

# Kamloops Air Quality Roundtable

Meeting Summary as at October 19, 2021

**Location:** Online meeting via Zoom

**Meeting Date:** October 5, 2021, 9:00AM to 12:00PM

## Present

Greg Baytalan, Interior Health

Daniel Crossingham, New Gold (to 11:00AM)

Kristin Dangelmaier, Domtar (to 11:00AM)

Jaimi Garbutt, City of Kamloops (Sustainability Services)

Fiona Goorman, First Nations Health Authority

Gavin King, Ministry of Environment and Climate Change Strategy

Sarah Martin, Thompson Rivers University (Office of Sustainability and Environment)

Wayne Mayall, Lafarge-Holcim

Melissa McGarry, School District 73

Gina Morris, Kamloops Moms for Clean Air

Patrick O'Brien, New Gold

Mike Simpson, Fraser Basin Council (FBC) (facilitator, recorder)

Robert Wielgoz, Thompson Rivers University (Education)

## Guests

Annie Seagram, Ministry of Environment and Climate Change Strategy

Kirsten Wourms, City of Kamloops (to 10:30AM)

## 1. Welcome, Introductions, Review Agenda and Objectives

Mike Simpson welcomed everyone, Secwepemc territory was acknowledged, and introductions were made. The agenda was approved as presented. As there were numerous new participants, the terms of reference were quickly reviewed to provide an overview of the KAQR. It was noted that all material including past meeting summaries and presentation material are at [www.kamloopsairquality.ca](http://www.kamloopsairquality.ca)

## 2. Previous Meeting Summaries

The meeting summary from May 20, 2021 was approved. Old action items from the previous meeting summary were reviewed (see Action Items at end of this meeting summary).

## 3. Comparison of 2021 Air Quality with Past Years of Wildfire Smoke

Annie Seagram is the Air Quality Meteorologist with Ministry of Environment and Climate Change Strategy in Surrey, BC. She has been doing some preliminary analysis of various data sets comparing the wildfire smoke in 2017 to 2021. Annie presented a comparison of PM2.5 data, number of smoky skies bulletins issued and number of air quality advisories issued for Kamloops and other locations in the Interior. As the PM2.5 data is not validated, the presentation cannot be shared at this point.

Questions and discussion raised the following points:

- Purple air (PA) monitor data is used by MOECCS to inform smoky skies bulletins, but not for air quality advisories. Concern was noted with using data from these sources for anything quantitative or where accuracy is needed, but there is value as a qualitative comparison. [See KAQR Statement on Purple Air Network, 5oct17 for more information.]
- The possibility of expanding the network of PA monitors to have them on publicly accessible land in the Kamloops airshed was discussed, but it was agreed there is a sufficient existing network of monitors in the airshed that MOECCS staff already monitor data from
- Environment and Climate Change Canada (ECCC) are working to install PA monitors in First Nations communities, to broaden the geographic distribution of monitoring
- Two of the smoke models that Annie watches are: the federal FireWork model [https://weather.gc.ca/firework/index\\_e.html](https://weather.gc.ca/firework/index_e.html) (chemistry based) and UBC's [www.firesmoke.ca](http://www.firesmoke.ca) (dispersion based)
- Challenges with the federal Air Quality Health Index (AQHI) from a worker-standpoint, and the three hour rolling average which presents as a lag in time for actual smoke conditions. Annie and Gavin noted that AQHI is not predictive, but there are some communication methods that are being explored and continuously worked on.

Once the data is validated, there was interest expressed in receiving the presentation file. Annie is open to follow-up questions, reach her at [annie.seagram@gov.bc.ca](mailto:annie.seagram@gov.bc.ca)

#### **4. City of Kamloops Community Wildfire Protection Plan**

Kirsten Wourms, Natural Resources Crew Leader with City of Kamloops, gave a presentation on their Community Wildfire Protection Plan (CWPP) to raise awareness that a plan exists and what has been done over the past decades for reducing wildfire risk. Kirsten's presentation will be posted online when it is received. Also see the details of the CWPP and associated maps on the City's website [here](#).

Questions and discussion raised the following points:

- Don't clear vegetation in green spaces behind your home
- Kamloops Fire Rescue does wildfire assessments for homes, call 250-828-3461 to arrange
- The value of sprinklers on homes that homeowners was discussed: they are of limited value and can have the negative impact of drawing down water supply for firefighters to access; and KFR crews have much more effective sprinkler systems that attach to hydrants during a fire

Kirsten is open to follow-up questions, reach her at [kwourms@kamloops.ca](mailto:kwourms@kamloops.ca)

#### **5. Information Sharing**

*New Gold* – Daniel noted that they are doing a study with Natural Resources Canada to understand the heat output of battery powered equipment underground. Moving to battery powered equipment from diesel will result in less particulate matter and less heat for underground workers.

Patrick introduced himself as an environmental scientist, and his role will focus on receptor-based air monitoring in real time including tracking emissions both underground and ambient conditions.

*Domtar* – Kristin reported that Domtar operations will retain their name and branding, despite the planned purchase by Paper Excellence which is anticipated to complete by December 2021. She noted

that they are investing millions of dollars in greenhouse gas reduction projects, including upgrades to their power boilers in 2021 and 2022. This also increased the reliability of equipment that consumes biomass. She also noted that 2021 had the lowest ever complaints about odour, perhaps because people were indoors due to wildfire smoke, or perhaps because the wildfire smoke was so bad.

*MOECCS* – Gavin noted he is involved with New Gold on their projects, as well as Kirsten and pile burning under the CWPP. He noted that the contractors doing the CWPP pile burning are good, and generally comply with venting conditions and know when it is good to burn or not. Internally, there are a lot of initiatives he is managing which is taking away his time to complete the air quality report. They are in the process of hiring two more air quality meteorologists, one in Smithers and another with an option to be in Prince George, Williams Lake or Kamloops.

Annie noted that a new high-quality monitor is being installed in Merritt for the first time in 20 years, siting of its location is underway. She added that Peter Jackson of UNBC is taking suggestions for how to improve the Purple Air Network site.

*First Nations Health Authority* – Fiona reported her manager Casey Neathway will connect with Gavin about the air quality grant for rural and remote communities program. She noted that FNHA had a busy summer between wildfire smoke, COVID and mental health issues. FNHA is also providing air filters for First Nations residents with pre-existing conditions where there is no clean air shelter in the community. She tested a homemade box air filter and measured results with a PM-meter, and the results were satisfactory. It was suggested to watch risk of heat buildup and fire risk. [Post-meeting, Greg circulated a study on this [here](#).]

*City of Kamloops* – Jaimi noted that the woodstove exchange program is fully subscribed, with about half a dozen applications to be submitted to complete the program. Most applicants have switched to natural gas and five to electric sources of heat. The scrap-it program (just a rebate to remove an existing woodstove) has limited success, as old woodstoves are too heavy or difficult to remove from homes. Jaimi has applied for funding to continue the woodstove exchange program and noted that Thompson-Nicola Regional District is exploring having a program too. The Province and the City have increased the incentive for heat pumps to encourage people to switch to heat pumps, this aligns with the Community Climate Action Plan. The City has also increased the incentive for electric appliances for the 2022 program (if successful with the funding).

*Interior Health* – Greg noted that this will be his last meeting, as his responsibilities within Interior Health are shifting primarily to small drinking water systems on longstanding boil advisory, and maintaining the radon file. Selena Russell will replace Greg at this roundtable. He noted that IH dealt with six “biggies” this summer: heat, drought, wildfires, smoke, COVID-19 and opioids. More Purple Air monitors have been spread around the BC Interior, thanks to Sarah Henderson at BC Centre for Disease Control and Corinne Schiller of Environment and Climate Change Canada. Thanks were expressed to Greg for his contributions to the KAQR since its inception in 2015. Greg acknowledged the positive step forward the establishment of the KAQR has been for Kamloops, a significant industrialized city within the Southern Interior.

On the topic of radon, Greg reminded folks to order your long-term radon detector from [www.radonaware.ca](http://www.radonaware.ca) and deploy for 91 days during the cold season for \$30 including laboratory analysis.

Also on the topic of radon, Mike received an email from BC Lung Association looking to engage people in homes built in Kamloops since 2015 in a radon study. It will be circulated with this meeting summary.

*School District 73* – Melissa noted that she is coordinating radon detector awareness, there are free monitors for residents in the North Thompson including Barriere, Vavenby, Blue River and they are looking to coordinate volunteers and drop off locations.

*Thompson Rivers University* – Sarah noted that her work continues with balancing COVID and wildfire smoke challenges on campus. Rob introduced himself and his interest in providing STEM (science, technology, engineering and math) teacher candidates with high-quality, real life data to create curriculum material and engage students. Gavin noted that MOECCS can provide data. Mike suggested that he would be welcome to participate in the Education Subcommittee, and that he would circulate the ideas and actions generated pre-COVID in 2019.

## 6. Financial Status

For the year beginning April 1, 2021, the following commitments have been made, with thanks:

- New Gold \$2000
- TRU \$1000
- KGHM \$1000
- Domtar \$1500
- City of Kamloops - \$1000

These funds allow FBC to convene meetings and maintain a website at [www.kamloopsairquality.ca](http://www.kamloopsairquality.ca)

## 7. Next Steps

Future KAQR meeting dates and draft agendas

- **January 2022** – Mike to seek a date a few weeks in advance

Future presentation opportunities

- Shelter in place concept, clean air refuges for Kamloops (evacuation, residents at risk)
- New Gold presentation on air quality
- TRU research chair in Predictive Services, Emergency Management and Fire Science
- Puget Sound Clean Air Agency?

Future field tour opportunities (when able to):

- Air station – federal station downtown
- City – landfill, sewage treatment plant (second choice)
- Stations being built at MOECCS – look at before shipped out
- Tolko – gasifier; veneer slicer; driers; presses; new cyclo-filter
- Pellet plant at Lavington (longer drive)
- SD73 Electric school bus

## List of Action Items

| Task  | Responsibility   | Timing              |
|---|--|---------------------|
| <b>Education Subcommittee tasks:</b> <ul style="list-style-type: none"> <li>▪ Follow up on action items from May 21, 2019 summary</li> <li>▪ Gina, Ralph and Kristin to prepare a general presentation on air quality for a layperson audience</li> <li>▪ Gina to review curriculum material as her time, capacity and interest allows</li> <li>▪ Connect with TRU's Eureka (summer science camp)</li> <li>▪ Connect with Big Little Science Centre, about including information on air quality aimed at various audiences</li> </ul> | Mike, Gina, Ralph, Melissa, Jim, Kristin, Jaimi Garbutt, Rob Wielgoz | Ongoing             |
| Send <b>feedback about the Purple Air Network</b> to Annie Seagram ( <a href="mailto:annie.seagram@gov.bc.ca">annie.seagram@gov.bc.ca</a> ) to pass on to Peter Jackson of UNBC who manages it  | Everyone   | Ongoing             |
| Explore whether data from the <b>Purple Air monitors being installed in First Nation communities</b> in the Kamloops airshed will be available online   | Fiona  | Before next meeting |
| Share the information about the <b>BC Lung radon study for homes built since 2015</b> with friends, family and colleagues   | Everyone   | Ongoing             |
| <b>STANDING ITEMS</b>   |  |                     |
| Ask Kristin (Domtar) if you need a supply of <b>wood ash</b>  | Everyone   | Ongoing             |
| Follow up with Jaimi if you want stickers/info on <b>idling reduction</b>   | Jaimi  | Ongoing             |
| Apply for <b>grants</b> (if needed)   | Gina   | As needed           |
| <b>Talk</b> to each other, <b>share</b> resources, <b>collaborate</b> between meetings  | Everyone   | Ongoing             |