

AQAC MINUTES

April 7, 2015

Members/alternates present: Sue Spanke, Ronni Flannery, Jan Hoem, Dave Atkins, John Garberson, Bert Chessin

Members/alternates absent: Beth Berlin, Bill Flanery, Guy Hanson, Ryan Leach, Kathy Tonnessen, John Ottman, Garon Smith

Staff: Sarah Coefield and Ben Schmidt

Public: Gary and Judy Matson

- 1. Jan Hoem called the meeting to order**
- 2. Excused absences recognized** – Beth Berlin, Bill Flanery, Guy Hanson, Ryan Leach, Kathy Tonnessen, John Ottman, and Garon Smith were excused.
- 3. Agenda approved.**
- 4. March minutes approved with typo corrections.**
- 5. Public comment on non-agenda items**

Gary Matson told the Council that the draft Environmental Impact Statement (EIS) for the Tongue River Railroad (TRR) is forecasted to be out by the end of April. He said the TRR scoping document has been out for a while and provides insight into what can be expected to be covered by the EIS. Gary said some of the main issues to look at will be traffic impacts, diesel fumes and climate change impacts that come from burning the coal shipped along the rail line. He said the Council has dealt with all of these issues in a previous letter about the terminals on the coast and can do so again for the TRR. Gary said the subcommittee that will be looking at the EIS could possibly meet before it comes out to look over the scoping document. He said that while Missoula may not have a climate change expert to give testimony to include in the letter, the Council subcommittee could look at documents from the Intergovernmental Panel on Climate Change (IPCC).

Jan Hoem said that if the EIS comes out sooner than expected, the committee should be prepared to meet before the next Council meeting. She also pointed out that there's a chance the EIS will cover all the Council would want to say, so they would only have to write a letter supporting the document. Jan said that if the EIS comes out before the next Council meeting, whatever the Council comes up with in their May meeting has to be ready to go to the Board without changes. She mentioned the letter the Council prepared for the board about the coal terminals on the coast and said that the council could use that as a model for this new letter.

Dave Atkins said that normally there should be a 90-day public comment period, so there should be ample time to write a letter.

Ronni Flannery said she would like to be added to the subcommittee and also that the subcommittee should wait to meet until the EIS comes out.

John Garberson told the group that the draft EIS for the Otter Creek mine has been postponed again because DEQ cited hundreds of deficiencies in Arch Coal's mine permit application.

6. Article Presentation

Dave Atkins presented the article "Health relevance of particles from wood comparison in comparison to diesel soot" from the 2007 European Biomass Conference and Exhibition. The article, by N. Klippel and T. Nussbaumer assesses the health relevance of particles resulting from varying combustion processes, including incomplete wood combustion, quasi-complete wood combustion and diesel combustion. The results show that diesel soot is more toxic to hamster lung tissue than soot from quasi-complete wood combustion, but less toxic than soot from incomplete wood combustion.

Sue Spanke said it was interesting that bad wood burning is worse than diesel. John Garberson asked if air quality staff had this toxicity information when they started working on the Seeley Lake air quality problems.

Ben Schmidt said that yes, this type of information has been out for a while. John said he think this type of information would help push Seeley in the right direction, but Ben told him that it's been found that health risks are a poor motivation for changing behavior.

John asked what the article is saying about wood smoke and cancer. Dave said that from a poorly operated stove, particulate matter would have similar carcinogenic effects to smoking and cooking over an open fire.

Dave said that the Missoula 2007 chemical mass balance study showed that woodstoves contribute more than 50 percent of Missoula's the winter particulate pollution. He said he thinks it would be worth a discussion to look at what and how we could work on changing out those old stoves – the current stove removal process takes a long time.

Jan Hoem said that the seriousness of the effects of wood smoke is clearer now than 20 years ago, and it's more of an urgent issue to remove existing woodstoves.

Dave said that right now, no one differentiates particulate matter based on chemical composition, and we should encourage DEQ and EPA to differentiate the health risks based on different chemical compositions.

John said there is a movement toward that abroad.

Ben said that it's a very complicated discussion. He said there are lots of political and technological ramifications to setting different standards based on particulate chemical composition. He said that the practicality of the effort runs into huge problems.

John Garberson will present at the next meeting.

7. Action Item: Resolution Supporting the Incorporation of the 2010 and 2014 Air Pollution Control Program Revisions into the SIP

Sarah Coefield told the group that the 2010 and 2014 Air Pollution Control Program revisions were not incorporated into Missoula's State Implementation Plan (SIP) because the revisions were largely driven by the 2006 changes to the National Ambient Air Quality Standard for PM2.5. The SIP, meanwhile, serves to make Missoula's rules for carbon monoxide and PM10 federally enforceable. The redesignation process for PM10 that MCCHD has been working on requires the Department to list all of its control measures for PM10. Because PM10 by definition includes all particles 10 microns in diameter and smaller, some PM10 control measures included in the redesignation request are recent revisions to the program that are targeted at PM2.5. In order to make the redesignation request easier for EPA to approve, Missoula needs to update the SIP to include the 2010 and 2014 rule revisions. Sarah explained that since all of the 2010 and 2014 rule revisions have already gone through the local and state adoption process, this is a largely procedural issue. She provided a resolution for the Council to approve that concurs that the Missoula City-County Air Pollution Control Program revisions that went into effect in 2010 and 2014 should be included into the Montana State Implementation Plan.

Dave Atkins made a motion to approve the resolution and Bert Chessin seconded the motion. The motion passed by unanimous voice vote.

8. History of Missoula's Air Quality Program – Ben Schmidt, MCCHD Air Quality Specialist.

Ben Schmidt gave a presentation to the group that outlined the history of air quality in Missoula and the development, major accomplishments and ongoing challenges of the Missoula Air Pollution Control Program.

John Garberson asked if other Montana counties can still take on or give up their air quality responsibilities. Ben said that yes, other counties can form or disband local air quality programs at their discretion.

Sue Spanke asked if counties get funding from the state if they create an air quality program. Ben said that they do, but it's not enough to run the program – the county needs to be able to fund most of it independently, which is why not many counties have an air program.

Dave Atkins asked if there has been a speciation study in Seeley Lake to identify the sources of particulate pollution. Ben said that there isn't a known purpose for that kind of study – the source of pollution in Seeley Lake is already known to be woodstoves and there isn't a good reason to throw money at that kind of study when the problem has already been identified.

9. Discussion – Industrial source permitting in Missoula.

At the January AQAC meeting, some members requested that the Council revisit the industrial permitting process because they are still concerned with the ability of stationary sources to obtain a permit for new equipment that is considered more polluting than the equipment that's being replaced (such as a wood-fired boiler

replacing a natural gas boiler). Ben Schmidt, air quality specialist with MCCHD attended the meeting to answer questions about Missoula's industrial air quality permitting process.

John Garberson expressed concern about the potential for something like the University of Montana's proposed boiler coming to Missoula. He said the department was required to permit the university's boiler even though it was going to produce more emissions than the system it was replacing. He said he feels like that's a loophole and he would like confirmation that it's a loophole as well as information on how we can change it.

Ben said he wouldn't call it a loophole. He said the Department has to treat everyone the same and that the Department pushed the university's permit application as far as we legally could by requiring lowest achievable emissions. He said the law doesn't look at what you're replacing – it only looks at what's coming in. It looks at whether or not equipment can meet emission standards and that it won't cause an area to violate the NAAQS.

Jan Hoem asked if the Department can add any more conditions to a permit. She was concerned about the university's proposed boiler's proximity to dorms.

Ben said the university did have to conduct modeling to examine any potential impacts near the proposed boiler. He said that modeling actually caught potential NOx emission exceedances from the existing natural gas boilers. Ben said that conditions or off-sets in permits get tricky. You can do offsets for Title V permits (large sources permitted by the state). He said offsets were attempted for subdivision developments and it was thrown out by the courts.

Sue Spanke pointed out that one of anything doesn't change the overall air pollution levels in town. However, the university's proposed boiler was the first, and people were afraid it was a precedent and more would move in. She said that the emission requirements for wood boilers and gas boilers are different – maybe the SIP could say we required the best achievable heating system.

Ben said that's legally very difficult. He said Missoula would have to prove why a rule that is that much more strict than state rules is necessary.

Sue said that stoves coming into Missoula have to meet a much higher standard than in other areas, so why not other sources?

Ben said that Missoula achieved that with the 2010 rules when we started requiring incoming industrial sources to meet Lowest Achievable Emissions Rate (LAER), which doesn't take cost of pollution equipment into account, instead of Best Achievable Control Technology (BACT), which does allow a facility to take cost into account when selecting equipment.

Sue asked why the emission requirements are different for wood vs. natural gas. Ben said the Department can't require a boiler to meet an impossible standard – you can't

expect a wood-fired boiler to have identical emissions to a natural gas boiler. He said it is important to keep in mind that there are other laws in play, and anything as extreme as requiring wood boilers to meet natural gas-level emissions would be challenged in court.

Ben also pointed out that Missoula is economically not a good area for wood-product driven energy and heat production. He said a recent study looked at where it makes sense to install a large-scale wood boiler, and it resulted in a very narrow range of appropriate sizes and locations where the boilers would be a good fit and make economic sense.

Dave Atkins said that from an economic standpoint, you need to look at places where you'll be able to offset more expensive fuels. For example, Darby has saved more than \$1 million in about eight years thanks to its wood boiler. He said scale and access to wood is critical to making a wood boiler work. He said that if you look at all the pollutants and the concern about climate change, you have to acknowledge that natural gas is releasing fossil fuels, whereas wood is carbon neutral.

Sue said that the "where to do it" argument is not relevant.

Ben said you could put several dozen of the university's proposed boiler in Missoula and it wouldn't have an impact because of the pollution controls. He said the better bang for the buck, in terms of cleaning up Missoula's air, would be to go after existing fireplaces and woodstoves in the valley. Ben said he'd be more worried about having a fireplace next door than the UM boiler.

Sue pointed out that it would be better to not be near either option.

Ben said that the county put in LAER requirements because it was the furthest they could push the issue to prevent problems with incoming industry. He reminded the Council that they tried to also push woodstoves farther and there was a lot of public uproar. He says he thinks industry has been pushed as far as legally possible.

John Garberson moved the conversation to offsets. He said we're always going to have growth and we're going to keep adding systems that can impact air quality. He said Ben indicated it would be difficult to require incoming systems to pay to remove stoves and asked for further discussion of that topic.

Ben said that the Department's attorney at the time said it would not be legal to require the university to offset its emissions. However, the university was willing to go for offsets in a voluntary PR move. Ben said that although the Department was told they couldn't require offsets, that determination may vary lawyer to lawyer, and we can't say that it is the ultimate answer. However, the Department had to follow what the lawyer said.

Jan said that the Rattlesnake developed flexibility factors in their transportation plan. She said that if we had a list of possible mitigation factors it would put whoever's trying

to do it in a better position with the community.

Dave said that the particulate matter that would have come from the UM boiler would be less toxic than the stoves they would have potentially removed. Ben agreed and said that's one of the nice things about electrostatic precipitators (ESPs) – they remove the ultrafines.

Sue asked if there are enough protections for people immediately adjacent to the boiler and not just the Missoula valley.

Ben said that's what the modeling is for. He said he can't say the boiler would have no impact, but he's more concerned about incompatible land uses such as a gravel pit in a neighborhood. He said modeling is the best tool we have available to see potential neighborhood impacts. He said modelers have to use standardized models and inputs that are easy to check.

Dave said the modeling is typically contracted out, and anyone who understands modeling can tell if the modelers are gaming the system.

John asked if technology drives air quality standards or if standards drive the technology.

Ben answered that the standards drive technology development.

John pointed out that ESPs have been around since the 1970s and he doubts they've improved despite standards being lowered. Ben said that ESPs have improved some. He acknowledged that no one has come up with anything ingeniously new recently for particulates. However, he said, there have been huge improvements for controlling NO_x and other emissions. He said that for particulates, a lot of the basic concepts from the 1980s are still around.

John asked if the delay in new technology would stop strengthening of emission requirements.

Ben said that you can't require something that isn't feasible – if you do, it gets thrown out in court. So, he said, it's really a combination of standards and technology driving each other.

Ronni Flannery asked John if he was referring to NAAQS, and John said yes. In response, Ronni pointed out that the answer to his question, then, is "no." The NAAQS are set to protect human health, and it's then up to the states to figure out how to meet them (such as by setting emission standards).

John said that's an optimistic viewpoint. He said we compromise on the NAAQS all the time, in part because of arguments about cost impacts once the standards are set.

Ronni acknowledged that it does become very political.

Dave said that Alliance for Greenheat sponsors woodstove design competitions to

increase efficiency and lower emissions from stoves. He said the competitions aren't driven by standards and the stoves that were designed and built for the competition can beat all of the existing standards. He said developing technology and adopting standards is an iterative process – its more complex than to say that standards drive technology.

Ben said that he knows of one company that made the cleanest stoves possible in order to drive out their competitors.

John said he understands the answer about his concern of a loophole – if a system meets the permitting requirements, it's permissible.

Bert Chessin said there are two pieces to this – if a community is right on the edge of a standard, it doesn't matter what kind of technology a system has, if it's going to push us over a standard, it can't go in.

Ben said it's not that simple. Sue said we did that with stoves.

Ben said no, we required LAER for stoves, which means only pellet stoves can be installed in the Air Stagnation Zone. He said we could have banned even pellet stoves, but that was deemed too extreme.

10. Select AQAC co-chair

The co-chair election was skipped due to several missing members. Bert Chessin said he is not in a place to be co-chair, but he was willing to serve as interim co-chair in May when Jan is out of town.

John Garberson made a motion to nominate Bert for interim co-chair. Sue seconded the motion and it passed by unanimous voice vote.

11. Staff Report

Sarah Coefield gave the staff report. She said work is continuing on the CO second 10-year limited maintenance plan. MCCHD has been in frequent contact with DEQ and EPA for CO, the PM10 Redesignation Request and SIP revisions. She said EPA has some additional minor revisions they want to see in the PM10 documents before it is officially submitted for approval.

Sarah and Ben attended smoke school on April 1st and they both passed on the first run.

Burning season is in full swing – there have been 2,928 permits sold to date and 4,210 permit activations.

Phil Perszyk resigned from the Council. Sarah asked if any of the alternates present were interested in his position. Ronni and Dave both indicated interest. Sarah said she'd send an email out to all the alternates and then forward notices of their interest to Garon Smith for him to make the appointment.

12. Public comment

None.

13. Select AQAC representative for next Air Board meeting update

Dave Atkins will attend the Board meeting.

14. Announcements, other business

Sue suggested that high density housing with balconies overhanging very busy streets in Missoula could be a potential future topic.

Sue also mentioned a lecture she attended that discussed birds and catastrophic wildfires. She said that as a general population, we have a perception that we live in an area that is supposed to have frequent, low-intensity burns. She said this understanding is based on tree ring studies. However, she said, we shouldn't necessarily jump to that conclusion, because catastrophic fires wouldn't leave surviving trees behind to have rings. She said that bird studies in different fire regimes found that 85 percent of the birds studies had their highest populations in some successive stage of catastrophic burns. This, she said, suggests that catastrophic burns are a long-time natural element in the area. She said that forests with massive beetle-driven tree die off don't have the same result for the birds because the understory remains unchanged. She said researchers are now looking at the Helena-area forest to see if beetle-killed forest impacts are at all similar to catastrophic fire impacts.

Jan Hoem said she and her husband will be taking their coal train documentary to Washington next month.

Dave Atkins said he wanted to mention that the Missoula Ranger District has an environmental assessment for the Marshall Woods Restoration Project. He said there will be a lot of burning unless the Forest chooses the "no action" alternative. The burning could be something that impact air quality in the valley – the Forest is looking at potentially more than 4,000 acres of treatment.

He said the district ranger and staff are willing to come to AQAC to discuss the project. The comment period for the project ends April 30th.

15. Adjourn