



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

February 13, 2018
GO2-18-033
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: 2017 BIOLOGICAL MONITORING REPORT

Reference: Letter, GI2-17-061, March 10, 2017, from Barry A. Thom (National Marine Fisheries Service) to Jeffery J. Rikhooff (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, Richland, 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 2017 Biological Monitoring Report.

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

Sincerely,

13/02/18 9:47:52 -08:00

X 

Khounnala, Shannon E., Environme... 

Shannon E. Khounnala
Environmental and Regulatory Programs Manager

SEK/nb

Attachments: 1. GO2-18-033 – 2017 Post Season Fish Collection Report – Attachment 1
2. GO2-18-033 – 2017 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

2017 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 2017 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 2017 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 2017 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 5/13/17 within view of the green buoy marking the Columbia Generating Station (CGS) discharge location.

Energy Northwest (ENW) personnel collected one small mouth bass on 8/31/17 from a shore location downstream of the CGS pump house. GPS coordinates were recorded as 46.468631, -119.264238, water temperature as 20.2 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. ENW personnel collected 3 additional small mouth bass on 9/16/17. These fish were caught from a shore location directly east of the CGS pump house. GPS coordinates were recorded as 46.471485, -119.265029, water temperature as 19.7 degrees Celsius. The fish were caught using hook and line techniques that targeted bass. Two additional bass were hooked but lost; no incidental take of 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 as fishermen donations. The walleye sample consisted of three walleye collected 10/4/17 near the Lyons Ferry Marina. The small mouth bass sample (4 fish) were collected 9/22/17 from a location between the highway 12 bridge and Ice harbor Dam, GPS coordinates were recorded as 46.240816, -118.955005.

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 9/20/17. The fish carcasses were obtained from both the Ringold and Lyons Ferry fish hatcheries on 10/17/17.

Fish Collection Summary

Reasonable and prudent measures were utilized to minimize the impact of biological monitoring activities during 2017. 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 2017 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 2017.



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

February 13, 2018
GO2-18-033
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: 2017 BIOLOGICAL MONITORING REPORT

Reference: Letter, GI2-17-061, March 10, 2017, from Barry A. Thom (National Marine Fisheries Service) to Jeffery J. Rikhooff (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, Richland, 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 2017 Biological Monitoring Report.

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

Sincerely,

13/02/18 9:47:52 -08:00

X 

Khounnala, Shannon E., Environme... 

Shannon E. Khounnala
Environmental and Regulatory Programs Manager

SEK/nb

- Attachments:
- 1. GO2-18-033 – 2017 Post Season Fish Collection Report – Attachment 1
 - 2. GO2-18-033 – 2017 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



INTEROFFICE MEMO

GO2-17-046

DIC: 1316.20

DATE: February 14, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 2017. Please note, operations logs for discharge flow, as recorded from CBD-FI-1A, were used because CBD-FR-10 was declared inoperable pending a repair to a drain valve in the instrument flow path. 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)

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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Robert A. Dutton, General Counsel, L&CS



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 01/01/2017 - 01/31/2017

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	Total Residual Chlorine Total residual Milligrams/L (mg/L) Once per defined event Grab
CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB	CWB2
1-Su	1/1/17	1.9	8.3	8.4		27.1						
1-M	1/2/17	2.0	8.3	8.4		28.2						
1-T	1/3/17	2.0	8.3	8.5		28.3	3*	13*	<1*	15*		
1-W	1/4/17	0.8	8.3	8.5	0	28.5					<0.1	<0.1
1-Th	1/5/17	1.4	8.3	8.5		27.6						
1-F	1/6/17	1.2	8.1	8.5		26.0						
1-Sa	1/7/17	1.4	8.4	8.4		29.1						
2-Su	1/8/17	1.5	8.4	8.4		27.4						
2-M	1/9/17	0.8	8.4	8.4		27.9						
2-T	1/10/17	1.5	8.4	8.4		29.2						
2-W	1/11/17	1.5	8.4	8.4		29.2						
2-Th	1/12/17	1.6	8.4	8.4		27.9						
2-F	1/13/17	1.6	8.3	8.4		28.2						
2-Sa	1/14/17	1.3	8.4	8.4		28.0						
3-Su	1/15/17	1.5	8.4	8.4		26.5						
3-M	1/16/17	1.5	8.4	8.4		26.6						
3-T	1/17/17	1.5	8.4	8.4		26.0						
3-W	1/18/17	0.5	8.4	8.4	0	27.9					<0.1	<0.1
3-Th	1/19/17	2.2	8.4	8.5		27.5						
3-F	1/20/17	0.6	8.4	8.4	0	27.7					<0.1	<0.1
3-Sa	1/21/17	1.8	8.4	8.4		26.6						
4-Su	1/22/17	1.7	8.4	8.4		25.3						
4-M	1/23/17	0.9	8.4	8.4	0	25.0					<0.1	<0.1
4-T	1/24/17	2.0	8.4	8.4		24.8						
4-W	1/25/17	0.3	8.4	8.4	0	24.1					<0.1	<0.1
4-Th	1/26/17	1.7	8.4	8.4		24.1						
4-F	1/27/17	1.4	8.4	8.4		24.8						
4-Sa	1/28/17	1.9	8.4	8.4		24.8						
5-Su	1/29/17	1.9	8.3	8.4		24.8						
5-M	1/30/17	0.6	8.4	8.4	0	24.8					<0.1	<0.1
5-T	1/31/17	2.1	8.4	8.4		25.3						
Instantaneous Minimum			8.1									
			>= 6.5 (RO)									
Average Monthly		1.43871							<1	15		
		<= 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-Su	1/1/17		
1-M	1/2/17		
1-T	1/3/17		
1-W	1/4/17		
1-Th	1/5/17		
1-F	1/6/17		
1-Sa	1/7/17		
2-Su	1/8/17		
2-M	1/9/17		
2-T	1/10/17		
2-W	1/11/17		
2-Th	1/12/17		
2-F	1/13/17		
2-Sa	1/14/17		
3-Su	1/15/17		
3-M	1/16/17		
3-T	1/17/17		
3-W	1/18/17		
3-Th	1/19/17		
3-F	1/20/17		
3-Sa	1/21/17		
4-Su	1/22/17		
4-M	1/23/17		
4-T	1/24/17		
4-W	1/25/17		
4-Th	1/26/17		
4-F	1/27/17		
4-Sa	1/28/17		
5-Su	1/29/17		
5-M	1/30/17		
5-T	1/31/17		
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	1/3/2017	3	Results reported from a grab sample taken 1/3/17
CWB	Copper Total Micrograms/L (ug/L)	1/3/2017	13	Results reported from a 24-hr composite sample collected 1/2/2017-1/3/2017
CWB	Chromium Total Micrograms/L (ug/L)	1/3/2017	B <1	Results reported from a 24-hr composite sample collected 1/2/2017-1/3/2017
CWB	Zinc Total Micrograms/L (ug/L)	1/3/2017	15	Results reported from a 24-hr composite sample collected 1/2/2017-1/3/2017
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: 01/01/2017 - 01/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
		Pnd
1-Su	1/1/17	24853
1-M	1/2/17	24853
1-T	1/3/17	24853
1-W	1/4/17	37779
1-Th	1/5/17	24853
1-F	1/6/17	24853
1-Sa	1/7/17	38500
2-Su	1/8/17	24853
2-M	1/9/17	38280
2-T	1/10/17	24853
2-W	1/11/17	38258
2-Th	1/12/17	24853
2-F	1/13/17	24853
2-Sa	1/14/17	38301
3-Su	1/15/17	24853
3-M	1/16/17	38177
3-T	1/17/17	24853
3-W	1/18/17	38514
3-Th	1/19/17	24853
3-F	1/20/17	38453
3-Sa	1/21/17	38340
4-Su	1/22/17	24853
4-M	1/23/17	38381
4-T	1/24/17	35653
4-W	1/25/17	27257
4-Th	1/26/17	24853
4-F	1/27/17	38289
4-Sa	1/28/17	24853
5-Su	1/29/17	37974
5-M	1/30/17	24853
5-T	1/31/17	38153
Monthly Total		957957

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: 01/01/2017 - 01/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Su	1/1/17	18.6
1-M	1/2/17	20.5
1-T	1/3/17	19.7
1-W	1/4/17	18.9
1-Th	1/5/17	17.3
1-F	1/6/17	17.4
1-Sa	1/7/17	17.2
2-Su	1/8/17	18.3
2-M	1/9/17	16.6
2-T	1/10/17	19.2
2-W	1/11/17	19.8
2-Th	1/12/17	18.1
2-F	1/13/17	18.0
2-Sa	1/14/17	17.7
3-Su	1/15/17	18.5
3-M	1/16/17	18.4
3-T	1/17/17	19.1
3-W	1/18/17	19.2
3-Th	1/19/17	19.8
3-F	1/20/17	19.0
3-Sa	1/21/17	20.0
4-Su	1/22/17	21.1
4-M	1/23/17	18.2
4-T	1/24/17	20.5
4-W	1/25/17	17.1
4-Th	1/26/17	19.8
4-F	1/27/17	19.2
4-Sa	1/28/17	18.7
5-Su	1/29/17	20.1
5-M	1/30/17	18.0
5-T	1/31/17	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.

Robert Dutton

2/14/2017 3:07:13 PM

Signature

Date



INTEROFFICE MEMO

GO2-17-061

DIC: 1316.20

DATE: March 14, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 2017. Please note, operations logs for discharge flow, as recorded from CBD-FI-1A, were used through 2/1/2017 because CBD-FR-10 was declared inoperable pending a repair to a drain valve in the instrument flow path. 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)
Plant Files

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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Robert A. Dutton, General Counsel, L&CS



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 02/01/2017 - 02/28/2017

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	2/1/17	1.0	8.4	8.4	0	25.0					<0.1	<0.1
1-Th	2/2/17	2.1	8.4	8.4		28.2						
1-F	2/3/17	2.1	8.4	8.4		29.1						
1-Sa	2/4/17	2.1	8.4	8.4		27.5						
2-Su	2/5/17	2.1	8.3	8.4		29.7						
2-M	2/6/17	0.5	8.4	8.4	0	30.0					<0.1	<0.1
2-T	2/7/17	2.6	8.4	8.4		29.7						
2-W	2/8/17	0.4	8.4	8.4	0	27.1	4.2*	12*	<1*	19*	<0.1	<0.1
2-Th	2/9/17	2.7	8.4	8.4		27.8						
2-F	2/10/17	0.7	8.3	8.4	0	26.9					<0.1	<0.1
2-Sa	2/11/17	2.3	8.3	8.4		25.7						
3-Su	2/12/17	2.3	8.3	8.4		27.7						
3-M	2/13/17	1.1	8.3	8.4	0	25.2					<0.1	<0.1
3-T	2/14/17	2.1	8.3	8.4		27.1						
3-W	2/15/17	0.4	8.3	8.4	0	26.0					<0.1	<0.1
3-Th	2/16/17	2.0	8.3	8.4		26.0						
3-F	2/17/17	2.0	8.3	8.4		26.9						
3-Sa	2/18/17	2.0	8.3	8.4		26.6						
4-Su	2/19/17	2.0	8.3	8.4		26.9						
4-M	2/20/17	1.1	8.3	8.4	0	27.4					<0.1	<0.1
4-T	2/21/17	2.3	8.3	8.4		27.5						
4-W	2/22/17	1.1	8.3	8.4	0	26.6					<0.1	<0.1
4-Th	2/23/17	2.0	8.3	8.4		26.6						
4-F	2/24/17	2.0	8.3	8.4		26.2						
4-Sa	2/25/17	2.0	8.3	8.4		25.7						
5-Su	2/26/17	2.0	8.3	8.4		28.0						
5-M	2/27/17	1.2	8.3	8.4	0	29.5					<0.1	<0.1
5-T	2/28/17	2.3	8.3	8.4		29.4						
Instantaneous Minimum			8.3									
			>= 6.5 (RO)									
Average Monthly		1.73							<1	19		
		<= 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

Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Turbidity (Nephelometric) Measured NTU	2/8/2017	4.2	Results reported from a grab sample collected 2/7/2017



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



CWB	Copper Total Micrograms/L (ug/L)	2/8/2017	12	Results reported from a 24-hr composite sample collected 2/7/2017-2/8/2017
CWB	Chromium Total Micrograms/L (ug/L)	2/8/2017	B <1	Results reported from a 24-hr composite sample collected 2/7/2017-2/8/2017
CWB	Zinc Total Micrograms/L (ug/L)	2/8/2017	19	Results reported from a 24-hr composite sample collected 2/7/2017-2/8/2017
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: 02/01/2017 - 02/28/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-W	2/1/17	36858
1-Th	2/2/17	23658
1-F	2/3/17	23658
1-Sa	2/4/17	36797
2-Su	2/5/17	23658
2-M	2/6/17	36968
2-T	2/7/17	36709
2-W	2/8/17	37058
2-Th	2/9/17	37058
2-F	2/10/17	23658
2-Sa	2/11/17	37258
3-Su	2/12/17	23658
3-M	2/13/17	23658
3-T	2/14/17	37395
3-W	2/15/17	23658
3-Th	2/16/17	36768
3-F	2/17/17	23658
3-Sa	2/18/17	37175
4-Su	2/19/17	23658
4-M	2/20/17	36959
4-T	2/21/17	37121
4-W	2/22/17	23658
4-Th	2/23/17	36895
4-F	2/24/17	23658
4-Sa	2/25/17	37258
5-Su	2/26/17	37158
5-M	2/27/17	36957
5-T	2/28/17	23658
Monthly Total		876288

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: 02/01/2017 - 02/28/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-W	2/1/17	17.1
1-Th	2/2/17	21.5
1-F	2/3/17	20.5
1-Sa	2/4/17	19.8
2-Su	2/5/17	20.6
2-M	2/6/17	18.7
2-T	2/7/17	20.6
2-W	2/8/17	18.9
2-Th	2/9/17	20.2
2-F	2/10/17	21.2
2-Sa	2/11/17	20.8
3-Su	2/12/17	20.7
3-M	2/13/17	18.3
3-T	2/14/17	19.9
3-W	2/15/17	18.0
3-Th	2/16/17	19.9
3-F	2/17/17	21.3
3-Sa	2/18/17	20.3
4-Su	2/19/17	21.8
4-M	2/20/17	19.5
4-T	2/21/17	21.9
4-W	2/22/17	19.6
4-Th	2/23/17	21.7
4-F	2/24/17	20.8
4-Sa	2/25/17	17.7
5-Su	2/26/17	21.2
5-M	2/27/17	20.6
5-T	2/28/17	22.8

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.

Robert Dutton

3/14/2017 9:46:12 AM

Signature

Date



INTEROFFICE MEMO

GO2-17-081

DIC: 1316.20

DATE: April 13, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 2017. 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)

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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Robert A. Dutton, General Counsel, L&CS



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 03/01/2017 - 03/31/2017

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	3/1/17	1.3	8.3	8.4	0	30.7					<0.1	<0.1
1-Th	3/2/17	2.1	8.3	8.4		30.7						
1-F	3/3/17	0.7	8.3	8.4	0	30.7					<0.1	<0.1
1-Sa	3/4/17	2.1	8.3	8.4		31.2						
2-Su	3/5/17	2.1	8.3	8.4		31.1						
2-M	3/6/17	0.6	8.3	8.4	0	30.5					<0.1	<0.1
2-T	3/7/17	2.6	8.3	8.4		31.6	3.2*					
2-W	3/8/17	1.1	8.3	8.4	0	31.9		11*	<1*	17*	<0.1	<0.1
2-Th	3/9/17	1.9	8.3	8.4		30.3						
2-F	3/10/17	1.9	8.3	8.4		33.1						
2-Sa	3/11/17	1.9	8.3	8.4		31.9						
3-Su	3/12/17	1.9	8.3	8.4		31.2						
3-M	3/13/17	0.6	8.3	8.4	0	31.6					<0.1	<0.1
3-T	3/14/17	2.7	8.3	8.4		31.9						
3-W	3/15/17	1.1	8.3	8.3	0	30.2					<0.1	<0.1
3-Th	3/16/17	2.1	8.3	8.3		30.3						
3-F	3/17/17	1.0	8.3	8.3	0	27.6					<0.1	<0.1
3-Sa	3/18/17	2.0	8.3	8.3		30.0						
4-Su	3/19/17	2.0	8.3	8.3		29.0						
4-M	3/20/17	1.1	8.3	8.3	0	27.3					<0.1	<0.1
4-T	3/21/17	2.5	8.3	8.3		28.5						
4-W	3/22/17	0.9	8.3	8.3	0	28.0					<0.1	<0.1
4-Th	3/23/17	2.4	8.3	8.3		27.6						
4-F	3/24/17	0.9	8.3	8.3	0	27.2					<0.1	<0.1
4-Sa	3/25/17	1.7	8.3	8.3		27.3						
5-Su	3/26/17	1.7	8.3	8.3		25.7						
5-M	3/27/17	1.0	8.3	8.3	0	26.6					<0.1	<0.1
5-T	3/28/17	2.1	8.3	8.3		28.7						
5-W	3/29/17	1.4	8.3	8.3	0	30.9					<0.1	<0.1
5-Th	3/30/17	3.1	8.3	8.3		31.0						
5-F	3/31/17	1.0	8.3	8.3	0	28.2					<0.1	<0.1
Instantaneous Minimum			8.3									
			>= 6.5 (RO)									
Average Monthly		1.66							<1	17		
		<= 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-W	3/1/17		
1-Th	3/2/17		
1-F	3/3/17		
1-Sa	3/4/17		
2-Su	3/5/17		
2-M	3/6/17		
2-T	3/7/17		
2-W	3/8/17		
2-Th	3/9/17		
2-F	3/10/17		
2-Sa	3/11/17		
3-Su	3/12/17		
3-M	3/13/17		
3-T	3/14/17		
3-W	3/15/17		
3-Th	3/16/17		
3-F	3/17/17		
3-Sa	3/18/17		
4-Su	3/19/17		
4-M	3/20/17		
4-T	3/21/17		
4-W	3/22/17		
4-Th	3/23/17		
4-F	3/24/17		
4-Sa	3/25/17		
5-Su	3/26/17		
5-M	3/27/17		
5-T	3/28/17		
5-W	3/29/17		
5-Th	3/30/17		
5-F	3/31/17		
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	3/7/2017	3.2	Results reported from a grab sample taken 3/7/17
CWB	Copper Total Micrograms/L (ug/L)	3/8/2017	11	Results reported from a 24-hr composite sample collected 3/7/2017-3/8/2017
CWB	Chromium Total Micrograms/L (ug/L)	3/8/2017	B <1	Results reported from a 24-hr composite sample collected 3/7/2017-3/8/2017
CWB	Zinc Total Micrograms/L (ug/L)	3/8/2017	17	Results reported from a 24-hr composite sample collected 3/7/2017-3/8/2017
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 started for feed & bleed of SSW ponds on 3/29/2017.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 03/01/2017 - 03/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-W	3/1/17	16674
1-Th	3/2/17	16674
1-F	3/3/17	29591
1-Sa	3/4/17	43473
2-Su	3/5/17	16674
2-M	3/6/17	30358
2-T	3/7/17	30174
2-W	3/8/17	30364
2-Th	3/9/17	30284
2-F	3/10/17	29988
2-Sa	3/11/17	16674
3-Su	3/12/17	16674
3-M	3/13/17	29874
3-T	3/14/17	29774
3-W	3/15/17	29620
3-Th	3/16/17	22328
3-F	3/17/17	37574
3-Sa	3/18/17	16674
4-Su	3/19/17	29999
4-M	3/20/17	16674
4-T	3/21/17	16674
4-W	3/22/17	30135
4-Th	3/23/17	16674
4-F	3/24/17	16674
4-Sa	3/25/17	31974
5-Su	3/26/17	30374
5-M	3/27/17	30174
5-T	3/28/17	16674
5-W	3/29/17	43001
5-Th	3/30/17	29752
5-F	3/31/17	30174
Monthly Total		812399

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	All Parameters			The leak detection system for evaporation ponds 1A and 1B registered operating time above the Operation and Maintenance (O&M) manual thresholds in March. The cause is under investigation.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 03/01/2017 - 03/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-W	3/1/17	21.2
1-Th	3/2/17	23.0
1-F	3/3/17	20.8
1-Sa	3/4/17	23.3
2-Su	3/5/17	21.9
2-M	3/6/17	21.0
2-T	3/7/17	22.6
2-W	3/8/17	21.7
2-Th	3/9/17	21.5
2-F	3/10/17	23.0
2-Sa	3/11/17	22.1
3-Su	3/12/17	22.0
3-M	3/13/17	21.0
3-T	3/14/17	24.0
3-W	3/15/17	22.0
3-Th	3/16/17	23.3
3-F	3/17/17	19.7
3-Sa	3/18/17	23.7
4-Su	3/19/17	21.4
4-M	3/20/17	20.4
4-T	3/21/17	23.6
4-W	3/22/17	19.1
4-Th	3/23/17	21.8
4-F	3/24/17	19.9
4-Sa	3/25/17	20.9
5-Su	3/26/17	20.2
5-M	3/27/17	21.1
5-T	3/28/17	19.9
5-W	3/29/17	20.8
5-Th	3/30/17	23.1
5-F	3/31/17	21.2

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

GO2-17-099

DIC: 1316.20

DATE: May 11, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 2017. 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: Michael W. Davis, Manager, Chemistry/Rad Safety

Approved by: Robert A. Dutton, General Counsel, L&CS



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 04/01/2017 - 04/30/2017

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	4/1/17	1.5	8.3	8.3		27.4						
2-Su	4/2/17	1.5	8.3	8.3		26.9						
2-M	4/3/17	0.4	8.3	8.3	0	24.2					<0.1	<0.1
2-T	4/4/17	1.6	8.3	8.3		22.3	25*	17*	1.7*	28*		
2-W	4/5/17	0.5	8.3	8.3	0	22.8					<0.1	<0.1
2-Th	4/6/17	2.9	8.3	8.3		26.1						
2-F	4/7/17	1.1	8.3	8.3	0	26.0					<0.1	<0.1
2-Sa	4/8/17	1.4	8.3	8.3		23.9						
3-Su	4/9/17	1.4	8.3	8.4		21.3						
3-M	4/10/17	1.4	8.3	8.3	0	22.8					<0.1	<0.1
3-T	4/11/17	3.1	8.3	8.3		22.6						
3-W	4/12/17	0.9	8.3	8.3	0	22.9					<0.1	<0.1
3-Th	4/13/17	3.0	8.3	8.3		22.6						
3-F	4/14/17	0.7	8.3	8.3	0	22.8					<0.1	<0.1
3-Sa	4/15/17	1.3	8.3	8.3		19.3						
4-Su	4/16/17	1.3	8.3	8.3		20.9						
4-M	4/17/17	0.5	8.3	8.3	0	22.1					<0.1	<0.1
4-T	4/18/17	2.1	8.3	8.3		24.5						
4-W	4/19/17	0.7	8.3	8.3	0	24.0					<0.1	<0.1
4-Th	4/20/17	1.5	8.3	8.3		22.5						
4-F	4/21/17	0.7	8.3	8.3	0	22.8					<0.1	<0.1
4-Sa	4/22/17	1.3	8.3	8.3		22.7						
5-Su	4/23/17	1.3	8.3	8.3		23.7						
5-M	4/24/17	0.2	8.3	8.3	0	23.1					<0.1	<0.1
5-T	4/25/17	1.6	8.3	8.3		23.7						
5-W	4/26/17	0.5	8.3	8.3	0	23.9					<0.1	<0.1
5-Th	4/27/17	2.1	8.3	8.3		23.0						
5-F	4/28/17	0.8	8.3	8.3	0	23.4					<0.1	<0.1
5-Sa	4/29/17	1.5	8.3	8.3		23.2						
6-Su	4/30/17	1.5	8.3	8.3		24.7						
Instantaneous Minimum			8.3									
			>= 6.5 (RO)									
Average Monthly		1.4							1.7	28		
		<= 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-Sa	4/1/17		
2-Su	4/2/17		
2-M	4/3/17		
2-T	4/4/17		
2-W	4/5/17		
2-Th	4/6/17		
2-F	4/7/17		
2-Sa	4/8/17		
3-Su	4/9/17		
3-M	4/10/17		
3-T	4/11/17		
3-W	4/12/17		
3-Th	4/13/17		
3-F	4/14/17		
3-Sa	4/15/17		
4-Su	4/16/17		
4-M	4/17/17		
4-T	4/18/17		
4-W	4/19/17		
4-Th	4/20/17		
4-F	4/21/17		
4-Sa	4/22/17		
5-Su	4/23/17		
5-M	4/24/17		
5-T	4/25/17		
5-W	4/26/17		
5-Th	4/27/17		
5-F	4/28/17		
5-Sa	4/29/17		
6-Su	4/30/17		
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	4/4/2017	25	Results reported from a grab sample taken 4/4/17
CWB	Copper Total Micrograms/L (ug/L)	4/4/2017	17	Results reported from a 24-hr composite sample collected 4/3/2017-4/4/2017
CWB	Chromium Total Micrograms/L (ug/L)	4/4/2017	1.7	Results reported from a 24-hr composite sample collected 4/3/2017-4/4/2017
CWB	Zinc Total Micrograms/L (ug/L)	4/4/2017	28	Results reported from a 24-hr composite sample collected 4/3/2017-4/4/2017
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 feed & bleed of SSW ponds started on 3/29/2017.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 04/01/2017 - 04/30/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Sa	4/1/17	27586
2-Su	4/2/17	27720
2-M	4/3/17	27439
2-T	4/4/17	14115
2-W	4/5/17	27315
2-Th	4/6/17	14115
2-F	4/7/17	41115
2-Sa	4/8/17	14115
3-Su	4/9/17	28692
3-M	4/10/17	30518
3-T	4/11/17	29815
3-W	4/12/17	30115
3-Th	4/13/17	29815
3-F	4/14/17	31067
3-Sa	4/15/17	14115
4-Su	4/16/17	14115
4-M	4/17/17	30507
4-T	4/18/17	14115
4-W	4/19/17	14115
4-Th	4/20/17	29970
4-F	4/21/17	30275
4-Sa	4/22/17	43244
5-Su	4/23/17	26999
5-M	4/24/17	27242
5-T	4/25/17	27115
5-W	4/26/17	27507
5-Th	4/27/17	14115
5-F	4/28/17	14115
5-Sa	4/29/17	27308
6-Su	4/30/17	27293
Monthly Total		755692

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	All Parameters			The leak detection system for evaporation ponds 1A and 1B registered operating time above the Operation and Maintenance (O&M) manual thresholds in April. Corrective action including trouble-shooting and cause investigation is ongoing.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 04/01/2017 - 04/30/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Sa	4/1/17	18.4
2-Su	4/2/17	14.3
2-M	4/3/17	14.8
2-T	4/4/17	13.8
2-W	4/5/17	13.9
2-Th	4/6/17	17.4
2-F	4/7/17	15.3
2-Sa	4/8/17	15.5
3-Su	4/9/17	14.4
3-M	4/10/17	15.3
3-T	4/11/17	17.0
3-W	4/12/17	13.8
3-Th	4/13/17	17.2
3-F	4/14/17	13.9
3-Sa	4/15/17	14.7
4-Su	4/16/17	15.7
4-M	4/17/17	15.3
4-T	4/18/17	17.3
4-W	4/19/17	14.9
4-Th	4/20/17	16.2
4-F	4/21/17	15.7
4-Sa	4/22/17	16.5
5-Su	4/23/17	16.3
5-M	4/24/17	15.3
5-T	4/25/17	17.5
5-W	4/26/17	15.9
5-Th	4/27/17	18.0
5-F	4/28/17	16.6
5-Sa	4/29/17	17.6
6-Su	4/30/17	17.9

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

GO2-17-115

DIC: 1316.20

DATE: June 14, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 May 2017. All monitoring parameters were within permit specifications for the month. Due to refueling outage activities, temporary flow and pH measurements, and circulating water pump house temperature measurements were used for part of the month. 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)

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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E & RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 05/01/2017 - 05/31/2017

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-M	5/1/17	0.5	8.3	8.3	0	25.7					<0.1	<0.1
1-T	5/2/17	1.8	8.3	8.3		24.7	28.0*					
1-W	5/3/17	0.5	8.3	8.3	0	24.8		20*	1.9*	33*	<0.1	<0.1
1-Th	5/4/17	1.7	8.2	8.3		28.5						
1-F	5/5/17	1.2	8.2	8.3	0	28.9					<0.1	<0.1
1-Sa	5/6/17	2.2	8.2	8.3		26.9						
2-Su	5/7/17	1.4	8.2	8.3		24.7						
2-M	5/8/17	0.3	8.2	8.3	0	23.4					<0.1	<0.1
2-T	5/9/17	1.7	8.2	8.3		25.1						
2-W	5/10/17	0.9	8.2	8.3	0	26.0					<0.1	<0.1
2-Th	5/11/17	4.3	8.2	8.3		27.3						
2-F	5/12/17	4.1	8.1	8.4		29.0						
2-Sa	5/13/17	3.3	8.2	8.3		28.9						
3-Su	5/14/17	2.1	8.2	8.3		13.3						
3-M	5/15/17	0.0	C	C		C						
3-T	5/16/17	1.8	8.1	8.2		18.6						
3-W	5/17/17	1.5	7.5	8.1		21.9*						
3-Th	5/18/17	0.01	8.1	8.1		24.1*						
3-F	5/19/17	0.05	8.0	8.1		24.3*						
3-Sa	5/20/17	2.0	7.7	8.0		26.9*						
4-Su	5/21/17	2.3	7.5	7.9		29.8*						
4-M	5/22/17	2.3	7.8	7.8		29.4*						
4-T	5/23/17	2.5	7.8	8.0		28.1*						
4-W	5/24/17	2.5	8.0	8.1		26.8*						
4-Th	5/25/17	2.7	7.8	8.1		24.9*						
4-F	5/26/17	2.4	7.9	8.1		24.1*						
4-Sa	5/27/17	2.1	8.0	8.2		24.9*						
5-Su	5/28/17	2.0	7.9	8.1		27.9*						
5-M	5/29/17	2.0	7.8	8.0		25.3						
5-T	5/30/17	2.2	7.7	8.3		25.9						
5-W	5/31/17	2.2	7.6	7.6		26.0						
Instantaneous Minimum			7.5									
			>= 6.5 (RO)									
Average Monthly		1.8							1.9	33		
		<= 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	5/1/17		
1-T	5/2/17		
1-W	5/3/17		
1-Th	5/4/17		
1-F	5/5/17		
1-Sa	5/6/17		
2-Su	5/7/17		
2-M	5/8/17		
2-T	5/9/17		
2-W	5/10/17		
2-Th	5/11/17		
2-F	5/12/17		
2-Sa	5/13/17		
3-Su	5/14/17		
3-M	5/15/17		
3-T	5/16/17		
3-W	5/17/17		
3-Th	5/18/17		
3-F	5/19/17		
3-Sa	5/20/17		
4-Su	5/21/17		
4-M	5/22/17		
4-T	5/23/17		
4-W	5/24/17		
4-Th	5/25/17		
4-F	5/26/17		
4-Sa	5/27/17		
5-Su	5/28/17		
5-M	5/29/17		
5-T	5/30/17		
5-W	5/31/17		
Instantaneous Minimum			
Average Monthly			
Instantaneous Maximum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Temperature Measured Degrees C	5/17/2017	21.9	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/18/2017	24.1	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/19/2017	24.3	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/20/2017	26.9	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/21/2017	29.8	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/22/2017	29.4	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/23/2017	28.1	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/24/2017	26.8	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/25/2017	24.9	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/26/2017	24.1	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/27/2017	24.9	Reported temperature results contain data from the CW Pump House
CWB	Temperature Measured Degrees C	5/28/2017	27.9	Reported temperature results contain data from the CW Pump House
CWB	Turbidity (Nephelometric) Measured NTU	5/2/2017	28.0	Results reported from a grab sample taken 5/2/2017
CWB	Copper Total Micrograms/L (ug/L)	5/3/2017	20	Results reported from a 24-hr composite sample collected 5/2/2017-5/3/2017
CWB	Chromium Total Micrograms/L (ug/L)	5/3/2017	1.9	Results reported from a 24-hr composite sample collected 5/2/2017-5/3/2017
CWB	Zinc Total Micrograms/L (ug/L)	5/3/2017	33	Results reported from a 24-hr composite sample collected 5/2/2017-5/3/2017
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 feed & bleed of SSW ponds started on 3/29/2017, ended 5/9/2017.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 05/01/2017 - 05/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated Pnd
1-M	5/1/17	22806
1-T	5/2/17	35760
1-W	5/3/17	35952
1-Th	5/4/17	35906
1-F	5/5/17	35764
1-Sa	5/6/17	35948
2-Su	5/7/17	49406
2-M	5/8/17	35806
2-T	5/9/17	36144
2-W	5/10/17	88068
2-Th	5/11/17	36006
2-F	5/12/17	35632
2-Sa	5/13/17	37580
3-Su	5/14/17	49110
3-M	5/15/17	22806
3-T	5/16/17	35502
3-W	5/17/17	37306
3-Th	5/18/17	38506
3-F	5/19/17	38406
3-Sa	5/20/17	22806
4-Su	5/21/17	38406
4-M	5/22/17	22806
4-T	5/23/17	54806
4-W	5/24/17	38893
4-Th	5/25/17	38619
4-F	5/26/17	53806
4-Sa	5/27/17	38306
5-Su	5/28/17	52706
5-M	5/29/17	66800
5-T	5/30/17	22806
5-W	5/31/17	69912
Monthly Total		1.26309e+006

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	All Parameters			The leak detection system for evaporation ponds 1A and 1B registered operating time above the Operation and Maintenance (O&M) manual thresholds in May. Corrective action including trouble-shooting and cause investigation is ongoing.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 05/01/2017 - 05/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-M	5/1/17	16.2
1-T	5/2/17	17.8
1-W	5/3/17	17.2
1-Th	5/4/17	19.3
1-F	5/5/17	17.6
1-Sa	5/6/17	18.3
2-Su	5/7/17	17.4
2-M	5/8/17	16.3
2-T	5/9/17	18.4
2-W	5/10/17	18.1
2-Th	5/11/17	21.6
2-F	5/12/17	13.0
2-Sa	5/13/17	6.2
3-Su	5/14/17	5.8
3-M	5/15/17	5.8
3-T	5/16/17	5.8
3-W	5/17/17	5.8
3-Th	5/18/17	5.8
3-F	5/19/17	5.8
3-Sa	5/20/17	5.8
4-Su	5/21/17	5.8
4-M	5/22/17	5.8
4-T	5/23/17	5.8
4-W	5/24/17	5.8
4-Th	5/25/17	5.8
4-F	5/26/17	5.8
4-Sa	5/27/17	5.8
5-Su	5/28/17	5.8
5-M	5/29/17	5.8
5-T	5/30/17	5.8
5-W	5/31/17	5.8

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

Outfall: Intk - Cooling water intake structure

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
Intk	All Parameters			eDNA Data from 5/14/17 to 5/31/17 not accurate due to sediment in sensing lines and outage work. Control Room Operators report TMU Intake flow has been approximately 4000 gpm throughout the refueling outage, since May 13. This value used.

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

GO2-17-130

DIC: 1316.20

DATE: July 11, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 June 2017. All monitoring parameters were within permit specifications for the month. Due to refueling outage activities, temporary flow measurements were used for part of the month. 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)

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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E & RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 06/01/2017 - 06/30/2017

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	6/1/17	2.2	7.5	7.5		26.6						
1-F	6/2/17	2.1	7.4	7.5		26.9						
1-Sa	6/3/17	2.1	7.5	7.6		27.4						
2-Su	6/4/17	2.1	7.6	7.8		27.4						
2-M	6/5/17	2.8	7.7	7.9		27.7						
2-T	6/6/17	2.8	7.9	8.0		25.2						
2-W	6/7/17	2.6	7.9	8.0		25.6						
2-Th	6/8/17	1.2	7.9	8.0		25.4						
2-F	6/9/17	2.1	7.4	8.3		25.1						
2-Sa	6/10/17	2.8	7.1	8.3		19.5						
3-Su	6/11/17	2.8	8.2	8.3		18.1						
3-M	6/12/17	2.9	8.2	8.3		19.2						
3-T	6/13/17	2.9	8.2	8.3		18.9						
3-W	6/14/17	2.9	8.2	8.3		17.3						
3-Th	6/15/17	3.3	8.2	8.3		19.5						
3-F	6/16/17	3.8	8.2	8.4		26.3						
3-Sa	6/17/17	3.5	8.3	8.5		27.7						
4-Su	6/18/17	5.6	8.0	8.4		28.8						
4-M	6/19/17	5.6	8.0	8.1		32.2						
4-T	6/20/17	5.5	8.0	8.1		31.0	1.8*	9.7*	<1*	5.8*		
4-W	6/21/17	1.0	8.1	8.1	0	29.2					<0.1	<0.1
4-Th	6/22/17	1.5	8.2	8.2		29.4						
4-F	6/23/17	0.4	8.2	8.2	0	29.7					<0.1	<0.1
4-Sa	6/24/17	1.5	8.2	8.2		31.3						
5-Su	6/25/17	1.4	8.2	8.2		32.8						
5-M	6/26/17	0.5	8.2	8.2	0	32.9					<0.1	<0.1
5-T	6/27/17	1.9	8.2	8.2		33.1						
5-W	6/28/17	0.9	8.2	8.2	0	32.8					<0.1	<0.1
5-Th	6/29/17	1.9	8.2	8.2		32.8						
5-F	6/30/17	0.9	8.2	8.2	0	32.8					<0.1	<0.1
Instantaneous Minimum			7.1									
			>= 6.5 (RO)									
Average Monthly		2.45							<1	5.8		
		<= 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	6/1/17		
1-F	6/2/17		
1-Sa	6/3/17		
2-Su	6/4/17		
2-M	6/5/17		
2-T	6/6/17		
2-W	6/7/17		
2-Th	6/8/17		
2-F	6/9/17		
2-Sa	6/10/17		
3-Su	6/11/17		
3-M	6/12/17		
3-T	6/13/17		
3-W	6/14/17		
3-Th	6/15/17		
3-F	6/16/17		
3-Sa	6/17/17		
4-Su	6/18/17		
4-M	6/19/17		
4-T	6/20/17		
4-W	6/21/17		
4-Th	6/22/17		
4-F	6/23/17		
4-Sa	6/24/17		
5-Su	6/25/17		
5-M	6/26/17		
5-T	6/27/17		
5-W	6/28/17		
5-Th	6/29/17		
5-F	6/30/17		
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	6/20/2017	1.8	Results reported from a grab sample collected 6/20/2017
CWB	Copper Total Micrograms/L (ug/L)	6/20/2017	9.7	Results reported from a 24-hr composite sample collected 6/19/2017 to 6/20/2017
CWB	Chromium Total Micrograms/L (ug/L)	6/20/2017	B <1	Results reported from a 24-hr composite sample collected 6/19/2017 to 6/20/2017
CWB	Zinc Total Micrograms/L (ug/L)	6/20/2017	5.8	Results reported from a 24-hr composite sample collected 6/19/2017 to 6/20/2017
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: 06/01/2017 - 06/30/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Th	6/1/17	23224
1-F	6/2/17	23026
1-Sa	6/3/17	21594
2-Su	6/4/17	21956
2-M	6/5/17	23375
2-T	6/6/17	23275
2-W	6/7/17	23343
2-Th	6/8/17	37707
2-F	6/9/17	7275
2-Sa	6/10/17	23375
3-Su	6/11/17	7275
3-M	6/12/17	38462
3-T	6/13/17	22275
3-W	6/14/17	37675
3-Th	6/15/17	23075
3-F	6/16/17	22875
3-Sa	6/17/17	7275
4-Su	6/18/17	7275
4-M	6/19/17	7275
4-T	6/20/17	7275
4-W	6/21/17	7275
4-Th	6/22/17	7275
4-F	6/23/17	7275
4-Sa	6/24/17	7275
5-Su	6/25/17	7275
5-M	6/26/17	7275
5-T	6/27/17	7275
5-W	6/28/17	88075
5-Th	6/29/17	7275
5-F	6/30/17	23400
Monthly Total		578562

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	All Parameters			After repair to a drain connection the leak detection system for evaporation ponds 1A and 1B operated within specifications of the Operation and Maintenance (O&M) manual thresholds in June.



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 06/01/2017 - 06/30/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-Th	6/1/17	5.8
1-F	6/2/17	5.8
1-Sa	6/3/17	5.8
2-Su	6/4/17	5.8
2-M	6/5/17	2.1
2-T	6/6/17	2.0
2-W	6/7/17	2.7
2-Th	6/8/17	3.2
2-F	6/9/17	5.5
2-Sa	6/10/17	1.2
3-Su	6/11/17	2.7
3-M	6/12/17	5.8
3-T	6/13/17	5.9
3-W	6/14/17	4.6
3-Th	6/15/17	5.5
3-F	6/16/17	7.1
3-Sa	6/17/17	7.5
4-Su	6/18/17	10.5
4-M	6/19/17	14.5
4-T	6/20/17	18.2
4-W	6/21/17	20.3
4-Th	6/22/17	23.5
4-F	6/23/17	22.3
4-Sa	6/24/17	25.1
5-Su	6/25/17	24.9
5-M	6/26/17	24.2
5-T	6/27/17	25.8
5-W	6/28/17	24.1
5-Th	6/29/17	25.2
5-F	6/30/17	24.8

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

Outfall: Intk - Cooling water intake structure

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
Intk	All Parameters			eDNA Data from 5/14/17 to 6/4/17 not accurate due to sediment in sensing lines and outage work. Control Room Operators report TMU Intake flow has been approximately 4000 gpm throughout the refueling outage, since May 13. This value used through 6/4/17.

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

GO2-17-148

DIC: 1316.20

DATE: August 14, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 July 2017. All monitoring parameters were within permit specifications for the month. 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)

(CGS Plant Files (DIC 1316.20))
(Page 2 of 2)
(September 5, 2017)
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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E & RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 07/01/2017 - 07/31/2017

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	7/1/17	1.8	8.2	8.3		34.2						
2-Su	7/2/17	1.9	8.2	8.3		34.5						
2-M	7/3/17	0.7	8.2	8.3	0	34.0					<0.1	<0.1
2-T	7/4/17	2.5	8.2	8.3		33.7	2.9*	20*	<1*	20*		
2-W	7/5/17	0.7	8.2	8.3	0	33.7					<0.1	<0.1
2-Th	7/6/17	2.6	8.2	8.3		35.2						
2-F	7/7/17	2.7	8.2	8.3	0	35.2					<0.1	<0.1
2-Sa	7/8/17	4.2	8.2	8.3		34.7						
3-Su	7/9/17	4.2	8.2	8.3		34.8						
3-M	7/10/17	2.8	8.2	8.3	0	34.8					<0.1	<0.1
3-T	7/11/17	4.2	8.2	8.3		33.8						
3-W	7/12/17	2.0	8.2	8.3	0	34.5					<0.1	<0.1
3-Th	7/13/17	4.2	8.2	8.3		34.2						
3-F	7/14/17	2.8	8.2	8.3	0	34.7					<0.1	<0.1
3-Sa	7/15/17	4.3	8.2	8.3		34.7						
4-Su	7/16/17	4.3	8.2	8.3		34.3						
4-M	7/17/17	2.4	7.9	8.3	0	32.3					<0.1	<0.1
4-T	7/18/17	4.4	7.9	7.9		32.9						
4-W	7/19/17	1.1	7.9	8.0	0	32.8					<0.1	<0.1
4-Th	7/20/17	1.4	8.0	8.1		32.9						
4-F	7/21/17	1.2	8.0	8.1	0	33.0					<0.1	<0.1
4-Sa	7/22/17	4.3	8.1	8.1		34.7						
5-Su	7/23/17	4.3	8.0	8.1		35.5						
5-M	7/24/17	2.4	8.0	8.1	0	34.7					<0.1	<0.1
5-T	7/25/17	4.3	8.0	8.0		34.3						
5-W	7/26/17	2.0	8.0	8.1	0	34.7					<0.1	<0.1
5-Th	7/27/17	4.1	8.0	8.0		35.0						
5-F	7/28/17	2.1	8.0	8.2	0	34.4					<0.1	<0.1
5-Sa	7/29/17	4.1	8.2	8.2		34.7						
6-Su	7/30/17	4.2	8.2	8.2		35.7						
6-M	7/31/17	2.7	8.0	8.3	0	35.2					<0.1	<0.1
Instantaneous Minimum			7.9									
			>= 6.5 (RO)									
Average Monthly		2.9							<1	20		
		<= 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-Sa	7/1/17		
2-Su	7/2/17		
2-M	7/3/17		
2-T	7/4/17		
2-W	7/5/17		
2-Th	7/6/17		
2-F	7/7/17		
2-Sa	7/8/17		
3-Su	7/9/17		
3-M	7/10/17		
3-T	7/11/17		
3-W	7/12/17		
3-Th	7/13/17		
3-F	7/14/17		
3-Sa	7/15/17		
4-Su	7/16/17		
4-M	7/17/17		
4-T	7/18/17		
4-W	7/19/17		
4-Th	7/20/17		
4-F	7/21/17		
4-Sa	7/22/17		
5-Su	7/23/17		
5-M	7/24/17		
5-T	7/25/17		
5-W	7/26/17		
5-Th	7/27/17		
5-F	7/28/17		
5-Sa	7/29/17		
6-Su	7/30/17		
6-M	7/31/17		
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	7/4/2017	2.9	Results reported from a grab sample collected 7/4/17
CWB	Copper Total Micrograms/L (ug/L)	7/4/2017	20	Results reported from a 24-hr composite sample collected 7/3/2017-7/4/2017
CWB	Chromium Total Micrograms/L (ug/L)	7/4/2017	B <1	Results reported from a 24-hr composite sample collected 7/3/2017-7/4/2017
CWB	Zinc Total Micrograms/L (ug/L)	7/4/2017	20	Results reported from a 24-hr composite sample collected 7/3/2017-7/4/2017
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: 07/01/2017 - 07/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume
		Monthly Gallons 1/Day - recorded but not reported Calculated
1-Sa	7/1/17	22455
2-Su	7/2/17	6044
2-M	7/3/17	22179
2-T	7/4/17	22533
2-W	7/5/17	22509
2-Th	7/6/17	6044
2-F	7/7/17	22087
2-Sa	7/8/17	6044
3-Su	7/9/17	22622
3-M	7/10/17	6044
3-T	7/11/17	38723
3-W	7/12/17	22299
3-Th	7/13/17	22125
3-F	7/14/17	6044
3-Sa	7/15/17	39255
4-Su	7/16/17	6044
4-M	7/17/17	6044
4-T	7/18/17	22133
4-W	7/19/17	22451
4-Th	7/20/17	6044
4-F	7/21/17	21844
4-Sa	7/22/17	22576
5-Su	7/23/17	22439
5-M	7/24/17	6044
5-T	7/25/17	22544
5-W	7/26/17	22244
5-Th	7/27/17	6044
5-F	7/28/17	22084
5-Sa	7/29/17	6044
6-Su	7/30/17	22544
6-M	7/31/17	6044
Monthly Total		530174

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: 07/01/2017 - 07/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-Sa	7/1/17	26.3
2-Su	7/2/17	26.6
2-M	7/3/17	25.3
2-T	7/4/17	27.1
2-W	7/5/17	25.5
2-Th	7/6/17	28.0
2-F	7/7/17	28.7
2-Sa	7/8/17	29.9
3-Su	7/9/17	29.4
3-M	7/10/17	28.1
3-T	7/11/17	28.8
3-W	7/12/17	27.2
3-Th	7/13/17	30.1
3-F	7/14/17	28.4
3-Sa	7/15/17	30.4
4-Su	7/16/17	29.3
4-M	7/17/17	27.1
4-T	7/18/17	29.8
4-W	7/19/17	27.1
4-Th	7/20/17	26.5
4-F	7/21/17	26.0
4-Sa	7/22/17	30.5
5-Su	7/23/17	30.5
5-M	7/24/17	28.0
5-T	7/25/17	30.0
5-W	7/26/17	28.1
5-Th	7/27/17	30.1
5-F	7/28/17	27.7
5-Sa	7/29/17	30.1
6-Su	7/30/17	30.4
6-M	7/31/17	29.0

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.

Signature

Date



INTEROFFICE MEMO

GO2-17-162

DIC: 1316.20

DATE: September 13, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 August 2017. All monitoring parameters were within permit specifications for the month. During a forced outage beginning 8/20/2017, Tower Makeup (TMU) flow was below the reliable response of the flow transmitter; however this makeup was roughly in balance with blowdown flow rates so blowdown measurements were used to estimate TMU intake.

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: Michael W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E & RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody: Columbia River

Monitoring Period: 08/01/2017 - 08/31/2017

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	8/1/17	4.3	8.1	8.2		35.1						
1-W	8/2/17	2.2	8.1	8.3	0	35.0					<0.1	<0.1
1-Th	8/3/17	4.3	8.2	8.2		35.9						
1-F	8/4/17	1.9	8.2	8.2	0	35.9					<0.1	<0.1
1-Sa	8/5/17	5.1	8.1	8.2		35.0						
2-Su	8/6/17	5.8	8.1	8.2		35.6						
2-M	8/7/17	2.9	8.1	8.2	0	35.4					<0.1	<0.1
2-T	8/8/17	4.9	8.1	8.2		34.6	2.4*	13*	<1*	15*		
2-W	8/9/17	2.4	8.1	8.2	0	34.7					<0.1	<0.1
2-Th	8/10/17	4.5	7.8	8.2		34.7						
2-F	8/11/17	4.5	8.1	8.2		34.5						
2-Sa	8/12/17	4.5	8.1	8.2		35.0						
3-Su	8/13/17	4.4	8.1	8.2		33.9						
3-M	8/14/17	4.4	8.1	8.2		32.0						
3-T	8/15/17	4.4	8.1	8.2		31.9						
3-W	8/16/17	1.3	8.1	8.2	0	31.5					<0.1	<0.1
3-Th	8/17/17	4.2	7.8	8.2		33.1						
3-F	8/18/17	1.4	8.1	8.2	0	32.9					<0.1	<0.1
3-Sa	8/19/17	4.2	8.1	8.2		32.5						
4-Su	8/20/17	4.1	7.8	8.2		32.3						
4-M	8/21/17	3.7	8.1	8.2		27.2						
4-T	8/22/17	2.5	8.1	8.2		27.3						
4-W	8/23/17	1.5	8.1	8.2		24.2						
4-Th	8/24/17	1.5	8.1	8.2		24.8						
4-F	8/25/17	1.5	8.1	8.2		23.4						
4-Sa	8/26/17	2.1	7.8	8.2		20.7						
5-Su	8/27/17	2.2	8.1	8.2		21.2						
5-M	8/28/17	2.2	8.1	8.2		22.3						
5-T	8/29/17	2.2	7.8	8.2		23.5						
5-W	8/30/17	2.2	8.0	8.2		24.1						
5-Th	8/31/17	2.2	8.1	8.2		23.1						
Instantaneous Minimum			7.8									
			>= 6.5 (RO)									
Average Monthly		3.2							<1	15		
		<= 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	8/1/17		
1-W	8/2/17		
1-Th	8/3/17		
1-F	8/4/17		
1-Sa	8/5/17		
2-Su	8/6/17		
2-M	8/7/17		
2-T	8/8/17		
2-W	8/9/17		
2-Th	8/10/17		
2-F	8/11/17		
2-Sa	8/12/17		
3-Su	8/13/17		
3-M	8/14/17		
3-T	8/15/17		
3-W	8/16/17		
3-Th	8/17/17		
3-F	8/18/17		
3-Sa	8/19/17		
4-Su	8/20/17		
4-M	8/21/17		
4-T	8/22/17		
4-W	8/23/17		
4-Th	8/24/17		
4-F	8/25/17		
4-Sa	8/26/17		
5-Su	8/27/17		
5-M	8/28/17		
5-T	8/29/17		
5-W	8/30/17		
5-Th	8/31/17		
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	8/8/2017	2.4	Results reported from a grab sample collected 8/8/2017
CWB	Copper Total Micrograms/L (ug/L)	8/8/2017	13	Results reported from a 24-hr composite sample collected 8/7/2017-8/8/2017
CWB	Chromium Total Micrograms/L (ug/L)	8/8/2017	B <1	Results reported from a 24-hr composite sample collected 8/7/2017-8/8/2017
CWB	Zinc Total Micrograms/L (ug/L)	8/8/2017	15	Results reported from a 24-hr composite sample collected 8/7/2017-8/8/2017
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: 08/01/2017 - 08/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-T	8/1/17	29442
1-W	8/2/17	29442
1-Th	8/3/17	12942
1-F	8/4/17	29342
1-Sa	8/5/17	45940
2-Su	8/6/17	12942
2-M	8/7/17	28775
2-T	8/8/17	46311
2-W	8/9/17	29546
2-Th	8/10/17	29649
2-F	8/11/17	12942
2-Sa	8/12/17	29623
3-Su	8/13/17	12942
3-M	8/14/17	29457
3-T	8/15/17	12942
3-W	8/16/17	29742
3-Th	8/17/17	12942
3-F	8/18/17	46042
3-Sa	8/19/17	12942
4-Su	8/20/17	29638
4-M	8/21/17	29507
4-T	8/22/17	12942
4-W	8/23/17	29542
4-Th	8/24/17	12942
4-F	8/25/17	29622
4-Sa	8/26/17	29237
5-Su	8/27/17	29667
5-M	8/28/17	28642
5-T	8/29/17	29820
5-W	8/30/17	12942
5-Th	8/31/17	29542
Monthly Total		797948

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: 08/01/2017 - 08/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-T	8/1/17	30.7
1-W	8/2/17	29.1
1-Th	8/3/17	30.8
1-F	8/4/17	28.9
1-Sa	8/5/17	31.4
2-Su	8/6/17	31.8
2-M	8/7/17	29.0
2-T	8/8/17	31.1
2-W	8/9/17	28.5
2-Th	8/10/17	30.7
2-F	8/11/17	30.6
2-Sa	8/12/17	30.9
3-Su	8/13/17	29.4
3-M	8/14/17	29.1
3-T	8/15/17	29.5
3-W	8/16/17	26.7
3-Th	8/17/17	30.1
3-F	8/18/17	26.8
3-Sa	8/19/17	30.1
4-Su	8/20/17	21.4
4-M	8/21/17	3.7*
4-T	8/22/17	2.5
4-W	8/23/17	1.5
4-Th	8/24/17	1.5
4-F	8/25/17	1.5
4-Sa	8/26/17	2.1
5-Su	8/27/17	2.2
5-M	8/28/17	2.2
5-T	8/29/17	2.2
5-W	8/30/17	2.2
5-Th	8/31/17	2.2

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

Outfall: Intk - Cooling water intake structure

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
Intk	Flow Not Applicable Million Gallons/Day	8/21/2017	3.7	During forced outage 8/21/17 to end of month, averaged daily blowdown flow used for TMU intake flow.

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

GO2-17-176

DIC: 1316.20

DATE: October 12, 2017
TO: Columbia Generating Station (CGS)
FROM: Jane LePage, Environmental Services (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 September 2017. Please note that operations logs for discharge flow as recorded from CBD-FI-1A were used during part of the month because CBD-FR-10 was declared non-functional. 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: Michael W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 09/01/2017 - 09/30/2017

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	9/1/17	4.3	7.8	8.2		34.9						
1-Sa	9/2/17	5.7	8.0	8.3		34.0						
2-Su	9/3/17	3.9	8.0	8.2		33.6						
2-M	9/4/17	2.4	8.1	8.2		31.9					<0.1	<0.1
2-T	9/5/17	4.2	8.1	8.2		30.3	2.3*	9.9*	<1*	7.5*		
2-W	9/6/17	1.6	8.1	8.2		29.4					<0.1	<0.1
2-Th	9/7/17	2.1	8.0	8.2		31.6						
2-F	9/8/17	0.7	8.1	8.2		31.8					<0.1	<0.1
2-Sa	9/9/17	1.1	8.1	8.2		31.8						
3-Su	9/10/17	1.1	8.1	8.2		31.6						
3-M	9/11/17	0.8	8.1	8.2		30.9					<0.1	<0.1
3-T	9/12/17	1.9	8.1	8.2		31.5						
3-W	9/13/17	1.0	8.1	8.2		31.9					<0.1	<0.1
3-Th	9/14/17	1.9	8.2	8.2		29.7						
3-F	9/15/17	0.4	8.2	8.2		29.1					<0.1	<0.1
3-Sa	9/16/17	2.0	8.2	8.2		28.3						
4-Su	9/17/17	2.0	7.8	8.2		29.2						
4-M	9/18/17	0.7	8.2	8.2		30.3					<0.1	<0.1
4-T	9/19/17	2.3	8.2	8.2		29.7						
4-W	9/20/17	1.3	8.2	8.2		29.7					<0.1	<0.1
4-Th	9/21/17	1.9	8.2	8.2		28.4						
4-F	9/22/17	0.6	8.2	8.2		28.7					<0.1	<0.1
4-Sa	9/23/17	2.0	8.2	8.2		28.7						
5-Su	9/24/17	1.9	8.2	8.2		29.0						
5-M	9/25/17	0.6	8.2	8.2		29.2					<0.1	<0.1
5-T	9/26/17	2.2	8.2	8.2		29.5						
5-W	9/27/17	0.8	8.2	8.2		29.4					<0.1	<0.1
5-Th	9/28/17	2.2	8.2	8.2		30.3						
5-F	9/29/17	0.5	8.2	8.2		30.2					<0.1	<0.1
5-Sa	9/30/17	2.2	8.2	8.2		29.0						
Instantaneous Minimum			7.8									
			>= 6.5 (RO)									
Average Monthly		1.9							<1	7.5		
		<= 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-F	9/1/17		
1-Sa	9/2/17		
2-Su	9/3/17		
2-M	9/4/17		
2-T	9/5/17		
2-W	9/6/17		
2-Th	9/7/17		
2-F	9/8/17		
2-Sa	9/9/17		
3-Su	9/10/17		
3-M	9/11/17		
3-T	9/12/17		
3-W	9/13/17		
3-Th	9/14/17		
3-F	9/15/17		
3-Sa	9/16/17		
4-Su	9/17/17		
4-M	9/18/17		
4-T	9/19/17		
4-W	9/20/17		
4-Th	9/21/17		
4-F	9/22/17		
4-Sa	9/23/17		
5-Su	9/24/17		
5-M	9/25/17		
5-T	9/26/17		
5-W	9/27/17		
5-Th	9/28/17		
5-F	9/29/17		
5-Sa	9/30/17		
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	9/5/2017	2.3	Results reported from a grab sample collected 9/5/2017
CWB	Copper Total Micrograms/L (ug/L)	9/5/2017	9.9	Results reported from a 24-hr composite sample collected 9/4/2017-9/5/2017
CWB	Chromium Total Micrograms/L (ug/L)	9/5/2017	B <1	Results reported from a 24-hr composite sample collected 9/4/2017-9/5/2017
CWB	Zinc Total Micrograms/L (ug/L)	9/5/2017	7.5	Results reported from a 24-hr composite sample collected 9/4/2017-9/5/2017
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: 09/01/2017 - 09/30/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-F	9/1/17	27717
1-Sa	9/2/17	28198
2-Su	9/3/17	11517
2-M	9/4/17	28317
2-T	9/5/17	44717
2-W	9/6/17	28017
2-Th	9/7/17	28417
2-F	9/8/17	27917
2-Sa	9/9/17	11517
3-Su	9/10/17	27976
3-M	9/11/17	28446
3-T	9/12/17	27617
3-W	9/13/17	28417
3-Th	9/14/17	28417
3-F	9/15/17	11517
3-Sa	9/16/17	27942
4-Su	9/17/17	45104
4-M	9/18/17	28186
4-T	9/19/17	28117
4-W	9/20/17	28461
4-Th	9/21/17	27859
4-F	9/22/17	11517
4-Sa	9/23/17	28231
5-Su	9/24/17	27966
5-M	9/25/17	11517
5-T	9/26/17	28000
5-W	9/27/17	28071
5-Th	9/28/17	11517
5-F	9/29/17	28242
5-Sa	9/30/17	28168
Monthly Total		777622

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: 09/01/2017 - 09/30/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-F	9/1/17	9.7
1-Sa	9/2/17	14.5
2-Su	9/3/17	22.6
2-M	9/4/17	18.6
2-T	9/5/17	21.3
2-W	9/6/17	17.9
2-Th	9/7/17	22.4
2-F	9/8/17	24.6
2-Sa	9/9/17	24.7
3-Su	9/10/17	24.2
3-M	9/11/17	23.8
3-T	9/12/17	25.5
3-W	9/13/17	23.7
3-Th	9/14/17	24.3
3-F	9/15/17	22.4
3-Sa	9/16/17	23.9
4-Su	9/17/17	24.1
4-M	9/18/17	22.5
4-T	9/19/17	24.7
4-W	9/20/17	21.9
4-Th	9/21/17	23.1
4-F	9/22/17	21.9
4-Sa	9/23/17	24.3
5-Su	9/24/17	24.4
5-M	9/25/17	21.8
5-T	9/26/17	25.9
5-W	9/27/17	23.2
5-Th	9/28/17	25.1
5-F	9/29/17	23.2
5-Sa	9/30/17	25.4

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.

Shannon Khounnala

10/12/2017 12:40:52 PM

Signature

Date



INTEROFFICE MEMO

GO2-17-192

DIC: 1316.20

DATE: November 14, 2017
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 October 2017. 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: Michael W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 10/01/2017 - 10/31/2017

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	10/1/17	2.8	8.2	8.2		28.6						
1-M	10/2/17	0.9	8.2	8.2	0	26.9					<0.1	<0.1
1-T	10/3/17	2.7	8.2	8.2		27.9	2.7*	15*	1.1*	19*		
1-W	10/4/17	1.3	8.2	8.2	0	27.9					<0.1	<0.1
1-Th	10/5/17	2.3	8.0	8.2		28.5						
1-F	10/6/17	0.6	8.2	8.2	0	28.8					<0.1	<0.1
1-Sa	10/7/17	2.0	8.2	8.2		29.3						
2-Su	10/8/17	2.0	8.2	8.3		29.5						
2-M	10/9/17	0.9	8.2	8.3	0	27.9					<0.1	<0.1
2-T	10/10/17	2.4	7.8	8.3		27.3						
2-W	10/11/17	0.5	8.2	8.3	0	27.3					<0.1	<0.1
2-Th	10/12/17	1.6	7.9	8.3		25.4						
2-F	10/13/17	1.8	7.8	8.3		25.6						
2-Sa	10/14/17	1.8	8.1	8.3		25.1						
3-Su	10/15/17	1.8	7.9	8.3		25.1						
3-M	10/16/17	0.9	7.9	8.3	0	24.2					<0.1	<0.1
3-T	10/17/17	1.9	7.9	8.3		28.1						
3-W	10/18/17	1.9	7.9	8.3		27.9						
3-Th	10/19/17	1.9	7.9	8.3		28.1						
3-F	10/20/17	0.7	8.2	8.3	0	27.6					<0.1	<0.1
3-Sa	10/21/17	2.2	7.9	8.3		25.1						
4-Su	10/22/17	2.2	8.2	8.3		28.2						
4-M	10/23/17	0.7	7.9	8.3	0	26.7					<0.1	<0.1
4-T	10/24/17	2.4	7.8	8.3		26.2						
4-W	10/25/17	0.6	8.2	8.3	0	26.2					<0.1	<0.1
4-Th	10/26/17	2.5	7.9	8.3		26.9						
4-F	10/27/17	0.8	8.2	8.3	0	26.9					<0.1	<0.1
4-Sa	10/28/17	2.4	7.9	8.3		26.1						
5-Su	10/29/17	2.4	8.2	8.3		26.6						
5-M	10/30/17	0.8	8.2	8.3	0	26.9					<0.1	<0.1
5-T	10/31/17	2.7	7.9	8.3		24.4						
Instantaneous Minimum			7.8									
			>= 6.5 (RO)									
Average Monthly		1.7							1.1	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



Week	Monitoring Point	pH Standard Units 1/Day Grab	Volume Weekly Million Gallons Continuous Metered/Recorded
		SSWD	SSWD
1-Su	10/1/17		
1-M	10/2/17		
1-T	10/3/17		
1-W	10/4/17		
1-Th	10/5/17		
1-F	10/6/17		
1-Sa	10/7/17		
2-Su	10/8/17		
2-M	10/9/17		
2-T	10/10/17		
2-W	10/11/17		
2-Th	10/12/17		
2-F	10/13/17		
2-Sa	10/14/17		
3-Su	10/15/17		
3-M	10/16/17		
3-T	10/17/17		
3-W	10/18/17		
3-Th	10/19/17		
3-F	10/20/17		
3-Sa	10/21/17		
4-Su	10/22/17		
4-M	10/23/17		
4-T	10/24/17		
4-W	10/25/17		
4-Th	10/26/17		
4-F	10/27/17		
4-Sa	10/28/17		
5-Su	10/29/17		
5-M	10/30/17		
5-T	10/31/17		
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	10/3/2017	2.7	Results reported from a grab sample collected 10/3/2017
CWB	Copper Total Micrograms/L (ug/L)	10/3/2017	15	Results reported from a 24-hr composite sample collected 10/2/2017-10/3/2017
CWB	Chromium Total Micrograms/L (ug/L)	10/3/2017	1.1	Results reported from a 24-hr composite sample collected 10/2/2017-10/3/2017
CWB	Zinc Total Micrograms/L (ug/L)	10/3/2017	19	Results reported from a 24-hr composite sample collected 10/2/2017-10/3/2017
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: 10/01/2017 - 10/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-Su	10/1/17	9100
1-M	10/2/17	9100
1-T	10/3/17	9100
1-W	10/4/17	10491
1-Th	10/5/17	41262
1-F	10/6/17	25924
1-Sa	10/7/17	9100
2-Su	10/8/17	9100
2-M	10/9/17	25787
2-T	10/10/17	9100
2-W	10/11/17	26000
2-Th	10/12/17	9100
2-F	10/13/17	25800
2-Sa	10/14/17	9100
3-Su	10/15/17	25039
3-M	10/16/17	9100
3-T	10/17/17	25084
3-W	10/18/17	25188
3-Th	10/19/17	9100
3-F	10/20/17	25667
3-Sa	10/21/17	25043
4-Su	10/22/17	25210
4-M	10/23/17	9100
4-T	10/24/17	11100
4-W	10/25/17	22400
4-Th	10/26/17	9100
4-F	10/27/17	9100
4-Sa	10/28/17	24501
5-Su	10/29/17	24507
5-M	10/30/17	9100
5-T	10/31/17	24900
Monthly Total		541303

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: 10/01/2017 - 10/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-Su	10/1/17	21.6
1-M	10/2/17	22.3
1-T	10/3/17	25.0
1-W	10/4/17	22.3
1-Th	10/5/17	23.1
1-F	10/6/17	22.8
1-Sa	10/7/17	24.8
2-Su	10/8/17	22.5
2-M	10/9/17	23.0
2-T	10/10/17	23.9
2-W	10/11/17	21.6
2-Th	10/12/17	21.8
2-F	10/13/17	22.4
2-Sa	10/14/17	22.5
3-Su	10/15/17	21.8
3-M	10/16/17	21.6
3-T	10/17/17	23.7
3-W	10/18/17	23.5
3-Th	10/19/17	24.9
3-F	10/20/17	22.2
3-Sa	10/21/17	23.2
4-Su	10/22/17	24.6
4-M	10/23/17	22.0
4-T	10/24/17	23.3
4-W	10/25/17	21.9
4-Th	10/26/17	24.2
4-F	10/27/17	21.9
4-Sa	10/28/17	23.2
5-Su	10/29/17	23.7
5-M	10/30/17	22.7
5-T	10/31/17	23.6

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

GO2-17-208

DIC: 1316.20

DATE: December 13, 2017
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 November 2017. 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)

CGS Plant Files (DIC 1316.20)
Page 2 of 2
December 14, 2017
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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 11/01/2017 - 11/30/2017

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-W	11/1/17	0.7	8.2	8.3	0	24.0					<0.1	<0.1
1-Th	11/2/17	2.7	7.9	8.3		25.7						
1-F	11/3/17	0.7	8.2	8.3	0	25.4					<0.1	<0.1
1-Sa	11/4/17	2.2	7.9	8.3		23.4						
2-Su	11/5/17	2.2	8.2	8.3		21.5						
2-M	11/6/17	0.7	7.9	8.3	0	22.0					<0.1	<0.1
2-T	11/7/17	2.5	7.9	8.3		21.1*	4.4*	16*	1.2*	16*		
2-W	11/8/17	0.6	8.2	8.3	0	22.9*					<0.1	<0.1
2-Th	11/9/17	2.4	7.9	8.3		23.0*						
2-F	11/10/17	2.4	7.9	8.3		23.0						
2-Sa	11/11/17	2.4	7.9	8.3		23.0						
3-Su	11/12/17	2.4	7.9	8.3		22.9						
3-M	11/13/17	0.8	8.2	8.3	0	22.6					<0.1	<0.1
3-T	11/14/17	2.1	7.9	8.3		24.5						
3-W	11/15/17	0.8	8.2	8.3	0	24.5					<0.1	<0.1
3-Th	11/16/17	2.5	7.9	8.3		23.3						
3-F	11/17/17	1.2	7.9	8.3	0	22.9					<0.1	<0.1
3-Sa	11/18/17	2.1	7.9	8.3		22.3						
4-Su	11/19/17	2.1	7.9	8.3		22.2						
4-M	11/20/17	0.4	8.2	8.3	0	22.1					<0.1	<0.1
4-T	11/21/17	2.9	7.9	8.3		21.7						
4-W	11/22/17	0.6	7.9	8.3	0	22.0					<0.1	<0.1
4-Th	11/23/17	2.9	8.2	8.3		26.0						
4-F	11/24/17	0.8	7.9	8.3	0	22.3					<0.1	<0.1
4-Sa	11/25/17	2.1	8.2	8.3		20.5						
5-Su	11/26/17	2.1	7.9	8.3		20.8						
5-M	11/27/17	1.1	8.2	8.3	0	21.4					<0.1	<0.1
5-T	11/28/17	2.5	7.9	8.3		20.8						
5-W	11/29/17	0.7	7.9	8.3	0	21.0					<0.1	<0.1
5-Th	11/30/17	2.4	7.9	8.3		19.9						
Average Monthly		1.73							1.2	16		
		<= 5.6							<= 8.2	<= 53		
Instantaneous Maximum			8.3									
			<= 9.0 (RO)									
Instantaneous Minimum		7.9										
		>= 6.5 (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	11/1/17		
1-Th	11/2/17		
1-F	11/3/17		
1-Sa	11/4/17		
2-Su	11/5/17		
2-M	11/6/17		
2-T	11/7/17		
2-W	11/8/17		
2-Th	11/9/17		
2-F	11/10/17		
2-Sa	11/11/17		
3-Su	11/12/17		
3-M	11/13/17		
3-T	11/14/17		
3-W	11/15/17		
3-Th	11/16/17		
3-F	11/17/17		
3-Sa	11/18/17		
4-Su	11/19/17		
4-M	11/20/17		
4-T	11/21/17		
4-W	11/22/17		
4-Th	11/23/17		
4-F	11/24/17		
4-Sa	11/25/17		
5-Su	11/26/17		
5-M	11/27/17		
5-T	11/28/17		
5-W	11/29/17		
5-Th	11/30/17		
Average Monthly			
Instantaneous Maximum			
Instantaneous Minimum			
Monthly Total			



Outfall: 001 -

Monitoring Point	Parameter	Sample Date/ Statistical Base	Value	Notes/Comment
CWB	Temperature Measured Degrees C	11/7/2017	21.1	Reported temperature results contain data from the CW pumphouse
CWB	Temperature Measured Degrees C	11/8/2017	22.9	Reported temperature results contain data from the CW pumphouse
CWB	Temperature Measured Degrees C	11/9/2017	23.0	Reported temperature results contain data from the CW pumphouse
CWB	Turbidity (Nephelometric) Measured NTU	11/7/2017	4.4	Results reported from a grab sample taken 11/7/17
CWB	Copper Total Micrograms/L (ug/L)	11/7/2017	16	Results reported from a 24-hr composite sample collected 11/6/17-11/7/17
CWB	Chromium Total Micrograms/L (ug/L)	11/7/2017	1.2	Results reported from a 24-hr composite sample collected 11/6/17-11/7/17
CWB	Zinc Total Micrograms/L (ug/L)	11/7/2017	16	Results reported from a 24-hr composite sample collected 11/6/17-11/7/17
CWB2	All Parameters			Total Residual Halogen reported
SSWD	All Parameters		C	No discharge from the Service Water Ponds



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 11/01/2017 - 11/30/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume
		Monthly Gallons 1/Day - recorded but not reported Pnd Calculated
1-W	11/1/17	12234
1-Th	11/2/17	28134
1-F	11/3/17	12234
1-Sa	11/4/17	12234
2-Su	11/5/17	12234
2-M	11/6/17	12234
2-T	11/7/17	12234
2-W	11/8/17	12234
2-Th	11/9/17	12234
2-F	11/10/17	27834
2-Sa	11/11/17	12234
3-Su	11/12/17	28285
3-M	11/13/17	12234
3-T	11/14/17	28134
3-W	11/15/17	28334
3-Th	11/16/17	12234
3-F	11/17/17	12234
3-Sa	11/18/17	12234
4-Su	11/19/17	12234
4-M	11/20/17	12234
4-T	11/21/17	27654
4-W	11/22/17	28594
4-Th	11/23/17	12234
4-F	11/24/17	28234
4-Sa	11/25/17	12234
5-Su	11/26/17	12234
5-M	11/27/17	28295
5-T	11/28/17	12234
5-W	11/29/17	12234
5-Th	11/30/17	28534
Monthly Total		526712

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: 11/01/2017 - 11/30/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow
		Million Gallons/Day Continuous Metered/Recorded
1-W	11/1/17	22.5
1-Th	11/2/17	23.7
1-F	11/3/17	21.1
1-Sa	11/4/17	21.3
2-Su	11/5/17	20.9
2-M	11/6/17	19.7
2-T	11/7/17	20.6
2-W	11/8/17	20.6
2-Th	11/9/17	22.6
2-F	11/10/17	21.9
2-Sa	11/11/17	22.5
3-Su	11/12/17	22.5
3-M	11/13/17	21.5
3-T	11/14/17	23.6
3-W	11/15/17	22.3
3-Th	11/16/17	23.6
3-F	11/17/17	21.9
3-Sa	11/18/17	22.4
4-Su	11/19/17	22.6
4-M	11/20/17	21.5
4-T	11/21/17	22.7
4-W	11/22/17	20.5
4-Th	11/23/17	25.0
4-F	11/24/17	21.5
4-Sa	11/25/17	21.7
5-Su	11/26/17	22.1
5-M	11/27/17	21.4
5-T	11/28/17	22.7
5-W	11/29/17	20.5
5-Th	11/30/17	21.2

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

GO2-18-009

DIC: 1316.20

DATE: January 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 December 2017. 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)

CGS Plant Files (DIC 1316.20)
Page 2 of 2
January 11, 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 W. Davis, Manager, Chemistry/Rad Safety

Approved by: Shannon Khounnala, Manager, E&RP



Permit Number: WA0025151

Permittee: Energy Northwest Columbia Generating Station

Facility County: Benton

Receiving Waterbody:

Monitoring Period: 12/01/2017 - 12/31/2017

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	12/1/17	1.8	8.1	8.3		19.2						
1-Sa	12/2/17	2.4	7.9	8.3		19.5						
2-Su	12/3/17	2.4	7.9	8.3		20.4						
2-M	12/4/17	0.6	8.2	8.3	0	19.8	3.3*	17*	<1*	23*	<0.1	<0.1
2-T	12/5/17	2.3	7.9	8.3		21.3						
2-W	12/6/17	0.8	8.2	8.3	0	20.5					<0.1	<0.1
2-Th	12/7/17	2.5	8.0	8.3		23.1						
2-F	12/8/17	0.7	8.0	8.3	0	22.8					<0.1	<0.1
2-Sa	12/9/17	2.0	7.9	8.3		22.1						
3-Su	12/10/17	2.0	7.9	8.3		23.5						
3-M	12/11/17	0.5	7.9	8.3	0	23.5					<0.1	<0.1
3-T	12/12/17	2.6	7.9	8.3		23.5						
3-W	12/13/17	0.7	8.3	8.3	0	23.5					<0.1	<0.1
3-Th	12/14/17	2.7	7.9	8.3		22.7						
3-F	12/15/17	0.7	8.3	8.3	0	21.7					<0.1	<0.1
3-Sa	12/16/17	2.3	7.9	8.3		21.8						
4-Su	12/17/17	2.3	7.9	8.3		22.0						
4-M	12/18/17	0.5	8.3	8.3	0	22.3					<0.1	<0.1
4-T	12/19/17	2.9	7.9	8.3		25.5						
4-W	12/20/17	0.4	7.9	8.3	0	25.4					<0.1	<0.1
4-Th	12/21/17	2.9	7.9	8.3		25.9						
4-F	12/22/17	0.8	7.9	8.3	0	22.9					<0.1	<0.1
4-Sa	12/23/17	2.3	8.0	8.3		25.4						
5-Su	12/24/17	2.4	7.9	8.3		28.5						
5-M	12/25/17	0.8	8.3	8.3	0	26.2					<0.1	<0.1
5-T	12/26/17	2.4	7.9	8.3		26.5						
5-W	12/27/17	0.6	7.9	8.3	0	25.5					<0.1	<0.1
5-Th	12/28/17	2.7	8.2	8.3		26.0						
5-F	12/29/17	1.2	8.1	8.3	0	26.5					<0.1	<0.1
5-Sa	12/30/17	2.1	7.9	8.3		26.3						
6-Su	12/31/17	2.2	7.9	8.3		26.2						
Instantaneous Minimum			7.9									
			>= 6.5 (RO)									
Average Monthly		1.7							<1	23		
		<= 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-F	12/1/17		
1-Sa	12/2/17		
2-Su	12/3/17		
2-M	12/4/17		
2-T	12/5/17		
2-W	12/6/17		
2-Th	12/7/17		
2-F	12/8/17		
2-Sa	12/9/17		
3-Su	12/10/17		
3-M	12/11/17		
3-T	12/12/17		
3-W	12/13/17		
3-Th	12/14/17		
3-F	12/15/17		
3-Sa	12/16/17		
4-Su	12/17/17		
4-M	12/18/17		
4-T	12/19/17		
4-W	12/20/17		
4-Th	12/21/17		
4-F	12/22/17		
4-Sa	12/23/17		
5-Su	12/24/17		
5-M	12/25/17		
5-T	12/26/17		
5-W	12/27/17		
5-Th	12/28/17		
5-F	12/29/17		
5-Sa	12/30/17		
6-Su	12/31/17		
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	12/4/2017	3.3	Results reported from a grab sample taken 12/4/2017
CWB	Copper Total Micrograms/L (ug/L)	12/4/2017	17	Results reported from a 24-hr composite sample collected 12/3/2017-12/4/2017
CWB	Chromium Total Micrograms/L (ug/L)	12/4/2017	B <1	Results reported from a 24-hr composite sample collected 12/3/2017-12/4/2017
CWB	Zinc Total Micrograms/L (ug/L)	12/4/2017	23	Results reported from a 24-hr composite sample collected 12/3/2017-12/4/2017
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: 12/01/2017 - 12/31/2017

Outfall: 002

Version: 1

Week	Monitoring Point	Volume Monthly Gallons 1/Day - recorded but not reported Calculated
1-F	12/1/17	17987
1-Sa	12/2/17	17987
2-Su	12/3/17	34007
2-M	12/4/17	17987
2-T	12/5/17	33787
2-W	12/6/17	34487
2-Th	12/7/17	17987
2-F	12/8/17	17987
2-Sa	12/9/17	34007
3-Su	12/10/17	33237
3-M	12/11/17	49617
3-T	12/12/17	34087
3-W	12/13/17	31487
3-Th	12/14/17	29887
3-F	12/15/17	30987
3-Sa	12/16/17	17987
4-Su	12/17/17	30747
4-M	12/18/17	17987
4-T	12/19/17	17987
4-W	12/20/17	17987
4-Th	12/21/17	33187
4-F	12/22/17	34287
4-Sa	12/23/17	17987
5-Su	12/24/17	17987
5-M	12/25/17	34187
5-T	12/26/17	33887
5-W	12/27/17	34187
5-Th	12/28/17	34187
5-F	12/29/17	33987
5-Sa	12/30/17	34237
6-Su	12/31/17	33087
Monthly Total		879427

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: 12/01/2017 - 12/31/2017

Outfall: Intk - Cooling water intake structure

Version: 1

Week	Monitoring Point	Flow Million Gallons/Day Continuous Metered/Recorded
		Intk
1-F	12/1/17	20.2
1-Sa	12/2/17	21.1
2-Su	12/3/17	22.0
2-M	12/4/17	19.2
2-T	12/5/17	20.9
2-W	12/6/17	19.1
2-Th	12/7/17	20.5
2-F	12/8/17	18.8
2-Sa	12/9/17	20.3
3-Su	12/10/17	20.8
3-M	12/11/17	19.2
3-T	12/12/17	21.1
3-W	12/13/17	19.5
3-Th	12/14/17	21.0
3-F	12/15/17	18.9
3-Sa	12/16/17	20.4
4-Su	12/17/17	20.5
4-M	12/18/17	21.2
4-T	12/19/17	22.6
4-W	12/20/17	19.5
4-Th	12/21/17	21.4
4-F	12/22/17	18.7
4-Sa	12/23/17	20.3
5-Su	12/24/17	19.8
5-M	12/25/17	18.1
5-T	12/26/17	20.4
5-W	12/27/17	18.1
5-Th	12/28/17	20.6
5-F	12/29/17	19.2
5-Sa	12/30/17	21.3
6-Su	12/31/17	20.1

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