

Shannon E. Khounnala Columbia Generating Station P.O. Box 968, MD PE03 Richland, WA 99352-0968 Ph. 509-377-8639 sekhounnala@energy-northwest.com

July 9, 2018 GO2-18-090 DIC 1316.26

Mr. Michael Wilson Office of Drinking Water Washington State Department of Health 16201 East Indiana Avenue, Suite 1500 Spokane Valley, Washington 99216

ELECTRONIC SUBMITTAL ONLY

Dear Mr. Wilson:

Subject: COLUMBIA GENERATING STATION

POTABLE WATER DATA

Reference: WDOH Water Supply System No. 920240

The information enclosed provides potable water data for Columbia Generating Station for June 2018. If you have any questions concerning this information, please contact Kip Whitehead at (509) 377-8794.

Respectfully,

09/07/18 12:03:39 -07:00

Shannon E. Khounnala

Khounnala, Shannon E., Environme

Environmental and Regulatory Programs Manager

SEK/nb

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SEK/lb		Columbia Files	964Y
WK Whitehead	PE03	Docket File	PE20
JL Cowin	PE12		



<u>Supplemental Reporting - Individual Filter Turbidity</u> <u>for Conventional, Direct, or In-line Filters</u>

	reatment l	Plant #:		Reporting Perio	d Month/Y	ear						
System Name:				June 2016	County:		-					
Columbia Generating Station					Benton	-	<u> </u>					
Did you monitor the eff	luent tu	ırbidity of eac	h individ	ual filter on a c	ontinuou	s basis?	▼ Yes □ No					
Check the appropriate box attach a description of follo												
Did the filtered water to	urbidity	in any indivi	dual filte	r exceed:								
(1) 1.0 NTU in 2 con	nsecutiv	e measurement	s taken 1	5 minutes apart?		E	Yes I No					
(2) 0.5 NTU in 2 corroperation after be 10,000 persons of	ackwash	ning or taking o			ıg	□ Yes	□ No 🔽 N/A					
(3) 1.0 NTU in 2 conconsecutive mon 3 consecutive mon	ths? - <i>F</i>						Yes 🔽 No					
(4) 2.0 NTU in 2 con the same individu			s for 2 co	onsecutive month	ıs? (in	r Yes ✓ No						
T''1 N 1 D 1:	11. 3.6			, ,		Assort Decision C						
Filter Number Turbio	dity Mea	asurement(s)	Date	(S)		Attach Description of Follow-up Status						
	Requi	red Follow-up a	ction for	listed abo	ove:							
		ired Follow-up action for exceedance cases listed above: above): Record Filter Number, Turbidity Measurement (s), Date(s), Then:										
Case (1) for systems serving than 10,000 persons. Required follow-up action		•Report the cause (if known) for the exceedance to the Department by the 10 th of the following month.										
Cases (1) and (2) for syste	•Do Either of the Following Within 7 Days:											
serving 10,000 or more pe	o Produce a Filter Profile and Report when Completed, or											
Required follow-up action	18:	o Report the Obvious Reason for the Exceedance										
	ase (3) for all systems. equired follow-up actions:			•Conduct a Self-Assessment of Filter Within 14 Days Consisting of:								
Required follow-up action	o Assessment of Filter Performance											
	o Development of Filter Profile O Identification/Prioritization of Factors Limiting Performance											
		 Identification/Prioritization of Factors Limiting Performance Assessment of Applicability of Corrections 										
		o Preparation of Report										
		 Preparation of Report Notify Department When Self-Assessment is Completed 										
Case (4) for all systems.				ve Performance I								
Required follow-up action	ıs:		-			, ,	Nova (> 10.000)					
			_	ents Within 60 Da		-						
Signatura		o Comp	iele CPE;		Days (<)	o,ooo) or	90 Days (≥ 10,000)					
Signature:	<u></u>			WTPO #: 12596								
Report Submitted by (Print)): Jennife	r Cowin		Telephone Numb	er: (5 09) 3	377-2132						

Water Treatment Plant Monthly Report

Month

June Year 2018

Water Treatment Plant Monthly Report

Month June Year 2018

Columbia Generating Station County

PWS ID Cells and Columns with Blue Headings are intended for data provided by user Source ID 92024 0 SO2 Source Name PWS Name Columbia River Columbia Generating Station Plant ID CGS County Benton Source ID SO2 PWS ID 92024 0 Source Name PWS Name Columbia River Plant ID

Avg	Total		30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	C)1	4	ω	2	-	Date	
191.47	5,744.16		89.88	261.24	154.18	49.49	182.46	289.18	131.29	211.08	323.85	285.81	221.51	220.84	138.36	209.06	280.09	279.41	251.47	54.20	162.26	127.59	98.64	250.46	0.00	192.90	235.99	165.63	235.65	163.27	248.11	230.26	in 1000 gals	
47	16	H	.88	24	18	49	46	18	29	08	85	81	51.	84	36	06	9	41	47	20	26	59	64	46	8	90	99	63	7.					
9	284		4.4	12.9	7.6	2.5	9.0	14.3	6.5	10.4	16.0	14.2	11.0	10.9	6.8	10.3	13.9	13.8	12.5	2.7	8.0	6.3	4.9	12.4	0.0	9.6	11.7	8.2	11.7	8.1	12.3	11.4	9 4	Total
17.16	377.48		16.22	14.84		٠,	31.62	15.06	15.09		15.84	15,40	15.80	16.00	15.70		31.50	16.00	15.00		15.80	15.79		15.11	15.60		14.80	14.00	26.30	13.20	12.80		Fotal in 1000 gal	Filter
2.8	84.0		1.3	3.8	2.3	0.7	2.7	42	1.9	3.1	4.7	4.2	3.2	3.2	2.0	3.1	4.1	4.1	3,7	8.0	2.4	1.9	1,4	3.7	0.0	2,8	3 5	24	3.4	2.4	3.6	3.4	Chlorine	
	0.0		na.	na	na	na	na	па	na	па	Da .	na.	na.	na	湿	Ra	na	na	กล	TIA.	Пa	na	뮯	굺	Пa	ם	굺	ᇜ	na	品	굻	品	Alum P	
0.02	0.74		0.01	0.03	0.02	0.01	0.02	0.04	0.02	0.03	0.04	0.04	0.03	0.03	0.02	0.03	0.04	0.04	0.03	0.01	0.02	0.02	0.01	0.03	0.00	0.02	0.08	0.02	0.03	0.02	0.03	0 03	Polymer	
	0.0		BE	THA!	na	na	na.	na	na	na	na	DA.	na	na	26	na	na.	na	na	Dia	na	na	na	na	na	na	na	Па	na	നമ	Da	na	Filter Aid	Chemical
	0.0		na na	na na	na	na	na	na	na	na	na	пa	na	na.	na	па	na	na	na	na	na	na	па	na	na	па	Soda Ash	Chemicals Used (lbs)						
	0.0		na	na	na	BU	Da	na	na.	BU	na	an	na	na	па	na	na	na	na	na	na	na	na	na	na	na	Ozone	٣						
16.3	490.4		7.7	22.3	13.2	4.2	156	24.7	11.2	18.0	27.6	24.4	18.9	18.9	11.8	17.8	23.9	23.9	21.5	4.6	13.9	10.9	8.4	21.4	0.0	16.5	20.1	14.1	20.1	13.9	21.2	19.7	PAX XL-19	
	0.0		na na	na	na	na	na.	Ta	na	na	na	na	na	福	na.	na	na	na.	na	na	na	na	BLU	na	na	na	na	na	na	BU	na	na		
2.67	0		2.2	2.3	2.0	2.1	1.7	2.1	2.1	2.0	1.4	1.2	1.8	1.9	2.0	2.1	2.4	2.3	2.4	2.4	2.9	3.0	2.7	2.8	pd	3.3	3.5	3.8	5.0	4.2	4.9	5.0	Raw	Turbi
			na	na	na na	na	na	na	na	na	na	na	na	na	na	na	na	na	па	па	na	na	na	па	na	na	na	па	па	na	па	na	Settled	Turbidity NTU
	No. of Street, or other Persons		0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.08	Pd	0.08	0.08	0.09	0.09	0.09	0.09	0.10	1st	
			0.08	0.08	Year or	DESIGNATION.	0.09	0.08	_	0.08	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	þd		0.09	0.08	0.08	pd	0.09	0.08	0.08	0.09	0.08	0.14	0.09	2nd	Combined
N. W.			pd I	0.10		pd f	0.08	0.09	pd	0.08	0.08	0.08	0.08	0.08	pd	0.08	0.08	0.08	0.08 p	pd	pd	pd	pd	0.08 p	pd	0.08 p	0.08 pd	pd	0.09 pd	pd p	0.09	0.08	3rd	Filter Efflu
			þd	0.08	Pd.	pd	pd	0.08	Pd	0.08	0.08	0.07	pd	0.08	Bd	0.08	0.08	0.08	Pd.	pd	pd	pd	Pd	pd	pd	pd		pd		pd	0.09	0.08	4th	ent Turbidi
			pd	pd	pd	pd	pd	Pd	pd	pd	pd	pd	bd	bd	B	pd	pd	0.08	Pd.	pd	pd	pd	pd		pd	pd		pd	pd	pd	Pd.	pd	5th	Combined Filter Effluent Turbidity 4 hour sample NTU
			pd	pd	pd	pd	bd	pd	pd	Pd.	bd	pd	pd	pd	pd	pd	М	pd	pd	Bd	Pd	Pd	pd.	pd		pd	pd	pd.	pd	pd	pd	pd	6th	ample NTU
0.08	1		0.08	0.09	0.09	0.09	0.08	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.08	0.08	pd	0.08	0.08	0.09	0.09	0.09	0.10	0.09	Avg	
	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Pd.	0	0	0	0	0	0	0	Samples > 0.3 NTU	No of
	1		0.10	0.19	0.15	0.17	0.16	0.12	0.12	0.17	0.19	0.17	0.09	0.14	0.11	0.12	0.11	0.10	0.10	0.10	0.12	0.11	0.11	0.10	Þd	0.10	0.10	0.11	0.11	0.11	0.14	0.17	Turbidity NTU	
10														100											B				H					% NTU
96.5		H	96.2	96.1	95.8	95.7	95.0	95.9	95.9	8.26	94.7	93.9	95.3	95.7	85.8	96.0	96.7	96.5	966	96.6	97.0	97.1	96.9	97.1		97.5	97.7	97.7	98.2	98.0	97.9	98.3	te 1) Raw	U Temp C
19			-	-		19	-	-	-	H		-	19	-		-	-		-	23		-	H			-	15	-						Š.
7.9		-		-		7.9	-	-	-	-	-	H	7.9		-	H		H	-	7.8		-	L		-	-	7.9	-	H	-			Raw	모
7.9		_	8.1	8.0	7.9	7.9	8.0	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9	8.0	7.8	7.9	7.9	7.8	7.9	7.9	7.9	7.9	Final	1 0
53			L			56		1		-			52	F		-				53	-	-	-				51						Raw	CaCO3
53			-			57				-			50		-					51				-			53						Σ _ :	
37						36							40							37							33						mg/L as CaCO3 Fin	Calcium
	Contract of the last																												1000				Remarks	

Did the CFE continuous monitoring fail to operate for more than five (5) consecutive days during this month? Y/N:

Total number of CFE samples exceeding 0.3 NTU: E = 100.0%

DOH Form #331-023 (Excel version)

Number of times CFE exceeded 1.0 NTU this month:

Satisfactory turbidity performance is 95% or greater. Performance determination: [1-(EN)]x100 =

Total number of CFE samples analyzed for month: N =

Report Submitted By Jennifer Cowin

See Cover Page for information on where to send this form.

NOTE 1: Percent turbidity reduction for each day of operation: PTR = [(Raw NTU)-(Avg CFE NTU)]x(100)(Raw NTU) NOTE 2: pd = plant down, system not making water. Turbidity reported at four hour intervals only when system is making water.

Date Printed: 7/2/2018

Health PWSID

Washington State Department of Health SWTR Disinfection Monthly Report Form

Overall Log Treatment Req'd Population Served County Source ID Plant ID SO2 PWS Name Columbia Generating Station Source Name Columbia River Min Grab Samples Reqd 2 Residuals I
Filtration Log Removal Credit Residuals Normally Measured Continuously Y/N al Credit 2.0 Submitted By WTPO Cert No Telephone No Month Required Disinfection Log Reduction Year

Cells and Columns with Blue Headings are intended for data provided by user

	Section 1				3.35	29	98	75	1.3	7.9	19.8	188.8	Avg
4		0.0	1.3	0	4.80	33	153	117	1.3	8.1	21.7	254	Max
The state of the s		0.0	1.2	0	2.18	25	70	54	1.2	7.8	17.0	117	Si
The state of the s	The state of the s	0	0	SON OF THE PERSON	30				Section of the last	THE PERSON NAMED IN	The second	The second second	Count
34		# > 4 hrs	# < 0.2 mg/L	30		The second second second							Total
					The same of the sa								
			1.3	C	3.20	27	87	66	1.3	8.1	21.4	207	30
-			1:3	C	3.45	26	90	68	1.3	8.0	21.3	200	29
		TO SECTION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE	1.3	C	3.32	12	O.G.	68	1.3	6.7	6.02	200	82
			j c	0 0	20.04	27	8	50	. i	7.0	2000	1000	3 5
4			2		200	27	71	7.	4	70	212	254	97
1			1 6	C	3.31	27	89	68	1.3	8.0	21.2	202	26
-			1.3	0	2.91	28	81	62	1.3	7.9	21.0	222	25
-			1.3	C	3.33	26	87	65	1.3	7.9	21.4	209	24
			1.3	C	3.16	25	79	60	1.3	7.9	21.7	226	23
-			1.3	C	3.41	27	92	70	1.3	8.0	21.2	196	22
1	National Sections		1.3	C	3.28	28	92	69	1.3	8.0	20.9	199	21
100000000000000000000000000000000000000			1.3	C	3.75	28	105	79	1.3	8.0	20.7	172	20
4	The same of the sa		1.3	C	3.40	28	95	73	1.3	7.9	20.8	188	19
1			1.3	C	2.54	30	76	58	1.3	7.9	19.6	235	18
1	The same of the sa		1.3	C	3.37	31	105	79	1.3	8.0	19.7	172	17
			1.3	C	2.79	30	84	64	1.3	8.0	19.7	214	16
1			1.3	C	2.79	32	89	68	1.3	8.0	19.0	201	15
1			1.3	C	4.80	32	153	117	1.3	7.9	18.8	117	14
1			1.3	C	3.89	28	109	82	1.3	7.9	20.4	167	13
COLUMN COLUMN		William Control	1.3	C	2.83	31	88	66	1.3	7.9	18.6	208	12
			1.3	C	4.41	31	137	104	1.3	7.9	18.7	131	=
			1.8	C	3.55	32	114	86	1.3	7.9	18.6	158	10
1			1.3	C	4.71	28	132	101	1.3	8.0	20.1	136	9
			1.3	C	3.45	29	100	75	1.3	7.8	19.8	181	8
			1.3	C	3.09	32	99	75	1.3	7.9	18.4	182	7
mk			1.3		3.54	31	110	84	1.3	7.9	18.6	163	6
2			1.3	The same	3,16	32	101	76	1.3	7.8	17.7	179	51
			1.2		2.18	32	70	55	1.3	7.9	18.1	248	4
1			1.2		4.14	32	132	99	1.3	7.9	18.5	138	ω
11			1.2	C	3.25	31	101	77	1.3	7.9	18.1	177	2
			1.2	C	2.64	33	87	75	1.2	7.9	17.0	183	
Sampled	ō	hours	mg/L		$\overline{}$	from Tables	(C.1)	(T) minutes		рН	C	Flow gpm	Date
			Ÿ	No. of Samples							Water		
Distribution S		ntry Point	Distribution E			æ	it in cell 19 abov	Removal Credi	Filtration Log	ter your plant's	emember to ent	orrect results, re	ote: For c
Residu		esidual at	Disinfectant R					non	ıtio Determinati	Inactivation Ra			
	Residual in Distribution System No of Sites Sampled Sampled 1 1 1 1 1 1 1 1 1 1 1 1 1		Buration less hours Name & Time hours Name & Time	It Residual at DOH DUH Name & Time	Distribution Entry Point Lowest Daily Duration less Residual than 0.2mgL Name & Time 1.2	No. of Lowest Daily Duration less DOH	Disinfectant Residual at Distribution Entry Point	No. of Calculated CT Calculated CT Calculated CT Feed Calculated CT Feed Calculated CT Feed Fe	Intelligent Intelligent				

DOH Form #331-048 (Excel version)

See Cover Page for information on where to send this form.

Signature



Surface Water Treatment Plant Monthly Report Summary Form

PWS ID PWS Name Columbia Generating Station 92024 0 Color code for form information: WTP Monthly Rept Source ID SO2
Source Name
Plant ID cgs **SWTR Monthly Disinfection Rept** Columbia River Month June County To be supplied by user Benton Year 2018

1.0 0 254 7	Y/N:	36. Did certified operator take all req'd pH, temp, turbidity, and residual disinfectant conc?	water/ General
1.0 0 254 0			IWaler General
1.0 0 254			The state of the s
1.0		34. Maximum flow rate treated (gpm)	Finished
1.0		33. Max allowable turbidity 1.0 No of finished water turbidity measurem't > limit	
0		32. Average of all disinfectant residual measurements taken with coliform samples	
		31. No of samples where no disinfectant residual was detected (Enter 0 if none)	Residuals
34		30. No of distribution system disinfectant residual samples measured this month	System
30		29. Number of days distribution system disinfectant residual was monitored	Distribution
30		28. Number of days water served to public this month	
0		27. No of days when residual fell below 0.2 mg/l for more than 4 hours (Enter 0 if none)	
0		26. No of days when residual fell below 0.2 mg/l (Enter 0 if none)	Samples
30		25. Number of entry point residual samples analyzed during month	Entry Point
29		24. Number of days during which plant produced water during month	
2.18		23. Lowest inactivation ratio achieved	
0		22. Number of days inactivation ratio was below 1.0 (Enter 0 if none)	Ratio
30		21. Number of days disinfectant CT was monitored this month	
4.5		20. Maximum filtration rate (gpm/sq. ft)	
Y	Y/N/NA:	19. Was coagulation in use at all times the plant was operating?	
z	Y/N:	18. Was unfiltered water provided to consumers at any time?	S=
96.5		17. Average of daily filtration effectiveness calculations (% turbidity reduction) "X" if N/A:	
0.2		16. Maximum filtered water turbidity (NTU)	Filtration
0.08		15. Average filtered water turbidity (NTU)	
0		14. Turbidity performance limit 0.3 No of filtered measurements > performance limit	
87		13. Number of filtered water turbidity measurements taken	
284		12. Hours of operation during reporting month	
87		11. Number of raw water turbidity measurements taken	
5.04		10. Maximum turbidity of the raw water treated by the plant (NTU)	1
2.67		Average turbidity of the raw water treated by the plant (NTU)	Water (naw)
29			Same (Bank)
2		7. Maximum density of raw water fecal coliform (# organisms/100 ml)	

DOH Form #331-172 (Excel version)	Signature	Report Submitted By
cel version)	141-	Jennifer Cowin
See Cover Page for information on where	Telephone Number	BTO/WTPO Cert No
here to send this form.	509-377-2132	12596