Fairbanks Air Quality Stakeholders Group  
Meeting Summary - October 17, 2018

The fifth meeting of the Air Quality Stakeholders Group was held on October 17, 2018, in the BP Design Theatre, 4th Floor UAF Engineering Building at the University of Alaska Fairbanks.

Meeting Agenda

8:00 am Coffee & tea
8:15 am Presentation/Q&A: Modeling of AQ Stakeholder recommendations
9:15 am Presentation/Q&A: Online survey straw poll results
10:00 am Break
10:15 am Discussion: Home Heating Initiative impacts
10:45 am Discussion: Lawsuit against EPA regarding SIP submission impact
11:00 am Straw polling: AQ control measures forwarded from:
   Energy Efficiency Work Group
   Point Sources Work Group
   Compliance & Enforcement Work Group
12:00 pm Lunch
1:00 pm Straw polling (continued): AQ control measures
2:00 pm Discussion: Education and messaging regarding Fairbanks air quality
3:00 pm Break
3:15 pm Next steps
4:30 pm November meeting plan
5:00 pm Adjourn

Presentation/Q&A: Modeling of AQ Stakeholder recommendations (Tom Carlson & Deanna Huff)

Tom Carlson of Sierra Research/Trinity Consultants presented the results of a modeling run based on the control measures that received at least 50% approval in straw polling at the September Stakeholder Group meeting. Each control measure was evaluated for emission reduction potential based on assumptions about timing, implementation, and compliance. The run included 13 control measures. Compared with baseline (pre-control) PM2.5 inventory of 4.14 tons per day, reductions by 2024 were modeled to be 1.95 tons/day after accounting for overlap. Assumptions for each measure are included in the presentation.

Deanna Huff of the Alaska Department of Conservation gave a detailed presentation on the air quality modeling, the emissions inventory and the process behind the Stakeholder Group model run. The CMAQ (community multiscale air quality) Model is a tool used to show attainment by modeling the representative emissions and meteorology. Monitor locations are used to verify the model and known concentrations, but an attainment demonstration has to be the entire area or all the grid cells in the model. The Stakeholders Group Model Run demonstrated significant progress toward attainment in North Pole, and Fairbanks area monitors showing attainment concentrations. The next step in Fairbanks is to look at maximum impact sites, add additional control measures and model an extension year out to 2024. Both presentations are available on the Stakeholders Group web page (http://fnsb.us/transportation/Pages/stakeholders.aspx).
Presentation/Q&A: Online survey straw poll results (Jana Peirce)

Jana Peirce presented the results of the online straw poll Stakeholders took between the September and October meetings on 8 additional control measures that Stakeholders had not been polled on by the full group. Survey results are available under the Meeting 5 heading on the Stakeholders Group web page.

Discussion: Home Heating Initiative impacts (DEC)

Denise Koch and Cindy Heil of Alaska DEC’s Division of Air Quality provided an update and addressed stakeholder questions about changes in the curtailment and enforcement program in the FNSB PM2.5 nonattainment area following passage of Proposition 4, the Home Heating voter initiative in Fairbanks on Oct. 4, which transferred regulatory authority from the borough to the Alaska DEC. The agency has some short-term plans and vision, which is partially triage until more long-term planning can be done. Many impacts of the program will stay the same, including using the same modeling program. As of October 26 the local compliance piece is transferred to the state, but they will not have additional staff or resources. They will still have air alerts. The stakeholder process needs to continue with recommendations. The submission of the SIP (state implementation plan) is being held up for this process. The work the Stakeholder Group is doing is critical in formulating what controls DEC puts in our SIP. It will be a complex process transferring from borough to the State but they knew this was a possibility and they will continue to move forward toward reaching attainment.

Control Measure Straw Polling and Discussion (Brian Rogers)

Stakeholders used Instant Insight audience response technology (“clickers”) for preliminary straw polling on additional control measures suggested by the Energy Efficiency Work Group, Point Sources Work Group, and Compliance & Enforcement Work Group. Bound by the federal regulations in the Clean Air Act, the State must adopt or amend EVERY control measure implemented by another nonattainment area in the U.S. unless it can be proven to be economically or technically infeasible or the State can show that there are already measures in place that are equally stringent.

Because the bar to prove economic or technical infeasibility is very high, most of the group’s work has been to look for ways to make measures less costly and onerous for the community than the versions adopted elsewhere (to Fairbanks size them), to add or preserve positive incentives to participate in the community’s attainment efforts (carrots as well as sticks), and to recommend the measures most likely to help the borough reach attainment by 2024 so the community can be spared the much more expensive and onerous consequences of failing to do that. Polling results are included at the end of this summary.

Solid Fuel Survey

Everyone in the room was invited to take the solid fuel survey using the audience response keypads. The survey was developed for the Clear the Air conference in September in order to learn how people hear about and respond to alerts, how they would prefer to hear about them, as well as how they buy and harvest wood.
Discussion: Education and messaging regarding Fairbanks air quality

Stakeholders reviewed notes from the Education Work Group that met in July and August, then discussed additional ideas to encourage participation in community efforts to reach attainment and raise awareness of the health and regulatory consequences of failing to meet it. A range of ideas were suggested that can be polled at the next meeting for possible inclusion in the recommendations package.

- Develop a public relations strategy for communicating with media and the community about Fairbanks air quality issues that promotes a positive and proactive approach to public outreach and education
- Communicate the costs of PM2.5 non-attainment, including increased medical costs, loss of federal highway funds and construction jobs, increased electric costs for residents and businesses, and other health and societal costs
- Be clear that the goal is not to eliminate wood burning, but to preserve our ability to heat with wood by agreeing not to burn during inversions
- Seek additional venues and audiences for Dr. Owen Hanley’s talk on health impacts of PM2.5
- Develop other high-impact presentations that make the science and consequences of PM2.5 pollution clear and compelling, such as the FNSB’s demonstration of burning dry vs. wet wood
- Learn from behavioral economics and social marketing how to identify and address barriers to changing behaviors
- Partner with the Cooperative Extension to provide classes in responsible wood burning
- Coordinate with local schools to incorporate air quality messages and alerts in daily announcements
- Encourage teachers to include air quality science and health impacts in lesson plans
- Engage the public through events that are creative and entertaining, such as a contest for building the best modular dry wood storage

Next steps

All control and attainment measures that received preliminary support from at least two-thirds of Stakeholders present will be added to a final package of recommendations to be voted up or down at the November meeting. Additional modeling will be done to show how likely the package is to get the community to attainment, and a draft of the package will be sent to Stakeholders the week before the meeting. Stakeholders who think they will dissent should look up what they would like included. The State would like to have as much information and local input as possible. The group will either produce a consensus report or a two-thirds majority report based on their discussions, or no report if the group fails to advance any recommendations by a two-thirds majority. It was suggested that the interior delegation be invited to the group’s final meeting.

Adjourn
Air Quality Stakeholder Straw Polling Responses – October 17, 2018

Responses Received: 25

1. Should point sources pay an annual assessment to an offset fund in lieu of capital expenditure for BACT and M/S M as laid out in the ADEQ concepts document?
   - Yes: 96%
   - No: 4%

Responses Received: 25

2. Should the offset fund approach be required over a 5-year period to yield greater annual impacts in PM2.5 reduction than the ADEQ proposed BACT/M/S M plant modifications?
   - Yes: 80%
   - No: 18%

Responses Received: 25

3. Should the offset funds be used primarily to reduce the impacts of wood smoke and not on studies?
   - Yes: 42%
   - No: 58%

Responses Received: 25

4. Should the offset funds be used to support development of a proposal to the National Science Foundation and other potential funders to study Fairbanks and North Pole air quality issues?
   - Yes: 22%
   - No: 78%

Responses Received: 25

5. Should the offset funding amounts required of point sources increase each year until attainment is reached or BACT and M/S M requirements are triggered?
   - Yes: 43%
   - No: 57%

Responses Received: 24

6. Should we include: Increase funding for compliance enforcement (Public 3)
   - Yes: 100%
   - No: 0%

Responses Received: 25

7. Should we include: Citation authority for ADEQ (Public 2)
   - Yes: 96%
   - No: 4%

Responses Received: 25

8. Should we include: Use of infrared cameras to observe heat signature for solid-fuel heating device operations? (ADEQ 1)
   - Yes: 98%
   - No: 2%
Responses Received: 27

Should we require a home energy audit at time of home sale?
(Potential buyers should be aware of what the energy efficiency of the home is, just as they are required to be informed of other issues.)

1. Yes
2. No

Responses Received: 28

Should we require a home energy audit to qualify for an exemption from a curtailment program?

1. Yes
2. No

Responses Received: 28

Should we require a home be brought up to a minimum star rating at time of home sale?

1. Yes
2. No

Responses Received: 18

Assuming funding is available to qualify for an exemption from a curtailment program, should homes be required to...

1. Meet a minimum star rating (e.g. 3.0 or 3.5 stars)
2. Move up by 1 star if the home is lower than X stars based on an energy audit.

1. Yes
2. No