

Kamloops Air Quality Roundtable

Meeting Summary as at April 30, 2019

Location: Henry Grube Education Centre, Kamloops

Meeting Date: February 28, 2019, 9:05AM to 12:00PM

Present

Ralph Adams, Ministry of Environment and Climate Change Strategy (MOECCS)

Greg Baytalan, Interior Health Authority

Tiffany Cobb, Domtar

Daniel Crossingham, New Gold

Jaimi Garbutt, City of Kamloops (Sustainability) (to 10:25AM)

Jim Gudjonson, Thompson Rivers University (to 11:40AM)

Emily Lomas, City of Kamloops (Environmental Services)

Nicole MacCulloch, KGHM Ajax Mine

Melissa McGarry, School District 73 (SD73)

Gina Morris, Kamloops Moms for Clean Air (KMFA)

Casey Neathway, First Nations Health Authority

Raynell Ortega, Tk'emlups te Secwepemc

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

Aaron Wiebe, Thompson Rivers University

1. Welcome, Introductions, Review Agenda and Objectives

Mike Simpson welcomed everyone, Secwepemc territory was acknowledged, and introductions were made around the room. The agenda was approved as presented. Regrets were noted from TRU Education (Susan Lidster). Melissa was thanked for arranging meeting space.

2. Previous Meeting Summaries

Meeting summary from October 29, 2018 was approved.

Old action items from the previous meeting summary were reviewed. Many are on today's agenda; those complete have been removed; those not complete will be carried forward (see end of this summary):

- No movement on the industrial tax incentive bylaw that was supported by those present at the January meeting; elections at Tk'emlups te Secwepemc are complete; Mike and Raynell will follow up with the actions

3. Levoglucosan

Ralph Adams gave a presentation on levoglucosan, and two recent papers that studied it and the connections to health impacts. Levoglucosan is a compound produced when biomass is burned. It is not a pollutant of concern, its significance is that it can be used as a marker to indicate if fine particulate matter (PM2.5) comes from the burning of biomass. Presentation to be circulated at a later date.

Key take-aways were as follows: industrial or large-scale biomass burners generally produce less emissions and PM2.5 than woodstoves since burning is more at higher temperatures and

technology is better; woodstoves should meet the best possible standards or higher; need to educate people on how to operate woodstoves in the most efficient operational manner and to use properly cured fuels; generally smaller communities have higher proportion of wood burning; that in Kamloops wood smoke is a local problem, but not an airshed-scale problem.

The discussion that followed raised the need for TNRD to be at this table, since there is likely proportionally more wood stove use outside of the city boundary; that these studies provide a good education opportunity since it's local data; and the challenge of addressing use of wood for heating in heavily built up environments in areas with periods of poor air dispersion in winter, compounded by the arguments for and against carbon emissions, the fact that wood is a renewable resource, compared to natural gas which is relatively inexpensive and clean to burn yet a non-renewable fossil fuel.

4. Educational Resources

Gina Morris presented on educational resources available at School District 73's Henry Grube Education Centre for teachers, and resources that KMFCFA have developed.

SD73 resources:

- Resources developed by TRU teacher (B.Ed.) candidate Paul Heron
 - Guide to teaching about air quality in Kamloops
 - Teaching unit on air quality
 - Large scale hair demonstrating size of PM10 and PM2.5
 - Posters with information
- Air pollution word search
- Clean air bingo
- Story of Great London smog
- Purple Air monitor in a plastic casing with a worksheet for experiments (was at Big Little Science Centre, will soon be made available at SD73)

Kamloops Moms for Clean Air resources

- 1 hour presentation available, aimed to be interactive, for grade 2, grade 5 levels
- Stinky car, whiteboard, parking lot, getting kids to draw idling exhaust
- Handouts - what kids can do, pledge sheets, opportunities to educate their parents, raising awareness of saving money, display pledge forms in hall
- Demonstration - fan, lights off, flour sifter from top of ladder to demonstrate dispersion of the flour by the fan in air
- Cups, milk, pepper water, paper filter experiment
- True/false myth buster game
- Breathing with a straw - demonstrates breathing difficulty

Gina will be talking to TRU teacher candidates in early March about curriculum material.

Susan Lidster of TRU Education gave her regrets that she couldn't attend today, but agreed to help out in any way, and welcomed any follow up questions, ideas or suggestions - contact her at slidster@tru.ca . Mike reminded participants that in October, Susan noted "...that she coordinates the 'Mind the Gap' program, which matches TRU faculty with teachers with up to \$2000 in grant funding to help close the gaps between teachers, desired curriculum material and faculty. Susan noted there are also opportunities to bring other actors (industry, interest groups) onto teams to develop material."

Discussion focused on what the education needs are, what connections can be made with teacher candidates, and how to utilize the Mind the Gap grants. Ideas were as follows:

- Melissa suggested engaging a particular SD73 principal with a science background to promote air quality projects in science fairs (grade 4 to grade 8 mostly, but up to grade 12). ACTION - Melissa to connect us with this principal
- Ralph suggested that low cost sensors are becoming more reliable; Kamloops Makers are working on developing them for various uses (indoor/outdoor, one attached to a bus, one for a stationary site)
- City has educational resources and opportunities; talk to Jaimi Garbutt. Balloon to attach to back of a car as a visual for idling
- High school opportunities or needs - seems like there's lots of elementary opportunities and materials, what about high school curriculum material that is more advanced?
- Ages - different delivery for younger, middle kids, older kids. Define what the delivery base looks like; what the project base looks like
- Explore how high school students can connect with elementary students
- How do we connect with teachers? Who's responsible for science curriculum?
- Jim - on TRU campus; never have enough horsepower - utilize sustainability ambassador program; seek to hire someone to build these educational packages; develop material and hire someone for a short term contract to deliver to schools
- Look at other resources that exist

It was agreed to create an Education Subcommittee:

- Subcommittee to consist of Gina, Ralph, Melissa, Jim, Kristin, Jaimi Garbutt (suggested) and supported by Mike
- Key task is to look at existing educational resources, identify gaps and opportunities
- The subcommittee can further define the scope (e.g., curriculum material, what gets developed by TRU teacher candidates, public education material)
- Subcommittee can't act unilaterally; report back at a future Roundtable meeting.

5. Information Sharing

T'kemlups te Secwepemc - Raynell noted that burning season is coming up for the month of April, usually focused on grass stubble and some yard waste (not garbage, not fruit tree trimmings). They are working on infrastructure, road improvements at base of Sun Rivers to eliminate congestion at "rush hour" to reduce idling. It was suggested to consider coordination of pick-up of yard waste and transporting to the City facility at Cinnamon Ridge. City staff also inquired about what gets collected at T'kemlups landfill and opportunities to share ideas with the City solid waste management staff.

City of Kamloops - Emily noted that the Green Living Expo coming up on Saturday May 11; registration is closing soon, and that fees are waived for non-profit groups. The technical report on the Airshed Management Plan progress report is complete in draft and will go to Council for review; Emily will check with Glen if it can be distributed to this group. City will ask TNRD to participate in woodstove exchange program.

MOECCS - Ralph noted that updates for 2018 air quality report are now complete. Within MOECCS, there is a change in management in clean air group; unclear if reorganization will take place; changes how meetings are done. Federal process underway to set up boiler status for space heating, it will likely follow the pattern established in Ontario. The new version of the Open Burning Smoke Control Regulation (OBSCR) was supposed to be in effect for spring burning season; it is unsure if it will be in place for this fall's burning season. On a personal note, Ralph is retiring from MOECCS in January 2020. A replacement is being hired, and hopefully his replacement will be present at the next meeting. He is planning to stay active in air quality and citizen science in Merritt, Kamloops, Quesnel and Williams Lake.

New Gold - Daniel advised of the need to set a date for the tour, ideally in late April or early May; Mike will follow up with Sam Numsen and send out a doodle poll next week. Diesel testing program initiated underground; testing the vehicles to get baseline of emissions for each vehicle, identify problems, and develop a pro-active maintenance program.

Thompson Rivers University - Jim reported that there is not much progress on wood biomass project, they are still assessing the need and are in communication with UNBC and UBC that have biomass systems on their campuses. TRU is committed to not use natural gas anymore; using electricity for new buildings, and trying to electrify campus building by building. This is aimed at greenhouse gas emission reduction. Solar is beneficial, but not sufficient for heating (would only provide 5% of heating load). Mobile emissions for CO₂ and air quality, reduction in emissions of 30% over last few years. Use of transit to and from campus has increased over the last few years from 90 000 trips/month to 170 000 trips/month. TRU is transitioning its fleet to hybrid and electric as much as possible. Aaron added that TRU is exploring creative parking pass options, enabling partial year use in winter and encouraging cycling in nicer weather. David Suzuki is coming to TRU on Friday March 8 for a film on climate change.

Interior Health Authority - Greg participated in an Environmental Protection Agency (US) indoor filter webinar about 2 weeks ago, there is another one on March 21, he will provide link to Mike to distribute. National Research Council of Canada is doing research on wildfire smoke filtration in acute care facilities from BC to Manitoba; Royal Inland Hospital in Kamloops is currently one of the hospitals and it depends on coordinating with building maintenance and whether there are wildfires in 2019. The 100 Kit challenge for Radon has been launched; see <https://takeactiononradon.ca/100-radon-test-kit-challenge/> - only Golden and Salmon Arm participated last year from the southern Interior. Greg can help with the application to help word it to make it likely successful.

Domtar - Tiffany noted that Domtar is looking at ways to reduce odour emissions and to prevent any venting releases. Ralph has data, but they haven't learned anything new. There are ongoing complaints about odour.

First Nations Health Authority - Casey advised that they are planning around indoor air quality for wildfire smoke mitigation this year, how to provide HEPA filters to communities, provide community level clean air shelters. There is ongoing radon detector work.

School District 73 - Melissa noted that radon testing is done annually in schools in Barriere and Clearwater, and that some mitigation work has been done in the past.

6. Next Steps

It was agreed to not have a booth in the Green Living Expo on May 11, and to not do anything for Clean Air Day in early June, mainly for the reason that the Kamloops Air Quality Roundtable doesn't have any specific material to present. It was an option to explore having a simple handout about the roundtable at the City's booth at the Green Living Expo.

Future meeting dates and draft agendas

- **Late April/early May with New Gold/New Afton mine tour**
 - Mike to seek a date ASAP (see doodle poll in email)
 - 2018 Air Quality presentation
- Fall meeting - to be determined
- Winter 2020 meeting - it was suggested to coordinate around webinar of the BC Lung annual conference, a webinar can be purchased for \$125 which can be shown to a large group

List of Action Items

Task	Who's responsible	Timing
Follow up with Tk'emlups te Secwepemc and City of Kamloops on next steps for industrial tax incentive bylaw ; Glen suggested to connect with him and other city staff as well before any further action is taken	Mike, Raynell	Before next meeting
Follow up with Kristin if you need a supply of wood ash	Everyone	Ongoing
Share plans for the proposed wood biomass system at TRU, including fibre requirements, air quality emissions, and more	Jim Gudjonson or Aaron Wiebe	At future meetings
Follow up with Glen Cheetham at City regarding public engagement, wood boiler bylaw issue	Jim, Aaron	Ongoing
Seek date for New Gold tour, next meeting (late April, early May)	Mike	Early March
Follow up with Glen, Josie about some material on KAQR at the City booth at Green Living Expo May 11	Mike	ASAP
Connect SD73 principal with Mike	Melissa	ASAP
Follow up with TNRD about interest in participating in this roundtable, and the woodstove exchange program	Emily	Before next meeting
Apply for grants (if needed)	Gina	As needed, when suitable grants are identified
Talk to each other, share resources, collaborate between meetings	Everyone	Ongoing