

El Dorado Refinery

https://en.wikipedia.org/wiki/Eldorado_Mining_and_Refining

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- [^] "[Port Hope Area Initiative](#)". Archived from [the original](#) on August 20, 2009. Retrieved January 13, 2009.
- [^] Carola Vyhnač (November 9, 2010). "[Port Hope properties tested for radiation](#)". Retrieved January 14, 2013.

Historical Context:

Originally organized in 1927 as Eldorado Gold Mines Limited, Eldorado Mining and Refining Limited found success beyond gold located in Manitoba. Although, these mines were later discovered to be having deposits of radioactive material. The Eldorado Refinery extracted radium from uranium ore, dumping the uranium waste throughout Port Hope or using it as fill material. The refinery stayed open for about eight years, using the small town as a dump site for tonnes of uranium waste. They built a state-of-the-art refinery in Port Hope, Ontario in 1933. Radium production took place between 1933 and 1940 when World War II closed European markets for radium material. The other byproduct of the company was silver, copper, and uranium salts. Uranium was useless until scientists realized the enormous energy potential of the uranium atom. The company reopened the mine at Port Radium in 1942 to supply the United States military with uranium products.

Port Hope:

<http://www.waterkeeper.ca/blog/2016/11/8/what-you-need-to-know-about-the-port-hope-area-radioactive-waste-cleanup>

The Government of Canada ordered Eldorado to refine uranium by 1942. This was in demand at the time by the United States for the Manhattan Project (also known as: the building of nuclear weapons). The primary role of Port Hope was to refine uranium ore and then ship it to the U.S. This increase in demand led to the federal government taking over Eldorado and making it theirs, a Crown corporation. Up until the 1960's Eldorado continued to feed uranium to the U.S. The U.S suddenly put a stop to their demand for uranium. This led to Eldorado to turn to new markets, nuclear energy being a promising industry. The first nuclear reactors were set up in Canada by the end of the 1960's. With CANDU reactors using unique combinations of fuel, the Port Hope Conversion Facility became a leading refinery in its industry. The nuclear energy industry blossomed in Ontario in the 1970's. That same decade, concerns over radioactive waste and how it should be stored starting cropping up all around the Port Hope region.

War Time Nuclear Impact:

<https://nuclearsafety.gc.ca/eng/resources/fact-sheets/Canadas-contribution-to-nuclear-weapons-development.cfm>

<p>In the midst of WWII, Canada joined the U.S and the UK in their efforts to make the nuclear bomb. In 1939 the fission method of uranium was discovered which used the energy within the atom. The company reopened the mine at Port Radium in 1942 to supply the United States military with uranium products. By the end of 1942, the UK and Canada had established the Montreal Laboratory to create nuclear weapons. The Canadian Government took over the company by purchasing share control in 1943, and in early 1944 the name was changed to Eldorado Mining and Refining Limited. Scientists from both nations and from France collaborated to design the ZEEP (zero energy experimental pile) reactor. The ZEEP was kept in Chalk River, Ontario where a small prototype was created to prove that natural uranium and heavy water could be used to make nuclear fission. </p>

Elliot Lake:

Historical Context:

<http://niche-canada.org/2016/06/15/wildly-nuclear-elliott-lake-and-canadas-nuclear-legacy/>

<p>Over the past sixty year, Elliot Lake has had two nicknames, unofficial titles. "Jewel in the Wilderness" being the first and the second " The Uranium Capital of The World". In the 1950s, the U.S. push for uranium production prompted exploitation of local uranium deposits. Immediately, the town began to grow where there was nothing to be grown at one point. For over 40 years, Elliot Lake was a significant producer of uranium. All through the period of exploitation, and especially after, Elliot Lake promoted itself as a beautiful destination for nature-lovers and outdoor adventurers. Today, the town continues to reconcile its two legacies as a paradoxically thoroughly modern wilderness, trying to become a destination for ecotourism while clinging to its nuclear role.</p>

<p>*The Uranium Mines of Elliot Lake were opened in the early 1950's in a post-war effort to continue to supply the United States of America with uranium for nuclear weapons development. This lasted for a few years before the United States declared it would no longer purchase uranium from Canada after 1962. Denison Mines, seen on the left, was the largest of the mines operated in this area.*</p>

Elliot Lake Impacts (consequences)

<p>Mines were producing 74% of Canada's total refined uranium, or yellowcake by 1959. This process accumulated millions of tons of waste during the process of milling, of which 99.8% of the ore became waste. The waste eventually was abandoned to only pollute to surrounding localities, which were unregulated for decades. It raised the water's acidity levels and released harmful radioactive decay. This pollution affected not only the people who inhabited the newfound town of Elliot Lake, but also those who had inhabited the land for over five hundred years: the Serpent River First Nation, or Anishinaabe.</p>

Nuclear Aftermath Turnaround:

<p>Nine mining companies were in operation and 25,000 people lived in Elliot Lake. During this year, the U.S announced that they will no longer be doing trade with Canada for uranium after 1962.The population of Elliot Lake dropped to below 7000 by 1966. The only mines still in

operation were the Denison Mines and Rio Algom. Federal plans were set in place for the CANDU Reactors and Ontario Hydro's interest played a role in its impact to the community. This led them to believe the population would expand to 30,000 people. Unfortunately for the Elliot Lake community, by the 1990s, empty mines and low prices caused a loss of over 4000 jobs.

This announcement of the mine closure shook the community's morale and the economy of Elliot Lake. Luckily for Elliot Lake's strong leadership initiatives and the Elliot Laker's instinct for survival the community grew again. This job loss brought new industries to Elliot Lake. All the abandoned units were fabricated to become senior homes with the beginning of the Retirement Living Program. This became a highly successful industry attracting thousands of retirees. This led to the start of the cottaging industry.

Wildly Nuclear <http://niche-canada.org/2016/06/15/wildly-nuclear-elliott-lake-and-canadas-nuclear-legacy/>
Canada. Accessed March 30th, 2016. Niche Canada

Discover Elliot Lake <http://www.tourismelliottlake.com/en/enjoy/history.asp>
Canada. Accessed March 30th, 2016. Tourism Elliot Lake

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