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

December 8, 2017

Bill Walker Governor

Larry Hartig Commissioner (This page serves as a placeholder for two-sided copying)

Appendix III.D.5.12

FNSB Air Quality Ordinances:

2015-01 2015-18 2015-29 2015-73 2016-20-1A 2016-21 2016-30 2016-37 2017-18 2017-44

ADEC & FNSB MOU October 2016

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

Nonattainment Area.

(This page serves as a placeholder for two-sided copying)

1		By:	John Davies	
2			Kathryn Dodge	
3			Janice Golub	
4		Introduced:	01/15/2015	
5		Advanced:	01/15/2015	
6		Substituted:	02/12/2015	
7		Amended:	02/12/2015	
8		Amended:	02/26/2015	
9		Amended:	02/27/2015	
10		Adopted:	02/27/2015	
11		Immediate		
12		Reconsideration Faile	d: 02/27/2015	
13		Adopted:	02/27/2015	
14				
15	FAIRBANKS NORTH STA	R BOROUGH		
16				
17	ORDINANCE NO 20	015 - 01		
18				
19	AN ORDINANCE AMENDING CHAPTER 8			
20	ORDINANCES REGARDING THE PM2.5 AIR		,	
21	AMENDING 2.48.120 REGARDING THE AIR POL			
22	DUTIES, AND AMENDING 1.04.050 REGARDING THE FINE SCHEDULE TO ADD			
23	VIOLATIONS OF THE PM2.5 AIR QUAL		FRAM	
24				
25	WHEREAS, EPA, on December 22,			
26	North Star Borough a non-attainment area for fine	particulate pollution (F	$M_{2.5}$); and	
27			- 44 - 14 - 14 - 14 - 14 - 14	
28	WHEREAS, in the winter, PM _{2.5} cond			
29	routinely exceed the allowable limit, thereby	violating the redera	ii neaiin-based	
30	standards; and			
31	WHEREAS on execceive level of D	M importe the health	and wall baing	
32 33	WHEREAS, an excessive level of PI of borough residents; and		and wen-being	
33 34	or borough residents, and			
34 35	WHEREAS, air quality issues co	ould impact large s	cale economic	
36	development, including military expansion; and	Sulu impact large s		
30 37	development, including military expansion, and			
38	WHEREAS, studies have identified	ed wood burning a	s a significant	
39	contributor of $PM_{2.5}$, particularly wood with high mo		s a significant	
40	contributor of r m _{2.0} , particularly wood with high hit			
41	WHEREAS, the combined effort of a	n educational program	concerning the	
42	importance of burning only dry wood and an inc		5	
43	could significantly reduce Borough PM _{2.5} levels; a		., <u>.</u> ,,	
-				
	AMENDMENTS ARE SHOWN IN LEG	GISLATIVE FORMAT		
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	Text to be <i>deleted</i> is [BRACKETED			

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44 WHEREAS, PM_{2.5} emissions from solid fuel burning appliances can be 45 significantly reduced through the selection and proper use of modern, EPA rated 46 models designed to meet more stringent emissions standards and by operating in 47 accordance with "best practices", including selection of appropriate fuel sources; and 48 49 WHEREAS. voluntary, incentive-based 50 programs belquo with comprehensive education programs have been employed in other communities to help 51 reduce PM_{2.5} emissions; and 52 53 54 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 55 goal and they would not address local neighborhood problems arising from one or two 56 significant polluters, neither of which is acceptable; and 57 58 WHEREAS, the State of Alaska, through a Memorandum of Agreement 59 60 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 61 and consistent with the State's air quality program; and 62 63 WHEREAS the State of Alaska Department of Environmental 64 Conservation has issued draft regulations intended to be part of the State 65 Implementation Plan (SIP) as required by the EPA; those regulations provide some new 66 restrictions on the sale of solid fuel burning appliances and firewood, and authorize the 67 borough to take on additional regulatory responsibility related to the SIP; and 68 69 WHEREAS, at the recent "Town Hall" on the PM_{2.5} problem, more than 50 70 citizens provided testimony indicating that our air quality was not acceptable and that 71 they expected the Assembly to act to put into place programs that will improve the air 72 quality in the borough. 73 74 WHEREAS, it is the intent of the Fairbanks North Star Borough Assembly 75 76 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 77 economically heating our buildings; and 78 79 WHEREAS, in adopting this clean air program, it is the intent of the 80 Assembly that it be enforced by concentrating on the most significant sources of PM2.5 81 82 pollution first, both for attainment within the Non-Attainment area and for significant local sources of pollution that affect adjacent and nearby properties; and 83 84

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85 86 87 88	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.
89	
90	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks
91	North Star Borough:
92	
93	Section 1. This ordinance is of a general and permanent nature and shall
94	be codified.
95	
96	Section 2. The following definitions in FNSBC 8.21.010 Definitions are
97	amended or added as follows:
98	<u>"Advisory" means a notice issued by the FNSB Air Quality division when the</u>
99	division determines, using available data, that a PM2.5 concentration of 25 ug/m ³ has,
100	or will likely occur.
101	<u>"Air Quality Control Zone" means the area of the Borough currently contained in</u>
102	the EPA designated non-attainment area, which uses the non-attainment area southern,
103	western and eastern boundaries as modified by their respective intersection with the following northern boundary described as; beginning at the intersection of Isberg Road
104 105	with Chena Ridge Road on the western boundary of the EPA designated non-
105	attainment area, then following Chena Ridge Road back to Chena Pump Road and
100	continuing north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road
107	to Miller Hill Road, then north on Miller Hill Road, then east on Yankovich, then north
100	from Yankovich Road along the east boundary of the Large Animal Research Station to
110	a point just north of its intersection with Nottingham drive and follows the ridge crest
111	across Nottingham Estates to approximately the point where Swallow Drive intersects
112	Dalton Trail to north on Dalton Trail to the crest of the Farmer's Loop Ridge, then follow
113	the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese
114	Highway, then south east on Bennet Road, and along Steel Creek Road to the
115	intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern
116	boundary of the EPA designated non-attainment area.
117	"Alert" means a notice issued by the FNSB air quality division when the division
118	determines, using available data, that a $\underline{PM}_{2.5}$ violation of the 35 [MICROGRAMS PER
119	CUBIC METER] <u>ug/m³ has, or</u> will likely occur.
120	"Clean wood" means natural wood that has not been painted, varnished, or
121	coated with a similar material, has not been treated with preservatives, and does not
122	contain resins or glues as in plywood or other composite wood products.
123	"Construction and demolition debris" means a conglomeration of materials from
124	construction, repair, remodeling or demolition of buildings and structures containing any
125	prohibited fuels.
126	"Episode" means when conditions reach or are predicted to reach advisory or
127	alert status.

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015-01 Page 3 of 11

"Forecast" means a description of the current dispersion conditions described as 128 good, fair, or poor and including the expected PM_{2.5} concentrations expressed in 129 micrograms per cubic meter. 130 131 "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 132 federal law. 133 134 Section 3. Section 8.21.020 Borough listed appliances shall be 135 amended as follows: 136 A[N] solid fuel burning appliance shall be listed by the borough if: 137 The solid fuel burning appliance is certified by the U.S. Environmental Protection 138 Α. Agency as meeting the federal emissions [LIMIT STANDARD APPROPRIATE FOR 139 THAT APPLIANCE OR IN THE CASE OF HYDRONIC HEATERS IS AT LEAST 140 PHASE II QUALIFIED] rate of 2.5 grams of PM_{2.5} per hour or less or for hydronic 141 heaters, meets Phase II qualifications and has an annual average emission level rating 142 equal to or less than 2.5 grams of PM2.5 per hour. For purposes of this section, 143 "certified" means that the solid fuel burning appliance meets emission performance 144 standards when tested by an accredited independent laboratory and labeled according 145 to procedures specified by the EPA in 40 CFR 60 Subpart AAA; or 146 The solid fuel burning appliance is tested, including by use of a handheld or other 147 Β. portable device, by an accredited independent laboratory, or other qualified person or 148 entity approved by the borough, establishing that it meets an [THE EPA] emissions 149 [LIMIT STANDARD APPROPRIATE FOR THAT APPLIANCE OR AN EMISSIONS 150 LIMIT STANDARD EQUIVALENT TO THAT OF A LISTED APPLIANCE IN A SIMILAR 151 CATEGORY] rate of 2.5 grams of PM_{2.5} per hour or less or for hydronic heaters the 152 153 appliance has an annual average emission level rating equal to or less than 2.5 grams of PM2.5 per hour. 154 155 Section 4. Section 8.21.025 **Prohibited acts** shall be amended as 156 follows: 157 [THE BOROUGH SHALL NOT, IN ANY WAY, REGULATE, PROHIBIT, 158 CURTAIL, NOR ISSUE FINES OR FEES ASSOCIATED WITH THE SALE, 159 DISTRIBUTION, OR OPERATION OF HEATING APPLIANCES OR ANY TYPE OF 160 COMBUSTIBLE FUEL.1 161 Installation of certain solid fuel burning appliances in the non-attainment area. 162 Α. Within the non-attainment area no person shall install or allow the installation of a solid 163 fuel burning appliance unless it is listed by the Borough as gualifying under this chapter 164 and the installation complies with all other requirements imposed in this chapter. It is a 165 separate violation to fail to remove a solid fuel burning appliance installed in violation of 166 this chapter. 167 All persons owning and selling their property within the Air Quality Control Zone 168 Β. with an unlisted installed solid fuel burning appliance that will not be removed before 169 sale must, if the solid fuel burning appliance was not listed by the Borough as qualifying 170

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171	at the time of installation, provide a written disclosure to the buyer and to the Division
172	prior to closing.
173	C. Visible Emissions Standard in the Air Quality Control Zone.
174	1. Standard. No person shall cause, permit, or allow the emission from a
175	solid fuel burning appliance in the Air Quality Control Zone to create opacity greater
176	than 20 percent for a period or periods aggregating more than 10 minutes in any hour
177	except during the first 30 minutes after the initial firing of a cold unit when the opacity
178	limit shall be less than 50 percent.
179	Procedures and Enforcement. When ambient weather and light conditions
180	permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A
181	reference method 9 (Visual determination of the Opacity of Emissions From Stationary
182	Sources), or an alternative technology that replaces method 9, when the technology is
183	available and the choice is feasible, upon request of the person being investigated, shall
184	be used to determine compliance with this section. Smoke visible from a chimney, flue
185	or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes
186	shall constitute prima facie evidence of unlawful operation of an applicable solid fuel
187	burning appliance.
188	D. PM _{2.5} Emissions Crossing Property Lines. No person shall cause or permit
189	emissions from a solid fuel burning appliance to impact the resident(s) of a neighboring
190	property through the creation of an emissions plume that:
191	1. crosses a property line
192	2. is observable using EPA method 22 (40 CFR 60 Appendix A), and
193	3. is 25ug/m ³ greater than the surrounding immediate vicinity background
194	<u>PM_{2.5} level using methods defined by the Borough Division of Air Quality. For purposes</u>
195	of this subsection, the surrounding "immediate vicinity" means land within an area
196	measured 1,200 feet in all directions from the boundaries of the emitting property.
197	E. Borough-Wide Installation Requirements for Hydronic Heaters.
198	1. Setback. Unless permitted by a variance, installing an approved pellet
199	fuel burning appliance, or replacing an existing hydronic heater with a listed appliance,
200	no person shall install or allow the installation of a hydronic heater located less than:
201	a. <u>330 feet from the closest property line, or</u>
202	b. 660 feet from a school, clinic, hospital, or senior housing unit.
203	2. Any hydronic heater installed in violation of this section shall be
204	immediately remedied or made inoperable and removed as soon as practicable;
205	however, in no case shall the time of removal be longer than 180 days after notice from
206	the Division of a violation.
207	F. Prohibited Fuels.
208	No person shall burn in the Borough any fuel, except coal in an appliance
209	designed to use coal, which is not listed in the manufacturer's owner's manual as an
210	acceptable fuel for that device or any of the following items in a solid fuel burning
211	appliance:
212	1. Any wood that does not meet the definition of clean wood or has more
213	than 20% moisture content,

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214	2. Garbage,
215	3. Tires,
216	4. Materials containing plastic or rubber,
217	5. Waste petroleum products,
218	6. Paints and paint thinners,
219	7. Chemicals,
220	8. Glossy or colored papers,
221	9. Construction and demolition debris,
222	<u>10. Plywood,</u>
223	<u>11. Particleboard,</u>
224	12. Saltwater driftwood,
225	<u>13. Manure,</u>
226	<u>14. Animal carcasses,</u>
227	15. Asphalt products,
228	<u>16. Flooring products.</u>
229	G. Sales or Leasing of Solid Fuel Burning Appliances.
230	 No person shall sell or lease a solid fuel burning appliance or barrel stove
231	kit in the borough that does not meet the emissions limits established in 8.21.020 A.
232	unless the buyer signs an affidavit, on a form prescribed by the Borough, that the
233	appliance will not be installed or used in the Air Quality Control Zone. This section does
234	not apply to appliances or stoves that transfer pursuant to a sale of property.
235	2. No person shall commercially sell or offer for sale or lease a solid fuel
236	burning appliance in the borough unless the commercial seller or dealer provides the
237	prospective buyer or lessee, prior to any sales or lease agreement, with a written notice,
238	prepared or approved by the Division, that includes, but is not limited to, the following:
239	a. The fuel restrictions imposed in this chapter;
240	b. Proper installation, property location, operation, and maintenance
241	of the appliance;
242	c. An advisory statement noting that operation of solid fuel burning
243	appliances may not be appropriate in some areas due to terrain, meteorological
244	conditions, or other relevant conditions that render the operation of the appliance a
245	public nuisance or health hazard even though it is otherwise legally installed and
246	operated, and
247	3. The written notice required in this section shall be signed and dated by the
248	prospective buyer or lessee prior to purchase or lease to indicate receipt of the
249	notification requirements of this section.
250	4. The commercial dealer or seller shall mail or otherwise provide a copy of
251	the notice, any required affidavit, to the Division within thirty days of the sale. All
252	commercial dealers or sellers shall also include with the notice documentation showing
253	whether the appliance sold or leased meets the Borough's emissions standard.
254	H. Nuisance. No person within the Fairbanks North Star Borough shall cause or
255	allow emissions of a solid fuel or waste oil burning appliance that are injurious to human life
256	or to property or that unreasonably interfere with the comfortable enjoyment of life or

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257 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 258 violation of a provision of this chapter is hereby declared to be a nuisance. 259 260 Ι. Other laws. Nothing in this section precludes other local jurisdictions from having more restrictive codes. 261 Penalties. Upon first conviction of an offense in this chapter, the 262 J. penalty(ies)/fines(s) set forth in FNSBC Title 1 regarding violations of the PM2.5 air 263 quality control program may be satisfied by completion within 60 days of a borough 264 approved class covering PM2.5 health concerns, non-attainment, importance of dry 265 wood and proper operation of solid fuel burning appliances. The borough may on its 266 own initiative file notice of satisfaction of attendance requirements with the court, or the 267 defendant may file a certificate of completion with the court within the applicable time 268 269 frame. Section 5. Section 8.21.040, Forecasting exceedances and voluntary 270 restrictions in the non-attainment area during an alert, shall be amended as follows: 271 8.21.040 Forecasting exceedances and [VOLUNTARY] restrictions in the Air 272 Quality Control Zone [NON-ATTAINMENT AREA] during an alert 273 During the winter months of October through March, the Borough shall issue a 274 Α. daily PM_{2.5} forecast [at] by 4:30 p.m. [MONDAY THROUGH FRIDAY]. When the PM_{2.5} 275 concentration reaches the onset level for an episode and is expected to remain at that 276 level for 12 hours or more, an alert or advisory will be declared. An alert or advisory may 277 278 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 279 measures set forth in this section shall be implemented and continued until the alert or 280 advisory is cancelled. There are three levels of episodes: Stage 1, 2 and 3. The 281 obligations imposed in this sub-section do not require, absent specific funding for that 282 purpose, any actions to be taken outside of the borough's normal business days and 283 hours of operation. 284 The Division will notify local media to ensure the declared alert or advisory is 285 Β. broadcast. The Division shall also use social media and methods of direct 286 communication such as text messages as feasible. Information within the notification 287 will contain the PM_{2.5} forecast, Stage level for areas, and actions required to reduce 288 sources of PM_{2.5}. The obligations imposed in this sub-section do not require, absent 289 290 specific funding for that purpose, any actions to be taken outside of the borough's normal business days and hours of operation. 291 [B]C. Stage 1: Voluntary Restrictions in the Air Quality Control Zone [NON-292 ATTAINMENT AREA] During an [ALERT] Advisory. 293 A Stage 1 air advisory is implemented when concentrations exceed or are 294 1. forecasted to exceed 25ug/m³. 295 [1]2. Residents shall be requested to voluntarily stop operation of solid fuel 296 [BURNING APPLIANCES], pellet [STOVES], and waste oil burning appliances, [AND] 297 as well as masonry heaters and all outdoor burning that includes recreational fires such 298

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299	as bonfires, campfires and the use of fire pits, non-permitted incinerators and burn
300	barrels in the Air Quality Control Zone [NON-ATTAINMENT AREA].
301	[2. THE DIVISION WILL NOTIFY LOCAL MEDIA TO ENSURE THE
301	DECLARED ALERT IS BROADCAST. INFORMATION WITHIN THE NOTIFICATION
	WILL CONTAIN THE PM FORECAST AND PROCEDURES TO REDUCE SOURCES
303	
304	OF PM.]
305	D. Stage 2: Required Restrictions in the Air Quality Control Zone During an Alert
306 307	<u>1. A Stage 2 air alert is implemented when concentrations exceed or are</u> forecasted to exceed 35ug/m ³ .
308	2. Burning is permitted in all borough listed appliances. No fuel source may
308	be added to the combustions chamber or firebox of any non-listed solid fuel burning
310	appliance or waste oil burning appliance. Residents should rely instead on their home's
311	alternate, cleaner source of heat (such as a gas or fuel oil fired furnace or boiler or
312	electric baseboard heaters) until the Stage 2 air alert is cancelled.
313	3. If a building owner or other person with a property or managerial interest
314	in the building has an approved "No Other Adequate Source of Heat" designation, the
315	building owner is exempted from complying with the Stage 2 air alert restrictions for that
316	building.
317	4. Outdoor burning is prohibited including non-permitted incinerators and
318	burn barrels. This does not include recreational fires such as bonfires, campfires or
319	ceremonial fires and the use of fire pits.
320	5. These restrictions shall not apply during a power failure.
321	E. Stage 3: Required Restrictions in the Air Quality Control Zone During an Alert.
322	1. A Stage 3 air alert is implemented when concentrations exceed or are
323	forecasted to exceed 55ug/m3.
324	2. No fuel source may be added to the combustions chamber or firebox of
325	any solid fuel burning appliances, masonry heaters, pellet fuel burning appliances, cook
326	stoves, fireplaces, or waste oil burning appliances. No waste oil may be added to a
327	waste oil burning appliance. Residents should rely instead on their home's alternate,
328	cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) the
329	Stage 3 air alert is cancelled.
330	3. If a building owner or other person with a property or managerial interest
331	in the building has an approved "No Other Adequate Source of Heat" designation the
332	building owner is exempted from complying with the Stage 3 air alert restrictions for that
333	building.
334	4. Outdoor burning is prohibited including non-permitted incinerators and
335	burn barrels. This does not include recreational fires such as bonfires, campfires or
336	ceremonial fires and the use of fire pits.
337	5. These restrictions shall not apply during a power failure or to listed
338	appliances, masonry heaters or pellet fuel burning appliances when the temperature is
339	below -15 as recorded at the Fairbanks International Airport.
340	Section 6. FNSB 2.48.120 Powers and duties of the Air Pollution Control
341	Commission are amended as follows:
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The commission may [SHALL] develop or review comprehensive plans for the F. 342 prevention, abatement, and control of air pollution in the borough. Such plans may 343 include recommendations on subjects including, but not limited to, transportation control 344 measures, zoning, taxation, research, and public relations. 345 After a public hearing, the commission shall determine whether a person may 346 Η. receive a variance from the installation requirements of FNSB 8.21.020 E allowing them 347 to install a hydronic heater. In determining whether to grant the variance, the 348 commission shall consider the proposed location of the appliance, impact on 349 surrounding neighborhood, emission levels of the appliance, terrain, meteorological 350 conditions, and other relevant conditions that may render the operation of the appliance 351 at that location a nuisance or a health hazard. 352 353 Section 7. A new section, Section 8.21.043, No other adequate source 354 of heat determination, shall be added as follows: 355 A building-owner or other person with a property or managerial interest in the 356 Α. building may obtain a "No Other Adequate Source of Heat" determination from the 357 358 Division if: The building-owner(s) or other person with a property or managerial 359 1. interest in the building applies with the Division on a form developed by the Division. 360 The building-owner(s) or other person with a property or managerial 361 2. interest in the building files an affidavit with the application that the subject structure 362 must be heated and the structure has no adequate heating source without using a solid 363 fuel or waste oil burning appliance or that economic hardships require the applicant's 364 use of a solid fuel or waste oil burning appliance or complying with a restriction would 365 result in damage to property including damage to the appliance itself and its heating 366 367 system components. В. There shall be no fee for applying for or obtaining a determination. 368 It shall be a violation to submit a false affidavit for a "no other adequate source of 369 C. heat" determination. 370 If the "no other adequate source of heat" appliance does not meet the standards 371 D. set in this chapter, the Division shall provide the applicant with information concerning 372 the borough's voluntary removal, replacement and repair program. 373 Applications denied by the division may be appealed to the Air Pollution Control 374 Ε. Commission. 375 376 Section 8. FNSB 1.04.050 Fine schedule is amended to add the 377 following: 378 Mandatory Code Section Offense Penalty/Fine Warning

Code SectionOffensePenalty/FineMandatory
Warning
Required8.21.025(A)Installation of an unlisted appliance\$500.00No

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

379

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

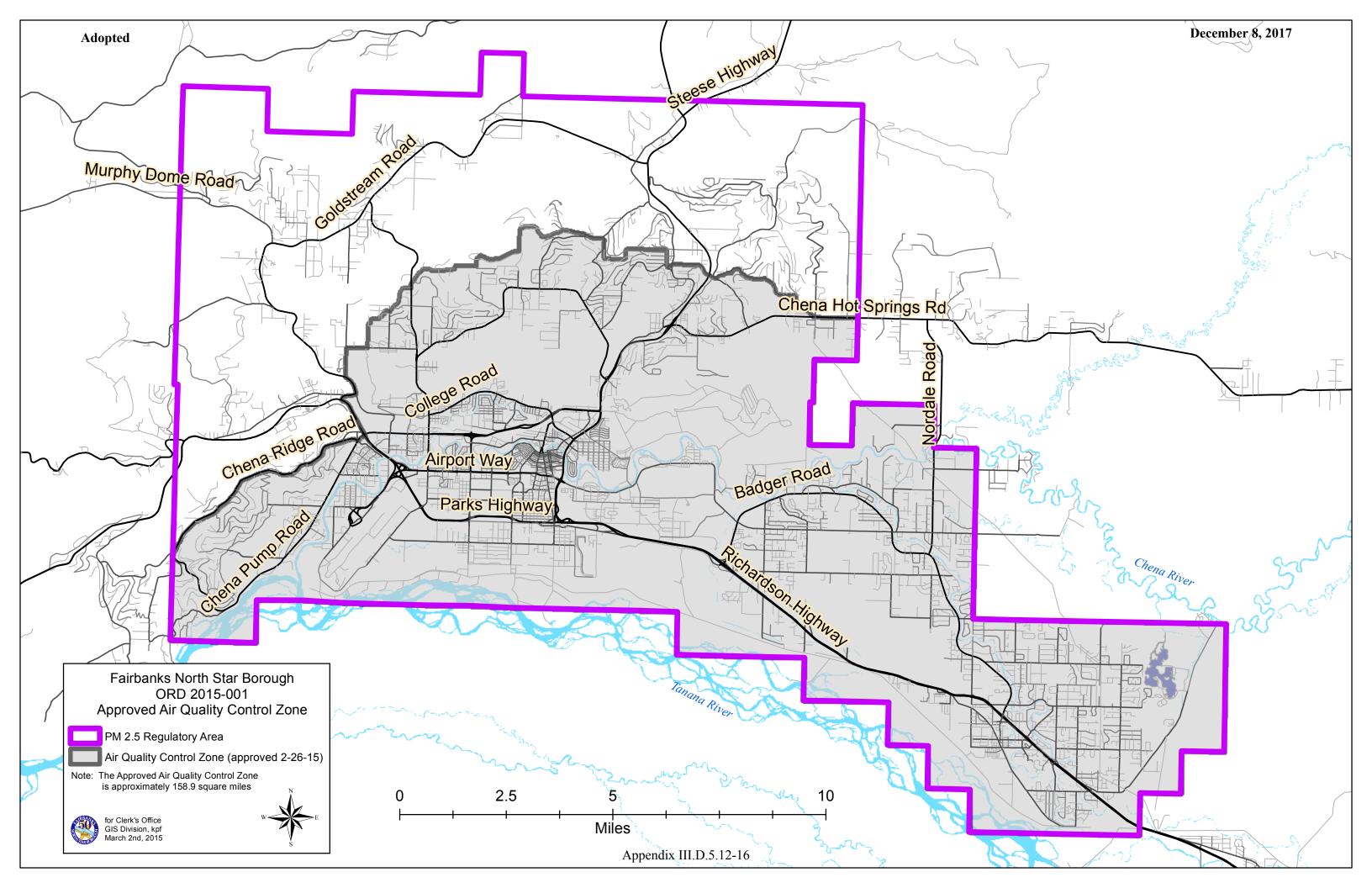
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following its adoption and shall have only prospective application, meaning no provision shall apply to any act, including installation or purchase of a solid fuel appliance completed prior to the effective date.

388	
389	PASSED AND APPROVED THIS 27 TH DAY OF FEBRUARY, 2015.
390	
391	
392	Kalw Kassel
393	
394	Karl Kassel
395	Presiding Officer
396	ATTEST:
397	AILEOI
398	Mauci alloford. Bunghan
399	and anyora Dingitun
400	Nanci Ashford-Bingham, MMC
401	Borough Clerk
402	
403	Aver Calub Hutchison Lowerses Dadge Owist Daviss Keess!
404	Ayes: Golub, Hutchison, Lawrence, Dodge, Quist, Davies, Kassel
405	Noes: Sattley, Roberts

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1 2 3 4 5	By: Lance Roberts Introduced: 04/09/2015 Advanced: 04/09/2015 Amended: 04/23/2015 Adopted: 04/23/2015		
6 7	FAIRBANKS NORTH STAR BOROUGH		
8 9	ORDINANCE NO. 2015 - 18		
10 11 12 13 14 15	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		
16 17 18 19 20 21	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		
22 23 24 25 26 27 28 29	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.		
30 31 32	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:		
33 34 35 36	Section 1. This ordinance is of a general and permanent nature and shall be codified.		
37 38 39 40 41 42 43 44	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 <i>solid fuel burning</i> <i>appliance</i> (SFBA) or <i>fireplace</i> . This program shall be subject to the following eligibility requirements, conditions, and criteria:		
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45 Α. General Requirements.

46 1. Application. An application approved by the *division* and signed by all 47 property owner(s) must be submitted along with any documentation required by the 48 division. Applicants must fully comply with the division's inspection process which shall 49 verify the existence of a qualifying SFBA or *fireplace*.

50 Priority Ranking. Applications may be prioritized and may be limited by 2. 51 the *division* in its discretion based on geographical location, the overall air quality 52 benefit and the type of SFBA or *fireplace* being removed, replaced or repaired.

53 The program is limited to properties within the borough 3. Eliaibility. 54 boundary in which a qualifying SFBA or fireplace is installed. If an application is 55 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 56 57 owing at the time of application and at completion of the program requirements.

58 Additional Requirements. In addition to the general requirements set forth 4. 59 in this section, applicants must also meet the following requirements:

60 Fully comply with the inspection process required by the *division* a. 61 that shall ensure that the existence of the qualifying appliance to be removed, replaced or repaired is properly documented. 62

63

Removal of appliance. b.

64

Delivery of appliance to an authorized decommission station. C. Certificate of destruction delivered to the *division*, if applicable. d.

65 66

Final installation of a qualified appliance visually verified. e.

67 f. All aspects of this section may be performed by borough-approved personnel or a borough-approved vendor. 68

Payments. Applicants will be eligible for reimbursements or, at the option 69 5. 70 of the applicant, payment may be made directly to a borough-approved vendor. 71 Reimbursements and payments shall be available as follows:

72 Replacement of an outdoor *hydronic heater*. With either a borough a. 73 listed solid fuel burning appliance [N EPA CERTIFIED SFBA WITH AN EMISSION RATE LESS THAN OR EQUAL TO 2.5 GRAMS/HOUR, AN EPA PHASE II QUALIFIED 74 PELLET BURNING HYDRONIC HEATER WITH AN EMISSION RATE EQUAL TO OR 75 76 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, 77 78 electricity or a masonry heater (including parts, labor and any costs associated with 79 upgrading the chimney to the extent required by the manufacturer of the appliance for 80 proper installation).

Appliance + Fuel Payment

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

81

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015 - 18 Page 2 of 5

Replacement of a non-borough listed [EPA certified] SFBA, or 82 b. fireplace, OR AN EPA CERTIFIED SFBA THAT HAS AN EMISSION RATE GREATER 83 84 THAN 2.5 GRAMS/HOUR]: With either a borough listed solid fuel burning appliance [N 85 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 86 87 heater, or an *appliance* designed to use pellets, home heating oil (excluding waste oil), 88 natural gas, propane, hot water district heat, electricity or a masonry heater (including 89 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-90 91 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 92 93 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. 94

Appliance + Fuel Payment

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

95 C. Removal of a SFBA (limited to a one-time participation in this 96 program per property).

Cash Payment

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

97

Fuel Payment. [IF A PELLET FUEL BURNING APPLIANCE OR A d. PELLET STOVE IS PURCHASED AND INSTALLED UNDER THIS PROGRAM. THE 98 APPLICANT IS ELIGIBLE TO RECEIVE AN ADDITIONAL \$300.00 PAYMENT FOR 99 THE PURCHASE OF PELLETS MANUFACTURED IN THE FAIRBANKS NORTH 100 101 STAR BOROUGH.] If a wood burning appliance is purchased and installed under this 102 program, the applicant is eligible to receive an additional \$300.00 payment for borough-103 approved pressed wood energy logs manufactured in the Fairbanks North Star 104 Borough.

105 106

Repair Program. e.

The repair program will pay for the: i.

107 Replacement of a wood stove's catalytic converter (A) 108 that has exceeded its life span through the one-time payment of up to \$750.00.

109 (B) Replacement of any emissions-reducing component 110 of an EPA-certified wood stove up to the maximum amount of \$750.00.

111 ii. In addition to the general requirements set forth in this section, applicants must fully comply with any inspection process required by the 112 113 *division*, which may be performed by a borough-approved vendor.

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015 - 18 Page 3 of 5 114

Section 3. FNSBC 8.21.045, Voluntary burn cessation program, is 115 116 hereby amended:

117 8.21.045 Voluntary burn cessation program.

118 The Fairbanks North Star Borough will, to the extent funds are available and 119 appropriated by the assembly, establish a program to encourage, incentivize, and 120 facilitate the voluntary cessation of the use of wood burning appliances (i.e., wood 121 stoves, wood-fired hydronic heaters, wood-fired furnaces, fireplaces, fireplace inserts, 122 masonry heaters or pellet fuel burning appliances) in the [NONATTAINMENT AREA] air 123 quality control zone during air quality alerts. It is recognized that it will be difficult or 124 impossible for some households to participate in this program (e.g., those that heat 125 solely with wood or for which wood is a necessary supplement during periods of cold 126 weather). Therefore, this program is intended for households that are able to use space 127 heating alternatives with significantly lower $pm_{2.5}$ emissions, including those fueled by 128 gas, oil, electricity, propane or district heat, but not wood or *pellet stoves* or other wood 129 burning appliances. This program will at a minimum consist of the following 130 components:

131 Α. The borough may contract with an agency that will provide services to 132 promote the program. This agency must have the standing, experience, and capability 133 to carry out a campaign to advertise, reach out, and attract a large number of 134 participants in the nonattainment area who are willing to cease the use of a wood 135 burning appliance during air quality alerts.

136 [INCENTIVES WILL BE PROVIDED TO HOUSEHOLDS THAT Β. 137 PARTICIPATE IN THE PROGRAM. THESE INCENTIVES MAY INCLUDE THE 138 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 139 THANK-YOU LETTER, WINDOW OR YARD SIGN; OR, (3) OTHER FORM OF PUBLIC 140 141 ACKNOWLEDGMENT. THE COST OF THIS INCENTIVE TO THE BOROUGH SHALL 142 NOT EXCEED \$25.00 PER HOUSEHOLD. THESE INCENTIVES MAY BE PROVIDED OR AUGMENTED BY PRIVATE CONTRIBUTIONS. 143

144 Facilitation of this program by the borough will include, but not be limited C.1 145 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 146 and television stations, and information posted on electronic reader or display boards 147 148 located throughout the borough in locations best suited to notify residents of air quality 149 alerts.

150 [D]C. Private contributions, including goods and/or services, will be sought for all 151 appropriate elements of the program. In general this will focus on the provision of 152 materials, equipment, and certain one-time services, but not to fund borough staff 153 positions.

154

155 Section 4. Effective Date. This ordinance shall be effective at 5:00 p.m. of the first Borough business day following its adoption. 156

157

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1 = 0	
158	PASSED AND APPROVED THIS 23 RD DAY OF APRIL, 2015.
159	
160	
161	Kaul W Kassel
162	Karl Kassel
163	Presiding Officer
164	5
165	ATTEST:
166	
167	Mauci alloford Bingham
168	Nanci Ashford-Bingham, MMC
169	Borough Clerk
170	Bolough Clerk
171	
172	Ayes: Golub, Sattley, Hutchison, Roberts, Lawrence, Dodge, Quist, Davies, Kassel
173	Noes: None
174	

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015 - 18 Page 5 of 5 Adopted

1		By:	Kathryn Dodge	
2		latra du a a du	John Davies	
3		Introduced:	04/23/2015	
4		Advanced:	04/23/2015	
5		Substituted:	06/25/2015	
6		Amended:	06/25/2015	
7		Adopted:	06/25/2015	
8				
9 10				
11	FAIRBANKS NORTH STAR	BOROUGH		
12				
13	ORDINANCE NO. 201	5 – 29		
14				
15	AN ORDINANCE AMENDING FNSBC 8.21.025.B T	O PERMIT FILING	OF PROPERTY	
16	SALE WRITTEN DISCLOSURES WITH THE AIR	QUALITY DIVISION	AFTER THE	
17	RECORDING OF THE SALE AND AMENDING FNS	SBC 8.21.040 CON	CERNING USE	
18	OF APPLIANCES THAT WERE BOROUGH LISTED AT THE TIME OF INSTALLATION			
19	DURING A STAGE 2 & 3 A	IR ALERT		
20				
21	WHEREAS, As part of the recently			
22	Program, borough code requires certain property se			
23	to the buyer and to the borough's Air Quality Division	n, prior to closing; ar	ıd	
24				
25	WHEREAS, Although disclosure prior			
26	buyer prior to purchase, disclosure to the borough ca	an wait until after clo	sing; and	
27		tions constinues fo		
28	WHEREAS, Because property transac			
29 20	variety of reasons, waiting until after closing to prov borough will potentially avoid an unnecessary st			
30 31	receives accurate information.	ep and ensure in	at the bolough	
32	receives accurate information.			
33	NOW, THEREFORE, BE IT ORDAINE	D by the Assembly	of the Fairbanks	
34	North Star Borough:			
35				
36	Section 1. Classification. This ordinan	ce is of a general ar	nd permanent	
37	nature and shall be codified.	<u></u>		
38				
39	Section 2. Section 8.21.025.B, Prohib	ited acts, is amend	ed as follows:	
40		·		

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015-29 Page 1 of 4

Β. All persons owning and selling their property within the Air Quality Control Zone 41 with an [UNLISTED SOLID FUEL BURNING APPLIANCE] installed non EPA certified 42 solid fuel burning appliance, or for hydronic heaters non EPA Phase II qualifications, 43 that will not be removed before sale must[, IF THE SOLID FUEL BURNING 44 APPLIANCE WAS NOT LISTED BY THE BOROUGH AS QUALIFYING AT THE TIME 45 OF INSTALLATION, provide a written disclosure to the buyer [AND TO THE DIVISION] 46 prior to closing, and a copy to the division no later than 10 days after the recording of 47 the sale. 48

49

50 Section 3. FNSBC 8.21.040, Forecasting exceedances and 51 restrictions in the air quality control zone during an alert, is amended as follows:

52

During the winter months of October through March, the borough shall issue a Α. 53 daily $PM_{2.5}$ forecast by 4:30 p.m. When the $PM_{2.5}$ concentration reaches the onset level 54 for an episode and is expected to remain at that level for 12 hours or more, an alert or 55 advisory will be declared. An alert or advisory may apply to the air quality control zone 56 as a whole, or to one or more sub-areas designated by the *division*. Once an *alert* or 57 advisory is declared, PM_{2.5} control measures set forth in this section shall be 58 implemented and continued until the alert or advisory is cancelled. There are three 59 levels of *episodes*: Stage 1, 2 and 3. The obligations imposed in this subsection do not 60 require, absent specific funding for that purpose, any actions to be taken outside of the 61 borough's normal business days and hours of operation. 62

Β. The *division* will notify local media to ensure the declared *alert* or *advisory* is 63 The division shall also use social media and methods of direct broadcast. 64 communication such as text messages as feasible. Information within the notification 65 will contain the PM_{2.5} forecast, stage level for areas, and actions required to reduce 66 sources of PM_{2.5}. The obligations imposed in this subsection do not require, absent 67 specific funding for that purpose, any actions to be taken outside of the borough's 68 normal business days and hours of operation. 69

70 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*.

- 78
- 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 $35 \ \mu\text{g/m}^3$.

81

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2. Burning is permitted in all [BOROUGH LISTED APPLIANCES] EPA 82 certified solid fuel burning appliances, and EPA Phase II Qualified hydronic heaters with 83 an annual average emission rating of 2.5 grams or less, masonry heaters, pellet fuel 84 burning appliances, cook stoves, and fireplaces. No fuel source may be added to the 85 combustions chamber or firebox of any [NONLISTED] solid fuel burning appliance or 86 waste oil burning appliance not listed above. Residents should rely instead on their 87 home's alternate, cleaner source of heat (such as a gas or fuel oil fired furnace or boiler 88 or electric baseboard heaters) until the Stage 2 air alert is cancelled. 89

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.

94 4. Outdoor burning is prohibited including nonpermitted incinerators and burn
 95 barrels. This does not include recreational fires such as bonfires, campfires or
 96 ceremonial fires and the use of fire pits.

5. These restrictions shall not apply during a power failure.

98 E. Stage 3: Required Restrictions in the Air Quality Control Zone During an Alert.

99 1. A Stage 3 air *alert* is implemented when concentrations exceed or are 100 forecasted to exceed 55 μ g/m³.

101 2. No fuel source may be added to the combustions chamber or firebox of 102 any solid fuel burning appliances, masonry heaters, pellet fuel burning appliances, cook 103 stoves, fireplaces, or waste oil burning appliances. No waste oil may be added to a 104 waste oil burning appliance. Residents should rely instead on their home's alternate, 105 cleaner source of heat (such as a furnace, boiler or electric baseboard heaters) until the 106 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.

123

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015-29 Page 3 of 4

124	PASSED AND APPROVED THIS 25 TH DAY OF JUNE, 2015.
125	
126	· · ·
127	1 And A
128	Kalw Kassel
129	Karl Kassel
130	Presiding Officer
131	ATTEST:
-	ATTEST.
132	And And Rail
133	Mauci alloford Binghan
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

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015-29 Page 4 of 4

1 2 3 4 5 6		By: Introduced Advanced: Amended: Adopted:	:	assel, Mayor 12/10/2015 12/10/2015 01/14/2016 01/14/2016
7 8	FAIRBANKS NORTH STAR	BOROUGI	Н	
9 10	ORDINANCE NO. 2015-73			
11 12 13 14 15 16 17 18 19	AN ORDINANCE AMENDING CHAPTER 8.21 OF THE FAIRBANKS NORTH STAR BOROUGH CODE OF ORDINANCES REGARDING THE PM2.5 AIR QUALITY CONTROL PROGRAM			
	WHEREAS, FNSB code of ordinances requires realty disclosures for all residences sold where an unlisted solid fuel burning device is installed, a requirement that to date has only produced two disclosures with zero solid fuel burning device change outs; and			
20 21 22 23	WHEREAS, FNSB code of ordinances limits air quality complaint response to emissions from solid fuel burning appliances only; and			
23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	WHEREAS, In adopting a clean air program that is enforced by 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 nearby properties, the complaint response program would be better suited to all types of high particulate emitting sources; and			
	WHEREAS, On February 27 th , 2015 the assembly adopted ordinance 2015-01 which created an Air Quality Control Zone, an area designated to refocus the FNSB woodsmoke mitigation efforts ; and			
	WHEREAS, The current code of ordina Voluntary Removal, Replacement, and Repair Pro residences within the FNSB, an area larger than the Air Quality Control Zone; and	ogram be	made ava	ilable to all
	WHEREAS, The FNSB has made \$5 money available for the woodstove change out pro improvement can be achieved by applying it within de	gram and	the greates	st air quality
	WHEREAS, The FNSB assembly and t 20% moisture content requirement for cordwood as particular terms of the second s			
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15	
45	MUTEREAC Divide Leberatories conducted a parioe of tests datailing the
46	WHEREAS, Dirigo Laboratories conducted a series of tests detailing the
47	benefits and limitations of mixing Superior Pellet Fuels energy logs with local cordwood,
48	the largest benefits to stove emissions reductions were with wet wood which is now
49	illegal within the borough; and
50	
51	WHEREAS, The price of heating fuel has dropped to a 8 year low making
52	it a more economical and cleaner to heat with oil instead of energy logs; and
53	
54	WHEREAS, FNSB code allows a one-time cash payment for the removal
55	of a solid fuel burning appliance, a benefit which could see larger participation with a
56	higher incentive.
57	
58	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks
59	North Star Borough:
60	
61	Section 1. Classification. This ordinance is of a general and permanent
62	nature and shall be codified.
63	
64	Section 2. FNSB 8.21.020, Borough listed appliances, is amended as
65	follows:
66	A solid fuel burning appliance shall be listed by the borough if:
67	A. The solid fuel burning appliance is certified by the U.S. Environmental Protection
68	Agency as meeting the federal emissions rate of 2.5 grams of PM2.5 per hour or less or
69	for hydronic heaters, meets Phase II qualifications and has [AN ANNUAL AVERAGE
70	EMISSION LEVEL RATING EQUAL TO OR LESS THAN 2.5 GRAMS OF PM2.5 PER
70 71	
	HOUR] an emission rating of 0.10 pounds per million BTU or less. For purposes of this
72 72	section, "certified" means that the solid fuel burning appliance meets emission
73	performance standards when tested by an accredited independent laboratory and
74	labeled according to procedures specified by the EPA in 40 CFR 60 Subpart AAA; or
75	B. The solid fuel burning appliance is tested, including by use of a handheld or other
76	portable device, by an accredited independent laboratory, or other qualified person or
77	entity approved by the borough, establishing that it meets an emissions rate of 2.5
78	grams of PM2.5 per hour or less or for hydronic heaters the appliance has [AN ANNUAL
79	AVERAGE EMISSION LEVEL RATING EQUAL TO OR LESS THAN 2.5 GRAMS OF
80	PM2.5 PER HOUR] an emission rating of 0.10 pounds per million BTU or less.
81	
82	Section 3. FNSB 8.21.025 C. 1. regarding the visible emissions standard
83	is amended as follows:
84	1. Standard. No person shall cause, permit, or allow [THE] particulate
85	emissions [FROM A SOLID FUEL BURNING APPLIANCE] from a non-mobile source in
86	the air quality control zone to create opacity greater than 20 percent for a period or
87	periods aggregating more than 10 minutes in any hour except during the first 30
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88 minutes after the initial firing [OF A COLD UNIT] when the opacity limit shall be less 89 than 50 percent. 90 91 Section 4. FNSB 8.21.025 D. is amended as follows: 92 D. PM2.5 Emissions Crossing Property Lines. No person shall cause or permit 93 particulate emissions [FROM A SOLID FUEL BURNING APPLIANCE] from a non-94 mobile source to impact the resident(s) of a neighboring property through the creation of 95 an emissions plume that: 96 1. Crosses a property line; 97 2. Is observable using EPA Method 22 (40 CFR 60 Appendix A); and 98 3. Is 25 µg/m3 greater than the surrounding immediate vicinity background 99 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 100 101 measured 1,200 feet in all directions from the boundaries of the emitting property. 102 103 Section 5. FNSB 8.21.025 H. is amended as follows: 104 Nuisance. No person within the Fairbanks North Star Borough shall cause or Η. allow particulate emissions [OF A SOLID FUEL OR WASTE OIL BURNING 105 106 APPLIANCE] from a non-mobile source that are injurious to human life or to property or 107 that unreasonably interfere with the comfortable enjoyment of life or property. No 108 person within the Fairbanks North Star Borough shall operate a solid fuel or waste oil 109 burning appliance in a manner so as to create a public or private nuisance. A violation 110 of a provision of this chapter is hereby declared to be a nuisance. 111 112 Section 6. FNSB 8.21.035 A. 1. Regarding applications for the enhanced 113 voluntary removal, replacement and repair program is amended as follows: 114 Application. An application approved by the *division* and signed by all 115 property owner(s) must be submitted along with any documentation required by the 116 Applications for either the removal of a solid fuel burning appliance or division. replacement with an appliance designed to use natural gas, propane or home heating 117 118 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 119 120 Applicants must fully comply with the *division*'s inspection disclosure statement. 121 process which shall verify the existence of a qualifying SFBA or *fireplace*. 122 123 Section 7. FNSB 8.21.035 A. 3., regarding eligibility for the enhanced 124 voluntary removal, replacement and repair program is amended as follows: 125 Eligibility. The program is limited to properties within the [BOROUGH] air 3. quality control zone boundary in which a qualifying SFBA or fireplace is installed. If an 126 application is approved for the program, the applicant will be given up to 90 days to 127 meet all of the requirements. Applicants must have no delinquent property tax or 128 129 penalty or interest owing at the time of application and at completion of the program 130 requirements. 131

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 appliance. [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 	132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149	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] <i>hydronic heater</i> . i. With either an [BOROUGH LISTED SOLID FUEL BURNING APPLIANCE, OR AN APPLIANCE DESIGNED TO USE PELLETS] <u>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 <i>masonry heater</i> (including parts, labor and any costs associated with upgrading the chimney to the extent required by the manufacturer of the appliance. iii. With an appliance designed to use natural gas, propane, hot water district heat or a electricity up to \$12,000 for purchase and installation of the appliance.</u>
155 APPLIANCE + FUEL PAYMENT UP TO \$10,000 FOR PURCHASE AND INSTALLATION OF THE APPLIANCE PLUS FUEL PAYMENT, IF APPLICABLE	152 153	COSTS ASSOCIATED WITH UPGRADING THE CHIMNEY TO THE EXTENT REQUIRED BY THE MANUFACTURER OF THE APPLIANCE FOR PROPER
	155	UP TO \$10,000 FOR PURCHASE AND INSTALLATION OF THE <i>APPLIANCE</i> PLUS FUEL
 b. Replacement of a non-borough-listed SFBA or <i>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. With[or]an appliance designed to use pellets, - up to \$5,000 for purchase and installation of the appliance. 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. 	158 159 160 161 162 163 164 165 166] b. Replacement of a non-borough-listed SFBA or <i>fireplace</i> : <u>i.</u> 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. <u>ii. With[or]an appliance designed to use pellets, - up to \$5,000</u> for purchase and installation of the appliance. <u>iii. With an appliance designed to use</u> home heating oil (excluding waste oil), hot water district heat, electricity, or a masonry heater (including

- 171 With an *appliance* designed to use natural gas[,] or propane iv. 172 up to \$10,000 per purchase and installation of the appliance. [, HOT WATER DISTRICT HEAT, ELECTRICITY OR A MASONRY HEATER (INCLUDING PARTS, LABOR AND 173 174 ANY COSTS ASSOCIATED WITH UPGRADING THE CHIMNEY TO THE EXTENT REQUIRED BY THE MANUFACTURER OF THE APPLIANCE FOR PROPER 175 176 INSTALLATION).] Multiple non-borough-listed solid fuel burning appliances or 177 fireplaces, or combinations thereof, may be replaced with a single heating device that 178 meets the requirements above, except for those that are fired by solid fuels. Payment 179 will be based on the number of devices removed, up to a maximum of three, and may 180 not exceed the replacement cost.
- 181

[APPLIANCE + FUEL PAYMENT

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

182

183 c. Removal of a SFBA (limited to a one-time participation in this 184 program per property).

185

Cash Payment

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

186

187 [D. FUEL PAYMENT. IF A WOOD BURNING APPLIANCE IS 188 PURCHASED AND INSTALLED UNDER THIS PROGRAM, THE APPLICANT IS 189 ELIGIBLE TO RECEIVE AN ADDITIONAL \$300.00 PAYMENT FOR BOROUGH 190 APPROVED PRESSED WOOD ENERGY LOGS MANUFACTURED IN THE 191 FAIRBANKS NORTH STAR BOROUGH.]

192

193 Section 9. <u>Effective Date</u>. This ordinance is effective at 5:00 p.m. on the 194 first Borough business day following its adoption.

195

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

Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2015-73 Page 5 of 6

196	PASSED AND APPROVED THIS 14 TH DAY OF JANUARY, 2016.
197	
198	
199	Le Nie L
200	Jønn Davies
201	Presiding Officer
202	
203	ATTEST:
204	Λ
205	Maria ashfor Bingham
206	
207	Nanci Ashford-Bingham, MMC
208	Borough Clerk
209	
210	Ayes: Cooper, Golub, Lawrence, Dodge, Quist, Davies
211	Noes: Roberts
212	Excused: Sattley, Hutchison

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

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

Adopted

1 2 3 4 5		By: Introduced: Advanced: Substituted:	Van Lawrence Matthew Cooper 03/24/2016 03/24/2016 05/04/2016				
6 7 8		Amended: Adopted:	05/04/2016 05/04/2016				
9 10 11	FAIRBANKS NORTH STAR E	BOROUGH					
12 13	ORDINANCE NO. 201	6-21					
13 14 15 16 17 18 19 20 21	AN ORDINANCE AMENDING FNSB 8.21.025 TO CERTAIN UNLISTED HYDRONIC HEATERS IN THE AMENDING THE FY 2015-16 BUDGET BY APPRO GENERAL FUND FUND BALANCE TO THE TRAN FUND TO PAY FOR THE REMOVAL OF THE UNLIS SUSPEND ALL OTHER PAYMENTS FROM THE REPLACEMENT PROGRAM UNT	E AIR QUALITY (PRIATING \$500 NSIT ENTERPRI STED HYDRONI(VOLUNTARY R	CONTROL ZONE, ,000 FROM THE SE PROJECTS C HEATERS AND				
22 23 24	WHEREAS, Hydronic heaters that do not have an emissions rating of 0.10 pounds per million BTU or less cannot, under existing code, be legally installed in the borough's nonattainment area; and						
25 26 27 28	WHEREAS, Certain hydronic heater borough's air quality problem; and	s significantly	contribute to the				
29 30 31 32	WHEREAS, The Borough has offered in past years and continues to offer a removal program that pays homeowners to remove or replace these hydronic heaters; and						
32 33 34 35 36 37	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						
38 39 40 41 42 43	WHEREAS, The imminent reclassifical North Star Borough from a Moderate to a Serious no imposition of control measures, including expensive plants and other stationary sources, which will lead quality but will significantly increase utility rates; and	on-attainment are e technology up	ea will result in the grades for power				

44 45	WHEREAS, The Borough's continued failure to significantly reduce PM2.5 pollution will further result in offset sanctions which will strangle economic development
43 46	in the non-attainment area and highway sanctions eliminating federal funding of road
40 47	projects within the non-attainment area; and
48	projects within the non-attainment area, and
49	WHEREAS, These sanctions will be lifted if and when air quality violations
5 0	cease.
50 51	
52	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks
52 53	North Star Borough:
55 54	North Star Borough.
55	Section 1. Sections 2, 3 and 4 are of a general and permanent nature and
56	shall be codified. Sections 5, 6 and 7 shall not be codified.
57	
58	Section 2. FNSBC 8.21.025 B. is hereby amended as follows:
59	B. <u>No person who has been convicted of or pled no contest to two or more</u>
60	violations of this chapter involving visible emissions or emissions crossing property lines
61	shall, in the air quality control zone, operate, use or keep installed a hydronic heater
62	unless the hydronic heater is:
63	1. Borough listed or was listed at the time of installation,
64	2. A closed combustion system with automatic components that feed solid
65	fuel, including wood pellets, into a firebox where the combustion is enhanced by an
66	active airflow system, or
67	3. Connected to a thermal mass system that is certified by the contractor or
68	installer as sufficient to allow the hydronic heater to burn at maximum capacity
69	minimizing on/off cycling. The division may require an owner to provide documentation
70	supporting the certification.
71	
72	This prohibition shall be effective 90 days after the 2 nd conviction or entry or a no
73	contest plea.
74	
75	All persons owning and selling their property within the air quality control zone with an
76	installed non-EPA-certified solid fuel burning appliance[, OR FOR HYDRONIC
77	HEATERS NON-EPA PHASE II QUALIFICATIONS,]that will not be removed before
78	sale must provide a written disclosure to the buyer prior to closing, and a copy to the
79	<i>division</i> no later than 10 days after the recording of the sale

division no later than 10 days after the recording of the sale.

79 80

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

82

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

83

84 Section 4. <u>General Fund Appropriation</u>. The FY 2015-16 budget is 85 hereby amended by appropriating \$500,000 to the General Fund budgetary guideline 86 entitled "Contribution to Transit Enterprise Projects Fund" and by increasing 87 Contribution from Fund Balance by a like amount. 88

- 89 Section 5. <u>Transit Enterprise Projects Fund Appropriation</u>. The 90 FY 2015-16 budget is hereby amended by appropriating \$500,000 to the Transit 91 Enterprise Projects Fund budgetary guideline entitled "Enhanced Voluntary Removal, 92 Replacement, and Repair Program" and by increasing Contribution from General Fund 93 by a like amount.
- Section 6. Limited Use of Funds. All unencumbered funds remaining in 95 the removal, replacement and repair program on the effective date of this ordinance 96 97 may be spent only on payments to applicants within the air quality zone who are (1) 98 removing or replacing an unlisted hydronic heater or (2) removing or replacing a 99 woodstove that has been the subject of more than one substantiated neighborhood complaint and meeting additional criteria established by the Mayor. This restriction shall 100 101 continue until May 1, 2017 or until the assembly appropriates additional funds to pay for 102 the other removal, replacement or repairs authorized under the program, whichever 103 occurs first.
- Section 7. Lapse of Funds for the "Enhance Voluntary Removal,
 Replacement, and Repair Program". Upon completion or abandonment of the program,
 any unexpended and unencumbered funds will lapse to the General Fund fund balance.
 Section 8. Effective Date. 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
- 111 the first Borough business day following its adoption.

112

110	
113	PASSED AND APPROVED THIS 4 TH DAY OF MAY, 2016.
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115	
116	
117	// n
118	y the
-	Jøhn Davies
119	Presiding Officer
120	
121	ATTOT
122	ATTEST:
123	
	Alua ashford Giugham
124	V (and any good and) and
125	Nanci Ashford-Bingham, MMC
126	
127	Borough Clerk
128	
120	Ayes: Sattley, Hutchison, Cooper, Westlind, Lawrence, Dodge, Quist, Davies
129	Ayes. Salley, Fulchison, Cooper, Westind, Lawrence, Douge, Quist, Davies

130 Noes: Roberts

1 2 3 4 5		By: Introduced: Advanced: Adopted:	John Davies 04/14/2016 04/14/2016 04/28/2016
6 7	FAIRBANKS NORTH STAR	BOROUGH	
8 9	ORDINANCE NO. 201	6-30	
10 11 12 13 14	AN ORDINANCE AMENDING THE FAIRBANKS NC ORDINANCES TO ADOPT THE PROPOSI REORGANIZATIO	ED RENUMBERING A	
15 16 17 18	WHEREAS, Codification is a process legislation of a permanent and general nature into Correplacement of the original Code; and	0 0	0 0
19 20 21 22	WHEREAS, The Fairbanks North Star first codified in 1975 and has since undergone two 2004; and	•	
23 24 25 26 27	WHEREAS, It is necessary to rout maximum usability, flexibility, amendibility and econo to access, easy to understand, has room to grow maintain; and	my resulting in a Code	e that is easy
28 29 30 31 32	WHEREAS, The proposed recodification review by Code Publishing, Co. and the FNSB Leg provisions, outdated references to state law, and con laws; and	al Department to elim	inate expired
32 33 34 35 36	WHEREAS, Following recodification, to Code of Ordinances will present an updated, order permanent Borough legislation.		•
37 38 39	NOW, THEREFORE, BE IT ORDAINED North Star Borough:	D by the Assembly of t	he Fairbanks
40 41 42	Section 1. This ordinance is not of a shall not be codified.	general and permaner	nt nature and
42 43 44 45 46	Section 2. The Clerk is authorized to North Star Borough Code proposed renumbering ar Code Publishing Company and to take all other actio	nd reorganization plan	prepared by

47 Section 3. The attached proposed renumbering and reorganization is 48 adopted. 49 Section 4. Effective Date. Section 2 of this ordinance shall be effective at 50 5:00 p.m. of the first Borough business day following its adoption. Section 3 of the 51 ordinance is effective July 15th, 2016. 52 53 PASSED AND APPROVED THIS 28TH DAY OF APRIL, 2016. 54 55 56 57 58 59 Kn Davies 60 Presiding Officer 61 62 63 ATTEST: 64 65 aphlor sham 66 67 Nanci Ashford-Bingham, MMC 68 **Borough Clerk** 69 70 71 Ayes: Sattley, Hutchison, Cooper, Westlind, Roberts, Lawrence, Dodge, Quist, Davies

72 Noes: None

2004 Code	New Code	New Name
	TITLE 1	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 PERSONNEI
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
	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 (l), 2.09.040, 3.01.200(C), 14.02.040(A)	3.24	Committees
	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
	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
4.14.150 - 4.14.170		
	5.12	Candidate Qualifications
2.12.180 - 2.12.270 2.12.280 - 2.12.315	5.12 5.16	Candidate Qualifications Ballots

2

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
111-112-11-11-1-1-1-1-1-1-1-1-1-1-1-1-1	TITLE 8	REVENUE AND TAXATION
2)	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
	TITLE 11	NATURAL GAS UTILITY
11.01.010, 11.01.030	11.04	Establishment of Utility and Management
	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
	TITLE 14	SERVICE AREAS AND COMMISSION
	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
: 徐如殿 出始 和前 建的石	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 Approval Processes
17.40.010 - 17.40.040	17.32	Vacations
17.40.050 - 17.40.080	17.36	Street Naming of Public Roads

2004 Code	New Code	New Name	
17.40.090 - 17.40.120	17.40	Street Naming of Private Roads	
17.50	50 17.44 Assurances for Com		
	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 Districts	
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		

7

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		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		
25.10	20.16	Land Management
25.15	20.16 20.20	Land Management Land Sale
25.15	20.20	Land Sale Determining Which Borough Lands May
25.15	20.20 20.24	Land Sale Determining Which Borough Lands May Be Sold or Retained
25.15 25.20 3.60, 8.03	20.20 20.24 TITLE 21	Land Sale Determining Which Borough Lands May Be Sold or Retained HEALTH AND SAFETY
25.15 25.20 3.60, 8.03 8.05	20.20 20.24 TITLE 21 21.04	Land Sale Determining Which Borough Lands May Be Sold or Retained HEALTH AND SAFETY Emergency Communication Services Carbon Monoxide Emergency Episode
25.15 25.20	20.20 20.24 TITLE 21 21.04 21.08	Land SaleDetermining Which Borough Lands May Be Sold or RetainedHEALTH AND SAFETYEmergency Communication ServicesCarbon Monoxide Emergency Episode Prevention Plan
25.15 25.20 3.60, 8.03 8.05 8.06	20.20 20.24 TITLE 21 21.04 21.08 21.12	Land Sale Determining Which Borough Lands May Be Sold or Retained HEALTH AND SAFETY Emergency Communication Services Carbon Monoxide Emergency Episode Prevention Plan Oxygenated Fuel
25.15 25.20 3.60, 8.03 8.05 8.06 8.08	20.20 20.24 TITLE 21 21.04 21.08 21.12 21.16	Land Sale Determining Which Borough Lands May Be Sold or Retained HEALTH AND SAFETY Emergency Communication Services Carbon Monoxide Emergency Episode Prevention Plan Oxygenated Fuel Fireworks

2004 Code	New Code	New Name	
The State of State	TITLE 22	ANIMALS	1
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	

Approved by borough:	Name Borough Clerk	4.29.16 Date
	Position	

1 2 3 4 5 6 7	By: Karl Kassel, Mayor Introduced: 06/23/2016 Advanced: 06/23/2016 Advanced: 07/28/2016 Adopted: 07/28/2016 Adopted: 07/28/2016		
8 9	ORDINANCE NO. 2016-37		
10			
11 12 13	AN ORDINANCE AMENDING TITLE 21 REGARDING NO OTHER ADEQUATE SOURCE OF HEAT DETERMINATIONS		
14 15	WHEREAS, Borough code exempts qualifying buildings with no other adequate source of heat from compliance with certain air quality regulations; and		
16 17 18 19	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		
20 21 22 23 24 25	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.		
26 27 28	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks North Star Borough:		
29 30 31	Section 1. This ordinance is of a general and permanent nature and shall be codified.		
32 33 34	Section 2. FNSBC 21.28.060 No other adequate source of heat determination is amended to read as follows:		
35 36 37 38 39 40 41 42 43 44	 A. A building owner or other person with a property or managerial interest in [THE building located within the air quality control zone may obtain a "no other adequ source of heat" determination from the division if: The building owner(s) or other person with a property or manage interest in the building applies with the division on a form developed by the division[.]; The building owner(s) or other person with a property or manage interest in the building owner(s) or other person with a property or manage interest in the building files an affidavit with the application that the subject struct must be heated and the structure has no adequate heating source without using a set fuel or waste oil burning appliance or that economic hardships require the application 		

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. 3. 48 Β. 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 C. 50 heat" determination. 51 D. If the "no other adequate source of heat" appliance does not meet the standards 52 set in this chapter, the division shall provide the applicant with information concerning 53 the borough's voluntary removal, replacement and repair program. 54 Applications denied by the division may be appealed to the air pollution control Ε. 55 commission. 56 57 Section 3. Effective Date. This ordinance shall be effective at 5:00 p.m. 58 of the first Borough business day following its adoption. 59 PASSED AND APPROVED THIS 28TH DAY OF JULY, 2016. 60 61 62 63 64 65 66 n Davies 67 Presiding Officer 68 69 70 ATTEST: 71 72 Ciplifor shan 73 74 Nanci Ashford-Bingham, MMC 75 **Borough Clerk** 76 77 78 Yeses: Cooper, Sattley, Hutchison, Westlind, Lawrence, Dodge, Davies 79 Noes: Roberts Other: Quist (Excused) 80

1 2 3 4 5 6 7 8 9	lr A A Ir R	By: ntroduced: Advanced: Amended: Adopted: mmediate Reconsideration Adopted:	Karl Kassel, Mayor 02/23/2017 02/23/2017 03/09/2017 03/09/2017 Failed: 03/09/2017 03/09/2017
10 11	FAIRBANKS NORTH STAR B	BOROUGH	
12	ORDINANCE NO. 2017	7-18	
13 14 15 16	AN ORDINANCE AMENDING CHAPT REGARDING THE PM _{2.5} AIR QUALITY CONTROI FNSBC 1.20.080, FINE SCH	L PROGRAM A	
17 18 19 20 21	WHEREAS, The United States Environ on December 22, 2008, declared part of the Fairb attainment area for fine particulate pollution (PM _{2.5}); a	anks North Sta	
22 23 24 25	WHEREAS, On December 16, 2016 th the Federal Register of its intent to reclassify the Fai attainment area from Moderate to Serious status; and	irbanks North S	
26 27 28 29	WHEREAS, Reclassification to Serious mandate that Best Available Control Measures be im within the non-attainment area; and		
30 31 32 33 34	WHEREAS, The State of Alaska, throu with the Borough, has authorized the Fairbanks Non administer an area-wide local $PM_{2.5}$ air quality control and consistent with the State's air quality program; an	rth Star Boroug	gh to establish and
35 36 37 38	WHEREAS, In the winter, PM _{2.5} concentroutinely exceed the allowable limit, thereby vicostandards; and		
39 40 41	WHEREAS, An excessive level of $PM_{2.5}$ of borough residents; and	$_{5}$ impacts the he	ealth and well being
42 43 44	WHEREAS, Air quality issues could economic development, including military expansion Borough.	• •	
	AMENDMENTS ARE SHOWN IN LEGIS Text to be added is <u>underli</u> Text to be deleted is [BRACKETED, C	ined	

45	
46	NOW, THEREFORE, BE IT ORDAINED by the Assembly of the Fairbanks
47	North Star Borough:
48	
49	Section 1. This ordinance is of a general and permanent nature and shall
50	be codified.
51	
52	Section 2. FNSBC 21.28.010, Definitions, shall be amended as follows:
53	
54	["ADVISORY" MEANS A NOTICE ISSUED BY THE FNSB AIR QUALITY
55	DIVISION WHEN THE DIVISION DETERMINES, USING AVAILABLE DATA, THAT A
56	$PM_{2.5}$ CONCENTRATION OF 25 μ G/M ³ HAS OCCURRED, OR WILL LIKELY OCCUR.]
57	
58	["AIR QUALITY ALERT" MEANS AN ADVISORY, ALERT OR EPISODE
59	CONCERNING AIR QUALITY WHETHER ISSUED BY THE FAIRBANKS NORTH
60	STAR BOROUGH OR THE STATE OF ALASKA.]
61	
62	"Air quality control zone" means the area of the borough currently contained in
63	the EPA designated nonattainment area, which uses the nonattainment area southern,
64	western and eastern boundaries as modified by their respective intersection with the
65	following northern boundary described as: beginning at the intersection of Isberg Road
66	with Chena Ridge Road on the western boundary of the EPA designated nonattainment
67	area, then following Chena Ridge Road back to Chena Pump Road and continuing
68	north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road to Miller Hill
69	Road, then north on Miller Hill Road, then east on Yankovich, then north from
70	Yankovich Road along the east boundary of the Large Animal Research Station to a
71	point just north of its intersection with Nottingham Drive and follows the ridge crest
72	across Nottingham Estates to approximately the point where Swallow Drive intersects
73	Dalton Trail to north on Dalton Trail to the crest of the Farmer's Loop Ridge, then follow
74	the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese
75	Highway, then southeast on Bennet Road, and along Steel Creek Road to the
76	intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern
77	boundary of the EPA designated nonattainment area.
78	
79	"Air Quality Index" (AQI) is an index for reporting daily air quality, which indicates
80	how polluted the air currently is or how polluted it is forecast to become. The higher the
81	AQI value, the greater the level of air pollution and the greater the health concern. AQI
82	is divided into six categories with correspondingly higher levels of health concern as
83	outlined in the table below:

AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED]

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.

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102

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

- 91 "Appliance" means a device or apparatus that is manufactured and designed to
 92 utilize energy and which does not require a stationary source air quality permit from the
 93 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.
- 98
 99 "Construction and demolition debris" means a conglomeration of materials from
 100 construction, repair, remodeling or demolition of buildings and structures containing any
 101 prohibited fuels.
- 103 "Cook stove" means a wood burning appliance that is designed primarily for 104 cooking food and that has the following characteristics:
- 105 1. An oven, with a volume of 0.028 cubic meters (one cubic foot) or greater, 106 and an oven rack;
- 107 2. A device for measuring oven temperatures;
- 108 3. A flame path that is routed around the oven;
- 109 4. A shaker grate;
- 110 5. An ash pan;

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111 112	 An ash clean-out door below the oven; and The absence of a fan or heat channels to dissipate heat from the device.
113 114	"Division" means the Fairbanks North Star Borough air quality division.
114	Division means the Fairbanks North Star Borough an quality division.
116	"Emergency Power System" is an independent source of electrical power that
117	supports important electrical systems on loss of normal power supply. An emergency
118 119	power system may include a standby generator, batteries, and other apparatus. Emergency power systems are installed to protect life and property from the
120	consequences of loss of normal electric power supply.
121	
122 123	"EPA" means the United States Environmental Protection Agency.
123 124 125	<u>"EPA certified" means that the solid fuel burning appliance meets emission</u> performance standards when tested by an accredited independent laboratory and is
125	labeled according to procedures specified by the EPA in 40 CFR Part 60 Subpart AAA
127	or QQQQ.
128	
129 130	["EPISODE" MEANS WHEN CONDITIONS REACH OR ARE PREDICTED TO REACH ADVISORY OR ALERT STATUS.]
131	
132	"Fireplace" means an assembly consisting of a hearth and open fire chamber of
133 134	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.
134	with solid rules, which cannot be operated with an air to rule ratio of less than 35 to one.
136	"Fireplace insert" means a solid fuel burning appliance similar in function and
137 138	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.
139	"Forecast" means a description of the surrent dispersion conditions described as
140 141	"Forecast" means a description of the current dispersion conditions described as good, fair, or poor and including the expected PM _{2.5} [CONCENTRATIONS
142	EXPRESSING IN MICROGRAMS PER CUBIC METER] NowCast AQI categorized as
143	good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, or
144 145	hazardous.
146	"Heating appliances" means, but is not limited to: [OIL FURNACES, GAS
147	FURNACES, WOOD STOVES, COAL STOVES, WOOD-FIRED HYDRONIC
148	HEATERS, WOOD-FIRED FURNACES, COAL-FIRED HYDRONIC HEATERS, COAL-
149 150	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,
151	and fireplaces.
152	
153 154	"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.
	AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be <i>added</i> is <u>underlined</u> Text to be <i>deleted</i> is [BRACKETED, CAPITALIZED]

155	
156	"Hydronic heater" means a fuel burning appliance designed to (1) burn wood or
157	other solid fuels and (2) heat building space and/or domestic hot water via the
158	distribution, typically through pipes, of a fluid heated in the appliance.
159	
160	"Masonry heater" means a wood burning appliance that complies with the
161	guidelines of ASTM E1602-08, Standard Guide for Construction of Masonry Heaters,
162	and:
163	1. Is designed and intended for operation only in a closed combustion chamber
164	configuration; and
165	2. Has enough thermal storage capacity to maintain no less than 50.0 percent of the
166	maximum masonry-mass temperature for at least four hours after the maximum
167	masonry-mass temperature has been reached; and
168	3. The masonry heater design and installation has been confirmed and documented
169 170	by a qualified person or entity approved by the borough.
170 171	"Nonattainment area" is the area depicted on the map attached to the ordinance
171	codified in this chapter and is further defined as follows:
172	Township Range Delineated Boundary for the Fairbanks
173	Nonattainment Area
175	MTRS F001N001 – All Sections, MTRS F001N001E – Sections 2-11, 14-
176	23, 26-34, MTRS F001N002 – Sections 1-5, 8-17, 20-29, 32-36, MTRS
177	F001S001E – Sections 1, 3-30, 32-36, MTRS F001S001W – Sections 1-
178	30, MTRS F001S002E – Sections 6-8, 17-20, 29-36, MTRS F001S002W
179	 – Sections 1-5, 8-17, 20-29, 32-33, MTRS F001S003E – Sections 31-32,
180	MTRS F002N001E – Sections 31-35, MTRS F002N001 – Sections 28, 31-
181	36, MTRS F002N002 – Sections 32-33, 36, MTRS F002S001E – Sections
182	1-2, MTRS F002S002E – Sections 1-17, 21-24, MTRS F002S003E –
183	Sections 5-8, 18.
184	
185	"NowCast" means a weighted average of hourly air monitoring data used by
186	the EPA for real-time reporting of the AQI for PM.
187	
188	"Opacity" means the reduction in transmitted light through a column of smoke as
189	measured by an observer certified in using EPA Reference Method 9 as defined by
190	federal law or EPA approved Alternative Method 82 which is defined as American
191	Society for Testing and Materials (ASTM) D 7520-09.
192	"Dortioulate matter" or "DM" means total particulate matter including DM and
193 104	"Particulate matter" or "PM" means total particulate matter including PM ₁₀ and
194 195	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
195 196	components, including acids, organic chemicals, metals, soil, or dust.
190 197	componente, moldaling acide, organic chemicale, metale, soli, or dust.
177	

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"Pellet fuel burning appliance" or "pellet stove" means a closed combustion, 198 199 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, 200 201 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 202 203 of cordwood. 204 205 "PM_{2.5}" means particulate matter comprised of particles that have diameters of 206 two and one-half microns or less. 207 208 "Sale" means the transfer of ownership or control. 209 210 "Solid fuel burning appliance" (SFBA) means any appliance[, UNLESS SPECIFICALLY EXCLUDED FROM THIS DEFINITION,] designed to produce heat by 211 burning nongaseous and nonliquid fuels. This definition includes, but is not limited to: 212 213 1. Wood stoves; 2. Coal stoves: 214 3. Wood-fired hydronic heaters; 215 4. Wood-fired furnaces: 216 5. Coal-fired hydronic heaters; 217 6. Coal-fired furnaces; [AND] 218 219 7. Fireplace inserts[.]; 8. Pellet fuel burning appliances; 220 9. Masonry Heaters; 221 222 10. Cook Stoves; and 223 11. Fireplaces. 224 THE FOLLOWING APPLIANCES ARE SPECIFICALLY EXCLUDED FROM THIS 225 226 **DEFINITION:** 227 1. MASONRY HEATERS: 228 2. PELLET FUEL BURNING APPLIANCES; 229 3. COOK STOVES; AND 4. FIREPLACES.] 230 231 232 "Waste oil burning appliance" means an appliance that burns used or waste oil. 233 234 Section 3. FNSBC 21.28.020, Borough listed appliances, shall be 235 amended as follows: 236 237 A solid fuel burning appliance shall be listed by the borough if: 238 239 The solid fuel burning appliance is EPA certified [CERTIFIED BY THE U.S. Α. 240 ENVIRONMENTAL PROTECTION AGENCY (EPA)] as meeting the federal emissions 241 rate of 2.5 grams of PM_{2.5} per hour or less, or for hydronic heaters, [MEETS PHASE II AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is underlined Text to be *deleted* is [BRACKETED, CAPITALIZED]

242 QUALIFICATIONS] is EPA certified and has an emission rating of 0.10 pounds per million BTU or less[. FOR PURPOSES OF THIS SECTION, "CERTIFIED" MEANS 243 THAT THE SOLID FUEL BURNING APPLIANCE MEETS EMISSION PERFORMANCE 244 245 STANDARDS WHEN TESTED BY AN ACCREDITED INDEPENDENT LABORATORY AND LABELED ACCORDING TO PROCEDURES SPECIFIED BY THE EPA IN 40 246 247 CFR 60 SUBPART AAA]; or 248 249 Β. The solid fuel burning appliance is a masonry heater, cook stove, or fireplace; or 250 251 The solid fuel burning appliance is tested, including by use of a handheld or other C. 252 portable device, by an accredited independent laboratory, or other qualified person or 253 entity approved by the borough, establishing that it meets the emissions rate of 2.5 254 grams per hour or less. [OR FOR HYDRONIC HEATERS THE APPLIANCE HAS AN 255 EMISSION RATING OF 0.1 POUNDS PER MILLION BTU OR LESS.] 256 257 Section 4. FNSBC 21.28.030, Prohibited acts, shall be amended as 258 follows: 259 260 Installation of Certain Solid Fuel Burning Appliances in the Nonattainment Area. Α. 261 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 262 263 and the installation complies with all other requirements imposed in this chapter. It is a 264 separate violation to fail to remove a solid fuel burning appliance installed in violation of 265 this chapter. 266 267 Β. 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 268 shall, in the air quality control zone, operate, use or keep installed a hydronic heater 269 270 unless the hydronic heater is: 271 1. Borough listed or was listed at the time of installation, 272 2. A closed combustion system with automatic components that feed solid 273 fuel, including wood pellets, into a firebox where the combustion is enhanced by an active airflow system, or 274 275 3. Connected to a thermal mass system that is certified by the contractor or 276 installer as sufficient to allow the hydronic heater to burn at maximum capacity 277 minimizing on/off cycling. The division may require an owner to provide documentation 278 supporting the certification. 279 This prohibition shall be effective 90 days after the second conviction or entry [OR] of a 280 no contest plea. [ALL PERSONS OWNING AND SELLING THEIR PROPERTY WITHIN THE AIR 281 QUALITY CONTROL ZONE WITH AN INSTALLED NON-EPA-CERTIFIED SOLID 282 283 FUEL BURNING APPLIANCE THAT WILL NOT BE REMOVED BEFORE SALE MUST PROVIDE A WRITTEN DISCLOSURE TO THE BUYER PRIOR TO CLOSING, AND A 284

AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED] 285 COPY TO THE DIVISION NO LATER THAN 10 DAYS AFTER THE RECORDING OF286 THE SALE.]

287

288 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 <u>40[30]</u> minutes after the initial firing when the opacity limit shall be less than 50 percent.

294 2. Procedures and Enforcement. When ambient weather and light conditions permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A 295 296 Reference Method 9 (Visual determination of the Opacity of Emissions From Stationary 297 Sources), or an alternative technology that replaces Method 9, when the technology is 298 available and the choice is feasible, upon request of the person being investigated, shall 299 be used to determine compliance with this section. Smoke visible from a chimney, flue 300 or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes 301 shall constitute prima facie evidence of unlawful operation of an applicable solid fuel 302 burning appliance. 303

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:

307

Crosses a property line;
 Is observable using EPA

308

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

309 3. Is 25 g/m3 greater than the surrounding immediate vicinity background 310 PM_{2.5} level using methods defined by the borough division of air quality. For purposes of 311 this subsection, the surrounding "immediate vicinity" means land within an area 312 measured 1,200 feet in all directions from the boundaries of the emitting property.

313

E. Borough-Wide Installation Requirements for Hydronic Heaters.

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:

319

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.

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.

326

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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- manual as an acceptable fuel for that device or any of the following items in a solid fuel burning appliance:
- Any wood that does not meet the definition of clean wood or has more
 than 20 percent moisture content;
- 333 2. Garbage;
- 334 **3.** Tires;
- 335 4. Materials containing plastic or rubber;
- 336 5. Waste petroleum products;
- 337 6. Paints and paint thinners;
- 338 **7.** Chemicals;
- 339 8. Glossy or colored papers;
- 340 9. Construction and demolition debris;
- 341 **10.** Plywood;
- 342 11. Particleboard;
- 343 **12.** Saltwater driftwood;
- 344 **13.** Manure;
- 345 14. Animal carcasses;
- 346 15. Asphalt products;
- 347 16. Flooring products.

a.

- 349 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:
- 360

348

- The fuel restrictions imposed in this chapter;
- b. Proper installation, property location, operation, and maintenance
 of the appliance;
- 363 c. An advisory statement noting that operation of solid fuel burning 364 appliances may not be appropriate in some areas due to terrain, meteorological 365 conditions, or other relevant conditions that render the operation of the appliance a 366 public nuisance or health hazard even though it is otherwise legally installed and 367 operated;
- 368 3. The written notice required in this section shall be signed and dated by the 369 prospective buyer or lessee prior to purchase or lease to indicate receipt of the 370 notification requirements of this section;
- 3714.The commercial dealer or seller shall mail or otherwise provide a copy of372the notice[,] and any required affidavit[,] to the division within 30 days of the sale. All

AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED] 373 commercial dealers or sellers shall also include with the notice documentation showing 374 whether the appliance sold or leased meets the borough's emissions standard.

375

376 Η. Nuisance. No person within the Fairbanks North Star Borough shall cause or 377 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 378 379 property. No person within the Fairbanks North Star Borough shall operate a solid fuel 380 or waste oil burning appliance in a manner so as to create a public or private nuisance. 381 A violation of a provision of this chapter is hereby declared to be a nuisance.

- 382
 - Ι.

383 Other Laws. Nothing in this section precludes other local jurisdictions from having 384 more restrictive codes. 385

386 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 387 388 quality control program may be satisfied by completion within 60 days of a borough-389 approved class covering PM2.5 health concerns, nonattainment, importance of dry 390 wood and proper operation of solid fuel burning appliances. The borough may on its 391 own initiative file notice of satisfaction of attendance requirements with the court, or the 392 defendant may file a certificate of completion with the court within the applicable time 393 frame.

- 394
- 395 396

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

397 The Fairbanks North Star Borough shall, to the extent funds are available and 398 appropriated by the assembly, offer an enhanced removal, replacement and repair 399 program to help offset the costs of removing, replacing or repairing a solid fuel burning 400 appliance (SFBA) or fireplace. This program shall be subject to the following eligibility 401 requirements, conditions, and criteria:

402 403

General Requirements. Α.

404 1. Application. An application approved by the division and signed by all 405 property owner(s) must be submitted along with any documentation required by the 406 division. Applications for either the removal of a solid fuel burning appliance (SFBA), or 407 replacement of a SFBA with an emergency power system, or an appliance designed to 408 use natural gas, propane, or home heating oil shall include a signed recordable 409 document restricting future installations of <u>SFBAs</u>[SOLID FUEL BURNING 410 APPLIANCES] and requiring appropriate notice to purchasers in the seller's disclosure statement. Applicants must fully comply with the division's inspection process which 411 shall verify the existence of a qualifying SFBA [OR FIREPLACE]. 412

413 Priority Ranking. Applications may be prioritized and may be limited by the 2. 414 division in its discretion based on geographical location, the overall air guality benefit and the type of SFBA or fireplace being removed, replaced or repaired. 415

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Eligibility. The program is limited to properties within the air quality control 416 3. 417 zone boundary in which a qualifying SFBA or fireplace is installed. If an application is 418 approved for the program, the applicant will be given up to 90 days to meet all of the 419 requirements. Applicants must have no delinguent property tax or penalty or interest 420 owing at the time of application and at completion of the program requirements. 421 Additional Requirements. In addition to the general requirements set forth 4. 422 in this section, applicants must also meet the following requirements: 423 Fully comply with the inspection process required by the division a. 424 that shall ensure that the existence of the qualifying appliance to be removed, replaced 425 or repaired is properly documented. 426 Removal of appliance. b. 427 Delivery of appliance to an authorized decommission station. C. 428 d. Certificate of destruction delivered to the division, if applicable. 429 Final installation of a qualified appliance visually verified. e. 430 All aspects of this section may be performed by borough-approved f. 431 personnel or a borough-approved vendor. 432 433 Payments. Applicants will be eligible for reimbursements or, at the option 5. 434 of the applicant, payment may be made directly to a borough-approved vendor. 435 Reimbursements and payments shall be available as follows: 436 Replacement of a hydronic heater: a. 437 With either an EPA-certified wood or pellet stove with an i. 438 emission rate less than or equal to two grams of PM_{2.5} per hour, or an EPA phase II 439 certified pellet burning hydronic heater with an emission rate equal to or less than 0.1 440 pounds per million BTU, or an emergency power system, up to \$10,000 for purchase and installation [OF THE APPLIANCE]. 441 442 With an appliance designed to use home heating oil ii. 443 (excluding waste or used oil) or a masonry heater (including parts, labor and any costs 444 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 445 appliance. 446 447 iii. With an appliance designed to use natural gas, propane, hot 448 water district heat, or electricity, up to \$14,000 for purchase and installation of the 449 appliance. 450 Replacement of a non-borough-listed SFBA [OR FIREPLACE]: b. 451 With either an EPA-certified wood stove, or fireplace insert i. that has an emission rate less than or equal to two grams of PM_{2.5} per hour, or in the 452 453 case of an EPA-certified wood stove, PM_{2.5} emissions must be reduced by 50 percent 454 and emit two grams of $PM_{2.5}$ per hour or less, up to \$4,000 for purchase and installation 455 of the appliance. 456 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 457 PELLETS], up to \$5,000 for purchase and installation of the appliance. 458

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-18 Page 11 of 17

459 With an appliance designed to use home heating oil iii. 460 (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 461 462 by the manufacturer of the appliance for proper installation), or an emergency power system, up to \$6,000 for the purchase and installation [OF THE APPLIANCE]. 463 464 With an appliance designed to use natural gas or propane, iv. 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 replaced with a single heating device that meets the requirements above, except for 467 468 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 Removal of a SFBA (limited to a one-time participation in this C. 471 program per property). 472 Removal of a hydronic heater through a one-time payment of i. 473 \$5,000. 474 Removal of other SFBAs through a one-time payment of ii. 475 \$2,000. **[CASH PAYMENT** \$5.000 – IF REMOVING HYDRONIC HEATER \$2,000 – IF REMOVING OTHER SFBAS] 476 d. Repair Program. 477 The repair program will pay for the: i. 478 (A) Replacement of a wood stove's catalytic converter 479 that has exceeded its life span through the one-time payment of up to \$750.00. 480 Replacement of any emissions-reducing component (B) 481 of an EPA-certified wood stove up to the maximum amount of \$750.00. 482 ii. In addition to the general requirements set forth in this 483 section, applicants must fully comply with any inspection process required by the 484 division, which may be performed by a borough-approved vendor. 485 486 Section 6. FNSBC 21.28.050, Forecasting exceedances and 487 restrictions in the air quality control zone during an alert, shall be amended as 488 follows: 489 During the winter months of October through March, the borough shall issue a Α. 490 daily PM_{2.5} forecast by 4:30 p.m. When the PM_{2.5} concentration reaches the onset level 491 for an alert [EPISODE] and is expected to remain at that level for 12 hours or more, an 492 alert [OR ADVISORY] will be declared. An alert [OR ADVISORY] may apply to the air 493 quality control zone as a whole, or to one or more sub-areas designated by the division. 494 Once an alert [OR ADVISORY] is declared, PM_{2.5} control measures set forth in this 495 section shall be implemented and continued until the alert [OR ADVISORY] is 496 cancelled. There are [THREE] two levels of [EPISODES] alerts: Stage 1[,] and Stage 2 497 [AND 3]. The obligations imposed in this subsection do not require, absent specific 498 funding for that purpose, any actions to be taken outside of the borough's normal AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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business days and hours of operation. <u>These restrictions shall not apply during a power</u>
 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

503 <u>pits.</u>

504

505 B. The division will notify local media to ensure the declared alert [OR ADVISORY] 506 is broadcast. The division shall also use social media and methods of direct 507 communication such as text messages as feasible. Information within the notification 508 will contain the $PM_{2.5}$ forecast, stage level for areas, and actions required to reduce 509 sources of $PM_{2.5}$. The obligations imposed in this subsection do not require, absent 510 specific funding for that purpose, any actions to be taken outside of the borough's 511 normal business days and hours of operation.

512

523

513 C. Stage 1: [VOLUNTARY] Restrictions in the Air Quality Control Zone during an 514 [ADVISORY] <u>Alert</u>.

515 [1. A STAGE 1 AIR ADVISORY IS IMPLEMENTED WHEN 516 CONCENTRATIONS EXCEED OR ARE FORECASTED TO EXCEED 25 µG/M³.

517 2. RESIDENTS SHALL BE REQUESTED TO VOLUNTARILY STOP 518 OPERATION OF SOLID FUEL, PELLET, AND WASTE OIL BURNING APPLIANCES, 519 AS WELL AS MASONRY HEATERS AND ALL OUTDOOR BURNING THAT 520 INCLUDES RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES AND THE 521 USE OF FIRE PITS, NONPERMITTED INCINERATORS AND BURN BARRELS IN 522 THE AIR QUALITY CONTROL ZONE.

524 D. STAGE 2: REQUIRED RESTRICTIONS IN THE AIR QUALITY CONTROL 525 ZONE DURING AN ALERT.]

526 1. A Stage 1 [2] air alert is implemented when concentrations exceed or are 527 forecasted to exceed 25 [35] μ g/m³.

Burning is permitted in all EPA-certified solid fuel burning appliances, and 528 2. 529 EPA [PHASE II QUALIFIED] certified hydronic heaters, [WITH AN ANNUAL AVERAGE EMISSION RATING OF 2.5 GRAMS OR LESS] masonry heaters, [PELLET FUEL 530 BURNING APPLIANCES,] and cook stoves[, AND FIREPLACES]. No fuel source may 531 532 be added to the combustion[S] chamber or firebox of any solid fuel burning appliance or 533 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 534 or electric baseboard heaters) until the Stage 1 [2] air alert is cancelled. 535

536 3. If a building owner or other person with a property or managerial interest 537 in the building has an approved "no other adequate source of heat" designation, the 538 building owner is exempted from complying with the Stage <u>1</u> [2] air alert restrictions for 539 that building.

540[4. OUTDOOR BURNING IS PROHIBITED INCLUDING NONPERMITTED541INCINERATORS AND BURN BARRELS. THIS DOES NOT INCLUDE

AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED] 542 RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES OR CEREMONIAL543 FIRES AND THE USE OF FIRE PITS.

544 5. THESE RESTRICTIONS SHALL NOT APPLY DURING A POWER 545 FAILURE.] 546

547 <u>D[E]</u>. Stage <u>2</u> [3]: Required Restrictions in the Air Quality Control Zone during an Alert.

548 1. A Stage <u>2</u> [3] air *alert* is implemented when concentrations exceed or are 549 forecasted to exceed <u>35[55]</u> μ G/M³.

- 550 2. No fuel source may be added to the combustion[S] chamber or firebox of 551 any solid fuel burning appliance[S, MASONRY HEATERS, PELLET FUEL BURNING 552 APPLIANCES, COOK STOVES, FIREPLACES,] or waste oil burning appliance[S. NO 553 WASTE OIL MAY BE ADDED TO A WASTE OIL BURNING APPLIANCE]. Residents 554 should rely instead on their home's alternate, cleaner source of heat (such as a furnace, 555 boiler or electric baseboard heaters) until the Stage <u>2</u> [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 <u>2</u> [3] air alert restrictions for that building.
- 560 OUTDOOR BURNING IS PROHIBITED INCLUDING NONPERMITTED [4. 561 INCINERATORS AND BURN BARRELS. THIS DOES NOT INCLUDE RECREATIONAL FIRES SUCH AS BONFIRES, CAMPFIRES OR CEREMONIAL 562 563 FIRES AND THE USE OF FIRE PITS.
- 5. THESE RESTRICTIONS SHALL NOT APPLY DURING A POWER 565 FAILURE. OR TO EPA-CERTIFIED SOLID FUEL BURNING APPLIANCES, EPA 566 PHASE II QUALIFIED HYDRONIC HEATERS WITH AN ANNUAL AVERAGE 567 EMISSION RATING OF 2.5 GRAMS OR LESS, MASONRY HEATERS OR PELLET 568 FUEL BURNING APPLIANCES WHEN THE TEMPERATURE IS BELOW -15 569 FAHRENHEIT AS RECORDED AT THE FAIRBANKS INTERNATIONAL AIRPORT.]
- 570
- 571 Section 7. FNSBC 21.28.060, **No other adequate source of heat** 572 **determination,** shall be amended as follows:

573 A. A building owner or other person with a property or managerial interest in a 574 building located within the air quality control zone may obtain a "no other adequate 575 source of heat" determination from the division if:

576 <u>1. The SFBA being used to heat the structure is EPA certified, unless an</u> 577 application has been made to the Enhanced Voluntary Removal, Replacement and 578 Repair Program (FNSBC 21.28.040) to remove or replace the non-certified SFBA and it 579 has been denied, a pellet fuel burning appliance installed prior to April 1, 2017, a 580 masonry heater, or a cook stove;

581 [1]<u>2</u>. The building owner(s) or other person with a property or managerial 582 interest in the building applies with the division on a form developed by the division;

583 [2]<u>3</u>. The building owner(s) or other person with a property or managerial 584 interest in the building files an affidavit with the application that the subject structure 585 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

590 591 [3]4. The building was constructed on or before December 31, 2016.

592 B. There shall be no fee for applying for or obtaining a determination. 593

594 C. It shall be a violation to submit a false affidavit for a "no other adequate source of 595 heat" determination. 596

597 D. If the "no other adequate source of heat" appliance does not meet the standards 598 set in this chapter, the division shall provide the applicant with information concerning 599 the borough's voluntary removal, replacement and repair program.

601 E. Applications denied by the division may be appealed to the air pollution control 602 commission within 30 days of the decision.

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600

604 An applicant that has been denied a "no alternative source of heat determination" F. by the division because the appliance does not meet the criteria of this section may 605 apply to the air pollution control commission for a variance within 10 days of this 606 607 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, 608 the commission shall consider the location of the appliance, impact on surrounding 609 neighborhood, emission levels of the appliance, the financial investment and ability of 610 the applicant to replace the appliance and any other relevant conditions that indicate the 611 operation of the appliance at that location is not a nuisance or health-hazard. If the 612 commission denies a variance, the "no alternative source of heat" determination shall 613 614 expire 60 days from the date of denial.

615

616 Section 8. FNSBC 21.28.070, Voluntary burn cessation program, is 617 repealed as follows:

618

[THE FAIRBANKS NORTH STAR BOROUGH WILL, TO THE EXTENT FUNDS 619 620 ARE AVAILABLE AND APPROPRIATED BY THE ASSEMBLY, ESTABLISH A PROGRAM TO ENCOURAGE, INCENTIVIZE, AND FACILITATE THE VOLUNTARY 621 622 CESSATION OF THE USE OF WOOD BURNING APPLIANCES (I.E., WOOD 623 STOVES, WOOD-FIRED HYDRONIC HEATERS, WOOD-FIRED FURNACES, FIREPLACES, FIREPLACE INSERTS, MASONRY HEATERS OR PELLET FUEL 624 BURNING APPLIANCES) IN THE AIR QUALITY CONTROL ZONE DURING AIR 625 QUALITY ALERTS. IT IS RECOGNIZED THAT IT WILL BE DIFFICULT OR 626 627 IMPOSSIBLE FOR SOME HOUSEHOLDS TO PARTICIPATE IN THIS PROGRAM (E.G., THOSE THAT HEAT SOLELY WITH WOOD OR FOR WHICH WOOD IS A 628 629 NECESSARY SUPPLEMENT DURING PERIODS OF COLD WEATHER).

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630 THEREFORE, THIS PROGRAM IS INTENDED FOR HOUSEHOLDS THAT ARE ABLE 631 TO USE SPACE HEATING ALTERNATIVES WITH SIGNIFICANTLY LOWER PM_{2.5} 632 EMISSIONS, INCLUDING THOSE FUELED BY GAS, OIL, ELECTRICITY, PROPANE 633 OR DISTRICT HEAT, BUT NOT WOOD OR PELLET STOVES OR OTHER WOOD BURNING APPLIANCES. THIS PROGRAM WILL AT A MINIMUM CONSIST OF THE 634 635 FOLLOWING COMPONENTS: 636 THE BOROUGH MAY CONTRACT WITH AN AGENCY THAT WILL PROVIDE Α. 637 SERVICES TO PROMOTE THE PROGRAM. THIS AGENCY MUST HAVE THE STANDING, EXPERIENCE, AND CAPABILITY TO CARRY OUT A CAMPAIGN TO 638 639 ADVERTISE, REACH OUT, AND ATTRACT A LARGE NUMBER OF PARTICIPANTS IN THE NONATTAINMENT AREA WHO ARE WILLING TO CEASE THE USE OF A 640 641 WOOD BURNING APPLIANCE DURING AIR QUALITY ALERTS. 642 FACILITATION OF THIS PROGRAM BY THE BOROUGH WILL INCLUDE, BUT Β. NOT BE LIMITED TO, THE PROVISION OF NOTICE OF AIR QUALITY ALERTS TO 643 644 INDIVIDUAL HOUSEHOLDS BY METHODS SUCH AS ELECTRONIC MAIL 645 MESSAGES, TEXT MESSAGES, AUTOMATED PHONE CALLS, NOTICES TO RADIO AND TELEVISION STATIONS, AND INFORMATION POSTED ON ELECTRONIC 646 READER OR DISPLAY BOARDS LOCATED THROUGHOUT THE BOROUGH IN 647 LOCATIONS BEST SUITED TO NOTIFY RESIDENTS OF AIR QUALITY ALERTS. 648 649 C. PRIVATE CONTRIBUTIONS, INCLUDING GOODS AND/OR SERVICES, WILL BE SOUGHT FOR ALL APPROPRIATE ELEMENTS OF THE PROGRAM. IN 650 651 GENERAL THIS WILL FOCUS ON THE PROVISION OF MATERIALS, EQUIPMENT, 652 AND CERTAIN ONE-TIME SERVICES, BUT NOT TO FUND BOROUGH STAFF **POSITIONS.**]

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- 654 655

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

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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)] <u>(C)</u>	Violation of a Stage [2 <u>]1</u> air alert restriction.	\$500	Yes
21.28.050[(E)] <u>(D)</u>	Violation of a Stage [3] <u>2</u> air alert restriction.	\$1,000	Yes

657

Section 10. Effective Date. 658 This ordinance shall be effective thirty 659 days following its adoption.

660

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	T 11
661	PASSED AND APPROVED THIS 9 TH DAY OF MARCH, 2017.
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668	/Kathryn Dódge
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675	Nanci Ashford-Bingham, MMC
	Borough Clerk
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678	Yeses: Cooper, Quist, Gray, Lawrence, Dodge, Davies
679	Noes: Roberts, Sattley
680	Other: Tacke (Excused)

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Adopted

1 2 3 4 5 6 7 8 9	By: Karl k Introduced: Advanced: Amended: Adopted: Immediate Reconsid Failed: Adopted:	Cassel, Mayor 05/18/2017 05/18/2017 06/19/2017 06/19/2017 eration 06/19/2017 06/19/2017
10 11	FAIRBANKS NORTH STAR BOROUGH	
12 13	ORDINANCE NO. 2017-44	
14 15 16 17 18 19 20 21 22	AN ORDINANCE AMENDING CHAPTER 21.28 FNSBO REGARDING THE PM2.5 AIR QUALITY CONTROL PROGRAM, A TITLE 4 REGARDING AIR POLLUTION CONTROL COMMISSION D AMENDING FNSBC 1.20.080, FINE SCHEDULE, AND AMENDING APP USER FEE SCHEDULE/TRANSPORTATION OF ORDINANCE NO. 2017- 18) TO ADD PERMIT APPLICATION FEES FOR SOLID FUEL BUR APPLIANCES IN NEW CONSTRUCTION	AMENDING UTIES, ENDIX E— 20 (FY 2017-
22 23 24 25 26	WHEREAS, The United States Environmental Protection Age December 2009, declared part of the Fairbanks North Star Borough (Bor attainment area for fine particulate pollution (PM2.5); and	
20 27 28 29 30	WHEREAS, On December 16, 2016 the EPA published pu the Federal Register of its intent to reclassify the Borough non-attainme Moderate to Serious status, and the Final Rule was signed on April 28, 201	nt area from
31 32 33 34 35	WHEREAS, The serious non-attainment designation requires serious State Implementation Plan (SIP) to be submitted to the EPA by D 2017 which must include implementation of all Best Available Contre (BACM); and	ecember 31,
36 37 38 39	WHEREAS, The Borough should consider implementing control measures by June 2017 so goodwill for these control measures recognized in the Serious SIP.	
40 41 42	NOW, THEREFORE, BE IT ORDAINED by the Assembly of t North Star Borough:	he Fairbanks

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 1 of 17 43 Section 1. Sections 2, 3, 4, 5, 6, 7, and 8 of this ordinance are of a 44 general and permanent nature and shall be codified. Sections 9 and 10 of this 45 ordinance are not of a general and permanent nature and shall not be codified.

46

Section 2. FNSBC 21.28.010, Definitions, shall be amended as follows: 47 "Air quality control zone" means the area of the borough currently contained in the EPA 48 49 designated nonattainment area, which uses the nonattainment area southern, western and eastern boundaries as modified by their respective intersection with the following 50 51 northern boundary described as: beginning at the intersection of Isberg Road with Chena Ridge Road on the western boundary of the EPA designated nonattainment 52 area, then following Chena Ridge Road back to Chena Pump Road and continuing 53 north on the Parks Highway to Sheep Creek Road, then Sheep Creek Road to Miller Hill 54 Road, then north on Miller Hill Road, then east on Yankovich, then north from 55 Yankovich Road along the east boundary of the Large Animal Research Station to a 56 point just north of its intersection with Nottingham Drive and follows the ridge crest 57 58 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 59 the geographic crest of Farmer's Loop Ridge to its intersection with the New Steese 60 Highway, then southeast on Bennett Road, and along Steele Creek Road to the 61 intersection of Chena Hot Springs Road, and Chena Hot Springs Road to the eastern 62 boundary of the EPA designated nonattainment area. 63

64

65 "Air quality index" (AQI) is an index for reporting daily air quality, which indicates how 66 polluted the air currently is or how polluted it is forecast to become. The higher the AQI 67 value, the greater the level of air pollution and the greater the health concern. AQI is 68 divided into six categories with correspondingly higher levels of health concern as 69 outlined in the table below:

70

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

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 2 of 17

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.

71

⁷² "Alert" means a notice issued by the division when the division determines, using ⁷³ available data or modeling, that PM2.5 concentration levels have reached or are ⁷⁴ forecasted to reach 25 μ g/m³ or higher for at least 12 consecutive hours.

75

"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.

79

"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.

83

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

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88 "Construction and demolition debris" means a conglomeration of materials from construction, repair, remodeling or demolition of buildings and structures containing any 89 90 prohibited fuels. 91 92 "Cook stove" means a wood burning appliance that is designed primarily for cooking 93 food and that has the following characteristics: 94 An oven, with a volume of 0.028 cubic meters (one cubic foot) or greater, 1. 95 and an oven rack; 2. A device for measuring oven temperatures; 96 A flame path that is routed around the oven; 97 3. 98 4. A shaker grate; 99 5. An ash pan; 6. An ash clean-out door below the oven; and 100 101 7. The absence of a fan or heat channels to dissipate heat from the device. 102 103 "Division" means the Fairbanks North Star Borough air quality division. 104 105 "Emergency power system" is an independent source of electrical power that supports important electrical systems on loss of normal power supply. An emergency power 106 system may include a standby generator, batteries, and other apparatus. Emergency 107 power systems are installed to protect life and property from the consequences of loss 108 109 of normal electric power supply. 110 111 "EPA" means the United States Environmental Protection Agency. 112 "EPA certified" means that the solid fuel burning appliance meets emission performance 113 standards when tested by an accredited independent laboratory and is labeled 114 according to procedures specified by the EPA in 40 CFR Part 60 Subpart AAA or 115 116 QQQQ. 117 118 "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 119 with solid fuels, which cannot be operated with an air to fuel ratio of less than 35 to one. 120 121 "Fireplace insert" means a solid fuel burning appliance similar in function and 122 performance to a freestanding wood burning stove, which is made from cast iron or 123 steel designed to be installed in an existing masonry or prefabricated fireplace. 124 125 "Forecast" means a description of the current dispersion conditions described as good, 126 fair, or poor and including the expected PM2.5 NowCast AQI categorized as good, 127 128 moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, or hazardous. 129

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130 "Heating appliances" means, but is not limited to: wood, coal, or pellet fired hydronic heaters, stoves, and furnaces; oil or gas fired boilers and furnaces; and masonry 131 heaters, pellet stoves, cook stoves, and fireplaces. 132 133 134 "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. 136 137 "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, 138 139 typically through pipes, of a fluid heated in the appliance. 140 "Masonry heater" means a wood burning appliance that complies with the guidelines of 141 ASTM E1602-08, Standard Guide for Construction of Masonry Heaters, and: 142 143 1. Is designed and intended for operation only in a closed combustion 144 chamber configuration; and Has enough thermal storage capacity to maintain no less than 50.0 145 2. percent of the maximum masonry-mass temperature for at least four hours after the 146 147 maximum masonry-mass temperature has been reached; and The masonry heater design and installation has been confirmed and 148 3. documented by a qualified person or entity approved by the borough. 149 150 "New Construction" means construction of entirely new structures designed for heated 151 occupancy and any structural alteration that adds heated square footage to an existing 152 153 structure whether or not the structure was previously occupied. 154 "Nonattainment area" is the area depicted on the map attached to the ordinance 155 codified in this chapter and is further defined as follows: 156 Township Range Delineated Boundary for the Fairbanks 157 Nonattainment Area 158 159 MTRS F001N001 – All Sections, MTRS F001N001E – Sections 160 2-11, 14-23, 26-34, MTRS F001N002 - Sections 1-5, 8-17, 20-161 29, 32-36, MTRS F001S001E - Sections 1, 3-30, 32-36, MTRS 162 F001S001W - Sections 1-30. MTRS F001S002E - Sections 6-163 8, 17-20, 29-36, MTRS F001S002W - Sections 1-5, 8-17, 20-164 29, 32-33, MTRS F001S003E - Sections 31-32, MTRS 165 F002N001E - Sections 31-35, MTRS F002N001 - Sections 28, 166 31-36, MTRS F002N002 - Sections 32-33, 36, MTRS 167 F002S001E - Sections 1-2, MTRS F002S002E - Sections 1-17, 168 21-24, MTRS F002S003E - Sections 5-8, 18. 169 170 "NowCast" means a weighted average of hourly air monitoring data used by the EPA for 171 real-time reporting of the AQI for PM. 172 173

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Fairbanks North Star Borough, Alaska

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174 "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 175 federal law or EPA approved Alternative Method 82 which is defined as American 176 177 Society for Testing and Materials (ASTM) D 7520-09. 178 179 "Particulate matter" or "PM" means total particulate matter including PM10 and PM2.5 180 (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 181 182 components, including acids, organic chemicals, metals, soil, or dust. 183 "Pellet fuel burning appliance" or "pellet stove" means a closed combustion, vented 184 185 pellet burning appliance with automatic components creating an active air flow system, 186 sold with the hopper and auger combination as integral parts, and designed, warranted, 187 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 188 189 cordwood. 190 191 "PM2.5" means particulate matter comprised of particles that have diameters of two and 192 one-half microns or less. 193 194 "Proper Wood Storage" means specific and dedicated space to store clean wood in 195 such a manner that the clean wood is not in contact with soil, the top of the clean wood is adequately protected from precipitation, and with airflow available to the clean wood. 196 197 198 "Sale" means the transfer of ownership or control. 199 200 "Solid fuel burning appliance" (SFBA) means any appliance designed to produce heat by burning nongaseous and nonliquid fuels. This definition includes, but is not limited to: 201 Wood stoves: 202 1. 203 2. Coal stoves: 204 3. Wood-fired hydronic heaters; Wood-fired furnaces; 205 4. Coal-fired hydronic heaters; 206 5. 207 6. Coal-fired furnaces: 7. 208 Fireplace inserts; Pellet fuel burning appliances; 209 8. 210 9. Masonry heaters; 10. Cook stoves: and 211 11. Fireplaces. 212 213 214 "Waste oil burning appliance" means an appliance that burns used or waste oil. 215 216 Section 3. FNSBC 21.28.030 Prohibited acts, shall be amended as follows: 217 AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is underlined

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 6 of 17 218

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.

225

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:

230

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

231 2. A closed combustion system with automatic components that feed solid 232 fuel, including wood pellets, into a firebox where the combustion is enhanced by an 233 active airflow system, or

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.

241

242 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.

248 2. Procedures and Enforcement. When ambient weather and light conditions permit, methods and procedures specified by the EPA in 40 CFR 60 Appendix A 249 Reference Method 9 (Visual determination of the Opacity of Emissions From Stationary 250 251 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 252 be used to determine compliance with this section. Smoke visible from a chimney, flue 253 or exhaust duct in excess of the opacity standard for a period in excess of 30 minutes 254 shall constitute prima facie evidence of unlawful operation of an applicable solid fuel 255 256 burning appliance.

257

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:

261 1. Crosses a property line;

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 7 of 17

262		2. Is observable using EPA Method 22 (40 CFR 60 Appendix A); and
263		3. Is 25 μ g/m ³ greater than the surrounding immediate vicinity background
264	PM _{2.5}	level using methods defined by the borough division of air quality. For purposes of
265	this s	subsection, the surrounding "immediate vicinity" means land within an area
266	meas	ured 1,200 feet in all directions from the boundaries of the emitting property.
267		
268	<u>E.</u>	Requirements for Installation of Solid Fuel Burning Appliances in New
269	Cons	truction.
270		1. For all new construction that commences on or after January 1, 2018 and
271	is loca	ated within the air quality control zone the following will apply:
272		a. Installation of a solid fuel burning appliance is prohibited unless a
273		permit has been issued by the division. A permit must be obtained for any solid
274		fuel burning appliance installed in new construction prior to installation of the
275		appliance.
276		b. Application. The permit application will require the owner(s) to
277		certify they will meet the following requirements:
278		i. The proposed solid fuel burning appliance meets all federal,
279		state, and borough air quality regulations;
280		ii. The proposed solid fuel burning appliance meets the
281		requirements of this chapter;
282		iii. The proposed solid fuel burning appliance is properly sized
283		for the structure in the opinion of a Borough listed vendor/installer;
284		iv. The proposed solid fuel burning appliance will be installed by
285		a Borough listed vendor/installer attesting to proper installation of the
286		device based on the manufacturer's installation manual;
287		v. Proper wood storage will be available; and
288		vi. Training will be provided to the occupants on proper wood
289		burning techniques.
290		c. Permit. An installation permit will be issued upon receipt of an
291		application meeting the requirements of subsection (b) and payment of any
292		required fee. Within 24 months of issuance, the owner must verify with
293		supporting documentation that the requirements of subsection (b) have been
294		completed, upon which an operating permit will be issued. If verification has not
295		been submitted or approved within 24 months the permit application will
296		automatically expire.
297		d. After a public hearing, and prior to installation of the solid fuel
298		burning appliance, the air pollution control commission may grant a variance, the
299		commission shall consider any alternate proposal that the applicant submits, the
300		location of the appliance, impact on surrounding neighborhood of the requested
301		variance, emission levels of the appliance, and any other relevant conditions that
302		indicate the operation of the appliance at that location or the requirement that is
302		being varied will not result in a nuisance or health-hazard.
303		being varied win not result in a huisance of health-hazard.
304 305	<u>F[</u> E].	Borough-Wide Installation Requirements for Hydronic Heaters.
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Fairbanks North Star Borough, Alaska

306 1. Setback. Unless permitted by a variance, or if replacing an existing 307 hydronic heater with a listed appliance, no person shall install or allow the installation of 308 a hydronic heater located less than: 309 Three hundred thirty feet from the closest property line; or a. 310 b. Six hundred sixty feet from a school, clinic, hospital, or senior 311 housing unit. 312 Any hydronic heater installed in violation of this section shall be 2. 313 immediately remedied or made inoperable and removed as soon as practicable; 314 however, in no case shall the time of removal be longer than 180 days after notice from 315 the division of a violation. 316 3. Variance. After a public hearing, the commission shall determine whether a person may receive a variance from the installation requirements of this subsection 317 allowing them to install a hydronic heater. In determining whether to grant the variance, 318 319 the commission shall consider the proposed location of the appliance, impact on 320 surrounding neighborhood, emission levels of the appliance, terrain, meteorological conditions, and other relevant conditions that may render the operation of the appliance 321 322 at that location a nuisance or a health hazard. 323 324 Prohibited Fuels. No person shall burn in the borough any fuel, except coal in an G[F]. 325 appliance designed to use coal, which is not listed in the manufacturer's owner's 326 manual as an acceptable fuel for that device or any of the following items in a solid fuel 327 burning appliance: 328 Any wood that does not meet the definition of clean wood or has more 1. 329 than 20 percent moisture content; 330 2. Garbage; 331 3. Tires; 332 4. Materials containing plastic or rubber; 5. Waste petroleum products; 333 334 6. Paints and paint thinners; 335 7. Chemicals: 336 8. Glossy or colored papers; Construction and demolition debris: 337 9. 10. Plywood; 338 Particleboard: 339 11. 12. Saltwater driftwood; 340 13. 341 Manure: 342 14. Animal carcasses; 343 15. Asphalt products; 344 16. Flooring products. 345 346 H[G]. Sales or Leasing of Solid Fuel Burning Appliances. 347 No person shall sell or lease an unlisted solid fuel burning appliance or 1. barrel stove kit in the borough unless the buyer signs an affidavit, on a form prescribed 348 by the borough, attesting that the appliance will not be installed or used in the air quality 349 AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 9 of 17 a.

control zone. This section does not apply to appliances or stoves that transfer pursuantto 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:

356

The fuel restrictions imposed in this chapter;

- b. Proper installation, property location, operation, and maintenance
 of the appliance;
- 359 c. An advisory statement noting that operation of solid fuel burning 360 appliances may not be appropriate in some areas due to terrain, meteorological 361 conditions, or other relevant conditions that render the operation of the appliance 362 a public nuisance or health hazard even though it is otherwise legally installed 363 and operated;
- 364 3. The written notice required in this section shall be signed and dated by 365 the prospective buyer or lessee prior to purchase or lease to indicate receipt of the 366 notification requirements of this section;
- 367
 4. The commercial dealer or seller shall mail or otherwise provide a copy of
 368 the notice and any required affidavit to the division within 30 days of the sale. All
 369 commercial dealers or sellers shall also include with the notice documentation showing
 370 whether the appliance sold or leased meets the borough's emissions standard.
- 371
- 372 <u>I[H]</u>. Nuisance. No person within the Fairbanks North Star Borough shall cause or 373 allow particulate emissions from a nonmobile source that are injurious to human life or 374 to property or that unreasonably interfere with the comfortable enjoyment of life or 375 property. No person within the Fairbanks North Star Borough shall operate a solid fuel 376 or waste oil burning appliance in a manner so as to create a public or private nuisance. 377 A violation of a provision of this chapter is hereby declared to be a nuisance.
- 378
- <u>J[I]</u>. Other Laws. Nothing in this section precludes other local jurisdictions from having
 more restrictive codes.
- 381 382 K[J]. Penalties. Upon first conviction of an offense in this chapter, the 383 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-384 approved class covering PM2.5 health concerns, nonattainment, importance of dry 385 wood and proper operation of solid fuel burning appliances. The borough may on its 386 own initiative file notice of satisfaction of attendance requirements with the court, or the 387 388 defendant may file a certificate of completion with the court within the applicable time 389 frame.
- 390
- 391Section 4. 21.28.040 Enhanced voluntary removal, replacement and392repair program, shall be amended as follows:
- 393

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Fairbanks North Star Borough, Alaska

Adopted

394 The Fairbanks North Star Borough shall, to the extent funds are available and 395 appropriated by the assembly, offer an enhanced removal, replacement and repair 396 program to help offset the costs of removing, replacing or repairing a solid fuel burning 397 appliance (SFBA) or fireplace. This program shall be subject to the following eligibility 398 requirements, conditions, and criteria:

399 General Requirements. A.

400 Application. An application approved by the division and signed by all 1. 401 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 402 403 replacement of a SFBA with an emergency power system, or an appliance designed to 404 use natural gas, propane, or home heating oil shall include a signed recordable 405 document restricting future installations of SFBAs and requiring appropriate notice to purchasers in the seller's disclosure statement. Applicants must fully comply with the 406 407 division's inspection process which shall verify the existence of a qualifying SFBA.

Priority Ranking. Applications may be prioritized and may be limited by the 408 2. 409 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. 410

411 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 412 413 approved for the program, the applicant will be given up to 90 days to meet all of the 414 requirements. Applicants must have no delinguent property tax or penalty or interest 415 owing at the time of application and at completion of the program requirements.

416 Additional Requirements. In addition to the general requirements set forth 4 417 in this section, applicants must also meet the following requirements:

- 418 Fully comply with the inspection process required by the division a. 419 that shall ensure that the existence of the qualifying appliance to be removed, replaced or repaired is properly documented. 420
- 421

Removal of appliance. b.

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423

- Delivery of appliance to an authorized decommission station. C. d. Certificate of destruction delivered to the division, if applicable.
- 424

Final installation of a qualified appliance visually verified. e.

The qualified appliance must be properly installed by a Borough 425 f. listed vendor/installer attesting to proper installation of the device based on 426 manufacturer's installation manual, compliance with any building code 427 requirements, and that the device is properly sized for the building in question. 428 429

The applicant will be required to demonstrate proper wood storage. q.

430 h. The applicant will be required to complete training with the vendor, ensuring that they understand how their particular device operates, including 431 education on proper wood burning techniques. 432

433 i.[F] All aspects of this section may be performed by borough-approved personnel or a borough-approved vendor. 434

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Fairbanks North Star Borough, Alaska

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435 5. Payments. Applicants will be eligible for reimbursements or, at the option
436 of the applicant, payment may be made directly to a borough-approved vendor.
437 Reimbursements and payments shall be available as follows:

438

a. Replacement of a hydronic heater:

439i.With either an EPA certified wood or pellet stove with an440emission rate less than or equal to two grams of PM2.5 per hour, or an441EPA phase II certified pellet burning hydronic heater with an emission rate442equal to or less than 0.1 pounds per million BTU, or an emergency power443system, up to \$10,000 for purchase and installation.

ii. 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.

449iii. With an appliance designed to use natural gas, propane, hot450water district heat, or electricity, up to \$14,000 for purchase and451installation of the appliance.

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b. Replacement of a non-borough-listed SFBA:

i. With either an EPA certified wood stove, or fireplace insert that has an emission rate less than or equal to two 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 two grams of PM2.5 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 PM2.5 per hour, up to \$5,000 for purchase and installation of the appliance.

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iv. With an appliance designed to use natural gas or propane,
up to \$10,000 per purchase and installation of the appliance. Multiple nonborough-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.

474 c. Removal of a SFBA (limited to a one-time participation in this 475 program per property).

i. Removal of a hydronic heater through a one-time payment of \$5,000.

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Fairbanks North Star Borough, Alaska

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: i. (A) Replacement of a wood stove's catalytic converter that 482 has exceeded its life span through the one-time payment of up to 483 484 \$750.00. 485 (B) Replacement of any emissions-reducing component of 486 an EPA certified wood stove up to the maximum amount of \$750.00. 487 In addition to the general requirements set forth in this 488 section, applicants must fully comply with any inspection process required by the division, which may be performed by a borough-approved vendor. 489 490 491 Section 5. FNSBC 21.28.050, Forecasting exceedances and 492 restrictions in the air quality control zone during an alert, shall be amended as 493 follows: 494 495 Α. During the winter months of October through March, the borough shall issue a 496 daily PM2.5 forecast by 4:30 p.m. When the PM2.5 concentration reaches the onset 497 level for an alert and is expected to remain at that level for 12 hours or more, an alert 498 will be declared. An alert may apply to the air quality control zone as a whole, or to one 499 or more sub-areas designated by the division. Once an alert is declared, PM2.5 control 500 measures set forth in this section shall be implemented and continued until the alert is 501 cancelled. There are two levels of alerts: Stage 1 and Stage 2. The obligations imposed 502 in this subsection do not require, absent specific funding for that purpose, any actions to 503 be taken outside of the borough's normal business days and hours of operation. These 504 restrictions shall not apply during a power failure. When an alert is in effect, outdoor 505 burning is prohibited, including nonpermitted incinerators and burn barrels. This outdoor 506 burning prohibition does not include recreational fires such as bonfires, campfires, or 507 ceremonial fires and the use of fire pits. 508 509 The division will notify local media to ensure the declared alert is broadcast. The Β. 510 division shall also use social media and methods of direct communication such as text 511 messages as feasible. Information within the notification will contain the PM2.5 forecast. 512 stage level for areas, and actions required to reduce sources of PM2.5. The obligations 513 imposed in this subsection do not require, absent specific funding for that purpose, any 514 actions to be taken outside of the borough's normal business days and hours of 515 operation. 516 C. Stage 1: Restrictions in the Air Quality Control Zone during an Alert. 517 518 1. A Stage 1 air alert is implemented when concentrations exceed or are 519 forecasted to exceed 25 µg/m³. 520 No fuel source may be added to the combustion chamber of a firebox of 2. any solid fuel burning appliance or waste oil burning appliance. Residents should rely 521 AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is underlined Text to be *deleted* is [BRACKETED, CAPITALIZED]

Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 13 of 17 522 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.] If a building owner or other person with a property or managerial interest 532 3. 533 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 534 535 building. If a building owner or other person with a property or managerial interest 536 4. in the building has an approved Stage 1 Waiver the building owner is exempted from 537 complying with the Stage 1 air alert restrictions for that building. A Stage 1 Waiver will 538 be granted if the person with property or managerial interest verifies that the SFBA 539 being operated during a Stage 1 air alert is a Borough listed appliance. A Stage 1 540 Waiver may be obtained by completing an application on a form developed by the 541 division, that includes the following information: 542 Documentation of approved appliance must be submitted, including 543 a. pictures, make and model. 544 545 Documentation of the applicant's ability to properly store wood. b. Documentation the applicant has taken a class or training in proper wood 546 C. burning techniques. 547 548 549 Stage 2: Required Restrictions in the Air Quality Control Zone during an Alert. D. A Stage 2 air alert is implemented when concentrations exceed or are 550 1. forecasted to exceed 35 µg/m³. 551 552 No fuel source may be added to the combustion chamber or firebox of 2. any solid fuel burning appliance or waste oil burning appliance. Residents should rely 553 instead on their home's alternate, cleaner source of heat (such as a furnace, boiler or 554 electric baseboard heaters) until the Stage 2 air alert is cancelled. 555 If a building owner or other person with a property or managerial interest 556 3. in the building has an approved "no other adequate source of heat" designation the 557 building owner is exempted from complying with the Stage 2 air alert restrictions for that 558 559 building. 560 Section 6. FNSBC 21.28.060 No other adequate source of heat 561 determination, shall be amended as follows: 562 563

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Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 14 of 17 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:

567 1. The SFBA being used to heat the structure is <u>a Borough listed</u> 568 <u>appliance;[EPA CERTIFIED UNLESS AN APPLICATION HAS BEEN MADE TO THE</u> 569 ENHANCED VOLUNTARY REMOVAL, REPLACEMENT AND REPAIR PROGRAM TO 570 REMOVE OR REPLACE THE NONCERTIFIED SFBA AND HAS BEEN DENIED, A 571 PELLET FUEL BURNING APPLIANCE INSTALLED PRIOR TO APRIL 1, 2017, A 572 MASONRY HEATER, OR A COOK STOVE.]

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574 2. The building owner(s) or other person with a property or managerial 575 interest in the building applies with the division on a form developed by the division, 576 including the following:

- 577a.Documentation of approved appliance must be submitted, including578pictures, make, model, and serial number.
- 579

b. Documentation of the applicant's ability to properly store wood.

580 c. <u>Documentation the applicant has taken a class or training in proper</u> 581 wood burning techniques;

a.

The building owner(s) or other person with a property or managerial 582 3. 583 interest in the building files an affidavit with the application that the subject structure 584 must be heated and the structure has no adequate heating source without using a solid 585 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 586 restriction would result in damage to property including damage to the appliance itself 587 and its heating system components. If economic hardship is the reason the applicant 588 has no other adequate source of heat, validating documentation is required. Validating 589 documentation may be established by showing approval for assistance from a list of 590 591 agencies or programs that provide economic assistance (e.g., programs based on HHS poverty guidelines, unemployment insurance, nutrition assistance) to be made available 592 593 by the division;

594 595 4. The building was constructed on or before December 31, 2016.

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

598 C. It shall be a violation to submit a false affidavit for a "no other adequate source 599 of heat" determination.

600

597

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.

604

605 E. Applications denied by the division may be appealed to the air pollution control 606 commission within 30 days of the decision.

607

AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED]

Fairbanks North Star Borough, Alaska

An applicant that has been denied a "no alternative source of heat determination" 608 F. by the division because the appliance does not meet the criteria of this section may 609 apply to the air pollution control commission for a variance within 10 days of this 610 decision. A temporary "no alternative source of heat" determination shall be granted 611 pending the decision of the commission. In determining whether to grant a variance, the 612 commission shall consider the location of the appliance, impact on surrounding 613 neighborhood, emission levels of the appliance, the financial investment and ability of 614 the applicant to replace the appliance and any other relevant conditions that indicate the 615 operation of the appliance at that location is not a nuisance or health hazard. If the 616 commission denies a variance, the "no alternative source of heat" determination shall 617 expire 60 days from the date of denial. 618

619

620

Section 7. FNSBC 1.20.080, **Fine Schedule**, is hereby amended as follows:

621 622

21.28.030(E)	Failure to obtain, submit and execute a permit for installing a SFBA in new construction.	<u>\$1,000</u>	No
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(<u>H[</u> G])	Violation of commercial sale requirements.	\$500.00	No

623

624

625 Section 8. Subsection G of FNSBC 4.12.110 shall be amended as 626 follows:

627

The commission shall hear variance requests as set forth in FNSBC Title 628 G. 21. JAFTER A PUBLIC HEARING, THE COMMISSION SHALL DETERMINE 629 WHETHER A PERSON MAY RECEIVE A VARIANCE FROM THE INSTALLATION 630 REQUIREMENTS OF FNSBC 21.28.030(E) ALLOWING THEM TO INSTALL A 631 HYDRONIC HEATER. IN DETERMINING WHETHER TO GRANT THE VARIANCE, 632 THE COMMISSION SHALL CONSIDER THE PROPOSED LOCATION OF THE 633 APPLIANCE, IMPACT ON SURROUNDING NEIGHBORHOOD, EMISSION LEVELS 634 635 OF THE APPLIANCE, TERRAIN, METEOROLOGICAL CONDITIONS, AND OTHER RELEVANT CONDITIONS THAT MAY RENDER THE OPERATION OF THE 636 APPLIANCE AT THAT LOCATION A NUISANCE OR A HEALTH HAZARD.] 637 638

> AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED]

Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 16 of 17

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-Bindham, MMC 664 **Borough Clerk** 665 666 667 Yeses: Tacke, Davies, Cooper, Quist, Gray, Lawrence, Dodge Roberts, Sattley 668 Noes:

> AMENDMENTS ARE SHOWN IN LEGISLATIVE FORMAT Text to be added is <u>underlined</u> Text to be deleted is [BRACKETED, CAPITALIZED]

Fairbanks North Star Borough, Alaska

ORDINANCE NO. 2017-44 Page 17 of 17 1

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

I. <u>Purpose</u>

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;

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;

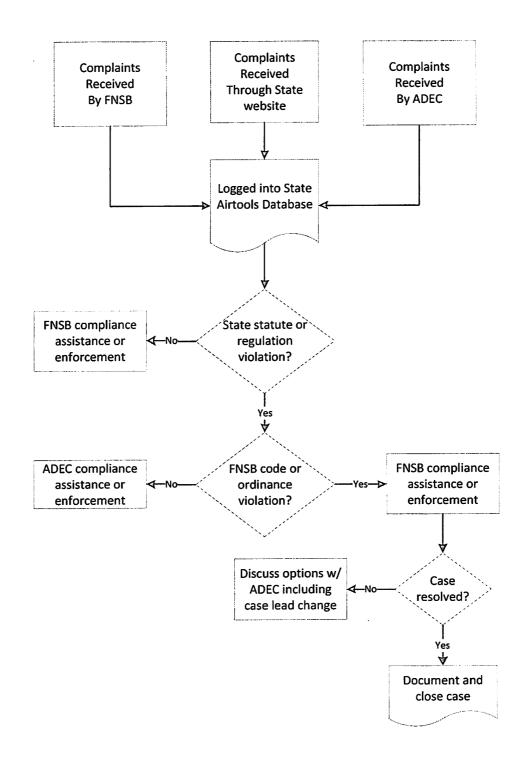
upon agreement by both agencies as to the roles, responsibilities, funding, and any other essential details of a coordinated area source program, work cooperatively to implement the program; and

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. <u>Complaint Response</u>

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

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 nonregulatory 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. <u>Air Quality Planning</u>

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 $\text{PM}_{\text{2.5}}$ 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. <u>Congestion Mitigation & Air Quality (CMAQ) Projects</u>

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. Budgetary

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

- 10 **-**

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:
 - 1. 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. Execution/Modification and Duration of Agreement

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

20 10 Date:

Fairbanks North Star Borough

Kasset By:

Karl Kassel Mavor

Date:

.

Adopted

Air Pollution Control MOU-DEC/FNSB

By: Nikolay Barkov **DEC** Finance Officer

10/19/16 Date:__

Appendix III.D.5.12-96



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)

Adopted

2

MOA Regarding Use of CMAQ Funds in Fairbanks

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 F002N001E- Sections 2 - 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.

MOA Regarding Use of CMAQ Funds in Fairbanks

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.

MOA Regarding Use of CMAQ Funds in Fairbanks

3. 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

1. 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

1. The Board will develop criteria to use in evaluating projects submitted to the Board.

2. 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

1. 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.

2. Projects evaluated will be ranked by their total score.

3. 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.

Page 4 of 6

Adopted

MOA Regarding Use of CMAQ Funds in Fairbanks

E. **Conflict Resolution Process**

Conflicts regarding the submission of a project listing to NR, including the 1. 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**

This agreement shall be effective upon signature of all parties and binding until A. amended or revoked. The anticipated duration of the agreement is tied to the PM 2.5 nonattainment 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.

An interagency consultation process shall be used for revision of the MOA as B. necessary.

VI. SIGNATORIES

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

E., Chair, FMATS Larry Hartig Commissioner, ADEC avor Luke Hopkins Fairbanks North Star Borough

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

Reviewe epartment Date:

Appendix III.D.5.12-101

Date

Page 5 of 6

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