

For Immediate Release **Update**

October 26 2020

New Research on lake contamination: Swan Hills' SHTC and Faust's Osmose Site

Keepers of the Athabasca and our partners have taken 2 sets of lake sediment core samples in **Lesser Slave Lake (LSL)**: at the mouth of the Swan River, and in Faust Bay (Giroux Bay) in 2018 and 2020.

We are looking for evidence of the fire and explosion that closed the Swan Hills Hazardous Waste Treatment Centre (SHTC) for 10 months in 2009/10, causing millions of dollars in damages. The SHTC specializes in the incineration of PCB (polychlorinated biphenyls) waste from around Canada, and has burned more than 300,000 tonne since opening in 1987. According to experts advising us, we have 'hints' of this 2009 explosion in our current test results, but will have to take new lake sediment core samples in the very deepest parts of the east and west basin of Lesser Slave Lake to confirm these hints are associated with the SHTC fire and explosion; that is where the heaviest sediments migrate to, and PCBs in sediments are very heavy.

What we found instead at our two sample locations is clear evidence of the Faust Osmose Site - a PCP (pentachlorophenol) wood treatment plant that was active in the 1960s and blew up in 1969:

Preliminary data indicates there have been CDDs (chlorinated dibenzo-p dioxins) seeping into Lesser Slave Lake for decades. These inputs exceed sediment guidelines in place to protect aquatic species in Faust Bay.

PCP is known to have a strong dioxin signature as evidenced in the test results of our samples. From a toxicity point of view, dioxins make up a higher percentage of the toxicity present in our lab results than any furans we see: 85% dioxin as compared with furan toxicity. Furans refer to potential inputs from SHTC, while dioxins refer to the Faust Osmose site as a potential input.

Dioxins accumulate in the body and stay with us. Dioxins are highly toxic and exposure to high concentrations of dioxins can cause reproductive and developmental problems and damage the immune system. Dioxins are also known endocrine disruptors and carcinogenic compounds, and dioxins' effects can be transgenerational. This means that people whose parents have been exposed to dioxins may experience health effects later in life. Generations down, there can still be health problems for new generations, including birth defects. It takes about ten years for these chemicals to be eliminated from the human body after removal from the source of pollution. Dioxins accumulate in animals higher in the food chain in their fat, especially fish. Even small amounts of contaminated sediment passing through the gills of a fish will have an impact on that fish's dioxin content, and some local people also like to eat fish livers, where these chemicals are concentrated.

While they turned down the offer from Alberta Environment to accept the ‘gift’ of the Osmose Site for the creation of a ‘Toxic Park’, Big Lakes County is currently involved in building a road to Lesser Slave Lake on top of known toxic hotspots*. The road allowance is the responsibility of the County; but the remaining toxicity on it from the Osmose Site is the responsibility of Alberta Environment.

Local residents have been concerned about the Osmose Site for decades. One resident who lives directly south of this site has spent the last ten years asking the Alberta Government to remediate the situation, and now prefers that they purchase her a new house instead. Living next door, one family says they are “not only deeply concerned about the safety of my family with these trucks going back and forth, but I don’t know what to do about it, as I feel completely defeated that no one cares about our well-being”. A local organic producer points out that traces of the pollutants have been found in both Faust’s raw and treated drinking water; suspicions around this prevented him from building greenhouses. The community in Faust is divided between those with concerns, and those without.

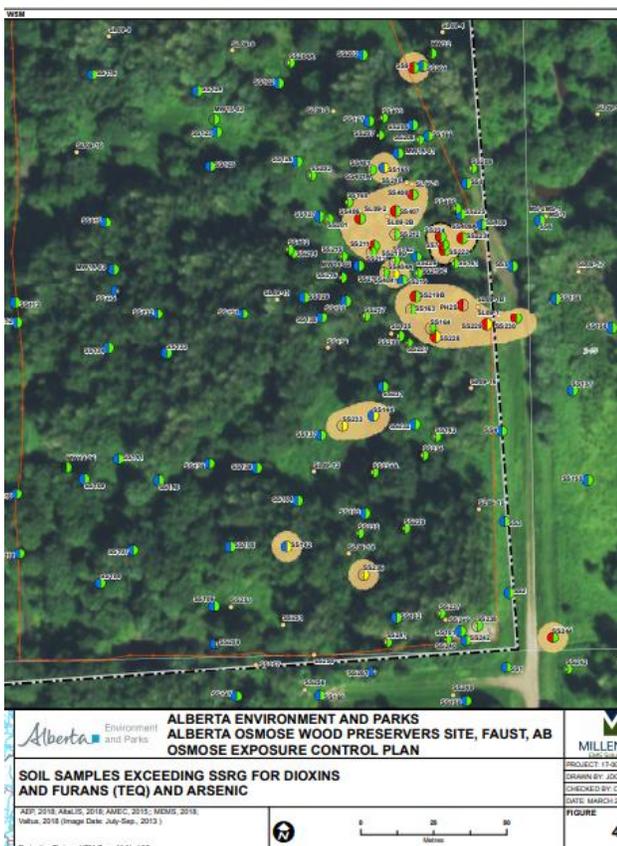
More research is called for to distinguish whether evidence from the 2009 SHTC fire is present in LSL: only testing in the deepest part of the east and west basins will show this.

More research is also called for to determine the effects of ongoing dioxin inputs into the Lesser Slave Lake, possibly from the Faust Osmose Site. Local First Nations use this lake for their Traditional Livelihood activities, and many other people eat fish from Lesser Slave Lake on a regular basis. We recommend immediately testing fish in Lesser Slave Lake to help determine any impacts or health risks to humans.

For information, and to get directly in touch with local residents or the lab director, please contact:

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* For the full “Site-Specific Risk Assessment and Exposure Control Plan Former Alberta Osmose Wood Preservers Plant Big Lakes County, Alberta” report, commissioned by Alberta Environment, please contact Jule