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ATTACHMENT 1

PFAS Data for NPDES NM0028355 Permitted Outfalls

Outfall 001 Operational Sample - PFAS Analysis

Location: Collected from the Power Plant Cooling Tower Basin
Composition: Power Plant Cooling Water, SWWS Effluent, and SCC Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.44
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorohexadecanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorotetradecanoic acid	0.716	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoro-1-heptanesulfonic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.70
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoroheptanoic acid	3.46	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorononanoic acid	8.37	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorohexanesulfonic acid (PFHxS)	1.18	ng/L	J	Y	W	REG	N	NE-2021-1	EPA:537M	1.63
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorodecane sulfonate	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.74
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorobutanoic acid	4.39	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorobutanesulfonic acid	1.60	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.59
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	3-Perfluoropropyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.44
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Hexafluoropropylene oxide dimer acid GenX	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorooctadecanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	**NPDES Outfall 01A001**	**10/19/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**16.2**	**ng/L**		**Y**	**W**	**REG**	**N**	**NE-2021-1**	**EPA:537M**	**1.79**
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoroundecanoic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorododecanoic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorohexanoic acid	24.1	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	**NPDES Outfall 01A001**	**10/19/2020**	**Perfluorooctanoic acid (PFOA)**	**12.6**	**ng/L**		**Y**	**W**	**REG**	**N**	**NE-2021-1**	**EPA:537M**	**1.79**
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorodecanoic acid	1.94	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	5.10	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	3.40
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoropentanoic acid	21.6	ng/L		Y	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoropentanesulfonic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.68
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	3-Perfluoropentyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorododecanesulfonic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.73
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	3-Perfluoroheptyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.58
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorononanesulfonic acid	0.626	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.72
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluorotridecanoic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	Perfluoro-1-octanesulfonamide	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.79
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.67
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.591	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	1.69
NP001-21-210297	NPDES Outfall 01A001	10/19/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-1	EPA:537M	3.36
			Total PFAS	100.54	ng/L								
			PFOA	12.6	ng/L								
			PFOS	16.2	ng/L								

Outfall 001 Operational Sample - PFAS Analysis

Location: Collected from the Power Plant Cooling Tower Basin
Composition: Power Plant Cooling Water, SWWS Effluent, and SCC Blowdown

Calculate the Instream Waste Concentration (Cd) - Using the EPA RP Analysis as a Basis

Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.311	MGD	Long Term Average from Permit Application
Qe	0.48205	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge
Cd	214.2	RP at Total PFAS Concentration	
	26.8	RP for PFOA	
	34.5	RP for PFOS	
	61.3	RP for PFOA + PFOS	

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 13S Operational Sample - PFAS Analysis

Location: Collected from the SWWS Clarifier

Composition: SWWS Effluent prior to being Chlorinated/Disinfected and pumped up to the Power Plant

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorotetradecanoic acid	0.707	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorononanoic acid	11.0	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoro-1-heptanesulfonic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.68
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoroheptanoic acid	4.98	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorodecanoic acid	2.65	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorodecane sulfonate	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.71
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorohexanesulfonic acid	1.66	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.61
WST46-21-209687	SWWS Clarifier	10/13/2020	3-Perfluoropropyl propanoic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorobutanoic acid	6.34	ng/L	J	Y	W	REG	W	2021-53	EPA:537M	8.84
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorobutanesulfonic acid	1.69	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.57
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorohexadecanoic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.39
WST46-21-209687	SWWS Clarifier	10/13/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorododecanoic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorohexanoic acid	30.4	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	**SWWS Clarifier**	**10/13/2020**	**Perfluorooctanoic acid (PFOA)**	**17.0**	**ng/L**		**Y**	**W**	**REG**	**W**	**2021-53**	**EPA:537M**	**1.77**
WST46-21-209687	SWWS Clarifier	10/13/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoropentanoic acid	25.8	ng/L		Y	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	6.18	ng/L	J	Y	W	REG	W	2021-53	EPA:537M	16.8
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoropentanesulfonic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.66
WST46-21-209687	SWWS Clarifier	10/13/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	**SWWS Clarifier**	**10/13/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**19.4**	**ng/L**		**Y**	**W**	**REG**	**W**	**2021-53**	**EPA:537M**	**1.77**
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorooctadecanoic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoroundecanoic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Hexafluoropropylene oxide dimer acid GenX	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.39
WST46-21-209687	SWWS Clarifier	10/13/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	3-Perfluoropentyl propanoic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorododecanesulfonic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	3-Perfluoroheptyl propanoic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.54
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorotridecanoic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluorononanesulfonic acid	0.619	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.70
WST46-21-209687	SWWS Clarifier	10/13/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	1.17	ng/L	U	N	W	REG	W	2021-53	EPA:537M	3.47
WST46-21-209687	SWWS Clarifier	10/13/2020	Perfluoro-1-octanesulfonamide	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
WST46-21-209687	SWWS Clarifier	10/13/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	5.83	ng/L	U	N	W	REG	W	2021-53	EPA:537M	16.6
WST46-21-209687	SWWS Clarifier	10/13/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.583	ng/L	U	N	W	REG	W	2021-53	EPA:537M	1.77
			Total PFAS	127.1	ng/L								
			PFOA	17.0	ng/L								
			PFOS	19.4	ng/L								

Outfall 13S Operational Sample - PFAS Analysis

Location: Collected from the SWWS Clarifier

Composition: SWWS Effluent prior to being Chlorinated/Disinfected and pumped up to the Power Plant

Calculate the Instream Waste Concentration (Cd) - Using the EPA RP Analysis as a Basis

Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.229	MGD	Long Term Average from Permit Application
Qe	0.35495	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	270.7	RP at Total PFAS Concentration
	36.2	RP for PFOA
	41.3	RP for PFOS
	77.5	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A027 (a.k.a., SCC Cooling Tower Blowdown) Operational Sample - PFAS Analysis

Location: Collected at SCC from the Recirculation/Blowdown Line Before DeChlorination
Composition: SCC Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.54
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorohexadecanoic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoroheptanoic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoro-1-heptanesulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.75
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorononanoic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorotetradecanoic acid	0.737	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorohexanesulfonic acid (PFHxS)	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.68
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorodecane sulfonate	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.79
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorobutanoic acid	1.99	ng/L		Y	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorobutanesulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.64
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	3-Perfluoropropyl propanoic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.54
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Hexafluoropropylene oxide dimer acid GenX	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorooctadecanoic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	**NPDES Outfall 03A027**	**11/05/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**0.737**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-3**	**EPA:537M**	**1.84**
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoroundecanoic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorododecanoic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorohexanoic acid	1.98	ng/L		Y	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorodecanoic acid	0.719	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	**NPDES Outfall 03A027**	**11/05/2020**	**Perfluorooctanoic acid (PFOA)**	**0.737**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-3**	**EPA:537M**	**1.84**
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.50
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoropentanesulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.73
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoropentanoic acid	2.28	ng/L		Y	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	3-Perfluoroheptyl propanoic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorododecanesulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.78
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	3-Perfluoropentyl propanoic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.69
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorononanesulfonic acid	0.645	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.77
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluorotridecanoic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.72
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	Perfluoro-1-octanesulfonamide	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.84
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.608	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	1.74
NP027-21-210372	NPDES Outfall 03A027	11/05/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.22	ng/L	U	N	W	REG	N	NE-2021-3	EPA:537M	3.47
			Total PFAS	6.25	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A027 (a.k.a., SCC Cooling Tower Blowdown) Operational Sample - PFAS Analysis

Location: Collected at SCC from the Recirculation/Blowdown Line Before DeChlorination
Composition: SCC Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.051	MGD	Long Term Average from Permit Application
Qe	0.07905	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0.154		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	13.3	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 04A022 Operational Sample - PFAS Analysis

Location: Collected from the Cooling Water System Basement Sump at TA-3-66
Composition: Cooling Loop Water

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.36
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorohexadecanoic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoro-1-heptanesulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.66
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoroheptanoic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorononanoic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorotetradecanoic acid	0.700	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorohexanesulfonic acid (PFHxS)	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.59
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorodecane sulfonate	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.70
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorobutanesulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.56
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	3-Perfluoropropyl propanoic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorobutanoic acid	0.700	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.36
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Hexafluoropropylene oxide dimer acid GenX	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorooctadecanoic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	**NPDES Outfall 04A022**	**11/02/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**2.83**	**ng/L**		**Y**	**W**	**REG**	**N**	**NE-2021-2**	**EPA:537M**	**1.75**
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoroundecanoic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorohexanoic acid	1.43	ng/L	J	Y	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorododecanoic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorodecanoic acid	0.683	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorooctanoic acid (PFOA)	0.700	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.33
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoropentanesulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.65
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoropentanoic acid	0.675	ng/L	J	Y	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorododecanesulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.69
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	3-Perfluoroheptyl propanoic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	3-Perfluoropentyl propanoic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.50
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorononanesulfonic acid	0.613	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.68
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluorotridecanoic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.63
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	Perfluoro-1-octanesulfonamide	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.75
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.578	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.65
NP022-21-210373	NPDES Outfall 04A022	11/02/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.16	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.29
			Total PFAS	4.94	ng/L								
			PFOA	0.0	ng/L								
			PFOS	2.8	ng/L								

Outfall 04A022 Operational Sample - PFAS Analysis

Location: Collected from the Cooling Water System Basement Sump at TA-3-66
Composition: Cooling Loop Water

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.001	MGD	Long Term Average from Permit Application
Qe	0.00155	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	10.5	RP at Total PFAS Concentration
	0.0	RP for PFOA
	6.0	RP for PFOS
	6.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 051 Compliance Sample - PFAS Analysis for DP1132

Location: Collected from the Compliance Sample Point at the RLWTF Effluent Tanks
Composition: RWLTF Treated Effluent

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP051-20-193488	NPDES Outfall 051051	3/10/2020	Perfluorooctanesulfonic acid	0.699	ng/L	U	N	W	REG	N	2020-573	EPA:537M	1.75
NP051-20-193488	NPDES Outfall 051051	3/10/2020	Perfluorooctanoic acid	0.699	ng/L	U	N	W	REG	N	2020-573	EPA:537M	1.75
NP051-20-193488	NPDES Outfall 051051	3/10/2020	Perfluorohexanesulfonic acid	0.577	ng/L	U	N	W	REG	N	2020-573	EPA:537M	1.59
NP051-20-193493	NPDES Outfall 051051	8/18/2020	Perfluorooctanesulfonic acid	0.726	ng/L	U	N	W	REG	N	2020-1093	EPA:537M	1.81
NP051-20-193493	NPDES Outfall 051051	8/18/2020	Perfluorooctanoic acid	0.726	ng/L	U	N	W	REG	N	2020-1093	EPA:537M	1.81
NP051-20-193493	NPDES Outfall 051051	8/18/2020	Perfluorohexanesulfonic acid	0.599	ng/L	U	N	W	REG	N	2020-1093	EPA:537M	1.65
NP051-21-209777	NPDES Outfall 051051	4/27/2021	Perfluorooctanesulfonic acid	0.706	ng/L	U	N	W	REG	N	2021-558	EPA:537M	1.77
NP051-21-209777	NPDES Outfall 051051	4/27/2021	Perfluorooctanoic acid	0.706	ng/L	U	N	W	REG	N	2021-558	EPA:537M	1.77
NP051-21-209777	NPDES Outfall 051051	4/27/2021	Perfluorohexanesulfonic acid	0.583	ng/L	U	N	W	REG	N	2021-558	EPA:537M	1.61
NP051-21-209778	NPDES Outfall 051051	5/18/2021	Perfluorooctanesulfonic acid	3.46	ng/L	U	N	W	REG	N	2021-629	EPA:537M	8.64
NP051-21-209778	NPDES Outfall 051051	5/18/2021	Perfluorooctanoic acid	0.691	ng/L	U	N	W	REG	N	2021-629	EPA:537M	1.73
NP051-21-209778	NPDES Outfall 051051	5/18/2021	Perfluorohexanesulfonic acid	0.57	ng/L	U	N	W	REG	N	2021-629	EPA:537M	1.57
NP051-21-209779	NPDES Outfall 051051	6/22/2021	Perfluorooctanesulfonic acid	0.723	ng/L	U	N	W	REG	N	2021-770	EPA:537M	1.81
NP051-21-209779	NPDES Outfall 051051	6/22/2021	Perfluorooctanoic acid	0.723	ng/L	U	N	W	REG	N	2021-770	EPA:537M	1.81
NP051-21-209779	NPDES Outfall 051051	6/22/2021	Perfluorohexanesulfonic acid	0.597	ng/L	U	N	W	REG	N	2021-770	EPA:537M	1.65
			Total PFAS	0.00	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Calculate the Instream Waste Concentration (Cd) - Using the EPA RP Analysis as a Basis

Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.021345	MGD	Long Term Average from Permit Application
Qe	0.03308475	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	0.0	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 05A055 Operational Sample - PFAS Analysis

Location: HEWTF Recirculation Line

Composition: HEWTF Effluent Before Discharge to the Mechanical Evaporator

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.38
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Ethylperfluoro-1-octanesulfonamide[N-]	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorohexadecanoic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	3-Perfluoropropyl propanoic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorobutanoic acid	440	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1100
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorobutanesulfonic acid	2.38	ng/L		Y	W	REG	N	2021-445	EPA:537M	1.56
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorodecane sulfonate	2.9	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.53
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorohexanesulfonic acid (PFHxS)	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.6
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorotetradecanoic acid	3.52	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.79
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorononanoic acid	2.9	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.79
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoro-1-heptanesulfonic acid	2.9	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.35
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoroheptanoic acid	2.9	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.79
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorooctadecanoic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorooctanesulfonic acid (PFOS)	3.52	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.79
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoroundecanoic acid	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Hexafluoropropylene oxide dimer acid GenX	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.38
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Methyl perfluorooctane sulfonamidoethanol[N-]	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoropentanoic acid	2.9	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.79
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	1140	ng/L		Y	W	REG	N	2021-445	EPA:537M	83.5
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoropentanesulfonic acid	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.65
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	ethyl perfluorooctanesulfonamidoacetic acid[N-]	7.7	ng/L		Y	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	**TA-16: NPDES Outfall 05A055**	**03/31/2021**	**Perfluorooctanoic acid (PFOA)**	**229**	**ng/L**		**Y**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**8.79**
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorodecanoic acid	0.686	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorohexanoic acid	4.69	ng/L		Y	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Methylperfluoro-1-octanesulfonamide[N-]	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorododecanoic acid	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorotridecanoic acid	0.58	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorononanesulfonic acid	3.08	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.44
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluoro-1-octanesulfonamide	0.821	ng/L	J	Y	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.580	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.64
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.31
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.580	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.66
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	Perfluorododecanesulfonic acid	0.580	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.70
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	3-Perfluoroheptyl propanoic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	4,8-Dioxa-3H-perfluorononanoic Acid	0.580	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222345	TA-16: NPDES Outfall 05A055	03/31/2021	3-Perfluoropentyl propanoic acid	1.16	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.52
			Total PFAS	1384.59	ng/L								
			PFOA	229.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 05A055 Operational Sample - PFAS Analysis

Location: HEWTF Recirculation Line

Composition: HEWTF Effluent Before Discharge to the Mechanical Evaporator

Calculate the Instream Waste Concentration (Cd)

Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MC	0.0003	MGD	Long Term Average from Permit Application
Qe	0.000465	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	2949.2	RP at Total PFAS Concentration
	487.8	RP for PFOA
	0.0	RP for PFOS
	487.8	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A048 Operational Sample - PFAS Analysis

Location: Collected from the LANSCE Cooling Towers Blowdown Before Dechlorination
Composition: Cooling Tower Blowdown Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.41
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Ethylperfluoro-1-octanesulfonamide[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorohexadecanoic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	3-Perfluoropropyl propanoic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorobutanoic acid	6.96	ng/L		Y	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorobutanesulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.58
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorodecane sulfonate	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.73
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorohexanesulfonic acid (PFHxS)	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.62
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorotetradecanoic acid	0.711	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoro-1-heptanesulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.69
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorononanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoroheptanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorooctadecanoic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoroundecanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	**TA-53: NPDES Outfall 03A048**	**03/31/2021**	**Perfluorooctanesulfonic acid (PFOS)**	**0.711**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.78**
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Hexafluoropropylene oxide dimer acid GenX	2.93	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.89
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.41
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoropentanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Methyl perfluorooctane sulfonamidoethanol[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	5.87	ng/L	U	N	W	REG	N	2021-445	EPA:537M	16.9
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoropentanesulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.67
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorodecanoic acid	0.694	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	**TA-53: NPDES Outfall 03A048**	**03/31/2021**	**Perfluorooctanoic acid (PFOA)**	**0.711**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.78**
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorohexanoic acid	3.56	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.89
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Methylperfluoro-1-octanesulfonamide[N-]	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorododecanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorononanesulfonic acid	0.623	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.71
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorotridecanoic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluoro-1-octanesulfonamide	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.66
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	5.87	ng/L	U	N	W	REG	N	2021-445	EPA:537M	16.7
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.68
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	3-Perfluoroheptyl propanoic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	Perfluorododecanesulfonic acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.72
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	3-Perfluoropentyl propanoic acid	1.17	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222341	TA-53: NPDES Outfall 03A048	03/31/2021	4,8-Dioxa-3H-perfluorononanoic Acid	0.587	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
			Total PFAS	6.96	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A048 Operational Sample - PFAS Analysis

Location: Collected from the LANSCE Cooling Towers Blowdown Before Dechlorination
Composition: Cooling Tower Blowdown Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (M(	0.088	MGD	Long Term Average from Permit Application
Qe	0.1364	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge
Cd	14.8	RP at Total PFAS Concentration	
	0.0	RP for PFOA	
	0.0	RP for PFOS	
	0.0	RP for PFOA + PFOS	

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A113 Operational Sample - PFAS Analysis

Location: Collected from the LEDA Cooling Towers Blowdown Before Dechlorination
Composition: Cooling Tower Blowdown Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorododecanoic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Methylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorohexanoic acid	0.713	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	**TA-53: NPDES Outfall 03A113**	**03/31/2021**	**Perfluorooctanoic acid (PFOA)**	**0.713**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.78**
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorodecanoic acid	0.695	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoropentanesulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.68
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	5.88	ng/L	U	N	W	REG	N	2021-445	EPA:537M	16.9
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Methyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoropentanoic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.42
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Hexafluoropropylene oxide dimer acid GenX	2.94	ng/L	U	N	W	REG	N	2021-445	EPA:537M	8.91
OPE-21-222342	**TA-53: NPDES Outfall 03A113**	**03/31/2021**	**Perfluorooctanesulfonic acid (PFOS)**	**0.713**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.78**
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoroundecanoic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorooctadecanoic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoroheptanoic acid	1.63	ng/L	J	Y	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorononanoic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorotetradecanoic acid	0.713	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoro-1-heptanesulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.69
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorohexanesulfonic acid (PFHxS)	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.62
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorodecane sulfonate	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.73
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorobutanesulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.59
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorobutanoic acid	11.9	ng/L		Y	W	REG	N	2021-445	EPA:537M	8.91
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	3-Perfluoropropyl propanoic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorohexadecanoic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Ethylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	5.88	ng/L	U	N	W	REG	N	2021-445	EPA:537M	17.1
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	4,8-Dioxa-3H-perfluorononanoic Acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	3-Perfluoropentyl propanoic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	3-Perfluoroheptyl propanoic acid	1.18	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.56
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorododecanesulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.73
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.68
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	147	ng/L	U	N	W	REG	N	2021-445	EPA:537M	419
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.66
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluoro-1-octanesulfonamide	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorotridecanoic acid	0.588	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222342	TA-53: NPDES Outfall 03A113	03/31/2021	Perfluorononanesulfonic acid	0.624	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.71
			Total PFAS	13.53	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A113 Operational Sample - PFAS Analysis

Location: Collected from the LEDA Cooling Towers Blowdown Before Dechlorination
Composition: Cooling Tower Blowdown Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD	0.0016	MGD	Long Term Average from Permit Application
Qe	0.00248	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	28.8	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A160 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the NMHFL Cooling Towers
Composition: Cooling Tower Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorododecanoic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Methylperfluoro-1-octanesulfonamide[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorohexanoic acid	0.743	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	**TA-35: NPDES Outfall 03A160**	**03/31/2021**	**Perfluorooctanoic acid (PFOA)**	**0.743**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.86**
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoropentanesulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.75
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	6.13	ng/L	U	N	W	REG	N	2021-445	EPA:537M	17.6
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoropentanoic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Methyl perfluorooctane sulfonamidoethanol[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.57
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Hexafluoropropylene oxide dimer acid GenX	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoroundecanoic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	**TA-35: NPDES Outfall 03A160**	**03/31/2021**	**Perfluorooctanesulfonic acid (PFOS)**	**0.743**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**2021-445**	**EPA:537M**	**1.86**
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorooctadecanoic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoroheptanoic acid	1.04	ng/L	J	Y	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoro-1-heptanesulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.76
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorononanoic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorotetradecanoic acid	0.743	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorohexanesulfonic acid (PFHxS)	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.69
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorodecanoic acid	0.725	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorodecane sulfonate	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.8
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorobutanesulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.65
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorobutanoic acid	12.8	ng/L		Y	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	3-Perfluoropropyl propanoic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorohexadecanoic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Ethylperfluoro-1-octanesulfonamide[N-]	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.57
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	3-Perfluoropentyl propanoic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	4,8-Dioxa-3H-perfluorononanoic Acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorododecanesulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.80
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	3-Perfluoroheptyl propanoic acid	1.23	ng/L	U	N	W	REG	N	2021-445	EPA:537M	3.72
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.75
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	6.13	ng/L	U	N	W	REG	N	2021-445	EPA:537M	17.5
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.73
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluoro-1-octanesulfonamide	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorononanesulfonic acid	0.65	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.78
OPE-21-222344	TA-35: NPDES Outfall 03A160	03/31/2021	Perfluorotridecanoic acid	0.613	ng/L	U	N	W	REG	N	2021-445	EPA:537M	1.86
			Total PFAS	13.84	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A160 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the NMHFL Cooling Towers
Composition: Cooling Tower Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MG	0.0026	MGD	Long Term Average from Permit Application
Qe	0.00403	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	29.5	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A181 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the TA55 Cooling Towers
Composition: Cooling Tower Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.58
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorohexadecanoic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	3-Perfluoropropyl propanoic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorobutanesulfonic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.66
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorobutanoic acid	0.747	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorodecane sulfonate	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.81
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorohexanesulfonic acid (PFHxS)	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.70
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorotetradecanoic acid	0.747	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorononanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoroheptanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoro-1-heptanesulfonic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.77
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorooctadecanoic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	**NPDES Outfall 03A181**	**11/18/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**0.747**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-4**	**EPA:537M**	**1.87**
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoroundecanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Hexafluoropropylene oxide dimer acid GenX	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.58
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoropentanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoropentanesulfonic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.75
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.55
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	**NPDES Outfall 03A181**	**11/18/2020**	**Perfluorooctanoic acid (PFOA)**	**0.747**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-4**	**EPA:537M**	**1.87**
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorodecanoic acid	0.728	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorohexanoic acid	0.747	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorododecanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorononanesulfonic acid	0.653	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.79
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorotridecanoic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluoro-1-octanesulfonamide	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.67
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.51
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	3-Perfluoroheptyl propanoic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	Perfluorododecanesulfonic acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.616	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	1.87
NP181-21-210374	NPDES Outfall 03A181	11/18/2020	3-Perfluoropentyl propanoic acid	1.23	ng/L	U	N	W	REG	N	NE-2021-4	EPA:537M	3.73
			Total PFAS	0.00	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A181 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the TA55 Cooling Towers
Composition: Cooling Tower Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD)	0.0094	MGD	Long Term Average from Permit Application
Qe	0.01457	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	0.0	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.

Outfall 03A199 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the LDCC Cooling Towers
Composition: Cooling Tower Blowdown

Field Sample ID	Location ID	Sample Date	Parameter Name	Report Result	Report Units	Lab Qualifier	Detected	Sample Matrix	Sample Purpose	Filtered	COC #	Lab Method	Report Detection Limit
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Methylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorododecanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorohexanoic acid	0.718	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorodecanoic acid	0.700	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	**NPDES Outfall 03A199**	**11/02/2020**	**Perfluorooctanoic acid (PFOA)**	**0.718**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-2**	**EPA:537M**	**1.79**
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	ethyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	1H, 1H, 2H, 2H-perfluorooctane sulfonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.41
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoropentanesulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.69
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Methyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	methyl perfluorooctanesulfonamidoacetic acid[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoropentanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	1H, 1H, 2H, 2H-Perfluorododecanesulphonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.45
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Hexafluoropropylene oxide dimer acid GenX	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoroundecanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	**NPDES Outfall 03A199**	**11/02/2020**	**Perfluorooctanesulfonic acid (PFOS)**	**0.718**	**ng/L**	**U**	**N**	**W**	**REG**	**N**	**NE-2021-2**	**EPA:537M**	**1.79**
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Ethyl perfluorooctane sulfonamidoethanol[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorooctadecanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoro-1-heptanesulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.71
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoroheptanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorononanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorotetradecanoic acid	0.718	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorohexanesulfonic acid (PFHxS)	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.63
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorodecane sulfonate	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.74
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorobutanoic acid	1.76	ng/L	J	Y	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorobutanesulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.60
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	3-Perfluoropropyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorohexadecanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Ethylperfluoro-1-octanesulfonamide[N-]	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	1H, 1H, 2H, 2H-perfluorodecane sulfonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.45
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	3-Perfluoropentyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	4,8-Dioxa-3H-perfluorononanoic Acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorododecanesulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.74
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	3-Perfluoroheptyl propanoic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.59
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.69
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	1H, 1H, 2H, 2H-Perfluorohexanesulfonic acid	1.18	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	3.37
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.67
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluoro-1-octanesulfonamide	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorotridecanoic acid	0.592	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.79
NP199-21-210371	NPDES Outfall 03A199	11/02/2020	Perfluorononanesulfonic acid	0.628	ng/L	U	N	W	REG	N	NE-2021-2	EPA:537M	1.72
			Total PFAS	1.76	ng/L								
			PFOA	0.0	ng/L								
			PFOS	0.0	ng/L								

Outfall 03A199 Operational Sample - PFAS Analysis

Location: Collected from the Recirculation/Blowdown Line for the LDCC Cooling Towers
Composition: Cooling Tower Blowdown

Calculate the Instream Waste Concentration (Cd)
Cd = [(F*Qa*Ca) + (Qe*2.13*Ce)] / (F*Qa + Qe)

Ce		ng/L	Ce = Reported concentration in effluent
Plant Effluent Flow (MGD	0.036	MGD	Long Term Average from Permit Application
Qe	0.0558	cfs	Qe = Plant effluent flow
F	1		F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")
Qa	0		Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria
Ca	0		Ca = Ambient stream concentration upstream of discharge

Cd	3.7	RP at Total PFAS Concentration
	0.0	RP for PFOA
	0.0	RP for PFOS
	0.0	RP for PFOA + PFOS

** RP is determined by comparing the Cd to the WQ Standards. For PFAS, the 401 Certification requests comparison to the Screening limit of 70 ng/L.