

FNSB PM-2.5 AIR QUALITY PLAN (SIP): NOTICE OF PROPOSED CHANGES TO ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION REGULATIONS

BRIEF DESCRIPTION

The Alaska Department of Environmental Conservation (ADEC) is proposing new air quality regulations and an air quality plan (state implementation plan, or SIP) for the Fairbanks North Star Borough (FNSB) fine particulate matter (PM-2.5) nonattainment area in order to comply with provisions of the federal Clean Air Act. These regulations and air quality plan address the use of wood stoves and solid fuel heating devices, outdoor open burning, visible emissions (opacity), commercial wood selling, and the grandfathering of wood stoves from emission standards. The proposal would also add clarifying language regarding a local government's powers or obligations, establish federally required air episode levels for PM-2.5 and revise solid fuel-fired heating device visible emission regulations statewide.

Title: FNSB PM-2.5 Air Quality Plan (SIP) and Proposed Regulations

ADEC is proposing to adopt regulations changes in Title 18 of the Alaska Administrative Code (AAC) Chapter 50 Air Quality Control. The proposed regulations would prohibit most open burning during winter months while providing an option for a local program to allow certain exceptions, define what can be burned in solid fuel-fired heating devices operating within the FNSB PM-2.5 nonattainment area, and establish provisions that take effect should a PM-2.5 area be classified as "serious" requiring wood sellers to disclose the moisture content of wood sold and providing for additional upgrades of high-emitting wood-fired heating devices. The proposal also establishes federally required air episode levels for PM-2.5 in Alaska and revises and expands visible emission standards for solid fuel-fired heating devices. The goal of the regulations is to protect human health and air quality as required by federal law while also preserving the ability of residents to heat their homes affordably. While the FNSB could likely come into compliance with federal air quality standards in the next decade through the use of alternative-fueled heating sources such as liquefied natural gas and continuing the wood stove change out program for several more years, the federal Clean Air Act does not allow a community or state this much time to come into compliance. These regulations have been drafted to maximize flexibility for residents in heating their homes and to address high energy costs while meeting the federal Clean Air Act requirements and health-based standards for fine particulate matter. The proposed regulations are intended to meet the requirements of Section 110 (Title 42 U.S.C. Chapter 85 §7410), Sections 171-179 (Title 42, U.S.C. Chapter 85 §7501-7509), and Section 189 (Title 42, U.S.C. Chapter 85 §7513) of the Clean Air Act and, once adopted, will be submitted to the U.S. Environmental Protection Agency for approval.

The regulation changes are as follows:

- Amend 18 AAC 50.005 to add clarifying language regarding a local government's powers or obligations.
- Amend 18 AAC 50.030 to adopt revisions to the State Air Quality Control Plan by adding a new subsection 5 to Volume II Section III.D: Fairbanks North Star Borough PM-2.5 Control Plan.
- Amend 18 AAC 50.065(f) to restrict wintertime outdoor open burning in the FNSB PM-2.5 non-attainment area but allow a local program to grant exceptions during periods of good air quality.
- Amend 18 AAC 50.075 to include solid fuel-fired devices, clarify the procedures for determining visible emissions (opacity), and add a new subsection to allow operation of wood-fired or solid fuel-fired devices during a PM-2.5 air quality episode if visible emissions are below the limits identified in the State Air Quality Plan for the area.
- Amend 18 AAC 50 by adding a new section to clarify the types of solid fuels that can and cannot be burned in heating devices operating within the FNSB PM-2.5 nonattainment area. The new section also provides

for commercial wood sellers to register, measure, and disclose the moisture content of wood sold in an area classified as a ‘serious’ PM-2.5 nonattainment area. The regulation proposes to provide wood sellers notice prior to initiation of any future requirements.

- Amend 18 AAC 50.077 to add a new subsection that would only apply to ‘serious’ PM-2.5 nonattainment areas which would require, unless waived, replacement of certain high-emitting wood-fired heating devices upon sale of residence.
- Amend 18 AAC 50 by adding a new section and a new table to establish PM-2.5 concentrations that will trigger an air quality alert, air quality warning or air quality emergency episode in Alaska and provides for the department and local air quality control programs to declare PM-2.5 air quality episodes and advisories and to take immediate action.
- Amend 18 AAC 50.990 to modify the definition of “open burning”, and add definitions for “dry wood”, “camp fire”, “wet wood”, and “manufactured compressed wood logs.”

Posting

The above list of proposed changes to the regulations only provides a concise summary of their subject matter. For a copy of the proposed regulation changes please refer to this DEC webpage http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_proposed-regs_2014.htm. A copy of material proposed for adoption by reference is available at <http://dec.alaska.gov/Air/anpms/SIP/18AAC50ReferenceMaterials.htm>. Materials not feasible to post or subject to copyright may be viewed at the DEC office(s) at the following locations: ADEC Bayview Office Building, 619 Ship Creek Drive, Anchorage; ADEC Fairbanks Office Building, 610 University Avenue; and ADEC Juneau Office Building, 410 Willoughby Avenue, Second Floor.

Questions

You may submit written questions relevant to the proposed action to DEC using the electronic question form at http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_questions_answers.html or by electronic mail to dec.air.comment@alaska.gov; or sending the questions to Division of Air Quality, DEC, 410 Willoughby Avenue, Suite 303, P.O. Box 111800, Juneau, Alaska 99811-1800. The written questions must be received at least 10 days before the end of the public comment period; December 9, 2014. The department will aggregate its response to substantially similar questions and make the questions and response available on http://dec.alaska.gov/air/anpms/comm/fbks_pm2-5_questions_answers.html. The department may, but is not required to, answer written questions received after the December 9, 2014 deadline for submitting questions.

Comments

You may comment on the proposed regulation changes, including the potential costs to private persons of complying and alternative practical methods of complying with the proposed changes, by submitting written comments to: Alice Edwards, Division of Air Quality, DEC, 410 Willoughby Avenue, Suite 303, P.O. Box 111800, Juneau, Alaska 99811-1800; or by facsimile at (907) 465-5129; or by e-mail to dec.air.comment@alaska.gov; or by the electronic comment form at <https://dec.alaska.gov/Applications/Air/airtoolsweb/FormalComments>. Comments must be received by 5:00 p.m. on December 19, 2014. Comments received after this date will not be considered in final action on these rules and the air quality plan.

Open Houses

The Department will hold two open houses in the greater Fairbanks area. The first open house is on Monday, December 1, 2014 in Fairbanks, Alaska from 5:00 – 7:00 p.m. at the following location: Westmark Hotel, Gold Room 813 Noble Street. The second open house is on Tuesday, December 2, 2014 in North Pole, Alaska from 6:30 – 8:30 p.m. at the following location: North Pole Middle School, Commons and Auditorium, 300 E. 8th

Avenue. There will be a short presentation at the beginning of each open house. ADEC is seeking input on its proposed regulations, which would primarily apply to the Fairbanks North Star Borough PM-2.5 nonattainment area, and the FNSB air quality plan. Formal oral testimony will not be taken at the open houses, but written comments and questions may be submitted to Department staff.

Hearings

The Department will also hold public hearings on this proposal. The first public hearing will be on Wednesday, December 3, 2014 from 11:30 am – 1:30 p.m. at the following locations: 1) Fairbanks Noel Wien Public Library, 1215 Cowles St., Auditorium; 2) ADEC Bayview Office Building, Conference Room A, 619 Ship Creek Drive, Anchorage, Alaska; 2) ADEC 2nd Floor Main Conference Room, 410 Willoughby Avenue, Juneau, Alaska. There will be a second public hearing on Wednesday, December 3, 2014 from 5:00 -7:00 p.m. at the following location: Fairbanks Noel Wien Public Library, 1215 Cowles St., Auditorium. A third public hearing will be on Wednesday, December 17, 2014 from 11:30 a.m. – 1:30 p.m. at the following locations: 1) Wedgewood Resort, 212 Wedgewood Drive, Fairbanks, Taiga Room; 2) ADEC Bayview Office Building, Conference Room A, 619 Ship Creek Drive, Anchorage, Alaska; 2) ADEC 2nd Floor Main Conference Room, 410 Willoughby Avenue, Juneau, Alaska. A fourth public hearing on Wednesday, December 17, 2014 from 5:00 -7:00 p.m. at the following location: Wedgewood Resort, 212 Wedgewood Drive, Fairbanks, Taiga Room. Formal oral or written comment may be submitted at the hearings. The hearings will be extended if necessary to accommodate those present before 1:30 pm and 7:00 pm, respectively, who did not have an opportunity to comment.

If you are a person with a disability who may need a special accommodation in order to participate in this public process, please contact Eric Hotchkiss at (907) 465-6171 or TDD Relay Service 1-800-770-8973/TTY or dial 711 seven days prior to any open house or a public hearing to ensure that any necessary accommodations can be provided.

After the public comment period ends on Friday, December 19, 2014 DEC will either adopt these or other provisions dealing with the same subject, without further notice, or decide to take no action on them. The language of the final regulations may be different from that of the proposed regulations. **YOU SHOULD COMMENT DURING THE TIME ALLOWED IF YOUR INTERESTS COULD BE AFFECTED.** Written comments received are public records and are subject to public inspection.

Statutory Authority: AS 46.03.010, AS 46.03.020, AS 46.14.030, AS 46.14.400

Statutes Being Implemented, Interpreted, or Made Specific: AS 46.14.030, AS 46.14.400

Fiscal Information: The proposed regulation changes are not expected to require an increased appropriation.

Dated: November 14, 2014


Larry Hartig, Commissioner

FNSB PM2.5 AIR QUALITY PLAN (SIP) & PROPOSED REGULATIONS
ADDITIONAL REGULATIONS NOTICE INFORMATION
(AS 44.62.190(d))

1. Adopting agency: Alaska Department of Environmental Conservation
2. General subject of regulation: 18 AAC 50 is being amended to: 1) add clarifying language regarding local governments powers and obligations; adopt state air quality plan; 2) amend outdoor open burning regulations; 3) amend and clarify visible emission standards for solid fuel-fired heaters and add opacity limits on fine particulate matter (PM-2.5) episode days; 4) add fuel requirements for solid fuel-fired heaters; 5) provide for a commercial wood seller program and provide for replacement of certain high-emitting wood-fired heating devices upon sale of residence in a serious PM-2.5 non-attainment area; 6) adopt the PM-2.5 concentrations triggering a PM-2.5 air episode and provide for announcements and actions; 7) amend the definitions section.
3. Citation of regulation (may be grouped): 18 AAC 50.005; 18 AAC 50.030; 50.065(f); 50.075; 50.076 (new); 50.077(b)(5)(C) (new); 50.246 (new); Table 6a (new); and 50.990.
4. Department of Law file number, if any JU2011200482
5. Reason for the proposed action:
(X) compliance with federal law: Section 110 (Title 42 U.S.C. Chapter 85 §7410), Sections 171-179 (Title 42, U.S.C. Chapter 85 §7501-7509), and Section 189 (Title 42, U.S.C. Chapter 85 §7513) of the Clean Air Act
() compliance with new or changed state statute
() compliance with federal or state court decision (identify) _____
() development of program standards
() other: (please list) _____
6. Appropriation/Allocation: _____
7. Estimated costs in the aggregate to comply with the proposed action to:
 - a. Private Persons: While there are no direct costs associated with the proposed regulations for private citizens there is the potential for an increase in cost to citizens in the areas identified below. There may be the potential for direct costs associated with requirements for commercial wood sellers which could come into effect starting in approximately 2016 as discussed below. There is also the potential for direct costs, starting in approximately 2016, for private citizens associated with requirements that would alter the grandfathering provisions of the wood heater emission standards.

Private Persons:
 1. There exists the potential for landfill costs for those who choose to dispose of wood waste at the landfill during the winter months, if a local program does not provide outdoor open burning opportunities. However, brush is accepted free of charge at the landfill in the Fairbanks North Star Borough.
 2. None. The proposed implementation date in October 2015 provides time for residents to plan for and season wood in advance of the dry wood requirement taking effect. For citizens who may need assistance in meeting opacity limits by mixing their wood with manufactured logs, the purchase of manufactured logs costs approximately \$330/ton (generally less than the cost of purchased cordwood). In addition, the requirement to use dry wood or a mix of dry wood will not take effect until October 2015 which will allow time for residents to cut, stack and store wood for proper curing before the requirements take effect and limit the need to purchase supplemental manufactured logs to meet the visible emission requirements.

3. If the FNSB non-attainment area fails to attain the PM-2.5 National Ambient Air Quality Standard by the end of 2015, these regulations would require upgrades to existing wood heaters that are sold with a home/structure. If the regulations become effective in 2016, the direct costs to private individuals would be the removal cost of a wood heating device that does not meet the state and federal emission standards. This is estimated to cost in the range of \$0 to \$800 per unit removed. This would depend on whether they remove the stove themselves or hire someone to do so. It also depends on whether they opt to remove the stovepipe/stack and rough patch the ceiling/roof. A device could be replaced with a new, cleaner burning unit, but there is no requirement that an individual selling a home/structure do so.

Commercial Wood Sellers:

These regulations include requirements for commercial wood sellers in the FNSB non-attainment area that would only come into effect if the area fails to attain the PM-2.5 National Ambient Air Quality Standard by the end of 2015. If the regulations are put in effect in 2016, the direct costs to commercial wood sellers associated with these regulations are the cost of purchasing at least one wood moisture content meter, estimated at \$25, and the time associated to comply with the program. Time costs associated with the program would include: initial and periodic renewal of registration, measuring the moisture content of the wood being sold at the time of each sale, filling out forms for each sale, recordkeeping and storing documents, and ensuring the department receives the copies of completed forms on a monthly basis. Depending on business practices, number of employees, number of consumers, the aggregate annual time cost for an individual business is estimated to be in the range of \$350-\$2600 per year.

b. Other State Agencies: None

c. Municipalities: None. The proposed regulations have no mandatory requirements for municipalities that have associated costs. Local municipalities may choose to adopt an open burning or visible emission waiver program to control smoke emissions.

8. Cost of implementation to the state agency and available funding (in thousands of dollars):

	Initial Year FY 17 _____	Subsequent Years _____
Operating Cost	\$ 33.3 _____	\$ 30.4 _____
Capital Cost	\$ 0 _____	\$ 0 _____
1002 Federal receipts	\$ 16.6 _____	\$ 15.2 _____
1003 General fund match	\$ 16.6 _____	\$ 15.2 _____
1004 General fund	\$ 0 _____	\$ 0 _____
1005 General fund/ program	\$ 0 _____	\$ 0 _____
1037 General fund/ mental health	\$ 0 _____	\$ 0 _____
Other	\$ 0 _____	\$ 0 _____

9. The name of the contact person for the regulations:

Name: Cindy Heil
Title: Program Manager
Address: 619 Ship Creek Ave, STE 249
Anchorage, Ak 99501
Telephone: 907-269-7579
E-mail address: cindy.heil@alaska.gov

10. The origin of the proposed action:

- staff of state agency
- federal government
- general public
- petition for regulation change
- other (please list) _____

11. Date: 11/14/2014

Prepared by: *Alice Edwards*
Name: Alice Edwards
Title: Director
Telephone: 465-5105