

**DATE:** January 3, 2019**FILE:** 5280-02**TO:** Chair and Directors  
Regional District Committee of the Whole**FROM:** Russell Dyson  
Chief Administrative OfficerSupported by Russell Dyson  
Chief Administrative Officer*R. Dyson***RE: Air Quality Update**

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**Purpose**

The purpose of this report is to update the Comox Valley Regional District (CVRD) Board on recent air quality initiatives underway in the community.

**Recommendation from the Chief Administrative Officer:**

THAT staff be directed to investigate formation of a Regional Airshed Advisory Group, to consult with staff at The Village of Cumberland, Town of Comox and City of Courtenay and to report back to the Board by spring 2019.

**Executive Summary**

Air quality continues to be a prominent citizen concern and several air quality advisories have been issued by the BC Ministry of Environment (MOE) in past winters as a result of high particulate matter levels (PM<sub>2.5</sub>).

The CVRD has partnered with MOE on air quality monitoring and also most recently a particulate matter emissions inventory. Data from recent local air quality monitoring indicates PM<sub>2.5</sub> levels in Comox Valley often rank higher than national air quality objectives during the heating season. Highlights of the emissions inventory include:

- 45% of the PM<sub>2.5</sub> is from open burning followed by 35% from space heating and 12% from mobile sources
- Approximately 94% of the open burning is provincially regulated (primarily land clearing and forestry) with only 4% coming from backyard burning and 0.8% from wildfires.
- Approximately 98% of the space heating emissions come from wood burning appliances, primarily woodstoves and inserts.
- Approximately 44% of the mobile sources were from non-road vehicles (e.g. farm and construction equipment) and 28% from on-road vehicles.

The emissions inventory was provided to the board in April 2017 as part of an Elected Official's Forum in conjunction with various other presentations from air quality experts such as Island Health, BC Centre for Disease Control and Health Canada. These presentations highlighted the impact of PM<sub>2.5</sub> on public health. Additionally, representatives from Port Alberni and Cowichan Valley also presented information about their local approaches to multijurisdictional airshed management.

In recognition of the significance of emissions from space heating the CVRD has been providing a woodstove exchange program since 2016, with funding from the province of BC through the BC Lung Association. In 2017 the Board approved the use of an Island Health Community Wellness grant to top up the woodstove rebates for those moving to a cleaner heating source such as heat pumps and natural gas. The move toward cleaner heating sources has been reinforced most recently as part of the 2019 woodstove program with the province also providing higher incentives for heat pumps, natural gas, propane and pellet stoves. Since the program started in 2016 a total of 96 rebates have been approved with 17 being for a cleaner heating source.

The Island Health grant is also being used for a smart burning education and outreach program. The program's aim is to inform the public on the impacts related to poor burning practices, actions they can take to improve local air quality, and the rules and guidelines identified in local and provincial regulations. The program focuses on residential wood heating activity as it is the source with the largest degree of municipal control, and is closest to the places where people live, work and play. The program is further focused on areas of the community identified as 'hot spots' by recent mobile PM<sub>2.5</sub> monitoring (typically older denser neighbourhoods).

Most recently, with funding from MOE, a home heating and air quality survey was completed. There were 389 respondents and the results of the survey include:

- 21% of respondents use wood as their primary heating source
- 93% of these homes have a wood burning appliance that already meets emissions certification
- 75% of these homes would prefer a different heating source (i.e. not wood burning) with cost being identified as the primary barrier to switching

As is evidence from the above information, air quality in the Comox Valley is a complex and significant issue. There are many organizations that have a role to play in addressing airshed management and the Board may wish to consider an approach similar to Port Alberni or Cowichan Valley. Should the Board support this direction, staff would initiate consultation with appropriate organizations such as member municipalities, Island Health and MOE to determine options and how to best proceed. Options may include a CVRD administered regional service or support being provided to an external non-profit group to lead the initiative. Once consultation has been completed, a subsequent staff report will be brought to the board with a target of early spring 2019.

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