

**REAUTHORIZATION ADDENDUM TO THE FACT SHEET FOR
TRANSALTA CENTRALIA GENERATION LLC
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT WA0001546**

1. FACILITY GENERAL INFORMATION

TransAlta Centralia Generation LLC
913 Big Hanaford Road
Centralia, WA 98531

Renewal of Previous Permit: October 1, 2016

Expiration Date: September 30, 2021

2. APPLICATION AND COMPLIANCE REVIEW

TransAlta Centralia Generation LLC (TCG) submitted an application to the Department of Ecology (Ecology) on May 4, 2020, for permit reissuance, and Ecology accepted it on June 16, 2020. Ecology reviewed inspections and assessed compliance of the facility's discharge with the terms and conditions in the previous permit. Ecology has sufficiently reviewed the application, discharge monitoring reports, and other facility information in enough detail to ensure that:

- TCG majority of the time during the five year permit cycle has complied with the terms, conditions, and requirements of the expired permit
- The discharge meets applicable effluent standards and limits, water quality standards, and other legally applicable requirements.
- Ecology has up-to date information on the TCG's waste treatment practices, and the nature, content, volume, and frequency of its discharge.
- The receiving water body is not impaired for any pollutants present in the facility's discharge
- Since the issuance of the current permit, Ecology has not received any additional information, which indicates that environmental impacts from the discharge warrant a complete renewal of the permit. Therefore, Ecology chose to reauthorize this permit.

3. SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED

TCG has most of the time complied with the effluent limits and permit conditions throughout the duration of the permit issued on September 9, 2016. Ecology assessed compliance based on its review of the facility's information in the Ecology Permitting and Reporting Information System (PARIS), Discharge Monitoring Reports (DMRs), and on inspections. This assessment shows that the Permittee has violated the permit limits for Copper two times, Selenium two times, Mercury three times, and Temperature one time during the five year permit cycle. The Permittee is also in noncompliance of chronic toxicity limit for *Ceriodaphnia dubia*. TCG is required to submit Toxicity Identification/Reduction Evaluation (TI/RE) Plan to Ecology and meet the permit limits. TI/RE Plan requirements are detailed on pages 6 and 30 of the draft permit.

4. EFFLUENT CHARACTERIZATION

TCG reported the concentration of pollutants in the discharge in the permit application and in DMRs. The tabulated data represents the quality of the wastewater effluent discharged from October 1, 2016. The wastewater effluent is characterized as follows:

Wastewater Effluent Characterization for Industrial Wastewater (Outfall 001)

Parameter	Units	Average Value	Maximum Value
Arsenic (Total)	µg/L	6.28	23.5
Chromium (Total)	mg/L	0.0036	0.0084
Chromium (Hex)	µg/L	2.67	6.37
Copper (Total)	µg/L	3.20	17.60
Mercury (Total)	ng/L	7.49	35.2
Selenium (Total)	µg/L	3.06	11.1
Zinc (Total)	mg/L	0.0034	0.006
Total Residual Chlorine	µg/L	50	50
Chlorine Free Available	mg/L	0.024	0.20
Oil and Grease	mg/L	4.68	5
TSS	mg/L	8.8	28
Flow	mgd	1.73	5.20
Dissolved Oxygen	mg/L	10.11	16.11
Temperature	°C	12.9	18.2
Turbidity	NTU	11.54	36.2
pH	S.U.	7.54 (minimum)	9.0

Wastewater Effluent Characterization for Industrial Wastewater (Pond 3E)

Parameter	Units	Average Value	Maximum Value
Arsenic (Total)	µg/L	5.94	13.4
Chromium (Total)	mg/L	0.0035	0.011
Chromium (hex)	µg/L	2.50	9.3
Copper (Total)	µg/L	3.62	7.76
Mercury (Total)	ng/L	7.31	12.80
Selenium (Total)	µg/L	1.61	7.50

Parameter	Units	Average Value	Maximum Value
Zinc (Total)	mg/L	0.007	0.05
Total Residual Chlorine	µg/L	50	50
Chlorine Free Available	mg/L	0.03	0.09
Flow	mgd	2.23	2.61
TSS	mg/L	5.7	12.4
Zinc	mg/L	0.007	0.05
pH	S.U.	7.15 (minimum)	8.45

Wastewater Effluent Characterization for Domestic Wastewater (Outfall 002)

Parameter	Units	Weekly	
		Average Value	Maximum Value
Biochemical Oxygen Demand (BOD ₅)	mg/L	7.13	31
BOD ₅	lbs/day	0.74	4.50
Total Suspended Solids (TSS)	mg/L	4.20	14.80
TSS	lbs/day	0.40	1.64
Total Residual Chlorine	mg/L	0.82	1.44
Fecal Coliform	#/100 mL	1.74	13.5
pH	S.U.	7.2 (minimum)	7.9 (maximum)

5. Surface Water Quality Standards and Impairments

The status of the receiving water body (Hanaford Creek) has not changed during the previous permit cycle which was issued to TCG in October 2016. Therefore, the permit limits and conditions will not change with this renewal of TCG's NPDES permit which were established and documented in the fact sheet of the last permit cycle (October 2016-September 2021).

6. Technology Based Effluent Limits [40 Code of Federal Regulations (CFR) Part 423]

Ecology has reviewed 40 CFR Part 423 and its applicable part to TCG. There are minor changes to the limits as well as the implementation timeline for internal waste stream(s) such as Flue Gas Desulfurization (FGD) in 40 CFR Part 423. The latest (no later than) effective timeline for FGD wastewater is December 31, 2025. Here are some excerpts from 40 CFR Part 423.13(g).

“(g)(1)(i) FGD wastewater. Except for those discharges to which paragraph (g)(2) or (g)(3) of this section applies, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration

listed in the table 1 following this paragraph (g)(1)(i). Dischargers must meet the effluent limitations for FGD wastewater in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2025. These effluent limitations apply to the discharge of FGD wastewater generated on and after the date determined by the permitting authority for meeting the effluent limitations, as specified in this paragraph.”

TABLE 5 TO PARAGRAPH (g)(1)(i)

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (µg/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (µg/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

These 40 CFR 423 requirements are reflected on page 9 of TCG’s NPDES permit. Ecology is proposing an effective date of December 31, 2025, for this internal discharge point (Outfall 003).

“(k)(1)(i) Bottom ash transport water. Except for those discharges to which paragraph (k)(2) of this section applies, or when the bottom ash transport water is used in the FGD scrubber, there shall be no discharge of pollutants in bottom ash transport water. Dischargers must meet the discharge limitation in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2025. This limitation applies to the discharge of bottom ash transport water generated on and after the date determined by the permitting authority for meeting the discharge limitation, as specified in this paragraph. Except for those discharges to which paragraph (k)(2) of this section applies, whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge limitation in this paragraph. When the bottom ash transport water is used in the FGD scrubber, it ceases to be bottom ash transport water, and instead is FGD wastewater, which must meet the requirements in paragraph (g) of this section.”

Ecology is proposing no discharge, effective December 31, 2025, from the bottom ash transport water. This is reflected on page 10 of TCG’s NPDES permit. This proposed effective date coincides with the date of December 31, 2025, when TCG will shutdown coal fired operation. TCG shutdown one of the two units on December 31, 2020, and the remaining second unit will be shutdown on December 31, 2025.

7. COOLING WATER INTAKE STRUCTURE (CWIS)

TCG submitted information and compliance report as required under the previous permit condition (S13.B). This condition required TCG to submit report and meet the requirements of 40 CFR Part 122.21(r) (2) (3) and applicable provisions of paragraphs (4), (5), (6), (7), and (8). This included replacing the river pumps with smaller pumps to attain the screen velocity of 0.5 feet per second (fps) as one of the options stated in 40 CFR Part 125.94(r)(2)(c).

8. PERMIT LIMITS AND CONDITIONS

The reauthorized permit is virtually identical to the previous permit issued on September 9, 2016, with a few exceptions identified below. Ecology removed the completed report requirements that do not require additional or continued assessment. The proposed reauthorized permit includes:

- The discharge limits and conditions in effect at the time of expiration of the previous permit.
- Changes to the submittal dates for reports and other submittal requirements carried over from the previous permit.
- Appendix A, which identifies the required test methods, detection levels and quantitation levels for the monitoring required in the proposed permit. Ecology added this requirement to ensure that facilities use sufficiently sensitive, federally approved (40 CFR Part 136) test methods with detection levels that provide usable analytical data for purposes of water quality standards compliance assessments.
- A requirement to submit monitoring data obtained during each monitoring period on the electronic DMR form and any other required permit submittal within the Water Quality Permitting Portal.

9. PUBLIC PROCESS

Ecology must public notice the availability of the draft reauthorized permit at least 30 days before it reissues the permit [[Washington Administrative Code \(WAC\) 173-220-050](#)]. Ecology invites you to review and comment on its decision to reauthorize the permit (see **Appendix A-Public Involvement Information** for more detail on the Public Notice procedures).

After the public comment period has closed, Ecology will prepare a Response to Comments document and attach it to this fact sheet addendum. Ecology will respond to each comment and describe the resultant changes to the permit in this document. Ecology sends a copy of the *Response to Comments* to all parties that submitted comments.

10. PERMIT APPEAL PROCESS

Appendix B describes the permit appeal process.

11. RECOMMENDATION FOR PERMIT ISSUANCE

Ecology proposes to reissue this permit for five years.

APPENDIX A — PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to reauthorize a permit to TransAlta Centralia Generation LLC. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft on November 16, 2021, in the [Daily Chronicle](#) to inform the public and to invite comment on the proposed draft National Pollutant Discharge Elimination System permit and fact sheet.

The Notice:

Tells where copies of the draft permit and fact sheet are available for public evaluation (a local public library, the closest regional or field office, posted on our website). Offers to provide the documents in an alternate format to accommodate special needs. Asks people to tell us how well the proposed permit would protect the receiving water. Invites people to suggest fairer conditions, limits, and requirements for the permit. Invites comments on Ecology's determination of compliance with antidegradation rules. Urges people to submit their comments, in writing, before the end of the comment period. Tells how to request a public hearing about the proposed NPDES permit. Explains the next step(s) in the permitting process.

Ecology has published a document entitled [Frequently Asked Questions about Effective Public Commenting](#), available on our website: <http://www.ecy.wa.gov/biblio/0307023.html>. You may obtain further information from Ecology email at jessica.christensen@ecy.wa.gov or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

The primary author of this permit and fact sheet addendum is Aziz Mahar, P.E.

APPENDIX B — YOUR RIGHT TO APPEAL

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by [chapter 43.21B RCW](#) and [chapter 371-08 WAC](#). “Date of receipt” is defined in [RCW 43.21B.001\(2\)](#) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in [chapter 43.21B RCW](#) and [chapter 371-08 WAC](#).

Address and Location Information

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive Southeast Lacey, WA 98503 Pollution Control Hearings Board 1111 Israel Road Southwest, Suite 301 Tumwater, WA 98501	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

APPENDIX C – RESPONSE TO COMMENTS

Ecology did not receive any comments.