

## **Comment: Victoria breathes a little easier these days**

Marg Gardiner / Times Colonist  
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After nine years of dedicated advocacy, the air quality in Victoria has improved significantly.

Between the Smelter and the Pulp Mill was a James Bay Neighbourhood Association report of air-quality findings undertaken by B.C. Environment in 2009. The assessment of an 89-day sampling of air pollutants compared James Bay measures with five other locations in B.C., including Trail, home of a smelter, and Prince George, home of a pulp mill.

With one exception, the James Bay measures of sulphur dioxide (SO<sub>2</sub>) pollution levels were second only to levels found in Trail. The exception was the “daily” maximum, James Bay levels being the highest.

Six years later, State of the Air, the B.C. Lung Association’s 2015 report of air quality in B.C. for 2014, again has Victoria “between smelter and pulp mill.” However, the findings, with James Bay having the fourth-highest one-hour maximum SO<sub>2</sub> reading among the 28 sites reported in the province, do not reflect the significant positive changes that have occurred in air quality in the region since 2012, or the levels achieved this season.

Improvements began in 2010, when the Vancouver Island Health Authority’s response to the 2009 air-quality monitoring validated and confirmed residents’ reports and fears. Noxious emissions from cruise ships at Ogden Point were expected to affect those with asthma, chronic obstructive pulmonary disease or other respiratory conditions; 0.4 to 1.6 premature deaths per season were estimated. VIHA recommendations, including the recommendation to use contractual obligations to forward the use of low-sulphur fuels, were not implemented.

Sadly, the industry, supported by local interests, balked for several years, offering “reasons” or “alternatives” while sidestepping responsibility.

With continuing pressure from health officer Dr. Richard Stanwick, a single SO<sub>2</sub> monitor was placed in James Bay for the 2011 season. This led to greatly reduced SO<sub>2</sub> levels in James Bay; the industry knew it was being monitored. SO<sub>2</sub> levels in 2011 and for the first part of 2012 were about 40 per cent lower than those experienced in 2009.

When low-sulphur fuel usage was mandated in 2012, the industry had an “out.” The James Bay Neighbourhood Association provided study results and other details, and Transport Canada closed the gap.

More stringent regulations, effective this year, requiring the use of 0.1 per cent sulphur fuel or an equivalent method of achieving low SO<sub>2</sub> levels, have resulted in better air quality this season.

The highest SO<sub>2</sub> level measured in 2015 between May 1 and Aug. 15, in James Bay and at Topaz is significantly lower than in previous years. The ship most associated with emissions has been the Ruby Princess, added to the Alaska schedule this season. Resident reports of ship stench are less frequent than previous years. However, yellow-brown plumes are sometimes seen, and whiffs of black smoke continue. One-hour SO<sub>2</sub> measures of up to 22 parts per billion include 10-minute measures of up to 80 ppb.

Cruise-ship emissions remain significant contributors to SO<sub>2</sub> and particulate matter for the region as measured at Topaz. Although residents who are sensitive to chemical exposures continue to detect and experience emissions, the current sulphur compounds and nitrogen oxides measurements are lower than advisory levels and provincial and federal targets; hence, serious effects on health are not anticipated.

B.C. Hydro estimated that in 2010, cruise-ship greenhouse gas emissions were 1.78 tonnes per hour per ship while docked. Victoria will see 1,623 cruise-ship hours in 2015, potentially creating 2,889 tonnes of GHG emissions.

JBNA's board thanks those who believed in our residents, and worked to ensure that evolving environmental regulation would be respected. To Stanwick and his VIHA associates Michael Pennock and Christine Bender, thank you; Earle Plaine, B.C. Ministry of the Environment, and Eleanor Setton, Spatial Sciences Research Lab (University of Victoria), thank you; Paul Topping, Environmental Protection, Transport Canada, thank you.

Continuing air and noise pollution, and traffic congestion impacts from cruise-industry operations, will be felt by residents along the Douglas, Dallas, and Kingston/Quebec roadways as the buses, including a fleet of 30-year-old highway buses, attempt to service the surge of passengers coming ashore as two to three ships arrive within minutes of one another.

In 2006, as JBNA assumed the challenge of air-shed pollution in James Bay, a priority was the assessment of floatplane and helicopter emissions, with a focus on volatile organic compounds. Researchers had identified this as a gap in knowledge, but the technology was not then available to monitor VOCs.

Looking ahead, air-shed issues will once again focus on floatplane and helicopter emissions near Ogden Point and the middle and Inner Harbour areas.

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