DEPARTMENT OF ECOLOGY
State of Washington

☐ Check this box if you have attached any documents to this form (using the paperclip icon on the left).

ERTS #(s):	**None**
Parcel # (s):	**See additional info box**
County:	**Lewis**
FSID #:	**94772166**
CSID #:	**17302**
UST #:	**8710**

SITE INFORMATION

Site Name (Name over door): **TransAlta Centralia**	Site Address (including City, State, and Zip): 913 Big Hanaford Rd, Centralia, WA 98531	Phone Click to enter text. Email **Click to enter text.**
Site Contact, Title, Business: **Conrad Wieclaw**	Site Contact Address (including City, State, and Zip): **913 Big Hanaford Rd, Centralia, WA 98531**	Phone **360-807-8093** Email **Conrad_Wieclaw@transalta.com** **Click to enter text.**
Site Owner, Title Business: **TransAlta Centralia Generation LLC**	Site Owner Address (including City, State, and Zip): **913 Big Hanaford Rd, Centralia, WA 98531**	Phone **360-736-9901** Email **Centralia@transalta.com**
Site Owner Contact, Title, Business: **Trans Alta Corporation**	Site Owner Contact Address (Including City, State, and Zip **TransAlta Place, Suite 1400, 1100 1 St SE, Calgary, Alberta Canada T2G 1B1**	Phone **403-267-7110** Email **Click to enter text.**
Previous Site Owner(s):	Additional Info (for any Site Information Item): **23340001000,23340002002,23340003000,23340004000,23340005001,23340005002, 23340005003,23340005004,23436000000,23345000000,23355001006,23355001007, 23355001008,23355002002.**	
Alternate Site Name(s): **Click to enter text.**		

Latitude (Decimal Degrees):	**46.75487**
Longitude (Decimal Degrees):	**-122.8636**

INSPECTION INFORMATION

☒ Please check this box if there is relevant inspection information, such as data or photos, in an existing site report for this site.

Inspection Conducted? Yes ☐ No ☒	Date/Time: Click to enter text.	Entry Notice:	Announced ☐ Unannounced ☐
Photographs taken?	Yes ☐	No ☒	Note: Attach photographs or upload to PIMS
Samples Collected?	Yes ☐	No ☒	Note: Attach record with media, location, depth, etc.

RECOMMENDATION

No Further Action (Check appropriate box below):		**LIST on Contaminated Sites List:** ☒
Release or threatened release does not pose a threat	☐	
No release or threatened release	☐	**LIST on NFA Sites List:** ☐
Refer to program/agency (Name: **Click to enter text.**)	☐	
Independent Cleanup Action Completed (contamination removed)	☐	

COMPLAINT (Brief Summary of ERTS Complaint):

Property representatives reported contamination above MTCA cleanup standards during Site investigations

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA):

I recommend this Site for a listing on the Contaminated Sites List. The submitted report indicates contamination above MTCA cleanup standards.

Investigator: **Thomas Middleton, L.HG**	Date Submitted: 6/2/2025

OBSERVATIONS ☐ **Please check this box if you included information on the Supplemental Page at end of report.**

Description (If site visit made, please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc):

There are six COCs for soil at the Site. These COCs are further divided into nine Remedial Areas (RAs) for discussion of vertical and horizontal distribution of COCs in soil. The RAs are summarized below:

- **Arsenic:** Remedial Areas 1, 2, and 8. The distribution of arsenic impacts is displayed on Figures 12 and 13.
- **Barium:** Remedial Areas 1, 5, 6, 8, and 9. The distribution of barium impacts is displayed on Figures 14 and 15.
- **Cadmium:** Remedial Areas 3, 5, 6, and 8. The distribution of cadmium impacts is displayed on Figures 16 and 17.
- **Copper:** Remedial Areas 1, 4, and 7. The distribution of copper impacts is displayed on Figures 18 and 19.
- **Selenium**: Remedial Area 8. The distribution of selenium impacts is displayed on Figure 20.
- **Zinc**: Remedial Area 2. The distribution of zinc impacts is displayed on Figure 21.

As identified above, there are nine Remedial Areas (RAs) with COCs at concentrations exceeding CULs.

There are nine COCs for groundwater at the Site. These COCs are summarized below and are based on groundwater samples collected from February 2023 to December 2024:

- **Arsenic (dissolved and total):** The distribution of arsenic impacts is displayed on Figures 23 through 27 in both the shallow and deep aquifers. The area of impacts in the shallow aquifer is predominantly near the Surge Pond, North Effluent Pond, and South Effluent Pond, with isolated pockets near the bottom ash pile and north of the North Coal Pile Runoff Ditch.

  The highest arsenic concentration in the deeper aquifer was from the off-property monitoring well CMWD-2 in both May and December 2024. Groundwater flow in the deeper aquifer is consistently toward the southeast. Based on the redox potential analysis of groundwater at the Site, these higher concentrations may be the result of anoxic groundwater conditions. Anoxic groundwater conditions significantly influence the mobility and concentration of naturally occurring arsenic and manganese at depth, especially where organic matter or other reducing agents are present.

- **Chromium (total):** The distribution of chromium impacts is displayed on Figures 28 through 30 in the shallow aquifer. No samples exceeded the chromium CUL from the deeper aquifer. Chromium impacts in the shallow aquifer exceeded CULs in monitoring wells CMW-16 (February 2023 and May 2024), CMW-32 (February 2023), and CMW-43 (December 2024). Corresponding chromium impacts to soil were not observed at levels exceeding CULs in these areas.

- **Copper (total):** While copper was retained as a COC for groundwater, only one sample exceeded the CUL in the shallow aquifer. Monitoring well CMW-16 exceeded the CUL in May 2024 at a concentration of 19 µg/L. The CUL for protection of surface water aquatic life is 11 µg/L. No samples exceeded the respective CUL from the deeper aquifer.

- **Manganese (dissolved and total):** The distribution of manganese impacts is displayed on Figures 31 through 35 in both the shallow and deep aquifers. Impacts to the shallow and deep aquifers were not fully delineated in May and December 2024 but the highest concentrations were observed upgradient of the facility, north of the CPRO Ponds and north of Hanaford Creek. This is most likely due to the naturally occurring metals at depth and the anoxic and hydric soil conditions to the north of the facility. As described in the 2019 Environmental Science & Technology, *Elevated Manganese Concentrations in United States Groundwater, Role of Land Surface- Soil- Aquifer Connections* (McMahon et al. 2018), the concentration of manganese is significantly higher in wells where hydric soils are present within a 500-meter buffer around the well.

- **Selenium (dissolved and total):** The distribution of selenium impacts is displayed on Figures 36 through 38 in the shallow aquifer. Selenium impacts exceeding the CUL of 5 µg/L were observed in the area surrounding the coal pile and the CPRO Ponds in February 2023 and December 2024. In May 2024, the selenium exceedances in the shallow aquifer were restricted to only monitoring well CMW-43, near Cooling Tower 1B.

  Selenium was not detected at a concentration exceeding the CUL of 80 µg/L in the deeper aquifer. The highest concentration in the deeper aquifer was 1.9 µg/L in December 2024 from monitoring well CMWD-1.

- **Zinc (dissolved and total):** The distribution of zinc impacts is displayed on Figures 39 through 41 in the shallow aquifer.

- **1-Methylnaphthalene:** 1-methlnaphthalene was detected in one monitoring well, CMW-16, exceeding the CUL of 0.86 µg/L. No other samples exceeded the MDL in both the shallow and deep aquifers.

- **TPH – Diesel-Range Organics:** The distribution of TPH-DRO impacts is displayed on Figures 42 through 44 in the shallow aquifer. Samples collected from monitoring well CMW-16, exceeded the CUL of 500 µg/L during all three sampling events. Based on the silica gel cleanup results collected in December 2024, there are other sources of polar organic compounds contributing to the weathered petroleum mixture, most likely from naturally occurring organic matter. Use of silica gel cleanup is recommended going forward to distinguish the non-petroleum polar organics in the samples. No TPH-DRO was detected exceeding the MDL in the deeper aquifer.

Vinyl Chloride: Vinyl chloride was only detected in two monitoring wells at a concentration exceeding the CUL of 0.02 µg/L for protection of surface water: temporary monitoring well CTMW-2 located south of the South Effluent Pond, and monitoring well CMW-27. The exceedance in temporary well CTMW-2 in February 2023 has not been encountered in surrounding groundwater monitoring wells CMW-6, CMW-8, and CMW-17.

There are six COCs for sediment at the Site. The spatial distribution of these COCs exceeding the SCO is restricted to the CPRO Ponds, the North Effluent Pond, the South Effluent Pond, and the Coal Pile Runoff Ditches.

The sediment samples collected from Hanaford Creek were either less than the MDL or less than the sediment cleanup objective for all constituents analyzed and are not discussed further in this section.

Chemical concentrations that are less than or equal to the CSL but greater than the sediment cleanup objective correspond to sediment quality that results in minor adverse effects to the benthic community. The

only constituents that exceeded the sediment screening level for protection of the benthic community were chromium and mercury. The distribution of COCs in sediment exceeding the SCO is as follows:

- **Arsenic:** The distribution of arsenic impacts is displayed on Figure 45. Sediment sample result\s exceeding the SCO were observed in the CPRO Ponds 2 through 8, the North Effluent Pond, and the East Coal Pile Runoff Ditch.

- **Cadmium:** The distribution of cadmium impacts is displayed on Figure 46. Sediment sample results exceeding the SCO were observed in the CPRO Ponds 3 through 8 and the North Effluent Pond. The sediment samples collected in the Coal Pile Runoff Ditches were all less than the MDL.

- **Chromium:** The distribution of chromium impacts is displayed on Figure 47. Sediment samples that exceeded the SCO were observed in CPRO Ponds 3, 4, 6, 7, and 8 and the North Effluent Pond. Six of the eight samples that exceeded the SCO also exceeded the SCL for chromium.

- **Mercury:** The distribution of mercury impacts is displayed on Figure 48. Sediment samples that exceeded the SCO were observed in the CPRO Pond 5, the North Effluent Pond, the South Effluent Pond, and the East Coal Pile Runoff Ditch. All samples that exceeded the SCO also exceeded the SCL for mercury.

- **Nickel:** The distribution of nickel impacts is displayed on Figure 49. Sediment samples that exceeded the SCO were observed in the CPRO Pond 3, the North Effluent Pond, the South Effluent Pond, and the West Coal Pile Runoff Ditch.

- **Selenium:** The distribution of selenium impacts is displayed on Figure 50. Sediment samples that exceeded the SCO were observed in the CPRO Ponds 3 through 7 and the North Effluent Pond.

Suspected off-property contaminants:

Investigation of potential impacts from smoke stack deposition has not occurred and suspected contaminants of concern off-property include, dioxins and furans (D/F), semi-volatile organic compounds (SVOCs) and select metals.

Documents reviewed:

2025-05-13 ECY Draft RI Report_TransAlta_Centralia.pdf

CONTAMINANT GROUP	CONTAMINANT	*SOIL*	*GROUNDWATER*	*SURFACE WATER*	*AIR*	*SEDIMENT*	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds	Select	Select	Select		Select	Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents	Select	Select	Select	Select	Select	Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). *Use this when TEX contaminants are present independently of gasoline.*
	Polynuclear Aromatic Hydrocarbons (PAH)	Select	**C**	Select	Select	Select	Hydrocarbons composed of two or more benzene rings.
	Tributyltin	Select	Select	Select		Select	The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether	Select	Select	Select	Select	Select	MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene	Select	Select	Select	Select	Select	Benzene
	Other Non-Halogenated Organics	Select	Select	Select	Select	Select	TEX
	Petroleum Diesel	Select	**C**	Select		Select	Petroleum Diesel
	Petroleum Gasoline	Select	Select	Select	Select	Select	Petroleum Gasoline
	Petroleum Other	Select	**B**	Select		Select	Oil-range organics
Halogenated Organics (see notes at bottom)	PBDE	Select	Select	Select	Select	Select	Polybrominated di-phenyl ether
	Other Halogenated Organics	Select	Select	Select	Select	Select	Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents	Select	**C**	Select	Select	Select	PCE, chloroform, EDB, EDC, MTBE
	Polychlorinated Biphenyls (PCB)	Select	Select	Select	Select	Select	Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)	**B**	Select	Select	Select	Select	A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). *Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270*
Metals	Metals – Other	**C**	**C**	Select		**C**	Cr, Se, Ag, Ba, Cd
	Lead	Select	Select	Select		Select	Lead
	Mercury	Select	Select	Select	Select	**C**	Mercury
	Arsenic	**C**	**C**	Select		Select	Arsenic
Pesticides	Non-halogenated pesticides	Select	Select	Select	Select	Select	Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides	Select	Select	Select	Select	Select	Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)

CONTAMINANT GROUP	CONTAMINANT	*SOIL*	*GROUNDWATER*	*SURFACE WATER*	*AIR*	*SEDIMENT*	DESCRIPTION
Other Contaminants	Radioactive Wastes	Select	Select	Select	Select	Select	Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic	Select	Select	Select		Select	Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic	Select	Select	Select	Select	Select	Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos	Select	Select	Select	Select	Select	All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances	Select	Select	Select		Select	Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures	Select	Select	Select		Select	Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures	Select	Select	Select		Select	For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordinance	Select	Select	Select	Select	Select	Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes	Select	Select	Select	Select	Select	Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes	Select	Select	Select	Select	Select	Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

(fill in contaminant matrix above with appropriate status choice from the key below the table)

Status choices for contaminants	
Contaminant Status	**Definition**
B— Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested
S— Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C— Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example—above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA— Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example—capped area).
RB— Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example—complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivative. Referral to the HSDB is recommended if you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

Dibenzodioxins and dibenzofurans are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in WAC 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).

FOR ECOLOGY II REVIEWER USE ONLY (For Listing Sites):

How did the Site come to be known ☒ **Site Discovery (received a report)** **5/14/2025** (Date Report Received)
☐ **ERTS Complaint**
☐ **Other (please explain):** Click to enter text.

Does an Early Notice Letter need to be sent: ☒ Yes ☐ No
If *No*, please explain why: Click to enter text.

NAICS Code (if known): **221112**
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):
Power Generation Facility – Coal burning

Site Unit(s) to be created (Unit Type): ☒ Upland (includes VCP & LUST) ☒ Sediment
If multiple Unites needed, please explain why: Click to enter text.

Cleanup Process Type (for the Unit):
☐ No Process ☐ Independent Action
☐ Voluntary Cleanup Program ☒ Ecology-supervised or conducted
☐ Federal-supervised or conducted

Site Status:
☒ Awaiting Cleanup ☐ Construction Complete – Performance Monitoring
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring
☐ No Further Action Required

Model Remedy Used? ☐
If yes, was this a transformer spill? ☐

Site Manager (Default Tom Middleton) Click to enter text.

Specific confirmed contaminants include:
Metals in Soil
Metals, DRO, VOCs in Groundwater
Metals, in Other (specify matrix: Sediment

Facility/Site ID No. (if known):
94772166
Cleanup Site ID No. (if known):
Click to enter text.

COUNTY ASSESSOR INFO: Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

Additional or Supplemental Information for Observations Page

Please use this box for any text that requires special formatting

Click to enter text.