

Air Quality Symposium 2009

July 15, 16, and 17, 2009

Sponsored by the Fairbanks North Star Borough

Interactive Page (will be updated regularly)

The purpose of the symposium was to present the status of the Borough's efforts to solve our fine particulate (PM_{2.5}) problem and to engage the thoughtful resources of our community in an open discussion in order to assess the best approaches to near and long term solutions.

Click (or control/click) on the blue underlined links for the presentation document.

Wednesday, July 15th

8:00 – 9:00	Meet and Get Badges
	<i>Session 1 – Introduction</i> (Glenn Miller, FNSB Transportation Director)
	Welcome and Opening Remarks
	FNSB Mayor Jim Whitaker (no presentation available)
	DEC Commissioner Larry Hartig (no presentation available)
	Regulatory Overview (Krishna Viswanathan, EPA R10)
	DEC Perspective (Alice Edwards, Acting Director, Division of Air Quality, DEC)
	DOT Perspective (Ron King, Chief Surface Transportation Programs, ADOT)
	Logistics (Jim Conner, FNSB)
10:30 – 10:45	Break
	Timeline for Attainment (Jim Conner, FNSB)
	Historical View of AQ Plan Development (Richard Joy, Gordon Darby)
	Analytical Overview (Jim Conner, FNSB /Barbara Trost, ADEC)
12:00 – 1:30	Lunch
	<i>Session 2 – Health Effects</i>
	AQI and Wildfire Concentrations (Jim Conner, FNSB)
	Summary of Known Health Effects, (Lori Verbrugge, AHSS)
	Local Hospital Admissions/Air Quality Correlation (Rachel Kossover, AHSS)
2:30 – 5:00	<i>Session 3 – Monitoring Data</i>
	Overview (Barbara Trost, ADEC)
	Fixed Site Trends (Jim Conner, FNSB)
	Fixed Site Trends (Eric Dick, Ft. Wainwright)
	Fixed Site Trends (Phil Austin, HMH)
3:30 – 3:45	Break
	Mobile Monitoring (Frank DiGenova, Sierra Research)
	Chemical Speciation Trends (Bob Dulla, Sierra Research)
	Sulfate and Nitrate Source Contributions (Cathy Cahill, UAF)
5:00 – 5:30	Wrap-up (Jim Conner, FNSB)
6:30 – 8:00	Evening Session-Mayor, FNSB, ADEC, EPA, ADOT, AHSS, CCHRC
	Symposium Overview and Public Open Discussion (symposium objectives, key analytical challenges overview, health issues, control programs, municipal tax credit/incentive programs, energy/renewable energy)

Thursday, July 16th

8:00 – 8:30	Meet
	<i>Session 4 – Modeling</i>
	Fairbanks Modeling Overview (Rob Elleman, EPA R10)
	Inventory Development (Bob Dulla, Sierra Research)
	Mobile Source Assessment (Ron Johnson, UAF)
	Fairbanks Winter Meteorology/Exceedance Conditions (Jim Brader, NWS)
	SODAR Observations (Javier Fochesatto, UAF)
10:30 – 10:45	Break
	Fairbanks Principal Components Analyses (Robert Crawford, Sierra Research)
	Fairbanks Principal Components Analyses II (Excel presentation, R. Crawford)
	Grid-based Model (Nicole Mölders, UAF)
12:00 – 1:30	Lunch
	Grid-based Model - RARE (Rob Elleman, EPA R10)
	Grid-based Modeling - MM5 (Don Morton, UAF)
	Receptor Models – PMF & UNMIX (Bob Dulla, Sierra Research)
3:00 – 3:15	Break
	Receptor Models – CMB (Tony Ward, University of Montana)
	Receptor Models - STN (RKM Jayanty, RTI, Inc.)
4:00	<i>Session 5 – Key Analytical Challenges (Alice Edwards, DEC and Jay Turner, WUSTL)</i> <i>Modeler’s Panel discussion</i>
5:00 – 5:30	Wrap-up (Jim Conner, FNSB)

Friday, July 17th

8:00 – 8:30	Meet
	<i>Session 6 –What’s Next</i> (Jim Conner, FNSB)
	<i>Key Analytical Challenges and recap of outstanding issues – Work Still needed</i>
	Planning Schedule - regulatory milestones, studies, incentive and mitigation programs (Bob Dulla, Sierra)
	Monitoring Plans for the Upcoming Winter (Barbara Trost, DEC)
	Modeling – Weight of Evidence (estimated completion EPA/UAF) (Rob Elleman and Krishna Viswanathan, EPA R10)
10:30 – 10:45	Break
	DOT & AUTC Funding Opportunities (Billy Connor, AUTC/ Clint Adler, DOT)
	Education Programs
	John Davies, CCHRC
	John Crouch, HPBA, Woodstove Changeout Programs
11:30 – 12:00	Wrap up (Jim Conner, FNSB)
12:00 – 1:30	Lunch
1:30 – 4:00	<i>Informal Discussions/Planning</i>

See next page to view “Fairbanks Bowl Observation” pictures/movies links.

These pictures were taken from a ridge north of Fairbanks. They are taken every 5 minutes, and can be viewed as a “movie.” After opening a camera link, click and hold the lower right scroll arrow/slider to view “movie,” or use your mouse scroll wheel for more control.

[~Fairbanks Bowl Observation: January 2nd, 2009](#)

[~Fairbanks Bowl Observation: January 10th, 2009 right camera](#)

[~Fairbanks Bowl Observation: January 10th, 2009 left camera](#)

[~Fairbanks Bowl Observation: February 14th, 2009 clear day, slide 177, pallet boiler](#)

“This .kmz view file can be used with Google Earth to view PM2.5 concentrations (preliminary data) measured using a Mobile Measurement Platform in and around Fairbanks on December 29, 2008, beginning at 15:23 hours. Dot color shows concentration (bright green is <35 ug/m3, red and grey =>350 ug/m3), and dot size shows avg. particle size (range is ~0.02 – 0.4 microns). Clicking on each point shows latitude, longitude, (instantaneous) concentration in ug/m3, time (HH:MM:SS), particle mass median diameter, and elevation (ft asl). For more details and cautions, see: ‘Mobile Monitoring’ above in Session 3, by Frank Di Genova and Dulla.” (It looks like it prompts you to open/save it to your computer, then uses Google Earth to open it for viewing. The file name is: **Mobile_sniffer_study_run_12_29_08.kmz**):

[Frank DiGenova: Mobile Monitoring, .kmz file, 12-29-08](#)

For more information about these presentations, feel free to contact the Fairbanks North Star Borough Air Quality Division at 459-1312.