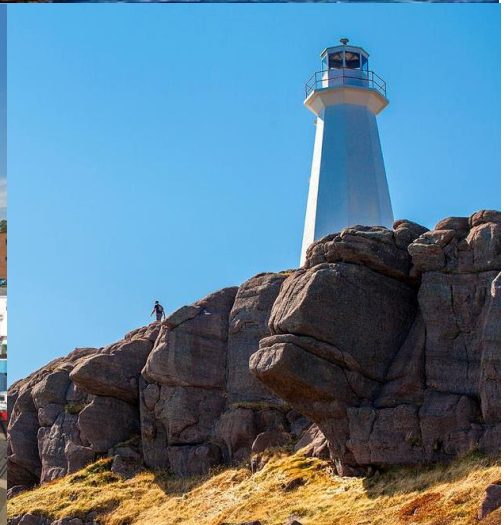




DEPARTMENT OF ENVIRONMENT AND CONSERVATION

2013 - 2015 AIR ZONE MANAGEMENT REPORT

March 2016



Current Air Quality Status

Table 1 presents the air quality status from 2013 to 2015 for the Newfoundland and Labrador Air Zone stations.

Table 1: Newfoundland and Labrador Air Quality by Station, 2013 to 2015

Station Location	8-hour Ozone (ppb)	24-hour PM _{2.5} (µg/m ³)	Annual PM _{2.5} (µg/m ³)
Water Street, St. John's	48.7	14	6.3
Old Placentia Road, Mount Pearl	47.6	13	5.7
Macpherson Avenue, Corner Brook	51.2	14	5.4
Scott Avenue, Grand Falls Windsor	50.6	13	4.9
Port aux Choix	47.9 ²	na	na
Burin	50.3	11	6.1
Smokey Mountain Road, Labrador City ¹	54.2 ²	17 [*] / 9 ^{**}	3.4 [*] / 2.8 ^{**}
Newfoundland Air Zone	51.2	14	6.3
Labrador Air Zone	54.2	17[*]	9^{**}
			3.4[*]
			2.8^{**}

1 – station was shut down in October 2015 and moved to a nearby location

2 – based on a 2-year average

na – indicates that data is not collected at this site.

* - indicates data is artificially high due to forest fires in the area during 2013.

** - indicates what the level would have been if the effects of the forest fires are excluded

In late June and early July 2013, large forest fires in eastern Quebec and western Labrador resulted in elevated PM_{2.5} levels across the entire Province. The impacts in Labrador, particularly near the Smokey Mountain monitoring station, were much greater than those on the island and consequently two values are reported for the Labrador Air Zone, the first being the air quality status with the impacts of the fires being included, the second being the air quality status with the impacts excluded. For the Newfoundland Air Zone, the air quality status is inclusive of the impacts from the forest fires. If the impacts had been excluded, the air quality status in the Newfoundland Air Zone would have dropped marginally, but not sufficient to alter the framework status.

Table 2 presents the final Air Zone status for the reporting period 2013 through 2015. For the Labrador Air Zone, the forest fires in eastern Quebec and western Labrador in 2013 are considered exceptional events and are therefore excluded from the final PM_{2.5} metrics. The specific dates of exclusion were June 27th to June 30th and July 2nd to July 6th.

Table 2: Newfoundland and Labrador Air Quality, 2012 to 2014

Station Location	8-hour Ozone (ppb)	24-hour PM _{2.5} (µg/m ³)	Annual PM _{2.5} (µg/m ³)
Newfoundland Air Zone	51.2	14	6.3
Labrador Air Zone	54.2	9	2.8
Canadian Ambient Air Quality Standard	63	28	10

Air Zone Management

It is recognized that the air quality in both the Labrador and Newfoundland Air Zones is largely affected by emissions from sources outside the province through long-range transport and as such, limits the number of mitigation measures available to maintain and reduce the impacts in the province. The Province continues to work with major industrial operations in the province to reduce particulate emissions and those emissions which are precursors to the formation of ozone. Should further actions be necessary to reduce ambient levels in both Air Zones, the Province is prepared to take actions as appropriate.

Additional information on AQMS can be found at the Department of Environment and Conservation website:

http://www.env.gov.nl.ca/env/env_protection/science/aqms.html

and the Canadian Council of Ministers of the Environment website:

<http://www.ccme.ca/en/resources/air/aqms.html>