

## ***Edwards v. DTE Energy: Backgrounder***

### The St. Clair River

The St. Clair River flows southward about 64 km from the southern tip of Lake Huron to Lake St. Clair. The river is bordered by the State of Michigan, United States of America, to the west and the Province of Ontario, Canada, to the east. The St. Clair River has an average width of 600 metres. Adjacent land use is a mix of agricultural, residential, and industrial.

The entire St. Clair River is an “Area of Concern” under the United States' and Canada's *Great Lakes Water Quality Agreement*. An Area of Concern is a geographic region with levels of contamination and habitat loss that impair beneficial uses or the area’s ability to support aquatic life. Impaired uses of the St. Clair River include restrictions on fish consumption, fish tumours or other deformities, degradation of benthos, restrictions on dredging activities, eutrophication or other undesirable algae, beach closings, degradation of aesthetics, added cost to agriculture and industry, and loss of fish and wildlife habitat.

### Mercury in the Environment

One of the contaminants of concern on the St. Clair River is mercury. Mercury is extremely persistent in all media and displays very high acute toxicity to fish and other aquatic organisms. It is also capable of reproductive and teratogenic effects in mammals. Consequently, mercury is universally accepted as a deleterious substance and regulatory organizations such as the Canadian Council of Ministers of the Environment and the Ontario Ministry of the Environment have established guidelines for the protection of water quality, aquatic life, and ultimately human health.

Mercury has been found to present increased risk of cardiovascular disease in humans. Mercury contamination has dramatic neurological impacts on young children. It is a particular risk to pregnant women who eat contaminated fish. Methyl mercury enters the mother's bloodstream and passes through the placenta to the fetus and accumulates in the brain where it can cause brain damage.

Coal-fired power plants have been linked to the presence of mercury in the environment. Two coal-fired power plants located on the west bank of the St. Clair River in Michigan, United States were found to be contributing significantly to the total mercury loading in the St. Clair River. They are the Belle River Power Plant, located in China Township, and the St. Clair Power Plant, located in East China Township. These facilities form one contiguous industrial complex owned by DTE Energy. This DTE Energy complex is releasing significant quantities of mercury into the air. This airborne mercury then falls to the earth downwind of the plant.

Mercury in sediments is converted by microorganisms into methyl mercury which is rapidly absorbed by fish either directly from water passing over its gills or ingested with

its diet. Since fish eliminate mercury at a very slow rate, concentrations of this substance gradually accumulate in the organism.

In order to limit human exposure to mercury from contaminated fish, various government departments have issued fish consumption advisories. In Ontario, fish consumption restrictions are due more frequently to mercury contamination on the St. Clair River (32% of restrictions) than on Lake Huron (9%), Lake Ontario (7%), Lake Superior (4%), or Lake Erie (2%). In Michigan, there are similar fish consumption restrictions due to mercury on carp, freshwater drum, and gizzard shad.

Samples collected by Lake Ontario Waterkeeper confirm that there are significant levels of mercury in the sediments of the St. Clair River.

### DTE Energy

During a 2004 mercury control technology test at stack #1 at DTE Energy's St. Clair power plant, 94% mercury emission reductions were achieved. At the conclusion of the 30-day test, DTE Energy discontinued use of the mercury control technology.

- September 5, 2006: The Informant Scott Edwards wrote to Mr. Anthony Earley, Jr, CEO of DTE Energy stating that mercury emissions from Detroit Edison's St. Clair and Belle River power stations are contributing significantly to adverse mercury levels in local waterways. Mr. Edwards also requested a meeting with Mr. Earley to discuss the issue of mercury emissions. The letter was delivered by certified mail return with receipt and received by DTE Energy on September 11, 2006. To date, DTE Energy has not replied.
- February 6th, 2007: Scott Edwards swore an Information at the Ontario Court of Justice in Sarnia, alleging that DTE Energy Company of the State of Michigan did unlawfully carry on a work or undertaking contrary to Canada's Fisheries Act. In doing so, Edwards launched a private prosecution against DTE Energy in March of 2007.
- August 9, 2007: Justice of the Peace Hurst of the Ontario Court of Justice found that Edwards had a prima facie case based on the evidence presented. However, due to Hurst's concerns about transboundary jurisdiction in the case, Edwards was denied from calling DTE Energy to court for litigation. Disagreeing with this outcome, Edwards filed a mandamus application. A mandamus is a legal tool for getting a superior court to order a lower court to perform a specific duty.
- January 17, 2007: the mandamus application was heard in Sarnia, ON before Judge Donahue of the Superior Court of Ontario. Based on the established prima facie nature of the case, Judge Donahue issued an order directing the Ontario Court of Justice to summon DTE Energy Company to face charges for poisoning the St. Clair River with dangerous amounts of mercury.
- June 30, 2008: Summons served on the accused.

- July 7, 2008: Ontario judge sets trial date for February 2, 2009. A pre-trial conference will occur in October, 2008.

### Canada's *Fisheries Act* and Private Prosecutions

The purpose of the *Fisheries Act* is to protect Canada's fisheries waters. The *Fisheries Act* is federal legislation that creates significant penalties including fines and imprisonment. *Fisheries Act* cases are prosecuted through the criminal court system.

In Canada, any citizen can commence a prosecution. The Attorney General may assume control, stay, join, or choose not to participate in the prosecution. More information about the *Fisheries Act* and private prosecutions can be found here:

<http://www.waterkeeper.ca/documents/CWPrimer2-v1.pdf>