

Describe the technology TransAlta uses to prevent spills to the water and air shed. Updated 2023

Do you use once through cooling water systems? Yes. Once through non-contact closed loop systems.

If there are multiple systems, describe how many are OTCW and how many are cooling towers.

No Cooling towers. There are 9 once through non-contact closed loop cooling water systems of varying sizes.

How is cooling tower blowdown water treated prior to release? N/A

Describe the systems in place to detect and prevent releases to water?

TransAlta currently operates two water demineralization treatment plants in which minerals are removed from the river water for the purpose of creating boiler feedwater needed for steam production. The minerals are then returned back to the river from a sump and/or settling pond. To ensure wastewater meets Ministry criteria, TransAlta utilizes the following;

- Operator water quality field checks
- Turbidity monitoring
- pH adjustment via neutralization systems
- Online pH monitoring
- Redundant discharge valves

Certain wastewater streams are directed to a neighbouring facility's bio-oxidation plant for treatment

How often do you update the Spills Contingency Plan?

TransAlta's site spill plan is reviewed and tested annually. All spill and release incidents at the cogeneration plant are investigated according to TransAlta's incident management process. Follow-up actions to mitigate these types of incidents are implemented as part of the site's continuous improvement objectives. Lessons learned from these events are communicated across the company with the intent of identifying potential risks at other facilities.

Are non proprietary sections of the Plan available for public review? No

Describe storm water interception systems to retain surface run off?

All storm water collected within TransAlta's cogeneration plant is directed to a surface water storage tank and routed into the demineralization water treatment plant for use as boiler feedwater. Storm water on the Bluewater Energy Park property is collected through a series of basins, filtered, and carbon treated prior to discharge.

What are the long term plans for spill prevention?

Modernizing the water demineralization treatment facility through the installation of a reverse osmosis system thus reducing/eliminating chemical use and storage onsite.

What is the company's process for community engagement/dialogue with impacted downstream residents of St. Clair River, Walpole Island and Wallaceburg.

TransAlta engages the Aamjiwnaang First Nation Environmental Committee routinely and in advance of projects. TransAlta is a member of the Bluewater Community Advisory Panel (BCAP), hosting annual community dinners and information sessions for BCAP members. Projects requiring an Ministry of the Environment, Conservation and Parks approval are posted to the Ontario Environmental Registry of Ontario (ERO) for public comment.

TransAlta is member of BASES and follows the BASES downriver reporting guideline in addition to providing community announcements/CAER code notifications through the Everbridge system.