



April 30, 2018

for immediate release

## **Condolences – 10 years After International Tailings Duck Disaster**

Guided by both Indigenous Elders' Traditional Knowledge and western science, the **Keepers of the Athabasca** (2006) are First Nations, Métis, Inuit, environmental groups, and watershed citizens working together for the protection of water, land, air, and all living things today and tomorrow in the Athabasca River watershed. Our mission is to unite the peoples of the Athabasca River and Lake Watershed to secure and protect water and watershed lands for ecological, social, cultural and community health and well being.

**On this, the anniversary of 1,600 ducks' death** in Syncrude's tailings pond, we wish to express our sincere condolences for the thousands of other lives lost in tailing ponds, including at least 27 black bears, 67 deer, 31 red foxes and 21 coyotes (between 2000 and 2008 only), along with moose, muskrats, beavers, voles, martens, more ducks, geese, at least 31 blue herons (2015), other birds, and people. We would also like to also recognize the unknown and unreported deaths of other animals large and small.

**Keepers of the Athabasca continues** to work hard to oppose new bitumen extraction, as the current methods are not sustainable or financially viable due to un-held liabilities. **We are actively fundraising** for a project with a team of hydrologists that examines surface and groundwater interaction around tailings ponds, in order to provide tools for community based monitoring. We continue to advocate for an independent human health study to examine the confirmed human cancer clusters in northeastern Alberta.

Here are some facts about tailing ponds that we have collected:

1. Combined area of all Alberta oil sands tailings ponds in 2013: 220 square kilometers. Based on growth rate (fact 4), the area covered by tailings ponds is now estimated to be **276 square kilometres** (2017).
2. Depth of the tailing ponds: **up to 100 meters**.
3. Combined estimated volume of all the tailings ponds material: **19.3 Billion cubic meters**.

4. Growth rate of the oil sands tailings ponds in area: over **14 sq. kilometers per year** at current production rates.
5. Tailings ponds composition: sand, water, clay, salt and a list of hydrocarbons including: bitumen, naphthenic acids, asphaltenes, benzene, creosols, humic and fulvic acids, phenols, phthalates, polycyclic aromatic hydrocarbons (PAHs), and toluene.
6. Precipitation (rain+snow) falling on the tailings ponds in 2017: **127 Million cubic meters**. It is unknown if this volume is considered when calculating industry water licenses.
7. Oil sands mining operations are currently licensed to divert **359 Million cubic meters** of fresh water from the Athabasca River.
8. Estimated total volume of unrecovered bitumen in the tailings ponds: **847 million barrels** (more than a year's full production at current rates). Current extraction method recovers 90% of the bitumen.
9. Volume of tailing emulsion waste generated per barrel of bitumen produced: **12 barrels**.
10. The most toxic substance in the tailings ponds: **naphthenic acids**. Other toxic substances include cyanide, phenols, arsenic, cadmium, chromium, lead and zinc. The amount of naphthenic acid processed in oil sands operations: **more than 100 tonnes per day**.
11. Amount of tailings pond leachate estimated to be reaching groundwater connected to the Athabasca River from just one tailings pond: **6.5 Million litres per day** or 2.37 Million cubic meters a year.
12. CO2 emissions (equivalent) per year per hectare of tailings ponds: 250 tonnes.
13. Total annual emissions based on 220 square kilometres: **5.5 Million tonnes (5.5 megatonnes)**. This fact is due to the extraction diluent (such as naphtha) being discharged into the tailings ponds. Diluent chemically changes to methane in the ponds and some diluent vapours escape unchanged as greenhouse gases.

**Keepers of the Athabasca oppose** current pilot projects to release tailings into the Athabasca River, as our 'world class monitoring system', promised over a decade ago, has still not been put into place. While oil companies may spend \$50M per year on 'managing' tailings, **Keepers of the Athabasca**, and Indigenous Knowledge Holders we consult with, feel that this management has not been effective. Western science continues to unethically research all around the severe issues without ever happening to 'discover' them.

For more information, please contact:

Paul Belanger, Co-chair

[pjborealis@gmail.com](mailto:pjborealis@gmail.com)

780 263-8810

Jule Asterisk, Executive Director

[keepers.communications@gmail.com](mailto:keepers.communications@gmail.com)

780 805-1709