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January 28, 2019
GO2-19-026
DIC 404.1

Ritchie Graves
Columbia Hydropower Branch
National Marine Fisheries Service
1201 NE Lloyd Blvd, Suite 1100
Portland, OR 97232

VIA E-MAIL AND US MAIL

Dear Mr. Graves:

Subject: 2018 BIOLOGICAL MONITORING REPORT

Reference: Letter, GI2-17-061, March 10, 2017, from Barry A. Thorn (National Marine Fisheries Service) to Jeffery J. Rikhoff (Division of License Renewal, Office of Nuclear Regulation) "Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Renewing the Operating License for the Columbia Generating Station, Washington, Condition 2.9.4(4)(a)."

Condition 2.9.4(4)(a) of the Endangered Species Act 7(a)(2) Biological Opinion requires the Energy Northwest to submit an annual summary of biological monitoring data and reports submitted pursuant to NPDES Permit WA002515-1. Attached is the 2018 Biological Monitoring Report.

If you have any questions regarding this report, I can be reached at (509) 377-8639.

Sincerely,

28/01/19 15:56:52 -08:00

X 

Khounnala, Shannon E. , Environme...
cosign

Shannon E. Khounnala
Environmental and Regulatory Programs Manager

SEK/nb

Attachments: 1. GO2-19-026 – 2018 Post Season Fish Collection Report – Attachment 1
2. GO2-19-026 – 2018 NPDES Permit DMRs – Attachment 2

cc: Briana Grange, NRC, Briana.Grange@NRC.gov
NRC Document Control Desk
EndangeredSpecies.Resource@NRC.gov

INTERNAL DISTRIBUTION:		FILE COPY	
SEK/lb		Columbia Files	964Y
		Docket File	PE20

Energy Northwest

Columbia Generating Station

2018 Post Season Fish Collection Report

The purpose of this report is to document fish collection activities on the part of Energy Northwest (ENW) during the 2018 calendar year and to verify that the activities were in compliance with the Endangered Species Act section 7(a)(2) Biological Opinion for the Columbia Generating Station (NMFS No: NWR/2011/05286) issued March 10, 2017. Also included is a discussion on changes in CGS operations during the 2018 calendar year that had the potential to affect CGS effluent discharges to the Columbia River.

Fish Collection

Columbia Generating Station (CGS) is required to collect and analyze fish samples from locations near the CGS effluent discharge in the Columbia River and from a control location, typically the Snake River. The samples are analyzed for radioactive content with the purpose of determining what impact, if any, CGS operation may have on Columbia River fish. The requirements specify collection of 2 resident and 1 anadromous species from both locations. The fish collection activities are to be performed in accordance with the Endangered Species Act section 7(a)(2) Biological Opinion for the Columbia Generating Station .

Resident Species Collection

Columbia River

The two resident fish species collected from the Columbia River in 2018 were walleye and small mouth bass. Two walleye were obtained as a fisherman donation in May. Information provided by the fishermen indicated the fish were caught on 5/1/18 within vicinity of the green buoy marking the Columbia Generating Station (CGS) discharge location.

Energy Northwest (ENW) personnel collected five small mouth bass on 8/17/18 from a shore location downstream of the CGS pump house. GPS coordinates were recorded as 46.473056, -119.265344, water temperature as 20.6 degrees Celsius. The fish was caught using hook and line techniques that targeted bass. No other fish were caught or hooked and no impact to an endangered or threatened species was observed. Fishing techniques used to collect the resident species were in accordance with the Washington Dept. of Fish and Wildlife (WDFW) freshwater fishing rules for the resident species of interest.

Snake River

The resident fish from the Snake River serve as controls and were obtained by ENW personnel and fisherman donation. The two walleye obtained as a fisherman donation in October. Information provided by the fishermen indicated the fish were caught on 10/26/18 near the Lyons Ferry Marina. ENW personnel collected three small mouth bass on 9/8/18 from a location between the Hood Park and Ice Harbor Dam, GPS coordinates were recorded as 46.240926, -118.954463.

Anadromous Species Collection

The anadromous specie collected from the Snake and Columbia Rivers was Chinook salmon. Authorization to obtain the fish from local hatcheries was provided by the State of Washington Dept. of Fish and Wildlife in a letter dated 9/12/18. The fish carcasses were obtained from both the Ringold and Lyons Ferry fish hatcheries on 11/6/18.

Fish Collection Summary

Reasonable and prudent measures were utilized to minimize the impact of biological monitoring activities during 2018. Fish collection was performed using hook and line techniques that targeted the species of interest; electroshock fishing was not performed. No capture or handling of Upper Columbia River (UCR) spring-run Chinook salmon or adult UCR steelhead occurred during the year.

Summary of Changes to CGS Aqueous Effluent Discharges

During the 2018 calendar year, the NPDES effluent monitoring as reported on the monthly discharge monitoring reports indicated that all parameters were within permit specifications with no issues or violations. Additionally, whole effluent toxicity testing performed on a quarterly basis showed no statistically significant difference in survival between the control and the acute critical effluent concentration (ACEC, 11% effluent). Based on the results of these quarterly acute toxicity tests and the monthly monitoring, there have been no changes in CGS operations that affected the effluent discharge during 2018.



INTEROFFICE MEMO

GO2-18-034

DIC: 1316.20

DATE: February 12, 2018
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA-002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for January 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's Online Reporting System.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

DISTRIBUTION LIST:

Jane LePage (1025)

W. Kip Whitehead (PE03)

Docket File (PE20)

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Jason Brown, Supervisor, Chemistry Operations

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 01/01/2018 - 01/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
		CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-M	1/1/18	0.7	8.3	8.3	0	24.6					<0.1	<0.1
1-T	1/2/18	2.5	8.3	8.3		26.5	7.2*	17*	2.2*	28*		
1-W	1/3/18	0.8	8.3	8.3	0	26.0					<0.1	<0.1
1-Th	1/4/18	2.2	8.3	8.3		25.6						
1-F	1/5/18	0.8	8.3	8.3	0	25.4					<0.1	<0.1
1-Sa	1/6/18	2.4	8.3	8.3		24.5						
2-Su	1/7/18	2.4	8.3	8.3		24.3						
2-M	1/8/18	0.5	8.3	8.3	0	24.5					<0.1	<0.1
2-T	1/9/18	2.7	8.3	8.3		26.0						
2-W	1/10/18	0.7	8.3	8.3	0	25.4					<0.1	<0.1
2-Th	1/11/18	2.5	8.3	8.3		25.6						
2-F	1/12/18	2.5	8.3	8.3		25.6						
2-Sa	1/13/18	2.5	8.3	8.3		26.3						
3-Su	1/14/18	2.5	8.3	8.3		26.1						
3-M	1/15/18	0.8	8.3	8.3	0	25.8					<0.1	<0.1
3-T	1/16/18	2.2	8.3	8.3		26.3						
3-W	1/17/18	0.7	8.3	8.3	0	26.0					<0.1	<0.1
3-Th	1/18/18	2.9	8.3	8.3		26.9						
3-F	1/19/18	0.7	8.3	8.3	0	25.5					<0.1	<0.1
3-Sa	1/20/18	2.3	8.3	8.3		23.5						
4-Su	1/21/18	2.3	8.3	8.3		23.6						
4-M	1/22/18	0.5	8.3	8.3	0	23.2					<0.1	<0.1
4-T	1/23/18	2.5	8.3	8.3		21.3						
4-W	1/24/18	0.6	8.3	8.3	0	21.1					<0.1	<0.1
4-Th	1/25/18	2.4	8.3	8.3		22.6						
4-F	1/26/18	0.7	8.3	8.3	0	22.4					<0.1	<0.1
4-Sa	1/27/18	2.4	8.3	8.3		24.7						
5-Su	1/28/18	2.4	8.3	8.3		24.0						
5-M	1/29/18	0.8	8.3	8.3	0	22.9					<0.1	<0.1
5-T	1/30/18	2.6	8.3	8.3		23.5						
5-W	1/31/18	0.7	8.3	8.3	0	23.1					<0.1	<0.1
Instantaneous Minimum			8.3									
			>= 6.5 (RO)									
Average Monthly		1.7							2.2	28		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.3								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-M	1/1/18		
1-T	1/2/18		
1-W	1/3/18		
1-Th	1/4/18		
1-F	1/5/18		
1-Sa	1/6/18		
2-Su	1/7/18		
2-M	1/8/18		
2-T	1/9/18		
2-W	1/10/18		
2-Th	1/11/18		
2-F	1/12/18		
2-Sa	1/13/18		
3-Su	1/14/18		
3-M	1/15/18		
3-T	1/16/18		
3-W	1/17/18		
3-Th	1/18/18		
3-F	1/19/18		
3-Sa	1/20/18		
4-Su	1/21/18		
4-M	1/22/18		
4-T	1/23/18		
4-W	1/24/18		
4-Th	1/25/18		
4-F	1/26/18		
4-Sa	1/27/18		
5-Su	1/28/18		
5-M	1/29/18		
5-T	1/30/18		
5-W	1/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	1/2/2018	7.2	Results reported from a grab sample collected 1/2/2018
CWB	Copper Total Micrograms/L (ug/L)	1/2/2018	17	Results reported from a 24-hr composite sample collected 1/1/2018-1/2/2018
CWB	Chromium Total Micrograms/L (ug/L)	1/2/2018	2.2	Results reported from a 24-hr composite sample collected 1/1/2018-1/2/2018
CWB	Zinc Total Micrograms/L (ug/L)	1/2/2018	28	Results reported from a 24-hr composite sample collected 1/1/2018-1/2/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 01/01/2018 - 01/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
		Pnd
1-M	1/1/18	15522
1-T	1/2/18	30838
1-W	1/3/18	30165
1-Th	1/4/18	29275
1-F	1/5/18	28756
1-Sa	1/6/18	28995
2-Su	1/7/18	15522
2-M	1/8/18	28549
2-T	1/9/18	15522
2-W	1/10/18	28990
2-Th	1/11/18	29152
2-F	1/12/18	15522
2-Sa	1/13/18	28595
3-Su	1/14/18	28859
3-M	1/15/18	15522
3-T	1/16/18	15522
3-W	1/17/18	28522
3-Th	1/18/18	28822
3-F	1/19/18	15522
3-Sa	1/20/18	29011
4-Su	1/21/18	28813
4-M	1/22/18	15522
4-T	1/23/18	15522
4-W	1/24/18	29042
4-Th	1/25/18	15522
4-F	1/26/18	28622
4-Sa	1/27/18	15522
5-Su	1/28/18	15522
5-M	1/29/18	29278
5-T	1/30/18	15522
5-W	1/31/18	22722
Monthly Total		718792

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 01/01/2018 - 01/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-M	1/1/18	18.7
1-T	1/2/18	20.8
1-W	1/3/18	18.9
1-Th	1/4/18	20.1
1-F	1/5/18	19.0
1-Sa	1/6/18	18.0
2-Su	1/7/18	20.1
2-M	1/8/18	18.9
2-T	1/9/18	21.7
2-W	1/10/18	20.5
2-Th	1/11/18	21.3
2-F	1/12/18	21.3
2-Sa	1/13/18	21.6
3-Su	1/14/18	21.6
3-M	1/15/18	19.4
3-T	1/16/18	21.3
3-W	1/17/18	19.7
3-Th	1/18/18	22.9
3-F	1/19/18	20.2
3-Sa	1/20/18	21.7
4-Su	1/21/18	21.9
4-M	1/22/18	19.8
4-T	1/23/18	20.7
4-W	1/24/18	19.9
4-Th	1/25/18	22.2
4-F	1/26/18	20.4
4-Sa	1/27/18	22.7
5-Su	1/28/18	21.6
5-M	1/29/18	19.8
5-T	1/30/18	22.4
5-W	1/31/18	19.1

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-044

DIC: 1316.20

DATE: March 14, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA-002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for February 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's Online Reporting System.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

DISTRIBUTION LIST:

Jane LePage (1025)

W. Kip Whitehead (PE03)

Docket File (PE20)

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Jason Brown, Supervisor, Chemistry Operations

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 02/01/2018 - 02/28/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
		CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Th	2/1/18	2.5	8.3	8.3		22.9						
1-F	2/2/18	1.2	8.3	8.3	0	23.5					<0.1	<0.1
1-Sa	2/3/18	2.3	8.3	8.3		24.6						
2-Su	2/4/18	2.3	8.3	8.3		26.3						
2-M	2/5/18	0.8	8.3	8.3	0	26.1					<0.1	<0.1
2-T	2/6/18	2.8	8.3	8.3		23.5	4.3*	14*	<1*	19*		
2-W	2/7/18	1.2	8.3	8.3	0	23.4					<0.1	<0.1
2-Th	2/8/18	2.3	8.3	8.3		24.5						
2-F	2/9/18	1.2	8.3	8.3	0	24.8					<0.1	<0.1
2-Sa	2/10/18	2.3	8.2	8.3		22.9						
3-Su	2/11/18	2.3	8.3	8.3		22.0						
3-M	2/12/18	0.6	8.3	8.3	0	22.8					<0.1	<0.1
3-T	2/13/18	2.8	8.3	8.3		25.4						
3-W	2/14/18	0.9	8.3	8.3	0	24.1					<0.1	<0.1
3-Th	2/15/18	2.3	8.3	8.3		24.8						
3-F	2/16/18	1.1	8.3	8.3	0	25.8					<0.1	<0.1
3-Sa	2/17/18	2.1	8.3	8.3		28.7						
4-Su	2/18/18	2.1	8.3	8.3		28.5						
4-M	2/19/18	1.1	8.3	8.3	0	24.7					<0.1	<0.1
4-T	2/20/18	2.2	8.3	8.3		24.1						
4-W	2/21/18	1.2	8.3	8.3	0	24.5					<0.1	<0.1
4-Th	2/22/18	2.2	8.3	8.3		23.0						
4-F	2/23/18	0.8	8.3	8.3	0	23.9					<0.1	<0.1
4-Sa	2/24/18	2.1	8.3	8.3		27.4						
5-Su	2/25/18	2.1	8.3	8.3		25.1						
5-M	2/26/18	1.1	8.3	8.3	0	23.7					<0.1	<0.1
5-T	2/27/18	2.2	8.3	8.3		23.5						
5-W	2/28/18	0.6	8.3	8.3	0	23.6					<0.1	<0.1
Instantaneous Minimum			8.2									
			>= 6.5 (RO)									
Average Monthly		1.7							<1	19		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.3								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	2/6/2018	4.3	Results reported from a grab sample collected 2/6/2018



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Th	2/1/18		
1-F	2/2/18		
1-Sa	2/3/18		
2-Su	2/4/18		
2-M	2/5/18		
2-T	2/6/18		
2-W	2/7/18		
2-Th	2/8/18		
2-F	2/9/18		
2-Sa	2/10/18		
3-Su	2/11/18		
3-M	2/12/18		
3-T	2/13/18		
3-W	2/14/18		
3-Th	2/15/18		
3-F	2/16/18		
3-Sa	2/17/18		
4-Su	2/18/18		
4-M	2/19/18		
4-T	2/20/18		
4-W	2/21/18		
4-Th	2/22/18		
4-F	2/23/18		
4-Sa	2/24/18		
5-Su	2/25/18		
5-M	2/26/18		
5-T	2/27/18		
5-W	2/28/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



CWB	Copper Total Micrograms/L (ug/L)	2/6/2018	14	Results reported from a 24-hr composite sample collected 2/5/2018-2/6/2018
CWB	Chromium Total Micrograms/L (ug/L)	2/6/2018	B <1	Results reported from a 24-hr composite sample collected 2/5/2018-2/6/2018
CWB	Zinc Total Micrograms/L (ug/L)	2/6/2018	19	Results reported from a 24-hr composite sample collected 2/5/2018-2/6/2018
CWB2	All Parameters			Total Residual Halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 02/01/2018 - 02/28/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Th	2/1/18	14456
1-F	2/2/18	27625
1-Sa	2/3/18	27815
2-Su	2/4/18	27922
2-M	2/5/18	14456
2-T	2/6/18	27531
2-W	2/7/18	27856
2-Th	2/8/18	27756
2-F	2/9/18	14456
2-Sa	2/10/18	27982
3-Su	2/11/18	14456
3-M	2/12/18	27830
3-T	2/13/18	14456
3-W	2/14/18	27610
3-Th	2/15/18	14456
3-F	2/16/18	27930
3-Sa	2/17/18	14456
4-Su	2/18/18	14456
4-M	2/19/18	28002
4-T	2/20/18	27956
4-W	2/21/18	27956
4-Th	2/22/18	27656
4-F	2/23/18	27956
4-Sa	2/24/18	27956
5-Su	2/25/18	14456
5-M	2/26/18	14456
5-T	2/27/18	14456
5-W	2/28/18	28756
Monthly Total		633111

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 02/01/2018 - 02/28/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Th	2/1/18	21.1
1-F	2/2/18	20.5
1-Sa	2/3/18	23.1
2-Su	2/4/18	23.6
2-M	2/5/18	21.5
2-T	2/6/18	22.8
2-W	2/7/18	21.0
2-Th	2/8/18	23.7
2-F	2/9/18	20.7
2-Sa	2/10/18	21.1
3-Su	2/11/18	20.8
3-M	2/12/18	18.9
3-T	2/13/18	21.3
3-W	2/14/18	19.4
3-Th	2/15/18	21.5
3-F	2/16/18	20.6
3-Sa	2/17/18	22.5
4-Su	2/18/18	20.9
4-M	2/19/18	19.2
4-T	2/20/18	20.3
4-W	2/21/18	18.7
4-Th	2/22/18	19.6
4-F	2/23/18	18.4
4-Sa	2/24/18	20.7
5-Su	2/25/18	21.9
5-M	2/26/18	19.9
5-T	2/27/18	21.3
5-W	2/28/18	20.0

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Shannon Khounnala

3/14/2018 9:37:57 AM

Signature

Date



INTEROFFICE MEMO

GO2-18-060

DIC: 1316.20

DATE: April 11, 2018
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA-002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for March 2018. Maintenance on a circulating water pump caused an increase in turbidity and metals concentration in the Outfall 001 monthly sample due to disturbed sediment. These parameters, although elevated, did not exceed permit specifications for the month. There were no other issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's Online Reporting System.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

SEK LB
WK Whitehead PE03

JT LePage

1025

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I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry & Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 03/01/2018 - 03/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Th	3/1/18	2.3	8.3	8.3		23.5						
1-F	3/2/18	1.1	8.3	8.3	0	22.9					<0.1	<0.1
1-Sa	3/3/18	2.1	8.3	8.3		22.8						
2-Su	3/4/18	2.0	8.2	8.4		22.9						
2-M	3/5/18	1.4	8.3	8.3	0	22.9					<0.1	<0.1
2-T	3/6/18	3.0	8.3	8.3		22.6	21*	24*	2.1*	51*		
2-W	3/7/18	0.9	8.3	8.3	0	22.1					<0.1	<0.1
2-Th	3/8/18	2.4	8.3	8.3		24.3						
2-F	3/9/18	1.2	8.3	8.3	0	25.5					<0.1	<0.1
2-Sa	3/10/18	2.0	8.3	8.3		23.7						
3-Su	3/11/18	2.0	8.3	8.3		23.4						
3-M	3/12/18	0.7	8.3	8.3	0	23.8					<0.1	<0.1
3-T	3/13/18	2.6	8.3	8.4		25.3						
3-W	3/14/18	0.8	8.3	8.3	0	25.4					<0.1	<0.1
3-Th	3/15/18	2.6	8.3	8.3		23.4						
3-F	3/16/18	1.2	8.3	8.3	0	23.4					<0.1	<0.1
3-Sa	3/17/18	2.2	8.3	8.3		24.1						
4-Su	3/18/18	2.2	8.3	8.3		24.4						
4-M	3/19/18	1.2	8.3	8.3	0	24.7					<0.1	<0.1
4-T	3/20/18	2.2	8.3	8.3		23.9						
4-W	3/21/18	1.1	8.3	8.3	0	23.9					<0.1	<0.1
4-Th	3/22/18	2.4	8.3	8.3		25.3						
4-F	3/23/18	1.0	8.3	8.3	0	24.8					<0.1	<0.1
4-Sa	3/24/18	2.2	8.3	8.3		24.2						
5-Su	3/25/18	2.2	8.3	8.3		23.5						
5-M	3/26/18	1.1	8.3	8.3	0	23.5					<0.1	<0.1
5-T	3/27/18	2.3	8.3	8.3		26.4						
5-W	3/28/18	1.1	8.3	8.3	0	25.6					<0.1	<0.1
5-Th	3/29/18	2.4	8.3	8.3		24.6						
5-F	3/30/18	1.0	8.3	8.3	0	24.5					<0.1	<0.1
5-Sa	3/31/18	1.6	8.3	8.3		24.2						
Instantaneous Minimum			8.2									
			>= 6.5 (RO)									
Average Monthly		1.8							2.1	51		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.4								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Th	3/1/18		
1-F	3/2/18		
1-Sa	3/3/18		
2-Su	3/4/18		
2-M	3/5/18		
2-T	3/6/18		
2-W	3/7/18		
2-Th	3/8/18		
2-F	3/9/18		
2-Sa	3/10/18		
3-Su	3/11/18		
3-M	3/12/18		
3-T	3/13/18		
3-W	3/14/18		
3-Th	3/15/18		
3-F	3/16/18		
3-Sa	3/17/18		
4-Su	3/18/18		
4-M	3/19/18		
4-T	3/20/18		
4-W	3/21/18		
4-Th	3/22/18		
4-F	3/23/18		
4-Sa	3/24/18		
5-Su	3/25/18		
5-M	3/26/18		
5-T	3/27/18		
5-W	3/28/18		
5-Th	3/29/18		
5-F	3/30/18		
5-Sa	3/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	3/6/2018	21	Results reported from a grab sample collected 3/6/2018
CWB	Copper Total Micrograms/L (ug/L)	3/6/2018	24	Results reported from a 24-hr composite sample collected 3/5/2018-3/6/2018. Metals elevated due disturbed sediment caused by pump maintenance work.
CWB	Chromium Total Micrograms/L (ug/L)	3/6/2018	2.1	Results reported from a 24-hr composite sample collected 3/5/2018-3/6/2018. Metals elevated due disturbed sediment caused by pump maintenance work.
CWB	Zinc Total Micrograms/L (ug/L)	3/6/2018	51	Results reported from a 24-hr composite sample collected 3/5/2018-3/6/2018. Metals elevated due disturbed sediment caused by pump maintenance work.
CWB2	All Parameters			Total Residual Halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 03/01/2018 - 03/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Th	3/1/18	23756
1-F	3/2/18	11256
1-Sa	3/3/18	24884
2-Su	3/4/18	24623
2-M	3/5/18	24761
2-T	3/6/18	24656
2-W	3/7/18	24656
2-Th	3/8/18	37156
2-F	3/9/18	24856
2-Sa	3/10/18	24263
3-Su	3/11/18	11256
3-M	3/12/18	24549
3-T	3/13/18	24856
3-W	3/14/18	11256
3-Th	3/15/18	11256
3-F	3/16/18	37656
3-Sa	3/17/18	38286
4-Su	3/18/18	24517
4-M	3/19/18	24865
4-T	3/20/18	31356
4-W	3/21/18	24556
4-Th	3/22/18	24756
4-F	3/23/18	24556
4-Sa	3/24/18	24582
5-Su	3/25/18	11256
5-M	3/26/18	11256
5-T	3/27/18	23756
5-W	3/28/18	25256
5-Th	3/29/18	24656
5-F	3/30/18	24356
5-Sa	3/31/18	24527
Monthly Total		728233

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 03/01/2018 - 03/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-Th	3/1/18	22.1
1-F	3/2/18	20.7
1-Sa	3/3/18	20.2
2-Su	3/4/18	20.1
2-M	3/5/18	21.0
2-T	3/6/18	22.3
2-W	3/7/18	20.3
2-Th	3/8/18	22.7
2-F	3/9/18	21.9
2-Sa	3/10/18	22.0
3-Su	3/11/18	22.6
3-M	3/12/18	21.5
3-T	3/13/18	23.5
3-W	3/14/18	21.4
3-Th	3/15/18	23.1
3-F	3/16/18	21.1
3-Sa	3/17/18	22.5
4-Su	3/18/18	22.9
4-M	3/19/18	21.6
4-T	3/20/18	22.9
4-W	3/21/18	21.4
4-Th	3/22/18	23.1
4-F	3/23/18	21.0
4-Sa	3/24/18	22.9
5-Su	3/25/18	22.3
5-M	3/26/18	21.0
5-T	3/27/18	23.6
5-W	3/28/18	22.2
5-Th	3/29/18	23.7
5-F	3/30/18	22.8
5-Sa	3/31/18	21.4

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-074

DIC: 1316.20

DATE: May 14, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA-002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for April 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's Online Reporting System.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

SEK LB
WK Whitehead PE03
JT LePage 1025

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I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 04/01/2018 - 04/30/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Su	4/1/18	1.6	8.3	8.3		22.6						
1-M	4/2/18	1.1	8.3	8.3	0	23.9					<0.1	<0.1
1-T	4/3/18	2.6	8.3	8.3		22.9	4.9*	12*	<1*	25*		
1-W	4/4/18	1.2	8.3	8.3	0	23.4					<0.1	<0.1
1-Th	4/5/18	2.1	8.3	8.3		24.5						
1-F	4/6/18	2.1	8.3	8.3		25.1						
1-Sa	4/7/18	2.1	8.3	8.3		25.8						
2-Su	4/8/18	2.1	8.3	8.3		25.4						
2-M	4/9/18	1.0	8.3	8.3	0	25.1					<0.1	<0.1
2-T	4/10/18	2.3	8.3	8.3		25.1						
2-W	4/11/18	1.2	8.3	8.3	0	25.2					<0.1	<0.1
2-Th	4/12/18	2.3	8.2	8.3		24.6						
2-F	4/13/18	1.3	8.3	8.3	0	24.8					<0.1	<0.1
2-Sa	4/14/18	2.0	8.3	8.3		25.5						
3-Su	4/15/18	2.0	8.3	8.3		25.1						
3-M	4/16/18	1.2	8.2	8.3	0	24.6					<0.1	<0.1
3-T	4/17/18	2.3	8.3	8.3		24.0						
3-W	4/18/18	1.2	8.3	8.3	0	23.5					<0.1	<0.1
3-Th	4/19/18	2.4	8.3	8.3		23.3						
3-F	4/20/18	1.1	8.3	8.3	0	23.5					<0.1	<0.1
3-Sa	4/21/18	2.1	8.3	8.3		23.9						
4-Su	4/22/18	2.1	8.3	8.3		23.9						
4-M	4/23/18	1.0	8.3	8.3	0	23.2					<0.1	<0.1
4-T	4/24/18	2.3	8.2	8.3		24.3						
4-W	4/25/18	1.0	8.3	8.3	0	24.6					<0.1	<0.1
4-Th	4/26/18	2.4	8.3	8.3		26.3						
4-F	4/27/18	1.1	8.3	8.3	0	26.6					<0.1	<0.1
4-Sa	4/28/18	1.7	8.3	8.3		26.0						
5-Su	4/29/18	1.7	8.3	8.3		24.4						
5-M	4/30/18	1.7	8.3	8.3		23.6						
Instantaneous Minimum			8.2									
			>= 6.5 (RO)									
Average Monthly		1.74333							<1	25		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.3								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Su	4/1/18		
1-M	4/2/18		
1-T	4/3/18		
1-W	4/4/18		
1-Th	4/5/18		
1-F	4/6/18		
1-Sa	4/7/18		
2-Su	4/8/18		
2-M	4/9/18		
2-T	4/10/18		
2-W	4/11/18		
2-Th	4/12/18		
2-F	4/13/18		
2-Sa	4/14/18		
3-Su	4/15/18		
3-M	4/16/18		
3-T	4/17/18		
3-W	4/18/18		
3-Th	4/19/18		
3-F	4/20/18		
3-Sa	4/21/18		
4-Su	4/22/18		
4-M	4/23/18		
4-T	4/24/18		
4-W	4/25/18		
4-Th	4/26/18		
4-F	4/27/18		
4-Sa	4/28/18		
5-Su	4/29/18		
5-M	4/30/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	4/3/2018	4.9	Results reported from a grab sample taken 4/3/2018
CWB	Copper Total Micrograms/L (ug/L)	4/3/2018	12	Results reported from a 24-hr composite sample collected 4/2/2018-4/3/2018
CWB	Chromium Total Micrograms/L (ug/L)	4/3/2018	B <1	Results reported from a 24-hr composite sample collected 4/2/2018-4/3/2018
CWB	Zinc Total Micrograms/L (ug/L)	4/3/2018	25	Results reported from a 24-hr composite sample collected 4/2/2018-4/3/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 04/01/2018 - 04/30/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
		Pnd
1-Su	4/1/18	27407
1-M	4/2/18	14458
1-T	4/3/18	27658
1-W	4/4/18	28058
1-Th	4/5/18	27758
1-F	4/6/18	27958
1-Sa	4/7/18	14458
2-Su	4/8/18	27758
2-M	4/9/18	27858
2-T	4/10/18	27958
2-W	4/11/18	14458
2-Th	4/12/18	14458
2-F	4/13/18	27458
2-Sa	4/14/18	27670
3-Su	4/15/18	28014
3-M	4/16/18	27790
3-T	4/17/18	14458
3-W	4/18/18	27558
3-Th	4/19/18	27658
3-F	4/20/18	27658
3-Sa	4/21/18	14458
4-Su	4/22/18	14458
4-M	4/23/18	27758
4-T	4/24/18	14458
4-W	4/25/18	14458
4-Th	4/26/18	14458
4-F	4/27/18	29558
4-Sa	4/28/18	29997
5-Su	4/29/18	29949
5-M	4/30/18	14458
Monthly Total		692519

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 04/01/2018 - 04/30/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Su	4/1/18	22.4
1-M	4/2/18	21.5
1-T	4/3/18	22.9
1-W	4/4/18	21.7
1-Th	4/5/18	22.7
1-F	4/6/18	22.6
1-Sa	4/7/18	22.9
2-Su	4/8/18	23.5
2-M	4/9/18	21.6
2-T	4/10/18	23.4
2-W	4/11/18	21.9
2-Th	4/12/18	23.1
2-F	4/13/18	21.7
2-Sa	4/14/18	23.7
3-Su	4/15/18	23.0
3-M	4/16/18	21.7
3-T	4/17/18	23.3
3-W	4/18/18	21.9
3-Th	4/19/18	24.2
3-F	4/20/18	21.1
3-Sa	4/21/18	24.0
4-Su	4/22/18	23.2
4-M	4/23/18	22.5
4-T	4/24/18	24.4
4-W	4/25/18	23.6
4-Th	4/26/18	25.8
4-F	4/27/18	22.7
4-Sa	4/28/18	20.3
5-Su	4/29/18	20.6
5-M	4/30/18	22.6

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-084

DIC: 1316.20

DATE: June 12, 2018
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for May 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's Online Reporting System.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

SEK LB	
WK Whitehead	PE03
JT LePage	1025

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Docket File	PE20
Columbia Files	964Y

CGS Plant Files (DIC 1316.20)
Page 2 of 2
August 23, 2018
Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Mary Ramos, Environmental Scientist, E&RP

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 05/01/2018 - 05/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-T	5/1/18	1.7	8.3	8.3		23.9						
1-W	5/2/18	1.4	8.3	8.3		24.8						
1-Th	5/3/18	1.6	8.3	8.3		25.3						
1-F	5/4/18	0.6	8.3	8.3	0	25.7					<0.1	<0.1
1-Sa	5/5/18	2.4	8.3	8.3		27.4						
2-Su	5/6/18	2.4	8.2	8.3		27.6	9.3*	14*	<1*	24*		
2-M	5/7/18	1.2	8.2	8.3	0	27.2					<0.1	<0.1
2-T	5/8/18	2.2	8.2	8.3		27.8						
2-W	5/9/18	1.1	8.2	8.3	0	28.5					<0.1	<0.1
2-Th	5/10/18	2.4	8.2	8.3		28.4						
2-F	5/11/18	0.9	8.2	8.3	0	28.2					<0.1	<0.1
2-Sa	5/12/18	1.8	8.2	8.3		28.4						
3-Su	5/13/18	1.8	8.2	8.3		29.0						
3-M	5/14/18	1.1	8.2	8.3	0	29.1					<0.1	<0.1
3-T	5/15/18	2.2	8.2	8.3		29.8						
3-W	5/16/18	0.7	8.2	8.3	0	29.8					<0.1	<0.1
3-Th	5/17/18	2.7	8.2	8.3		30.3						
3-F	5/18/18	3.3	7.8	8.2		30.3						
3-Sa	5/19/18	4.4	7.6	7.9		18.0						
4-Su	5/20/18	5.4	7.9	8.0		18.9						
4-M	5/21/18	5.5	8.0	8.1		18.6						
4-T	5/22/18	5.3	8.0	8.1		19.6						
4-W	5/23/18	4.8	8.0	8.2		20.5						
4-Th	5/24/18	4.4	7.9	8.2		23.5						
4-F	5/25/18	0.9	8.2	8.2	0	24.1					<0.1	<0.1
4-Sa	5/26/18	1.7	8.2	8.2		24.5						
5-Su	5/27/18	1.7	8.2	8.2		25.1						
5-M	5/28/18	0.8	8.2	8.2	0	25.4					<0.1	<0.1
5-T	5/29/18	1.6	7.8	8.2		25.2						
5-W	5/30/18	0.5	8.2	8.2	0	24.7					<0.1	<0.1
5-Th	5/31/18	1.5	8.0	8.3		23.7						
Instantaneous Minimum			7.6									
			>= 6.5 (RO)									
Average Monthly		2.3							<1	24		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.3								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-T	5/1/18		
1-W	5/2/18		
1-Th	5/3/18		
1-F	5/4/18		
1-Sa	5/5/18		
2-Su	5/6/18		
2-M	5/7/18		
2-T	5/8/18		
2-W	5/9/18		
2-Th	5/10/18		
2-F	5/11/18		
2-Sa	5/12/18		
3-Su	5/13/18		
3-M	5/14/18		
3-T	5/15/18		
3-W	5/16/18		
3-Th	5/17/18		
3-F	5/18/18		
3-Sa	5/19/18		
4-Su	5/20/18		
4-M	5/21/18		
4-T	5/22/18		
4-W	5/23/18		
4-Th	5/24/18		
4-F	5/25/18		
4-Sa	5/26/18		
5-Su	5/27/18		
5-M	5/28/18		
5-T	5/29/18		
5-W	5/30/18		
5-Th	5/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	5/6/2018	9.3	Results reported from a grab sample taken 5/6/2018
CWB	Copper Total Micrograms/L (ug/L)	5/6/2018	14	Results reported from a 24-hr composite sample collected 5/5/2018-5/6/2018
CWB	Chromium Total Micrograms/L (ug/L)	5/6/2018	B <1	Results reported from a 24-hr composite sample collected 5/5/2018-5/6/2018
CWB	Zinc Total Micrograms/L (ug/L)	5/6/2018	24	Results reported from a 24-hr composite sample collected 5/5/2018-5/6/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 05/01/2018 - 05/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-T	5/1/18	36399
1-W	5/2/18	36799
1-Th	5/3/18	36699
1-F	5/4/18	36599
1-Sa	5/5/18	20799
2-Su	5/6/18	36094
2-M	5/7/18	20799
2-T	5/8/18	36699
2-W	5/9/18	36499
2-Th	5/10/18	20799
2-F	5/11/18	20799
2-Sa	5/12/18	52269
3-Su	5/13/18	46982
3-M	5/14/18	46446
3-T	5/15/18	33299
3-W	5/16/18	44949
3-Th	5/17/18	33249
3-F	5/18/18	46099
3-Sa	5/19/18	20799
4-Su	5/20/18	20799
4-M	5/21/18	33385
4-T	5/22/18	44976
4-W	5/23/18	49936
4-Th	5/24/18	34999
4-F	5/25/18	35599
4-Sa	5/26/18	35588
5-Su	5/27/18	20799
5-M	5/28/18	54310
5-T	5/29/18	36199
5-W	5/30/18	34899
5-Th	5/31/18	33399
Monthly Total		1.09796e+006

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 05/01/2018 - 05/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-T	5/1/18	24.0
1-W	5/2/18	23.6
1-Th	5/3/18	24.8
1-F	5/4/18	23.9
1-Sa	5/5/18	25.7
2-Su	5/6/18	24.9
2-M	5/7/18	23.7
2-T	5/8/18	25.5
2-W	5/9/18	21.4
2-Th	5/10/18	24.8
2-F	5/11/18	22.3
2-Sa	5/12/18	24.8
3-Su	5/13/18	25.0
3-M	5/14/18	24.5
3-T	5/15/18	25.9
3-W	5/16/18	23.3
3-Th	5/17/18	25.4
3-F	5/18/18	9.1
3-Sa	5/19/18	6.4
4-Su	5/20/18	1.9
4-M	5/21/18	4.8
4-T	5/22/18	6.4
4-W	5/23/18	5.6
4-Th	5/24/18	13.6
4-F	5/25/18	15.6
4-Sa	5/26/18	16.6
5-Su	5/27/18	16.7
5-M	5/28/18	16.6
5-T	5/29/18	16.8
5-W	5/30/18	15.2
5-Th	5/31/18	16.1

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-093

DIC: 1316.20

DATE: July 12, 2018
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for June 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

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WK Whitehead	PE03
JT LePage	1025

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Docket File	PE20
Columbia Files	964Y

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 06/01/2018 - 06/30/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-F	6/1/18	0.7	8.1	8.3	0	23.4					<0.1	<0.1
1-Sa	6/2/18	1.3	8.0	8.3		23.5						
2-Su	6/3/18	1.3	8.1	8.3		25.4						
2-M	6/4/18	0.5	8.1	8.3	0	25.7					<0.1	<0.1
2-T	6/5/18	1.1	8.1	8.3		24.2	19*	19*	1.8*	34*		
2-W	6/6/18	0.2	8.2	8.3	0	23.0					<0.1	<0.1
2-Th	6/7/18	1.4	8.2	8.3		25.5						
2-F	6/8/18	0.4	8.2	8.3	0	25.7					<0.1	<0.1
2-Sa	6/9/18	1.3	8.0	8.4		24.8						
3-Su	6/10/18	1.3	8.1	8.2		24.2						
3-M	6/11/18	0.3	8.1	8.2	0	23.2					<0.1	<0.1
3-T	6/12/18	2.4	8.2	8.2		26.5						
3-W	6/13/18	0.7	8.2	8.2	0	26.7					<0.1	<0.1
3-Th	6/14/18	2.1	8.2	8.2		27.3						
3-F	6/15/18	0.8	8.2	8.2	0	27.9					<0.1	<0.1
3-Sa	6/16/18	1.7	8.2	8.2		29.0						
4-Su	6/17/18	1.7	8.2	8.2		29.4						
4-M	6/18/18	0.6	8.2	8.2	0	29.9					<0.1	<0.1
4-T	6/19/18	2.3	8.2	8.2		30.8						
4-W	6/20/18	1.6	8.2	8.2		31.4						
4-Th	6/21/18	3.4	8.2	8.2		32.4						
4-F	6/22/18	1.1	8.2	8.2	0	31.6					<0.1	<0.1
4-Sa	6/23/18	1.5	8.2	8.2		30.8						
5-Su	6/24/18	1.5	8.2	8.2		30.7						
5-M	6/25/18	1.4	8.2	8.2	0	31.0					<0.1	<0.1
5-T	6/26/18	3.4	8.2	8.2		29.8						
5-W	6/27/18	0.9	8.2	8.2	0	28.8					<0.1	<0.1
5-Th	6/28/18	2.0	8.2	8.2		28.9						
5-F	6/29/18	0.7	8.2	8.2	0	29.7					<0.1	<0.1
5-Sa	6/30/18	2.0	8.2	8.2		29.3						
Instantaneous Minimum			8.0									
			>= 6.5 (RO)									
Average Monthly		1.38667							1.8	34		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.4								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Watered/Recorded
		SSWD	SSWD
1-F	6/1/18		
1-Sa	6/2/18		
2-Su	6/3/18		
2-M	6/4/18		
2-T	6/5/18		
2-W	6/6/18		
2-Th	6/7/18		
2-F	6/8/18		
2-Sa	6/9/18		
3-Su	6/10/18		
3-M	6/11/18		
3-T	6/12/18		
3-W	6/13/18		
3-Th	6/14/18		
3-F	6/15/18		
3-Sa	6/16/18		
4-Su	6/17/18		
4-M	6/18/18		
4-T	6/19/18		
4-W	6/20/18		
4-Th	6/21/18		
4-F	6/22/18		
4-Sa	6/23/18		
5-Su	6/24/18		
5-M	6/25/18		
5-T	6/26/18		
5-W	6/27/18		
5-Th	6/28/18		
5-F	6/29/18		
5-Sa	6/30/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	6/5/2018	19	Results reported from a grab sample taken 6/5/2018
CWB	Copper Total Micrograms/L (ug/L)	6/5/2018	19	Results reported from a 24-hr composite sample collected 6/4/2018-6/5/2018
CWB	Chromium Total Micrograms/L (ug/L)	6/5/2018	1.8	Results reported from a 24-hr composite sample collected 6/4/2018-6/5/2018
CWB	Zinc Total Micrograms/L (ug/L)	6/5/2018	34	Results reported from a 24-hr composite sample collected 6/4/2018-6/5/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 06/01/2018 - 06/30/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated Pnd
1-F	6/1/18	19712
1-Sa	6/2/18	32512
2-Su	6/3/18	32912
2-M	6/4/18	46012*
2-T	6/5/18	33712
2-W	6/6/18	34512
2-Th	6/7/18	19712
2-F	6/8/18	35312
2-Sa	6/9/18	34822
3-Su	6/10/18	19712
3-M	6/11/18	35502
3-T	6/12/18	35512
3-W	6/13/18	19712
3-Th	6/14/18	34712
3-F	6/15/18	35712
3-Sa	6/16/18	51212
4-Su	6/17/18	19712
4-M	6/18/18	35412
4-T	6/19/18	35712
4-W	6/20/18	35512
4-Th	6/21/18	35112
4-F	6/22/18	35554
4-Sa	6/23/18	19712
5-Su	6/24/18	34806
5-M	6/25/18	34776
5-T	6/26/18	51336
5-W	6/27/18	19712
5-Th	6/28/18	19712
5-F	6/29/18	34549
5-Sa	6/30/18	35935
Monthly Total		968844

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

Outfall: 002 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
Pnd	Volume Monthly Gallons	6/4/2018	46012	Estimated 4200 gallons of water released due to pipe failure at evaporation ponds. EFSEC notified on 6/5/18. (Volume included in total. Majority of water went back into evaporation ponds.)



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 06/01/2018 - 06/30/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-F	6/1/18	15.4
1-Sa	6/2/18	17.0
2-Su	6/3/18	16.2
2-M	6/4/18	16.2
2-T	6/5/18	16.7
2-W	6/6/18	15.7
2-Th	6/7/18	17.8
2-F	6/8/18	15.5
2-Sa	6/9/18	15.4
3-Su	6/10/18	15.6
3-M	6/11/18	22.3
3-T	6/12/18	24.7
3-W	6/13/18	23.0
3-Th	6/14/18	23.9
3-F	6/15/18	19.9
3-Sa	6/16/18	24.9
4-Su	6/17/18	24.6
4-M	6/18/18	22.8
4-T	6/19/18	25.2
4-W	6/20/18	25.9
4-Th	6/21/18	27.2
4-F	6/22/18	24.9
4-Sa	6/23/18	24.6
5-Su	6/24/18	24.8
5-M	6/25/18	25.1
5-T	6/26/18	25.8
5-W	6/27/18	23.5
5-Th	6/28/18	24.8
5-F	6/29/18	23.2
5-Sa	6/30/18	24.5

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-105

DIC: 1316.20

DATE: August 14, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for July 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

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WK Whitehead	PE03
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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 07/01/2018 - 07/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Su	7/1/18	2.0	8.2	8.2		29.7						
1-M	7/2/18	0.7	8.2	8.2	0	28.3	6.5*	16*	1.2*	20*	<0.1	<0.1
1-T	7/3/18	2.4	8.2	8.2		28.8						
1-W	7/4/18	1.1	8.2	8.2	0	28.7					<0.1	<0.1
1-Th	7/5/18	2.0	8.2	8.2		30.6						
1-F	7/6/18	1.0	8.2	8.2	0	31.1					<0.1	<0.1
1-Sa	7/7/18	2.2	8.2	8.2		30.6						
2-Su	7/8/18	2.2	8.2	8.2		29.4						
2-M	7/9/18	0.6	8.2	8.2	0	29.7					<0.1	<0.1
2-T	7/10/18	2.4	8.2	8.2		29.8						
2-W	7/11/18	0.7	8.2	8.2	0	29.7					<0.1	<0.1
2-Th	7/12/18	2.8	8.2	8.2		31.6						
2-F	7/13/18	1.6	8.2	8.2	0	31.7					<0.1	<0.1
2-Sa	7/14/18	3.0	8.2	8.2		31.9						
3-Su	7/15/18	3.0	8.2	8.2		30.3						
3-M	7/16/18	1.1	8.2	8.2	0	30.9					<0.1	<0.1
3-T	7/17/18	5.1	8.2	8.2		31.8						
3-W	7/18/18	2.7	8.2	8.2	0	31.7					<0.1	<0.1
3-Th	7/19/18	4.4	8.2	8.2		31.4						
3-F	7/20/18	1.6	8.2	8.2	0	30.0					<0.1	<0.1
3-Sa	7/21/18	2.3	8.2	8.2		29.7						
4-Su	7/22/18	2.3	8.2	8.2		30.0						
4-M	7/23/18	1.4	8.2	8.2	0	30.3					<0.1	<0.1
4-T	7/24/18	2.3	8.2	8.2		30.9						
4-W	7/25/18	2.7	8.2	8.2	0	31.6					<0.1	<0.1
4-Th	7/26/18	4.7	8.2	8.2		31.6						
4-F	7/27/18	2.9	8.2	8.2	0	31.9					<0.1	<0.1
4-Sa	7/28/18	4.8	8.2	8.2		31.9						
5-Su	7/29/18	4.9	8.2	8.2		32.0						
5-M	7/30/18	2.7	8.2	8.2	0	31.7					<0.1	<0.1
5-T	7/31/18	4.9	8.2	8.2		33.1						
Instantaneous Minimum			8.2									
			>= 6.5 (RO)									
Average Monthly		2.5							1.2	20		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.2								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Su	7/1/18		
1-M	7/2/18		
1-T	7/3/18		
1-W	7/4/18		
1-Th	7/5/18		
1-F	7/6/18		
1-Sa	7/7/18		
2-Su	7/8/18		
2-M	7/9/18		
2-T	7/10/18		
2-W	7/11/18		
2-Th	7/12/18		
2-F	7/13/18		
2-Sa	7/14/18		
3-Su	7/15/18		
3-M	7/16/18		
3-T	7/17/18		
3-W	7/18/18		
3-Th	7/19/18		
3-F	7/20/18		
3-Sa	7/21/18		
4-Su	7/22/18		
4-M	7/23/18		
4-T	7/24/18		
4-W	7/25/18		
4-Th	7/26/18		
4-F	7/27/18		
4-Sa	7/28/18		
5-Su	7/29/18		
5-M	7/30/18		
5-T	7/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	7/2/2018	6.5	Results reported from a grab sample taken 7/2/2018
CWB	Copper Total Micrograms/L (ug/L)	7/2/2018	16	Results reported from a 24-hour composite sample collected 7/1/2018-7/2/2018
CWB	Chromium Total Micrograms/L (ug/L)	7/2/2018	1.2	Results reported from a 24-hour composite sample collected 7/1/2018-7/2/2018
CWB	Zinc Total Micrograms/L (ug/L)	7/2/2018	20	Results reported from a 24-hour composite sample collected 7/1/2018-7/2/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 07/01/2018 - 07/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Su	7/1/18	34393
1-M	7/2/18	33506
1-T	7/3/18	34100
1-W	7/4/18	34153
1-Th	7/5/18	34439
1-F	7/6/18	33697
1-Sa	7/7/18	18253
2-Su	7/8/18	34194
2-M	7/9/18	18253
2-T	7/10/18	34026
2-W	7/11/18	49780
2-Th	7/12/18	18253
2-F	7/13/18	33638
2-Sa	7/14/18	33899
3-Su	7/15/18	34053
3-M	7/16/18	18253
3-T	7/17/18	33353
3-W	7/18/18	33794
3-Th	7/19/18	34112
3-F	7/20/18	18253
3-Sa	7/21/18	34187
4-Su	7/22/18	33384
4-M	7/23/18	18253
4-T	7/24/18	50095
4-W	7/25/18	18253
4-Th	7/26/18	48353
4-F	7/27/18	34453
4-Sa	7/28/18	34826
5-Su	7/29/18	18253
5-M	7/30/18	35880
5-T	7/31/18	18253
Monthly Total		960592

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 07/01/2018 - 07/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Su	7/1/18	21.2
1-M	7/2/18	24.4
1-T	7/3/18	24.7
1-W	7/4/18	24.5
1-Th	7/5/18	26.3
1-F	7/6/18	25.3
1-Sa	7/7/18	25.9
2-Su	7/8/18	26.1
2-M	7/9/18	25.0
2-T	7/10/18	26.4
2-W	7/11/18	24.4
2-Th	7/12/18	27.2
2-F	7/13/18	26.7
2-Sa	7/14/18	27.5
3-Su	7/15/18	27.5
3-M	7/16/18	25.8
3-T	7/17/18	30.5
3-W	7/18/18	28.1
3-Th	7/19/18	28.2
3-F	7/20/18	25.9
3-Sa	7/21/18	27.1
4-Su	7/22/18	26.3
4-M	7/23/18	26.5
4-T	7/24/18	28.0
4-W	7/25/18	28.2
4-Th	7/26/18	29.1
4-F	7/27/18	30.1
4-Sa	7/28/18	29.7
5-Su	7/29/18	31.2
5-M	7/30/18	28.7
5-T	7/31/18	29.5

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-115

DIC: 1316.20

DATE: September 13, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for August 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

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CGS Plant Files (DIC 1316.20)
(Page 2 of 2)
September 13, 2018
Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 08/01/2018 - 08/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-W	8/1/18	2.3	8.1	8.2	0	32.3					<0.1	<0.1
1-Th	8/2/18	2.8	8.1	8.2		31.4						
1-F	8/3/18	1.9	8.2	8.2	0	30.8					<0.1	<0.1
1-Sa	8/4/18	2.9	8.1	8.2		30.2						
2-Su	8/5/18	2.9	8.1	8.2		30.5						
2-M	8/6/18	1.4	8.1	8.2	0	30.9					<0.1	<0.1
2-T	8/7/18	3.2	8.1	8.2		31.4	2.5*	12*	1.3*	13*		
2-W	8/8/18	2.2	8.2	8.2	0	31.9					<0.1	<0.1
2-Th	8/9/18	4.9	8.1	8.2		32.6						
2-F	8/10/18	2.6	8.1	8.2	0	33.4					<0.1	<0.1
2-Sa	8/11/18	4.7	8.1	8.2		32.8						
3-Su	8/12/18	4.7	8.1	8.2		31.3						
3-M	8/13/18	1.4	8.1	8.2	0	30.5					<0.1	<0.1
3-T	8/14/18	2.9	8.1	8.2		30.7						
3-W	8/15/18	1.4	8.1	8.2	0	30.8					<0.1	<0.1
3-Th	8/16/18	2.9	8.1	8.2		32.1						
3-F	8/17/18	2.0	8.1	8.2	0	31.8					<0.1	<0.1
3-Sa	8/18/18	2.8	8.1	8.2		32.0						
4-Su	8/19/18	2.8	8.1	8.2		31.9						
4-M	8/20/18	1.4	8.1	8.2	0	32.5					<0.1	<0.1
4-T	8/21/18	2.9	8.1	8.2		32.5						
4-W	8/22/18	1.6	8.1	8.2	0	32.0					<0.1	<0.1
4-Th	8/23/18	2.9	8.1	8.2		32.6						
4-F	8/24/18	1.5	8.1	8.2	0	32.2					<0.1	<0.1
4-Sa	8/25/18	2.9	8.1	8.2		31.1						
5-Su	8/26/18	2.8	8.1	8.2		30.7						
5-M	8/27/18	1.1	8.1	8.2	0	31.0					<0.1	<0.1
5-T	8/28/18	1.7	8.1	8.2		30.4						
5-W	8/29/18	1.0	8.1	8.2	0	30.6					<0.1	<0.1
5-Th	8/30/18	1.9	8.1	8.2		31.2						
5-F	8/31/18	1.1	8.1	8.2	0	31.3					<0.1	<0.1
Instantaneous Minimum			8.1									
			>= 6.5 (RO)									
Average Monthly		2.4							1.3	13		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.2								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-W	8/1/18		
1-Th	8/2/18		
1-F	8/3/18		
1-Sa	8/4/18		
2-Su	8/5/18		
2-M	8/6/18		
2-T	8/7/18		
2-W	8/8/18		
2-Th	8/9/18		
2-F	8/10/18		
2-Sa	8/11/18		
3-Su	8/12/18		
3-M	8/13/18		
3-T	8/14/18		
3-W	8/15/18		
3-Th	8/16/18		
3-F	8/17/18		
3-Sa	8/18/18		
4-Su	8/19/18		
4-M	8/20/18		
4-T	8/21/18		
4-W	8/22/18		
4-Th	8/23/18		
4-F	8/24/18		
4-Sa	8/25/18		
5-Su	8/26/18		
5-M	8/27/18		
5-T	8/28/18		
5-W	8/29/18		
5-Th	8/30/18		
5-F	8/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	8/7/2018	2.5	Results reported from a grab sample taken 8/7/2018
CWB	Copper Total Micrograms/L (ug/L)	8/7/2018	12	Results reported from a 24-hour composite sample collected 8/6/2018-8/7/2018
CWB	Chromium Total Micrograms/L (ug/L)	8/7/2018	1.3	Results reported from a 24-hour composite sample collected 8/6/2018-8/7/2018
CWB	Zinc Total Micrograms/L (ug/L)	8/7/2018	13	Results reported from a 24-hour composite sample collected 8/6/2018-8/7/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the standby service water ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 08/01/2018 - 08/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-W	8/1/18	41917
1-Th	8/2/18	24817
1-F	8/3/18	41617
1-Sa	8/4/18	24817
2-Su	8/5/18	24817
2-M	8/6/18	41318
2-T	8/7/18	41117
2-W	8/8/18	24817
2-Th	8/9/18	41517
2-F	8/10/18	41317
2-Sa	8/11/18	41417
3-Su	8/12/18	24817
3-M	8/13/18	41217
3-T	8/14/18	41417
3-W	8/15/18	41217
3-Th	8/16/18	41417
3-F	8/17/18	24817
3-Sa	8/18/18	41279
4-Su	8/19/18	57801
4-M	8/20/18	24817
4-T	8/21/18	40917
4-W	8/22/18	24817
4-Th	8/23/18	41217
4-F	8/24/18	40917
4-Sa	8/25/18	41217
5-Su	8/26/18	41317
5-M	8/27/18	41117
5-T	8/28/18	41209
5-W	8/29/18	41325
5-Th	8/30/18	41417
5-F	8/31/18	41117
Monthly Total		1164874

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 08/01/2018 - 08/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-W	8/1/18	27.6
1-Th	8/2/18	27.3
1-F	8/3/18	25.5
1-Sa	8/4/18	25.1
2-Su	8/5/18	26.3
2-M	8/6/18	26.3
2-T	8/7/18	28.9
2-W	8/8/18	27.4
2-Th	8/9/18	30.5
2-F	8/10/18	28.2
2-Sa	8/11/18	29.0
3-Su	8/12/18	28.2
3-M	8/13/18	25.5
3-T	8/14/18	26.8
3-W	8/15/18	25.3
3-Th	8/16/18	27.5
3-F	8/17/18	27.2
3-Sa	8/18/18	26.8
4-Su	8/19/18	27.2
4-M	8/20/18	25.7
4-T	8/21/18	26.7
4-W	8/22/18	25.8
4-Th	8/23/18	26.7
4-F	8/24/18	25.0
4-Sa	8/25/18	25.3
5-Su	8/26/18	25.3
5-M	8/27/18	23.8
5-T	8/28/18	24.7
5-W	8/29/18	24.4
5-Th	8/30/18	25.3
5-F	8/31/18	23.9

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

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Signature

Date



INTEROFFICE MEMO

GO2-18-127

DIC: 1316.20

DATE: October 15, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for September 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

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WK Whitehead PE03
JT LePage 1025

FILE COPY

Docket File PE20
Columbia Files 964Y

CGS Plant Files (DIC 1316.20)
(Page 2 of 2)
October 15, 2018
Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 09/01/2018 - 09/30/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Sa	9/1/18	1.9	8.1	8.2		31.3						
2-Su	9/2/18	1.9	8.1	8.2		30.3						
2-M	9/3/18	0.7	8.2	8.2	0	29.9					<0.1	<0.1
2-T	9/4/18	2.5	8.2	8.2		29.1	3.3*	13*	1.1*	14*		
2-W	9/5/18	1.1	8.2	8.2	0	27.1					<0.1	<0.1
2-Th	9/6/18	2.4	8.2	8.2		27.5						
2-F	9/7/18	1.2	8.2	8.2	0	28.1					<0.1	<0.1
2-Sa	9/8/18	2.2	8.2	8.2		28.9						
3-Su	9/9/18	2.3	8.2	8.2		27.8						
3-M	9/10/18	1.1	8.2	8.2	0	27.6					<0.1	<0.1
3-T	9/11/18	2.3	8.2	8.2		26.9						
3-W	9/12/18	0.7	8.2	8.2	0	26.9					<0.1	<0.1
3-Th	9/13/18	2.3*	8.2	8.2		26.6						
3-F	9/14/18	1.2	8.2	8.2		26.6						
3-Sa	9/15/18	2.2	8.2	8.2		26.6						
4-Su	9/16/18	2.2	8.2	8.2		27.7						
4-M	9/17/18	0.4	8.2	8.2	0	27.6					<0.1	<0.1
4-T	9/18/18	2.5	8.2	8.2		26.1						
4-W	9/19/18	1.2	8.2	8.2	0	26.1					<0.1	<0.1
4-Th	9/20/18	2.4	8.2	8.2		26.7						
4-F	9/21/18	1.2	8.2	8.2	0	27.0					<0.1	<0.1
4-Sa	9/22/18	2.1	8.2	8.2		27.6						
5-Su	9/23/18	2.1	8.2	8.2		27.8						
5-M	9/24/18	0.7	8.2	8.2	0	25.5					<0.1	<0.1
5-T	9/25/18	2.4	8.2	8.2		25.7						
5-W	9/26/18	0.7	8.2	8.2	0	25.8					<0.1	<0.1
5-Th	9/27/18	2.5	8.2	8.2		26.8						
5-F	9/28/18	1.2	8.2	8.2	0	26.9					<0.1	<0.1
5-Sa	9/29/18	2.1	8.2	8.2		26.4						
6-Su	9/30/18	2.1	8.2	8.2		26.5						
Instantaneous Minimum			8.1									
			>= 6.5 (RO)									
Average Monthly		1.7							1.1	14		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.2								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Sa	9/1/18		
2-Su	9/2/18		
2-M	9/3/18		
2-T	9/4/18		
2-W	9/5/18		
2-Th	9/6/18		
2-F	9/7/18		
2-Sa	9/8/18		
3-Su	9/9/18		
3-M	9/10/18		
3-T	9/11/18		
3-W	9/12/18		
3-Th	9/13/18		
3-F	9/14/18		
3-Sa	9/15/18		
4-Su	9/16/18		
4-M	9/17/18		
4-T	9/18/18		
4-W	9/19/18		
4-Th	9/20/18		
4-F	9/21/18		
4-Sa	9/22/18		
5-Su	9/23/18		
5-M	9/24/18		
5-T	9/25/18		
5-W	9/26/18		
5-Th	9/27/18		
5-F	9/28/18		
5-Sa	9/29/18		
6-Su	9/30/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Flow Million Gallons/Day	9/13/2018	2.3	Fire Protection storage tank drained to CW basin 9/13/2018-9/16/2018 (0.4 MG total volume)
CWB	Turbidity (Nephelometric) Measured NTU	9/4/2018	3.3	Results reported from a grab sample taken 9/4/2018
CWB	Copper Total Micrograms/L (ug/L)	9/4/2018	13	Results reported from a 24-hour composite sample collected 9/3/2018-9/4/2018
CWB	Chromium Total Micrograms/L (ug/L)	9/4/2018	1.1	Results reported from a 24-hour composite sample collected 9/3/2018-9/4/2018
CWB	Zinc Total Micrograms/L (ug/L)	9/4/2018	14	Results reported from a 24-hour composite sample collected 9/3/2018-9/4/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the SSW ponds directly to blowdown line Outfall 001. Intermittent Standby Service Water pump-over to CW tower basin for SSW pond cleaning started on 9/5/2018 ended 9/24/2018 (M- F).



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 09/01/2018 - 09/30/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
		Pnd
1-Sa	9/1/18	40329
2-Su	9/2/18	23674
2-M	9/3/18	40519
2-T	9/4/18	23674
2-W	9/5/18	40674
2-Th	9/6/18	23674
2-F	9/7/18	23674
2-Sa	9/8/18	23674
3-Su	9/9/18	23674
3-M	9/10/18	40287
3-T	9/11/18	23674
3-W	9/12/18	23674
3-Th	9/13/18	23674
3-F	9/14/18	40058
3-Sa	9/15/18	23674
4-Su	9/16/18	40072
4-M	9/17/18	23674
4-T	9/18/18	56474
4-W	9/19/18	23674
4-Th	9/20/18	40005
4-F	9/21/18	39974
4-Sa	9/22/18	39974
5-Su	9/23/18	23674
5-M	9/24/18	39777
5-T	9/25/18	23674
5-W	9/26/18	40263
5-Th	9/27/18	40074
5-F	9/28/18	40074
5-Sa	9/29/18	40139
6-Su	9/30/18	23674
Monthly Total		973803

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 09/01/2018 - 09/30/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded Intk
1-Sa	9/1/18	24.9
2-Su	9/2/18	24.8
2-M	9/3/18	24.0
2-T	9/4/18	24.7
2-W	9/5/18	24.9
2-Th	9/6/18	24.7
2-F	9/7/18	25.3
2-Sa	9/8/18	25.3
3-Su	9/9/18	25.2
3-M	9/10/18	24.2
3-T	9/11/18	24.8
3-W	9/12/18	23.0
3-Th	9/13/18	24.5
3-F	9/14/18	23.7
3-Sa	9/15/18	24.3
4-Su	9/16/18	25.1
4-M	9/17/18	22.6
4-T	9/18/18	25.0
4-W	9/19/18	23.0
4-Th	9/20/18	24.9
4-F	9/21/18	24.2
4-Sa	9/22/18	25.2
5-Su	9/23/18	24.3
5-M	9/24/18	22.8
5-T	9/25/18	24.7
5-W	9/26/18	22.9
5-Th	9/27/18	25.5
5-F	9/28/18	24.2
5-Sa	9/29/18	24.6
6-Su	9/30/18	23.9

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-141

DIC: 1316.20

DATE: November 14, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for October 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

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WK Whitehead	PE03
JT LePage	1025

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CGS Plant Files (DIC 1316.20)
(Page 2 of 2)
November 14, 2018
Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 10/01/2018 - 10/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
		CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-M	10/1/18	0.6	8.2	8.2		26.5					<0.1	<0.1
1-T	10/2/18	2.3	8.2	8.2		29.2	3.8*	17*	1.0*	13*		
1-W	10/3/18	1.0	8.2	8.2		28.2					<0.1	<0.1
1-Th	10/4/18	2.2	8.2	8.2		26.6						
1-F	10/5/18	1.1	8.1	8.3		26.7					<0.1	<0.1
1-Sa	10/6/18	1.9	8.1	8.2		27.6						
2-Su	10/7/18	1.9	8.0	8.3		27.9						
2-M	10/8/18	0.7	8.2	8.2		28.1					<0.1	<0.1
2-T	10/9/18	2.4	8.1	8.2		28.3						
2-W	10/10/18	1.5	8.1	8.2		27.9					<0.1	<0.1
2-Th	10/11/18	3.9	8.2	8.2		27.9						
2-F	10/12/18	1.7	8.2	8.2		28.8					<0.1	<0.1
2-Sa	10/13/18	2.4	8.2	8.2		28.7						
3-Su	10/14/18	2.4	8.2	8.2		27.2						
3-M	10/15/18	1.6	8.2	8.2		25.7					<0.1	<0.1
3-T	10/16/18	3.3	8.2	8.3		26.1						
3-W	10/17/18	0.9	8.2	8.2		25.6					<0.1	<0.1
3-Th	10/18/18	3.6	8.2	8.2		26.3						
3-F	10/19/18	1.7	8.2	8.3		26.2					<0.1	<0.1
3-Sa	10/20/18	2.9	7.9	8.3		26.3						
4-Su	10/21/18	2.9	7.9	8.4		26.2						
4-M	10/22/18	1.0	8.1	8.2		26.3					<0.1	<0.1
4-T	10/23/18	3.2	8.2	8.3		27.2						
4-W	10/24/18	1.0	8.2	8.2		27.1					<0.1	<0.1
4-Th	10/25/18	3.3	8.2	8.4		27.5						
4-F	10/26/18	2.1	8.2	8.2		30.0					<0.1	<0.1
4-Sa	10/27/18	3.8	8.2	8.2		28.1						
5-Su	10/28/18	3.3	8.2	8.2		28.1						
5-M	10/29/18	0.2	8.2	8.2		26.0					<0.1	<0.1
5-T	10/30/18	1.8	8.1	8.2		25.7						
5-W	10/31/18	0.5	8.1	8.2		26.0					<0.1	<0.1
Instantaneous Minimum			7.9									
			>= 6.5 (RO)									
Average Monthly		2.0							1	13		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.4								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-M	10/1/18		
1-T	10/2/18		
1-W	10/3/18		
1-Th	10/4/18		
1-F	10/5/18		
1-Sa	10/6/18		
2-Su	10/7/18		
2-M	10/8/18		
2-T	10/9/18		
2-W	10/10/18		
2-Th	10/11/18		
2-F	10/12/18		
2-Sa	10/13/18		
3-Su	10/14/18		
3-M	10/15/18		
3-T	10/16/18		
3-W	10/17/18		
3-Th	10/18/18		
3-F	10/19/18		
3-Sa	10/20/18		
4-Su	10/21/18		
4-M	10/22/18		
4-T	10/23/18		
4-W	10/24/18		
4-Th	10/25/18		
4-F	10/26/18		
4-Sa	10/27/18		
5-Su	10/28/18		
5-M	10/29/18		
5-T	10/30/18		
5-W	10/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	10/2/2018	3.8	Results reported from a grab sample taken 10/2/2018
CWB	Copper Total Micrograms/L (ug/L)	10/2/2018	17	Results reported from a 24-hour composite sample collected 10/1/2018-10/2/2018
CWB	Chromium Total Micrograms/L (ug/L)	10/2/2018	1.0	Results reported from a 24-hour composite sample collected 10/1/2018-10/2/2018
CWB	Zinc Total Micrograms/L (ug/L)	10/2/2018	13	Results reported from a 24-hour composite sample collected 10/1/2018-10/2/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the SSW ponds directly to blowdown line Outfall 001.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 10/01/2018 - 10/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-M	10/1/18	34216
1-T	10/2/18	50451
1-W	10/3/18	50596
1-Th	10/4/18	50636
1-F	10/5/18	34216
1-Sa	10/6/18	50716
2-Su	10/7/18	50216
2-M	10/8/18	34216
2-T	10/9/18	34216
2-W	10/10/18	50616
2-Th	10/11/18	50116
2-F	10/12/18	50716
2-Sa	10/13/18	50917
3-Su	10/14/18	50834
3-M	10/15/18	50897
3-T	10/16/18	34216
3-W	10/17/18	50616
3-Th	10/18/18	34216
3-F	10/19/18	50416
3-Sa	10/20/18	34216
4-Su	10/21/18	34216
4-M	10/22/18	34216
4-T	10/23/18	34216
4-W	10/24/18	34216
4-Th	10/25/18	34216
4-F	10/26/18	61016
4-Sa	10/27/18	73604
5-Su	10/28/18	74050
5-M	10/29/18	34216
5-T	10/30/18	34216
5-W	10/31/18	72394
Monthly Total		1.41783e+006

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 10/01/2018 - 10/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-M	10/1/18	23.0
1-T	10/2/18	25.4
1-W	10/3/18	22.1
1-Th	10/4/18	23.6
1-F	10/5/18	21.4
1-Sa	10/6/18	22.8
2-Su	10/7/18	22.7
2-M	10/8/18	21.4
2-T	10/9/18	23.2
2-W	10/10/18	22.9
2-Th	10/11/18	24.6
2-F	10/12/18	22.8
2-Sa	10/13/18	24.2
3-Su	10/14/18	23.0
3-M	10/15/18	21.6
3-T	10/16/18	23.9
3-W	10/17/18	21.2
3-Th	10/18/18	23.7
3-F	10/19/18	22.1
3-Sa	10/20/18	23.2
4-Su	10/21/18	23.2
4-M	10/22/18	20.7
4-T	10/23/18	23.5
4-W	10/24/18	21.5
4-Th	10/25/18	24.1
4-F	10/26/18	23.7
4-Sa	10/27/18	24.2
5-Su	10/28/18	23.7
5-M	10/29/18	20.1
5-T	10/30/18	21.3
5-W	10/31/18	20.6

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-18-151

DIC: 1316.20

DATE: December 12, 2018
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
NOVEMBER 2018 NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for November 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

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JT LePage	1025

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Columbia Files	964Y

CGS Plant Files (DIC 1316.20)
Page 2 of 2
December 12, 2018
Columbia Generating Station
NPDES DISCHARGE MONITORING REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Michael Davis, Manager, Chemistry and Radiation Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 11/01/2018 - 11/30/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Th	11/1/18	2.0	8.1	8.2		28.2						
1-F	11/2/18	1.0	8.2	8.2	0	28.1					<0.1	<0.1
1-Sa	11/3/18	2.1	8.2	8.2		27.3						
2-Su	11/4/18	2.1	8.2	8.4		27.5						
2-M	11/5/18	1.0	8.2	8.3	0	26.8					<0.1	<0.1
2-T	11/6/18	4.9	8.2	8.3		26.2	5.2*	14*	<1*	16*		
2-W	11/7/18	1.7	8.2	8.3	0	24.9					<0.1	<0.1
2-Th	11/8/18	5.0	8.1	8.3		25.0						
2-F	11/9/18	1.2	8.2	8.4	0	23.5					<0.1	<0.1
2-Sa	11/10/18	3.7	8.2	8.5		23.7						
3-Su	11/11/18	3.7	8.3	8.4		23.1						
3-M	11/12/18	1.2	8.1	8.4	0	22.5					<0.1	<0.1
3-T	11/13/18	1.7	8.2	8.5		22.6						
3-W	11/14/18	1.3	8.3	8.4	0	23.2					<0.1	<0.1
3-Th	11/15/18	3.6	8.2	8.3		23.7						
3-F	11/16/18	1.1	8.2	8.3	0	23.6					<0.1	<0.1
3-Sa	11/17/18	1.5	8.2	8.3		25.3						
4-Su	11/18/18	1.5	8.2	8.3		23.8						
4-M	11/19/18	0.3	8.3	8.3	0	22.8					<0.1	<0.1
4-T	11/20/18	1.9	7.9	8.4		23.9						
4-W	11/21/18	1.6	8.2	8.3	0	23.9					<0.1	<0.1
4-Th	11/22/18	1.9	8.3	8.4		28.4						
4-F	11/23/18	1.0	8.2	8.4	0	24.8					<0.1	<0.1
4-Sa	11/24/18	1.9	8.2	8.2		24.8						
5-Su	11/25/18	1.9	8.1	8.4		24.6						
5-M	11/26/18	1.0	8.1	8.4	0	23.8					<0.1	<0.1
5-T	11/27/18	2.2	8.1	8.3		25.1						
5-W	11/28/18	0.6	8.2	8.4	0	25.1					<0.1	<0.1
5-Th	11/29/18	2.3	8.2	8.3		24.7						
5-F	11/30/18	1.6	8.2	8.4		24.6						
Instantaneous Minimum			7.9									
			>= 6.5 (RO)									
Average Monthly		2.0							<1	16		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.5								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Th	11/1/18		
1-F	11/2/18		
1-Sa	11/3/18		
2-Su	11/4/18		
2-M	11/5/18		
2-T	11/6/18		
2-W	11/7/18		
2-Th	11/8/18		
2-F	11/9/18		
2-Sa	11/10/18		
3-Su	11/11/18		
3-M	11/12/18		
3-T	11/13/18		
3-W	11/14/18		
3-Th	11/15/18		
3-F	11/16/18		
3-Sa	11/17/18		
4-Su	11/18/18		
4-M	11/19/18		
4-T	11/20/18		
4-W	11/21/18		
4-Th	11/22/18		
4-F	11/23/18		
4-Sa	11/24/18		
5-Su	11/25/18		
5-M	11/26/18		
5-T	11/27/18		
5-W	11/28/18		
5-Th	11/29/18		
5-F	11/30/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	11/6/2018	5.2	Results reported from a grab sample taken 11/6/2018
CWB	Copper Total Micrograms/L (ug/L)	11/6/2018	14	Results reported from a 24-hour composite sample collected 11/5/2018-11/6/2018
CWB	Chromium Total Micrograms/L (ug/L)	11/6/2018	B <1	Results reported from a 24-hour composite sample collected 11/5/2018-11/6/2018
CWB	Zinc Total Micrograms/L (ug/L)	11/6/2018	16	Results reported from a 24-hour composite sample collected 11/5/2018-11/6/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the SSW ponds directly to blowdown line Outfall 001.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 11/01/2018 - 11/30/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume
		Monthly Gallons 1/Day - recorded but not reported Pnd Calculated
1-Th	11/1/18	19695
1-F	11/2/18	19695
1-Sa	11/3/18	45178
2-Su	11/4/18	32566
2-M	11/5/18	19695
2-T	11/6/18	32695
2-W	11/7/18	35595
2-Th	11/8/18	44295
2-F	11/9/18	35395
2-Sa	11/10/18	35395
3-Su	11/11/18	35395
3-M	11/12/18	35395
3-T	11/13/18	35195
3-W	11/14/18	19695
3-Th	11/15/18	19695
3-F	11/16/18	35595
3-Sa	11/17/18	35595
4-Su	11/18/18	19695
4-M	11/19/18	19695
4-T	11/20/18	35539
4-W	11/21/18	19695
4-Th	11/22/18	35595
4-F	11/23/18	33795
4-Sa	11/24/18	38028
5-Su	11/25/18	32688
5-M	11/26/18	35269
5-T	11/27/18	35895
5-W	11/28/18	35495
5-Th	11/29/18	35695
5-F	11/30/18	19695
Monthly Total		933548

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 11/01/2018 - 11/30/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Th	11/1/18	23.2
1-F	11/2/18	22.5
1-Sa	11/3/18	22.8
2-Su	11/4/18	23.6
2-M	11/5/18	21.1
2-T	11/6/18	25.4
2-W	11/7/18	21.2
2-Th	11/8/18	23.7
2-F	11/9/18	18.7
2-Sa	11/10/18	21.9
3-Su	11/11/18	21.2
3-M	11/12/18	16.7
3-T	11/13/18	19.1
3-W	11/14/18	18.8
3-Th	11/15/18	24.1
3-F	11/16/18	19.3
3-Sa	11/17/18	18.9
4-Su	11/18/18	18.2
4-M	11/19/18	19.9
4-T	11/20/18	18.5
4-W	11/21/18	18.7
4-Th	11/22/18	19.4
4-F	11/23/18	20.4
4-Sa	11/24/18	21.6
5-Su	11/25/18	20.7
5-M	11/26/18	19.4
5-T	11/27/18	21.6
5-W	11/28/18	19.7
5-Th	11/29/18	22.1
5-F	11/30/18	20.3

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date



INTEROFFICE MEMO

GO2-19-009

DIC: 1316.20

DATE: January 10, 2019
TO: Columbia Generating Station, (CGS)
FROM: Jane LePage, Environmental Scientist (1025)
SUBJECT: Columbia Generating Station
DECEMBER 2018 NPDES DISCHARGE MONITORING REPORT
REFERENCE: NPDES Permit No. WA002515-1, Condition S3.A

Please find attached the NPDES Discharge Monitoring Report (DMR) for December 2018. All monitoring parameters were within permit specifications for the month with no issues of concern. The report will be submitted electronically to the State of Washington Department of Ecology (Ecology) via Ecology's online reporting system.

If you have any questions concerning this information, please contact WK Whitehead at (509) 377-8794.

JTL

INTERNAL DISTRIBUTION:

SEK LB	
WK Whitehead	PE03
JT LePage	1025

FILE COPY

Docket File	PE20
Columbia Files	964Y

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Prepared by: Jane T. LePage, Environmental Scientist, Environmental Services

Reviewed by: W. Kip Whitehead, Environmental Scientist Principal, E&RP

Approved by: Brad C. Barfuss, Supervisor, Environmental Services

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 12/01/2018 - 12/31/2018

Outfall: 001

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded	pH Daily Min Standard Units Continuous Metered/Recorded	pH Daily Max Standard Units Continuous Metered/Recorded	Duration pH excursion Minutes Once per defined event Metered/Recorded	Temperature Measured Degrees C Continuous Metered/Recorded	Turbidity (NTU) Measured NTU Monthly Grab	Copper Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Chromium Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Zinc Total Micrograms/L (ug/L) Monthly Composite sample (24 hour)	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab	Halogens Total Combined Milligrams/L (mg/L) Once per defined event Grab
		CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Sa	12/1/18	2.4	8.1	8.2		24.3						
2-Su	12/2/18	2.4	8.0	8.2		23.5						
2-M	12/3/18	0.8	8.2	8.3	0	23.4					<0.1	<0.1
2-T	12/4/18	2.4	8.2	8.4		22.0	6.6*	17*	<1*	24*		
2-W	12/5/18	0.6	8.2	8.3	0	21.4					<0.1	<0.1
2-Th	12/6/18	2.2	8.1	8.3		25.0						
2-F	12/7/18	0.5	8.1	8.4	0	23.8					<0.1	<0.1
2-Sa	12/8/18	2.3	8.3	8.4		20.6						
3-Su	12/9/18	2.3	8.1	8.5		21.3						
3-M	12/10/18	2.3	8.2	8.3		22.3						
3-T	12/11/18	0.4	8.3	8.3		20.9						
3-W	12/12/18	1.5	8.2	8.3	0	22.9					<0.1	<0.1
3-Th	12/13/18	1.6	8.0	8.5		24.7						
3-F	12/14/18	1.2	8.1	8.5	0	24.5					<0.1	<0.1
3-Sa	12/15/18	2.0	7.9	8.4		24.8						
4-Su	12/16/18	2.0	7.8	8.3		22.5						
4-M	12/17/18	1.2	8.2	8.4	0	24.3					<0.1	<0.1
4-T	12/18/18	2.0	8.3	8.5		26.3						
4-W	12/19/18	0.7	7.9	8.4	0	25.8					<0.1	<0.1
4-Th	12/20/18	2.6	7.9	8.3		25.0						
4-F	12/21/18	1.2	8.1	8.3	0	25.0					<0.1	<0.1
4-Sa	12/22/18	2.0	8.0	8.3		21.5						
5-Su	12/23/18	2.0	8.0	8.4		21.1						
5-M	12/24/18	1.0	8.3	8.5	0	21.0					<0.1	<0.1
5-T	12/25/18	2.1	8.2	8.5		21.5						
5-W	12/26/18	1.2	8.1	8.4	0	22.5					<0.1	<0.1
5-Th	12/27/18	2.1	7.9	8.4		22.6						
5-F	12/28/18	1.1	8.1	8.5	0	21.1					<0.1	<0.1
5-Sa	12/29/18	1.9	8.2	8.4		26.0						
6-Su	12/30/18	1.9	8.3	8.4		26.0						
6-M	12/31/18	0.4	8.2	8.4	0	22.3					<0.1	<0.1
Instantaneous Minimum			7.8									
			>= 6.5 (RO)									
Average Monthly		1.6							<1	24		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum				8.5								
				<= 9.0 (RO)								
Monthly Total					0							
					<= 446							

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Sa	12/1/18		
2-Su	12/2/18		
2-M	12/3/18		
2-T	12/4/18		
2-W	12/5/18		
2-Th	12/6/18		
2-F	12/7/18		
2-Sa	12/8/18		
3-Su	12/9/18		
3-M	12/10/18		
3-T	12/11/18		
3-W	12/12/18		
3-Th	12/13/18		
3-F	12/14/18		
3-Sa	12/15/18		
4-Su	12/16/18		
4-M	12/17/18		
4-T	12/18/18		
4-W	12/19/18		
4-Th	12/20/18		
4-F	12/21/18		
4-Sa	12/22/18		
5-Su	12/23/18		
5-M	12/24/18		
5-T	12/25/18		
5-W	12/26/18		
5-Th	12/27/18		
5-F	12/28/18		
5-Sa	12/29/18		
6-Su	12/30/18		
6-M	12/31/18		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	12/4/2018	6.6	Results reported from a grab sample taken 12/4/2018
CWB	Copper Total Micrograms/L (ug/L)	12/4/2018	17	Results reported from a 24-hour composite sample collected 12/3/2018-12/4/2018
CWB	Chromium Total Micrograms/L (ug/L)	12/4/2018	B <1	Results reported from a 24-hour composite sample collected 12/3/2018-12/4/2018
CWB	Zinc Total Micrograms/L (ug/L)	12/4/2018	24	Results reported from a 24-hour composite sample collected 12/3/2018-12/4/2018
CWB2	All Parameters			Total residual halogen reported
SSWD	All Parameters		C	No discharge from the SSW ponds.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 12/01/2018 - 12/31/2018

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Sa	12/1/18	36824
2-Su	12/2/18	20658
2-M	12/3/18	20658
2-T	12/4/18	20658
2-W	12/5/18	36558
2-Th	12/6/18	35858
2-F	12/7/18	36158
2-Sa	12/8/18	34195
3-Su	12/9/18	32903
3-M	12/10/18	46476
3-T	12/11/18	20658
3-W	12/12/18	33158
3-Th	12/13/18	20658
3-F	12/14/18	33458
3-Sa	12/15/18	33558
4-Su	12/16/18	32958
4-M	12/17/18	33258
4-T	12/18/18	32758
4-W	12/19/18	33458
4-Th	12/20/18	33458
4-F	12/21/18	36758
4-Sa	12/22/18	47558
5-Su	12/23/18	33658
5-M	12/24/18	34258
5-T	12/25/18	33558
5-W	12/26/18	33858
5-Th	12/27/18	20658
5-F	12/28/18	33858
5-Sa	12/29/18	20658
6-Su	12/30/18	47022
6-M	12/31/18	20658
Monthly Total		990828

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 12/01/2018 - 12/31/2018

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-Sa	12/1/18	21.6
2-Su	12/2/18	21.2
2-M	12/3/18	19.0
2-T	12/4/18	20.2
2-W	12/5/18	18.7
2-Th	12/6/18	18.9
2-F	12/7/18	12.7
2-Sa	12/8/18	14.8
3-Su	12/9/18	15.3
3-M	12/10/18	15.2
3-T	12/11/18	14.0
3-W	12/12/18	19.6
3-Th	12/13/18	21.9
3-F	12/14/18	20.7
3-Sa	12/15/18	17.3
4-Su	12/16/18	17.0
4-M	12/17/18	21.3
4-T	12/18/18	22.9
4-W	12/19/18	20.2
4-Th	12/20/18	22.9
4-F	12/21/18	20.0
4-Sa	12/22/18	20.9
5-Su	12/23/18	19.5
5-M	12/24/18	19.7
5-T	12/25/18	20.1
5-W	12/26/18	19.7
5-Th	12/27/18	19.7
5-F	12/28/18	18.7
5-Sa	12/29/18	22.2
6-Su	12/30/18	21.7
6-M	12/31/18	18.4

Reporting Codes Used: B - Below Detection Limit/No Detection, C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted 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 for knowing violations.

Signature

Date