

**Air Quality Advisory Council
Minutes – April 6, 2010**

Members / Alternates Present: Beth Berlin, Bill Flanery, John Garberson, Jan Hoem, Patricia Hogan, Bert Chessin, Sue Spanke, Mark Loeffelbein, Tova Sardot, Katie Lane, George Hart

Staff Present: Mamie Colburn

1. John Garberson called the meeting to order.

2. Excused Absences Recognized. Jason Boeckel absent- effectively resigned. Dan Cottrell absent, Garon Smith absent.

3. Agenda was approved.

4. March minutes were approved.

5. No public comment on non agenda items.

6. Article Presentation. Bert presented the article: The Dirty Truth About the Air, printed in US News and World Report, April 2010. This two page article is an overview of the health risks associated with particulate pollution. One quote from the article which the council discussed was, “A difference of 10 micrograms per cubic meter increase the risk of dying from ischemic heart disease (narrowed arteries) by 18 percent, arrhythmia by 13 percent, and cardiac arrest by 21 percent.”

Jan will give next month’s article.

7. Peter Kolb: German Forest Practices and Use of Wood as Fuel. Dr. Peter Kolb works for MSU/UM forestry through the extension program. He reviewed management and cultural significance of forests in Germany, where he did his Fulbright. By comparing and contrasting forest management Germany and Montana we learned more about how forest management impacts the wood products and home heating industries.

Montana and Germany are a similar size but Germany has a little more forest land than we do. They get more rain to make the forests about twice as productive. Annual harvest in Montana is 400 million board feet, in Germany it is 12 Billion board feet. We cut and use a much lower percentage of our forests than they do in Germany. Forests there can be small and are more intensely managed. Forests there are a mosaic, anything over 5 diameters can be harvested, and log decks are abundant. Their goal is by 2020 to have 20-30 percent of their energy as bioenergy.

In an area the size of 3 western MT counties there were: 5 papermills, 60 small biomass facilities, and countless small sawmills. These facilities used wood from the forests in the areas AND imported wood from other areas of Europe for a total of 6 billion board feet of use. They are using wood products to replace an equivalent of 396 million gallons of heating oil per year.

Currently, one-third of the houses in Bavaria heat with wood from low value trees. Houses are built with concrete and have mass to hold heat once a fire is burned. Many houses have thermal mass built into the center fireplace and or use super efficient wood stoves. Cleaning and inspection of the stoves and chimneys is required at least a couple of times a year.

The goal to create efficient wood heat is correct “TOM” Technology, Operation, Maintenance. Technology and Maintenance are controlled by regulations/incentives and Operation is controlled through education. 98% of wood heat in Germany comes from home burning and only 2% from co-gen/biomass plants. Two efficient options are a masonry type stove that is only fired once or twice a day and thermal mass is stored in stone around the central chimney 2) down-draft fully automated wood furnace. Both of these create very little emission for the amount of heat they create.

We have millions of board feet of wood not being used right now in Montana because there is no market for it. In Germany incentives are in place for wood products and table, chairs, all kinds of items are made locally of wood and not imported plastic. Regulations are much more pervasive in Germany and wouldn't be appropriate to put all these in place in Montana.

Some of the information presented was from the study: Biomass Combustion in Europe Overview on Technologies and Regulations. NYSERDA, New York State Energy Research and Development Authority, April 2008. The council engaged in discussion with the speakers and members of the audience.

8. Staff Report. Meeting was running late, no report.

9. Public Comment. No public comment.

10. Announcements and New Business. Jan would like to email Mamie some dates for the woodstove committee to meet. Mamie will distribute these to the group and advertise as needed.

11. Meeting was adjourned. Next meeting is May 3, 2010.