NAME OF THE WATER UTILITY City of Alcoa

NAME OF THE WATER TREATMENT PLANT Alcoa Membrane WTP

COUNTY Blount PWSID# 0000007

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Supply

COMPREHENSIVE MONTHLY OPERATION REPORT

Month/Year: March-2023

Date	Raw water treated X 1000 Gallons	Finished water X 1000 Gallons	Permeate water X 1000 Gallons	PHYSICAL AND CHEMICAL CHARACTERISTICS																		CHEMICALS USED													
					Turbidity NTU							Cl_2 mg/L		Alkalinity mg/L		Hardness mg/L			pH			Fluoride mg/L			Calculated Dosages mg/L							Pounds per 24 Hours						
				°C		FINISHED WATER TURBIDITY MUST BE MEASURED EVERY 4 HOURS AND RECORDED																															
						AM			PM																											
				Raw Water Temperature	Raw Turbidity NTU	12-4	4-8	8-12	12-4	4-8	8-12	Top of Filter	Lowest Plant Effluent	Total Raw	Total Finished	Raw	Finished		Raw	Mixed	Finished	Raw	Finished	Distribution	ACH	$Pre\ Cl_2$	$Post\ Cl_2$	Fluoride	Caustic Soda			ACH	$Pre\ Cl_2$	$Post\ Cl_2$	Fluoride	Caustic Soda		
1	7980	7210	7370	14	9	.02	.02	.02	.02	.02	.02		2.00	52	51	52	52		7.5	7.4	7.9		.58	.67	6		3.00	0.60	2.4			399		184	194	590		
2	5780	5230	5350	14	96	.02	.02	.02	.02	.01	.01		2.07	49	53	46	51		7.2	7.1	7.8		.60	.60	15		3.50	0.60	2.6			723		156	141	464		
3	7100	6400	6540	14	42	.01	.01	.01	.02	.01	.01		2.35	36	43	38	44		7.0	7.0	7.6		.52	.57	11		3.20	0.60	3.0			651		175	172	655		
4	6630	6000	6180	14	19	.01	.01	.01	.01	.01	.01		2.04	46	43	47	48		7.2	7.3	7.7		.53		8		2.80	0.60	3.1			442		144	163	639		
5	6570	6000	6160	13	11	.01	.01	.01	.01	.01	.01		1.94	48	47	48	49		7.3	7.5	7.7		.55		7		2.90	0.60	3.1			384		149	162	637		
6	6550	5940	6090	12	8	.01	.01	.01	.01	.01	.01		2.02	51	49	54	52		7.4	7.5	7.9	0.21	.59	.67	6		2.90	0.60	3.2			328		147	160	650		
7	7340	6640	6820	13	7	.02	.01	.01	.01	.01	.01		2.04	53	54	52	52		7.6	7.5	8.0		.60	.60	6		2.90	0.60	3.1			367		165	180	705		
8	7090	6440	6600	13	7	.01	.01	.01	.01	.01	.01		2.15	59	58	61	60		7.7	7.6	8.0		.62	.65	6		2.90	0.60	3.1			355		160	174	683		
9	6740	6120	6280	12	6	.01	.01	.01	.01	.01	.01		2.11	61	63	62	63		7.7	7.6	8.0		.63	.66	6		2.90	0.60	2.9			337		152	165	608		
10	6980	6340	6490	12	5	.01	.01	.01	.01	.01	.01		2.05	67	63	65	66		7.8	7.5	8.0		.65	.51	6		2.90	0.60	2.8			349		157	171	606		
11	6860	6220	6390	13	5	.01	.01	.01	.01	.01	.01		2.06	65	64	62	65		7.9	7.6	8.0		.67		6		2.90	0.60	2.8			343		155	168	597		
12	6310	6000	6390	12	23	.01	.01	.01	.02	.02	.02		2.00	64	65	63	63		7.8	7.5	8.0		.72		8		3.00	0.60	2.8			421		160	168	597		
13	6710	6000	6150	11	25	.02	.02	.02	.02	.02	.02		2.00	57	61	58	60		7.6	7.3	7.9	0.05	.72	.75	8		3.20	0.60	2.8			448		164	162	574		
14	6940	6150	6170	10	10	.02	.02	.02	.02	.02	.02		2.10	53	55	55	55		7.7	7.5	7.9		.66	.61	6		3.10	0.60	2.8			347		160	162	576		
15	6640	6000	6180	9	6	.02	.02	.02	.02	.02	.02		2.04	53	54	56	54		7.7	7.4	8.0		.63	.55	6		3.00	0.60	2.8			332		155	163	577		
16	6690	6090	6180	10	5	.02	.02	.02	.02	.02	.02		2.26	55	55	55	56		7.9	7.5	8.0		.65	.59	6		2.80	0.60	2.8			335		144	163	577		
17	7880	7170	6250	10	5	.02	.02	.02	.02	.02	.02		2.06	59	57	61	59		7.9	7.5	8.1		.66	.63	6		2.70	0.60	2.6			394		141	165	542		
18	4810	4360	4210	11	6	.02	.02	.02	.02	OFF	OFF		2.15	61	63	69	66		7.8	7.6	8.0		.69		6		2.70	0.60	2.6			241		95	111	365		
19	6410	5800	4210	10	5	OFF	.02	.02	.02	.02	.02		2.15	61	67	69	61		7.8	7.5	8.0		.70		6		2.70	0.60	2.6			321		95	111	365		
20	8480	7490	7630	9	4	.02	.02	.02	.02	.02	.02		1.93	58	58	64	58		7.8	7.5	8.0	0.05	.71	.60	6		2.60	0.60	2.6			424		165	201	662		
21	7010	6200	6360	10	4	.02	.02	.02	.02	.02	.02		1.87	57	56	64	62		7.9	7.5	8.0		.74	.58	6		2.90	0.60	2.6			351		154	168	552		
22	6640	6000	6200	10	4	.02	.02	.02	.02	.02	.02		2.11	61	62	60	62		7.9	7.5	8.0		.76	.61	6		2.90	0.60	2.6			332		150	163	538		
23	6280	5710	5840	11	4	.02	.02	.02	.02	.02	.02		2.10	65	65	65	61		7.9	7.5	8.0		.77	.59	6		2.90	0.60	2.6			314		141	154	507		
24	7340	6670	6620	14	5	.02	.02	.02	.02	.02	.02		2.04	67	65	68	63		7.9	7.5	8.0		.75	.58	6		2.90	0.60	2.6			367		160	174	574		
25	5300	4840	5080	17	23	OFF	OFF	.02	.02	.02	.02		2.15	64	63	65	62		7.9	7.5	8.1		.72		8		3.00	0.60	2.5			354		127	134	424		
26	7150	6500	6610	16	23	.02	.02	.02	.02	.02	.02		2.02	60	60	61	61		7.6	7.3	7.9		.64		8		3.20	0.60	2.4			477		176	174	529		
27	7060	6350	6480	14	8	.02	.02	.02	.02	.02	.02		2.18	57	57	58	56		7.8	7.4	7.9	0.14	.61	.64	6		3.10	0.60	2.5			353		168	171	540		
28	6660	6000	6200	15	6	.02	.02	.02	.01	.01	.01		2.12	61	62	61	58		7.7	7.4	8.0		.65	.61	6		3.00	0.60	2.5			333		155	163	517		
29	7650	6910	7130	14	5	.01	.01	.02	.02	.02	.02		2.05	60	62	60	58		7.8	7.7	8.0		.65	.63	6		2.90	0.60	2.5			383		172	188	595		
30	7840	7120	7260	14	5	.02	.02	.02	.02	.02	.02		2.07	59	59	61	63		8.0	7.9	8.2		.66	.58	6		2.90	0.60	2.5			392		176	191	605		
31	7870	7160	7030	14	5	.02	.02	.02	.02	.01	.01		2.04	61	60	64	64		7.9	8.0	8.2		.76	.54	6		2.90	0.60	2.3			394		170	185	539		
TOT	213290	193060	194450	387	393	0.48	0.49	0.52	0.53	0.48	0.48		64.27	1775	1793	1819	1803		238.4	231.8	246.8	.45	20.36	14.02	211		91.2	18.60	84.1			11993		4771	5121	17590		
AVE	6880	6228	6273	12	13	0.02	0.02	0.02	0.02	0.02	0.02		2.07	57	58	59	58		7.7	7.5	8.0	0.11	0.66	0.61	7		2.94	0.60	2.7			387		154	165	567		
MAX	8480	7490	7630	17	96	0.02	0.02	0.02	0.02	0.02	0.02		2.35	67	67	69	66		8.0	8.0	8.2	0.21	0.77	0.75	15		3.50	0.60	3.2			723		184	201	705		
MIN	4810	4360	4210	9	4	0.01	0.01	0.01	0.01	0.01	0.01		1.87	36	43	38	44		7.0	7.0	7.6	0.05	0.52	0.51	6		2.60	0.60	2.3			241		95	111	365		

CHEMICALS USED	BRAND	ANALYSIS	POUNDS USED	COSTS	
				per lb	per month
ACH	USALCO - DelPAC XG	100%	11993	$0.38500	$4,617.37
Chlorine	CORECHEM, Inc.	100%	4771	$0.3425	$1,634.17
Fluoride	UNIVAR	24%	5121	$0.20300	$1,039.60
Caustic Soda (25%)	UNIVAR	25%	17590	$0.58500	$2,572.52
				TOTAL	$9,863.66

I certify that the data provided accurately represents the water quality, quantity, treatment, operational practices, and other activities for the reporting period specified herein.

Certified Operator Name Tyrel J. Emory

Certified Operator Signature Tyrel J. Emory

APR 17 2023

NAME OF THE WATER UTILITY City of Alcoa

NAME OF THE WATER TREATMENT PLANT Alcoa Membrane WTP

COUNTY Blount PWSID# 0000007

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Supply

COMPREHENSIVE MONTHLY OPERATION REPORT

March-2023

Date	Log Removal Values						Filter Operation Data								Disinfection and CT Values												Microbiological Examinations Plant & Distibution											
								(NOTE: ALL TMP VALUES ARE NEGATIVE)							First Disinfection Sequence					Second Disinfection Sequence																		
	Train 1	Train 2	Train 3	Train 4	Train 5	Train 6	Plant Hours	Train 1 - TMP, psi	Train 2 - TMP, psi	Train 3 - TMP, psi	Train 4 - TMP, psi	Train 5 - TMP, psi	Train 6 - TMP, psi	Reject Gallons (x 1000)	C. Free Cl2 - End of Sequence	T. Contact Time in Minutes	PH - End of Seqence	CT - Calculated	CT - Required	C. Free Cl2 - End of Sequence	T. Contact Time in Minutes	PH - End of Seqence	CT - Calculated	CT - Required	Total Inactivation Ratio CT Calc / CT Req		Dist Sample 1 CFU	Dist Sample 2 CFU	Dist Sample 3 CFU	Free Cl_2 mg/L Sample site #1	Sample site # 1	Free Cl2 mg/L Sample site #2	Sample site # 2	Free Cl2 mg/L Sample Site #3	Sample site #3
1	4.59	4.64	4.43	4.51	4.38	4.39	24	1.56	1.28	2.28	2.36	2.54	2.54	804						2.00	168	7.9	335.1	30	11.2		Neg	Neg	Neg	1.63	218 Amy Dr.	2.12	1450 Dalton St.	2.06	460 Defoe Cir.
2	4.58	4.65	4.54	4.51	4.28	4.44	19	1.56	1.43	2.46	2.75	2.71	2.50	588						2.10	112	7.9	234.6	30	7.8		Neg	Neg	Neg	1.18	223 Associates Blvd.	1.91	771 Louisville Rd.	2.19	110 Tyson Blvd. Suite 200
3	4.56	4.57	4.42	4.35	4.40	4.48	22	2.80	2.57	4.32	3.87	4.58	3.17	730						2.40	119	7.6	286.3	32	8.9					2.06	4472 Deer Run Dr.				
4	4.46	4.53	4.39	4.36	4.25	4.27	24	1.60	1.31	2.32	2.99	2.72	2.54	666						2.00	168	7.8	335.1	30	11.2										
5	4.47	4.53	4.38	4.34	4.19	4.26	24	1.80	1.72	2.50	2.77	2.69	2.55	660						1.90	168	7.8	318.3	30	10.6										
6	4.58	4.61	4.49	4.46	4.41	4.64	24	1.79	1.79	2.49	2.72	2.78	2.68	676						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.97	1217 Applecreek Dr.	1.90	1047 Brighton Dr.	1.91	1102 Grant St.
7	4.56	4.65	4.65	4.55	4.64	4.62	24	1.95	1.81	2.79	2.96	3.09	3.02	737						2.00	144	8.0	287.2	30	9.6		Neg	Neg	Neg	2.00	547 Wedgewood Dr.	2.04	3636 Chambers Rd.	2.05	4074 Glenmore Dr.
8	4.49	4.57	4.42	4.38	4.28	4.28	24	1.84	1.83	2.61	2.81	2.98	2.87	712						2.20	144	8.1	315.9	38	8.3		Neg	Neg	Neg	2.00	444 Link Dr.	2.08	1722 Maplecrest Dr.	1.93	6280 Sierra Cir.
9	4.48	4.60	4.42	4.38	4.32	4.30	24	1.85	1.69	2.73	3.11	2.75	2.63	677						2.10	164	8.1	343.7	37	9.3		Neg	Neg	Neg	2.24	2048 Stonybrook Rd.	2.17	4209 W. Lakeview Cir.	1.93	3525 Central Park Blvd.
10	4.52	4.57	4.39	4.34	4.32	4.31	24	1.76	1.76	2.36	2.59	2.56	2.57	701						2.10	144	8.1	301.6	37	8.2					2.18	2923 Old Knox Hwy.				
11	4.44	4.58	4.37	4.36	4.30	4.30	24	1.70	1.67	2.81	2.89	2.90	3.08	691						2.10	144	8.1	301.6	37	8.2										
12	4.54	4.63	4.40	4.34	4.33	4.32	23	1.65	1.29	2.29	2.46	2.44	2.43	636						2.00	168	8.1	335.1	37	9.1										
13	4.52	4.63	4.43	4.38	4.34	4.34	24	2.09	1.58	2.43	2.72	2.73	2.33	674						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.92	273 Joule St.	1.87	2810 Airport Hwy.	2.21	162 Cusick Rd.
14	4.61	4.65	4.47	4.42	4.37	4.54	24	1.69	2.02	2.55	2.71	2.71	1.55	697						2.10	144	8.0	301.6	30	10.1		Neg	Neg	Neg	1.91	3568 Chambers Rd.	1.99	4077 Glenmore Dr.	2.09	220 Associates Blvd.
15	4.50	4.65	4.46	4.65	4.41	4.63	24	1.69	1.69	2.69	2.82	2.93	1.56	667						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.64	2020 N. Wright Rd.	2.09	4472 Deer Run Dr.	2.49	1921 Topside Rd.
16	4.57	4.64	4.43	4.37	4.36	4.53	24	1.76	1.35	2.38	2.50	2.54	1.74	672						2.30	144	8.1	330.3	38	8.7		Neg	Neg	Neg	2.48	35.800503, -83.887153	2.25	2919 Old Knoxville Hwy.	1.98	124 N. Hall Rd.
17	4.53	4.62	4.42	4.36	4.31	4.51	24	3.58	2.09	3.13	3.38	3.58	2.74	791						2.10	126	8.1	263.9	37	7.1					1.74	223 Associates Blvd.				
18	4.51	4.58	4.38	4.32	4.30	4.44	16	2.03	2.07	2.74	3.53	3.06	2.21	486						2.20	144	8.0	315.9	31	10.2										
19	4.47	4.58	4.39	4.33	4.29	4.44	18	2.37	2.34	3.20	4.03	3.97	2.99	646						2.20	126	8.1	276.5	38	7.3										
20	4.52	4.56	4.40	4.38	4.38	4.49	24	2.30	2.33	3.55	4.09	3.26	2.97	852						1.90	112	8.1	212.2	48	4.4					2.42	4077 Glenmore Dr.				
21	4.53	4.56	4.39	4.33	4.44	4.39	24	2.22	1.90	3.22	3.34	2.20	2.75	704						1.90	144	8.0	272.9	30	9.1					2.00	4077 Glenmore Dr.				
22	4.47	4.59	4.30	4.38	4.57	4.33	24	1.80	1.58	2.56	2.90	1.80	2.34	667						2.10	168	8.0	351.8	30	11.7					1.33	35.800503, -83.887153				
23	4.48	4.60	4.39	4.35	4.49	4.38	24	1.79	1.39	2.92	2.59	1.79	2.26	631						2.10	168	8.0	351.8	30	11.7					1.97	6280 Sierra Cir.				
24	4.54	4.64	4.44	4.37	4.48	4.42	24	1.56	1.82	2.81	3.01	2.26	2.56	738						2.00	119	8.1	238.5	37	6.4					2.08	444 Link Dr.				
25	4.54	4.56	4.48	4.42	4.56	4.35	15	2.38	1.78	2.55	2.69	2.07	3.23	534						2.20	126	8.2	276.5	25	11.1										
26	4.53	4.63	4.43	4.40	4.49	4.43	24	1.90	1.47	2.34	2.52	1.88	2.12	717						2.00	126	8.0	251.3	20	12.6										
27	4.55	4.64	4.46	4.42	4.52	4.47	24	1.80	1.25	1.99	2.18	1.67	1.85	710						2.20	144	8.0	315.9	31	10.2					1.91	4209 W. Lakeview Cir.				
28	4.60	4.65	4.48	4.53	4.53	4.50	24	1.85	1.29	2.09	1.40	1.71	1.92	669						2.10	168	8.0	351.8	20	17.6					2.23	2923 old knoxville hwy				
29	4.60	4.56	4.42	4.65	4.52	4.45	24	1.82	1.45	2.32	1.61	1.96	2.12	768						2.10	135	8.0	284.2	30	9.5					2.05	4074 Glenmore Dr.				
30	4.55	4.63	4.44	4.64	4.49	4.44	24	1.74	1.80	2.27	1.58	1.94	2.06	787						2.10	135	8.3	284.2	37	7.7					2.12	460 Defoe Cir.				
31	4.53	4.62	4.44	4.61	4.50	4.45	24	1.96	1.63	2.49	1.79	2.18	2.32	791						2.00	112	8.3	223.4	37	6.0					1.99	223 Associates Blvd.				
TOT	140.42	142.72	137.35	137.19	136.45	137.14	713	60.19	52.98	82.19	85.67	80.98	76.20	21479						64.5	4479	249	9302.6	1007	297.1					45.05		20.42		20.84	
AVE	4.53	4.60	4.43	4.43	4.40	4.42	23	1.94	1.71	2.65	2.76	2.61	2.46	693						2.08	144.47	8.03	300.08	32.48	9.58					1.96		2.04		2.08	
MAX	4.61	4.65	4.65	4.65	4.64	4.64	24	3.58	2.57	4.32	4.09	4.58	3.23	852						2.4	168	8.3	351.8	48	17.6					2.48		2.25		2.49	
MIN	4.44	4.53	4.30	4.32	4.19	4.26	15	1.56	1.25	1.99	1.40	1.67	1.55	486						1.9	111.7	7.6	212.2	20.0	4.4					1.18		1.87		1.91	

COST OF PRODUCTION	
(a) Cost of Personnel	$78,591
(b) Cost of Chemicals	$9,864
(c) Cost of Energy	$42,083
(d) Insurance & Misc. Cost	$19,651
(e) Total Production Cost	$150,189
(f) Cost per MG Water Treated	$704.15

(a) Type of Filters	Membrane Vacuum
(b) Number of Filter Trains	6
(c) Filter Area - Sq Ft. (each)	76160
(d) Total Area - Sq Ft.	456960
(e) Filter Rate, gfd	35.0
(f) Filter Rate, gfd Total Rated	
(g) Filter Capacity	16,000,000
GPM	1,111

REMARKS: _____

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, COMPLIANCE AND ENFORCEMENT UNIT

DISINFECTANT MONITORING REPORT

APR 0 6 2023

PUBLIC WATER SYSTEM NAME AND ADDRESS

PWSID # 0 0 0 0 0 0 7

FACILITY ID T P 0 0 1

City of Alcoa Water Plant
223 Associates Blvd.
Alcoa, TN 37701

SAMPLE PERIOD

START DATE (m m d d y y): 0 3 0 1 2 3

END DATE (m m d d y y): 0 3 3 1 2 3

I. SYSTEMS USING CHLORINE OR CHLORAMINES (1)

A. Distribution System Monitoring

Number of Samples Required (1)	Number of Samples Taken	Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
030	030	1.18	2.01	000	100.0

B. Entry Point Monitoring

Number of Days Residual Measurements Required (2)	Number of Days Residual Measurements Taken	Type of Monitoring Conducted: Grab	Type of Monitoring Conducted: Continuous	Lowest Residual Measured (mg/L)	Was the Continuous Chlorine Analyzer out of service more than 5 consecutive days while this facility was in operation? ("Y" for yes, or "N" for no)
31	31		✓	1.87	N

II. SYSTEMS USING CHLORINE DIOXIDE

A. Entry Point Monitoring

Number of Days Residual Measurements Required	Number of Days Residual Measurements Taken	Highest Residual Measured Entering the D.S. (mg/L)	Number of Days Residual Measured > MRDL	Number of Consecutive Days Residual Measured > MRDL
		.		

B. Distribution System Monitoring

1. Systems Not Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date of Follow-Up Sampling (3)	Time of First Sample / Result (mg/L)	Time of Second Sample / Result (mg/L)	Time of Third Sample / Result (mg/L)
		/ .	/ .	/ .

2. Systems Utilizing Disinfection Booster Stations

Date E.P. Sample Exceeded MRDL	Date Follow-Up Sampling (4)	Sample Results (mg/L) at: Closest Customer	Average Point	Maximum Residence Time
		.	.	.

Notes:
(1) Disinfection residuals must be measured at the same frequency and locations for all total coliform samples that are taken. The number of required samples is the total number of routine and repeat total coliform samples taken during the reporting period.
(2) Each day of operation, Subpart H systems and True Ground Water Systems serving more than 3,330 persons must measure chlorine residuals continuously at the entry point to the distribution system. Grab sampling may be conducted at the rate specified in the regulations for systems serving less than 3,300.
(3) For systems using chlorine dioxide, and not utilizing booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at a point closest to the first customer at six-hour intervals. Analysis must be by Ion Chromatography.
(4) For systems using chlorine dioxide, and which utilize booster chlorination facilities in the distribution system, if an entry point sample exceeds the MRDL, a three-sample set of measurements must be taken the day after the exceedance at the following locations: 1) a point closest to the first customer, 2) a point reflecting the average residence time, and, 3) a point reflecting the maximum residence time. Analysis must be by Ion Chromatography.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

PREPARED BY Tyrel J. Emory DATE 4/3/23 APPROVED BY Tyrel J. Emory DATE 4/3/23

(continued on reverse)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, COMPLIANCE AND ENFORCMENT UNIT

INTERIM ENHANCED SURFACE WATER TREATMENT RULE
FILTER PERFORMANCE REPORT [1]

APR 0 6 2023

PUBLIC WATER SYSTEM NAME AND ADDRESS

City of Alcoa Water Plant
223 Associates Blvd.
Alcoa, TN 37701

PWSID #	ENTRY POINT	SAMPLE PERIOD START DATE	SAMPLE PERIOD END DATE	TOTAL HOURS PLANT OPERATED THIS MONTH	LABORATORY ID
0000007		030123	033123	713	00015

REPORTABLE SAMPLES [2] REQUIRED	REPORTABLE SAMPLES [2] TAKEN	NUMBER OF REPORTABLE SAMPLES LESS THAN OR EQUAL TO THE LOWER NTU STANDARD [3]	PERCENT OF REPORTABLE SAMPLES LESS THAN OR EQUAL TO THE LOWER NTU STANDARD	NUMBER OF REPORTABLE SAMPLES EXCEEDING THE UPPER NTU STANDARD [4] (LIST DATES ON BACK)	HIGHEST FINISHED WATER TURBIDITY THIS MONTH
181	181	181	100.01	000	00.02 2

Notes:
(1) This form applies to filtration systems utilizing either a surface water supply or a source that has been designated groundwater under the direct influence of surface water.
(2) Systems utilizing cartridge filtration must at a minimum, measure turbidity once per day while treating water. Systems required to measure and record finished water turbidity every 4 hours that the plant is in operation, shall report the highest value measured during each 4-hour period. Systems utilizing continuous monitoring turbidimeters shall report the highest recorded value for every 4 hour period.
(3) NTU standards vary depending on the type of filtration treatment provided, and include a lower limit that must be met in 95% of the reportable samples, and an upper limit that cannot be exceeded without receiving a treatment technique violation. Use the lower NTU standard applicable to this facility for this calculation.
(4) Indicate the number of reportable samples that exceeded the upper NTU standard. On the back of this form, indicate the dates when a sample exceeded the upper NTU standard, and the date the state was notified of the exceedance.

	Y or N
Did this facility meet the CT requirements for each day it was in operation?	Y

A. FOR ALL FILTERS AT THIS FACILITY

	Y or N
1. Was turbidity monitored continuously and the results recorded for each filter effluent line?	Y
2. If the answer to question number 1 is no, was grab sampling conducted for every 4 hours the continuous monitor was out of service?	
3. If the answer to question number 2 is yes, was grab sampling conducted for more than 5 consecutive days on any individual filter?	

B. FOR ANY FILTER AT THIS FACILITY [5]

Were any 2 consecutive filter effluent measurements taken 15 minutes apart:	Y or N	Filter Numbers (maximum of four filters)
1. Greater than 0.5 NTU after the first 4 hours of operation?	N	
2. Greater than 1.0 NTU?	N	
3. Greater than 1.0 NTU in each of 3 consecutive months?	N	
4. Greater than 2.0 NTU in two consecutive months?	N	

Note:
(5) If this facility answered "Yes" to any question listed in Section B. above, then the system must submit a "Monthly Turbidity Exceedance Report" (CN-1196) for the individual filter that met at least one of the conditions listed.

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

PREPARED BY: Tyrel J. Emory DATE: 4/3/23 PHONE: (865) 380-4921 APPROVED BY: Tyrel J. Emory DATE: 4/3/23 PHONE: (865) 380-4921

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESCOURCES - DRINKING WATER UNIT
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Ave., 11th Floor
Nashville, TN 37243-1102

APR 0 6 2023

MONTHLY DISTRIBUTION SYSTEM FLUORIDE SAMPLING SUMMARY and QUARTERLY CHECK SAMPLE REPORTING

Public Water System Name & Address					
City of Alcoa Water Plant					
223 Associatese Blvd.					
Alcoa, TN 37701					
Contact Person: Tyrel J. Emory					
PWSID Number: 0000007			County: Blount		
	Month [1]	Average for Month mg/L [2]	Highest Fluoride Measurement mg/L [3]	Lowest Fluoride Measurement mg/L [4]	Number of Days Fluoride Measured [5]
1	January 2023	0.58	0.70	0.42	20
2	February 2023	0.61	0.67	0.52	20
3	March 2023	0.61	0.75	0.51	23
4					
5					
6					
7					
8					
9					
10					
11					
12					

Instructions:
This report is to be completed by all community water systems that add fluoride to their finished water.
It may be submitted monthly or quarterly to the Division of Water Resources, Drinking Water Unit.

(1) Enter the month for which the results are being reported.
(2) Enter the calculated average of all distribution system fluoride measurements taken during the month.
(3) Enter the highest fluoride value measured during the month in the distribution system.
(4) Enter the lowest fluoride value measured during the month in the disturbution system.
(5) Enter the number of days fluoride samples were taken in the distribution system.
(6) Mail completed report to the address above. For assistance or questions call 1-888-891-8332.

Quarterly Check Samples:

Collection Date	Address	PWS Results (ppm)	Certified Lab	Certified Lab Reults (ppm)
2/14/2023	4209 W. Lakeview Circle Louisville, TN 37777	0.65	Pace Analytical	0.56

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in the Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Certified Operator: Tyrel J. Emory	Signature: Tyrel J. Emory
Phone: 865-380-4921	Date: 4/3/2023

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, COMPLIANCE AND ENFORCEMENT UNIT
William Snodgrass Tennessee Tower
312 Rosa L. Parks Ave., 11th Floor
Nashville, Tennessee 37243-1102

APR 0 6 2023

BACTERIOLOGICAL ANALYSIS DETAIL

PWSID 0 0 0 0 7 1 4

Public Water System Name and Address Tuckaleechee Utility District
P. O. Box 58
Townsend, TN 37882

County Blount

Phone. 865-448-2230

Sample Date	Sample Time	Sample Type	Chlorine Residual	Location Code	Repeat Sample Location	Sample Results	Contaminant Code	Method Code	Analysis Date	Analysis Time	Laboratory ID
030623	0815	D	1.9			N	3100	9223	030623	1130	03002
030623	0840	D	1.7			N	3100	9223	030623	1130	03002
030623	0915	D	1.6			N	3100	9223	030623	1130	03002
030623	0945	D	1.9			N	3100	9223	030623	1130	03002
030623	1010	D	1.8			N	3100	9223	030623	1130	03002
032323	1400	D	1.7			N	3100	9223	032323	1635	03002
032323	1415	D	2.0			N	3100	9223	032323	1635	03002
032323	1420	D	2.0			N	3100	9223	032323	1635	03002
032323	1440	D	1.7			N	3100	9223	032323	1635	03002
032323	1500	D	1.9			N	3100	9223	032323	1635	03002

	Location Name	Collected By	Analyzed By
1.	7706 Chestnut Hill Rd.	LV	PP
2.	8314 State Hwy. 73	LV	PP
3.	1150 Shuler Rd.	LV	PP
4.	2356 Ellejoy Rd.	LV	PP
5.	2031 Ellejoy Rd.	LV	PP
6.	118 Stables Dr.	BR	KA
7.	7126 E. Lamar Alexander	BR	KA
8.	7729 E. Lamar Alexander	BR	KA
9.	123 Cromwell Dr.	BR	KA
10.	123 Tiger Dr.	BR	KA

Administrative Information

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Responsible Official: [signature] Phone: 865-380-4921 Program Contact: _____ Phone: _____ Technical Contact: _____ Phone: _____

Return to: Tennessee Division of Water Resources, Compliance and Enforcement Unit, William R. Snodgrass-TN Tower, 312 Rosa L. Parks Ave., 11th Floor, Nashville TN, 37243-1102

CN–0800 (Rev. 1-06)

RDA 2410

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES, COMPLIANCE AND ENFORCEMENT UNIT
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

APR 0 6 2023

MONTHLY MICROBIOLOGICAL and DISINFECTANT MONITORING REPORT

Public Water System Name: City of Alcoa Water Plant
Phone: 865-380-4921
Address: 223 Associates Blvd. Alcoa, TN 37701
County: Blount

Bacteriological Monitoring (1)

PWSID	Contaminant ID	Analysis Method	Sample Period Begin	Sample Period End
0000007	3100	9223	030123	033123

Total Number Of Routine Distribution Samples Analyzed	Total Number Of Positive Samples Analyzed (2)	Total Number Of Repeat Samples Analyzed (2)	Laboratory ID	Laboratory Name
030	000	000	03002	Alcoa Water Plant

Date of First Sample	Date of Last Sample
030123	031623

Disinfectant Residual Monitoring (3)

Lowest Residual Measured (mg/L)	Average Residual Measured (mg/L)	Number of Samples below 0.2 mg/L	% of Samples 0.2 mg/L or higher
1.18	2.01	000	100.0

Notes

(1) This form is to be submitted for systems reporting 10 or more bacteriological compliance samples during the reporting period.

(2) All positive and repeat samples must be reported on Form CN-0800, Bacteriological Analysis Detail.

(3) Systems supplying chlorinated water must monitor disinfectant residuals at the same locations and frequencies as total coliform sampling is required.

Administrative Information

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Responsible Official: Tyrel L. Emmons Phone: (865) 380-4921

Program Contact: _____ Phone: ( )

Technical Contact _____ Phone: ( )

Return to: Tennessee Division of Water Resources, Compliance and Enforcement Unit, William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243-1102

CITY OF ALCOA

PUBLIC WORKS AND ENGINEERING DEPARTMENT
Engineering - Fleet - Landfill - Purchasing - Sanitation
Streets & Stormwater - Water & Wastewater - Water Quality

725 Universal Street, Alcoa, Tennessee 37701 (865) 380-4800 FAX (865) 380-4803

APR 0 6 2023

CERTIFIED, RETURN RECEIPT REQUESTED
CONFIRMING FAX

April 3, 2023

Mr. Jeff Bagwell
Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Re: Microbiological Monitoring Report - Filter Performance Report - Disinfectant Monitoring Report - Fluoride Sampling Summary – Bacteriological Analysis Report-TUD
City of Alcoa Water Treatment Plant - Blount County
PWSID 0000007

Dear Mr. Bagwell:

Enclosed are the Microbiological Monitoring Report, Filter Performance Report, Disinfectant Monitoring Report, Fluoride Sampling Summary, and the Bacteriological Analysis Report for Tuckaleechee Utility District, for the month of March 2023 for the City of Alcoa Water Treatment Plant. Please contact me at 865-380-4921 if additional information is needed.

Sincerely,

Tyrel J. Emory
Supervisor, Alcoa Water Treatment Plant

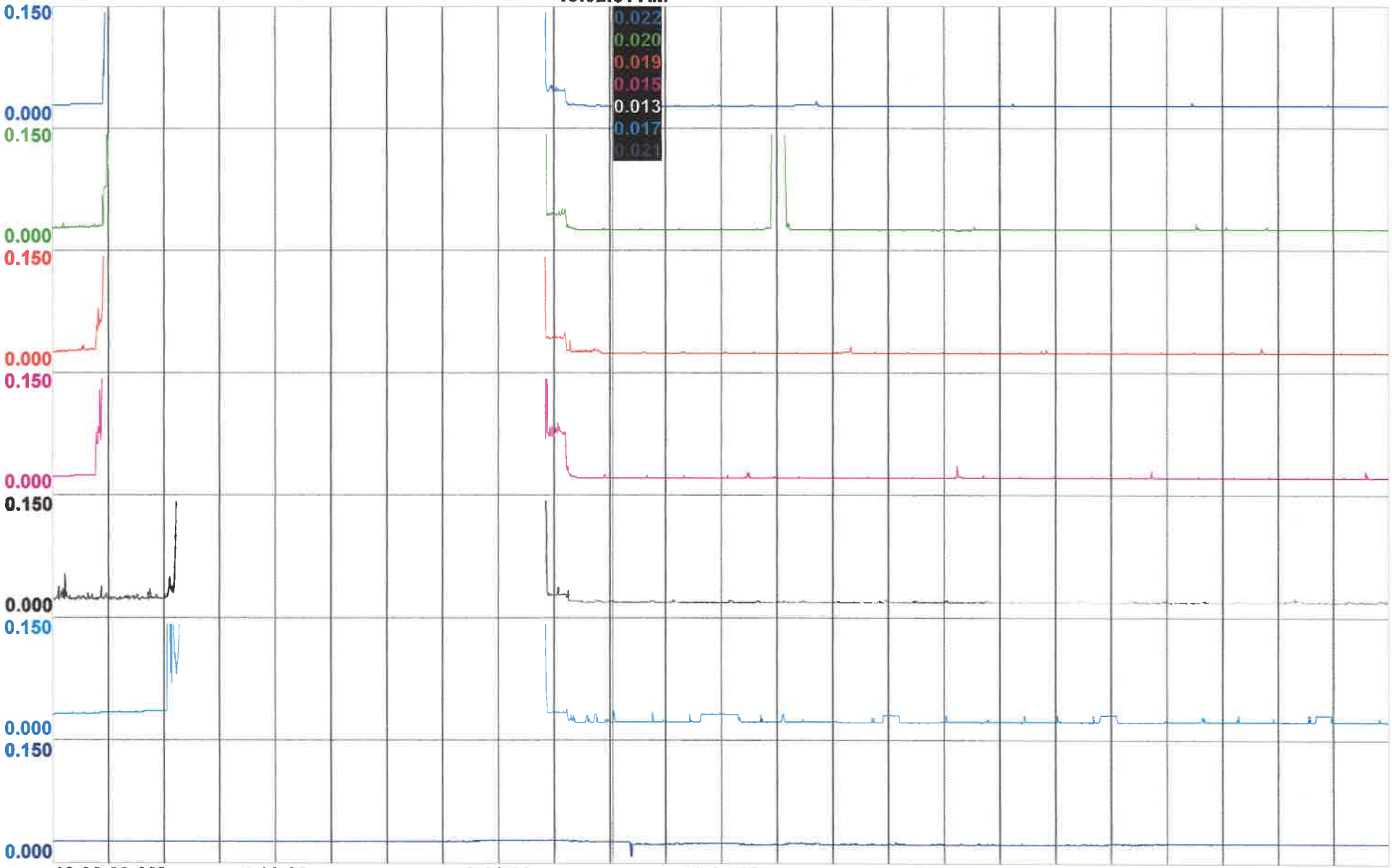
TJE: kh

Enclosures:
1. Microbiological Monitoring Report
2. Filter Performance Report
3. Disinfectant Monitoring Report
4. Fluoride Sampling Summary – Quarterly
5. Bacteriological Analysis Report - TUD

cc: Mr. Shane Snoderly, Public Works Director, City of Alcoa (w/encls.)
Mr. Greg Mize, Knoxville Environmental Field Office (w/encls.)

Saturday, March 25, 2023 - Sunday, March 26, 2023 - -

10:02:51 AM



APR 1 7 2023

Caption	12:21:15 PM	Min	Max	Units
{PLC00\ZW_1_TURB}	0.013	0.000	0.150	NTU
{PLC00\ZW_2_TURB}	0.028	0.000	0.150	NTU
{PLC00\ZW_3_TURB}	0.017	0.000	0.150	NTU
{PLC00\ZW_4_TURB}	0.013	0.000	0.150	NTU
{PLC00\ZW_5_TURB}	0.017	0.000	0.150	NTU
{PLC00\ZW_6_TURB}	0.015	0.000	0.150	NTU
{PLC00\FW_TURB}	0.017	0.000	0.150	NTU

NAME OF THE WATER UTILITY City of Alcoa

NAME OF THE WATER TREATMENT PLANT Alcoa Membrane WTP

COUNTY Blount PWSID# 0000007

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Supply

COMPREHENSIVE MONTHLY OPERATION REPORT

APR 0 6 2023

Month/Year: March-2023

Date	Raw water treated X 1000 Gallons	Finished water X 1000 Gallons	Permeate water X 1000 Gallons	PHYSICAL AND CHEMICAL CHARACTERISTICS																		CHEMICALS USED													
				Raw Water Temperature °C	Turbidity NTU							Cl_2 mg/L		Alkalinity mg/L		Hardness mg/L			pH			Fluoride mg/L			Calculated Dosages mg/L							Pounds per 24 Hours						
					Raw Turbidity NTU	FINISHED WATER TURBIDITY MUST BE MEASURED EVERY 4 HOURS AND RECORDED AM			PM			Top of Filter	Lowest Plant Effluent	Total Raw	Total Finished	Raw	Finished		Raw	Mixed	Finished	Raw	Finished	Distribution	ACH	Pre Cl_2	Post Cl_2	Fluoride	Caustic Soda			ACH	Pre Cl_2	Post Cl_2	Fluoride	Caustic Soda		
						12-4	4-8	8-12	12-4	4-8	8-12																										
1	7980	7210	7370	14	9	.02	.02	.02	.02	.02	.02		2.00	52	51	52	52		7.5	7.4	7.9		.58	.67	6		3.00	0.60	2.4			399		184	194	590		
2	5780	5230	5350	14	96	.02	.02	.02	.02	.01	.01		2.07	49	53	46	51		7.2	7.1	7.8		.60	.60	15		3.50	0.60	2.6			723		156	141	464		
3	7100	6400	6540	14	42	.01	.01	.01	.02	.01	.01		2.35	36	43	38	44		7.0	7.0	7.6		.52	.57	11		3.20	0.60	3.0			651		175	172	655		
4	6630	6000	6180	14	19	.01	.01	.01	.01	.01	.01		2.04	46	43	47	48		7.2	7.3	7.7		.53		8		2.80	0.60	3.1			442		144	163	639		
5	6570	6000	6160	13	11	.01	.01	.01	.01	.01	.01		1.94	48	47	48	49		7.3	7.5	7.7		.55		7		2.90	0.60	3.1			384		149	162	637		
6	6550	5940	6090	12	8	.01	.01	.01	.01	.01	.01		2.02	51	49	54	52		7.4	7.5	7.9	0.21	.59	.67	6		2.90	0.60	3.2			328		147	160	650		
7	7340	6640	6820	13	7	.02	.01	.01	.01	.01	.01		2.04	53	54	52	52		7.6	7.5	8.0		.60	.60	6		2.90	0.60	3.1			367		165	180	705		
8	7090	6440	6600	13	7	.01	.01	.01	.01	.01	.01		2.15	59	58	61	60		7.7	7.6	8.0		.62	.65	6		2.90	0.60	3.1			355		160	174	683		
9	6740	6120	6280	12	6	.01	.01	.01	.01	.01	.01		2.11	61	63	62	63		7.7	7.6	8.0		.63	.66	6		2.90	0.60	2.9			337		152	165	608		
10	6980	6340	6490	12	5	.01	.01	.01	.01	.01	.01		2.05	67	63	65	66		7.8	7.5	8.0		.65	.51	6		2.90	0.60	2.8			349		157	171	606		
11	6860	6220	6390	13	5	.01	.01	.01	.01	.01	.01		2.06	65	64	62	65		7.9	7.6	8.0		.67		6		2.90	0.60	2.8			343		155	168	597		
12	6310	6000	6390	12	23	.01	.01	.01	.02	.02	.02		2.00	64	65	63	63		7.8	7.5	8.0		.72		8		3.00	0.60	2.8			421		160	168	597		
13	6710	6000	6150	11	25	.02	.02	.02	.02	.02	.02		2.00	57	61	58	60		7.6	7.3	7.9	0.05	.72	.75	8		3.20	0.60	2.8			448		164	162	574		
14	6940	6150	6170	10	10	.02	.02	.02	.02	.02	.02		2.10	53	55	55	55		7.7	7.5	7.9		.66	.61	6		3.10	0.60	2.8			347		160	162	576		
15	6640	6000	6180	9	6	.02	.02	.02	.02	.02	.02		2.04	53	54	56	54		7.7	7.4	8.0		.63	.55	6		3.00	0.60	2.8			332		155	163	577		
16	6690	6090	6180	10	5	.02	.02	.02	.02	.02	.02		2.26	55	55	55	56		7.9	7.5	8.0		.65	.59	6		2.80	0.60	2.8			335		144	163	577		
17	7880	7170	6250	10	5	.02	.02	.02	.02	.02	.02		2.06	59	57	61	59		7.9	7.5	8.1		.66	.63	6		2.70	0.60	2.6			394		141	165	542		
18	4810	4360	4210	11	6	.02	.02	.02	.02	OFF	OFF		2.15	61	63	69	66		7.8	7.6	8.0		.69		6		2.70	0.60	2.6			241		95	111	365		
19	6410	5800	4210	10	5	OFF	.02	.02	.02	.02	.02		2.15	61	67	69	61		7.8	7.5	8.0		.70		6		2.70	0.60	2.6			321		95	111	365		
20	8480	7490	7630	9	4	.02	.02	.02	.02	.02	.02		1.93	58	58	64	58		7.8	7.5	8.0	0.05	.71	.60	6		2.60	0.60	2.6			424		165	201	662		
21	7010	6200	6360	10	4	.02	.02	.02	.02	.02	.02		1.87	57	56	64	62		7.9	7.5	8.0		.74	.58	6		2.90	0.60	2.6			351		154	168	552		
22	6640	6000	6200	10	4	.02	.02	.02	.02	.02	.02		2.11	61	62	60	62		7.9	7.5	8.0		.76	.61	6		2.90	0.60	2.6			332		150	163	538		
23	6280	5710	5840	11	4	.02	.02	.02	.02	.02	.02		2.10	65	65	65	61		7.9	7.5	8.0		.77	.59	6		2.90	0.60	2.6			314		141	154	507		
24	7340	6670	6620	14	5	.02	.02	.02	.02	.02	.02		2.04	67	65	68	63		7.9	7.5	8.0		.75	.58	6		2.90	0.60	2.6			367		160	174	574		
25	5300	4840	5080	17	23	OFF	OFF	.54	.02	.02	.02		2.15	64	63	65	62		7.9	7.5	8.1		.72		8		3.00	0.60	2.5			354		127	134	424		
26	7150	6500	6610	16	23	.02	.02	.02	.02	.02	.02		2.02	60	60	61	61		7.6	7.3	7.9		.64		8		3.20	0.60	2.4			477		176	174	529		
27	7060	6350	6480	14	8	.02	.02	.02	.02	.02	.02		2.18	57	57	58	56		7.8	7.4	7.9	0.14	.61	.64	6		3.10	0.60	2.5			353		168	171	540		
28	6660	6000	6200	15	6	.02	.02	.02	.01	.01	.01		2.12	61	62	61	58		7.7	7.4	8.0		.65	.61	6		3.00	0.60	2.5			333		155	163	517		
29	7650	6910	7130	14	5	.01	.01	.02	.02	.02	.02		2.05	60	62	60	58		7.8	7.7	8.0		.65	.63	6		2.90	0.60	2.5			383		172	188	595		
30	7840	7120	7260	14	5	.02	.02	.02	.02	.02	.02		2.07	59	59	61	63		8.0	7.9	8.2		.66	.58	6		2.90	0.60	2.5			392		176	191	605		
31	7870	7160	7030	14	5	.02	.02	.02	.02	.01	.01		2.04	61	60	64	64		7.9	8.0	8.2		.76	.54	6		2.90	0.60	2.3			394		170	185	539		
TOT	213290	193060	194450	387	393	0.48	0.49	1.04	0.53	0.48	0.48		64.27	1775	1793	1819	1803		238.4	231.8	246.8	.45	20.36	14.02	211		91.2	18.60	84.1			11993		4771	5121	17590		
AVE	6880	6228	6273	12	13	0.02	0.02	0.03	0.02	0.02	0.02		2.07	57	58	59	58		7.7	7.5	8.0	0.11	0.66	0.61	7		2.94	0.60	2.7			387		154	165	567		
MAX	8480	7490	7630	17	96	0.02	0.02	0.54	0.02	0.02	0.02		2.35	67	67	69	66		8.0	8.0	8.2	0.21	0.77	0.75	15		3.50	0.60	3.2			723		184	201	705		
MIN	4810	4360	4210	9	4	0.01	0.01	0.01	0.01	0.01	0.01		1.87	36	43	38	44		7.0	7.0	7.6	0.05	0.52	0.51	6		2.60	0.60	2.3			241		95	111	365		

CHEMICALS USED	BRAND	ANALYSIS	POUNDS USED	COSTS	
				per lb	per month
ACH	USALCO - DelPAC XG	100%	11993	$0.38500	$4,617.37
Chlorine	CORECHEM, Inc.	100%	4771	$0.3425	$1,634.17
Fluoride	UNIVAR	24%	5121	$0.20300	$1,039.60
Caustic Soda (25%)	UNIVAR	25%	17590	$0.58500	$2,572.52
				TOTAL	$9,863.66

I certify that the data provided accurately represents the water quality, quantity, treatment, operational practices, and other activities for the reporting period specified herein.

Certified Operator Name Tyrel J. Emory

Certified Operator Signature Tyrel J. Emory

APR 0 6 2023

NAME OF THE WATER UTILITY City of Alcoa

NAME OF THE WATER TREATMENT PLANT Alcoa Membrane WTP

COUNTY Blount PWSID# 0000007

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Supply

COMPREHENSIVE MONTHLY OPERATION REPORT

March-2023

Date	Log Removal Values						Filter Operation Data								Disinfection and CT Values												Microbiological Examinations Plant & Distibution									
								(NOTE: ALL TMP VALUES ARE NEGATIVE)							First Disinfection Sequence					Second Disinfection Sequence																	
	Train 1	Train 2	Train 3	Train 4	Train 5	Train 6	Plant Hours	Train 1 - TMP, psi	Train 2 - TMP, psi	Train 3 - TMP, psi	Train 4 - TMP, psi	Train 5 - TMP, psi	Train 6 - TMP, psi	Reject Gallons (x 1000)	C. Free Cl2 - End of Sequence	T. Contact Time in Minutes	PH - End of Seqence	CT - Calculated	CT - Required	C. Free Cl2 - End of Sequence	T. Contact Time in Minutes	PH - End of Seqence	CT - Calculated	CT - Required	Total Inactivation Ratio CT Calc / CT Req		Dist Sample 1 CFU	Dist Sample 2 CFU	Dist Sample 3 CFU	Free Cl_2 mg/L Sample site #1	Sample site # 1	Free Cl2 mg/L Sample site #2	Sample site # 2	Free Cl2 mg/L Sample Site #3	Sample site #3
1	4.59	4.64	4.43	4.51	4.38	4.39	24	1.56	1.28	2.28	2.36	2.54	2.54	804						2.00	168	7.9	335.1	30	11.2		Neg	Neg	Neg	1.63	218 Amy Dr.	2.12	1450 Dalton St.	2.06	460 Defoe Cir.
2	4.58	4.65	4.54	4.51	4.28	4.44	19	1.56	1.43	2.46	2.75	2.71	2.50	588						2.10	112	7.9	234.6	30	7.8		Neg	Neg	Neg	1.18	223 Associates Blvd.	1.91	771 Louisville Rd.	2.19	110 Tyson Blvd. Suite 200
3	4.56	4.57	4.42	4.35	4.40	4.48	22	2.80	2.57	4.32	3.87	4.58	3.17	730						2.40	119	7.6	286.3	32	8.9					2.06	4472 Deer Run Dr.				
4	4.46	4.53	4.39	4.36	4.25	4.27	24	1.60	1.31	2.32	2.99	2.72	2.54	666						2.00	168	7.8	335.1	30	11.2										
5	4.47	4.53	4.38	4.34	4.19	4.26	24	1.80	1.72	2.50	2.77	2.69	2.55	660						1.90	168	7.8	318.3	30	10.6										
6	4.58	4.61	4.49	4.46	4.41	4.64	24	1.79	1.79	2.49	2.72	2.78	2.68	676						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.97	1217 Applecreek Dr.	1.90	1047 Brighton Dr.	1.91	1102 Grant St.
7	4.56	4.65	4.65	4.55	4.64	4.62	24	1.95	1.81	2.79	2.96	3.09	3.02	737						2.00	144	8.0	287.2	30	9.6		Neg	Neg	Neg	2.00	547 Wedgewood Dr.	2.04	3636 Chambers Rd.	2.05	4074 Glenmore Dr.
8	4.49	4.57	4.42	4.38	4.28	4.28	24	1.84	1.83	2.61	2.81	2.98	2.87	712						2.20	144	8.1	315.9	38	8.3		Neg	Neg	Neg	2.00	444 Link Dr.	2.08	1722 Maplecrest Dr.	1.93	6280 Sierra Cir.
9	4.48	4.60	4.42	4.38	4.32	4.30	24	1.85	1.69	2.73	3.11	2.75	2.63	677						2.10	164	8.1	343.7	37	9.3		Neg	Neg	Neg	2.24	2048 Stonybrook Rd.	2.17	4209 W. Lakeview Cir.	1.93	3525 Central Park Blvd.
10	4.52	4.57	4.39	4.34	4.32	4.31	24	1.76	1.76	2.36	2.59	2.56	2.57	701						2.10	144	8.1	301.6	37	8.2					2.18	2923 Old Knox Hwy.				
11	4.44	4.58	4.37	4.36	4.30	4.30	24	1.70	1.67	2.81	2.89	2.90	3.08	691						2.10	144	8.1	301.6	37	8.2										
12	4.54	4.63	4.40	4.34	4.33	4.32	23	1.65	1.29	2.29	2.46	2.44	2.43	636						2.00	168	8.1	335.1	37	9.1										
13	4.52	4.63	4.43	4.38	4.34	4.34	24	2.09	1.58	2.43	2.72	2.73	2.33	674						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.92	273 Joule St.	1.87	2810 Airport Hwy.	2.21	162 Cusick Rd.
14	4.61	4.65	4.47	4.42	4.37	4.54	24	1.69	2.02	2.55	2.71	2.71	1.55	697						2.10	144	8.0	301.6	30	10.1		Neg	Neg	Neg	1.91	3568 Chambers Rd.	1.99	4077 Glenmore Dr.	2.09	220 Associates Blvd.
15	4.50	4.65	4.46	4.65	4.41	4.63	24	1.69	1.69	2.69	2.82	2.93	1.56	667						2.00	168	8.0	335.1	30	11.2		Neg	Neg	Neg	1.64	2020 N. Wright Rd.	2.09	4472 Deer Run Dr.	2.49	1921 Topside Rd.
16	4.57	4.64	4.43	4.37	4.36	4.53	24	1.76	1.35	2.38	2.50	2.54	1.74	672						2.30	144	8.1	330.3	38	8.7		Neg	Neg	Neg	2.48	35.800503, -83.887153	2.25	2919 Old Knoxville Hwy.	1.98	124 N. Hall Rd.
17	4.53	4.62	4.42	4.36	4.31	4.51	24	3.58	2.09	3.13	3.38	3.58	2.74	791						2.10	126	8.1	263.9	37	7.1					1.74	223 Associates Blvd.				
18	4.51	4.58	4.38	4.32	4.30	4.44	16	2.03	2.07	2.74	3.53	3.06	2.21	486						2.20	144	8.0	315.9	31	10.2										
19	4.47	4.58	4.39	4.33	4.29	4.44	18	2.37	2.34	3.20	4.03	3.97	2.99	646						2.20	126	8.1	276.5	38	7.3										
20	4.52	4.56	4.40	4.38	4.38	4.49	24	2.30	2.33	3.55	4.09	3.26	2.97	852						1.90	112	8.1	212.2	48	4.4					2.42	4077 Glenmore Dr.				
21	4.53	4.56	4.39	4.33	4.44	4.39	24	2.22	1.90	3.22	3.34	2.20	2.75	704						1.90	144	8.0	272.9	30	9.1					2.00	4077 Glenmore Dr.				
22	4.47	4.59	4.30	4.38	4.57	4.33	24	1.80	1.58	2.56	2.90	1.80	2.34	667						2.10	168	8.0	351.8	30	11.7					1.33	35.800503, -83.887153				
23	4.48	4.60	4.39	4.35	4.49	4.38	24	1.79	1.39	2.92	2.59	1.79	2.26	631						2.10	168	8.0	351.8	30	11.7					1.97	6280 Sierra Cir.				
24	4.54	4.64	4.44	4.37	4.48	4.42	24	1.56	1.82	2.81	3.01	2.26	2.56	738						2.00	119	8.1	238.5	37	6.4					2.08	444 Link Dr.				
25	4.54	4.56	4.48	4.42	4.56	4.35	15	2.38	1.78	2.55	2.69	2.07	3.23	534						2.20	126	8.2	276.5	25	11.1										
26	4.53	4.63	4.43	4.40	4.49	4.43	24	1.90	1.47	2.34	2.52	1.88	2.12	717						2.00	126	8.0	251.3	20	12.6										
27	4.55	4.64	4.46	4.42	4.52	4.47	24	1.80	1.25	1.99	2.18	1.67	1.85	710						2.20	144	8.0	315.9	31	10.2					1.91	4209 W. Lakeview Cir.				
28	4.60	4.65	4.48	4.53	4.53	4.50	24	1.85	1.29	2.09	1.40	1.71	1.92	669						2.10	168	8.0	351.8	20	17.6					2.23	2923 old knoxville hwy				
29	4.60	4.56	4.42	4.65	4.52	4.45	24	1.82	1.45	2.32	1.61	1.96	2.12	768						2.10	135	8.0	284.2	30	9.5					2.05	4074 Glenmore Dr.				
30	4.55	4.63	4.44	4.64	4.49	4.44	24	1.74	1.80	2.27	1.58	1.94	2.06	787						2.10	135	8.3	284.2	37	7.7					2.12	460 Defoe Cir.				
31	4.53	4.62	4.44	4.61	4.50	4.45	24	1.96	1.63	2.49	1.79	2.18	2.32	791						2.00	112	8.3	223.4	37	6.0					1.99	223 Associates Blvd.				
TOT	140.42	142.72	137.35	137.19	136.45	137.14	713	60.19	52.98	82.19	85.67	80.98	76.20	21479						64.5	4479	249	9302.6	1007	297.1					45.05		20.42		20.84	
AVE	4.53	4.60	4.43	4.43	4.40	4.42	23	1.94	1.71	2.65	2.76	2.61	2.46	693						2.08	144.47	8.03	300.08	32.48	9.58					1.96		2.04		2.08	
MAX	4.61	4.65	4.65	4.65	4.64	4.64	24	3.58	2.57	4.32	4.09	4.58	3.23	852						2.4	168	8.3	351.8	48	17.6					2.48		2.25		2.49	
MIN	4.44	4.53	4.30	4.32	4.19	4.26	15	1.56	1.25	1.99	1.40	1.67	1.55	486						1.9	111.7	7.6	212.2	20.0	4.4					1.18		1.87		1.91	

COST OF PRODUCTION	
(a) Cost of Personnel	$78,591
(b) Cost of Chemicals	$9,864
(c) Cost of Energy	$42,083
(d) Insurance & Misc. Cost	$19,651
(e) Total Production Cost	$150,189
(f) Cost per MG Water Treated	$704.15

(a) Type of Filters	Membrane Vacuum
(b) Number of Filter Trains	6
(c) Filter Area - Sq Ft. (each)	76160
(d) Total Area - Sq Ft.	456960
(e) Filter Rate, gfd	35.0
(f) Filter Rate, gfd Total Rated	
(g) Filter Capacity	16,000,000
GPM	1,111

REMARKS: _____

CITY OF ALCOA

PUBLIC WORKS AND ENGINEERING DEPARTMENT
Engineering - Fleet - Landfill - Purchasing - Sanitation
Streets & Stormwater - Water & Wastewater - Water Quality

725 Universal Street, Alcoa, Tennessee 37701 (865) 380-4800 FAX (865) 380-4803

CERTIFIED, RETURN RECEIPT REQUIRED

April 11, 2023

Ms. Jenna Williams
Knoxville Environmental Field Office
Division of Water Resources
3711 Middlebrook Pike
Knoxville, Tennessee 37921-6538

Re: Monthly Operation Report
City of Alcoa Water Treatment Plant
Blount County
PWSID 0000007

Dear Ms. Williams:

Enclosed is the Corrected Monthly Operation Report for the month of March 2023 for the City of Alcoa Water Treatment Plant, the Turbidity Chart for March 25, 2023, and both the Handwritten and Electronic Day Sheets for March 25, 2023. Please call me at (865) 380-4921 if you need additional information.

Sincerely,

Tyrel J. Emory
Supervisor, Alcoa Water Treatment Plant

TJE/kh

Enclosure: 1. Corrected Monthly Operation Report
2. Turbidity Chart for March 25, 2023
3. Both Handwritten and Electronic Day Sheets for March 25, 2023

Cc: Mr. Shane Snoderly, Director Engineering and Public Works, City of Alcoa (w/encls.)