

MINUTES FOR AQC MEETING

DECEMBER 12th, 2019, 2pm
ACRD Board Room

Present: Dave Jarrett (Community at large)
Anna Lewis (Chair)
Gary Swann (Agricultural Community member)
Stephanie Bruvall (Island Health)
Earle Plain (MOE)
Diane Bodnar (ACRD electoral director)
Jade Yehia (Island Health) via phone
Ashley Popovich (Catalyst Paper)
Patty Edwards (MLA's Office) 2:08
Mike Owens (Fire Department) 2:16
Rosemarie Buchanan (SD70) 2:40

Regrets: Judy Carlson (Community at large)
Larry Cross (Catalyst Paper)
Karen Larsen (FNHA)
Ron Corbeil (City of PA)

Guests: Keith Wyton (AAQS)
David McCormick (PAPA) left at 3:10

Meeting called to order at 2:04

1. WELCOME

-acknowledgement of the traditional territories
-roundtable of introductions

2. APPROVAL OF AGENDA

Earle Plain moved to adopt agenda as presented. Dave Jarrett seconded. All in favour.

APPROVAL OF MINUTES – November 7th, 2019

Gary Swann moved to adopt minutes as presented. Stephanie Bruvall seconded. All in favour.

3. PRESENTATION: Dr. Erik Krogh on the Vancouver Island University Pilot Mapping Project

This project was conducted over the winter of 2018/summer 2019 and was a pilot project in which the Vancouver Island University mobile lab, equipped with two mass spectrometers conducted 10 samples days on a predetermined route to look at air quality over space and time in the Alberni Valley. Other objectives included: looking at the association between particulate matter and volatile organic and promoting public awareness and education (several people where curious as to what the van doing and would get a tour and talk about air quality as well as VIU gave a public presentation in March of 2019). One of the intents of the project was to provide information for decision makers and inform policy to promote clean air.

The van has a unique constellation of instrumentation onboard with the mass spectrometers. Volatile organic compounds (VOCs) can be natural or anthropogenic and VIU examined what is present, at what concentrations, where they are coming from, and how much does each source contribute. From a human health standpoint, Particulate Matter (PM)_{2.5} is important as are VOCs. VOCs often interact with other pollutants to interact with secondary pollutants and create new problems. Ground level ozone, nitrogen dioxide and PM_{2.5} can be secondary pollutants which are primary contributors to the Air Quality Health Index.

General observations:

- PM_{2.5} values were higher in winter samplings. More variability in the wintertime sampling and could be challenging as wanting dry days for sampling purposes.
- Ozone was higher than expected. Could be something to consider monitoring in the future as could potentially be an issue.
- Greenhouse gas data: summer distributions are biogenic. Winter was higher due to poor venting.
- Methane hotspots: wastewater treatment plant, landfill
- Carbon dioxide: traffic corridor, Catalyst (these numbers were not high but should be considered when looking at greenhouse gas and climate change).
- Methane: lower levels/concentrations in the winter. Due to microbial activities.
- Aug. 15th 3 forest fires in the region. Could visually see and reflected in the data.
- Wintertime PM_{2.5} concentrations driven by local point sources. I.e. woodstoves.
- Some of the VOCs observed:
 - Toluene. Fairly common air pollutant, gas. High through transport corridors, gas stations, downtown areas. Fugitive sources and incomplete combustion. Rural areas had much lower levels. Still very low percentages.
 - Methyl mercaptan.
 - Dimethyl sulfide.
- Semi volatile organics so evaporate in the summer. Organic decomposition is higher as well in the summer.
- Marine emission were difficult to measure as typically a good wind. It does appear there are specific emissions coming from the marine environments.
- Forest and green spaces and trees are super important for air quality
- City lagoon. Methane thiol aka methal mercaptan. Some low levels. Methane levels are elevated downwind. On other side fresh air, wind coming off the inlet. Methane can be produced biogenically through bogs, wetlands, etc.
- Ongoing challenge regarding the source of air contaminants. I.e. lagoon vs. pulp mill. Could be a mixture. Perhaps there could be a way to correlate study with odour complaints? Catalyst does get odour complaints.

Recommendations:

- Transportation corridors. Something to keep an eye on as ozone levels were lower than recommended guidelines but higher than anticipated.
- Low cost sensors. Integrated sensor networks. Issues regarding quality control and can get some interesting data that way.
- PM_{2.5} continues to be an issue due to wildfires and winter heating
- dominant VOC sources are related to forest industry and transportation
- Generally Port Alberni air quality was good. Areas to keep an eye on are PM_{2.5} and ozone.

Earle: It appears that a number of the sampling days took place during smoky conditions due to wildfire impacts on the Island; it is well known that PM, NOx, VOCs are all elevated in wildfire smoke plumes. This leads to elevated O3 over the area under hot sunny conditions (which we had) - we have measured elevated O3 as a result of WF smoke in many communities across the province.

4. ACRD RESPONSE TO AAQS/AQC LETTER

- Jenny Brunn to speak to ACRD's response to letter re. reduction of yard waste diameter
- Jenny was sick and postponed response until next meeting.

Jade suggesting looking into the "Investing in Canada Infrastructure Program. This is a provincial grant and Jade had a conversation with them around the possibility of getting a chipper funded. A region is permitted one grant so if the ACRD has not previously applied they could do so with a letter of support from Island Health. Anna will follow up with Jenny to see if this is a possibility.

<https://www2.gov.bc.ca/gov/content/transportation/funding-engagement-permits/funding-grants/investing-in-canada-infrastructure-program/green-infrastructure/environmental-quality>.

5. UPDATES

- **Woodstove Exchange**

- 16 tracking numbers for the woodstove exchanges have been issued and currently have 3 that are outstanding. Breakdown of exchanges is: 11 woodstoves to woodstove (2 outstanding); 5 woodstoves to cleaner burning appliances (1 outstanding).

- Anna checked into the Clean BC Better Homes website and ensure that the information listed was correct. The website takes you to the Ministry of Environments page on the woodstove exchange which lists the regions which run the program and then the associated coordinator. Appropriate name and contact info were listed. Also looked in the BC Hydro rebate program. They do have the link to the clean BC Better Homes on their page which is the closest thing to individual communities having links. In conversation with BC Hydro they are not interested in having to manage various community links.

- Have received of confirmation of funding for 2020 WSE. The \$15 000 amount awarded would be distributed as follows:

- \$ 10,000 to support exchange incentives, (there is flexibility here in terms of how funds are allocated, woodstove to woodstove vs. woodstove to alternate fuel source).
- \$ 1,000 for advertising the program, and
- \$ 4,000 for supporting program salary (split 40/60 between ACRD and AAQS).

Tracy and Anna will be reviewing all 2020 material (agreement with retailers, WSE brochure, etc.) next week and hope to launch program asap in January. Elena Rardon has agreed to write article when WSE 2020 is launched and then we will do a round of advertising mid-February. Anna will look into the cost for a weekly radio ad via the AAQS as they get a better price being a non-profit.

- **BC Lung Conference, February 11th, Vancouver**

- Keith Wyton, Bernadette Wyton and Anna Lewis will be attending conference in Vancouver.
- Theme of conference is: Environmental Justice of Air Quality in the Era of Citizen Science.
- Patty Edwards will be livestreaming conference in Port Alberni.

- **ACRD Bylaws**

- Nothing to report. Alex stated that planning staff had an unexpected workload with zoning and development applications over the last month.

- The Board of Directors was considering a list of strategic priorities yesterday and Alex reported that the staff recommendation is to continue to work through the open burning bylaws as a priority.

6. NEW BUSINESS

- **Review TOR for AQC**

- At the AGM of the AAQS it was brought up the desire to ensure that climate change is in the AQC TOR as well as identified as a priority in the airshed management strategy.

- suggested that under the goals and objectives portion of the TOR that it would read “To take seriously our responsibility for air quality within a regional, provincial, national and global context, including greenhouse gas emissions and climate change.”

- Stephanie suggested removing the (currently vacant) behind some of the stakeholders included.

Gary Swann made the motion to:

“Adopt and ratify the Air Quality Council Terms of Reference with the two noted changes”.

Mike Owens seconded. All in favour.

The TOR will be revisited in December 2021.

- **Cannabis and Air Quality**

- Diane is feeling frustrated that there are no answers regarding impact of cannabis production on air quality. As an electoral director she has several inquiries and complaints from residents that are upset with what is going on, lack of bylaw, etc.

- 2 technical reports have just come out of Colorado. Anna will forward to the AQC. The biggest takeaway from these reports is that there more research and data that needs to occur before conclusions can be determined regarding impact of cannabis on air quality.

- Dr. Erik Krogh via VIU mobile lab has had preliminary discussions with Metro Vancouver and large facility outside of Edmonton around potential projects.

- Erik identified the huge knowledge gap that currently exists. VOCs from cannabis will vary depending on strain, density, local topography, time of day, where the plant is in its growing cycle, molecular changes in a diurnal cycle. The research is evolving but it is primarily hypothetical until more research is done to provide definitive answers.

- **Air Quality Advisory**

- occurred Sunday Dec.1st and lifted Dec. 2nd

- Earle stated that the diurnal patterns actually suggested that in addition to wood stove emissions, open burning was occurring on Saturday. He suspects that the degraded conditions were a result of the combination of weather conditions and smoke from woodstoves and illegal open burning (unless it was backyard burning where the OBSCR doesn't apply). The week prior to advisory was good venting. On the Thursday the venting index forecasted poor/poor so all fires should have been out by Thursday night.

-Alberni Valley News contacted Anna and there wrote an online article, in which Anna was able to the promote the Woodstove Exchange.

Keith believes exceedance was directly related to some of the burning taking place in the valley, none of which should have occurred under OBSCR.

- **Lack of regard of venting index and OBSCR**

-Burning has been occurring frequently throughout the valley without regard for venting index or new OBSCR legislation. There seems to be an institutional inertia due to OBSCR legislation taking so long to adopt. How can the AQC facilitate a group project or raise the profile of this issue?

- Conversation with conservation officers (invite to our next meeting)

- RAPP line calls (no call back to people reporting)

- Importance of getting burning bylaws passed

- Could the Alberni, Cowichan, and Comox valley brainstorm with conservation officers and formulate a plan regarding how to bring a watch dog type group together

- Need to be proactive rather than reactive

- Issues with compliance. Would a group help close the gap and lack of communication?

- Could do a 3- or 4-week educational campaign October/November, prior to when all the burning begins. (I.e. How to utilize venting index and what it is and why it is important).

 - Venting index on the radio, similar to what Cowichan Valley has done.

- Smaller scale forestry operators can be problematic. Agriculture and land clearing are two other identified areas. Can we facilitate a meeting that encourages bidders in forestry to understand OBSCR legislation?

- Could we get information out to the public that is a visual, public example? Videos that went out around woodsmoke and tips for wood burners. Woodsmoke and your health. Anna to put link on webpage when updating. There is also a video that Earle and Sarah Waters just being finished in the Cowichan Valley.

7. NEXT MEETING

-Thursday, February 6th, 2pm, ACRD boardroom

Meeting adjourned 4:19