

Cleaning up the air in our breathtaking Okanagan!

With the abundance of trees and agricultural land in the Okanagan, you may think that the air quality is the best around. Despite the air quality in the Central Okanagan being *generally* good, specific events, such as forest fires, can cause pollutants to exceed those levels due to an increase of smoke. Certain neighbourhoods in the region may also reach unhealthy air quality levels due to smoke from woodstoves and proximity to major roads and vehicle emissions.

Research has shown that **there is no threshold below which PM_{2.5} or ozone has zero health effects**, the two pollutants most damaging to human health). It is in the everyone's best interest to ensure that air quality remains at the highest possible level at all times. So what can we do to help?

Reduce or eliminate residential wood burning

Smoke contains particulate matter, which was classified as carcinogenic to humans by the World Health Organization. It is associated with an array of health problems – from a runny nose and coughing, to bronchitis, asthma, emphysema, pneumonia, and heart disease - and contributes to premature death. In the Central Okanagan, 30% of particulate matter comes from residential wood burning. People who have a wood burning appliance in their home should make sure it meets EPA standards. If you are planning to install a new heating device, choose one that is cleaner and more efficient heating (non-wood burning). For more information about wood burning, visit: www.regionaldistrict.com/airquality.



Reduce vehicle idling

When a motor vehicle is running one of the pollutants it emits is carbon dioxide (CO₂), which is the main greenhouse gas that contributes to climate change. Vehicles produce other emissions, such as volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) that, mixed in the presence of sunlight, creates **ozone**. Ozone affects the respiratory system causing shortness of breath, coughing, inflammation, and can trigger conditions such as asthma and bronchitis. Vehicle emissions are responsible for 32% of the sources of smog-forming pollution and for 61% of greenhouse gas emissions in the Central Okanagan. If each driver in the Okanagan **avoids idling** for at least **6 minutes a day** we will reduce **15,142 tonnes of CO₂** per year.

You can easily see pollution when there is a wildfire or when exhaust is coming from a car. Sometimes you may not see air pollutants with your naked eye, but that doesn't mean they aren't there. If you cannot see the mountains clearly across the lake, that means something is in the air, particulate matter or gases. These substances in the air appear as haze and reduce the clarity and color of what we see. Poor visibility can negatively affect tourism, air travel, quality of life, property values, general well-being and our wilderness experience.

A recent PM_{2.5} monitoring study performed from November 2015 to April 2016 in the Central Okanagan, showed that specific neighbourhoods consistently had higher PM_{2.5} values than surrounding areas. The biggest hotspot, concentration of PM_{2.5}, was located in Rutland, followed by the Mission and Lake Country. The full report is available at www.regionaldistrict.com/airquality.

Next steps

As part of the 2015 Central Okanagan [Clean Air Strategy](#) an Air Quality Technical Committee (AQTC) was integrated by a group of air quality experts from federal, provincial and local agencies to discuss best practices for integrating clean air goals into community plans, regulations, and policies. The AQTC is working on **improving burning regulations** and harmonizing them through the region. The AQTC is also working on an Idling Control bylaw proposal to **reduce unnecessary vehicle emissions**. As Natural Resources Canada¹ states, **idling for more than 10 seconds uses more fuel than restarting the engine**.

It is obvious that the public is concerned about air quality in the Central Okanagan, as shown by the demand for new approaches and alternatives to burning. Local governments are looking into several options that include: expand the Agricultural Chipping Program, rebates to rent/buy a flail mower or chipper; reduce tipping fees at landfill, restrict burning only to properties actively engaged on farming activities (around 1,400); implement a burning permit based on pile tonnage; and, change venting index conditions when using pollution control tools (forced air technologies).

Local air quality matters because it has a huge impact on public health. We all have a responsibility to achieve clean air, by the choices we make when deciding how to manage our wood waste, heat our homes, choose our transportation, use our vehicles, and by abiding to the air quality regulations set out by government. The new proposals will be presented in 2017 to the appropriate RDCO Board or Municipal Councils. We all must do our part to improve local air quality and assure that the health and environment of future generations are better protected.

Nancy Mora, P. Eng.
Regional Air Quality Coordinator

¹ [Natural Resource Canada-Idle-Free Zone](#)

² [Which Is Greener: Idle, or Stop and Restart?](#)