

Update  
Winter 2017

# Deloro Mine Site Cleanup Project

## The Deloro Mine Site Cleanup is in its Final Phase

The Deloro mine site cleanup project is in its last phase with most major construction work complete. Work will be continuing in Young's Creek.



*Aerial photos: Before and After*



# Environmental Protection and Management

This year, we substituted a pollinator-friendly planting mix along the entire western portion of the Deloro Project site (rather than traditional grass seed). The covered area will be the size of approximately 19 hockey rinks.

In addition to air quality and noise, radiological, and geotechnical monitoring, there are approximately 29 water quality monitors across the site to ensure cleanup goals continue to be met.

Our poplar tree plantation on the remediated tailings area of the site is in good condition and it continues to perform as designed to manage soil moisture and protect the engineered capping system.

As always, Species At Risk are monitored and protected. Some of the species observed include the common night hawk, barn swallow, Blanding's turtle, common snapping turtle, whip-poor-will, five lined skink and monarch butterfly.



## Canadian Nuclear Safety Commission

- The Canadian Nuclear Safety Commission (CNSC) regulates the use of nuclear energy and materials to protect health, safety, security and the environment.
- In 2009, the Deloro Mine Site came under the oversight of CNSC due to presence of low level radioactive waste (LLRW) materials at the Site. The LLRW is present due to the historical processing of waste ore from Port Hope to extract cobalt.
- Since 2009, the ministry has remediated the Tailings and Industrial and Mine Area, addressing the majority of the contamination at the site. As a result of these improvements, the remaining material on the Deloro site is of low radiological risk, and the Ministry is applying for clearance from the CNSC licence.



# Industrial and Mine Area



100 per cent of the hazardous and low-level radioactive waste has been excavated and placed in the waste consolidation area or capped in place as outlined in the cleanup plan. The final cap over

the waste was added this year and we expect the area to be seeded in early 2017 so vegetation can take root throughout the year.

The groundwater interceptor trench, is complete along the west

side of the site. This trench diverts clean groundwater away from underground contamination, a critical role in protecting the local environment.

## Work in Young's Creek Continues

In 2016, the ministry's contractor finished building the liner of the containment cell that will store contaminated sediment from Young's Creek for the long term. Young's Creek is the last piece of the clean-up project, and is expected to continue through 2019.

### Young's Creek Containment Cell Liner by the Numbers

- Eight layers of diverse, protective material measuring 1.35 metres thick
- 24,000 square metres of woven geosynthetic clay material
- 19,000 cubic metres of sustainable natural clay
- 44 thermal protection blankets measuring 24 by 250 feet



# Arsenic Treatment Plant

The new sludge lagoon, replacing the former 35-year-old structure is complete, and upgrades to the plant and surrounding area are ongoing.

In 2016, 59,600 cubic metres of contaminated groundwater and leachate were treated and approximately 1,450 kilograms of arsenic were removed and prevented from being discharged into the natural

environment. The Arsenic Treatment Plant, operating since 1983, will continue to operate for many years to pump and treat contaminated groundwater from the site.



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## Public Liaison Committee meetings

The ministry holds Public Liaison Committee (PLC) meetings two to three times a year. If you are interested in becoming a member of the PLC, please contact 613-548-6921.

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## Keeping you informed

The ministry will continue to keep you informed about new developments on cleanup construction.

**For more information:**  
[www.ontario.ca/delorominesite](http://www.ontario.ca/delorominesite)

**Or contact:**  
Ministry of the Environment and Climate Change,  
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**Phone:** 613-549-4000