



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Environmental
Conservation

DIVISION OF AIR QUALITY
Air Non-Point & Mobile Sources

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Transmitted via Electronic Mail

Subject: Alaska's Finalized Regulations and Requirements for Wood-Fired Heating Devices and Coal-Fired Heating Devices

Dear Device Manufacturer:

This letter is to notify you that there are now updated standards and requirements that must be met in order to sell solid fuel-fired heating devices within the Fairbanks North Star Borough (FNSB) Fine Particulate Matter (PM_{2.5}) Nonattainment Area. The Alaska Department of Environmental Conservation (ADEC) regulations were established to address PM_{2.5} air pollution in a portion of the FNSB that is designated by the Environmental Protection Agency (EPA) as a serious PM_{2.5} nonattainment area (map enclosed). This portion of the FNSB does not meet the federal health based standards for PM_{2.5}, which comes from wood smoke and other combustion sources.

Some of the revised standards and requirements went into effect on January 8, 2020, some will be initiated over time, and one will be started September 1, 2020. The regulations governing the standards and requirements have been finalized which may affect the sale of your company's solid fuel-fired heating devices within the nonattainment area.

Several web pages have been developed to provide information to the public and local vendors on the regulations; links to these web pages are provided below. A brief synopsis of the changes is also provided, however, the remainder of this letter is focused on the requirements that must be met by manufacturers of solid fuel-fired heating devices.

Manufacturers and vendors both inside and outside the nonattainment area are affected by 18 AAC 50.077 – Standards for wood-fired heating devices and 18 AAC 50.079 – Provisions for coal-fired heating devices. These regulations make it unlawful to sell certain types of heating devices to customers that intend to install and operate the device inside the boundaries of the FNSB PM_{2.5} Nonattainment Area.

Beginning **January 8, 2020**

- Cordwood-fired hydronic heaters <350,000 Btu/hr cannot be sold for installation within the nonattainment area. Larger devices may be sold if able to meet emission rate and installation requirements.
- Coal-fired heating devices cannot be sold for installation within the nonattainment area
- Wood stoves, pellet stoves and inserts may be installed, in the nonattainment area, only if they have an EPA certified emission rate of 2.0 grams per hour or less **AND** are included on

Clean Air

ADEC's list of approved devices. Note, there is no differentiation between a crib wood certification test and a cordwood certification test with regards to the certified emission rate. Please see below for additional information regarding ADEC's list and how devices may be listed or not listed.

- Pellet hydronic heaters may be installed, in the nonattainment area, only if they have an EPA certified emission rate of 2.0 grams per hour (0.10 lbs per million BTU) or less **AND** are on ADEC's list of approved devices.
- A pellet fueled hydronic heater, within the nonattainment area, may not be installed within 330 feet from the closest property line or within 660 feet from a school, clinic, hospital, or senior housing unit.
- Wood-fired heating devices sold within the nonattainment area must be registered upon sale. Registration may be made directly online or on a downloadable form and submitted to ADEC (see web page links below).
- All wood-fired heating devices installed within the nonattainment area must be properly sized and professionally installed. Installation must be confirmed on a downloadable form and submitted to ADEC (see web page links below).
- **Wood-fired heating devices not meeting requirements may not be advertised for sale within the nonattainment area.**
- Information regarding curtailment information and proper operating instructions shall be provided to a buyer at the time of sale.
- All removed wood-fired heating devices, not meeting state emission standards shall be rendered inoperable.
- All existing non-certified woodstoves or pellet stoves, all non-pellet hydronic heaters, and all coal-fired heating devices, within the nonattainment area, must be removed by December 31, 2024 or before the device is sold, leased, or conveyed as part of an existing structure or property, whichever is first.
- Wood-fired heating devices not meeting the state emission standards may not be reinstalled within the area.
- Upon the effective date of an EPA finding, all EPA certified devices, other than masonry heaters, in the area that are older than 25 years and have an emission rating greater than 2.0 g/hr must be removed by December 31, 2024. Once a device exceeds 25 years old and has an emission rating greater than 2.0 g/hr, they will also be required to be removed, even after December 31, 2024.

Beginning **September 1, 2020**

- In order for a wood-fired heating device to be an ADEC listed device and approved for sale and installation within the nonattainment area, additional criteria must be met. The device must still meet EPA certification and have an emission rate of 2.0 g/hr or less. In addition, the device may not have any valid test run with a 1-hr filter pull value from the device's certification test report that exceeds 6.0 g/hr. If a TEOM is used during the certification test and the emission

profile is submitted to ADEC, the result must demonstrate that no rolling 1 hour average exceeds 4.0 g/hr.

ADEC is committed to reviewing certification reports and posting the approved devices. If a device is not on the approved list, but is EPA Step 2 certified, you may contact ADEC to request a review or an explanation as to why the device was not included on the ADEC list. Vendors and manufacturers may wish to provide additional information, if available, to possibly change the determination.

ADEC Approved Wood Heating Device List

The updated 18 AAC 50.077 regulations have expanded the criteria for ADEC in determining allowable wood-fired heating devices to be sold into the area. ADEC may now approve devices based on the supporting data and laboratory tests results contained in the certification tests themselves. Furthermore, alternative test methods, including broadly applicable test methods, must not only be approved by EPA but also by ADEC.

Therefore, approximately monthly, ADEC staff will review the EPA certification list to determine what devices are eligible to be added to the ADEC device list. ADEC then applies the 2.0 g/hr standard criteria. From the remaining devices, ADEC will apply the results of the certification test review. ADEC has begun a re-review of certification tests and will be removing devices from the current ADEC list or will not add devices to the ADEC list for the following:

- Anomalies and inconsistencies with the test report which include, but are not limited to: incomplete test reports per U.S. EPA NSPS requirements, cordwood that has been cut square and uniform without typical bark coverage to mimic crib wood, manipulation of fuel configuration from marketing materials, duplicative test information in separate reports, negative numbers, non-reported 1-hr filter measurements, fuel loading contradictory to the fire box (east-west firebox vs north-south fuel loading), testing instructions that are not consistent with owner manual instructions, reports that are incomplete or fail to provide backup data (not just summary tables), etc.
- Inability to find test reports. It has proven difficult to find test reports of devices on the EPA certification list. If test reports are unable to be found after a basic search of the manufacturer's website, the device will not be listed. Manufacturers are encouraged to ensure their certification reports are easily accessible. Website links, where a report may be found, may be sent directly to steven.hoke@alaska.gov if a report has been updated, or if it is believed a device has not been listed in error.

ASTM 3053 Test Method

As mentioned previously, 18 AAC 50.077(b)(3)(iii) states that alternative test methods, including broadly applicable test methods need to be approved by EPA and the department. ASTM 3053 has not been approved by the ADEC. While some devices that have been certified with ASTM 3053 are currently listed on the ADEC approved device list that may change once ADEC has made a final decision on the method's approvability by the State.

The PM2.5 emission standards for new wood heaters are intended to assist the FNSB in meeting the PM2.5 ambient air quality standards. The greatest contributor to PM2.5 emissions within the FNSB is wood smoke.

The actual regulations and additional information, including the downloadable forms may be found at:

- <http://dec.alaska.gov/air/anpms/communities/fbks-pm2-5-proposed-regs-2019/> - the adopted regulations, adopted air quality plan, all the public notice versions may be found at this link. The department did receive a number of comments regarding these regulations during the public review process. The response to these comments may also be found at this link.
- <http://dec.alaska.gov/air/anpms/communities/fbks-pm2-5-nonattainment-control-measure-requirements> - all the control measures within the nonattainment may be found at this link. This includes the solid fuel-fired heating standards, requirements, and lists.
- <http://dec.alaska.gov/air/> - this is a short url, under Popular Content, select "Fairbanks PM_{2.5}", this may be a simpler way to reach the information.

For those vendors in and around the FNSB PM2.5 nonattainment area, Steven Hoke will be either calling or visiting to review requirements and may set up a virtual meeting to further discuss the new rules. If you have any questions about these new emission standards and associated requirements you may contact Steven at 907-451-5172 or steven.hoke@alaska.gov. You may also contact me directly at cindy.heil@alaska.gov.

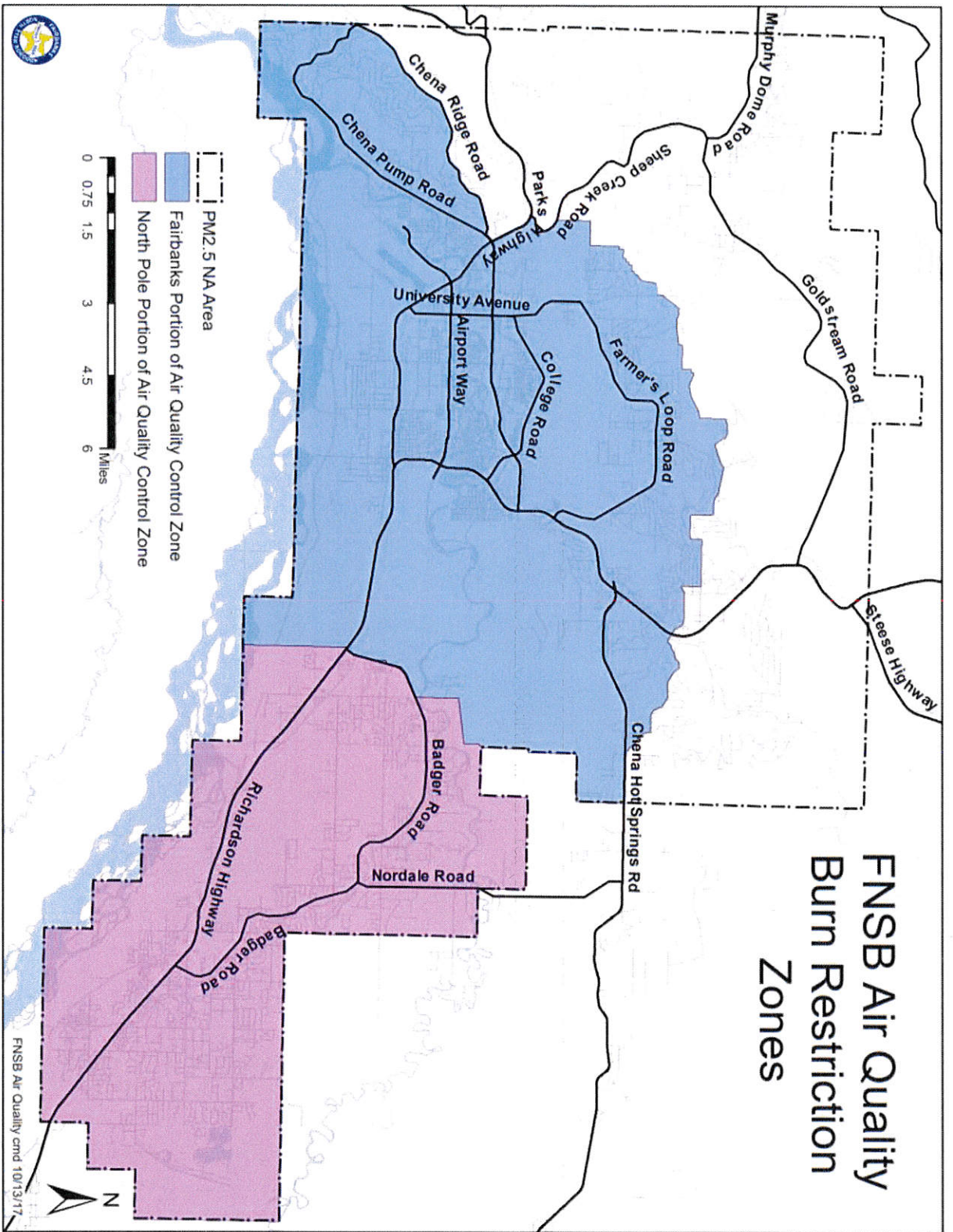
Sincerely,



Cindy Heil

Environmental Program Manager

FNSB Air Quality Burn Restriction Zones



Note: Solid Fuel Fired Standards and Requirements are for the entire nonattainment area (NA).