

Alaska Department of Environmental Conservation

Division of Air Quality

TOP QUESTIONS ON DEC REGULATION PROPOSALS AND AIR QUALITY PLANNING PROCESS

Dear Fairbanks North Star Borough Resident,

DEC is holding four open houses in the greater Fairbanks area to answer questions residents have about a set of draft regulations currently out for public comment. The draft regulations include provisions that would apply statewide (including provisions describing when the public would receive alerts about unhealthy concentrations of fine particulate matter (also known as “PM2.5”)) and provisions that would apply just to the “PM2.5 non-attainment areas” in the state. The draft regulations that would only apply to PM2.5 non-attainment areas include wintertime outdoor open burning restrictions, requirements to burn the appropriate clean wood or coal in solid fuel heating devices, and performance standards for new wood-fired stoves and outdoor hydronic heaters. Currently, the only PM2.5 non-attainment area is the one in the Fairbanks North Star Borough, but there is the possibility other areas of the state could go into non-attainment in the future.

Information on the draft regulations, upcoming open houses, public hearings and the various ways you can comment on the regulations can be found at: http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_proposed-regs.htm or you may call or email DEC staff, Scott Sloane, at 465-5176 or scott.sloane@alaska.gov. DEC is committed to working collaboratively with the Fairbanks and North Pole communities on workable and effective solutions, achieving the dual goals of healthy winter air and affordable heating for homes and businesses. Any comments you provide to DEC will be carefully considered as we work towards the final set of regulations. For everyone’s convenience we have set out below some of the more frequently-asked questions from the first two open houses and DEC’s responses. We will continue to post updates on our website.

Thank you for your interest and comments,

Alice Edwards
Director, Division of Air Quality

1) How will persons comply with the ‘curtailment’ of wood heating devices during a declared episode if they must use wood to keep their home warm during extreme cold weather (see 18 AAC 50.075(b))?

DEC wants to help ensure that people in the Fairbanks area can heat their homes with affordable fuels including wood. With this objective in mind, DEC is proposing to relax the current regulation that prohibits using wood as a fuel for heating when an air quality episode (described below under question4) has been declared. The proposed revisions to 18 AAC 50.075(b) states, "the department may prohibit operation of wood-fired heating devices..." This change is meant to provide flexibility so DEC can allow residents who have only wood heat or need wood heat to keep their house warm in severe cold weather to continue to heat with wood during a declared air quality episode. Again, the current regulation, without the proposed change, would prohibit all wood-burning when an air episode is declared.

Based on past air quality conditions in the Fairbanks-North Pole area, the department thinks it will be important to include a section in the local air quality plan (which is still being developed by DEC and will be going out for public review and comment later this fall and winter) that would lay out how the department would address an air episode. Some options could include: subdividing the non-attainment area into smaller areas where potential episodes could be called with response options specifically tailored to what is reasonable and effective in that area; identifying the temperature range where a wood heater curtailment would risk safety and property (frozen pipes) and would not be considered a reasonable response option; identifying what meteorological data should be used and how, identifying how best to utilize the air monitors, identifying what types of exemptions to a curtailment program there should be and identifying how to implement those exemptions. While the outcome of this regulation process is not yet known, over the next few months, the Division of Air Quality will work to draft an approach for air episodes that can be included in the local air quality plan. Again, this plan would then be released for public review and comment in the next phase of the air quality planning process. DEC would continue to work with the community to develop all components of the plan.



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2) These regulations (18 AAC 50.245(a)) appear to nullify the citizen initiative passed in October 2012 that restricts the Fairbanks North Star Borough's authority for heating devices and fuels, is this true?

A local ordinance established through citizen initiative in October 2012 limits the Fairbanks North Star Borough's ability to regulate, prohibit, curtail or issue fines or fees related to the sale, distribution, or operation of heating appliances and any type of combustible fuel. As consistently stated by DEC, it was not the intent of the Department when drafting these proposed regulations to undo the 2012 citizen initiative. The Department of Law recently reviewed the question whether the draft regulations, if adopted, would undo the 2012 citizen initiative and concluded that DEC's regulatory proposal does not impact the ordinance. The proposed regulations do not empower the Borough to act outside the authority of its duly-authorized air quality program and enabling ordinances. The Department of Law letter on this question is available on DEC's web site at: http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_questions_answers.html. With this said, DEC stresses that the public comment period on the draft regulations is still open and anyone who believes there are changes that should be made to the draft regulations to address any remaining concern about potential conflicts between the 2012 citizen initiative and the proposed regulations by DEC should still feel free to comment and suggest changes to the draft. When reviewing the proposed regulation, it might be helpful to keep in mind that other communities have or may in the future want to have a local air program. These regulations need to recognize some communities may give their local program more duties and authorities than some other communities.

3) Why are there no regulations regarding the use of wet wood?

While the use of wet wood leads to poor combustion and smoke, there is not yet a solution to ensure an ample dry wood supply in the Fairbanks North Star Borough throughout the wood-burning season. It is difficult to consider advancing a requirement for dry wood without having an adequate supply or providing an alternative option for those who purchase their wood. At this time, the State thinks that implementing public education and voluntary programs will assist in raising the awareness for residents to properly season wood and the increase availability of dry wood in the market. We continue to evaluate the issue of wet wood and encourage further discussion. DEC welcomes your suggestions and comments on this issue. The current proposal does not mean that a regulatory provision to address wet wood could not be brought forward in the future if needed to bring the community into attainment with the National Ambient Air Standard (NAAQS) for PM2.5, which is the legal requirement in the federal Clean Air Act that we must all meet. That standard is set to protect human health.

4) If the 24-hour PM2.5 National Ambient Air Quality Standard (NAAQS) is 35 µg/m³, why is the lowest proposed episode trigger set at 56 µg/m³ (see 18 AAC 50.245(a)) ? Why not set the trigger at 25 or 30 µg/m³ to protect health?

In the regulation proposal, a 24-hour PM2.5 concentration of 56 micrograms per cubic meter (µg/m³) would initiate the first level of a formal air episode, an alert. The department proposed this level as it is equivalent to the federal Air Quality Index value where air quality is deemed "Unhealthy" for all individuals. The proposed concentration is higher than the 35 µg/m³ 24-hour National Ambient Air Quality Standard (NAAQS) for PM2.5. The NAAQS is set at a level that is meant to protect sensitive populations, including children, the elderly, and those with existing medical conditions. The NAAQS level corresponds with the Air Quality Index value where air quality is deemed "Unhealthy for Sensitive Groups." Under the proposal, air quality advisories could still be called at PM2.5 concentrations between 35 and 55 µg/m³ (per 18 AAC 50.245(b)) along with requests for voluntary actions to curtail emissions. The department is seeking comment on the proposed episode levels.

Setting air quality episode concentration thresholds is a requirement for state's implementing the National Ambient Air Quality Standards under the Clean Air Act. Establishing the thresholds for the PM2.5 concentration levels that can trigger a formal air quality alert, air quality warning, and air quality emergency helps to provide a framework for DEC and local air



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agencies as they work together to inform the public of poor air quality conditions and evaluate response actions. Air quality episodes as a result of human-caused air pollution should not be frequent events in any community; response actions to episodes are not meant to replace on-going formal control programs to bring an area into compliance with the health-based air quality standard. The development and implementation of an attainment plan will reduce the overall risk of areas reaching unhealthy levels of air pollution, the need to declare air episodes and the subsequent need to take actions for these significant but rarer air pollution events that could impact a broader sector of the public. One could view response to an air quality episode as similar to a fire department responding to a single dangerous fire while the development and implementation of the PM2.5 attainment plan is deciding what needs to be done to lower the risk of all fires in the future.

5) Why are there no emission standards proposed for coal stoves?

As part of the air quality planning effort, studies have been conducted to determine the specific sources of the pollution found on the monitor filters from within the non-attainment area. The studies found that the portion of particulate coming from coal burning is small compared to the particulate on the filters from wood burning. This is consistent with surveys of residents' home heating devices which show wood heaters are much more prevalent than coal heaters. Given that the majority of the problem, area wide, is wood smoke, the current proposed regulations are focused there. However, the department is very aware of citizen concerns regarding smoke from coal-fired heaters. Unfortunately, the U.S. EPA has not developed any emission standards for new residential coal-fired indoor stoves or outdoor boilers nor has EPA established any specific test methods or program to certify residential coal heating devices. As a result, DEC does not have an existing federal program or framework to use to make a regulatory decision on an emission standard for coal heaters. For DEC to regulate coal-fired heating devices, significant research is needed to establish standards for these devices. DEC would need to work with a testing laboratory to test and develop a method for certifying coal-fired heating devices and then use that method to test many types of coal-fired devices. This research, testing, and development would take time and resources. DEC continues to evaluate the need for and the options to address emissions from residential coal-fired heating devices. We welcome continued discussion and comment on this issue.

6) The hearings all during the day when people are working. Could the department hold a public hearing in the evening?

The department has received a number of comments related to the timing of the public hearing. The department will be issuing a supplemental notice that establishes an evening hearing to make it easier for those who wish to provide oral comments and can only make it to an evening meeting. Details on the new public hearing will be posted on the DEC web site at http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_proposed-regs.htm.

Additional questions and answers as well as more information on the regulation proposals and how to comment are available at: http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_proposed-regs.htm.

