Alaska Department of Environmental Conservation



Amendments to: State Air Quality Control Plan

Vol. III: Appendix III.D.5.12

{Appendix to Volume II. Analysis of Problems, Control Actions; Section III. Area-wide Pollutant Control Program; D. Particulate Matter; 5. Fairbanks North Star Borough PM2.5 Control Plan}

Adopted

November 3, 2017

Bill Walker Governor

Larry Hartig Commissioner

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Appendix III.D.5.12

FNSB Air Quality Ordinances:

2015-01 2015-18

2015-10 2015-29

2015-29 2015-73

2<u>016-20</u>-1A

2016-21

2016-30

2016-37

<u>2017-18</u>

2017-44

ADEC & FNSB MOU January 2010 October 2016.

MOA for the Selection & Funding of Projects Funded by CMAQ within the FNSB PM2.5 Nonattainment Area.

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1 2 3 4 5 6 7 8 9 10 11 12 13	By: John Davie Kathryn Dodg Janice Golul Introduced: 01/15/2019 Advanced: 01/15/2019 Substituted: 02/12/2019 Amended: 02/12/2019 Amended: 02/26/2019 Amended: 02/27/2019 Adopted: 02/27/2019 Immediate Reconsideration Failed: 02/27/2019 Adopted: 02/27/2019	e b 5 5 5 5 5 5 5 5
14 15	FAIRBANKS NORTH STAR BOROUGH	
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17	ORDINANCE NO 2015 - 01	
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19 20 21 22 23 24 25 26 27 28 29	AN ORDINANCE AMENDING CHAPTER 8.21 OF THE FNSB CODE OF ORDINANCES REGARDING THE PM2.5 AIR QUALITY CONTROL PROGRAM, AMENDING 2.48.120 REGARDING THE AIR POLLUTION CONTROL COMMISSION'S DUTIES, AND AMENDING 1.04.050 REGARDING THE FINE SCHEDULE TO ADD VIOLATIONS OF THE PM2.5 AIR QUALITY CONTROL PROGRAM WHEREAS, EPA, on December 22, 2008, declared part of the Fairbank North Star Borough a non-attainment area for fine particulate pollution (PM _{2.5}); and WHEREAS, in the winter, PM _{2.5} concentrations in the non-attainment area routinely exceed the allowable limit, thereby violating the federal health-based	s a
30 31 32	standards; and WHEREAS, an excessive level of PM _{2.5} impacts the health and well-being	
33 34	of borough residents; and	•
35 36 37	WHEREAS, air quality issues could impact large scale economic development, including military expansion; and	С
38 39 40	WHEREAS, studies have identified wood burning as a significant contributor of $PM_{2.5}$, particularly wood with high moisture content; and	nt
41 42 43	WHEREAS, the combined effort of an educational program concerning the importance of burning only dry wood and an increase in the availability of dry wood could significantly reduce Borough $PM_{2.5}$ levels; and	

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Fairbanks North Star Borough, Alaska

WHEREAS, PM_{2.5} emissions from solid fuel burning appliances can be significantly reduced through the selection and proper use of modern, EPA rated models designed to meet more stringent emissions standards and by operating in accordance with "best practices", including selection of appropriate fuel sources; and

WHEREAS, voluntary, incentive-based programs coupled with comprehensive education programs have been employed in other communities to help reduce $PM_{2.5}$ emissions; and

WHEREAS, voluntary measures may enable the Borough to model attainment, however, it is likely that they would take more than five years to reach this goal and they would not address local neighborhood problems arising from one or two significant polluters, neither of which is acceptable; and

WHEREAS, the State of Alaska, through a Memorandum of Agreement with the Borough, has authorized the Fairbanks North Star Borough to establish and administer an area-wide local PM_{2.5} air quality control program that will operate in lieu of and consistent with the State's air quality program; and

WHEREAS the State of Alaska Department of Environmental Conservation has issued draft regulations intended to be part of the State Implementation Plan (SIP) as required by the EPA; those regulations provide some new restrictions on the sale of solid fuel burning appliances and firewood, and authorize the borough to take on additional regulatory responsibility related to the SIP; and

WHEREAS, at the recent "Town Hall" on the $PM_{2.5}$ problem, more than 50 citizens provided testimony indicating that our air quality was not acceptable and that they expected the Assembly to act to put into place programs that will improve the air quality in the borough.

WHEREAS, it is the intent of the Fairbanks North Star Borough Assembly to respond to calls for regulations that will help improve the air quality within the borough by adopting a program that balances the need for clean air with the needs for economically heating our buildings; and

 WHEREAS, in adopting this clean air program, it is the intent of the Assembly that it be enforced by concentrating on the most significant sources of PM2.5 pollution first, both for attainment within the Non-Attainment area and for significant local sources of pollution that affect adjacent and nearby properties; and

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Fairbanks North Star Borough, Alaska

WHEREAS, in enforcing this clean air program, it is the intent of the Assembly that the focus be on assisting violators to come into compliance through the use of warning, education, and assistance provided through programs such as the enhanced solid fuel burning device change-out program.

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NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

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Section 1. This ordinance is of a general and permanent nature and shall be codified.

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Section 2. The following definitions in FNSBC 8.21.010 Definitions are amended or added as follows:

<u>"Advisory"</u> means a notice issued by the FNSB Air Quality division when the division determines, using available data, that a PM2.5 concentration of 25 ug/m³ has, or will likely occur.

"Air Quality Control Zone" means the area of the Borough currently contained in the EPA designated non-attainment area, which uses the non-attainment area southern, western and eastern boundaries as modified by their respective intersection with the following northern boundary described as; beginning at the intersection of Isberg Road with Chena Ridge Road on the western boundary of the EPA designated nonattainment area, then following Chena Ridge Road back to Chena Pump Road and continuing north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road to Miller Hill Road, then north on Miller Hill Road, then east on Yankovich, then north from Yankovich Road along the east boundary of the Large Animal Research Station to a point just north of its intersection with Nottingham drive and follows the ridge crest across Nottingham Estates to approximately the point where Swallow Drive intersects Dalton Trail to north on Dalton Trail to the crest of the Farmer's Loop Ridge, then follow the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese Highway, then south east on Bennet Road, and along Steel Creek Road to the intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern boundary of the EPA designated non-attainment area.

"Alert" means a notice issued by the FNSB air quality division when the *division* determines, using available data, that a $\underline{PM}_{2.5}$ violation of the 35 [MICROGRAMS PER CUBIC METER] $\underline{ug/m^3}$ has, or will likely occur.

<u>"Clean wood"</u> means natural wood that has not been painted, varnished, or coated with a similar material, has not been treated with preservatives, and does not contain resins or glues as in plywood or other composite wood products.

<u>"Construction and demolition debris"</u> means a conglomeration of materials from construction, repair, remodeling or demolition of buildings and structures containing any prohibited fuels.

"Episode" means when conditions reach or are predicted to reach advisory or alert status.

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Fairbanks North Star Borough, Alaska

"Forecast" means a description of the current dispersion conditions described as good, fair, or poor and including the expected PM_{2.5} concentrations expressed in micrograms per cubic meter.

<u>"Opacity"</u> means the reduction in transmitted light through a column of smoke as measured by an observer certified in using EPA Reference Method 9 as defined by federal law.

Section 3. Section 8.21.020 **Borough listed appliances** shall be

amended as follows:

A[N] solid fuel burning appliance shall be listed by the borough if:

A. The *solid fuel burning appliance* is certified by the U.S. Environmental Protection Agency as meeting the federal emissions [LIMIT STANDARD APPROPRIATE FOR THAT *APPLIANCE* OR IN THE CASE OF *HYDRONIC HEATERS* IS AT LEAST PHASE II QUALIFIED] rate of 2.5 grams of PM_{2.5} per hour or less or for hydronic heaters, meets Phase II qualifications and has an annual average emission level rating equal to or less than 2.5 grams of PM2.5 per hour. For purposes of this section, "certified" means that the *solid fuel burning appliance* meets emission performance standards when tested by an accredited independent laboratory and labeled according to procedures specified by the EPA in 40 CFR 60 Subpart AAA; or

B. The solid fuel burning appliance is tested, including by use of a handheld or other portable device, by an accredited independent laboratory, or other qualified person or entity approved by the borough, establishing that it meets an [THE EPA] emissions [LIMIT STANDARD APPROPRIATE FOR THAT APPLIANCE OR AN EMISSIONS LIMIT STANDARD EQUIVALENT TO THAT OF A LISTED APPLIANCE IN A SIMILAR CATEGORY] rate of 2.5 grams of PM_{2.5} per hour or less or for hydronic heaters the appliance has an annual average emission level rating equal to or less than 2.5 grams of PM2.5 per hour.

Section 4. Section 8.21.025 **Prohibited acts** shall be amended as

follows:

[THE BOROUGH SHALL NOT, IN ANY WAY, REGULATE, PROHIBIT, CURTAIL, NOR ISSUE FINES OR FEES ASSOCIATED WITH THE SALE, DISTRIBUTION, OR OPERATION OF HEATING APPLIANCES OR ANY TYPE OF COMBUSTIBLE FUEL.]

- A. Installation of certain solid fuel burning appliances in the non-attainment area. Within the non-attainment area no person shall install or allow the installation of a solid fuel burning appliance unless it is listed by the Borough as qualifying under this chapter and the installation complies with all other requirements imposed in this chapter. It is a separate violation to fail to remove a solid fuel burning appliance installed in violation of this chapter.
- B. All persons owning and selling their property within the Air Quality Control Zone with an unlisted installed solid fuel burning appliance that will not be removed before sale must, if the solid fuel burning appliance was not listed by the Borough as qualifying

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Fairbanks North Star Borough, Alaska

at the time of installation, provide a written disclosure to the buyer and to the Division prior to closing.

- C. Visible Emissions Standard in the Air Quality Control Zone.
- 1. Standard. No person shall cause, permit, or allow the emission from a solid fuel burning appliance in the Air Quality Control Zone to create opacity greater than 20 percent for a period or periods aggregating more than 10 minutes in any hour except during the first 30 minutes after the initial firing of a cold unit when the opacity limit shall be less than 50 percent.
- 2. Procedures and Enforcement. When ambient weather and light conditions permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A reference method 9 (Visual determination of the Opacity of Emissions From Stationary Sources), or an alternative technology that replaces method 9, when the technology is available and the choice is feasible, upon request of the person being investigated, shall be used to determine compliance with this section. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning appliance.
- D. PM_{2.5} Emissions Crossing Property Lines. No person shall cause or permit emissions from a solid fuel burning appliance to impact the resident(s) of a neighboring property through the creation of an emissions plume that:
 - crosses a property line
 - 2. is observable using EPA method 22 (40 CFR 60 Appendix A), and
- 3. is 25ug/m³ greater than the surrounding immediate vicinity background PM_{2.5} level using methods defined by the Borough Division of Air Quality. For purposes of this subsection, the surrounding "immediate vicinity" means land within an area measured 1,200 feet in all directions from the boundaries of the emitting property.
- E. Borough-Wide Installation Requirements for Hydronic Heaters.
- 1. Setback. Unless permitted by a variance, installing an approved pellet fuel burning appliance, or replacing an existing hydronic heater with a listed appliance, no person shall install or allow the installation of a hydronic heater located less than:
 - a. 330 feet from the closest property line, or
 - b. 660 feet from a school, clinic, hospital, or senior housing unit.
- 2. Any hydronic heater installed in violation of this section shall be immediately remedied or made inoperable and removed as soon as practicable; however, in no case shall the time of removal be longer than 180 days after notice from the Division of a violation.
- F. Prohibited Fuels.

- No person shall burn in the Borough any fuel, except coal in an appliance designed to use coal, which is not listed in the manufacturer's owner's manual as an acceptable fuel for that device or any of the following items in a solid fuel burning appliance:
- 1. Any wood that does not meet the definition of clean wood or has more than 20% moisture content,

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Fairbanks North Star Borough, Alaska

November 3, 2017 Adopted

Garbage, 214 Tires, 215 Materials containing plastic or rubber. 216 5. Waste petroleum products, 217 Paints and paint thinners. 218 Chemicals, 219 8. Glossy or colored papers, 220 Construction and demolition debris, 221 Plywood. 10. 222 11. Particleboard. 223 12. Saltwater driftwood, 224 13. Manure, 225 14. Animal carcasses. 226 15. Asphalt products, 227 Flooring products. 16. 228 Sales or Leasing of Solid Fuel Burning Appliances. 229 G. No person shall sell or lease a solid fuel burning appliance or barrel stove 230 kit in the borough that does not meet the emissions limits established in 8.21.020 A. 231 unless the buyer signs an affidavit, on a form prescribed by the Borough, that the 232 appliance will not be installed or used in the Air Quality Control Zone. This section does 233 not apply to appliances or stoves that transfer pursuant to a sale of property. 234 No person shall commercially sell or offer for sale or lease a solid fuel 235

- burning appliance in the borough unless the commercial seller or dealer provides the 236 prospective buyer or lessee, prior to any sales or lease agreement, with a written notice, 237 prepared or approved by the Division, that includes, but is not limited to, the following: 238 239 The fuel restrictions imposed in this chapter;

 - Proper installation, property location, operation, and maintenance of the appliance:
 - An advisory statement noting that operation of solid fuel burning appliances may not be appropriate in some areas due to terrain, meteorological conditions, or other relevant conditions that render the operation of the appliance a public nuisance or health hazard even though it is otherwise legally installed and operated, and
 - The written notice required in this section shall be signed and dated by the 3. prospective buyer or lessee prior to purchase or lease to indicate receipt of the notification requirements of this section.
 - The commercial dealer or seller shall mail or otherwise provide a copy of the notice, any required affidavit, to the Division within thirty days of the sale. All commercial dealers or sellers shall also include with the notice documentation showing whether the appliance sold or leased meets the Borough's emissions standard.
 - Nuisance. No person within the Fairbanks North Star Borough shall cause or allow emissions of a solid fuel or waste oil burning appliance that are injurious to human life or to property or that unreasonably interfere with the comfortable enjoyment of life or

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Fairbanks North Star Borough, Alaska

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property. No person within the Fairbanks North Star Borough shall operate a solid fuel or waste oil burning appliance in a manner so as to create a public or private nuisance. A violation of a provision of this chapter is hereby declared to be a nuisance.

- I. Other laws. Nothing in this section precludes other local jurisdictions from having more restrictive codes.
- J. Penalties. Upon first conviction of an offense in this chapter, the penalty(ies)/fines(s) set forth in FNSBC Title 1 regarding violations of the PM2.5 air quality control program may be satisfied by completion within 60 days of a borough approved class covering PM2.5 health concerns, non-attainment, importance of dry wood and proper operation of solid fuel burning appliances. The borough may on its own initiative file notice of satisfaction of attendance requirements with the court, or the defendant may file a certificate of completion with the court within the applicable time frame.

Section 5. Section 8.21.040, Forecasting exceedances and voluntary restrictions in the non-attainment area during an alert, shall be amended as follows: 8.21.040 Forecasting exceedances and [VOLUNTARY] restrictions in the Air Quality Control Zone [NON-ATTAINMENT AREA] during an alert

- A. During the winter months of October through March, the Borough shall issue a daily $PM_{2.5}$ forecast [at] by 4:30 p.m. [MONDAY THROUGH FRIDAY]. When the $PM_{2.5}$ concentration reaches the onset level for an episode and is expected to remain at that level for 12 hours or more, an alert or advisory will be declared. An alert or advisory may apply to the Air Quality Control Zone as a whole, or to one or more sub-areas designated by the division. Once an alert or advisory is declared, $PM_{2.5}$ control measures set forth in this section shall be implemented and continued until the alert or advisory is cancelled. There are three levels of episodes: Stage 1, 2 and 3. The obligations imposed in this sub-section do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.
- B. The Division will notify local media to ensure the declared alert or advisory is broadcast. The Division shall also use social media and methods of direct communication such as text messages as feasible. Information within the notification will contain the PM_{2.5} forecast, Stage level for areas, and actions required to reduce sources of PM_{2.5}. The obligations imposed in this sub-section do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.
- [B]C. Stage 1: Voluntary Restrictions in the <u>Air Quality Control Zone</u> [NON-ATTAINMENT AREA] During an [ALERT] <u>Advisory</u>.
- 1. <u>A Stage 1 air advisory is implemented when concentrations exceed or are forecasted to exceed 25ug/m³</u>.
- [1]2. Residents shall be requested to voluntarily stop operation of solid fuel [BURNING APPLIANCES], pellet [STOVES], and waste oil burning appliances, [AND] as well as masonry heaters and all outdoor burning that includes recreational fires such

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Fairbanks North Star Borough, Alaska

as bonfires, campfires and the use of fire pits, non-permitted incinerators and burn barrels in the Air Quality Control Zone [NON-ATTAINMENT AREA].

- [2. THE DIVISION WILL NOTIFY LOCAL MEDIA TO ENSURE THE DECLARED ALERT IS BROADCAST. INFORMATION WITHIN THE NOTIFICATION WILL CONTAIN THE PM FORECAST AND PROCEDURES TO REDUCE SOURCES OF PM.]
- D. Stage 2: Required Restrictions in the Air Quality Control Zone During an Alert
- 1. A Stage 2 air alert is implemented when concentrations exceed or are forecasted to exceed 35ug/m³.
- 2. Burning is permitted in all borough listed appliances. No fuel source may be added to the combustions chamber or firebox of any non-listed solid fuel burning appliance or waste oil burning appliance. Residents should rely instead on their home's alternate, cleaner source of heat (such as a gas or fuel oil fired furnace or boiler or electric baseboard heaters) until the Stage 2 air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "No Other Adequate Source of Heat" designation, the building owner is exempted from complying with the Stage 2 air alert restrictions for that building.
- 4. Outdoor burning is prohibited including non-permitted incinerators and burn barrels. This does not include recreational fires such as bonfires, campfires or ceremonial fires and the use of fire pits.
 - 5. These restrictions shall not apply during a power failure.
- E. Stage 3: Required Restrictions in the Air Quality Control Zone During an Alert.
- 1. A Stage 3 air alert is implemented when concentrations exceed or are forecasted to exceed 55ug/m3.
- 2. No fuel source may be added to the combustions chamber or firebox of any solid fuel burning appliances, masonry heaters, pellet fuel burning appliances, cook stoves, fireplaces, or waste oil burning appliances. No waste oil may be added to a waste oil burning appliance. Residents should rely instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) the Stage 3 air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "No Other Adequate Source of Heat" designation the building owner is exempted from complying with the Stage 3 air alert restrictions for that building.
- 4. Outdoor burning is prohibited including non-permitted incinerators and burn barrels. This does not include recreational fires such as bonfires, campfires or ceremonial fires and the use of fire pits.
- 5. These restrictions shall not apply during a power failure or to listed appliances, masonry heaters or pellet fuel burning appliances when the temperature is below -15 as recorded at the Fairbanks International Airport.
- Section 6. FNSB 2.48.120 **Powers and duties** of the Air Pollution Control Commission are amended as follows:

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Fairbanks North Star Borough, Alaska

F. The commission <u>may</u> [SHALL] develop <u>or review</u> comprehensive plans for the prevention, abatement, and control of air pollution in the borough. Such plans may include recommendations on subjects including, but not limited to, transportation control measures, zoning, taxation, research, and public relations.

H. After a public hearing, the commission shall determine whether a person may receive a variance from the installation requirements of FNSB 8.21.020 E allowing them to install a hydronic heater. In determining whether to grant the variance, the commission shall consider the proposed location of the appliance, impact on surrounding neighborhood, emission levels of the appliance, terrain, meteorological conditions, and other relevant conditions that may render the operation of the appliance at that location a nuisance or a health hazard.

Section 7. A new section, Section 8.21.043, **No other adequate source of heat determination**, shall be added as follows:

- A. A building-owner or other person with a property or managerial interest in the building may obtain a "No Other Adequate Source of Heat" determination from the Division if:
- 1. The building-owner(s) or other person with a property or managerial interest in the building applies with the Division on a form developed by the Division.
- 2. The building-owner(s) or other person with a property or managerial interest in the building files an affidavit with the application that the subject structure must be heated and the structure has no adequate heating source without using a solid fuel or waste oil burning appliance or that economic hardships require the applicant's use of a solid fuel or waste oil burning appliance or complying with a restriction would result in damage to property including damage to the appliance itself and its heating system components.
- B. There shall be no fee for applying for or obtaining a determination.
- <u>C.</u> It shall be a violation to submit a false affidavit for a "no other adequate source of heat" determination.
- D. If the "no other adequate source of heat" appliance does not meet the standards set in this chapter, the Division shall provide the applicant with information concerning the borough's voluntary removal, replacement and repair program.
- E. Applications denied by the division may be appealed to the Air Pollution Control Commission.

Section 8. FNSB 1.04.050 Fine schedule is amended to add the

following:

Code Section	<u>Offense</u>	Penalty/Fine	Mandatory Warning Required
8.21.025(A)	Installation of an unlisted appliance	\$500.00	<u>No</u>

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Fairbanks North Star Borough, Alaska

8.21.025(A)	Failure to remove an unlisted appliance	\$500.00	Yes
8.21.025(B)	Failure to disclose an unlisted appliance before sale	\$500.00	<u>No</u>
8.21.025(C)	Violation of visible emissions standard 1 st offense	\$100.00	<u>Yes</u>
8.21.025(C)	Violation of visible emissions standard 2 nd offense	\$500.00	<u>No</u>
8.21.025(D)	Emissions crossing property lines 1 st offense	\$500.00	<u>Yes</u>
8.21.025(D)	Emissions crossing property lines 2 nd offense	\$1000.00	<u>No</u>
8.21.025(E)	Illegal installation of hydronic heaters	\$500.00	<u>No</u>
8.21.025(E)	Failure to remove hydronic heaters	\$500.00	<u>No</u>
8.21.025(F)	Use of prohibited fuels1 st offense	\$100.00	Yes
8.21.025(F)	Use of prohibited fuels2 nd offense	\$500.00	<u>No</u>
8.21.025(G)	Violation of commercial sale requirements	\$500.00	<u>No</u>
8.21.040(D)	Violation of a stage 2 air alert restriction	\$500.00	Yes
8.21.040(D)	Violation of a stage 3 air alert restriction	<u>\$1000.00</u>	<u>Yes</u>
8.21.043	Filing a false affidavit	\$500.00	<u>No</u>

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Section 9. <u>Effective Date</u>. Except for FNSBC 8.21.025 G (Commercial Sales) which shall be effective 30 days after adoption, and FNSBC 8.21.025 B (sale of property) which shall be effective on May 1st, 2015, and FNSBC 8.21.025(F)(1) (requirement wood be 20% moisture content) which shall be effective on October 1, 2015. This ordinance shall be effective at 5:00 pm on the first Borough business day

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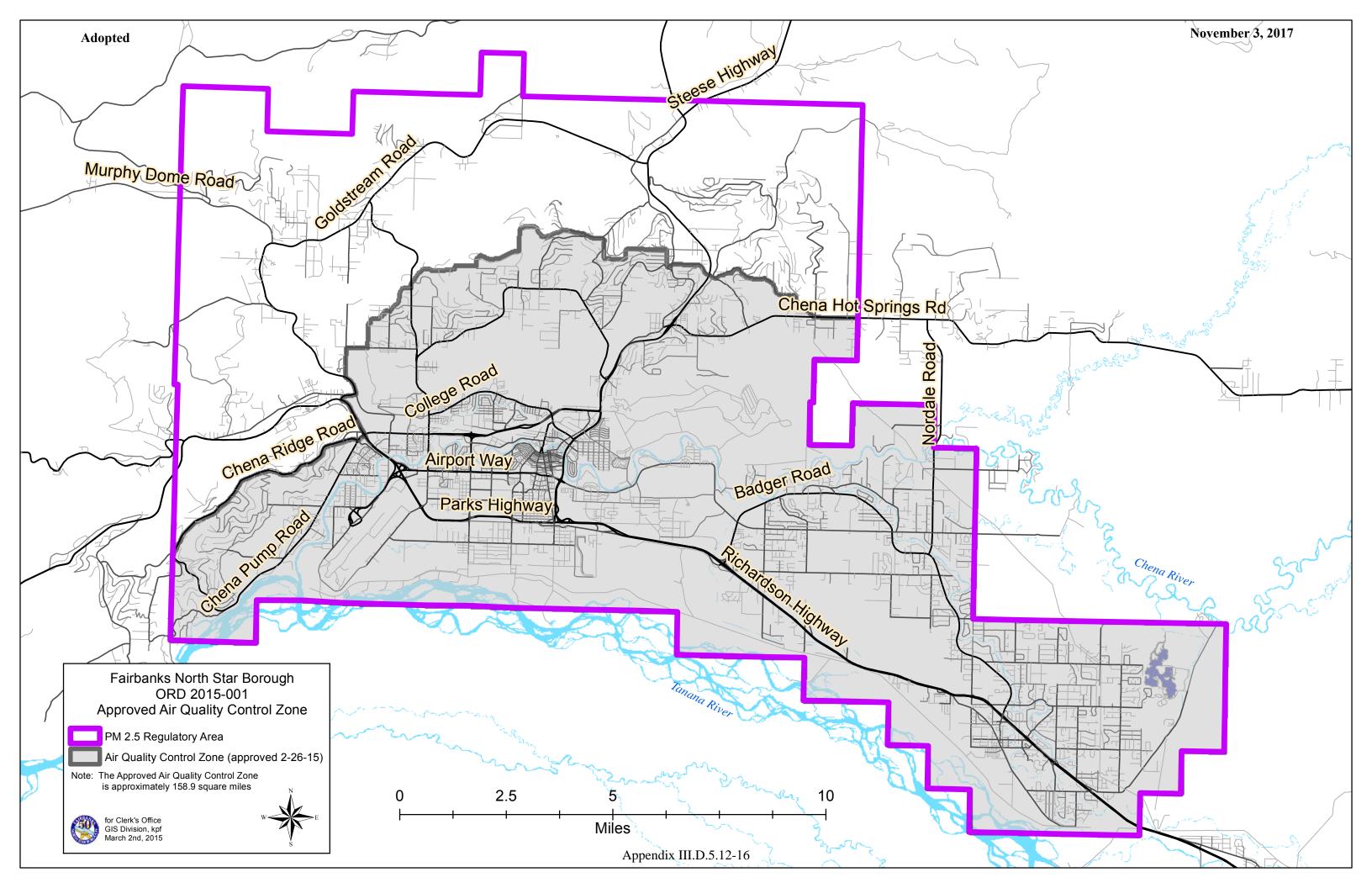
Fairbanks North Star Borough, Alaska



following its adoption and shall have only prospective application, meaning no provision 385 shall apply to any act, including installation or purchase of a solid fuel appliance 386 completed prior to the effective date. 387 388 PASSED AND APPROVED THIS 27TH DAY OF FEBRUARY, 2015. 389 390 391 392 393 394 **Presiding Officer** 395 396 ATTEST: 397 398 399 400 Nanci Ashford-Bingham, MMC 401 Borough Clerk 402 403 Ayes: Golub, Hutchison, Lawrence, Dodge, Quist, Davies, Kassel 404 Noes: Sattley, Roberts 405

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 By:
 Lance Roberts

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 Introduced:
 04/09/2015

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 Advanced:
 04/09/2015

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 Amended:
 04/23/2015

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 Adopted:
 04/23/2015

FAIRBANKS NORTH STAR BOROUGH

ORDINANCE NO. 2015 - 18

AN ORDINANCE AMENDING FNSBC 8.21.035 REGARDING THE ENHANCED VOLUNTARY REMOVAL, REPLACEMENT AND REPAIR PROGRAM, REMOVING THE ADDITIONAL FUEL PAYMENT FROM THE PROGRAM AND AMENDING FNSBC 8.21.045 REGARDING THE VOLUNTARY BURN CESSATION PROGRAM

 WHEREAS, the Borough Assembly recently amended FNSBC 8.21.020 regarding borough listed solid fuel burning appliances so that the use of that defined term can now be substituted for the current lengthier description of an acceptable solid fuel burning appliance replacement for the enhanced voluntary removal, replacement and repair program; and

WHEREAS, in order to maximize the limited funds available for the enhanced voluntary removal, replacement and repair program, it is necessary to remove the additional payment for the purchase of fuel; and

WHEREAS, the recently amended voluntary, removal, replacement and repair program largely replaces the separate voluntary burn cessation program and any funds intended to be spent on the cessation program could be more efficiently spent on the removal, replacement and repair program.

NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

Section 1. This ordinance is of a general and permanent nature and shall be codified.

Section 2. FNSBC 8.21.035, **Enhanced voluntary removal, replacement and repair program**, is hereby amended as follows:

The Fairbanks North Star Borough shall, to the extent funds are available and appropriated by the assembly, offer an enhanced removal, replacement and repair program to help offset the costs of removing, replacing or repairing a *solid fuel burning appliance* (SFBA) or *fireplace*. This program shall be subject to the following eligibility requirements, conditions, and criteria:

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Fairbanks North Star Borough, Alaska

A. General Requirements.

1. Application. An application approved by the *division* and signed by all property owner(s) must be submitted along with any documentation required by the *division*. Applicants must fully comply with the *division*'s inspection process which shall verify the existence of a qualifying SFBA or *fireplace*.

- 2. Priority Ranking. Applications may be prioritized and may be limited by the *division* in its discretion based on geographical location, the overall air quality benefit and the type of SFBA or *fireplace* being removed, replaced or repaired.
- 3. Eligibility. The program is limited to properties within the borough boundary in which a qualifying SFBA or fireplace is installed. If an application is approved for the program, the applicant will be given up to 90 days to meet all of the requirements. Applicants must have no delinquent property tax or penalty or interest owing at the time of application and at completion of the program requirements.
- 4. Additional Requirements. In addition to the general requirements set forth in this section, applicants must also meet the following requirements:
- a. Fully comply with the inspection process required by the *division* that shall ensure that the existence of the qualifying *appliance* to be removed, replaced or repaired is properly documented.
 - b. Removal of appliance.
 - c. Delivery of *appliance* to an authorized decommission station.
 - d. Certificate of destruction delivered to the *division*, if applicable.
 - e. Final installation of a qualified appliance visually verified.
- f. All aspects of this section may be performed by borough-approved personnel or a borough-approved vendor.
- 5. Payments. Applicants will be eligible for reimbursements or, at the option of the applicant, payment may be made directly to a borough-approved vendor. Reimbursements and payments shall be available as follows:
- a. Replacement of an outdoor *hydronic heater*. With either a <u>borough listed solid fuel burning appliance</u> [N EPA CERTIFIED SFBA WITH AN EMISSION RATE LESS THAN OR EQUAL TO 2.5 GRAMS/HOUR, AN EPA PHASE II QUALIFIED PELLET BURNING *HYDRONIC HEATER* WITH AN EMISSION RATE EQUAL TO OR LESS THAN 0.2 POUNDS/MILLION BTUS], or an *appliance* designed to use pellets, home heating oil (excluding waste oil), natural gas, propane, hot water district heat, electricity or a *masonry heater* (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance for proper installation).

Appliance + Fuel Payment

Up to \$10,000 for purchase and installation of the *appliance* plus fuel payment, if applicable.

CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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b. Replacement of a non-borough listed [EPA certified] SFBA, or fireplace[, OR AN EPA CERTIFIED SFBA THAT HAS AN EMISSION RATE GREATER THAN 2.5 GRAMS/HOUR]: With either a borough listed solid fuel burning appliance [N EPA CERTIFIED SFBA WITH AN EMISSION RATE EQUAL TO OR LESS THAN 2.5 GRAMS/HOUR AND] that has an emission rate 50 percent or less than the replaced heater, or an appliance designed to use pellets, home heating oil (excluding waste oil), natural gas, propane, hot water district heat, electricity or a masonry heater (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance for proper installation). Multiple non-boroughlisted solid fuel burning appliances or fireplaces, or combinations thereof, may be replaced with a single heating device that meets the requirements above, except for those that are fired by solid fuels. Payment will be based on the number of devices removed, up to a maximum of three, and may not exceed the replacement cost.

Appliance + Fuel Payment

Up to \$4,000 <u>per device</u> for purchase and installation of the *appliance* plus fuel payment, if applicable.

c. Removal of a SFBA (limited to a one-time participation in this program per property).

Cash Payment

\$2,000 – if removing outdoor *hydronic heater* \$1,000 – if removing other SFBAs

- d. Fuel Payment. [IF A PELLET FUEL BURNING APPLIANCE OR A PELLET STOVE IS PURCHASED AND INSTALLED UNDER THIS PROGRAM, THE APPLICANT IS ELIGIBLE TO RECEIVE AN ADDITIONAL \$300.00 PAYMENT FOR THE PURCHASE OF PELLETS MANUFACTURED IN THE FAIRBANKS NORTH STAR BOROUGH.] If a wood burning appliance is purchased and installed under this program, the applicant is eligible to receive an additional \$300.00 payment for borough-approved pressed wood energy logs manufactured in the Fairbanks North Star Borough.
 - e. Repair Program.
 - i. The repair program will pay for the:
- (A) Replacement of a wood stove's catalytic converter that has exceeded its life span through the one-time payment of up to \$750.00.
- (B) Replacement of any emissions-reducing component of an EPA-certified wood stove up to the maximum amount of \$750.00.
- ii. In addition to the general requirements set forth in this section, applicants must fully comply with any inspection process required by the *division*, which may be performed by a borough-approved vendor.

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Fairbanks North Star Borough, Alaska

Section 3. FNSBC 8.21.045, **Voluntary burn cessation program**, is hereby amended:

117 8.21.045 Voluntary burn cessation program.

The Fairbanks North Star Borough will, to the extent funds are available and appropriated by the assembly, establish a program to encourage, incentivize, and facilitate the voluntary cessation of the use of wood burning appliances (i.e., wood stoves, wood-fired hydronic heaters, wood-fired furnaces, fireplaces, fireplace inserts, masonry heaters or pellet fuel burning appliances) in the [NONATTAINMENT AREA] air quality control zone during air quality alerts. It is recognized that it will be difficult or impossible for some households to participate in this program (e.g., those that heat solely with wood or for which wood is a necessary supplement during periods of cold weather). Therefore, this program is intended for households that are able to use space heating alternatives with significantly lower $pm_{2.5}$ emissions, including those fueled by gas, oil, electricity, propane or district heat, but not wood or pellet stoves or other wood burning appliances. This program will at a minimum consist of the following components:

- A. The borough may contract with an agency that will provide services to promote the program. This agency must have the standing, experience, and capability to carry out a campaign to advertise, reach out, and attract a large number of participants in the *nonattainment area* who are willing to cease the use of a wood burning *appliance* during *air quality alerts*.
- B. [INCENTIVES WILL BE PROVIDED TO HOUSEHOLDS THAT PARTICIPATE IN THE PROGRAM. THESE INCENTIVES MAY INCLUDE THE PROVISION OF (1) A SIGN-UP BONUS SUCH AS CASH, A VOUCHER, OR GOODS AND SERVICES USEFUL TO A HOUSEHOLD THAT HEATS WITH WOOD; (2) A THANK-YOU LETTER, WINDOW OR YARD SIGN; OR, (3) OTHER FORM OF PUBLIC ACKNOWLEDGMENT. THE COST OF THIS INCENTIVE TO THE BOROUGH SHALL NOT EXCEED \$25.00 PER HOUSEHOLD. THESE INCENTIVES MAY BE PROVIDED OR AUGMENTED BY PRIVATE CONTRIBUTIONS.
- C.] Facilitation of this program by the borough will include, but not be limited to, the provision of notice of *air quality alerts* to individual households by methods such as electronic mail messages, text messages, automated phone calls, notices to radio and television stations, and information posted on electronic reader or display boards located throughout the borough in locations best suited to notify residents of *air quality alerts*.
- [D]C. Private contributions, including goods and/or services, will be sought for all appropriate elements of the program. In general this will focus on the provision of materials, equipment, and certain one-time services, but not to fund borough staff positions.

Section 4. <u>Effective Date.</u> This ordinance shall be effective at 5:00 p.m. of the first Borough business day following its adoption.

CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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158	PASSED AND APPROVED THIS 23 RD DAY OF APRIL, 2015.
159	
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161	Karlw Kassel
162	Karl Kassel
163	Presiding Officer
164	
165	ATTEST:
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167	Mauci aphyord Burgham
168	Nanci Ashford-Bingham, MMC
169	Borough Clerk
170	
171	
172	Ayes: Golub, Sattley, Hutchison, Roberts, Lawrence, Dodge, Quist, Davies, Kassel
173	Noes: None
174	

CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is underlined

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1 2 3 4 5 6 7 8		By: Introduced: Advanced: Substituted: Amended: Adopted:	Kathryn Dodge John Davies 04/23/2015 04/23/2015 06/25/2015 06/25/2015 06/25/2015
9 10			
11	FAIRBANKS NORTH STAR I	BOROUGH	
12			
13	ORDINANCE NO. 2015	5 – 29	
14			
15	AN ORDINANCE AMENDING FNSBC 8.21.025.B TO		
16	SALE WRITTEN DISCLOSURES WITH THE AIR (RECORDING OF THE SALE AND AMENDING FNS		
17 18	OF APPLIANCES THAT WERE BOROUGH LISTED		
19	DURING A STAGE 2 & 3 A		INSTALLATION
20	DOMINO / CI/NOL 2 & C/N		
21	WHEREAS, As part of the recently a	adopted PM _{2.5} Air	Quality Control
22	Program, borough code requires certain property se		-
23	to the buyer and to the borough's Air Quality Division	, prior to closing; a	nd
24			
25	WHEREAS, Although disclosure prior t		
26	buyer prior to purchase, disclosure to the borough ca	n wait until after clo	osing; and
27	WHEREAS Bassums property transpo	tions comptimes f	ail to alogo for a
28 29	WHEREAS, Because property transac variety of reasons, waiting until after closing to provi		
30	borough will potentially avoid an unnecessary ste		
31	receives accurate information.		ac a.e 20.0ag
32			
33	NOW, THEREFORE, BE IT ORDAINED	D by the Assembly	of the Fairbanks
34	North Star Borough:		
35	0 " 4 0 " " " TI "		
36	Section 1. Classification. This ordinand	ce is of a general a	nd permanent
37	nature and shall be codified.		
38 39	Section 2. Section 8.21.025.B, Prohibi	ted acts is amend	led as follows:
39 40	Occion 2. Occion 0.21.023.b, i idilibi	tod doto, is differed	ica as ioliows.
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Fairbanks North Star Borough, Alaska

B. All persons owning and selling their property within the Air Quality Control Zone with an [UNLISTED SOLID FUEL BURNING APPLIANCE] <u>installed non EPA certified solid fuel burning appliance</u>, or for hydronic heaters non EPA Phase II qualifications, that will not be removed before sale must[, IF THE SOLID FUEL BURNING APPLIANCE WAS NOT LISTED BY THE BOROUGH AS QUALIFYING AT THE TIME OF INSTALLATION,] provide a written disclosure to the buyer [AND TO THE DIVISION] prior to closing, <u>and a copy to the division no later than 10 days after the recording of the sale</u>.

Section 3. FNSBC 8.21.040, Forecasting exceedances and restrictions in the air quality control zone during an alert, is amended as follows:

- A. During the winter months of October through March, the borough shall issue a daily $PM_{2.5}$ forecast by 4:30 p.m. When the $PM_{2.5}$ concentration reaches the onset level for an *episode* and is expected to remain at that level for 12 hours or more, an *alert* or *advisory* will be declared. An *alert* or *advisory* may apply to the *air quality control zone* as a whole, or to one or more sub-areas designated by the *division*. Once an *alert* or *advisory* is declared, $PM_{2.5}$ control measures set forth in this section shall be implemented and continued until the *alert* or *advisory* is cancelled. There are three levels of *episodes*: Stage 1, 2 and 3. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.
- B. The *division* will notify local media to ensure the declared *alert* or *advisory* is broadcast. The *division* shall also use social media and methods of direct communication such as text messages as feasible. Information within the notification will contain the $PM_{2.5}$ forecast, stage level for areas, and actions required to reduce sources of $PM_{2.5}$. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.
- C. Stage 1: Voluntary Restrictions in the *Air Quality Control Zone* During an *Advisory*.
- 1. A Stage 1 air *advisory* is implemented when concentrations exceed or are forecasted to exceed 25 μ g/m³.
- 2. Residents shall be requested to voluntarily stop operation of solid fuel, pellet, and waste oil burning *appliances*, as well as *masonry heaters* and all outdoor burning that includes recreational fires such as bonfires, campfires and the use of fire pits, nonpermitted incinerators and burn barrels in the *air quality control zone*.
- D. Stage 2: Required Restrictions in the *Air Quality Control Zone* During an *Alert*.
- 1. A Stage 2 air *alert* is implemented when concentrations exceed or are forecasted to exceed 35 μ g/m³.

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2. Burning is permitted in all [BOROUGH LISTED *APPLIANCES*] <u>EPA certified solid fuel burning appliances, and EPA Phase II Qualified hydronic heaters with an annual average emission rating of 2.5 grams or less, masonry heaters, pellet fuel <u>burning appliances, cook stoves, and fireplaces.</u> No fuel source may be added to the combustions chamber or firebox of any [NONLISTED] *solid fuel burning appliance* or waste oil burning *appliance* not listed above. Residents should rely instead on their home's alternate, cleaner source of heat (such as a gas or fuel oil fired furnace or boiler or electric baseboard heaters) until the Stage 2 air *alert* is cancelled.</u>

- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation, the building owner is exempted from complying with the Stage 2 air *alert* restrictions for that building.
- 4. Outdoor burning is prohibited including nonpermitted incinerators and burn barrels. This does not include recreational fires such as bonfires, campfires or ceremonial fires and the use of fire pits.
 - 5. These restrictions shall not apply during a power failure.
- E. Stage 3: Required Restrictions in the Air Quality Control Zone During an Alert.
- 1. A Stage 3 air *alert* is implemented when concentrations exceed or are forecasted to exceed $55 \, \mu g/m^3$.
- 2. No fuel source may be added to the combustions chamber or firebox of any solid fuel burning appliances, masonry heaters, pellet fuel burning appliances, cook stoves, fireplaces, or waste oil burning appliances. No waste oil may be added to a waste oil burning appliance. Residents should rely instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) until the Stage 3 air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation the building owner is exempted from complying with the Stage 3 air *alert* restrictions for that building.
- 4. Outdoor burning is prohibited including nonpermitted incinerators and burn barrels. This does not include recreational fires such as bonfires, campfires or ceremonial fires and the use of fire pits.
- 5. These restrictions shall not apply during a power failure or to [LISTED APPLIANCES] EPA certified solid fuel burning appliances, EPA Phase II Qualified hydronic heaters with an annual average emission rating of 2.5 grams or less, masonry heaters or pellet fuel burning appliances when the temperature is below -15 Fahrenheit as recorded at the Fairbanks International Airport.

Section 4. This ordinance is effective at 5:00 p.m. on the first Borough business day following its adoption except that Section 2 shall apply retroactively with an effective date of May 1st, 2015.

CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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124	PASSED AND APPROVED THIS 25 TH DAY OF JUNE, 2015.
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126	
127	Karlw Kassel
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129	Karl Kassel
130	Presiding Officer
131	ATTEST:
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133	Mauci allyord Burgham
134	Nanci Ashford-Bingham, MMC
135	Borough Clerk
136	
137	·
138	Ayes: Quist, Sattley, Hutchison, Lawrence, Dodge, Davies, Kassel
139	Noes: Roberts
140	Excused: Golub

1 By: Karl W. Kassel, Mayor 2 Introduced: 12/10/2015 3 12/10/2015 Advanced: 4 Amended: 01/14/2016 5 Adopted: 01/14/2016 6 7 8 FAIRBANKS NORTH STAR BOROUGH 9 10 ORDINANCE NO. 2015-73 11 12 AN ORDINANCE AMENDING CHAPTER 8.21 OF THE FAIRBANKS NORTH STAR 13 BOROUGH CODE OF ORDINANCES REGARDING THE PM2.5 AIR QUALITY CONTROL 14 **PROGRAM** 15 16 WHEREAS, FNSB code of ordinances requires realty disclosures for all residences sold where an unlisted solid fuel burning device is installed, a requirement 17 that to date has only produced two disclosures with zero solid fuel burning device 18 19 change outs; and 20 21 WHEREAS, FNSB code of ordinances limits air quality complaint 22 response to emissions from solid fuel burning appliances only; and 23 24 WHEREAS, In adopting a clean air program that is enforced by 25 concentrating on the most significant sources of PM2.5 pollution, both for attainment within the Non-Attainment area and for significant local sources of pollution that affect 26 27 nearby properties, the complaint response program would be better suited to all types of high particulate emitting sources; and 28 29 WHEREAS, On February 27th, 2015 the assembly adopted ordinance 30 2015-01 which created an Air Quality Control Zone, an area designated to refocus the 31 32 FNSB woodsmoke mitigation efforts; and 33 34 WHEREAS. The current code of ordinances dictates that the Enhanced 35 Voluntary Removal, Replacement, and Repair Program be made available to all 36 residences within the FNSB, an area larger than the non-attainment boundary and the Air Quality Control Zone; and 37 38 39 WHEREAS, The FNSB has made \$500,000 of general fund balance money available for the woodstove change out program and the greatest air quality 40 improvement can be achieved by applying it within designated hot spot areas; and 41 42 43 WHEREAS, The FNSB assembly and the State of Alaska has adopted a 44 20% moisture content requirement for cordwood as part of ordinance 2015-01; and

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Fairbanks North Star Borough, Alaska

WHEREAS, Dirigo Laboratories conducted a series of tests detailing the benefits and limitations of mixing Superior Pellet Fuels energy logs with local cordwood, the largest benefits to stove emissions reductions were with wet wood which is now illegal within the borough; and

WHEREAS, The price of heating fuel has dropped to a 8 year low making it a more economical and cleaner to heat with oil instead of energy logs; and

WHEREAS, FNSB code allows a one-time cash payment for the removal of a solid fuel burning appliance, a benefit which could see larger participation with a higher incentive.

NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

Section 1. <u>Classification</u>. This ordinance is of a general and permanent nature and shall be codified.

 Section 2. FNSB 8.21.020, **Borough listed appliances**, is amended as follows:

A solid fuel burning appliance shall be listed by the borough if:

- A. The solid fuel burning appliance is certified by the U.S. Environmental Protection Agency as meeting the federal emissions rate of 2.5 grams of PM2.5 per hour or less or for hydronic heaters, meets Phase II qualifications and has [AN ANNUAL AVERAGE EMISSION LEVEL RATING EQUAL TO OR LESS THAN 2.5 GRAMS OF PM2.5 PER HOUR] an emission rating of 0.10 pounds per million BTU or less. For purposes of this section, "certified" means that the solid fuel burning appliance meets emission performance standards when tested by an accredited independent laboratory and labeled according to procedures specified by the EPA in 40 CFR 60 Subpart AAA; or
- B. The solid fuel burning appliance is tested, including by use of a handheld or other portable device, by an accredited independent laboratory, or other qualified person or entity approved by the borough, establishing that it meets an emissions rate of 2.5 grams of PM2.5 per hour or less or for hydronic heaters the appliance has [AN ANNUAL AVERAGE EMISSION LEVEL RATING EQUAL TO OR LESS THAN 2.5 GRAMS OF PM2.5 PER HOUR] an emission rating of 0.10 pounds per million BTU or less.

Section 3. FNSB 8.21.025 C. 1. regarding the visible emissions standard is amended as follows:

1. Standard. No person shall cause, permit, or allow [THE] <u>particulate</u> emissions [FROM A SOLID FUEL BURNING APPLIANCE] <u>from a non-mobile source</u> in the air quality control zone to create opacity greater than 20 percent for a period or periods aggregating more than 10 minutes in any hour except during the first 30

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November 3, 2017 Adopted

minutes after the initial firing [OF A COLD UNIT] when the opacity limit shall be less than 50 percent.

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Section 4. FNSB 8.21.025 D. is amended as follows:

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- D. PM2.5 Emissions Crossing Property Lines. No person shall cause or permit particulate emissions [FROM A SOLID FUEL BURNING APPLIANCE] from a nonmobile source to impact the resident(s) of a neighboring property through the creation of an emissions plume that:
 - 1. Crosses a property line;
 - 2. Is observable using EPA Method 22 (40 CFR 60 Appendix A); and
- Is 25 µg/m3 greater than the surrounding immediate vicinity background PM2.5 level using methods defined by the borough division of air quality. For purposes of this subsection, the surrounding "immediate vicinity" means land within an area measured 1,200 feet in all directions from the boundaries of the emitting property.

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Section 5. FNSB 8.21.025 H. is amended as follows:

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Nuisance. No person within the Fairbanks North Star Borough shall cause or Н. allow particulate emissions [OF A SOLID FUEL OR WASTE OIL BURNING APPLIANCE] from a non-mobile source that are injurious to human life or to property or that unreasonably interfere with the comfortable enjoyment of life or property. person within the Fairbanks North Star Borough shall operate a solid fuel or waste oil burning appliance in a manner so as to create a public or private nuisance. A violation of a provision of this chapter is hereby declared to be a nuisance.

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Section 6. FNSB 8.21.035 A. 1. Regarding applications for the enhanced voluntary removal, replacement and repair program is amended as follows:

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Application. An application approved by the division and signed by all property owner(s) must be submitted along with any documentation required by the Applications for either the removal of a solid fuel burning appliance or replacement with an appliance designed to use natural gas, propane or home heating oil shall include a signed recordable document restricting future installations of solid fuel burning appliances and requiring appropriate notice to purchasers in the seller's Applicants must fully comply with the division's inspection disclosure statement. process which shall verify the existence of a qualifying SFBA or *fireplace*.

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Section 7. FNSB 8.21.035 A. 3., regarding eligibility for the enhanced voluntary removal, replacement and repair program is amended as follows:

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Eligibility. The program is limited to properties within the [BOROUGH] air quality control zone boundary in which a qualifying SFBA or fireplace is installed. If an application is approved for the program, the applicant will be given up to 90 days to meet all of the requirements. Applicants must have no delinquent property tax or penalty or interest owing at the time of application and at completion of the program requirements.

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> CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is underlined Text to be *deleted* is [BRACKETED AND CAPITALIZED]

Section 8. FNSB 8.21.035 A. 5., regarding payments for the enhanced voluntary removal, replacement and repair program is amended as follows:

- 5. Payments. Applicants will be eligible for reimbursements or, at the option of the applicant, payment may be made directly to a borough-approved vendor. Reimbursements and payments shall be available as follows:
 - a. Replacement of an [OUTDOOR] *hydronic heater*.
- i. With either an [BOROUGH LISTED SOLID FUEL BURNING APPLIANCE, OR AN APPLIANCE DESIGNED TO USE PELLETS] EPA certified wood or pellet stove with an emission rate less than or equal to 2.0 grams of PM2.5 per hour, or an EPA phase II certified pellet burning hydronic heater with an emission rate equal to or less than 0.1 pounds per million BTU, up to \$10,000 for purchase and installation of the appliance.
- ii. With an appliance designed to use home heating oil (excluding waste oil) or a masonry heater (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance for proper installation), up to \$12,000 for purchase and installation of the appliance.
- <u>iii.</u> With an appliance designed to use natural gas, propane, hot water district heat, <u>or</u> electricity <u>up to \$14,000 for purchase and installation of the appliance.</u> [OR A MASONRY HEATER (INCLUDING PARTS, LABOR AND ANY COSTS ASSOCIATED WITH UPGRADING THE CHIMNEY TO THE EXTENT REQUIRED BY THE MANUFACTURER OF THE APPLIANCE FOR PROPER INSTALLATION).

APPLIANCE + FUEL PAYMENT

UP TO \$10,000 FOR PURCHASE AND INSTALLATION OF THE *APPLIANCE* PLUS FUEL PAYMENT, IF APPLICABLE

b. Replacement of a non-borough-listed SFBA or *fireplace*:

i. With either an [BOROUGH LISTED SOLID FUEL BURNING APPLIANCE] EPA certified wood stove, or fireplace insert that has an emission rate less than or equal to 2.0 grams of PM2.5 per hour, or in the case of an EPA certified wood stove, PM2.5 emissions must be reduced by 50 percent and emit 2.0 grams of PM2.5 per hour or less [THAN THE REPLACED HEATER], up to \$4,000 for purchase and installation of the appliance.

- ii. With[or]an appliance designed to use pellets, up to \$5,000 for purchase and installation of the appliance.
- iii. With an appliance designed to use home heating oil (excluding waste oil), hot water district heat, electricity, or a masonry heater (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance for proper installation) up to \$6,000 for the purchase and installation of the appliance.

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Fairbanks North Star Borough, Alaska

iv. With an appliance designed to use natural gas[,] or propane
up to \$10,000 per purchase and installation of the appliance. [, HOT WATER DISTRICT
HEAT, ELECTRICITY OR A MASONRY HEATER (INCLUDING PARTS, LABOR AND
ANY COSTS ASSOCIATED WITH UPGRADING THE CHIMNEY TO THE EXTENT
REQUIRED BY THE MANUFACTURER OF THE APPLIANCE FOR PROPER
INSTALLATION).] Multiple non-borough-listed solid fuel burning appliances or
fireplaces, or combinations thereof, may be replaced with a single heating device that
meets the requirements above, except for those that are fired by solid fuels. Payment
will be based on the number of devices removed, up to a maximum of three, and may
not exceed the replacement cost.

[APPLIANCE + FUEL PAYMENT

UP TO \$4,000 PER DEVICE FOR PURCHASE AND INSTALLATION OF THE *APPLIANCE* PLUS FUEL PAYMENT, IF APPLICABLE.]

c. Removal of a SFBA (limited to a one-time participation in this program per property).

Cash Payment

\$5,000 [\$2,000] – if removing [OUTDOOR] *hydronic heater* \$2,000 [\$1,000]– if removing other SFBAs

[D. FUEL PAYMENT. IF A WOOD BURNING APPLIANCE IS PURCHASED AND INSTALLED UNDER THIS PROGRAM, THE APPLICANT IS ELIGIBLE TO RECEIVE AN ADDITIONAL \$300.00 PAYMENT FOR BOROUGH APPROVED PRESSED WOOD ENERGY LOGS MANUFACTURED IN THE FAIRBANKS NORTH STAR BOROUGH.]

Section 9. <u>Effective Date</u>. This ordinance is effective at 5:00 p.m. on the first Borough business day following its adoption.

CODE AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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196	PASSED AND APPROVED THIS 14 ^{1H} DAY OF JANUARY, 2016.	
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199	(Le Nile)	
200	John Davies	7
201	Presiding Officer	
202	Treatming Cities.	
203	ATTEST:	
204	A = A = A = A = A = A = A = A = A = A =	
205 206	Mua asy on Bingham	
200 207	Nanci Ashford-Bingham, MMC	
207	Borough Clerk	
208 209	Borough Clark	
210	Ayes: Cooper, Golub, Lawrence, Dodge, Quist, Davies	
210	Noes: Roberts	
212	Excused: Sattley Hutchison	

1 By: Karl W. Kassel, Mayor 2 Kathryn Dodge 3 John Davies 4 Introduced: 07/28/2016 5 Advanced: 07/28/2016 6 Adopted: 08/11/2016 7 8 FAIRBANKS NORTH STAR BOROUGH 9 10 **ORDINANCE NO. 2016-20-1A** 11 12 AN ORDINANCE AMENDING THE FY 2016-17 BUDGET BY APPROPRIATING 13 \$290,400 FROM THE GENERAL FUND FUND BALANCE TO THE TRANSIT 14 ENTERPRISE PROJECTS FUND TO DESIGN AND OPERATE AN AIR QUALITY MONITORING NETWORK 15 16 17 WHEREAS, In 2009 the Environmental Protection Agency (EPA) 18 designated Fairbanks a "PM2.5 Non-Attainment" area; and 19 20 WHEREAS, The Fairbanks North Star Borough (FNSB) returned 21 regulatory air quality monitoring responsibilities to the State of Alaska in FY 2017; and 22 23 WHEREAS, The FNSB has designed a community based Air Quality 24 Monitoring Plan that will enhance real-time decision making and provide actionable 25 inputs for improved air quality; and 26 27 WHEREAS, The FNSB Air Quality Division will integrate several different 28 monitor types to identify, in real-time, high PM2.5 emissions sources, resulting in 29 targeted and increased community engagement actions; and 30 WHEREAS, The last comprehensive Air Quality speciation study was 31 32 conducted by the FNSB in 2013; and 33 34 WHEREAS, This funding will be used for, but not limited to, the purchase 35 of a variety of monitor types, a maintenance and deployment contract, equipment 36 hosting contracts, equipment operating supplies, and a speciation study; and 37 38 WHEREAS, This Community-Based Air Quality Monitoring Program is 39 estimated to last three years and funding in subsequent fiscal years for operating the program (FY18 and FY19) are intended to be included in the Mayor's recommended 40 41 budgets for those years. 42 43 NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks 44 North Star Borough: 45

46 Section 1. Classification. This ordinance is not of a general and permanent nature and shall not be codified. 47 48 49 Section 2. General Fund Appropriation. The FY 2016-17 budget is hereby amended by appropriating \$290,400 to the General Fund budgetary guideline 50 entitled "Contribution to Transit Enterprise Projects Fund" and by increasing 51 52 Contribution from Fund Balance by a like amount. 53 Transit Enterprise Projects Fund Appropriation. The FY 54 Section 3. 55 2016-17 budget is hereby amended by appropriating \$290,400 to the Transit Enterprise Projects Fund budgetary guideline entitled "Community-Based Air Quality Monitoring 56 57 Program" and increasing Contribution from General Fund by a like amount. 58 59 Lapse of Funds. Upon completion or abandonment of the Section 4. project, any unexpended, unencumbered funds will lapse to the General Fund fund 60 balance. 61 62 63 Section 5. Effective Date. This ordinance is effective at 5:00 p.m. on the first Borough business day following its adoption. 64 65 PASSED AND APPROVED THIS 11TH DAY OF AUGUST, 2016. 66 67 68 69 70 71 72 73 ølin Davies 74 residing Officer 75 76 ATTEST: 77 78 79 80 Nanci Ashford-Bingham, MMC 81 Borough Clerk 82 83 84 Yeses: Cooper, Sattley, Hutchison, Westlind, Lawrence, Quist, Davies Roberts 85 Noes: Other: Dodge (Excused) 86

Van Lawrence 1 By: 2 Matthew Cooper 3 Introduced: 03/24/2016 4 Advanced: 03/24/2016 5 Substituted: 05/04/2016 6 Amended: 05/04/2016 7 Adopted: 05/04/2016 8 9 10 FAIRBANKS NORTH STAR BOROUGH 11 12 ORDINANCE NO. 2016-21 13 14 AN ORDINANCE AMENDING FNSB 8.21.025 TO REQUIRE THE REMOVAL OF CERTAIN UNLISTED HYDRONIC HEATERS IN THE AIR QUALITY CONTROL ZONE. 15 16 AMENDING THE FY 2015-16 BUDGET BY APPROPRIATING \$500,000 FROM THE GENERAL FUND FUND BALANCE TO THE TRANSIT ENTERPRISE PROJECTS 17 FUND TO PAY FOR THE REMOVAL OF THE UNLISTED HYDRONIC HEATERS AND 18 19 SUSPEND ALL OTHER PAYMENTS FROM THE VOLUNTARY REMOVAL AND 20 REPLACEMENT PROGRAM UNTIL MAY 1, 2017 21 22 WHEREAS, Hydronic heaters that do not have an emissions rating of 0.10 23 pounds per million BTU or less cannot, under existing code, be legally installed in the 24 borough's nonattainment area; and 25 26 WHEREAS, Certain hydronic heaters significantly contribute to the 27 borough's air quality problem; and 28 29 WHEREAS, The Borough has offered in past years and continues to offer 30 a removal program that pays homeowners to remove or replace these hydronic heaters: 31 and

WHEREAS, The Borough needs to increase funding of the removal program and temporarily preclude other program spending in order to ensure funds are available to pay owners who are required to remove these unlisted hydronic heaters; and

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42 43 WHEREAS, The imminent reclassification by the EPA of the Fairbanks North Star Borough from a Moderate to a Serious non-attainment area will result in the imposition of control measures, including expensive technology upgrades for power plants and other stationary sources, which will lead to insignificant improvement to air quality but will significantly increase utility rates; and

WHEREAS, The Borough's continued failure to significantly reduce PM2.5 pollution will further result in offset sanctions which will strangle economic development in the non-attainment area and highway sanctions eliminating federal funding of road projects within the non-attainment area; and

WHEREAS, These sanctions will be lifted if and when air quality violations cease.

NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

Section 1. Sections 2, 3 and 4 are of a general and permanent nature and shall be codified. Sections 5, 6 and 7 shall not be codified.

Section 2. FNSBC 8.21.025 B. is hereby amended as follows:

B. No person who has been convicted of or pled no contest to two or more violations of this chapter involving visible emissions or emissions crossing property lines shall, in the air quality control zone, operate, use or keep installed a hydronic heater unless the hydronic heater is:

1. Borough listed or was listed at the time of installation,

2. A closed combustion system with automatic components that feed solid fuel, including wood pellets, into a firebox where the combustion is enhanced by an active airflow system, or

 3. Connected to a thermal mass system that is certified by the contractor or installer as sufficient to allow the hydronic heater to burn at maximum capacity minimizing on/off cycling. The division may require an owner to provide documentation supporting the certification.

This prohibition shall be effective 90 days after the 2nd conviction or entry or a no contest plea.

 All persons owning and selling their property within the *air quality control zone* with an installed non-EPA-certified *solid fuel burning appliance*[, OR FOR *HYDRONIC HEATERS* NON-EPA PHASE II QUALIFICATIONS,]that will not be removed before sale must provide a written disclosure to the buyer prior to closing, and a copy to the *division* no later than 10 days after the recording of the sale.

Section 3. FNSBC 1.04.050, fine schedule, is amended to add the following:

Code Section	<u>Offense</u>	Penalty/Fine	Mandatory Warning Required
8.21.025(B)	Failure to remove, using or operating a prohibited hydronic heater. 1st offense.	<u>\$500</u>	Yes, with removal as soon as practicable.
8.21.025(B)	Failure to remove, using or operating a prohibited hydronic heater. 2nd offense.	\$1,000	No.

Section 4. <u>General Fund Appropriation</u>. The FY 2015-16 budget is hereby amended by appropriating \$500,000 to the General Fund budgetary guideline entitled "Contribution to Transit Enterprise Projects Fund" and by increasing Contribution from Fund Balance by a like amount.

Section 5. <u>Transit Enterprise Projects Fund Appropriation</u>. The FY 2015-16 budget is hereby amended by appropriating \$500,000 to the Transit Enterprise Projects Fund budgetary guideline entitled "Enhanced Voluntary Removal, Replacement, and Repair Program" and by increasing Contribution from General Fund by a like amount.

Section 6. <u>Limited Use of Funds</u>. All unencumbered funds remaining in the removal, replacement and repair program on the effective date of this ordinance may be spent only on payments to applicants within the air quality zone who are (1) removing or replacing an unlisted hydronic heater or (2) removing or replacing a woodstove that has been the subject of more than one substantiated neighborhood complaint and meeting additional criteria established by the Mayor. This restriction shall continue until May 1, 2017 or until the assembly appropriates additional funds to pay for the other removal, replacement or repairs authorized under the program, whichever occurs first.

 Section 7. <u>Lapse of Funds for the "Enhance Voluntary Removal,</u> <u>Replacement, and Repair Program"</u>. Upon completion or abandonment of the program, any unexpended and unencumbered funds will lapse to the General Fund fund balance.

Section 8. <u>Effective Date.</u> Sections 2, 3 and 4 of this ordinance shall be effective on October 1, 2016. The remaining sections shall be effective at 5:00 pm. on the first Borough business day following its adoption.

113	PASSED AND APPROVED THIS 4 ¹¹ DAY OF MAY, 2016.
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118	John Davies
119	Presiding Officer
120	Presiding Officer
121	ATTEST:
122	ATTEST.
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124	Mua asylow Bingham
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126	Nanci Ashford-Bingham, MMC
127	Borough Clerk
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129	Ayes: Sattley, Hutchison, Cooper, Westlind, Lawrence, Dodge, Quist, Davies
130	Noes: Roberts

1 By: John Davies 2 Introduced: 04/14/2016 3 Advanced: 04/14/2016 4 Adopted: 04/28/2016 5 6 FAIRBANKS NORTH STAR BOROUGH 7 8 9 ORDINANCE NO. 2016-30 10 AN ORDINANCE AMENDING THE FAIRBANKS NORTH STAR BOROUGH CODE OF 11 12 ORDINANCES TO ADOPT THE PROPOSED RENUMBERING AND 13 REORGANIZATION 14 WHEREAS, Codification is a process of organizing and arranging all 15 16 legislation of a permanent and general nature into Code and a recodification is any new replacement of the original Code; and 17 18 19 WHEREAS, The Fairbanks North Star Borough Code of Ordinances was 20 first codified in 1975 and has since undergone two recodifications, the most recent in 21 2004; and 22 WHEREAS, It is necessary to routinely update a Code to ensure 23 24 maximum usability, flexibility, amendibility and economy resulting in a Code that is easy 25 to access, easy to understand, has room to grow and is simple and inexpensive to 26 maintain; and 27 28 WHEREAS. The proposed recodification is a product of an extensive legal review by Code Publishing, Co. and the FNSB Legal Department to eliminate expired 29 provisions, outdated references to state law, and conflicts with other code provisions or 30 31 laws; and 32 WHEREAS, Following recodification, the Fairbanks North Star Borough 33 34 Code of Ordinances will present an updated, orderly and logical composition of all 35 permanent Borough legislation. 36 37 NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks 38 North Star Borough: 39 40 Section 1. This ordinance is not of a general and permanent nature and 41 shall not be codified. 42 43 Section 2. The Clerk is authorized to approve the attached Fairbanks 44 North Star Borough Code proposed renumbering and reorganization plan prepared by

Code Publishing Company and to take all other action necessary to implement the plan.

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Section 3. The attached proposed renumbering and reorganization is adopted. Section 4. Effective Date. Section 2 of this ordinance shall be effective at 5:00 p.m. of the first Borough business day following its adoption. Section 3 of the ordinance is effective July 15th, 2016. PASSED AND APPROVED THIS 28TH DAY OF APRIL, 2016. Presiding Officer ATTEST: Nanci Ashford-Bingham, MMC **Borough Clerk** Ayes: Sattley, Hutchison, Cooper, Westlind, Roberts, Lawrence, Dodge, Quist, Davies Noes: None

2004 Code	New Code	New Name	
	TITLE	GENERAL PROVISIONS	
1.03.010 - 1.03.040, 1.03.110 - 1.03.160	1.04	Code Adoption – General Provisions	
1.01	1.08	Borough Incorporation	
1.02, 8.01.010, 8.01.020, 8.02.010	1.12	Borough Powers	
2.60	1.16	Public Records and Privacy	
1.04	1.20	Penalty Provisions	
	TITLE 2	ADMINISTRATION AND PERSONN	
2.04	2.04	Borough Mayor	
2.16	2.08	Borough Administration Departments	
2.19	2.12	Borough Attorney	
2.28, 9.04	2.16	Emergency Management	
2.05 (except 2.05.050)	2.20	Risk Management	
2.32.042, 2.32.052	2.24	Library Director	
2.36.070 - 2.36.100	2.28	Parks and Recreation	
2.24	2.32	Personnel System	
THE AUTHOR O	TITLE 3	ASSEMBLY	
2.08, 2.09.010(A) – (D) and (H), 2.09.020, 2.09.200	3.04	Borough Assembly	
2.09.070, 2.20	3.08	Borough Clerk	
1.03.050 - 1.03.100	3.12	Ordinances	
2.09.030, 2.09.050, 2.09.060, 2.09.080, 2.09.090	3.16	Meetings	
2.09.035	3.20	Agendas	
2.09.010(E) — (G) and (I), 2.09.040, 3.01.200(C), 14.02.040(A)	3.24	Committees	
100 may 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TITLE 4	BOARDS AND COMMISSIONS	
2.21 (except 2.21.190)	4.04	General Provisions	
2.63	4.08	Agricultural Commission	
2.48	4.12	Air Pollution Control Commission	
2.38, 6.14.020, 6.14.030	4.16	Animal Control Commission	
2.10.040 - 2.10.110	4.20	Assembly Board of Ethics	

2004 Code	New Code	New Name	
18.52.030, last three sentences of 18.56.025(C)	4.24	Board of Adjustment	
3.24.002	4.28	Board of Equalization	
2.37	4.32	Chena Riverfront Commission	
2.100	4.36	Early Childhood Development Commission	
2.75	4.40	Economic Development Commission	
8.01,030, 8.01.050 - 8.01.070	4.44	Emergency Medical Services (EMS) Boards	
2.67	4.48	Health and Social Services Commission	
2.64	4.52	Historic Preservation Commission	
3.04.130	4.56	Investment Advisory Committee	
2.65	4.60	John A. Carlson Community Center Advisory Board	
2.80	4.64	Land Management Advisory Commission	
2.105	4.68	Landscape Review Board	
2.32.012, 2.32.022	4.72	Library Commission	
2.36.010 - 2.36.060	4.76	Parks and Recreation Commission	
2.40, 18.52.020	4.80	Planning Commission	
2.39	4.84	Platting Board	
2.56	4.88	Public Transportation Advisory Commission	
2.110	4.92	Recycling Commission	
2.95	4.96	Road Service Revolving Loan Fund Board	
2.70	4.100	Senior Citizens Advisory Commission	
2.22	4.104	Salaries and Emoluments Commission	
2.45	4.108	Sister City Commission	
2.62	4.112	Trails Advisory Commission	
2.90	4.116	Youth Commission	
Manuscript Control of the Control	TITLE 5	ELECTIONS	
2.12.010 - 2.12.120, 2.12.780, 14.01.071	5.04	General Provisions	
2.12.130 - 2.12.170	5.08	Voter Qualifications	
2.12.180 - 2.12.270	5.12	Candidate Qualifications	
2.12.280 - 2.12.315	5.16	Ballots	

2004 Code	New Code	New Name	
2.12.320 - 2.12.455	5.20	Operation of Polls	
2.12.460 - 2.12.510	5.24	Ballot Counting Procedures	
2.12.520 - 2.12.620	5.28	Absentee Voting	
2.12.630 - 2.12.680	5.32	Canvass Board and Certification of Election Results	
2.12.690 - 2.12.730	5.36	Election Recount	
2.12.740	5.40	Appeal or Judicial Review	
	TITLE 6	CODE OF ETHICS	
	Division 1.	Assembly Code of Ethics	
2.10.330	6.04	Definitions	
2.10.010 - 2.10.030	6.08	Purpose and Applicability	
2.10.120	6.12	Violations	
2.10.130	6.16	Gifts and Required Disclosure	
2.10.150 - 2.10.300	6.20	Procedures	
2.10.310, 2.10.320	6.24	Penalties and Remedies	
	Division 2.	Code of Ethics for Boards and Commissions, Mayor and Borough Employees	
2.21,190	6.28	Code of Ethics for Boards and Commissions	
2.25	6.32	Code of Ethics for Mayor and Borough Employees	
	TITLE 7	FINANCE	
3.01 (except 3.01.200(C))	7.04	Fiscal Management	
3.02	7.08	Grant Management	
3.03	7.12	Budget Management	
3.04 (except 3.04.130, 3.04.140)	7.16	Investment of Borough Funds	
	TITLE 8	REVENUE AND TAXATION	
A THE PROPERTY AND ADDRESS.	Division 1.	Property Taxes	
3.08, 3.11.070, 3.12	8.04	General Provisions	
3.10	8.08	Exemptions and Deferrals	
3.11.010 – 3.11.060, 3.11.080	8.12	Criteria for Real Property Exemptions and Deferrals	

2004 Code	New Code	New Name	
3.24.001, 3.28	8.16	Appeal – Remedies Available to Property Taxpayers Seeking Relief From Taxes Assessed or Paid	
3.32	8.20	Delinquency and Foreclosure	
3.36	8.24	Redemption, Sale and Repurchase	
3.40	8.28	Statute of Limitations	
	Division 2.	Other Assessments, Taxes and Fees	
3.05	8.32	Special Assessment Procedures	
3.46	8.36	Oil and Gas Property Tax	
3.55	8.40	Borough Debt and Bonds	
3.57	8.44	Tobacco Distribution Excise Tax	
3.58	8.48	Hotel-Motel Room Tax	
3.59	8.52	Alcoholic Beverage Tax	
8.10	8.56	Solid Waste Collection District	
3.50	8.60	User Fees	
	TITLE 9	PUBLIC PEACE, MORALS AND WELFARE	
9.12	9.04	Offenses Against Public Property	
9.16	9.08	Liquor Licenses	
9.17	9.12	Marijuana Regulation	
9.20	9.16	Compulsory Attendance	
8.07	9.20	Curfew for Minors	
	TITLE 10	TRAFFIC AND VEHICLES	
	Division 1.	Abandoned Vehicles – Vehicle Impoundment	
8.14	10.04	Abandoned Vehicles	
10.01	10.08	Vehicle Impoundment	
	Division 2.	Permanent Motor Vehicle and Noncommercial Trailer Registration	
10.02	10.12	Permanent Motor Vehicle and Noncommercial Trailer Registration	
and the same	TITLE 11	NATURAL GAS UTILITY	
11.01.010, 11.01.030	11.04	Establishment of Utility and Managemen	
A Comment	TITLE 12	STREETS AND SIDEWALKS	
12.01	12.04	Protection of Public Roads and Areas	

2004 Code	New Code	New Name	
12.02	12.08	Traffic Regulations	
12.03	12.12	Street and Road Maintenance	
14.03	12.16	Excavation and Construction on Public Roads Within Road Service Areas	
	TITLE 13	STORM WATER DISCHARGE	
21.20	13.04	Definitions	
21.10	13.08	General Provisions	
21.30	13.12	Illicit Discharge Detection and Elimination	
21.40	13.16	Construction Site Storm Water Runoff Control	
21.50	13.20	Post-Construction Storm Water Management	
E 2 2	TITLE 14	SERVICE AREAS AND COMMISSIO	
	Division 1.	General Provisions	
14.01.011 – 14.01.061, 14.01.091 – 14.01.181 (except last sentence of 14.01.151(C))	14.04	General Provisions	
14.01.081, 14.01.160, 17.60.200	14.08	Annexation and Boundaries	
	Division 2.	Service Area District Councils	
14.02.010, 14.02.020, 14.02.030, 14.02.040(B), 14.02.050	14.12	Service Area District Councils	
	Division 3.	Service Area Creation, Powers and Commissions	
14.08 (except 14.08.030, 14.08.110, 14.08.150, 14.08.155, 14.08.180, 14.08.230, 14.08.270, 14.08.275, 14.08.290, 14.08.300, 14.08.900)	14.16	Road Construction, Maintenance, and Improvement	
14.08.110, 14.08.150, 14.08.155, 14.08.180, 14.08.290, 14.08.300, 14.08.900	14.20	Fire Protection	

2004 Code	New Code	New Name	
14.08.030, 14.08.230, 14.08.270, 14.08.275	14.24	Utilities – Parks and Recreation	
	TITLE 15	BUILDINGS AND CONSTRUCTION	
15.04	15.04	Floodplain Management Regulations	
	TITLE 16	PUBLIC PROCUREMENT AND SURPLUS	
2.05.050, 3.04.140, 11.01.020, 16.21	16.04	Procurement Generally	
16.25	16.08	Office of the Chief Procurement Officer	
14.01.151(C) last sentence, 16.30	16.12	Source Selection and Contract Formation	
16.35	16.16	Specifications	
16.40	16.20	Construction Contract Management and Contract Administration	
16.45	16.24	Bonds and Bid Security	
16.50	16.28	Contract Clauses and Their Administration	
16.55	16.32	Professional Services	
16.60	16.36	Debarment or Suspension	
16.65	16.40	Appeals and Remedies	
16.70	16.44	Ethics in Public Contracting	
	TITLE 17	SUBDIVISIONS	
	Division 1.	General Provisions	
17.20	17.04	Definitions	
17.10	17.08	General Provisions	
	Division 2.	Subdivision Applications and Approval Processes	
17.30.010 - 17.30.030	17.12	Major Plats	
17.30.040 - 17.30.060	17.16	Quick Plats	
17.30.070 - 17.30.100	17.20	Waiver of a Plat	
17.30.110, 17.30.120	17.24	Amendments	
17.30.130 - 17.30.160	17.28	Right-of-Way Acquisition Plats	
	Division 3.	Other Related Applications and Approva Processes	
17.40.010 - 17.40.040	17.32	Vacations	

2004 Code	New Code	New Name	
17.40.090 - 17.40.120	17.40	Street Naming of Private Roads	
17.50	17.44	Assurances for Completion	
	Division 4.	Subdivision Requirements	
17.60.010	17.48	Preliminary Plats	
17.60.020 - 17.60.055	17.52	Final Plats	
17.60.060 - 17.60.180	17.56	Design and Public Improvement Requirements	
17.60.190, 17.60.210, 17.60.220, 17.60.230	17.60	Other Miscellaneous Requirements	
	Division 5.	Variances – Appeals	
17.70	17.64	Variances	
17.80	17.68	Appeals	
	TITLE 18	ZONING	
18.06	18.04	Definitions	
18.02	18.08	Comprehensive Plan	
18.04	18.12	General Provisions	
18.08	18.16	Zoning District Designations	
18.10	18.20	OR Outdoor Recreational District	
18.11	18.24	OSB Open Space Buffer District	
18.14	18.28	RA-40, RA-20, RA-10 and RA-5 Rural and Agricultural Districts	
18.16	18.32	RF-4 and RF-2 Rural Farmstead District	
18.18	18.36	RE-4 and RE-2 Rural Estate Districts	
18.20	18.40	RR Rural Residential District	
18.22	18.44	SF-20, SF-10 and SF-5 Single-Family Residential Districts	
18.24	18.48	TF Two-Family Residential District	
18.26	18.52	MF Multiple-Family Residential District	
18.28	18.56	MFO Multiple-Family Residential/ Professional Office District	
18.32	18.60	LC Light Commercial District	
18.34	18.64	GC General Commercial District	
18.36	18.68	CBD Central Business District	
18.38	18.72	LI Light Industrial District	
18.40	18.76	HI Heavy Industrial District	

2004 Code	New Code	New Name	
18.42	18.80	ML Mineral Lands District	
18.44	18.84	GU-1 General Use District	
18.45	18.88	GU-5 General Use District	
18.48	18.92	Overlay Designations	
18.50	18.96	Supplementary Regulations	
18.52.010	18.100	Department of Community Planning	
18.54	18.104	Amendments, Changes and Procedures	
18.56 (except last three sentences of 18.56.025(C))	18.108	Nonconforming (Grandfathered) Uses and Lots	
18.58	18.112	Enforcement and Penalties	
Title 18 Appendix A	18.116	Geometric Standards	
	TITLE 19	MOBILE HOMES	
19.20	19.04	Definitions	
3.16	19.08	Mobile Home Registration	
19.10	19.12	Mobile Home Parks	
3.44	19.16	Mobile Home Sales	
	TITLE 20	LAND ACQUISITION, MANAGEMENT AND SALE	
25.25.030	20.04	Definitions	
25.25.010	20.08	Purpose	
25.05	20.12	Land Acquisition	
25.10	20.16	Land Management	
25.15	20.20	Land Sale	
25.20	20.24	Determining Which Borough Lands Ma Be Sold or Retained	
	TITLE 21	HEALTH AND SAFETY	
3.60, 8.03	21.04	Emergency Communication Services	
8.05	21.08	Carbon Monoxide Emergency Episode Prevention Plan	
8.06	21.12	Oxygenated Fuel	
8.08	21.16	Fireworks	
8.12	21.20	Garbage and Solid Waste	
8.20	21.24	Vehicle Plug-In Program	
8.21	21.28	PM _{2.5} Air Quality Control Program	

2004 Code	New Code	New Name
	TITLE 22	ANIMALS
6.04.010	22.04	Definitions
6.04.020	22.08	Animal Control Management
6.06	22.12	Fees and Deposits
6.12	22.16	Impoundment
6.14.010	22.20	Animal Bite Incidents
6.16	22.24	Rabies Control
6.24	22.28	Unlawful Acts
6.04.030, 6.28	22.32	Enforcement - Penalties

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Name White Busham

Position

By: Karl Kassel, Mayor Introduced: 06/23/2016 06/23/2016 Advanced: Amended: 07/28/2016 Adopted: 07/28/2016 FAIRBANKS NORTH STAR BOROUGH ORDINANCE NO. 2016-37

AN ORDINANCE AMENDING TITLE 21 REGARDING NO OTHER ADEQUATE SOURCE OF HEAT DETERMINATIONS

WHEREAS, Borough code exempts qualifying buildings with no other adequate source of heat from compliance with certain air quality regulations; and

WHEREAS, Granting these exemptions only to buildings constructed prior to December 31, 2016 will encourage property owners to include an alternative source of heat in new construction for use during times of exceedances; and

WHEREAS, Because borough codes imposing restrictions on the use of solid fuel and other appliances during air alerts apply only to the air quality zone, only owners within the air quality zone need to apply for a "no other adequate source of heat" determination.

NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

Section 1. This ordinance is of a general and permanent nature and shall be codified.

Section 2. FNSBC 21.28.060 **No other adequate source of heat determination** is amended to read as follows:

- A. A building owner or other person with a property or managerial interest in [THE] <u>a</u> building <u>located within the air quality control zone</u> may obtain a "no other adequate source of heat" determination from the division if:
- 1. The building owner(s) or other person with a property or managerial interest in the building applies with the division on a form developed by the division[.]:
- 2. The building owner(s) or other person with a property or managerial interest in the building files an affidavit with the application that the subject structure must be heated and the structure has no adequate heating source without using a solid fuel or waste oil burning appliance or that economic hardships require the applicant's use of a solid fuel or waste oil burning appliance or complying with a restriction would

45 result in damage to property including damage to the appliance itself and its heating 46 system components[.]; and 47

- The building was constructed on or before December 31, 2016.
- 48 В. There shall be no fee for applying for or obtaining a determination.
- It shall be a violation to submit a false affidavit for a "no other adequate source of 49 50 heat" determination.
 - If the "no other adequate source of heat" appliance does not meet the standards set in this chapter, the division shall provide the applicant with information concerning the borough's voluntary removal, replacement and repair program.
 - Applications denied by the division may be appealed to the air pollution control commission.

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Section 3. Effective Date. This ordinance shall be effective at 5:00 p.m. of the first Borough business day following its adoption.

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PASSED AND APPROVED THIS 28TH DAY OF JULY, 2016.

า์n Davies

Presiding Officer

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ATTEST: 71

Nanci Ashford-Bingham, MMC

Borough Clerk

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78 Yeses: Cooper, Sattley, Hutchison, Westlind, Lawrence, Dodge, Davies

79 Noes: Roberts

Other: Quist (Excused) 80

November 3, 2017 Adopted

1 2 3 4 5 6		By: Introduced: Advanced: Amended: Adopted: Immediate	Karl Kassel, Mayor 02/23/2017 02/23/2017 03/09/2017 03/09/2017
7 8		Reconsideration Adopted:	n Failed: 03/09/2017 03/09/2017
9 10	FAIRBANKS NORTH STAR	BOROUGH	
11 12	ORDINANCE NO. 201	17-18	
13			
14 15 16 17	AN ORDINANCE AMENDING CHAP REGARDING THE PM _{2.5} AIR QUALITY CONTRC FNSBC 1.20.080, FINE SC	L PROGRAM A	_
18 19 20 21	WHEREAS, The United States Enviro on December 22, 2008, declared part of the Fairl attainment area for fine particulate pollution ($PM_{2.5}$); a	banks North St	O 1 ()
22 23 24 25	WHEREAS, On December 16, 2016 the Federal Register of its intent to reclassify the Fa attainment area from Moderate to Serious status; and	airbanks North S	•
26 27 28	WHEREAS, Reclassification to Serious mandate that Best Available Control Measures be in within the non-attainment area; and		
29 30 31 32 33	WHEREAS, The State of Alaska, throwith the Borough, has authorized the Fairbanks No administer an area-wide local $PM_{2.5}$ air quality control and consistent with the State's air quality program; an	orth Star Boroug ol program that w	gh to establish and
34 35 36 37 38	WHEREAS, In the winter, $PM_{2.5}$ concer routinely exceed the allowable limit, thereby vistandards; and		
39 40 41	WHEREAS, An excessive level of PM_{2} of borough residents; and	_{.5} impacts the he	ealth and well being
42 43 44	WHEREAS, Air quality issues coule economic development, including military expansi Borough.	•	
	AMENDMENTS ARE SHOWN IN LEGIS		

Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-18 Page 1 of 17

Text to be added is underlined Text to be *deleted* is [BRACKETED, CAPITALIZED]

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NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:

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Section 1. This ordinance is of a general and permanent nature and shall be codified.

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Section 2. FNSBC 21.28.010, **Definitions**, shall be amended as follows:

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["ADVISORY" MEANS A NOTICE ISSUED BY THE FNSB AIR QUALITY DIVISION WHEN THE DIVISION DETERMINES, USING AVAILABLE DATA, THAT A $PM_{2.5}$ CONCENTRATION OF 25 μ G/M³ HAS OCCURRED, OR WILL LIKELY OCCUR.]

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["AIR QUALITY ALERT" MEANS AN ADVISORY, ALERT OR EPISODE CONCERNING AIR QUALITY WHETHER ISSUED BY THE FAIRBANKS NORTH STAR BOROUGH OR THE STATE OF ALASKA.]

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"Air quality control zone" means the area of the borough currently contained in the EPA designated nonattainment area, which uses the nonattainment area southern, western and eastern boundaries as modified by their respective intersection with the following northern boundary described as: beginning at the intersection of Isberg Road with Chena Ridge Road on the western boundary of the EPA designated nonattainment area, then following Chena Ridge Road back to Chena Pump Road and continuing north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road to Miller Hill Road, then north on Miller Hill Road, then east on Yankovich, then north from Yankovich Road along the east boundary of the Large Animal Research Station to a point just north of its intersection with Nottingham Drive and follows the ridge crest across Nottingham Estates to approximately the point where Swallow Drive intersects Dalton Trail to north on Dalton Trail to the crest of the Farmer's Loop Ridge, then follow the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese Highway, then southeast on Bennet Road, and along Steel Creek Road to the intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern boundary of the EPA designated nonattainment area.

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"Air Quality Index" (AQI) is an index for reporting daily air quality, which indicates how polluted the air currently is or how polluted it is forecast to become. The higher the AQI value, the greater the level of air pollution and the greater the health concern. AQI is divided into six categories with correspondingly higher levels of health concern as outlined in the table below:

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Fairbanks North Star Borough, Alaska

AQI (Air Quality Index)	AQI Category	Cautionary Statement	Health Statement
0-50	Good	None	None
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion.	None
101-150	Unhealthy for Sensitive Groups	People with respiratory or heart disease, the elderly, and children should limit prolonged exertion.	Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly.
151-200	Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion.	Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly: increased respiratory effects in general population.
201-300	Very Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid outdoor activity; everyone else should avoid prolonged exertion.	Significant aggravation of the heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly: significant increase in respiratory effects in the general population.
301-500	Hazardous	Everyone should avoid any outdoor exertion; people with respiratory or heart disease; the elderly and children should remain indoors.	Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly: significant increase in respiratory effects in the general population.

division determines, using available data <u>or modeling</u>, that [A] PM_{2.5} [VIOLATION OF THE 35 μg/m3 HAS OCCURED OR WILL LIKELY OCCUR] <u>concentration levels have</u> reached or are forecasted to reach 25μg/m³ or higher for at least 12 consecutive hours.

"Appliance" means a device or apparatus that is manufactured and designed to utilize energy and which does not require a stationary source air quality permit from the state of Alaska under 18 AAC 50.

"Alert" means a notice issued by the [FNSB AIR QUALITY] division when the

"Clean wood" means natural wood that has not been painted, varnished, or coated with a similar material, has not been treated with preservatives, and does not contain resins or glues as in plywood or other composite wood products.

"Construction and demolition debris" means a conglomeration of materials from construction, repair, remodeling or demolition of buildings and structures containing any prohibited fuels.

"Cook stove" means a wood burning appliance that is designed primarily for cooking food and that has the following characteristics:

 1. An oven, with a volume of 0.028 cubic meters (one cubic foot) or greater, and an oven rack;

2. A device for measuring oven temperatures;

3. A flame path that is routed around the oven;4. A shaker grate;

5. An ash pan;

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Fairbanks North Star Borough, Alaska

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7. The absence of a fan or heat channels to dissipate heat from the device.

"Division" means the Fairbanks North Star Borough air quality division.

"Emergency Power System" is an independent source of electrical power that supports important electrical systems on loss of normal power supply. An emergency power system may include a standby generator, batteries, and other apparatus. Emergency power systems are installed to protect life and property from the consequences of loss of normal electric power supply.

"EPA" means the United States Environmental Protection Agency.

<u>"EPA certified" means that the solid fuel burning appliance meets emission performance standards when tested by an accredited independent laboratory and is labeled according to procedures specified by the EPA in 40 CFR Part 60 Subpart AAA or QQQQ.</u>

["EPISODE" MEANS WHEN CONDITIONS REACH OR ARE PREDICTED TO REACH ADVISORY OR ALERT STATUS.]

"Fireplace" means an assembly consisting of a hearth and open fire chamber of noncombustible factory-built or masonry materials and provided with a chimney, for use with solid fuels, which cannot be operated with an air to fuel ratio of less than 35 to one.

"Fireplace insert" means a solid fuel burning appliance similar in function and performance to a freestanding wood burning stove, which is made from cast iron or steel designed to be installed in an existing masonry or prefabricated fireplace.

"Forecast" means a description of the current dispersion conditions described as good, fair, or poor and including the expected $PM_{2.5}$ [CONCENTRATIONS EXPRESSING IN MICROGRAMS PER CUBIC METER] NowCast AQI categorized as good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, or hazardous.

"Heating appliances" means, but is not limited to: [OIL FURNACES, GAS FURNACES, WOOD STOVES, COAL STOVES, WOOD-FIRED HYDRONIC HEATERS, WOOD-FIRED FURNACES, COAL-FIRED HYDRONIC HEATERS, COAL-FIRED FURNACES] wood, coal, or pellet fired hydronic heaters, stoves, and furnaces; oil or gas fired boilers and furnaces; and masonry heaters, pellet stoves, cook stoves, and fireplaces.

"Hydronic" means having to do with a system moving heat from one location to another by means of the circulation of a heat transfer liquid through piping or tubing.

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Fairbanks North Star Borough, Alaska

"Hydronic heater" means a fuel burning appliance designed to (1) burn wood or other solid fuels and (2) heat building space and/or domestic hot water via the distribution, typically through pipes, of a fluid heated in the appliance.

"Masonry heater" means a wood burning appliance that complies with the guidelines of ASTM E1602-08, Standard Guide for Construction of Masonry Heaters, and:

1. Is designed and intended for operation only in a closed combustion chamber configuration; and

2. Has enough thermal storage capacity to maintain no less than 50.0 percent of the maximum masonry-mass temperature for at least four hours after the maximum masonry-mass temperature has been reached; and

 3. The masonry heater design and installation has been confirmed and documented by a qualified person or entity approved by the borough.

"Nonattainment area" is the area depicted on the map attached to the ordinance codified in this chapter and is further defined as follows:

Township Range Delineated Boundary for the Fairbanks Nonattainment Area

MTRS F001N001 – All Sections, MTRS F001N001E – Sections 2-11, 14-23, 26-34, MTRS F001N002 – Sections 1-5, 8-17, 20-29, 32-36, MTRS F001S001E – Sections 1, 3-30, 32-36, MTRS F001S001W – Sections 1-30, MTRS F001S002E – Sections 6-8, 17-20, 29-36, MTRS F001S002W – Sections 1-5, 8-17, 20-29, 32-33, MTRS F001S003E – Sections 31-32, MTRS F002N001E – Sections 31-35, MTRS F002N001 – Sections 28, 31-36, MTRS F002N002 – Sections 32-33, 36, MTRS F002S001E – Sections 1-2, MTRS F002S002E – Sections 1-17, 21-24, MTRS F002S003E –

"NowCast" means a weighted average of hourly air monitoring data used by the EPA for real-time reporting of the AQI for PM.

"Opacity" means the reduction in transmitted light through a column of smoke as measured by an observer certified in using EPA Reference Method 9 as defined by federal law or EPA approved Alternative Method 82 which is defined as American Society for Testing and Materials (ASTM) D 7520-09.

"Particulate matter" or "PM" means total particulate matter including PM_{10} and $PM_{2.5}$ (condensable and noncondensable fraction) and is a complex airborne mixture of extremely small particles and liquid droplets that are made up of a number of components, including acids, organic chemicals, metals, soil, or dust.

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Fairbanks North Star Borough, Alaska

Sections 5-8, 18.

"Pellet fuel burning appliance" or "pellet stove" means a closed combustion, vented pellet burning appliance with automatic components creating an active air flow system, sold with the hopper and auger combination as integral parts, and designed, warranted, safety listed, and advertised by the manufacturer specifically to be fueled by pellets of sawdust, wood products and other biomass materials while prohibiting the use of cordwood.

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"PM_{2.5}" means particulate matter comprised of particles that have diameters of two and one-half microns or less.

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"Sale" means the transfer of ownership or control.

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"Solid fuel burning appliance" (SFBA) means any appliance[, UNLESS SPECIFICALLY EXCLUDED FROM THIS DEFINITION,] designed to produce heat by burning nongaseous and nonliquid fuels. This definition includes, but is not limited to:

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- Wood stoves;
 Coal stoves;
- 2. Coal stoves;3. Wood-fired *hydronic heaters*;
 - 4. Wood-fired furnaces:
 - 5. Coal-fired hydronic heaters;
 - 6. Coal-fired furnaces; [AND]
 - 7. Fireplace inserts[.];
 - 8. Pellet fuel burning appliances;
 - 9. Masonry Heaters;
 - 10. Cook Stoves; and
 - 11. Fireplaces.

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[THE FOLLOWING APPLIANCES ARE SPECIFICALLY EXCLUDED FROM THIS DEFINITION:

- 1. MASONRY HEATERS:
- 2. PELLET FUEL BURNING APPLIANCES;
- 3. COOK STOVES; AND
- 4. FIREPLACES.]

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"Waste oil burning appliance" means an appliance that burns used or waste oil.

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Section 3. FNSBC 21.28.020, **Borough listed appliances**, shall be amended as follows:

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A solid fuel burning appliance shall be listed by the borough if:

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A. The solid fuel burning appliance is <u>EPA certified</u> [CERTIFIED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)] as meeting the federal emissions rate of 2.5 grams of PM_{2.5} per hour or less, or for hydronic heaters, [MEETS PHASE II

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Fairbanks North Star Borough, Alaska

242 QUALIFICATIONS] is EPA certified and has an emission rating of 0.10 pounds per

- 243 million BTU or less[. FOR PURPOSES OF THIS SECTION, "CERTIFIED" MEANS
- 244 THAT THE SOLID FUEL BURNING APPLIANCE MEETS EMISSION PERFORMANCE
- 245 STANDARDS WHEN TESTED BY AN ACCREDITED INDEPENDENT LABORATORY
- 246 AND LABELED ACCORDING TO PROCEDURES SPECIFIED BY THE EPA IN 40 247 CFR 60 SUBPART AAA]; or

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B. The solid fuel burning appliance is a masonry heater, cook stove, or fireplace; or

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<u>C.</u> The solid fuel burning appliance is tested, including by use of a handheld or other portable device, by an accredited independent laboratory, or other qualified person or entity approved by the borough, establishing that it meets the emissions rate of 2.5 grams per hour or less. [OR FOR HYDRONIC HEATERS THE APPLIANCE HAS AN EMISSION RATING OF 0.1 POUNDS PER MILLION BTU OR LESS.]

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Section 4. FNSBC 21.28.030, **Prohibited acts**, shall be amended as follows:

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A. Installation of Certain Solid Fuel Burning Appliances in the Nonattainment Area. Within the nonattainment area no person shall install or allow the installation of a solid fuel burning appliance unless it is listed by the borough as qualifying under this chapter and the installation complies with all other requirements imposed in this chapter. It is a separate violation to fail to remove a solid fuel burning appliance installed in violation of this chapter.

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B. No person who has been convicted of or pled no contest to two or more violations of this chapter involving visible emissions or emissions crossing property lines shall, in the air quality control zone, operate, use or keep installed a hydronic heater unless the hydronic heater is:

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1. Borough listed or was listed at the time of installation,

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2. A closed combustion system with automatic components that feed solid fuel, including wood pellets, into a firebox where the combustion is enhanced by an active airflow system, or

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3. Connected to a thermal mass system that is certified by the contractor or installer as sufficient to allow the hydronic heater to burn at maximum capacity minimizing on/off cycling. The division may require an owner to provide documentation supporting the certification.

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This prohibition shall be effective 90 days after the second conviction or entry [OR] of a no contest plea.

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- 281 [ALL PERSONS OWNING AND SELLING THEIR PROPERTY WITHIN THE AIR
- 282 QUALITY CONTROL ZONE WITH AN INSTALLED NON-EPA-CERTIFIED SOLID 283 FUEL BURNING APPLIANCE THAT WILL NOT BE REMOVED BEFORE SALE MUST
- 284 PROVIDE A WRITTEN DISCLOSURE TO THE BUYER PRIOR TO CLOSING, AND A

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Fairbanks North Star Borough, Alaska

COPY TO THE DIVISION NO LATER THAN 10 DAYS AFTER THE RECORDING OF THE SALE.]

C. Visible Emissions Standard in the Air Quality Control Zone.

1. Standard. No person shall cause, permit, or allow particulate emissions from a nonmobile source in the air quality control zone to create opacity greater than 20 percent for a period or periods aggregating more than 10 minutes in any hour except during the first 40[30] minutes after the initial firing when the opacity limit shall be less than 50 percent.

2. Procedures and Enforcement. When ambient weather and light conditions permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A Reference Method 9 (Visual determination of the Opacity of Emissions From Stationary Sources), or an alternative technology that replaces Method 9, when the technology is available and the choice is feasible, upon request of the person being investigated, shall be used to determine compliance with this section. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning appliance.

D. PM_{2.5} Emissions Crossing Property Lines. No person shall cause or permit particulate emissions from a nonmobile source to impact the resident(s) of a neighboring property through the creation of an emissions plume that:

Crosses a property line;
 Is observable using EPA

 3. Is 25 g/m3 greater than the surrounding immediate vicinity background $PM_{2.5}$ level using methods defined by the borough division of air quality. For purposes of this subsection, the surrounding "immediate vicinity" means land within an area measured 1,200 feet in all directions from the boundaries of the emitting property.

Is observable using EPA Method 22 (40 CFR 60 Appendix A); and

E. Borough-Wide Installation Requirements for Hydronic Heaters.

1. Setback. Unless permitted by a variance, [INSTALLING AN APPROVED PELLET FUEL BURNING APPLIANCE] or <u>if</u> replacing an existing hydronic heater with a listed appliance, no person shall install or allow the installation of a hydronic heater located less than:

a. Three hundred thirty feet from the closest property line; or

b. Six hundred sixty feet from a school, clinic, hospital, or senior housing unit.

2. Any hydronic heater installed in violation of this section shall be immediately remedied or made inoperable and removed as soon as practicable; however, in no case shall the time of removal be longer than 180 days after notice from the *division* of a violation.

F. Prohibited Fuels. No person shall burn in the borough any fuel, except coal in an appliance designed to use coal, which is not listed in the manufacturer's owner's

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Fairbanks North Star Borough, Alaska

manual as an acceptable fuel for that device or any of the following items in a solid fuel burning appliance:

- 331 1. Any wood that does not meet the definition of clean wood or has more than 20 percent moisture content;
 - Garbage;
 - 3. Tires:
 - 4. Materials containing plastic or rubber;
- 5. Waste petroleum products;
- 337 6. Paints and paint thinners;
- 338 7. Chemicals:
 - Glossy or colored papers;
- 9. Construction and demolition debris;
- 341 10. Plywood;
 - 11. Particleboard;
 - 12. Saltwater driftwood;
- 344 13. Manure;
 - 14. Animal carcasses;
 - 15. Asphalt products;
- 347 16. Flooring products.

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- G. Sales or Leasing of Solid Fuel Burning Appliances.
- 1. No person shall sell or lease an <u>unlisted</u> solid fuel burning appliance or barrel stove kit in the borough [THAT DOES NOT MEET THE EMISSIONS LIMITS ESTABLISHED IN FNSBC 21.28.020(A)] unless the buyer signs an affidavit, on a form prescribed by the borough, <u>attesting</u> that the appliance will not be installed or used in the air quality control zone. This section does not apply to appliances or stoves that transfer pursuant to a sale of property;
- 2. No person shall commercially sell or offer for sale or lease a solid fuel burning appliance in the borough unless the commercial seller or dealer provides the prospective buyer or lessee, prior to any sales or lease agreement, with a written notice, prepared or approved by the division, that includes, but is not limited to, the following:
 - a. The fuel restrictions imposed in this chapter;
- b. Proper installation, property location, operation, and maintenance of the appliance;
- c. An advisory statement noting that operation of solid fuel burning appliances may not be appropriate in some areas due to terrain, meteorological conditions, or other relevant conditions that render the operation of the appliance a public nuisance or health hazard even though it is otherwise legally installed and operated;
- 3. The written notice required in this section shall be signed and dated by the prospective buyer or lessee prior to purchase or lease to indicate receipt of the notification requirements of this section;
- 4. The commercial dealer or seller shall mail or otherwise provide a copy of the notice[,] and any required affidavit[,] to the division within 30 days of the sale. All

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Fairbanks North Star Borough, Alaska

commercial dealers or sellers shall also include with the notice documentation showing whether the appliance sold or leased meets the borough's emissions standard.

H. Nuisance. No person within the Fairbanks North Star Borough shall cause or allow particulate emissions from a nonmobile source that are injurious to human life or to property or that unreasonably interfere with the comfortable enjoyment of life or property. No person within the Fairbanks North Star Borough shall operate a solid fuel or waste oil burning appliance in a manner so as to create a public or private nuisance. A violation of a provision of this chapter is hereby declared to be a nuisance.

I. Other Laws. Nothing in this section precludes other local jurisdictions from having more restrictive codes.

J. Penalties. Upon first conviction of an offense in this chapter, the penalty(ies)/fine(s) set forth in FNSBC Title 1 regarding violations of the PM2.5 air quality control program may be satisfied by completion within 60 days of a borough-approved class covering PM2.5 health concerns, nonattainment, importance of dry wood and proper operation of solid fuel burning appliances. The borough may on its own initiative file notice of satisfaction of attendance requirements with the court, or the defendant may file a certificate of completion with the court within the applicable time frame.

Section 5. FNSBC 21.28.040, **Enhanced voluntary removal, replacement and repair program**, shall be amended as follows:

The Fairbanks North Star Borough shall, to the extent funds are available and appropriated by the assembly, offer an enhanced removal, replacement and repair program to help offset the costs of removing, replacing or repairing a solid fuel burning appliance (SFBA) or fireplace. This program shall be subject to the following eligibility requirements, conditions, and criteria:

A. General Requirements.

property owner(s) must be submitted along with any documentation required by the division. Applications for either the removal of a solid fuel burning appliance (SFBA), or replacement of a SFBA with an emergency power system, or an appliance designed to use natural gas, propane, or home heating oil shall include a signed recordable document restricting future installations of SFBAs[SOLID FUEL BURNING APPLIANCES] and requiring appropriate notice to purchasers in the seller's disclosure statement. Applicants must fully comply with the division's inspection process which shall verify the existence of a qualifying SFBA [OR FIREPLACE].

Application. An application approved by the division and signed by all

2. Priority Ranking. Applications may be prioritized and may be limited by the division in its discretion based on geographical location, the overall air quality benefit and the type of SFBA or fireplace being removed, replaced or repaired.

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Fairbanks North Star Borough, Alaska

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Fairbanks North Star Borough, Alaska

- Eligibility. The program is limited to properties within the air quality control zone boundary in which a qualifying SFBA or fireplace is installed. If an application is approved for the program, the applicant will be given up to 90 days to meet all of the requirements. Applicants must have no delinquent property tax or penalty or interest owing at the time of application and at completion of the program requirements.
- Additional Requirements. In addition to the general requirements set forth in this section, applicants must also meet the following requirements:
- Fully comply with the inspection process required by the division that shall ensure that the existence of the qualifying appliance to be removed, replaced or repaired is properly documented.
 - Removal of appliance. b.
 - Delivery of appliance to an authorized decommission station. C.
 - d. Certificate of destruction delivered to the division, if applicable.
 - Final installation of a qualified appliance visually verified. e.
- All aspects of this section may be performed by borough-approved f. personnel or a borough-approved vendor.
- Payments. Applicants will be eligible for reimbursements or, at the option of the applicant, payment may be made directly to a borough-approved vendor. Reimbursements and payments shall be available as follows:
 - Replacement of a hydronic heater: a.
- With either an EPA-certified wood or pellet stove with an emission rate less than or equal to two grams of PM_{2.5} per hour, or an EPA phase II certified pellet burning hydronic heater with an emission rate equal to or less than 0.1 pounds per million BTU, or an emergency power system, up to \$10,000 for purchase and installation [OF THE APPLIANCE].
- With an appliance designed to use home heating oil (excluding waste or used oil) or a masonry heater (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance for proper installation), up to \$12,000 for purchase and installation of the appliance.
- iii. With an appliance designed to use natural gas, propane, hot water district heat, or electricity, up to \$14,000 for purchase and installation of the appliance.
 - Replacement of a non-borough-listed SFBA [OR FIREPLACE]: b.
- With either an EPA-certified wood stove, or fireplace insert that has an emission rate less than or equal to two grams of PM_{2.5} per hour, or in the case of an EPA-certified wood stove, PM_{2.5} emissions must be reduced by 50 percent and emit two grams of PM_{2.5} per hour or less, up to \$4,000 for purchase and installation of the appliance.
- ii. With an EPA certified pellet stove that has an emission rate less than or equal to two grams of PM₂₅ per hour [APPLIANCE DESIGNED TO USE PELLETS], up to \$5,000 for purchase and installation of the appliance.

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459	iii. With an appliance designed to use home heating oil
460	(excluding waste oil), hot water district heat, electricity, or a masonry heater (including
461	parts, labor and any costs associated with upgrading the chimney to the extent required
462	by the manufacturer of the appliance for proper installation), or an emergency power
463	system, up to \$6,000 for the purchase and installation [OF THE APPLIANCE].
464	iv. With an appliance designed to use natural gas or propane,
465	up to \$10,000 per purchase and installation of the appliance. Multiple non-borough-
466	listed solid fuel burning appliances or fireplaces, or combinations thereof, may be
467	replaced with a single heating device that meets the requirements above, except for
468	those that are fired by solid fuels. Payment will be based on the number of devices
469	removed, up to a maximum of three, and may not exceed the replacement cost.
470	c. Removal of a SFBA (limited to a one-time participation in this
471	program per property).

program per property).

i. Removal of a hydronic heater through a one-time payment of

\$5,000.

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ii. Removal of other SFBAs through a one-time payment of

475 **\$2,000**.

[CASH PAYMENT

\$5,000 – IF REMOVING HYDRONIC HEATER \$2,000 – IF REMOVING OTHER SFBAS]

d. Repair Program.

i. The repair program will pay for the:

(A) Replacement of a wood stove's catalytic converter that has exceeded its life span through the one-time payment of up to \$750.00.

(B) Replacement of any emissions-reducing component of an EPA-certified wood stove up to the maximum amount of \$750.00.

ii. In addition to the general requirements set forth in this section, applicants must fully comply with any inspection process required by the division, which may be performed by a borough-approved vendor.

Section 6. FNSBC 21.28.050, Forecasting exceedances and restrictions in the air quality control zone during an alert, shall be amended as follows:

A. During the winter months of October through March, the borough shall issue a daily $PM_{2.5}$ forecast by 4:30 p.m. When the $PM_{2.5}$ concentration reaches the onset level for an <u>alert</u> [EPISODE] and is expected to remain at that level for 12 hours or more, an alert [OR ADVISORY] will be declared. An alert [OR ADVISORY] may apply to the air quality control zone as a whole, or to one or more sub-areas designated by the division. Once an alert [OR ADVISORY] is declared, $PM_{2.5}$ control measures set forth in this section shall be implemented and continued until the alert [OR ADVISORY] is cancelled. There are [THREE] <u>two</u> levels of [EPISODES] <u>alerts:</u> Stage 1[,] <u>and Stage 2</u> [AND 3]. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal

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Fairbanks North Star Borough, Alaska

business days and hours of operation. These restrictions shall not apply during a power failure. When an alert is in effect, outdoor burning is prohibited, including nonpermitted incinerators and burn barrels. This outdoor burning prohibition does not include recreational fires such as bonfires, campfires, or ceremonial fires and the use of fire pits.

B. The division will notify local media to ensure the declared alert [OR ADVISORY] is broadcast. The division shall also use social media and methods of direct communication such as text messages as feasible. Information within the notification will contain the $PM_{2.5}$ forecast, stage level for areas, and actions required to reduce sources of $PM_{2.5}$. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.

- C. Stage 1: [VOLUNTARY] Restrictions in the Air Quality Control Zone during an [ADVISORY] Alert.
- [1. A STAGE 1 AIR ADVISORY IS IMPLEMENTED WHEN CONCENTRATIONS EXCEED OR ARE FORECASTED TO EXCEED 25 μ G/M³.
- 2. RESIDENTS SHALL BE REQUESTED TO VOLUNTARILY STOP OPERATION OF SOLID FUEL, PELLET, AND WASTE OIL BURNING APPLIANCES, AS WELL AS MASONRY HEATERS AND ALL OUTDOOR BURNING THAT INCLUDES RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES AND THE USE OF FIRE PITS, NONPERMITTED INCINERATORS AND BURN BARRELS IN THE AIR QUALITY CONTROL ZONE.

- D. STAGE 2: REQUIRED RESTRICTIONS IN THE AIR QUALITY CONTROL ZONE DURING AN ALERT.]
- 1. A Stage 1 [2] air alert is implemented when concentrations exceed or are forecasted to exceed 25 [35] μ g/m³.
- 2. Burning is permitted in all EPA-certified solid fuel burning appliances, and EPA [PHASE II QUALIFIED] certified hydronic heaters, [WITH AN ANNUAL AVERAGE EMISSION RATING OF 2.5 GRAMS OR LESS] masonry heaters, [PELLET FUEL BURNING APPLIANCES,] and cook stoves[, AND FIREPLACES]. No fuel source may be added to the combustion[S] chamber or firebox of any solid fuel burning appliance or waste oil burning appliance not listed above. Residents should rely instead on their home's alternate, cleaner source of heat (such as a gas or fuel oil fired furnace or boiler or electric baseboard heaters) until the Stage 1 [2] air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation, the building owner is exempted from complying with the Stage $\underline{1}$ [2] air alert restrictions for that building.
- [4. OUTDOOR BURNING IS PROHIBITED INCLUDING NONPERMITTED INCINERATORS AND BURN BARRELS. THIS DOES NOT INCLUDE

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- 542 RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES OR CEREMONIAL 543 FIRES AND THE USE OF FIRE PITS.
- 544 5. THESE RESTRICTIONS SHALL NOT APPLY DURING A POWER 545 FAILURE.]

- <u>D[E]</u>. Stage <u>2</u> [3]: Required Restrictions in the Air Quality Control Zone during an Alert.
- 1. A Stage $\underline{2}$ [3] air *alert* is implemented when concentrations exceed or are forecasted to exceed 35[55] μ G/M³.
- 2. No fuel source may be added to the combustion[S] chamber or firebox of any solid fuel burning appliance[S, MASONRY HEATERS, PELLET FUEL BURNING APPLIANCES, COOK STOVES, FIREPLACES,] or waste oil burning appliance[S. NO WASTE OIL MAY BE ADDED TO A WASTE OIL BURNING APPLIANCE]. Residents should rely instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) until the Stage 2 [3] air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation the building owner is exempted from complying with the Stage $\underline{2}$ [3] air alert restrictions for that building.
- [4. OUTDOOR BURNING IS PROHIBITED INCLUDING NONPERMITTED INCINERATORS AND BURN BARRELS. THIS DOES NOT INCLUDE RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES OR CEREMONIAL FIRES AND THE USE OF FIRE PITS.
- 5. THESE RESTRICTIONS SHALL NOT APPLY DURING A POWER FAILURE. OR TO EPA-CERTIFIED SOLID FUEL BURNING APPLIANCES, EPA PHASE II QUALIFIED HYDRONIC HEATERS WITH AN ANNUAL AVERAGE EMISSION RATING OF 2.5 GRAMS OR LESS, MASONRY HEATERS OR PELLET FUEL BURNING APPLIANCES WHEN THE TEMPERATURE IS BELOW -15 FAHRENHEIT AS RECORDED AT THE FAIRBANKS INTERNATIONAL AIRPORT.]

Section 7. FNSBC 21.28.060, **No other adequate source of heat determination**, shall be amended as follows:

- A. A building owner or other person with a property or managerial interest in a building located within the air quality control zone may obtain a "no other adequate source of heat" determination from the division if:
- 1. The SFBA being used to heat the structure is EPA certified, unless an application has been made to the Enhanced Voluntary Removal, Replacement and Repair Program (FNSBC 21.28.040) to remove or replace the non-certified SFBA and it has been denied, a pellet fuel burning appliance installed prior to April 1, 2017, a masonry heater, or a cook stove;
- [1]2. The building owner(s) or other person with a property or managerial interest in the building applies with the division on a form developed by the division;
- [2]3. The building owner(s) or other person with a property or managerial interest in the building files an affidavit with the application that the subject structure must be heated and the structure has no adequate heating source without using a solid

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fuel or waste oil burning appliance or that economic hardships require the applicant's use of a solid fuel or waste oil burning appliance or complying with a restriction would result in damage to property including damage to the appliance itself and its heating system components; and

[3]4. The building was constructed on or before December 31, 2016.

B. There shall be no fee for applying for or obtaining a determination.

C. It shall be a violation to submit a false affidavit for a "no other adequate source of heat" determination.

D. If the "no other adequate source of heat" appliance does not meet the standards set in this chapter, the division shall provide the applicant with information concerning the borough's voluntary removal, replacement and repair program.

E. Applications denied by the division may be appealed to the air pollution control commission within 30 days of the decision.

F. An applicant that has been denied a "no alternative source of heat determination" by the division because the appliance does not meet the criteria of this section may apply to the air pollution control commission for a variance within 10 days of this decision. A temporary "no alternative source of heat" determination shall be granted pending the decision of the commission. In determining whether to grant a variance, the commission shall consider the location of the appliance, impact on surrounding neighborhood, emission levels of the appliance, the financial investment and ability of the applicant to replace the appliance and any other relevant conditions that indicate the operation of the appliance at that location is not a nuisance or health-hazard. If the commission denies a variance, the "no alternative source of heat" determination shall expire 60 days from the date of denial.

Section 8. FNSBC 21.28.070, **Voluntary burn cessation program,** is repealed as follows:

[THE FAIRBANKS NORTH STAR BOROUGH WILL, TO THE EXTENT FUNDS ARE AVAILABLE AND APPROPRIATED BY THE ASSEMBLY, ESTABLISH A PROGRAM TO ENCOURAGE, INCENTIVIZE, AND FACILITATE THE VOLUNTARY CESSATION OF THE USE OF WOOD BURNING APPLIANCES (I.E., WOOD STOVES, WOOD-FIRED HYDRONIC HEATERS, WOOD-FIRED FURNACES, FIREPLACES, FIREPLACE INSERTS, MASONRY HEATERS OR PELLET FUEL BURNING APPLIANCES) IN THE AIR QUALITY CONTROL ZONE DURING AIR QUALITY ALERTS. IT IS RECOGNIZED THAT IT WILL BE DIFFICULT OR IMPOSSIBLE FOR SOME HOUSEHOLDS TO PARTICIPATE IN THIS PROGRAM (E.G., THOSE THAT HEAT SOLELY WITH WOOD OR FOR WHICH WOOD IS A NECESSARY SUPPLEMENT DURING PERIODS OF COLD WEATHER).

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Fairbanks North Star Borough, Alaska

630 THEREFORE, THIS PROGRAM IS INTENDED FOR HOUSEHOLDS THAT ARE ABLE

- TO USE SPACE HEATING ALTERNATIVES WITH SIGNIFICANTLY LOWER PM_{2.5}
- 632 EMISSIONS, INCLUDING THOSE FUELED BY GAS, OIL, ELECTRICITY, PROPANE
- OR DISTRICT HEAT, BUT NOT WOOD OR PELLET STOVES OR OTHER WOOD
- 634 BURNING APPLIANCES. THIS PROGRAM WILL AT A MINIMUM CONSIST OF THE
- 635 FOLLOWING COMPONENTS:
- 636 A. THE BOROUGH MAY CONTRACT WITH AN AGENCY THAT WILL PROVIDE
- 637 SERVICES TO PROMOTE THE PROGRAM. THIS AGENCY MUST HAVE THE
- 638 STANDING, EXPERIENCE, AND CAPABILITY TO CARRY OUT A CAMPAIGN TO
- 639 ADVERTISE, REACH OUT, AND ATTRACT A LARGE NUMBER OF PARTICIPANTS
- 640 IN THE NONATTAINMENT AREA WHO ARE WILLING TO CEASE THE USE OF A
- 641 WOOD BURNING APPLIANCE DURING AIR QUALITY ALERTS.
- 642 B. FACILITATION OF THIS PROGRAM BY THE BOROUGH WILL INCLUDE, BUT
- NOT BE LIMITED TO, THE PROVISION OF NOTICE OF AIR QUALITY ALERTS TO
- 644 INDIVIDUAL HOUSEHOLDS BY METHODS SUCH AS ELECTRONIC MAIL
- 645 MESSAGES, TEXT MESSAGES, AUTOMATED PHONE CALLS, NOTICES TO RADIO
- 646 AND TELEVISION STATIONS, AND INFORMATION POSTED ON ELECTRONIC
- 647 READER OR DISPLAY BOARDS LOCATED THROUGHOUT THE BOROUGH IN
- 648 LOCATIONS BEST SUITED TO NOTIFY RESIDENTS OF AIR QUALITY ALERTS.
- 649 C. PRIVATE CONTRIBUTIONS, INCLUDING GOODS AND/OR SERVICES, WILL
- 650 BE SOUGHT FOR ALL APPROPRIATE ELEMENTS OF THE PROGRAM. IN
- 651 GENERAL THIS WILL FOCUS ON THE PROVISION OF MATERIALS, EQUIPMENT,
- 652 AND CERTAIN ONE-TIME SERVICES, BUT NOT TO FUND BOROUGH STAFF
- 653 POSITIONS.]

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Section 9. FNSBC 1.20.080, **Fine Schedule**, is hereby amended as

follows:

Code Section	Offense	Penalty/Fine	Mandatory Warning Required
[21.28.030(B)	FAILURE TO DISCLOSE AN UNLISTED APPLIANCE BEFORE SALE	\$500.00	NO]
21.28.050[(D)](C)	Violation of a Stage [2]1 air alert restriction.	\$500	Yes
21.28.050[(E)](D)	Violation of a Stage [3]2 air alert restriction.	\$1,000	Yes

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Section 10. <u>Effective Date.</u> This ordinance shall be effective thirty days following its adoption.

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Fairbanks North Star Borough, Alaska

661	PASSED AND APPROVED THIS 9 TH DAY OF MARCH, 2017.
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666	Valley Woder
667	/Kathryn Dodge
668	Presiding Officer
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670	ATTEST:
671	Λ_{α} Λ_{α} Λ_{α} Λ_{α}
672 673	Maria asygon. Bingham
674	
675	Nanci Ashford-Bingham, MMC
676	Borough Clerk
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678	Yeses: Cooper, Quist, Gray, Lawrence, Dodge, Davies
679	Noes: Roberts. Sattley

Fairbanks North Star Borough, Alaska

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Other: Tacke (Excused)

1 2 3 4 5	By: Karl Kassel, Mayor Introduced: 05/18/2017 Advanced: 05/18/2017 Amended: 06/19/2017 Adopted: 06/19/2017
6	Immediate Reconsideration
7 8	Failed: 06/19/2017
8	Adopted: 06/19/2017
10	
11	FAIRBANKS NORTH STAR BOROUGH
12	TAIRBANKO NORTH OTAIR BORGOGT
13	ORDINANCE NO. 2017-44
14	
15	AN ORDINANCE AMENDING CHAPTER 21.28 FNSBC
16	REGARDING THE PM2.5 AIR QUALITY CONTROL PROGRAM, AMENDING
17	TITLE 4 REGARDING AIR POLLUTION CONTROL COMMISSION DUTIES,
18	AMENDING FNSBC 1.20.080, FINE SCHEDULE, AND AMENDING APPENDIX E-
19	USER FEE SCHEDULE/TRANSPORTATION OF ORDINANCE NO. 2017-20 (FY 2017-
20	18) TO ADD PERMIT APPLICATION FEES FOR SOLID FUEL BURNING
21	APPLIANCES IN NEW CONSTRUCTION
22	WILEDEAG THE HEALTH E
23	WHEREAS, The United States Environmental Protection Agency (EPA) in
24	December 2009, declared part of the Fairbanks North Star Borough (Borough) a non-
25 26	attainment area for fine particulate pollution (PM2.5); and
27	WHEREAS, On December 16, 2016 the EPA published public notice in
28	the Federal Register of its intent to reclassify the Borough non-attainment area from
29	Moderate to Serious status, and the Final Rule was signed on April 28, 2017; and
30	Wiederate to corredo ctatae, and the Final Pale Nac orginal of April 20, 2017, and
31	WHEREAS, The serious non-attainment designation requires a new
32	serious State Implementation Plan (SIP) to be submitted to the EPA by December 31,
33	2017 which must include implementation of all Best Available Control Measures
34	(BACM); and
35	
36	WHEREAS, The Borough should consider implementing some of the
37	control measures by June 2017 so goodwill for these control measures can be
38	recognized in the Serious SIP.
39	NOW THEREFORE BE IT OPPOINED by the Assembly of the Control of the
40	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks
41	North Star Borough:
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Section 1. Sections 2, 3, 4, 5, 6, 7, and 8 of this ordinance are of a general and permanent nature and shall be codified. Sections 9 and 10 of this ordinance are not of a general and permanent nature and shall not be codified.

Section 2. FNSBC 21.28.010, Definitions, shall be amended as follows: "Air quality control zone" means the area of the borough currently contained in the EPA designated nonattainment area, which uses the nonattainment area southern, western and eastern boundaries as modified by their respective intersection with the following northern boundary described as: beginning at the intersection of Isberg Road with Chena Ridge Road on the western boundary of the EPA designated nonattainment area, then following Chena Ridge Road back to Chena Pump Road and continuing north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road to Miller Hill Road, then north on Miller Hill Road, then east on Yankovich, then north from Yankovich Road along the east boundary of the Large Animal Research Station to a point just north of its intersection with Nottingham Drive and follows the ridge crest across Nottingham Estates to approximately the point where Swallow Drive intersects Dalton Trail to north on Dalton Trail to the crest of the Farmer's Loop Ridge, then follow the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese Highway, then southeast on Bennett Road, and along Steele Creek Road to the intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern boundary of the EPA designated nonattainment area.

"Air quality index" (AQI) is an index for reporting daily air quality, which indicates how polluted the air currently is or how polluted it is forecast to become. The higher the AQI value, the greater the level of air pollution and the greater the health concern. AQI is divided into six categories with correspondingly higher levels of health concern as outlined in the table below:

AQI (Air	AQI	Continuous Chalana	Licelth Ctatement
Quality Index)	Category	Cautionary Statement	Health Statement
0 – 50	Good	None	None
51 – 100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion.	None
101 – 150	Unhealthy for Sensitive Groups	People with respiratory or heart disease, the elderly, and children should limit prolonged exertion.	Increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and

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AQI (Air Quality Index)	AQI Category	Cautionary Statement	Health Statement
			the elderly.
151 – 200	Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid prolonged exertion; everyone else should limit prolonged exertion.	Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; increased respiratory effects in general population.
201 – 300	Very Unhealthy	People with respiratory or heart disease, the elderly, and children should avoid outdoor activity; everyone else should avoid prolonged exertion.	Significant aggravation of the heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in the general population.
301 – 500	Hazardous	Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly and children should remain indoors.	Significant aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly; significant increase in respiratory effects in the general population.

"Alert" means a notice issued by the division when the division determines, using available data or modeling, that PM2.5 concentration levels have reached or are forecasted to reach 25 μ g/m³ or higher for at least 12 consecutive hours.

"Appliance" means a device or apparatus that is manufactured and designed to utilize energy and which does not require a stationary source air quality permit from the state of Alaska under 18 AAC 50.

"Clean wood" means natural wood that has not been painted, varnished, or coated with a similar material, has not been treated with preservatives, and does not contain resins or glues as in plywood or other composite wood products.

"Commence" means (i) begin, or cause to begin, actual on-site construction or (ii) enter into binding agreements or contractual obligations to begin construction, which cannot be cancelled or modified without substantial loss to the owner.

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"Construction and demolition debris" means a conglomeration of materials from construction, repair, remodeling or demolition of buildings and structures containing any prohibited fuels.

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"Cook stove" means a wood burning appliance that is designed primarily for cooking food and that has the following characteristics:

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1. An oven, with a volume of 0.028 cubic meters (one cubic foot) or greater, and an oven rack;

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2. A device for measuring oven temperatures;

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3. A flame path that is routed around the oven;

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A shaker grate;

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5. An ash pan;

100 101 6. An ash clean-out door below the oven; and7. The absence of a fan or heat channels to dissipate heat from the device.

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"Division" means the Fairbanks North Star Borough air quality division.

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"Emergency power system" is an independent source of electrical power that supports important electrical systems on loss of normal power supply. An emergency power system may include a standby generator, batteries, and other apparatus. Emergency power systems are installed to protect life and property from the consequences of loss of normal electric power supply.

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"EPA" means the United States Environmental Protection Agency.

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"EPA certified" means that the solid fuel burning appliance meets emission performance standards when tested by an accredited independent laboratory and is labeled according to procedures specified by the EPA in 40 CFR Part 60 Subpart AAA or QQQQ.

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"Fireplace" means an assembly consisting of a hearth and open fire chamber of noncombustible factory-built or masonry materials and provided with a chimney, for use with solid fuels, which cannot be operated with an air to fuel ratio of less than 35 to one.

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"Fireplace insert" means a solid fuel burning appliance similar in function and performance to a freestanding wood burning stove, which is made from cast iron or steel designed to be installed in an existing masonry or prefabricated fireplace.

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"Forecast" means a description of the current dispersion conditions described as good, fair, or poor and including the expected PM2.5 NowCast AQI categorized as good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, or hazardous.

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Fairbanks North Star Borough, Alaska

130	"Heating appliances" means, but is not limited to: wood, coal, or pellet fired hydronic
131	heaters, stoves, and furnaces; oil or gas fired boilers and furnaces; and masonry
132	heaters, pellet stoves, cook stoves, and fireplaces.
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134	"Hydronic" means having to do with a system moving heat from one location to another
135	by means of the circulation of a heat transfer liquid through piping or tubing.
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137	"Hydronic heater" means a fuel burning appliance designed to (1) burn wood or other
138	solid fuels and (2) heat building space and/or domestic hot water via the distribution,
139	typically through pipes, of a fluid heated in the appliance.
140	
141	"Masonry heater" means a wood burning appliance that complies with the guidelines of
142	ASTM E1602-08, Standard Guide for Construction of Masonry Heaters, and:
143	 Is designed and intended for operation only in a closed combustion
144	chamber configuration; and
145	2. Has enough thermal storage capacity to maintain no less than 50.0
146	percent of the maximum masonry-mass temperature for at least four hours after the
147	maximum masonry-mass temperature has been reached; and
148	The masonry heater design and installation has been confirmed and
149	documented by a qualified person or entity approved by the borough.
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151	"New Construction" means construction of entirely new structures designed for heated
152	occupancy and any structural alteration that adds heated square footage to an existing
153	structure whether or not the structure was previously occupied.
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155	"Nonattainment area" is the area depicted on the map attached to the ordinance
156	codified in this chapter and is further defined as follows:
157	Township Range Delineated Boundary for the Fairbanks
158	Nonattainment Area
159	MEDO FORMANON AND AND MEDO FORMANONAE
160	MTRS F001N001 – All Sections, MTRS F001N001E – Sections
161	2-11, 14-23, 26-34, MTRS F001N002 – Sections 1-5, 8-17, 20-
162	29, 32-36, MTRS F001S001E – Sections 1, 3-30, 32-36, MTRS
163	F001S001W – Sections 1-30, MTRS F001S002E – Sections 6-
164	8, 17-20, 29-36, MTRS F001S002W – Sections 1-5, 8-17, 20-
165	29, 32-33, MTRS F001S003E – Sections 31-32, MTRS
166	F002N001E – Sections 31-35, MTRS F002N001 – Sections 28,
167	31-36, MTRS F002N002 – Sections 32-33, 36, MTRS
168	F002S001E – Sections 1-2, MTRS F002S002E – Sections 1-17,
169	21-24, MTRS F002S003E – Sections 5-8, 18.

real-time reporting of the AQI for PM.

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"NowCast" means a weighted average of hourly air monitoring data used by the EPA for

Fairbanks North Star Borough, Alaska

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174 175 176 177 178	"Opacity" means the reduction in transmitted light through a column of smoke measured by an observer certified in using EPA Reference Method 9 as defined federal law or EPA approved Alternative Method 82 which is defined as Ameri Society for Testing and Materials (ASTM) D 7520-09.				
179 180 181 182 183	(condensable and noncondensable fraction) and is a complex airborne mixture of extremely small particles and liquid droplets that are made up of a number of components, including acids, organic chemicals, metals, soil, or dust.				
183 184 185 186 187 188 189 190	"Pellet fuel burning appliance" or "pellet stove" means a closed combustion, vented pellet burning appliance with automatic components creating an active air flow system, sold with the hopper and auger combination as integral parts, and designed, warranted safety listed, and advertised by the manufacturer specifically to be fueled by pellets of sawdust, wood products and other biomass materials while prohibiting the use of cordwood.				
191 192 193	"PM2.5" means particulate matter comprised of particles that have diameters of two and one-half microns or less.				
194 195 196 197	such a mar	ood Storage" means specific and dedicated space to store clean wood in nner that the clean wood is not in contact with soil, the top of the clean wood by protected from precipitation, and with airflow available to the clean wood.			
198 199	"Sale" mea	ns the transfer of ownership or control.			
200 201 202 203 204 205 206 207 208 209 210 211 212		burning appliance" (SFBA) means any appliance designed to produce heat nongaseous and nonliquid fuels. This definition includes, but is not limited to: Wood stoves; Coal stoves; Wood-fired hydronic heaters; Wood-fired furnaces; Coal-fired hydronic heaters; Coal-fired furnaces; Fireplace inserts; Pellet fuel burning appliances; Masonry heaters; Cook stoves; and Fireplaces.			
213 214 215	"Was	ste oil burning appliance" means an appliance that burns used or waste oil.			

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Section 3. FNSBC 21.28.030 Prohibited acts, shall be amended as

Fairbanks North Star Borough, Alaska

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follows:

ORDINANCE NO. 2017-44

 A. Installation of Certain Solid Fuel Burning Appliances in the Nonattainment Area. Within the nonattainment area no person shall install or allow the installation of a solid fuel burning appliance unless it is listed by the borough as qualifying under this chapter and the installation complies with all other requirements imposed in this chapter. It is a separate violation to fail to remove a solid fuel burning appliance installed in violation of this chapter.

B. No person who has been convicted of or pled no contest to two or more violations of this chapter involving visible emissions or emissions crossing property lines shall, in the air quality control zone, operate, use or keep installed a hydronic heater unless the hydronic heater is:

1. Borough listed or was listed at the time of installation,

- 2. A closed combustion system with automatic components that feed solid fuel, including wood pellets, into a firebox where the combustion is enhanced by an active airflow system, or
- 3. Connected to a thermal mass system that is certified by the contractor or installer as sufficient to allow the hydronic heater to burn at maximum capacity minimizing on/off cycling. The division may require an owner to provide documentation supporting the certification.

This prohibition shall be effective 90 days after the second conviction or entry of a no contest plea.

C. Visible Emissions Standard in the Air Quality Control Zone.

1. Standard. No person shall cause, permit, or allow particulate emissions from a nonmobile source in the air quality control zone to create opacity greater than 20 percent for a period or periods aggregating more than 10 minutes in any hour except during the first 40 minutes after the initial firing when the opacity limit shall be less than 50 percent.

2. Procedures and Enforcement. When ambient weather and light conditions permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A Reference Method 9 (Visual determination of the Opacity of Emissions From Stationary Sources), or an alternative technology that replaces Method 9, when the technology is available and the choice is feasible, upon request of the person being investigated, shall be used to determine compliance with this section. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning appliance.

D. $PM_{2.5}$ Emissions Crossing Property Lines. No person shall cause or permit particulate emissions from a nonmobile source to impact the resident(s) of a neighboring property through the creation of an emissions plume that:

Crosses a property line;

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- 2. Is observable using EPA Method 22 (40 CFR 60 Appendix A); and
- Is 25 µg/m³ greater than the surrounding immediate vicinity background 3. PM_{2.5} level using methods defined by the borough division of air quality. For purposes of this subsection, the surrounding "immediate vicinity" means land within an area measured 1,200 feet in all directions from the boundaries of the emitting property.
- Requirements for Installation of Solid Fuel Burning Appliances in New Construction.
- For all new construction that commences on or after January 1, 2018 and 1. is located within the air quality control zone the following will apply:
 - Installation of a solid fuel burning appliance is prohibited unless a permit has been issued by the division. A permit must be obtained for any solid fuel burning appliance installed in new construction prior to installation of the appliance.
 - b. Application. The permit application will require the owner(s) to certify they will meet the following requirements:
 - The proposed solid fuel burning appliance meets all federal. state, and borough air quality regulations;
 - The proposed solid fuel burning appliance meets the requirements of this chapter;
 - The proposed solid fuel burning appliance is properly sized for the structure in the opinion of a Borough listed vendor/installer;
 - The proposed solid fuel burning appliance will be installed by a Borough listed vendor/installer attesting to proper installation of the device based on the manufacturer's installation manual;
 - Proper wood storage will be available; and
 - vi. Training will be provided to the occupants on proper wood burning techniques.
 - Permit. An installation permit will be issued upon receipt of an application meeting the requirements of subsection (b) and payment of any Within 24 months of issuance, the owner must verify with supporting documentation that the requirements of subsection (b) have been completed, upon which an operating permit will be issued. If verification has not been submitted or approved within 24 months the permit application will automatically expire.
 - After a public hearing, and prior to installation of the solid fuel burning appliance, the air pollution control commission may grant a variance, the commission shall consider any alternate proposal that the applicant submits, the location of the appliance, impact on surrounding neighborhood of the requested variance, emission levels of the appliance, and any other relevant conditions that indicate the operation of the appliance at that location or the requirement that is being varied will not result in a nuisance or health-hazard.

F[E]. Borough-Wide Installation Requirements for Hydronic Heaters.

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- 1. Setback. Unless permitted by a variance, or if replacing an existing hydronic heater with a listed appliance, no person shall install or allow the installation of a hydronic heater located less than:
 - a. Three hundred thirty feet from the closest property line; or
 - b. Six hundred sixty feet from a school, clinic, hospital, or senior housing unit.
 - 2. Any hydronic heater installed in violation of this section shall be immediately remedied or made inoperable and removed as soon as practicable; however, in no case shall the time of removal be longer than 180 days after notice from the division of a violation.
 - 3. Variance. After a public hearing, the commission shall determine whether a person may receive a variance from the installation requirements of this subsection allowing them to install a hydronic heater. In determining whether to grant the variance, the commission shall consider the proposed location of the appliance, impact on surrounding neighborhood, emission levels of the appliance, terrain, meteorological conditions, and other relevant conditions that may render the operation of the appliance at that location a nuisance or a health hazard.

 $\underline{G}[F]$. Prohibited Fuels. No person shall burn in the borough any fuel, except coal in an appliance designed to use coal, which is not listed in the manufacturer's owner's manual as an acceptable fuel for that device or any of the following items in a solid fuel burning appliance:

- 1. Any wood that does not meet the definition of clean wood or has more than 20 percent moisture content;
 - 2. Garbage;
 - Tires;
 - 4. Materials containing plastic or rubber;
 - Waste petroleum products;
 - 6. Paints and paint thinners;
- 335 7. Chemicals;
 - Glossy or colored papers;
 - Construction and demolition debris;
- 338 10. Plywood;
 - 11. Particleboard:
 - Saltwater driftwood;
- 341 13. Manure;
 - 14. Animal carcasses;
 - 15. Asphalt products:
 - 16. Flooring products.

H[G]. Sales or Leasing of Solid Fuel Burning Appliances.

1. No person shall sell or lease an unlisted solid fuel burning appliance or barrel stove kit in the borough unless the buyer signs an affidavit, on a form prescribed by the borough, attesting that the appliance will not be installed or used in the air quality

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44

control zone. This section does not apply to appliances or stoves that transfer pursuant to a sale of property;

- 2. No person shall commercially sell or offer for sale or lease a solid fuel burning appliance in the borough unless the commercial seller or dealer provides the prospective buyer or lessee, prior to any sales or lease agreement, with a written notice, prepared or approved by the division, that includes, but is not limited to, the following:
 - a. The fuel restrictions imposed in this chapter;
 - b. Proper installation, property location, operation, and maintenance of the appliance;
 - c. An advisory statement noting that operation of solid fuel burning appliances may not be appropriate in some areas due to terrain, meteorological conditions, or other relevant conditions that render the operation of the appliance a public nuisance or health hazard even though it is otherwise legally installed and operated;
- 3. The written notice required in this section shall be signed and dated by the prospective buyer or lessee prior to purchase or lease to indicate receipt of the notification requirements of this section;
- 4. The commercial dealer or seller shall mail or otherwise provide a copy of the notice and any required affidavit to the division within 30 days of the sale. All commercial dealers or sellers shall also include with the notice documentation showing whether the appliance sold or leased meets the borough's emissions standard.
- I[H]. Nuisance. No person within the Fairbanks North Star Borough shall cause or allow particulate emissions from a nonmobile source that are injurious to human life or to property or that unreasonably interfere with the comfortable enjoyment of life or property. No person within the Fairbanks North Star Borough shall operate a solid fuel or waste oil burning appliance in a manner so as to create a public or private nuisance. A violation of a provision of this chapter is hereby declared to be a nuisance.
- <u>J[I]</u>. Other Laws. Nothing in this section precludes other local jurisdictions from having more restrictive codes.
- <u>K[J]</u>. Penalties. Upon first conviction of an offense in this chapter, the penalty(ies)/fine(s) set forth in FNSBC Title 1 regarding violations of the PM2.5 air quality control program may be satisfied by completion within 60 days of a borough-approved class covering PM2.5 health concerns, nonattainment, importance of dry wood and proper operation of solid fuel burning appliances. The borough may on its own initiative file notice of satisfaction of attendance requirements with the court, or the defendant may file a certificate of completion with the court within the applicable time frame.

Section 4. 21.28.040 Enhanced voluntary removal, replacement and repair program, shall be amended as follows:

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44

The Fairbanks North Star Borough shall, to the extent funds are available and appropriated by the assembly, offer an enhanced removal, replacement and repair program to help offset the costs of removing, replacing or repairing a solid fuel burning appliance (SFBA) or fireplace. This program shall be subject to the following eligibility requirements, conditions, and criteria:

A. General Requirements.

- 1. Application. An application approved by the division and signed by all property owner(s) must be submitted along with any documentation required by the division. Applications for either the removal of a solid fuel burning appliance (SFBA), or replacement of a SFBA with an emergency power system, or an appliance designed to use natural gas, propane, or home heating oil shall include a signed recordable document restricting future installations of SFBAs and requiring appropriate notice to purchasers in the seller's disclosure statement. Applicants must fully comply with the division's inspection process which shall verify the existence of a qualifying SFBA.
- 2. Priority Ranking. Applications may be prioritized and may be limited by the division in its discretion based on geographical location, the overall air quality benefit and the type of SFBA or fireplace being removed, replaced or repaired.
- 3. Eligibility. The program is limited to properties within the air quality control zone boundary in which a qualifying SFBA or fireplace is installed. If an application is approved for the program, the applicant will be given up to 90 days to meet all of the requirements. Applicants must have no delinquent property tax or penalty or interest owing at the time of application and at completion of the program requirements.
- 4. Additional Requirements. In addition to the general requirements set forth in this section, applicants must also meet the following requirements:
 - a. Fully comply with the inspection process required by the division that shall ensure that the existence of the qualifying appliance to be removed, replaced or repaired is properly documented.
 - b. Removal of appliance.
 - c. Delivery of appliance to an authorized decommission station.
 - d. Certificate of destruction delivered to the division, if applicable.
 - e. Final installation of a qualified appliance visually verified.
 - f. The qualified appliance must be properly installed by a Borough listed vendor/installer attesting to proper installation of the device based on manufacturer's installation manual, compliance with any building code requirements, and that the device is properly sized for the building in question.
 - g. The applicant will be required to demonstrate proper wood storage.
 - h. The applicant will be required to complete training with the vendor, ensuring that they understand how their particular device operates, including education on proper wood burning techniques.
 - <u>i.[F]</u> All aspects of this section may be performed by borough-approved personnel or a borough-approved vendor.

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435	5.	Payments. Applicants will be eligible for reimbursements or, at the option
436	of the app	licant, payment may be made directly to a borough-approved vendor.
437	Reimburser	nents and payments shall be available as follows:
438		 Replacement of a hydronic heater:
439		i. With either an EPA certified wood or pellet stove with an
440		emission rate less than or equal to two grams of PM2.5 per hour, or an
441		EPA phase II certified pellet burning hydronic heater with an emission rate
442		equal to or less than 0.1 pounds per million BTU, or an emergency power
443		system, up to \$10,000 for purchase and installation.
444		ii. With an appliance designed to use home heating oil
445		(excluding waste or used oil) or a masonry heater (including parts, labor
446		and any costs associated with upgrading the chimney to the extent
447		required by the manufacturer of the appliance for proper installation), up to
448		\$12,000 for purchase and installation of the appliance.
449		iii. With an appliance designed to use natural gas, propane, hot
450		water district heat, or electricity, up to \$14,000 for purchase and
451		installation of the appliance.
452		b. Replacement of a non-borough-listed SFBA:
453		i. With either an EPA certified wood stove, or fireplace insert
454		that has an emission rate less than or equal to two grams of PM2.5 per
455		hour, or in the case of an EPA certified wood stove, PM2.5 emissions
456		must be reduced by 50 percent and emit two grams of PM2.5 per hour or
457		less, up to \$4,000 for purchase and installation of the appliance.
458		ii. With an EPA certified pellet stove that has an emission rate
459		less than or equal to two grams of PM2.5 per hour, up to \$5,000 for
460		purchase and installation of the appliance.
461		iii. With an appliance designed to use home heating oil
462		(excluding waste oil), hot water district heat, electricity, or a masonry
463		heater (including parts, labor and any costs associated with upgrading the
464		chimney to the extent required by the manufacturer of the appliance for
465		proper installation), or an emergency power system, up to \$6,000 for the
466		purchase and installation.
467		iv. With an appliance designed to use natural gas or propane,
468		up to \$10,000 per purchase and installation of the appliance. Multiple non-
469		borough-listed solid fuel burning appliances or fireplaces, or combinations
470		thereof, may be replaced with a single heating device that meets the
471		requirements above, except for those that are fired by solid fuels. Payment
472		will be based on the number of devices removed, up to a maximum of
473		three, and may not exceed the replacement cost.
474		c. Removal of a SFBA (limited to a one-time participation in this
475	proar	am per property).
476	ļ-1-9.	i. Removal of a hydronic heater through a one-time payment of
477		\$5,000

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- 478 ii. Removal of other SFBAs through a one-time payment of 479 \$2,000. 480 Repair Program. d. 481 The repair program will pay for the: (A) Replacement of a wood stove's catalytic converter that 482 483
 - has exceeded its life span through the one-time payment of up to \$750.00.
 - (B) Replacement of any emissions-reducing component of an EPA certified wood stove up to the maximum amount of \$750.00.
 - In addition to the general requirements set forth in this section, applicants must fully comply with any inspection process required by the division, which may be performed by a borough-approved vendor.
 - Section 5. FNSBC 21.28.050, Forecasting exceedances and restrictions in the air quality control zone during an alert, shall be amended as follows:
 - A. During the winter months of October through March, the borough shall issue a daily PM2.5 forecast by 4:30 p.m. When the PM2.5 concentration reaches the onset level for an alert and is expected to remain at that level for 12 hours or more, an alert will be declared. An alert may apply to the air quality control zone as a whole, or to one or more sub-areas designated by the division. Once an alert is declared, PM2.5 control measures set forth in this section shall be implemented and continued until the alert is cancelled. There are two levels of alerts: Stage 1 and Stage 2. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation. These restrictions shall not apply during a power failure. When an alert is in effect, outdoor burning is prohibited, including nonpermitted incinerators and burn barrels. This outdoor burning prohibition does not include recreational fires such as bonfires, campfires, or ceremonial fires and the use of fire pits.
 - The division will notify local media to ensure the declared alert is broadcast. The B. division shall also use social media and methods of direct communication such as text messages as feasible. Information within the notification will contain the PM2.5 forecast. stage level for areas, and actions required to reduce sources of PM2.5. The obligations imposed in this subsection do not require, absent specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation.
 - C. Stage 1: Restrictions in the Air Quality Control Zone during an Alert.
 - A Stage 1 air alert is implemented when concentrations exceed or are forecasted to exceed 25 µg/m³.
 - No fuel source may be added to the combustion chamber of a firebox of any solid fuel burning appliance or waste oil burning appliance. Residents should rely

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Adopted November 3, 2017

522 instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) until the Stage 1 air alert is cancelled. [BURNING IS 523 PERMITTED IN ALL EPA CERTIFIED SOLID FUEL BURNING APPLIANCES, AND 524 EPA CERTIFIED HYDRONIC HEATERS, MASONRY HEATERS, AND COOK 525 STOVES. NO FUEL SOURCE MAY BE ADDED TO THE COMBUSTION CHAMBER 526 OR FIREBOX OF ANY SOLID FUEL BURNING APPLIANCE OR WASTE OIL 527 BURNING APPLIANCE NOT LISTED ABOVE. RESIDENTS SHOULD RELY INSTEAD 528 529 ON THEIR HOME'S ALTERNATE, CLEANER SOURCE OF HEAT (SUCH AS A GAS OR FUEL OIL FIRED FURNACE OR BOILER OR ELECTRIC BASEBOARD 530 531 HEATERS) UNTIL THE STAGE 1 AIR ALERT IS CANCELLED.]

- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation, the building owner is exempted from complying with the Stage 1 air alert restrictions for that building.
- 4. If a building owner or other person with a property or managerial interest in the building has an approved Stage 1 Waiver the building owner is exempted from complying with the Stage 1 air alert restrictions for that building. A Stage 1 Waiver will be granted if the person with property or managerial interest verifies that the SFBA being operated during a Stage 1 air alert is a Borough listed appliance. A Stage 1 Waiver may be obtained by completing an application on a form developed by the division, that includes the following information:
- a. Documentation of approved appliance must be submitted, including pictures, make and model.
 - b. Documentation of the applicant's ability to properly store wood.
- c. Documentation the applicant has taken a class or training in proper wood burning techniques.
- D. Stage 2: Required Restrictions in the Air Quality Control Zone during an Alert.
- 1. A Stage 2 air alert is implemented when concentrations exceed or are forecasted to exceed 35 $\,\mu g/m^3$.
- 2. No fuel source may be added to the combustion chamber or firebox of any solid fuel burning appliance or waste oil burning appliance. Residents should rely instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) until the Stage 2 air alert is cancelled.
- 3. If a building owner or other person with a property or managerial interest in the building has an approved "no other adequate source of heat" designation the building owner is exempted from complying with the Stage 2 air alert restrictions for that building.

Section 6. FNSBC 21.28.060 **No other adequate source of heat determination**, shall be amended as follows:

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Fairbanks North Star Borough, Alaska

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ORDINANCE NO. 2017-44

A. A building owner or other person with a property or managerial interest in a building located within the air quality control zone may obtain a "no other adequate source of heat" determination from the division if:

1. The SFBA being used to heat the structure is a Borough listed appliance: [EPA CERTIFIED UNLESS AN APPLICATION HAS BEEN MADE TO THE ENHANCED VOLUNTARY REMOVAL, REPLACEMENT AND REPAIR PROGRAM TO REMOVE OR REPLACE THE NONCERTIFIED SFBA AND HAS BEEN DENIED, A PELLET FUEL BURNING APPLIANCE INSTALLED PRIOR TO APRIL 1, 2017, A MASONRY HEATER, OR A COOK STOVE.]

a.

- 2. The building owner(s) or other person with a property or managerial interest in the building applies with the division on a form developed by the division, including the following:
 - a. <u>Documentation of approved appliance must be submitted, including</u> pictures, make, model, and serial number.
 - b. Documentation of the applicant's ability to properly store wood.
 - c. <u>Documentation the applicant has taken a class or training in proper</u> wood burning techniques;
- 3. The building owner(s) or other person with a property or managerial interest in the building files an affidavit with the application that the subject structure must be heated and the structure has no adequate heating source without using a solid fuel [OR WASTE OIL] burning appliance or that economic hardships require the applicant's use of a solid fuel [OR WASTE OIL] burning appliance or complying with a restriction would result in damage to property including damage to the appliance itself and its heating system components. If economic hardship is the reason the applicant has no other adequate source of heat, validating documentation is required. Validating documentation may be established by showing approval for assistance from a list of agencies or programs that provide economic assistance (e.g., programs based on HHS poverty guidelines, unemployment insurance, nutrition assistance) to be made available by the division;
 - 4. The building was constructed on or before December 31, 2016.
- B. There shall be no fee for applying for or obtaining a determination.
- C. It shall be a violation to submit a false affidavit for a "no other adequate source of heat" determination.
- D. If the "no other adequate source of heat" appliance does not meet the standards set in this chapter, the division shall provide the applicant with information concerning the borough's voluntary removal, replacement and repair program.
- E. Applications denied by the division may be appealed to the air pollution control commission within 30 days of the decision.

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44

Section 7.

follows:

F. An applicant that has been denied a "no alternative source of heat determination" by the division because the appliance does not meet the criteria of this section may apply to the air pollution control commission for a variance within 10 days of this decision. A temporary "no alternative source of heat" determination shall be granted pending the decision of the commission. In determining whether to grant a variance, the commission shall consider the location of the appliance, impact on surrounding neighborhood, emission levels of the appliance, the financial investment and ability of the applicant to replace the appliance and any other relevant conditions that indicate the operation of the appliance at that location is not a nuisance or health hazard. If the commission denies a variance, the "no alternative source of heat" determination shall expire 60 days from the date of denial.

FNSBC 1.20.080, Fine Schedule, is hereby amended as

21.28.030(E)	Failure to obtain, submit and execute a permit for installing	\$1,000	No
	a SFBA in new construction.		
21.28.030(<u>F</u> [E])	Illegal installation of hydronic heaters.	\$500.00	No
21.28.030(<u>F</u> [E])	Failure to remove hydronic heaters.	\$500.00	No
21.28.030(<u>G</u> [F])	Use of prohibited fuels.	\$100.00	Yes
	1st offense		
21.28.030(<u>G</u> [F])	Use of prohibited fuels.	\$500.00	No
	2nd offense		
21.28.030(H[G])	Violation of commercial sale requirements.	\$500.00	No

Section 8. Subsection G of FNSBC 4.12.110 shall be amended as follows:

G. The commission shall hear variance requests as set forth in FNSBC Title 21. [AFTER A PUBLIC HEARING, THE COMMISSION SHALL DETERMINE WHETHER A PERSON MAY RECEIVE A VARIANCE FROM THE INSTALLATION REQUIREMENTS OF FNSBC 21.28.030(E) ALLOWING THEM TO INSTALL A HYDRONIC HEATER. IN DETERMINING WHETHER TO GRANT THE VARIANCE, THE COMMISSION SHALL CONSIDER THE PROPOSED LOCATION OF THE APPLIANCE, IMPACT ON SURROUNDING NEIGHBORHOOD, EMISSION LEVELS OF THE APPLIANCE, TERRAIN, METEOROLOGICAL CONDITIONS, AND OTHER RELEVANT CONDITIONS THAT MAY RENDER THE OPERATION OF THE APPLIANCE AT THAT LOCATION A NUISANCE OR A HEALTH HAZARD.]

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639 Section 9. Appendix E- User Fee Schedule of the FY 2017-18 budget is 640 hereby amended to add the following to the Transportation User Fee Schedule: 641 Air Quality 642 643 Permit application fee for SFBA in new construction \$375.00 644 Section 10. Effective Date. This ordinance shall be effective at 5:00 p.m. 645 of the first Borough business day following its adoption. 646 647 PASSED AND APPROVED THIS 19th DAY OF JUNE, 2017. 648 649 650 651 652 653 654 √Kathryn Dodge 655 **Presiding Officer** 656 657 658 659 660 ATTEST: 661 662 663 Nanci Ashford-Bingham, MMC 664 Borough Clerk 665 666 667 Yeses: Tacke, Davies, Cooper, Quist, Gray, Lawrence, Dodge Roberts, Sattley 668 Noes:

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Adopted November 3, 2017

MEMORANDUM OF UNDERSTANDING BETWEEN ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND FAIRBANKS NORTH STAR BOROUGH FOR AIR POLLUTION CONTROL

I. Purpose

The purpose of this Memorandum of Understanding (MOU) is to clarify the joint responsibilities for air pollution control and monitoring within the Fairbanks North Star Borough with an emphasis on fine particulate matter ($PM_{2.5}$) and carbon monoxide (CO). The Alaska Department of Environmental Conservation (DEC) and the Fairbanks North Star Borough (Borough) have joint responsibility for air pollution control in the Fairbanks North Star Borough. The parties to this MOU recognize that clear lines of responsibility must be established and maintained to maximize the efficient utilization of available resources and to provide the greatest protection to the public's health and safety. It is with this recognition that these two parties hereby enter into this agreement.

II. <u>Major Stationary Sources</u>

DEC will retain responsibility for permitting, inspection, surveillance, and enforcement of all currently permitted facilities under DEC authority, and for any new sources that require DEC permit approval under AS 46.14.

DEC will:

notify the Borough upon receipt of any permit applications or renewals for State Air Quality Permits for stationary sources located within the Borough, to allow sufficient time for Borough comment on such permitting activities;

respond to Borough requests during the Department permit review, for additional information from a permit applicant pursuant to 18 AAC 50 or the State Implementation Plan for Air Quality Control; and

provide information in a reasonable time period to the Borough in response to requests for information on permitted facilities.

The Borough will:

Maintain its registration to DEC's online system for public notice announcements; and

notify DEC when it desires information on a permitted facility, permit

application or renewal.

III. Open Burning

DEC will be responsible for issuing approvals for open burning of materials from Fire Service training, land clearing operations of 40 acres or greater per year and for the open burning of petroleum-based materials or other materials in a way that produces black smoke.

DEC will:

provide the Borough with copies of all open burning approvals issued by DEC for sites within the Borough;

notify applicants to contact the Borough regarding any Borough Codes pertaining to open burning; and

include open burning prohibitions in its air quality advisories if determined to be appropriate to the air pollution event.

The Borough will:

advise DEC and the Division of Forestry if the Borough re-establishes any open burning regulations and permit procedures

IV. Area Source Control Programs

The Borough and DEC recognize that many small stationary pollution emission sources have the potential to collectively impact air quality. These small sources are categorized as area sources by EPA and DEC and may be regulated by local, state, or federal rules, but are not typically permitted by the DEC Air Permit program. They include, but are not limited to, the following types of sources: solid fuel-fired heating devices, commercial and residential space heating, small sources that fall below permitting thresholds, and fugitive dust sources including, but not limited to construction and demolition activities, sand blasting, land clearing and farming activities.

The Borough will:

implement solid fuel-fired heating device repair, retrofit, and replacement programs as resources allow;

implement voluntary programs related to fuel burning that assist in mitigating PM_{2.5} air pollution as resources allow;

Adopted November 3, 2017

Air Pollution Control MOU-DEC/FNSB

conduct public outreach and education on air quality health effects and the mitigation and impacts of air pollution from home heating devices, and other local area sources as resources allow:

take the lead in developing and implementing local control programs to address pollution from area sources consistent with the Borough Assembly's approval/authorization and will notify and consult with DEC regarding local control programs being considered for implementation to insure coordination with any existing state programs or regulations.

DEC will:

implement state regulations designed to mitigate area source impacts in the area;

assist and coordinate with the Borough on public outreach and education activities;

notify and consult with the Borough regarding any proposed state area source programs or regulations that could impact a local control program or activities within the Borough; and

provide technical assistance related to state and federal requirements that could impact development and implementation of a local control program.

The Borough and DEC will:

look for opportunities to share data related to area sources that can further technical efforts in assessing air quality impacts;

jointly determine whether, and when, the two agencies will need to coordinate on implementation of an area source program;

jointly determine the roles and responsibilities for each agency in implementing any coordinated area source program;

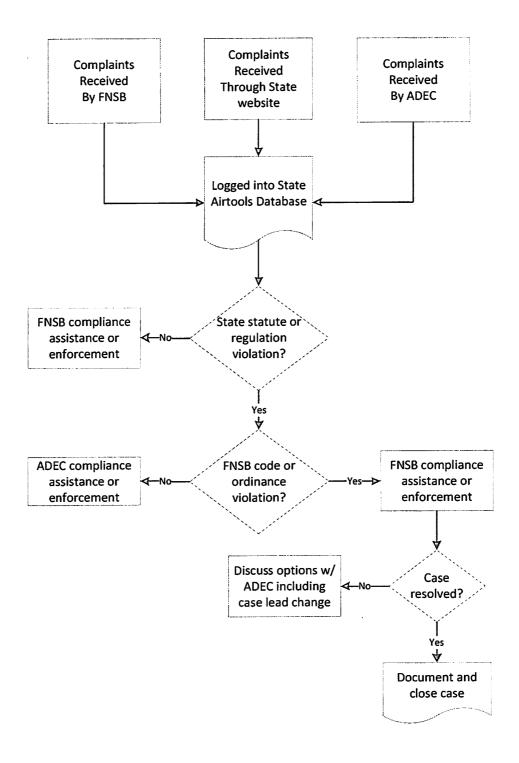
upon agreement by both agencies as to the roles, responsibilities, funding, and any other essential details of a coordinated area source program, work cooperatively to implement the program; and

amend this agreement, as soon as practical, to incorporate the relevant details related to an approved area source program so that clear lines of responsibility are delineated.

V. Complaint Response

DEC and the Borough will collaborate in the response, investigation, compliance

assistance and enforcement stemming from public complaints regarding air pollution within the Borough. The flow chart delineates the course of action and agency lead in assessing appropriate enforcement actions.



Each agency will be responsible for assessing whether an air quality complaint is

Adopted November 3, 2017

Air Pollution Control MOU-DEC/FNSB

based upon a violation of the Borough Air Quality Ordinances or of the State Air Quality Control Regulations. If the complaint alleges a Borough ordinance violation, then the Borough may respond, investigate and address the violation. If the complaint alleges a violation of both the Borough Ordinances and the State regulations, and the Borough is unable to resolve the violation, then the Borough will discuss options with the State, such as a change in agency lead. Case coordination necessitates close communication between the agencies regarding respective agency approach and goals, based on the agency ordinances or regulations.

For DEC permitted stationary sources, DEC will investigate public Air Quality Complaints. If the Borough is interested in public complaints regarding permitted facilities, the Borough will, in its discretion, contact DEC. DEC agrees to share information regarding the complaint investigation and closure with the Borough.

VI. <u>Ambient Air Monitoring/Air Quality Forecasting</u>

As of July 1, 2016, DEC began maintainance and operation of the federally required air quality monitoring network consisting of three sampling sites in the Fairbanks North Star Borough: The Fairbanks State Office Building (SOB), the multi-pollutant National Core site (NCore) and the North Pole Fire Station #3 (NPF3) sampling site. The SOB and NPF3 sites are used to monitor fine particulate matter (PM_{2.5}) and the Ncore site monitors PM_{2.5} and carbon monoxide, along with a suite of other criteria pollutants and meteorological parameters. The Borough will review monitoring needs with DEC and EPA in consideration of resources available for the purpose of assigning monitoring priorities. The Borough will continue to provide recorded daily ambient air quality forecasts during the period of October 1 through March 31 each winter and will issue air quality advisories and alerts as needed. DEC will provide technical and back-up support for issuing air quality advisories and will assit with posting the Borough advisories to the state advisory website.

Close communication and cooperation between the agencies is necessary to share information on ambient air conditions including any results from any special purpose monitoring efforts to determine the need for issuing an air quality advisory, or declaring an air episode due to anthropogenic or natural events.

DEC will:

operate and maintain the NCore, CO, $PM_{2.5}$ ambient air and meterological monitoring network as required in accordance with state and federal regulations, guidelines, and the yearly DEC/EPA and Borough Air Programs work plan;

assume payment for utilities and internet access for the monitoring sites on Borough property and previously coverd by the Borough, specifically for the

NCore and North Pole Fire Station #3 monitoring sites;

operate and maintain the PM_{2.5} speciation monitor in accordance with state and federal regulations, guidelines, and the yearly DEC/EPA and Borough Air Programs work plan;

continue to provide technical assistance to the Borough in the areas of ambient air monitoring science, instrument operation, and quality assurance;

send the Borough copies of correspondence and applicable materials associated with air quality monitoring work performed by DEC within the Borough and air monitoring information received from EPA or other sources which may be of interest to the Borough;

notify the Borough as to reporting requirements, due dates, etc.;

review and approve in writing special purpose monitoring site locations using Federal Equivalence Method (FEM) monitors as required and notify EPA of SPM monitoring locations;

provide, or facilitate in-state, technical assistance and training as time and funding allows;

provide filter weighing operations for the analysis of particulate filters;

conduct an annual monitoring network assessment and develop recommendations for any changes which may be necessary in coordination with the Borough and EPA;

coordinate with and assist the Borough on developing air quality advisories and forecasts, provide assistance by posting the Borough's advisories to the State's Air Advisory web site, and assist in the distribution of information to the public and interested parties; and

provide and maintain a data acquisition system including a website for near real-time data access and a database for data storage, review and submission of required monitoring data to EPA.

The Borough will:

house the NCore, North Pole Fire Station #3 air quality monitoring sites, and the Peger Road meteorological tower on Borough property and grant DEC access to these sites year round;

notify DEC regarding any special air monitoring studies using non-regulatory monitors to identify/better define air quality problem areas, as funding and staff allow;

submit to DEC in writing for approval any desired/required changes to the special purpose monitoring sites monitoring network for any sites using FEM monitors;

assist DEC staff with field monitoring during short-term periods when DEC has staffing problems (as time and funding allows);

continue to implement, as needed, the Borough's emergency episode prevention and response plan for CO;

provide a recorded daily CO forecast during periods of poor air quality, when CO concentrations are of concern. The daily CO forecast will also be provided on the Borough web page and phone system for media and the general public; and

develop and provide $PM_{2.5}$ forecasts to address potential impacts during the summer wildfire season and the winter $PM_{2.5}$ season. A daily forecast will be provided during periods of poor air quality. The $PM_{2.5}$ forecast will be posted on the Borough web page and the Borough's phone system for media and the general public. The Borough will notify DEC of any air quality advisory as soon as possible and provide said advisory to DEC for posting to the State's web site. As part of that forecast, provide a description of the air dispersion (poor, fair, or good) forecast for each day, with weekend and holiday projections made the previous Friday.

VII. Air Quality Planning

The Borough will continue its efforts to maintain the National Ambient Air Quality Standard (NAAQS) for carbon monoxide and work towards meeting attainment for fine particulate matter ($PM_{2.5}$). This will include the study and possible implementation of reasonable, cost-effective strategies designed to reduce ambient air pollutant concentrations which will allow the Borough to maintain the carbon monoxide standard and attain the $PM_{2.5}$ standard.

DEC will:

provide technical and administrative assistance to the Borough;

- in the area of maintenance of the NAAQS for carbon monoxide; and
- In the area of development of the attainment plan for PM_{2.5}

work with the Borough to develop additional programs that will;

 aid the Borough in maintaining the health based NAAQS for carbon monoxide in the Borough maintenance area, subject to available funding;

- aid the Borough in attaining the health based NAAQS standard for PM_{2.5} in the Borough nonattainment area, subject to available funding; and
- assist the Borough in its dealings with EPA, particularly in the development of additional strategies to reduce ambient air pollutant levels in the Borough.

The Borough will:

continue its efforts to maintain the NAAQS for carbon monoxide;

update the CO maintenance plan per the Clean Air Act requirements or as needed to address local objectives;

continue its efforts to attain the NAAQS for PM_{2.5.};

implement PM_{2.5} strategies to attain the standard that are shown to be necessary, reasonable and cost effective;

assist DEC to study $PM_{2.5}$ concentrations at cold temperatures, and the resultant impact of $PM_{2.5}$ on the prospects for attaining and maintaining the $PM_{2.5}$ standard in the Borough nonattainment area, including potential use of new and innovative programs;

develop emission inventories as needed to support or implement $PM_{2.5}$ SIPs; and

take the lead in collaboratively developing and updating with DEC a PM_{2.5} attainment plan to bring the Borough nonattainment area into attainment with the NAAQS.

VIII. Mobile Source Control Programs

The Borough and DEC recognize that air pollution emissions from motor vehicles and other mobile sources have the potential to collectively impact air quality. Mobile sources are typically regulated by federal and state rules, but local programs can be beneficial in reducing emissions.

The Borough will:

take the lead in developing and implementing local control programs to address pollution from mobile sources and will notify and consult with DEC regarding local control programs being considered for implementation to insure coordination with any existing state programs or regulations; and

implement projects to expand parking lot electrical plug-in infrastructure to

reduce cold start emissions at Borough owned facilities, when included in the State Implementation Plan as resources allow.

DEC will:

maintain state regulations that allow a vehicle inspection & maintenance program to remain as a CO contingency measure in the Fairbanks CO maintenance plan as required by EPA;

coordinate with the state DOT on any diesel emission reduction projects being implemented to reduce PM_{2.5} emissions from the state fleet as part of the State Implementation Plan;

notify and consult with the Borough regarding any proposed state mobile source programs or regulations that could impact a local control program or activities within the Borough; and

provide technical assistance related to state and federal requirements that could impact development and implementation of a local control program.

The Borough and DEC will:

look for opportunities to share data related to mobile sources that can further technical efforts in assessing air quality impacts;

jointly determine whether, and when, the two agencies will need to coordinate on implementation of any mobile source program;

jointly determine the roles and responsibilities for each agency in implementing any coordinated mobile source program;

upon agreement by both agencies as to the roles, responsibilities, funding, and any other essential details of a coordinated mobile source program, work cooperatively to implement the program; and

amend this agreement, as soon as practical, to incorporate the relevant details related to any approved mobile source program so that clear lines of responsibility are delineated.

IX. Congestion Mitigation & Air Quality (CMAQ) Projects

The Borough will:

Conduct a call for project nominations to address $PM_{2.5}$ in the donut area (the area outside of the metropolitan planning area but within the $PM_{2.5}$ non-attainment area) if funding is available, on behalf of the CMAQ Project Evaluation Board:

Coordinate with the DEC regarding the development of CMAQ projects to address the PM_{2.5} within the non-attainment area;

Consult with the metropolitan planning organization (MPO) and the State of Alaska DOT&PF Northern Region regarding priority CMAQ projects within the metropolitan planning area.

DEC will:

Coordinate with the Borough regarding the development of CMAQ projects to address PM_{2.5} within the non-attainment area;

Consult with the MPO and the State of Alaska DOT&PF Northern Region regarding priority CMAQ projects within the metropolitan planning area.

DEC and the Borough will:

jointly determine roles and responsibilities for implementing CMAQ projects at the time that the projects are submitted to the metropolitan planning organization or Department of Transportation for funding.

X. <u>Notice/Project Contacts</u>

For purposes of this agreement each agency will identify a project manager who will have overall responsibility for management of the agreement. The project managers may designate and identify in writing to the other agency, other staff with responsibility for implementing specific activities under the agreement.

For purposes of this agreement DEC's project manager is, Denise Koch, Director, Division of Air Quality

For purposes of this agreement, the Borough's project manager is, Ron Lovell, Manager, Air Quality Division

All project work plans and approvals shall be submitted through the project managers designated in this section.

Parties agree to notify each other in writing of changes in project manager or activity managers within 10 days of change.

XI. <u>Budgetary</u>

DEC and the Borough shall negotiate any funding agreements for the coming year as an amendment to this MOU. Any annual funding agreements will be negotiated between the DEC Air Quality Director and the FNSB Air Quality Manager. Future

year appropriations shall be discussed and operational costs agreed upon no later than May 31st of each year. The annual funding agreements shall be documented in writing and make specific reference to this MOU.

This MOU has no financial consideration at this point in time. If future services are needed by either party requiring funding, an amendment to this MOU will be issued.

XII. It is mutually agreed:

- that the Borough and DEC shall employ and maintain staff to carry out the activities necessary to administer the air quality programs outlined in this agreement;
- that nothing in this agreement shall be construed as obligating DEC or the Borough to the expenditure of funds, or for the future payment of funds; and
- 3. that amendments to this agreement may be proposed by either party and shall become effective upon approval of both parties.

XIII. <u>Execution/Modification and Duration of Agreement</u>

This agreement will be in effect upon signature by both parties until amended or revoked. The agreement may be terminated upon 90 days' written notice by either party. In addition, all notes, data collected, equipment and any draft reports shall be submitted to DEC within 30 days of termination of this agreement by either party.

Alaska Department of Environmental Conservation

> Larry Hartig Commissioner

Date: 10/25/16

Fairbanks North Star Borough

Karl Kassel

Mayor

Date: 0 14 16

Nikolay Barkov

DEC Finance Officer

Date:_

FINAL

MEMORANDUM OF AGREEMENT FOR THE SELECTION AND FUNDING OF PROJECTS FUNDED BY CMAQ WITHIN THE FAIRBANKS NONATTAINMENT AREA FOR PM 2.5

Among the Alaska Department of Transportation and Public Facilities (ADOT&PF), the Fairbanks Metropolitan Area Transportation System (FMATS), the Fairbanks North Star Borough (FNSB) and the Alaska Department of Environmental Conservation (ADEC)

I. PURPOSE

A. This Memorandum of Agreement (MOA) is a written agreement among the Fairbanks area MPO (FMATS), state agencies (ADEC, ADOT&PF), and the designated air quality planning agency (Fairbanks North Star Borough, FNSB) describing their respective roles and responsibilities including project selection and CMAQ fund management necessary for air quality related transportation planning.

II. BACKGROUND

- A. The U.S. Environmental Protection Agency (EPA) has designated the following townships and ranges of the Fairbanks North Star Borough as a non-attainment area for PM 2.5: -MTRS F001N001 All sections; -MTRS F001N001E Sections 2 11, 14 23, 26 34; -MTRS F001N002 Sections 1 5, 8 17, 20 29, 32 36; -MTRS F001S001E Sections 1, 3 30, 32 36; -MTRS F001S001W Sections 1 30; -MTRS F001S002E Sections 6 8, 17 20, 29 36; -MTRS F001S002W Sections 1 5, 8 17, 20 29, 32 33; -MTRS F001S003E-Sections 31 32; -MTRS F002N001E- Sections 31 35; -MTRS F002N001-Sections 28, 31 36; -MTRS F002N002-Sections 32 33, 36; -MTRS F002S001E Sections 1 2; -MTRS F002S002E Sections 1 17, 21 24; -MTRS F002S003E Sections 5 8, 18. A map of the non-attainment area is attached as Appendix A.
- B. This PM 2.5 nonattainment designation became effective on December 14, 2009.
- C. The above non-attainment area is larger than the FMATS Metropolitan Planning Area (MPA) illustrated in Appendix A as the MPO boundary.
- D. 23 CFR 450.314(b) states that if the metropolitan planning area does not include the entire nonattainment or maintenance area, there shall be an agreement among the state department of transportation, state air quality agency, affected local agencies and the metropolitan planning organizations describing the process for cooperative planning and analysis of all projects outside the metropolitan planning area but within the nonattainment or maintenance area.
- E. Further, 23 CFR 450.314(c) states that in the nonattainment area or maintenance areas, if the MPO is not the designated agency for air quality planning under section 174 of the Clean Air Act (42 USC 7504), there shall be a written agreement between the MPO and the designated air quality planning agency describing their respective roles and responsibilities for air quality related transportation planning.

III. AGENCY ROLES & RESPONSIBILITIES

- A. ADEC
 - 1. ADEC and the FNSB have joint responsibility for air pollution control in the FNSB.
 - 2. ADEC will provide technical assistance in the development of the Fairbanks PM2.5 nonattainment area CMAQ transportation project listing.

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- 3. ADEC will participate and be a member on the Fairbanks CMAQ Project Evaluation Board.
- B. ADOT&PF Northern Region (NR)
 - 1. NR will provide technical assistance in the development of the Fairbanks CMAQ transportation project listing.
 - 2. NR will prepare and submit the PDAs to fund the selected projects, administer project funds to the appropriate implementing agency, and will assist in the development of the environmental documentation, design, right-of-way, utility and construction of selected projects as required.
 - 3. NR will participate and be a member on the Fairbanks CMAQ Project Evaluation Board.
 - 4. NR will issue an annual thirty-day Call for Nominations prior to January 31.
- C. ADOT&PF Division of Program Development (HQ)
 - 1. HQ will make Federal CMAQ funding available for eligible air quality projects in Fairbanks.
 - 2. HQ will provide CMAQ funding for the purposes of travel demand modeling and conformity determination for the updates of the plans and programs and to include projects outside of the MPA in the nonattainment area. No local match is currently required. Should local match be required in the future, agreements will be developed through interagency consultation.
 - 3. HQ will participate and be a member on the Fairbanks CMAQ Project Evaluation Board.
 - 4. HQ will (subject to available CMAQ funding) include in the STIP all projects agreed to by the Fairbanks CMAQ Project Evaluation Board and submitted by the FNSB.

D. FMATS

- 1. FMATS will work with local agencies in developing and submitting projects to the Fairbanks CMAQ Project Evaluation Board.
- 2. FMATS will include all projects approved by the Fairbanks CMAQ Project Evaluation Board and submitted by the FNSB in the informational section of the TIP.
- 3. FMATS will participate and be a member on the Fairbanks CMAQ Project Evaluation Board.
- E. FNSB
 - 1. FNSB and the ADEC have joint responsibility for air pollution control in the FNSB.
 - 2. FNSB is the lead air quality agency for the Fairbanks area and will determine the priorities for the CMAQ funding provided to the PM2.5 nonattainment area.

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- FNSB will provide to the NR a list of PM 2.5 CMAQ transportation projects for the PM2.5 nonattainment area for inclusion in the STIP.
- FNSB will participate and be a member on the Fairbanks CMAQ Project Evaluation Board.

IV. CMAQ PROJECT EVALUATION BOARD

A. Board membership

The Fairbanks CMAQ Project Evaluation Board (hereinafter Board) will have 7
members representing the following entities: ADEC, FMATS, City of Fairbanks, City of
North Pole, FNSB, ADOT&PF (NR) and ADOT&PF (HQ). The Board may select a chair to
facilitate evaluation discussions.

B. Project Evaluation Criteria

- The Board will develop criteria to use in evaluating projects submitted to the Board.
- The developed criteria will take into account eligible uses of CMAQ funding and consider the projects efficacy in addressing PM2.5 attainment.
- Evaluation criteria will be provided to agencies for use in developing CMAQ project proposals for submittal to the Board.

C. Project Submission

- Any member of the Board may submit a project for evaluation and possible inclusion in the STIP.
- 2. Board Members will notify their respective agencies of the time window for the Call for Nominations.

D. Project Evaluation

- The Board will use the developed evaluation criteria to score the projects.
- Projects evaluated will be ranked by their total score.
- Based upon the project ranking and scheduling, projects will be submitted to the FNSB mayor for approval and then to NR for inclusion in the STIP subject to CMAQ funding available to the Fairbanks PM2.5 nonattainment area.
- In compiling the proposed list for inclusion in the STIP, if the next ranked project is too costly to be included due to fiscal constraint, the next project below it may be included instead.
- 5. The Board will meet as necessary to allow FNSB to submit its slate of proposed projects in time for inclusion in a draft STIP or draft STIP amendment. It is anticipated that the Board will meet at a minimum once per year, preferably no later than March 31, to solicit, rank, and recommend projects.

E. Conflict Resolution Process

- 1. Conflicts regarding the submission of a project listing to NR, including the inclusion or absence of a project, will be resolved according to the following process:
 - a) The conflict resolution process is initiated in writing, via email, from any signatory who has a conflict or grievance to all other signatories in the MOA who are affected by the conflict or grievance.
 - b) Within fifteen (15) working days after receipt of such notice, each affected party, along with its director or designee, will meet and determine reasonable measures to resolve the conflict.
 - c) If the conflict has not been resolved at the expiration of sixty (60) days after receipt of the initial notice, the conflict shall be referred to the Office of the Governor for final resolution.
- 2. All parties understand and agree that the timeline above, while ambitious, may not suffice in getting the matter resolved in time for inclusion in the draft STIP or draft STIP amendment.

V. AGREEMENT TERMS

- A. This agreement shall be effective upon signature of all parties and binding until amended or revoked. The anticipated duration of the agreement is tied to the PM 2.5 non-attainment designation and is required until the area has achieved attainment status and maintained such status for a period of at least twenty years. The undersigned agencies may revise or replace this MOA via unanimous written agreement. The agreement may be terminated by a signing agency upon 90 days' written notice to all the signatory parties.
- B. An interagency consultation process shall be used for revision of the MOA as necessary.

VI. SIGNATORIES

The undersigned hereby agree to comply with the provisions and terms of this MOA as described above.

Steve Titus, P.E., Chair, FMATS

Larry Hartig, Commissioner, ADEC

Mayor Luke Hopkins, Fairbanke North Star Borough

Leo von Scheben, P.E., L.S., M.B.A., Commissioner, ADOT&PF

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Abbreviations Guide

ADOT & PF - Alaska Department of Transportation and Public Facilities

ADEC - Alaska Department of Environmental Conservation

CMAQ - Congestion Mitigation/Air Quality Program

EPA - United States Environmental Protection Agency

FHWA - Federal Highway Administration

FMATS - Fairbanks Metropolitan Area Transportation System

FNSB - Fairbanks North Star Borough

FTA - Federal Transit Administration

HQ - Alaska Department of Transportation and Public Facilities, Headquarters

PDA - Project Development Authorization

PM2.5 - Fine Particulate Matter Less Than 2.5 Micrometers

MOA - Memorandum of Agreement

MPA - Metropolitan Planning Area

MPO - Metropolitan Planning Organization

MTP - Metropolitan Transportation Plan

NR - Alaska Department of Transportation and Public Facilities, Northern Region

RLRTP - Regional Long Range Transportation Plan

SIP - State Implementation Plan

STIP - Statewide Transportation Improvement Program

TIP - Transportation Improvement Program

USDOT - United States Department of Transportation

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