

AIR QUALITY UPDATE

June 2015



IOC is committed to doing our part with respect to our contribution to air quality in Labrador West. Our priority is the health and safety of our employees and our communities.

- > The Air Quality Improvement Project (AQIP) involves a number of initiatives that demonstrate our commitment to understanding and, where possible, reducing our contribution. AQIP includes: extensive stack testing, air dispersion modeling, re-engineering and expansion of air quality monitors, engineering studies, and air quality assessments.
- > We have invested close to \$10 million in the Air Quality Improvement Project and are currently working towards implementing an engineering solution which will help reduce our contribution to dust emissions in the community.
- > We have invested approximately \$7 million in dust management initiatives to help reduce our contribution to in-plant dust. This includes installation of additional containment skirts, enclosing conveyors and modifications to the crusher pit doors to better contain dust.
- > IOC has an award winning tailings rehabilitation program, and in 2014 we added 30 hectares of rehabilitated tailings to our ongoing re-vegetation program. Over 670 hectares have been rehabilitated to date, and we are currently identifying priority areas for 2015.

- > Our Environment, Occupational Health and Operational Teams are committed to working on continuous improvement initiatives through the development of a dust management plan, which will help reduce our overall contribution to dust on site and in the community.

Examples include:

Mine Operations:

- currently completing trial application of a binder at rock crusher area to mitigate fugitive dust lift-off
- continued watering of the roads used by haul trucks and other mining equipment
- water suppression systems in place on the drills
- water spray systems in place on the rock crusher
- hydro seeding of various areas within Mining Operations to reduce dust lift-off and erosion

Processing Operations:

- watering of the roads between Processing and Mine Operations, as well as the road system on Tailings, using water trucks
- dust suppression system at the load-out
- currently exploring options to assist with control of fugitive dust lift-off from the Tailings/Beaver Bay areas.

- Options being considered include misting units, wood chips, hay, binders/crusting agents, and seeding
- engineering solution for pellet plant which will reduce our air emissions coming from the stacks by 60%

- > While our efforts will help reduce IOC's contribution to visible dust, we must recognize that there are other sources of dust emissions contributing to the soiling issue in town.

We are currently completing an assessment of air monitoring data since our last community update in October of 2014, and will provide a complete analysis to the community as soon as the information is available.

In response to community feedback, we have made significant improvements to the way we share our air quality information.

- > Over the years there have been exceedances of visible dust and this represents an important soiling issue to the community and to IOC, but does not represent a health issue.
- > Currently reviewing the possibility of relocating some of the air quality monitors. Will do so in consultation with NL government and will inform the community once a decision has been made.
- > In 2015, a second silica monitor was installed. When a valid data sample size is obtained, a complete review and analysis will be performed.

- > Air Monitoring Data is available online, near real time, on the Department of Environment and Conservation website. Currently Smokey Mountain data available, but other data is in the process of being commissioned to the site: http://www.env.gov.nl.ca/env/env_protection/science/airmon/index.html
- > IOC installed an ozone monitor in July 2014 and we are the first industry in Canada to partner with provincial government to establish Air Quality Health Index information. This information is available on the Environment Canada weather network website for Labrador City: https://weather.gc.ca/airquality/pages/provincial_summary/nl_e.html

We are pleased to inform residents that as part of the Air Quality Improvement Project, we have decided on an engineering solution that will help reduce air emissions coming from the pellet plant stacks.



- > Will involve two types of technology: Multi-clone and Wet Scrubber.
- > Will be progressively installed in a staged approach by Dec 2020 as we proceed with machine rebuilds/retrofit.
- > Working with government to bring us in compliance with regulations.
- > With respect to emissions leaving the IOC boundary, about 90% are related to stack emissions from the pellet plant stacks, with the remaining 10% coming from fugitive dust sources, such as roads, tailings and load-out.
- > The new engineering solution will reduce the dust coming from the stacks by 60%.

If members of the community have concerns of an environmental nature relating to IOC operations or would like more information about our Air Quality Improvement Project, they can contact our feedback line.

Feedback line:
Telephone: 944-8400 ext 8677
Email: IOCfeedback@ironore.ca