
Mobile Sources & Other Space Heating (Oil/Coal) Work Group – September 12, 2018

In Attendance:

Voting Members

Alicia Stevens
Donna Gardino
Lee Hazen
Jingqiu Mao (online)

Ron Johnson (online)
Ross Adkins

Facilitation Team

Jana Peirce

Non-Voting Members

Nick Czarnecki, FNSB
Bob Dulla, Sierra Research (online)
Brittany Smart, FNSB (online)

Control Measures 48-49: Date Certain Removal of Coal Only Heaters (M48) and Prohibit Use of Coal Burning Heaters (49)

Consensus:

- Modify Puget Sound Regulation 13.07 to mandate the removal and disposal or destruction of coal-only heaters located in the nonattainment area by January 1, 2020.

Discussion:

- Number of coal stoves in area is estimated at 470. Don't know how many people have removed them.
- As unlisted SFBs coal stoves and coal burning hydronic heaters cannot be installed, do not qualify for the Wood Stove Changeout Program, and cannot be operated during Stage 1 or 2 alerts. Cannot receive a NOASH certification.
- We don't know what the compliance is.
- Under Wood Stove Change Out Program, coal devices are still eligible for removal, but just not for being replaced with another coal burning device. Currently, you can replace a coal appliance with a certified wood stove or pellet device. When we run out of funding through the original grant, it will only be available for a non-solid fuel. Probably another 2 to 3 years.
- It's important to let people know well in advance of upcoming changes.
- We should help incentivize people to switch.
- Problem with coal burning:
 - Coal from Healy has water in it, which smolders and causes bad emissions. You can't control or fix the amount of water in the coal. Too small of a market.
 - The moisture content is very similar to [wood stoves?]. The emission levels on wood stoves depend on the home owner for correct operation and correct fuels. But with coal, there is no way to control the quality or the moisture. Cannot monitor it to even know what is in it.
- This group does make difficult decisions. If you need to recommend measures, you can add stipulations or recommendations for funding, or public outreach. That's within your scope when looking at these measures. (Nick Czarnecki)
- We need to have something like a whitepaper to describe our reasoning and how we came to our conclusions, something more substantial than meeting notes.
- Without a registration program, we don't know where coal stoves are – likely scattered throughout Fairbanks and North Pole.

- Not all coal burners have a secondary source of heat. The air quality commission heard about two coal businesses this summer and the incentives were not enough for a business; they are more for households. One variance was accepted, and the other was not. For both locations coal was only source of heat.
- The current incentives are not motivating for larger structures?
- No. We had a cost estimate provided by Mr. Sanford when he wanted to do a replacement of his coal burners. There was significant cost for a replacement, substantially more expensive than a residential unit.
- No, I disagree that a commercial user vs a homeowner will have a larger cost. A larger user needs to have an expert maintenance person and other professional connections. Can amortize the cost. By the time it's removed it's already paid for.
- The incentives in the woodstove changeout program may not be big enough for a small commercial or multi-housing unit, but this group could recommend that. (Small commercial = anybody that falls underneath DEC's regulatory compliance. The large point sources are regulated by DEC. It's very difficult to permit a new, large point source in the area.)
- We can put in phased recommendations on different nonattainment zones, which would be less stringent on some, but if we coal burning is effectively banned in large areas, it would impact the market for coal so it might no longer be available for anyone, or the price could change.
- There is a funding deficiency for Wood Stove Change Out program. Matrix for change outs based on what you are switching from and to. You can get up to \$14K going to a fuel system, or \$12K with a wood system, etc.
- \$7 million dollars sounds a lot better to me than \$700 million dollars through the utilities. And utilities don't seem to add anything to the [PM2.5] problem.

Control Measures 52-53: Operation and sale of small used oil burners prohibited (M52), and no use, sale or exchange of used oil for fuel unless it meets constituent property limits (M53)

Background:

- State of Vermont:
 - Burning used oil in small fuel burning equipment described as “pot burners” or “vaporizing” burners is prohibited as of a certain date, as is the retail sale of the burners.
 - The use, purchase, sale or exchange of used oil for use as fuel is prohibited unless its constituent properties PRIOR TO BLENDING are within federal hazmat limits (except for Total Halogens which may not be over 1000 ppm, while Federal statute allows up to 4000 ppm).
- FNSB and State of Alaska: Neither have regulations addressing use or sale of used oil burners for heating, although the Borough restricts the operation of waste oil appliances during air quality alerts or that create a public nuisance.

Consensus:

- Prohibit use as a fuel in nonattainment area.
- Prohibit sale for use as a fuel in the nonattainment area.
- Use as MSM.

- Caveat: Waiting for more data on PM2.5 and sulfure emissions.

Discussion:

- Who uses or sells used oil?
 - Car dealerships, maintenance shops.... people that change oil in their business. It's a cost to dispose of it. If they can sell it or use it gets rid of that cost and gives them some heat as well.
 - Kendall Motors, some others, use it and heat their shops, but they don't buy it, get supply from business, and they don't have to pay to dispose of it
 - We can use it for the roads like a neighbor does.
 - The borough collects used oil and use it at the transfers sites and to heat buildings. They do not burn it during AQ alerts.
 - As far as we know, shops don't mix it into other oil at specific amounts (ratios), just throw it in.
- Is it more harmful that regular oil?
 - It is more harmful. There are heavy metals.... (Nick)
 - Not sure of PM2.5 or sulfur factor for used oil. How does it compare to #1 or #2 fuel oil? Those numbers are available, and Nick will get them.
- There's been a lot of effort spent trying to get natural gas here. I think the borough should go for a resolution that businesses have to use natural gas if the line goes by their place of business. It's unreasonable for the hospital to burn #2 fuel.
- Should we restrict it?
 - Let's agree that we can't let people use used oil in our situation
 - Doubtful we can restrict it to certain times of the year. Doubtful that businesses will turn them off during air quality warnings.
 - It will be hard to tell people they can't use it, and they now have to pay to dispose of it.
 - If burning is prohibited, someone will come up with a good use for it after cutting it out.
 - They can add disposal fee to their invoice.
 - It should go back to the refineries to refine it back to usable oil. It wouldn't be very expensive.
 - Prohibit from October to May?
 - Make it an MSM for timing?
 - Maybe give it to the borough in [their tanks?]
- Should we prohibit sale?
 - What if someone outside the attainment zone buys it for use there.
 - There may be enough value in the oil for an entrepreneur
 - Prohibiting sale would not take care of the use by auto shops
 - Is economics a factor? Yes, BACM has lowest bar for economic feasibility. Higher for MSM (Nick)
- Vermont measure only restricts use and purchase if these certain constituent properties conditions are exceeded. Do we want to do this?
 - I think that would be hard to enforce if it's not total.
 - Our problem is serious. Should ban.

R20: Transportation control measures: Vehicle Idling

Consensus:

Work group members spent the last 10 minutes of the meeting discussing vehicle idling (the main transportation-related control measure put forward). Given the size of the problem and lack of clear impact for gas-powered vehicles, there was consensus around making this a voluntary measure and using education, such as PSAs, social media, and posted signs, to address the problem.

Members had questions about emissions from “beefed-up cars.” No decisions were made about idling by heavy-duty diesels without more information on the scope of both problems.

Discussion:

- There is no control measure on vehicle idling from other jurisdictions, but the EPA included it as something to look at since they get a lot of complaints about vehicle idling.
- There are traffic management techniques used to minimize idling such as roundabouts. FMATS also hears about vehicle idling in parking lots.
- The borough has a wealth of data from the carbon emissions air.
- The borough has no regulations on idling, but does require plugins for larger employers (determined by number of staff ~275 and up).
- Bob Dulla, Sierra Research: There are two types of idling:
 - Keeping gasoline-powered cars running vs. turning them off: Letting them get cold really increases pollutants. An idling car produces very little emissions vs starting a cold car up. It’s sort of a wash with an hour timeline.
 - Large heavy-duty diesels: Up north vehicles were set up with exterior or parked devices to keep the engines warm without keeping it running (like parking it indoors).
- Suggestions:
 - Have businesses post no idling signs in parking lots.
 - Post no idling signs in front of buildings – where impacts are greatest
 - Enforcement would be a nightmare. Given size of the problem, make it voluntary and use education, not enforcement.
 - PSAs would be great. We're looking for some things to post on our Facebook, engage with the community
- Is there a way to regulate conversions of vehicles that have been beefed up for increased horsepower or emissions?
 - Maybe make it illegal to modify the engines as this can get around the emissions standards.