# **Alaska Department of Environmental Conservation**



## Amendments to: State Air Quality Control Plan

# Vol. III: Appendix III.D.7.14

### {Appendix to Volume II. Analysis of Problems, Control Actions; Section III. Area-wide Pollutant Control Program; D. Particulate Matter; 7. Fairbanks North Star Borough PM2.5 Control Plan, Serious Requirements}

# Adopted

November 19, 2019

Michael J. Dunleavy Governor

Jason W. Brune Commissioner (This page serves as a placeholder for two-sided copying)

### Appendix III.D.7.14

### Contents

Affidavit of Public Hearing, signed July 12, 2019, by Cindy Heil

Affidavit of Response to Comments, signed November 19, 2019, by Alice Edwards

The following documents are included as part of the Appendix, however due to their electronic nature, they may be found posted separately at: http://dec.alaska.gov/air/anpms/communities/fbks-pm2-5-serious-sip/

- <u>MOVES2014b Importer Inputs YYYY SerSIP.xls Files</u> These are Excel spreadsheet inputs used to generated the county-level MOVES2014b input databases for each of the calendar years for which modeling inventories or Motor Vehicle Emission Budgets (MVEBs) were generated under the Serious SIP. The "YYYY" notation in the filename refers to one of the following calendar years: 2013, 2017, 2019, 2020, 2023, 2024, 2026, 2029 or 2032.
- MOVES2014b\_Fbks\_YYYY NAArea MVEB.mrs Files These are the MOVES2014b "runspec" inputs for the MOVES2014b county-level "Inventory Mode" runs used to develop the MVEBs and on-road RFP inventories for the PM<sub>2.5</sub> nonattainment area. Again, "YYYY" is the calendar year used for RFP inventories or MVEBs as follows: 2013, 2017, 2020, 2023, 2026, 2029, 2032.
- <u>MOVES2014b\_Importer\_YYYY\_MVEB.xml Files</u> This set of files are XML scripts used to automate the process of importing the MOVES input data from the Excel spreadsheet into the MOVES2014x input databases prior to execution of the model. Again, "YYYY" in the filename refers to the calendar year.
- <u>Importer\_SerSIP\_MVEB\_2013-2032.bat</u> This is a DOS batch-file used to run the XML scripts that generate the MOVES input databases for all the RFP/MVEB nonattainment area runs.
- <u>MOVESRun\_SerSIP\_MVEB\_2013-2032.bat</u> This is the DOS batch-file used to execute MOVES2014b for all RFP/MVEB calendar years using the calendar year-specific runspec files and MOVES input databases as described above.
- <u>moves2014b\_fbks\_YYYY\_naarea\_mveb\_mm\_Files</u> The files are MOVES2014b input databases and output databases for the RFP/MVEB model runs for the nonattainment area. "YYYY" in the filename refers to the calendar year. And "mm" at the end of the filename identifies the database as either an input database (mi) or output database (mo).
- <u>MOVES2014b\_NAArea\_FinalMVEB\_InventoryMode\_Runs.xlsx</u> This is an Excel spreadsheet in which the RFP/MVEB nonattainment area emissions were calculated from the "movesoutput" and "movesactivityoutput" tables imported from each calendar year-specific MOVES output database. The "EmisTabs" sheet in the workbook contains tabulated on-road emissions by MOVES Source Use type, fuel type, pollutant,

process and calendar year to which plug-in adjustments were applied for PM<sub>2.5</sub> (for light-duty gasoline starting exhaust only). This spreadsheet also includes Inventory mode outputs for the nonattainment area for the modeling inventory years (2013, 2019, 2024 and 2029) that were used to cross-check SMOKE/MOVES-based episodic emissions for each of these years.

• <u>Fairbanks\_PlugIn\_Benefit\_Calcs\_SerSIP.xlsx</u> – Finally, this an Excel spreadsheet used to generate relative emission benefits (% reductions) of plug-in use as a function of ambient temperature and MOVES2014b soak time interval based on multivariate regression fit of emissions testing from the 2010-2011 Fairbanks Plug-in/Soak Testing program. Cell O78 of the "RevisedCalcs" sheet is the user-input ambient temperature for which benefits are calculated and reported in cells R86:T86. (-11.8°F is the average temperature for the 35 modeling episode days used in the Serious SIP.)

#### AFFIDAVIT OF ORAL HEARINGS

I, Cynthia Heil, Environmental Program Manager of the Department of Environmental Conservation, being sworn, state the following:

On June 26, 2019, at 1200-1331, Fairbanks North Star Borough, 907 Terminal St., Assembly Chambers, Fairbanks, AK; and 1700-2000 at the Fairbanks North Star Borough, 907 Terminal St., Assembly Chambers, Fairbanks, AK, I presided over public hearings held under AS 44.62.210 for the purpose of taking testimony in connection with the adoption of changes to 18 AAC 50, Air Quality Control to:

- (1) Amend 18 AAC 50.030 to adopt revisions to the *State Air Quality Control Plan*. Those revisions include
  - a. a new section in Volume II, Section III.D.7: Fairbanks North Star Borough (FNSB) Fine Particulate Matter (PM-2.5) Serious State Implementation Plan (SIP);
  - b. amending Volume III Appendix to Volume II Section II to incorporate the proposed regulations after public review and comment. This appendix within the *State Air Quality Control Plan* contains the state's air quality regulations.
- (2) Amend 18 AAC 50.075 to add requirements regarding visible emissions.
- (3) Amend 18 AAC 50.076 to add requirements for wood sellers.
- (4) Amend 18 AAC 50.077 to add requirements for wood-fired heating devices within the serious nonattainment area.
- (5) Amend 18 AAC 50.078 to include new control measures related to diesel fuel use and smaller commercial sources of PM-2.5 within the serious nonattainment area.
- (6) Amend 18 AAC 50.079 to add requirements for coal-fired heating devices.
- (7) Amend 18 AAC 50.990 to add definitions.

Date: July 12, 2019

Cynthia Heil, Environmental Program Manager

Subscribed and sworn to before me at

on

Notary Public in and for the State of Alaska



Appendix III.D.7.14-5

on

#### AFFIDAVIT OF AGENCY RECORD OF PUBLIC COMMENT

I, Alice Edwards, Director of the Division of Air Quality for the Department of Environmental Conservation, being duly sworn, state the following:

In compliance with AS 44.62.215, the Department of Environmental Conservation has kept a record of its use or rejection of factual or other substantive information that was submitted in writing and orally as public comment and that was relevant to the accuracy, coverage, or other aspect of the Department of Environmental Conservation regulation relating to fine particulate matter (PM-2.5) including a new State Implementation Plan intended to meet federal requirements for the serious nonattainment area within the Fairbanks North Star Borough (FNSB).

Date: 11/19/2019

Alice Edwards, Director, Air Quality

Subscribed and sworn to before me at

2019

Notary Public in and for the State of Alaska

[NOTARY SEAL]

