

# New study shows that oilsands mining and processing are polluting the Athabasca River

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Inorganic elements known to be toxic at low concentrations are being discharged to air and water by oilsands mining and processing according to University of Alberta research findings being published this month in one of the world's top scientific journals.

The 13 elements being discharged include mercury, arsenic, lead, [cadmium](#) and several other metals known to be toxic at trace levels. The paper will appear in the August 30 edition of the [Proceedings of the National Academy of Sciences](#) (*PNAS*).

The results are not surprising according to corresponding author David Schindler - an internationally acclaimed researcher in the Department of Biological Sciences at the U of A - given the huge amounts of many of the same elements that the industry has reported discharging, according to Environment Canada's National [Pollutant](#) Release Inventory.

"Given the large amounts of pollutants released, any monitoring program that cannot detect increases in the environment must be considered as incompetent," says Schindler, referring to the Regional Aquatic Monitoring Program.

"The U of A study was deliberately designed to test claims by industry and Alberta politicians that all contaminants in the river are from natural sources," said Schindler.

This included examining patterns of deposition of pollutants in snow and

releases to water both near to, and remote from, industry.

"Rather than pollutants increasing continuously downstream in the river due to natural sources, as government has claimed, concentrations of the majority of toxins were always highest near sites of industrial activity," Schindler says.

He notes however that concentrations of many contaminants remained above background levels right up to the Athabasca Delta. Elevated concentrations were in Lake Athabasca, near Fort Chipewyan.

"The releases are in clear violation of section 36, subsection 3 of the Fisheries Act, which prohibits discharge of toxins in any quantity into fish-bearing waters."

Schindler says much of the debate over the impact of oilsands has been based on a combination of conjecture and propaganda, which has not been peer reviewed or published in recognized scientific publications.

An earlier (December, 2009) paper by the research group documented the release by the oilsands industry of a number of organic carcinogens, similar to those released by the BP spill into the Gulf of Mexico, and the Exxon Valdez into the Gulf of Alaska.

Provided by University of Alberta

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