

**SUBJECT:** AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY REPEALING MSB 8.30 ENVIRONMENTAL PROTECTION; REPEALING MSB 8.33 AIR QUALITY ALERTS AND EMERGENCIES; ADOPTING MSB 8.75 AIR QUALITY; AMENDING MSB 1.45.100 SCHEDULE OF FINES FOR INFRACTIONS; AND AMENDING MSB 15.24.030 ADOPTING THE MATANUSKA-SUSITNA BOROUGH AIR QUALITY MANAGEMENT PLAN; AND A RESOLUTION AUTHORIZING THE BOROUGH MANAGER TO ENTER INTO AN UPDATED MEMORANDUM OF UNDERSTANDING WITH THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION FOR AIR QUALITY COORDINATION.

**AGENDA OF:** February 19, 2019

**ASSEMBLY ACTION:**

OR 19-032 & RS 19-022 Amended, adopted (Pt held)  
w/ Leonard, McKee & Summer opposed  
@ 3/5/19 RM

**MANAGER RECOMMENDATION:** Introduce and set for public hearing.

**APPROVED BY JOHN MOOSEY, BOROUGH MANAGER:**

Route To:	Department/Individual	Initials	Remarks
	Originator; B. Blackburn	BBB	
	Planning and Land Use Director	EP	
	Finance Director	CX	
	Borough Attorney	TS	
	Borough Clerk	JRM	2/11/19

**ATTACHMENT (S):** Fiscal Note: YES X NO       

Draft Air Quality Management Plan (16 pp)  
Proposed Memorandum of Understanding (5 pp)  
Current Memorandum of Understanding (3 pp)  
Current Code MSB 8.30 & 8.33 (18 pp)  
Planning Commission Resolution 18-29 (3 pp)  
Resolution Serial No. 19-022 (3 pp)  
Ordinance Serial No. 19-032 (7 pp)

**SUMMARY STATEMENT:**

In recent years, the air quality monitor in the Butte has documented elevated levels of fine particle matter pollution (PM<sub>2.5</sub>). PM<sub>2.5</sub> pollution has well documented impacts on human health,

especially serious for children, the elderly as well as people with respiratory diseases like bronchitis, asthma, emphysema, heart problems, or diabetes. Current Borough Code related to air quality gives enforcement authority to the South Central Clean Air Authority (SCCAA) which is no longer in operation. By updating the code, the Borough can address the air quality issues at a local level while avoiding impacts to citizen health, minimizing associated health care costs, avoiding regulatory burden and ultimately tax payer costs.

Attached for your review is the code ordinance combining two code sections (MSB 8.30 Environmental Protection and MSB 8.33 Air Quality Alerts and Emergencies) into one (MSB 8.75) to eliminate outdated references to the SCCAA which has not been functional since its inception. The legislation will transfer air quality authority to the Matanuska-Susitna Borough (Borough) Planning and Land Use Department, create a Butte Air Quality District, and update 1.45.100 schedule of fines for infractions related to air quality. The proposed district and update to the fine schedule will allow the Borough to enforce outdoor open burning regulations in the Butte Air Quality District during times when an Air Quality Advisory has been issued, with the intention of limiting national air quality standard exceedances. This legislation also adopts the Air Quality Management Plan into MSB 15.24.030 which outlines activities the Borough will pursue as a part of a local, targeted air quality effort, and allows for the update of the Memorandum of Understanding (MOU) between the Borough and Alaska Department of Environmental Conservation (DEC) for Air Quality Coordination. The authority of the Borough to implement the code updates and the Air Quality Management Plan is pursuant to DEC approval through an executed MOU.

The Planning Commission unanimously passed Resolution 18-29 in support of Assembly adoption of this legislation on Monday, February 4<sup>th</sup>, 2019.

**AUTHORITY:**

In Borough Code Title 8.30, authority for air quality protection actions and enforcement is given to the SCCAA. This authority was to be composed of Mayors and Assembly members from Anchorage and the Borough to address interjurisdictional issues. As far as staff knows, the SCCAA was never fully established and has been inactive for over 20 years. Anchorage sunset their commission in 2011 and is currently rewriting their code to eliminate the SCCAA. This legislation proposes to eliminate the SCCAA and transfer the authority for air quality protection to the Borough Planning and Land Use Department.

## **BACKGROUND :**

The Borough has had an air quality MOU in collaboration with DEC since 1998. The purpose of the program is to protect public health, safety and the environment. As part of that MOU, DEC maintains air quality monitoring stations in Palmer and the Butte. The Borough and DEC issue air quality alerts when monitoring equipment detects air pollution levels above healthy standards. Alerts in the Borough are primarily issued for dust events (also known as coarse particulate matter or PM<sub>10</sub>) and PM<sub>2.5</sub>.

In recent years, the monitor located in the Butte has recorded PM<sub>2.5</sub> concentrations near or above the national standard, with increased number of exceedances in the last three years. Elevated PM<sub>2.5</sub> levels in the Butte area are exacerbated by inversions in the winter months that trap wood smoke from burn barrels, slash burning, and wood stoves close to the ground. If levels continue to rise, at least a portion of the Borough will be designated as a "nonattainment area" and the Borough will face mandatory federal regulations imposed by the Environmental Protection Agency through the DEC.

It is important to recognize that the Borough has not yet been declared a "nonattainment area" and this provides the opportunity to make decisions at the local level and avoid state and federal involvement. Right now, any efforts we implement within the Borough are at our community's discretion. However, if we do not address the problem, and our air quality levels in the Butte continue to exceed the national standards, we will be faced with federally mandated consequences that will last at least 20 years or more.

The first step for the Borough to manage our air quality resources at the local level is to ensure that the Borough has the authority to implement air quality programs that will address the PM<sub>2.5</sub> issue. Statewide, this authority is granted to DEC by the legislature and may be granted to a second-class borough through an MOU. An MOU does not give DEC any powers it does not already have, rather it gives the Borough the tools to manage local air resources in a way that is sensitive to our community's needs while avoiding additional greater federal and state involvement.

## **COMPLIANCE WITH BOROUGH COMPREHENSIVE PLAN**

The Matanuska-Susitna Borough Comprehensive Development Plan (Borough-wide Comprehensive Plan) was originally adopted in 1970 and contains sections addressing Borough-wide as well as community specific issues. The Borough-wide Comprehensive Plan, as amended in 2005, provides general goals and policy recommendations to help guide future development in order to enhance our quality of life

and the public health, safety, and welfare. Included in the adopted Borough-wide Comprehensive Plan are several goals and subsequent policies pertaining to air quality in the Mat-Su:

- Goal (T-2): Protect and enhance the Borough's natural resources including watershed, groundwater supplies and air quality
- Goal (LU-2): Protect and enhance the public safety, health, and welfare of Borough residents
- Goal (LU-4): Protect and enhance the Borough's natural resources including watershed, groundwater supplies and air quality
- Goal (CQ-1): Protect natural systems and features from the potentially negative impacts of human activities, including but not limited to land development

**RECOMMENDATION OF ADMINISTRATION:**

Staff respectfully recommends Assembly adoption of the ordinance, repealing MSB 8.30 Environmental Protection; Repealing MSB 8.33 Air Quality Alerts and Emergencies; adopting MSB 8.75 Air Quality; and amending MSB 15.24.030 adopting the Matanuska-Susitna Borough Air Quality Management Plan; and the resolution authorizing the Borough Manager to enter into an updated Memorandum of Understanding with the Alaska Department of Environmental Conservation for Air Quality Coordination

MATANUSKA-SUSITNA BOROUGH  
FISCAL NOTE

Agenda Date: February 19, 2019

SUBJECT: AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY REPEALING 8.30 ENVIRONMENTAL PROTECTION; REPEALING 8.33 AIR QUALITY ALERTS AND EMERGENCIES; ADOPTING 8.75 AIR QUALITY; AMENDING MSB 1.45.100 SCHEDULE OF FINES FOR INFRACTIONS; AND AMENDING 15.24.030 ADOPTING THE MATANUSKA-SUSITNA BOROUGH AIR QUALITY MANAGEMENT PLAN.

ORIGINATOR: Planning

FISCAL ACTION (TO BE COMPLETED BY FINANCE)	FISCAL IMPACT <u>YES</u> NO
AMOUNT REQUESTED *	FUNDING SOURCE <u>Fines</u>
FROM ACCOUNT #	PROJECT #
TO ACCOUNT: <u>100.000.000 3xx.xxx</u>	PROJECT #
VERIFIED BY: <u>Barbara Baumgardner</u>	CERTIFIED BY:
DATE: <u>2/7/19</u>	DATE:

EXPENDITURES/REVENUES:

(Thousands of Dollars)

OPERATING	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Personnel Services						
Travel						
Contractual						
Supplies						
Equipment						
Land/Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING						
CAPITAL						
REVENUE		*				

FUNDING:

(Thousands of Dollars)

General Fund						
State/Federal Funds						
Other		*				
TOTAL		*				

POSITIONS:

Full-Time						
Part-Time						
Temporary						

ANALYSIS: (Attach a separate page if necessary) \* Revenue determinate on fines collected

PREPARED BY:

PHONE:

DEPARTMENT:

DATE:

IM No. 19-040  
Resolution Serial No. 19-022  
OR 19-032

By: Brianne Blackburn  
Introduced: November 5, 2018  
Public Hearing: December 3, 2018  
Action: Approved

**MATANUSKA-SUSITNA BOROUGH  
PLANNING COMMISSION RESOLUTION NO. 18-29**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH PLANNING COMMISSION RECOMMENDING ASSEMBLY ADOPTION OF AN ORDINANCE REPEALING 8.30 ENVIRONMENTAL PROTECTION; REPEALING 8.33 AIR QUALITY ALERTS AND EMERGENCIES; ADOPTING 8.75 AIR QUALITY; AMENDING MSB 1.45.100 SCHEDULE OF FINES FOR INFRACTIONS; AND AMENDING 15.24.030 ADOPTING THE MATANUSKA-SUSITNA BOROUGH AIR QUALITY MANAGEMENT PLAN.

WHEREAS, the Mat-Su Borough wants to protect residents' way of life including their right to heat their homes with wood; and

WHEREAS, this legislation does not regulate wood stoves or other heat sources; and

WHEREAS, Alaska statute 29.35.055 allows the Matanuska-Susitna Borough (Borough) to establish a local air quality control program with Alaska Department of Environmental Conservation (DEC) approval through a memorandum of understanding (MOU); and

WHEREAS, the Matanuska-Susitna Borough has had an air quality program in collaboration with DEC since 1998; and

WHEREAS, PM 2.5 levels above the national air quality standard have been linked to a variety of cardiopulmonary health problems, including premature death; and

WHEREAS, the Butte air quality monitor has recorded concentrations of PM 2.5 at or above the national standard since 2014 and, as a result, the Borough is at risk of being designated

1M 19-040  
OR 19-032  
RS 19-022

as a nonattainment area by the Environmental Protection Agency (EPA); and

WHEREAS, nonattainment status could lead to mandated EPA oversight and restricted federal highway funds; and

WHEREAS, current Borough Code gives authority to the South Central Clean Air Authority which has not been active for over 20 years; and

WHEREAS, strategic planning is necessary, to avoid nonattainment status, by means of locally focused, cost-effective, and implementable air quality improvement policy.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Borough Planning Commission hereby recommends assembly adoption of the ordinance repealing MSB 8.30 Environmental Protection; Repealing MSB 8.33 Air Quality Alerts and Emergencies; adopting MSB 8.75 Air Quality; amending MSB 1.45.100 schedule of fines for infractions; and amending 15.24.030 adopting the Matanuska-Susitna Borough Air Quality Management Plan.

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Colleen Vague  
COLLEEN VAGUE, Chair

ATTEST

Mary Brodigan  
MARY BRODIGAN, Planning Clerk

(SEAL)

YES: *Vague, Anderson, Patterson, Chesbro, Elder, Alaskan,*  
NO: *and Mossanen*

APPROVED BY:

DATE:

# Matanuska-Susitna Borough Air Quality Management Plan

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ASSEMBLY DRAFT | FEBRUARY 2019



IM 19-040  
OR 19-032  
RS 19-022

## Table of Contents

<b>Executive Summary.....</b>	<b>3</b>
<b>List of Acronyms .....</b>	<b>4</b>
<b>Background .....</b>	<b>5</b>
Authority .....	5
Nonattainment Process .....	5
Particle Pollution .....	6
Health Impacts .....	6
Mat-Su Conditions .....	6
<b>Goals of this Plan .....</b>	<b>8</b>
<b>Implementation .....</b>	<b>9</b>
Public Notification & Education .....	9
Code Updates .....	9
Voluntary and Incentive-Based Programs .....	9
<b>Plan Evaluation .....</b>	<b>10</b>
<b>References.....</b>	<b>11</b>
<b>Appendices.....</b>	<b>12</b>
Air Quality FAQ.....	13

## Executive Summary

In recent years, the air quality monitor in the Butte has documented elevated levels of fine particle matter pollution (PM<sub>2.5</sub>) and the Environmental Protection Agency (EPA) has repeatedly warned the Matanuska-Susitna Borough (the Borough) that levels are threatening to exceed federal standards established to protect public health. The monitor located in the Butte has recorded PM<sub>2.5</sub> concentrations near or above the PM<sub>2.5</sub> 24-hour National Ambient Air Quality Standard (NAAQS), with increased number of exceedances in the last three years.

PM<sub>2.5</sub> pollution has well documented impacts on human health, especially serious for children, the elderly as well as people with respiratory diseases like bronchitis, asthma, emphysema, heart problems, or diabetes. The fine particles that make up PM<sub>2.5</sub> are small enough to penetrate into the lungs and bloodstream which can cause the heart to work harder to achieve the same rate of transfer.

It is important to recognize that the Borough has not yet been declared a “nonattainment area” by EPA which provides the Borough an opportunity to make decisions at the local level and avoid state and federal involvement. Right now, any efforts we implement within the Borough are at our community’s discretion. However, if we do not address the problem, and our air quality levels in the Butte continue to exceed the national standards, we will be faced with federally mandated consequences that will last at least 20 years. The Borough wishes to avoid a “nonattainment” designation and the serious fiscal and regulatory consequences for Borough tax payers.

This plan has been developed with established Borough priorities in mind and offers targeted solutions at a local level to managing our air quality resources. Through directed efforts in public notification and education, code updates, and voluntary and incentive-based programs, this plan aims to protect the air quality of Mat-Su Borough residents and visitors and reduce fine particle matter pollution in the Butte area to levels below the national standard.

## List of Acronyms

CAA	Clean Air Act
DEC	Alaska Department of Environmental Conservation
DV	Design Value
EPA	Environmental Protection Agency
MOU	Memorandum of Understanding
NAAQS	National Ambient Air Quality Standard
PM	Particulate Matter
PM <sub>10</sub>	Coarse particulate matter
PM <sub>2.5</sub>	Fine particulate matter
SIP	State Implementation Plan
SLAMS	State and Local Air Monitoring Station

## Background

### Authority

The Clean Air Act (CAA) is a federal law initially created by Congress in 1963 and then strengthened in 1970 to comprehensively address air pollution. As part of a comprehensive approach to air pollution, Congress also created the Environmental Protection Agency (EPA) and gave it the primary role in carrying out the law. In 1990, Congress revised and expanded the Clean Air Act, providing EPA even broader authority to implement and enforce regulations reducing air pollutant emissions.

Under the Clean Air Act, EPA is required to establish national ambient air quality standards (NAAQS) to protect public health based on the latest science and requires states to adopt enforceable plans, known as state implementation plans (SIP) to achieve these standards. The CAA covers the entire country; however, states, tribes, and local governments do a lot of the work to meet the Clean Air Act's requirements. Individual states may have stronger air pollution laws, but they may not have weaker pollution limits than those set by EPA.<sup>1</sup>

Alaska statutory authority for managing air quality is granted to the Alaska Department of Environmental Conservation (DEC) by the legislature.<sup>2</sup> As a second class borough, the Mat-Su may administer an air quality program with approval from the department through a cooperative agreement or Memorandum of Understanding (MOU)<sup>3</sup>. A local program allows a local government to develop targeted solutions for pollution problems that require special understanding of local industries, geography, housing, and other factors. A program implemented solely at either the state or federal level would be less responsive to local needs given the lack of community-level knowledge and resources.<sup>4</sup>

The Matanuska-Susitna Borough Comprehensive Development Plan (Borough-wide Comprehensive Plan) was originally adopted in 1970 and contains sections addressing Borough-wide as well as community specific issues. The Borough-wide Comprehensive Plan, as amended in 2005, provides general goals and policy recommendations to help guide future development in order to enhance our quality of life and the public health, safety, and welfare. Included in the adopted Borough-wide Comprehensive Plan are several goals and subsequent policies pertaining to air quality in the Mat-Su:

- Goal (T-2): Protect and enhance the Borough's natural resources including watershed, groundwater supplies and air quality
- Goal (LU-2): Protect and enhance the public safety, health, and welfare of Borough residents
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### Nonattainment Process

An area that is not violating the NAAQS is considered "in attainment." If the air quality in any region falls short of the NAAQS for a pollutant, then the EPA designates that region as "nonattainment" for that pollutant.<sup>5</sup> States with nonattainment areas are required to develop and carry out costly additional measures in its SIP in order to improve air quality.<sup>5</sup> These measures must be implemented locally and must be enforceable. If the state fails to submit or carry out an adequate SIP, or if the EPA disapproves of a submitted plan, then the EPA can restrict the state's use of federal highway funds in the nonattainment area or will require offsetting emissions reductions, at a two-to-one ratio, for industry in the nonattainment area.<sup>6</sup>

Once a non-attainment area demonstrates attainment (meets NAAQS), it must continue to demonstrate attainment for 20 years before being considered for a full “attainment area.” During that time, the area is responsible for implementing a maintenance plan and reporting to the EPA through the SIP.<sup>7</sup>

## Particle Pollution

The Borough experiences particle pollution or particulate matter (PM), which is a complex mixture of extremely small solid or liquid particles in the air. Some particles, such as dust, dirt, soot, or smoke, are large enough or dark enough to be seen with the naked eye and others are so small they can only be detected with a microscope. The size of the particles is directly linked to their potential for causing health problems. Particles less than 10 micrometers in diameter pose a risk to health because they can affect both the lungs and heart. Because of the risk to public health, the EPA is required to set National Ambient Air Quality Standards for PM pollution that specifies a maximum amount of PM to be present in outdoor air<sup>8</sup>, and this is measured as either coarse PM (PM<sub>10</sub>) or fine PM (PM<sub>2.5</sub>). There are different standards for PM<sub>10</sub> and PM<sub>2.5</sub> (table 1)<sup>9</sup>.

*Table 1 EPA PM National Ambient Air Quality Standards (NAAQS)*

Pollutant	Averaging Time	Level	Form
PM <sub>2.5</sub>	Annual Mean	12 µg/m <sup>3</sup>	Annual mean, averaged over 3 years
	24-hour	35 µg/m <sup>3</sup>	98 <sup>th</sup> percentile, averaged over 3 years
PM <sub>10</sub>	24-hour	150 µg/m <sup>3</sup>	Not to be exceeded more than once per year on average over 3 years

PM<sub>10</sub> includes particles that are 10 micrometers in diameter or less and it primarily comes from road dust, agricultural dust, river beds, construction sites, mining operations and similar activities<sup>10</sup>. PM<sub>2.5</sub> is less than 2.5 micrometers in diameter and is a product of combustion, primarily caused by burning fuels.<sup>11</sup>

## Health Impacts

PM<sub>2.5</sub> is associated with more severe health consequences: the smaller the particle, the greater the potential because the particles are small enough to slip through our natural defenses in the oral and nasal passages and penetrate farther into the respiratory tract. PM<sub>2.5</sub> particles can lodge in the very small air sacs of the lungs which can slow the transfer of oxygen and carbon dioxide and cause the heart to work harder to achieve the same rate of transfer.<sup>12</sup> This effect is most noticeable in children and the elderly as well as people with respiratory diseases like bronchitis, asthma, emphysema, or heart problems. However, particulate inhalation can affect all people and adverse effects may only appear after repeated low concentration exposures or exposure to extremely high concentrations.<sup>13</sup>

## Mat-Su Conditions

DEC maintains coarse particulate (PM<sub>10</sub>) and fine particulate (PM<sub>2.5</sub>) ambient air monitors at Butte and Palmer sites to describe existing air quality conditions within the Borough. Data are collected year-round at these sites and is available to the public at <http://dec.alaska.gov/Applications/Air/airtoolsweb/Aq/>.

The Borough primarily experiences PM<sub>10</sub> as blowing dust. When the Borough experiences high wind events, conditions are dry and low river levels expose large gravel bars and tidal flats (typical in fall and spring), large amounts of glacial silt can be stirred up and carried down the valleys. The Borough issues several air quality alerts per year because of these wind-blown dust events. Because these elevated PM<sub>10</sub> levels are from a natural source and often not reasonably controllable, rather than being required to

control the sources of dust pollution, the Borough is required to mitigate the impacts through air quality advisories and public education.<sup>12</sup>

Typical sources of PM<sub>2.5</sub> found in the Borough include outdoor burning of construction debris or trash (burn barrels), land clearing, and wood-fired heating devices. In the winter months, the Butte area can experience extended periods of inversions, where cold, dense air traps smoke close to the ground. This can cause elevated levels of PM<sub>2.5</sub>.<sup>12</sup> In recent years, the monitor located in the Butte has recorded PM<sub>2.5</sub> concentrations near or above the national standard to protect public health, with increased number of exceedances in the last three years (Table 2). Compliance is determined by the Design Value (DV) which is the three-year average of the annual 98<sup>th</sup> percentile monitored value (not the maximum value observed averaged over three years of data).

*Table 2 Butte PM<sub>2.5</sub> data 2012-2015. Note: 2015 and 2016 DV are within 1 from NAAQS (DEC). Highlighted cells are emphasized as DVs that were only considered in-compliance with the standard due to rounding.*

Year	Number of Exceedances (days)	98 <sup>th</sup> Percentile (µg/m <sup>3</sup> )	Design Value (DV)* (µg/m <sup>3</sup> )	Standard (µg/m <sup>3</sup> )
2012	4	33.4	33.7	35
2013	3	27.9	30.5	35
2014	8	38.1	33.1	35
2015	8	37.9	34.6	35
2016	2	29.2	35.1*	35
2017	4	26.2**	31.1**	35

\*DV<35.5 µg/m<sup>3</sup> round down to 35 and are in compliance

\*\* Preliminary Data

Since the start of the PM<sub>2.5</sub> measurements, the PM<sub>2.5</sub> concentrations at the Butte site hovered around 30µg/m<sup>3</sup>, which initially was far below the NAAQS. When EPA later tightened the standard in 2006 from 65 µg/m<sup>3</sup> to the current NAAQS of 35 µg/m<sup>3</sup>, the Butte site became a regulatory site per federal requirements. During this same time, the Palmer station has consistently recorded PM<sub>2.5</sub> levels far below the national standard (figure 3).<sup>14</sup>

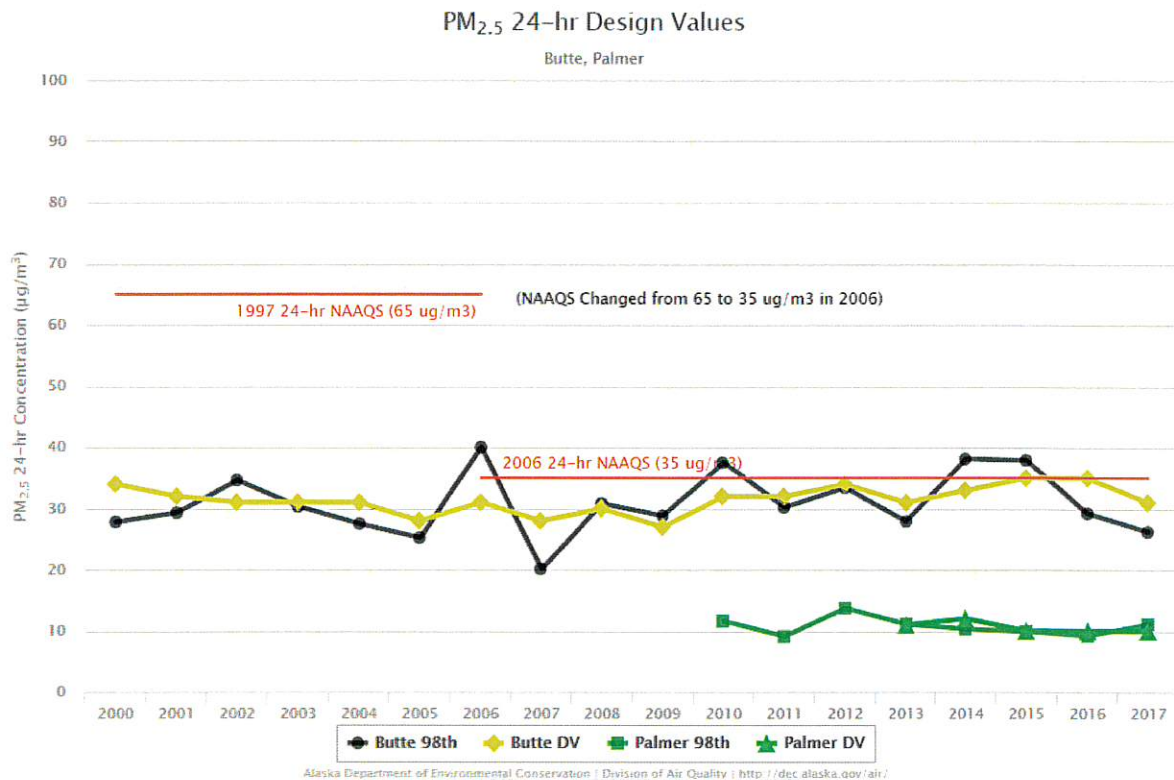


Figure 3 24-hour averaged PM<sub>2.5</sub> concentrations at Butte and Palmer Monitors (DEC)

## Goals of this Plan

The Mat-Su Borough is recognized for its abundant supplies of natural resources which has attracted people to this community for generations. Through the comprehensive planning process, the Mat-Su Borough has prioritized air quality protection to support the health, character, and economy of our community. This Plan addresses these goals of the Borough-wide Comprehensive Plan and provides guidance on implementing these goals to address community needs.

As an area that is in “attainment,” the Borough can make decisions regarding air quality locally, without measures being mandated at the federal or state level. This plan was developed to implement targeted solutions at a local level with the intent to:

1. Protect the air quality of Mat-Su Borough residents and visitors through education and communication.
2. Reduce fine particle matter pollution (PM<sub>2.5</sub>) in the Butte area to levels below the NAAQS (35  $\mu\text{g}/\text{m}^3$ ) established to protect health by decreasing the number of days that experience poor air quality (35  $\mu\text{g}/\text{m}^3$ ) to four or fewer days per year.
3. Protect Mat-Su residents’ way of life including their right to heat their homes with wood. This plan does not allow for the regulation of wood stoves or other heat sources.

## Implementation

### Public Notification & Education

Communicating with the public is critical to help the public gain a clear understanding of the air quality issues so people can make choices to protect their health and contribute to improving air quality. The following activities are geared towards notifying people of current conditions and offering opportunities for people to gain information about air quality through a variety of methods including the Borough's website, brochures, attendance at local events, school programs, and social media.

- **Alerts & Advisories:** The Borough will issue PM<sub>2.5</sub> and PM<sub>10</sub> forecasts and air quality alerts and advisories as needed throughout the year to address poor air quality. Alerts and advisories will include recommended actions to be taken if the concentrations of PM<sub>2.5</sub> or PM<sub>10</sub> in the ambient air has reached, or is likely in the immediate future to reach unhealthy levels, as identified by DEC (18 AAC 50.246).
- **Additional Signage:** Two digital highway signs will be rented and placed in key locations in the Butte area to relay critical air quality messages during winter months.
- **Website, Print & Social Media, Direct Mailings:** Communicate information to the public on how to protect our air quality, press releases and other announcements, and current air quality data through the website, print and digital media, and direct mailings.
- **Participation in Local Events:** The Borough will participate in local events to inform the public about air quality and sources that contribute to air quality.
- **School Outreach:** offer training and support to Palmer/Butte area schools in air quality education.

### Code Updates

Update MSB code to reorganize sections relating to air quality under one title, eliminate references to an outdated, inactive commission, and allow for creation of a localized air quality district.

- **Reorganization:** Repeal 8.30 Environmental Protection and 8.33 Air quality alerts and emergencies and adopt under a new section to consolidate all sections relevant to air quality.
- **Update Outdated Language:** Current MSB code (Title 8.30) gives authority for air quality protection to South Central Clean Air Authority that no longer exists. Updates to this code eliminate reference to this inactive Commission and will transfer air quality authority to the MSB Planning and Land Use Department.
- **Creation of a Butte Area Air Quality District:** An air quality district will allow the Borough to implement a localized program targeting enforcement of outdoor, open burning regulations during times when an air quality advisory has been issued, with the intention of protecting Mat-Su air quality resources and limiting national air quality standard exceedances.
- **Update Fine Schedule:** Will allow for enforcement of outdoor open burning regulations

### Voluntary and Incentive-Based Programs

Voluntary and incentive programs provide an effective, non-regulatory approach to reducing PM<sub>2.5</sub> by encouraging participation in targeted waste disposal discount programs and technology advancement through purchase, replacement, or retrofitting less efficient equipment for cleaner alternatives.

- **Dry Wood Use:** Encourage use of dry wood for heating through community-based programs that facilitate people acquiring dry wood during times of poor air quality.

- **Equipment Upgrades:** Explore opportunities for a cost-sharing match program to help homeowners practice proper wood storage as well as swap out inefficient wood burning stoves for cleaner alternatives such as natural gas fired devices (where infrastructure allows) and EPA certified wood and pellet stoves. If a successful model can be developed, the Borough will pursue grant funding to support these activities.
- **Limited Trash Disposal Coupon:** Provide residents in areas impacted by elevated PM<sub>2.5</sub> levels access to discounted trash disposal to minimize outdoor burning during high-risk times of the year (November-February).

## Plan Evaluation

The air quality activities described above will be implemented and evaluated regularly for success based on the following metrics:

- Periodic surveys of residents to determine general awareness of air quality issues and collect feedback on program activities. Evaluate for trends over the course of education campaign.
- Annual report of activities to include public outreach summary and progress toward stated goals and objectives.
- Analyze PM<sub>2.5</sub> and PM<sub>10</sub> data to identify trends and alignment with national standards.

## References

- <sup>1</sup>Information accessed on March 15, 2018 at [https://www.epa.gov/sites/production/files/2015-05/documents/caa\\_nutshell.pdf](https://www.epa.gov/sites/production/files/2015-05/documents/caa_nutshell.pdf)
- <sup>2</sup>[AS 46.03](#) ; [AS 46.14](#)
- <sup>3</sup>[AS 46.14.400](#)
- <sup>4</sup>Information accessed on March 15, 2018 at <https://www.epa.gov/sites/production/files/2015-08/documents/peg.pdf>
- <sup>5</sup>U.S. Code: [§7502](#)
- <sup>6</sup>U.S. Code: [§7503](#), [7509](#)
- <sup>7</sup>U.S. Code: [§7505\(a\)](#)
- <sup>8</sup>U.S. Code: [§7409](#)
- <sup>9</sup>Information accessed on March 15, 2018 at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>
- <sup>10</sup>Information accessed on March 15, 2018 at <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>
- <sup>11</sup>Information accessed on March 15, 2018 at <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics>
- <sup>12</sup>Alaska DEC, Air Quality Monitoring at Harrison Court, Butte, Alaska 1999-2010, 2011
- <sup>13</sup>World Health Organization, Effects of Particulate Matter, 2013
- <sup>14</sup>Personal communication with Denise Koch, DEC Division of Air Quality Director on February 5, 2018

## Appendices

## Air Quality FAQ

1. What is PM<sub>2.5</sub>?
2. What is PM<sub>10</sub>?
3. What air quality issues do we have in the Borough?
4. Does dust from glaciers cause air pollution?
5. Why should we be concerned about PM<sub>2.5</sub> pollution?
6. Why do we have or need air quality monitors in the Borough?
7. Where are air quality monitors in the Borough?
8. Why do we need air quality monitors?
9. Can the monitor in the Butte be moved to a better location?
10. Why are there only two monitoring stations when violations could affect the whole Borough?
11. Isn't it scientifically questionable to implement regulations based on just two monitors, one of which is in the worst possible place?
12. Why do we need an MOU with DEC?
13. What does the current (2006) MOU between Borough and DEC say?
14. Did the updated MOU proposed in January 2018 allow the borough to restrict the use of woodstoves?

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1. What is PM<sub>2.5</sub>?

Fine particulate matter, or PM<sub>2.5</sub> is less than 2.5 micrometers in diameter and is a product of combustion, primarily caused by burning fuels.

2. What is PM<sub>10</sub>?

Coarse particulate matter, or PM<sub>10</sub>, is less than 10 micrometers in diameter and it primarily comes from road dust, agriculture dust, river beds, construction sites, mining operations and similar activities. The Borough primarily experiences PM10 as blowing dust.

3. What air quality issues do we have in the Borough?

Borough primarily has documented 2 different particulate matter (PM) air quality issues. Areas in the Borough experience blowing dust particles, typically in the fall and spring, primarily from natural sources (glacial silt) and is therefore not required to control sources of dust pollution. The Butte area has documented elevated PM<sub>2.5</sub> levels which can be exacerbated by inversions in the winter months that trap smoke from wood stoves, burn barrels, and slash burning close to the ground.

4. Does dust from glaciers cause air pollution?

Dust is a form of particle pollution (see "what is PM<sub>10</sub>") and the Borough does experience elevated levels of PM<sub>10</sub>. When we experience high wind events, conditions are dry and low river levels expose large gravel bars and tidal flats (typical in fall and spring), large amounts of glacial silt can be stirred up and carried down the valleys. The Borough issues several air quality alerts per year because of these wind-blown dust events, but because these elevated PM<sub>10</sub> levels are from a natural source, and often not reasonably controllable, rather than being we are not

required to control the sources of dust pollution, we are required to mitigate the impacts through air quality advisories and public education.

**5. Why should we be concerned about PM<sub>2.5</sub> pollution?**

PM<sub>2.5</sub> is associated with more severe health consequences: the smaller the particle, the greater the potential to impact health because they are small enough to slip through our natural defenses in the oral and nasal passages and penetrate farther into the respiratory tract and even enter the bloodstream. PM<sub>2.5</sub> particles can lodge in the very small air sacs of the lungs which can slow the transfer of oxygen and carbon dioxide and cause the heart to work harder to achieve the same rate of transfer. These are similar to the health effects caused by the particles in cigarette smoke. This effect is most noticeable in children and the elderly as well as people with respiratory diseases like bronchitis, asthma, emphysema, or heart problems. However, particulate inhalation can affect all people and adverse effects may only appear after repeated low concentration exposures or exposure to extremely high concentrations.

**6. Why do we have or need air quality monitors in the Borough?**

DEC began monitoring ambient air quality in Palmer/Butte area in summer 1985 in response to smoke generated by fires used to clear land in Point Mackenzie. As a result of this sampling, heavy dust loads were detected, and, by the 1990's Borough complaints about dust in Butte/Palmer had increased.

**7. Where are air quality monitors in the Borough?**

Currently, there are two PM<sub>2.5</sub> (fine particulate matter) monitoring sites in the Borough Valley: one in Palmer, at S. Gulkana St. and one in the Butte, at Harrison Ct. In addition to the current monitors, previous sampling locations within the Borough include:

- Palmer Parks and Maintenance Building (1973-78)
- South Big Lake Road (1985- 2003, with PM<sub>2.5</sub> monitoring from 3/4/2000 to 12/31/2002)
- Kirsten Square - 1451 E Parks Highway (1/1/1986- 7/31/1986)
- Colony School Drive (4/11/1998-12/31/1998)
- Trapper Creek (Established in 2001, still ongoing monitoring for the NPS IMPROVE site, transport site for Denali National Park)
- 100 W Swanson Ave, Wasilla (1/1/2008-9/30/2012)- closed due to budget cuts and low measurement levels

**8. Why do we need air quality monitors?**

Federal requirements mandate at least one PM<sub>2.5</sub> State and Local Air Monitoring Station (SLAMS) for areas with populations between 50,000 and 500,000:

- At least one site must be placed in a location that is expected to have the maximum concentration. (Butte meets this requirement)
- At least one PM<sub>2.5</sub> monitoring location in an area with a most recent three-year design value that is ≥85% of any PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS). (Butte exceeds 85%)

- At least one PM<sub>2.5</sub> site to monitor regional background and regional transport. (Palmer site meets this requirement)

**9. Can the monitor in the Butte be moved to a better location?**

This site is considered a regulatory State and Local Air Monitoring Station (SLAMS) site. It is very difficult to get permission to remove a monitoring site. Federal rules require the following for removal of a PM<sub>2.5</sub> SLAMS site:

- The monitor has shown attainment and has a probability of less than 10% of exceeding 80% of the NAAQS during the next 3 years. (Butte cannot show this probability)
- A monitor that has not measured violations of the NAAQS in the previous five years (Butte has measured violations in the past 5 years)
- A PM<sub>2.5</sub> monitor which EPA has determined cannot be compared to the NAAQS because of its siting. (Butte does not have a siting issue)
- A SLAMS Monitor not eligible for removal under the above may be moved to a nearby location with the same scale of representation if logistical reasons beyond the state's control make it impossible to continue operation at its current site. (The Butte site is in a public right of way. This option section typically refers to sites on private property where the land owner wants to have the site removed.)

**10. Why are there only two monitoring stations when violations could affect the whole Borough?**

Ambient air quality monitoring is expensive. Monitoring stations have to be set up for at least 3 years to produce sufficient data to compare to the national standards. This requires a lot of money for equipment and staff. In recent years, due to the State budget situation, the State has reduced the number of monitoring stations. DEC currently does not have the staff or funding to expand the monitoring network. DEC relies on public complaints to identify other areas of concern.

**11. Isn't it scientifically questionable to implement regulations based on just two monitors, one of which is in the worst possible place?**

When setting up air monitoring to represent an area, at least one of the sites is required to be in an area with the highest air pollution. When funding is limited, and resources exist only for one site, it should be located in the area of highest impact. In this way, a limited monitoring network is still protective of the public and when that monitor shows good air quality, one can assume that the other areas are clean as well.

**12. Why do we need an MOU with DEC?**

Simply put, the Borough does not have the authority to manage local air quality programs without an MOU with the State. The Alaska State Legislature has mandated that the Alaska DEC assess, evaluate, and mediate environmental issues that may affect the health and welfare of residents within the state (Title 46 of the Alaska Statutes). Authority for managing air quality can be delegated to a second class borough (AS 29.35.210) through AS 46.14.400 which requires DEC approval of any local program through a cooperative agreement or MOU. Without an MOU, the Borough does not have broad powers to create or manage local air quality programs which include actions like updating outdated Air Quality Code ([Matanuska-Susitna Borough Code 8.30](#)),

implementing a voluntary cost-share program for homeowners looking to improve the efficiency of their home heating devices, or providing a seasoned-wood swap out program.

**13. What does the current (2006) MOU between Borough and DEC say?**

The current MOU has been in effect since 2006 and it focuses primarily on DEC and the Borough working together to ensure that air monitoring results and health effects are communicated to the public. In this MOU, DEC supplies and operates the monitors and assists the Mat-Su Borough in communicating advisories and alerts. It is important to note that these advisories and alerts relate not only to PM<sub>2.5</sub> issues, but also to PM<sub>10</sub> and is a critical notification for people that can have major health impacts when air quality is compromised.

**14. Did the updated MOU proposed in January 2018 allow the borough to restrict the use of woodstoves?**

No. The MOU in and of itself does not allow the Borough to restrict citizen use of wood stoves. Such restriction would require a code change and assembly action including public hearing and assembly vote. Wood stoves are an important heating source for many residents especially in areas where other heating sources such as natural gas are not available. Residents are encouraged to purchase wood stoves that meet efficiency standards and operate and maintain them properly.

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
AND  
MATANUSKA-SUSITNA BOROUGH  
FOR  
AIR QUALITY COORDINATION**

I. Purpose

The purpose of this memorandum of understanding (MOU) is to clarify the joint responsibilities between the Alaska Department of Environmental Conservation (DEC) and the Matanuska-Susitna Borough (Borough) for air quality control and monitoring within the Borough with an emphasis on fine particulate matter (PM<sub>2.5</sub>) and coarse particulate matter (PM<sub>10</sub>). Both parties recognize that clear lines of responsibilities must be established and maintained to maximize the efficient utilization of available resources and to protect the public's health and safety to the greatest extent possible. Therefore, the two parties agree to enter into this MOU.

II. Ambient Air Monitoring/Air Quality Forecasting/Air Quality Alerts and Advisories

DEC will maintain and operate the network coarse particulate (PM<sub>10</sub>) and fine particulate (PM<sub>2.5</sub>) ambient air monitors to describe existing air quality conditions within the Borough. The Borough will issue PM<sub>2.5</sub> and PM<sub>10</sub> air quality alerts and advisories through the State Air Quality Advisory website and mailing list as well as through the Borough process. DEC will provide technical and back-up support for air quality advisories related to the ambient air monitoring network.

DEC will:

- operate and maintain the PM<sub>10</sub> and PM<sub>2.5</sub> ambient air and meteorological monitoring network as required in accordance with state and federal regulations, guidelines, and the yearly DEC/EPA Air Program work plan;

- conduct special air monitoring studies of criteria pollutants to identify/better define air quality problem areas, as necessary and as funding and staffing allow;

- send to 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.;

- 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 air quality alerts, advisories and forecasts, provide access to the State's Air Advisory web site for posting advisories, and assist the distribution of information to the public and interested parties;

provide training to Borough staff on the State's Air Advisory System and other forecasting tools;

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; and

issue, air quality alerts and advisories in back up capacity, if needed

The Borough will:

issue PM<sub>2.5</sub> and PM<sub>10</sub> forecasts to address air quality concerns. A daily forecast will be provided during periods of poor air quality. The forecast will be posted on the Borough's and State's web page and the Borough's phone system, including holiday and weekend projections made the previous workday, when appropriate; and

issue, as needed, air quality alerts and advisories for both PM<sub>10</sub> and PM<sub>2.5</sub> throughout the year.

### III. Air Quality Planning and Implementation

The Borough will initiate efforts to maintain the national ambient air quality standard (NAAQS) for fine particulate matter (PM<sub>2.5</sub>). 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 PM<sub>2.5</sub> standard.

DEC will:

provide technical and administrative assistance to the Borough;

work with the Borough to develop additional programs that will:

- aid the Borough in maintaining the health based standard for PM<sub>2.5</sub> in the Butte 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 Butte area.

Assist and coordinate with the Borough on public outreach and education

activities; and

Notify and consult with the Borough regarding any proposed state programs or regulations that could impact a local control program or activities within the Borough.

The Borough will:

Implement an air quality management plan with the goal of maintaining national ambient air quality standards

implement reasonable and cost effective strategies that assist in mitigating PM<sub>2.5</sub> air pollution to include voluntary or incentive programs

Conduct public outreach and education for air quality health effects and other impacts and ways to mitigate air pollution.

#### IV. 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, prescribed burning operations of 40 acres or greater per year, and for the open burning of petroleum-based materials or other materials that give off black smoke.

DEC will:

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

advise applicants to contact the Borough regarding any Borough Codes pertaining to open burning.

The Borough will:

advise DEC if the Borough re-establishes any open burning ordinances and permit procedures;

at its discretion establish open burning ordinances as efforts towards maintaining attainment of the PM<sub>2.5</sub> standard, especially in the Butte area; and

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

#### V. Complaint Response

DEC and the Borough will collaborate in the response, investigation, compliance assistance and enforcement stemming from public complaints regarding air pollution within the Borough.

VI. Notice/Project Contacts

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 this agreement.

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

For purposes of this agreement, the Borough's project manager is,  
Planning Director, Matanuska-Susitna Borough

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.

VII. It is mutually agreed:

1. that the Borough and DEC shall maintain staff to carry out the activities necessary to administer the air quality programs outlined in this agreement;
2. that amendments to this agreement may be proposed by either party and shall become effective upon approval of both parties.
3. that 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.
4. Nothing in this agreement shall be construed as obligating the Borough or DEC to expend any funds in excess of appropriations authorized by this MOU (none requested or authorized at this time).
5. Nothing in this agreement shall be construed as obligating the expenditure of any funds not authorized by the Matanuska-Susitna Borough Assembly.
6. Nothing in this agreement gives authority to MSB to regulate wood stoves or other heat sources

VIII. 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 30 days' written notice by either party.

Alaska Department of  
Environmental Conservation

Matanuska-Susitna Borough

By: \_\_\_\_\_  
Jason W Brune  
Commissioner

By: \_\_\_\_\_  
John Moosey  
Borough Manager

Date: \_\_\_\_\_

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Elizabeth Pederson  
DEC Finance Officer

Date: \_\_\_\_\_

**MAT-SU BOROUGH**  
**AND**  
**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**MEMORANDUM OF UNDERSTANDING**  
**FOR**  
**AIR MONITORING IN THE MAT-SU VALLEY**

This memorandum of understanding (MOU) is made and entered into between the Alaska Department of Environmental Conservation, hereinafter referred to as DEC, and the Matanuska-Susitna Borough, hereinafter referred to as the Mat-Su Borough.

**PURPOSE AND OBJECTIVE**

This MOU was developed for the purpose and objective of developing a cooperative process for conducting air monitoring in the Mat-Su Valley to support an assessment of particulate matter due to natural and anthropogenic sources. This MOU identifies each party's responsibilities for ensuring that mutually agreeable and representative sites are chosen, equipment is installed in a timely manner, and power and phone access is available for monitoring equipment.

**RECITALS**

WHEREAS, the DEC believes it is in the best interest of the State of Alaska to form a cooperative partnership with the Mat-Su Borough to assess environmental concerns identified by all parties; and

WHEREAS, the DEC possesses expertise in air monitoring and desires to build capacity for conducting environmental assessments in Alaskan communities; and

WHEREAS, the DEC possesses air monitoring equipment which it is willing to site in Alaskan communities; and

WHEREAS, the DEC wishes to help the Mat-Su Valley governments determine which air pollutants are impacting the health of their residents; and

WHEREAS, the Mat-Su Borough desires to protect the Air Quality of Mat-Su Borough residents and visitors;

Now, therefore, in consideration of benefits to be derived by each party, it is hereby agreed as follows:

## GENERAL AGREEMENT

### I. PARTIES/PURPOSE:

The Mat-Su Borough, 350 East Dahlia Avenue, Palmer, Alaska, 99645, enters into an agreement with the State of Alaska, Department of Environmental Conservation, Division of Air Quality, 555 Cordova Street, Anchorage, Alaska 99501 ("DEC").

### II. GENERAL OBLIGATIONS OF THE PARTIES:

Under this agreement the Mat-Su Borough will through its Environmental Program:

- Assist the DEC in identifying potential air monitoring sites;
- Assist the DEC in surmounting logistical concerns in monitoring site selection where possible (e.g. land use permission, power and phone connectivity);
- Take an active role in communicating the real-time, online availability of air monitoring results and health effects to local residents.

Under this agreement the Department of Environmental Conservation will:

- Supply all air monitoring instrumentation, parts, supplies, and manpower for monitoring projects in Mat-Su Valley. DEC will be responsible for utility costs (power/phone) associated with the monitoring sites.
- Serve as "technical experts" in the area of ambient air monitoring and provide information, if requested, on air monitoring sampling methods and protocols specific to this project.
- Assist the Mat-Su Borough in communicating the real-time online availability of air monitoring results and health effects to local residents.

### III. EFFECTIVE/TERMINATION DATE:

This MOU will become effective upon signature of both parties and remain in effect until the termination of this project. Either party, with a 30-day-advance written notice, may terminate this agreement.

### IV. MISCELLANEOUS PROVISIONS:

1. Nothing in this agreement shall be construed as obligating the Mat-Su Borough or DEC to expend any funds in excess of appropriations authorized by this MOU (none requested or authorized at this time).
2. Modifications to this agreement may be made only in writing and signed by both Parties.

Project Officers

Mat-Su Borough  
Sev Jones  
Chief of Planning  
350 East Dahlia Avenue  
Palmer, Alaska 99645  
(907) 7459856  
[Sjones@matsugov.us](mailto:Sjones@matsugov.us)

Alaska Department of Environmental Conservation  
Heidi Strader  
Environmental Project Specialist  
555 Cordova St  
Anchorage, AK 99501  
907 269-7676  
[heidi\\_strader@dec.state.ak.us](mailto:heidi_strader@dec.state.ak.us)

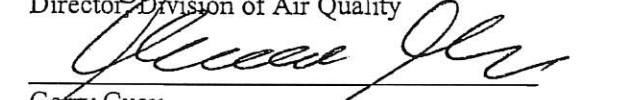
IN WITNESS WHEREOF, each party hereto has caused this MOA to be executed by an authorized official on the day and year set forth opposite his/her signature.

Alaska Department of Environmental Conservation:

Date: 6/20/06

  
Thomas W. Chapple  
Director, Division of Air Quality

Date: 6/19/06

  
Geoffry Guay  
Program Manager, Monitoring & Quality Assurance

Mat-Su Borough:

Date: 5-12-06

  
John Duffy  
Matanuska-Susitna Borough Manager

**CHAPTER 8.30: ENVIRONMENTAL PROTECTION**

## Section

## Article I: South Central Clean Air Authority; General Provisions

- [8.30.010](#) Definitions
- [8.30.015](#) Authority established; governing body
- [8.30.020](#) Authority; organization, voting and compensation
- [8.30.025](#) Authority; powers and duties
- [8.30.030](#) Executive Director; appointment and duties
- [8.30.035](#) Variances
- [8.30.040](#) Federal and state law
- [8.30.045](#) Air pollution inspections
- [8.30.050](#) Notice of violation
- [8.30.055](#) Compliance orders
- [8.30.060](#) Voluntary compliance
- [8.30.065](#) Appeals
- [8.30.070](#) Judicial review
- [8.30.075](#) Confidentiality of records
- [8.30.080](#) Remedies [Repealed]
- [8.30.090](#) Violations, enforcement, and penalties

## Article II: Clean Air Standards

- [8.30.110](#) Application of article
- [8.30.115](#) Ambient air quality standards
- [8.30.120](#) Open burning
- [8.30.125](#) Incinerators
- [8.30.130](#) Industrial processes and fuel-burning equipment
- [8.30.135](#) Pulp mills
- [8.30.140](#) Motor vehicle emissions
- [8.30.145](#) Marine vessels
- [8.30.150](#) Air pollution prohibited
- [8.30.155](#) Permit to operate
- [8.30.160](#) Revocation or suspension of permit
- [8.30.165](#) Air episodes
- [8.30.170](#) Source testing
- [8.30.175](#) Circumvention

**ARTICLE I: SOUTH CENTRAL CLEAN AIR AUTHORITY; GENERAL PROVISIONS****8.30.010 DEFINITIONS.**

(A) For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

- (1) "Air contaminant" means dust, fumes, mist, smoke, fly ash and other particulate matter, vapor, gas, odorous substances, or any combinations thereof.
- (2) "Air curtain incinerator" means an incinerator in which large quantities of combustible materials are burned in a rectangular container which is equipped with an overfire air system.
- (3) "Ambient air" means that portion of the surrounding atmosphere which may affect persons in the area.
- (4) "Authority" means the South Central Clean Air Authority.
- (5) "Commission" means the South Central Clear Air Authority.
- (6) "Director" means the director of the South Central Clean Air Authority or the director's authorized representative.
- (7) "Emission" means the release of air contaminants into the environment.
- (8) "Facility" means a unit or multiple units built, installed or established to serve a particular purpose.
- (9) "Fuel-burning equipment" means any combustion device or part of the device capable of emission, but excludes mobile internal combustion engines, incinerators, marine vessels, indoor fireplaces, backyard barbecues, and home cooking devices.
- (10) "Incinerator" means any equipment, device or contrivance, excluding indoor fireplaces, used for the thermal reduction of garbage or other wastes.
- (11) "Opacity" means the characteristic of a substance which renders it partially or wholly impervious to transmittance of light and causes obstruction of an observer's view.
- (12) "Open burning" means the burning of any material so the products of combustion are emitted directly into the ambient air without passing through a stack or flare.
- (13) "ppm" means parts per million by volume.
- (14) "Particulate matter" means any material, except water, which is or has been airborne and exists as a liquid or a solid at standard conditions.

- (15) "Person" means any individual, public or private corporation, political subdivision, government agency, municipality, industry, partnership, association, firm, trust, estate or any other entity.
- (16) "Putrescible matter" means material which decomposes so quickly it causes a nuisance or obnoxious odors.
- (17) "Reduction of visibility" means the obscuration of an observer's vision, as determined by the method of observation described in the U.S. Bureau of Mines Information Circular No. 8333, dated May 1967, Department of the Interior, and modified to account for equivalent opacity.
- (18) "Source" means anything which may emit air contaminants.
- (19) "Stack" means any chimney or conduit through which air or air contaminants are emitted into the environment.
- (20) "Standard conditions" means a dry gas at a temperature of 70° F. and a reference pressure of 14.7 pounds per square inch.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.015 AUTHORITY ESTABLISHED; GOVERNING BODY.**

(A) There is established a South Central Clean Air Authority which shall administer this chapter within a designated area of the Matanuska-Susitna Borough and exercise all powers vested in that authority by law. The geographic boundaries of the South Central Clean Air Authority shall be those of the borough and the municipality of Anchorage, and the following area of the borough:

Beginning at the NE Corner of Section 15, T16N, R1E (projected), Seward Meridian, State of Alaska, said corner being at or approximately at the Alaska Railroad bridge over the Knik River; thence in a northerly direction across the mouth of the Matanuska River to a point intersecting the T17N line; thence westerly along the T17N line to a point intersecting the western bank of the Little Susitna River; thence northerly along the western bank of the Little Susitna River to a point intersecting the T19N; thence westerly along the T19N line to the west bank of the Big Susitna River; thence northerly along the west bank of the Big Susitna River to the point at which the Chulitna River branches off the Big Susitna River; thence northerly along the west bank of the Chulitna River to a point of intersection with the southern boundary of Denali State Park; thence westerly along the southern boundary of Denali State Park to a point meeting the southern boundary of Denali National Monument; thence westerly along the southern boundary of the Denali National Monument along the line of T25N extended to the western boundary of Matanuska-Susitna Borough; thence following the Matanuska-Susitna Borough boundary first south and then in an easterly direction up Cook Inlet and Knik Arm to the point of beginning. A more detailed legal description is available from the south central clean air

authority.

(B) The South Central Clean Air Authority, consisting of six members, is established to perform those functions described in MSB [8.30.025](#).

(C) Three authority members shall be appointed in a manner provided in the Anchorage Municipal Code; the remaining members shall consist of two members of the assembly of the borough and the mayor.

(D) The assembly shall appoint two assembly members to the authority for terms equal to the duration of the assembly members' elected terms and shall appoint new assembly members to the authority in the event of a vacancy.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 90-028AM, § 6, 1990; Ord. 80-32, § 2 (part), 1980)

#### **8.30.020 AUTHORITY; ORGANIZATION, VOTING AND COMPENSATION.**

(A) The authority shall meet biannually and shall annually elect a presiding officer and other officers as appropriate. Officers shall serve terms of one year and may be reelected to their positions.

(B) A quorum shall consist of four members of the authority. No action of the authority may be taken except upon concurrence of at least four members.

(C) The authority shall determine its own rules of procedure, order of business, and place of meeting.

(D) Members may be paid per diem and travel expenses for meetings outside of the borough as provided by the assembly.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.025 AUTHORITY; POWERS AND DUTIES.**

(A) The authority:

(1) shall hear appeals from decisions of the director concerning applications for variances, permits or other entitlements, appeals from enforcement orders and other decisions of the director for which appeals are authorized under MSB [8.30.065](#);

(2) shall advise the Municipality of Anchorage and the Matanuska-Susitna Borough mayors and assemblies regarding enactment or revision of legislation affecting air quality within the authority;

(3) may hold public hearings as necessary for administration and enforcement of regulations of the authority, state law and municipal ordinances, compel the attendance of witnesses and the

production of evidence, and adopt rules of procedure as it finds reasonable and necessary for holding public hearings; and

(4) may issue orders or take other action necessary to decide appeals made to the authority under subsection (A) of this section, and to enforce decisions and orders made following those appeals.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.030 EXECUTIVE DIRECTOR; APPOINTMENT AND DUTIES.**

(A) The administrative powers of the South Central Clean Air Authority shall be exercised by an executive director.

(B) The executive director shall be appointed by the manager or alternatively, the manager may contract with the municipality of Anchorage, other governmental agency, or person for the services of an executive director.

(C) The executive director:

- (1) shall act upon applications for variances pursuant to MSB [8.30.035](#);
- (2) shall decide applications for permits submitted to the authority under this chapter;
- (3) shall determine the existence of, and order curtailment actions for air episodes consistent with MSB [8.30.165](#);
- (4) may require the owner or operator of air contaminant sources to install, maintain and operate emission or ambient monitoring devices or both, and to furnish data collected to the director; gather data concerning air pollution within the district, conduct research and investigation into the causes and prevention of air pollution and conduct other related and scientific and technical investigations;
- (5) shall enforce this chapter and the orders and regulations promulgated by the authority and its member governments;
- (6) may render general administrative services to the authority and its member governments and other duties as assigned by the authority or required to administer this chapter;
- (7) shall serve as an ex officio member and secretary of the authority; and
- (8) may apply for, receive and administer and expend federal aid, state aid and other funds for the control of air pollution or the development and administration of programs related to that control in accordance with the approved budget of the borough and the authority.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.035 VARIANCES.**

(A) A person who owns or is in control of a plant, building, structure, establishment, process or equipment may apply to the authority for a variance from applicable emission control regulations. The director may grant the variances, but only after public hearing following due notice if it finds that:

- (1) the emissions occurring or proposed to occur do not endanger human health or safety; or
- (2) compliance with the rules or regulations from which variance is sought would produce severe hardship without benefits to the public.

(B) No variance may be granted under this section until the director has considered the relative interests of the applicant, other owners of property likely to be affected by the emissions, and the general public.

(C) A variance granted under subsection (A) of this section shall be for periods and under conditions consistent with the reasons for it and within the following limitations:

- (1) If the variance is granted on the ground that there is no practicable means known or available for the adequate prevention, abatement or control of the air pollution involved, it shall be only until the necessary means for prevention, abatement, or control become known and available, subject to the taking of substitute or alternate measures that the director may prescribe.
- (2) If the variance is granted on the ground that compliance with the particular requirement from which variance is sought shall necessitate the taking of measures which, because of their extent or cost, must be spread over a considerable period, it shall be for a period not to exceed the reasonable time, which in the opinion of the director is necessary; a variance granted on this ground shall contain a timetable for taking action in an expeditious manner and shall be conditioned on adherence to the timetable and shall be for not more than five years.
- (3) If the variance is granted on the ground that it is justified to relieve or prevent hardship of a kind other than that provided in subsections (C)(1) and (2) of this section, it shall be for not more than one year.

(D) The director may upon application renew an existing variance on terms and conditions and for periods which would be appropriate on initial granting of a variance. If complaint is made to the authority on account of the variance, no renewal of the variance may be granted unless after public hearing on the complaint following due notice, the director finds that renewal is justified. Application shall be made at least 60 days before the expiration of the variance. Immediately upon receipt of an

application for renewal the director shall give public notice of the variance.

(E) A variance or renewal is not a right of the applicant but is in the discretion of the director.

(F) No variance or renewal granted under this section may be construed to prevent or limit the application of the emergency orders of the director issued under MSB [8.30.140](#)(D) and [8.30.160](#).

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.040 FEDERAL AND STATE LAW.**

No person shall commit any act prohibited by, omit any act required by, or exceed any standard or limitation established by the Federal Clean Air Act, 42 U.S.C. § 7401, et seq., as amended, or Alaska Statutes Title 46, Article 4, as amended, or by any valid rule, regulation, emission standard or limitation, ambient air quality standard or performance standard promulgated pursuant to either federal or state legislation.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.045 AIR POLLUTION INSPECTIONS.**

The director may at a reasonable time and upon presentation of a proper search warrant, where required by the constitution of the United States or the state of Alaska, enter and inspect the property and premises where an air contaminant source is located or being constructed to ascertain the state of compliance with this article and the regulations promulgated pursuant to this article. No person may interfere with that inspection.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.050 NOTICE OF VIOLATION.**

When the director has evidence that a violation of this article, or regulation issued pursuant to this article, has occurred, the director may serve a written notice of violation upon the suspected violator. The notice shall specify the provision believed to be violated and the facts believed to constitute the violation, and may include a compliance order that necessary corrective action be taken within a specified time.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.055 COMPLIANCE ORDERS.**

A compliance order issued pursuant to MSB [8.30.050](#) shall become a final order unless, within ten days after receipt of service of the notice of violation and compliance order, the person named requests in writing a hearing before the authority in a manner provided in MSB [8.30.065](#).

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.060 VOLUNTARY COMPLIANCE.**

The director may attempt to obtain voluntary compliance through warning, informal conference, or other appropriate means.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.065 APPEALS.**

(A) Upon the written request by a person aggrieved by a decision of the director made under this article or any regulation enforced pursuant to this article, including a decision to deny a permit, to operate, or the issuance of a compliance order or variance no later than 30 days after that decision, the commission shall conduct a hearing to review the decision. The hearing shall occur no later than 30 days after receipt of the written request or as soon as a quorum of the commission may be convened after receipt of the request. After considering the evidence presented at the hearing, the commission shall affirm, modify or reverse the decision of the director except as otherwise provided by law.

(B) If, after a hearing held under subsection (A) of this section, the commission finds that a violation has occurred, it shall affirm or modify the compliance order previously issued or issue an appropriate compliance order for taking corrective action. If the commission finds that no violation has occurred, it shall rescind the previous order, if any. A compliance order issued as a part of a notice of violation or after a hearing may prescribe the date by which the violation shall cease and may prescribe time tables for necessary action in preventing, abating or controlling emissions.

(C) In connection with a hearing held under this section, the commission may compel the attendance of witnesses and the production of evidence; and enforce its orders and subpoenas in the manner provided by Alaska Civil Rule 45(g).

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.070 JUDICIAL REVIEW.**

A party to the appeal made to the commission under MSB [8.30.065](#) may appeal a final decision of the commission to the superior court, third judicial district no later than 30 days following that decision, pursuant to Rule 45 of the appellate rules of procedure. Review by the court shall be limited to whether the decision of the commission is supported by substantial evidence.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.075 CONFIDENTIALITY OF RECORDS.**

Records and information other than emission data in the possession of the director, which relate to production or sales figures or to processes or production techniques of the owner or operator of an air

contaminant source, are considered confidential records of the authority only upon application by the owner or operator and certification by the director that their public disclosure would tend to adversely affect the owner or operator's competitive position.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.080 Remedies. [Repealed by Ord. 95-088(SUB)(am), § 7 (part). See MSB [8.30.090](#) for current provisions]**

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**8.30.090 VIOLATIONS, ENFORCEMENT, AND PENALTIES.**

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(A) Except as otherwise specified in this chapter violations of this chapter are infractions.

(B) Remedies, enforcement actions, and penalties shall be consistent with the terms and provisions of MSB 1.45.

(Ord. 95-088(SUB)(am), § 18 (part), 1995)

## **ARTICLE II: CLEAN AIR STANDARDS**

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**8.30.110 APPLICATION OF ARTICLE.**

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The provisions of this chapter apply only to that geographic area of the Matanuska-Susitna Borough described in MSB [8.30.015\(A\)](#).

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

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**8.30.115 AMBIENT AIR QUALITY STANDARDS.**

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(A) Ambient air quality within the borough shall be maintained at the lowest practicable air contaminant concentrations. In no event shall these concentrations exceed the following levels corrected to standard conditions:

(1) *Suspended particulate matter.*

(a) annual geometric mean: 60 micrograms per cubic meter.

(b) twenty-four-hour maximum not to be exceeded more than once a year: 150 micrograms per cubic meter.

(2) *Sulfur oxides (measured as sulfur dioxide).*

(a) annual arithmetic mean: 80 micrograms per cubic meter.

(b) twenty-four-hour maximum not to be exceeded more than once a year: 365 micrograms per cubic meter.

- (c) three-hour maximum not to be exceeded more than once a year: 1,300 micrograms per cubic meter.
  - (3) *Carbon monoxide not to be exceeded more than once a year.*
    - (a) eight-hour maximum: 10 milligrams per cubic meter.
    - (b) one-hour maximum: 40 milligrams per cubic meter.
  - (4) *Photochemical oxidants.* One-hour maximum not to be exceeded more than once a year: 160 micrograms per cubic meter.
  - (5) *Nitrogen dioxide.* Annual arithmetic mean: 100 micrograms per cubic meter.
  - (6) *Reduced sulfur compounds.* Thirty-minute maximum not to be exceeded more than once a year: 50 micrograms per cubic meter.
- (B) In areas where existing air quality is better than the ambient air quality standards specified in subsection (A) of this section, the director shall enforce the air contaminant emission requirements as specified in this article so as to minimize degradation of the air quality.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.120 OPEN BURNING.**

- (A) Within incorporated municipalities and those areas of the borough served by refuse pickup service:
- (1) open burning is permissible except that those materials which tend to result in the emission of black smoke or odors, including but not limited to putrescible garbage, asphalt, rubber, oil wastes and asphalt-impregnated materials, may not be burned in the open. Permissible open burning is further subject to the limitations of subsections (D) and (E) of this section; and
  - (2) the open burning of debris, trees and brush accumulated during land clearing operations shall be conducted, except as specified in subsection (D) of this section to obtain maximum combustion efficiency throughout the burning period. Tires or similar organic matter may not be used to start or maintain the fire.
- (B) In all other areas of the borough, open burning for the disposal of oils, oily wastes, asphalt and tars and similar waste materials is prohibited unless conducted pursuant to permit from the director.
- (C) Controlled fires for the purpose of training firefighting personnel require prior written approval from the director. Controlled fires for disposing of demolition wastes require prior written approval from the director. After the fires have been conducted, summary reports shall be submitted to the

director.

(D) No open burning shall be allowed if an air quality advisory is broadcast on a radio or television station in an area stating that burning is not permitted for that day. This advisory shall be based on weather conditions being such that air ventilation in the affected area is inadequate to provide for maintenance of the ambient air quality standards specified in MSB [8.30.115](#).

(E) Open burning shall be governed at landfill sites by applicable statutes and regulations of the state.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.125 INCINERATORS.**

(A) Visible emissions, excluding condensed water vapor, from incinerators may not result in a reduction of visibility through the exhaust effluent greater than 20 percent for periods aggregating more than three minutes in any hour.

(B) Particulate matter emitted from incinerators may not exceed, on the basis of a cubic foot of exhaust gas corrected to 12 percent CO<sub>2</sub> and standard conditions, and except as specified in subsections (C) and (D) of this section:

- (1) 0.3 grains for incinerators less than or equal to 200 pounds per hour rated capacity;
- (2) 0.2 grains for incinerators larger than 200, but equal to or less than 1,000 pounds per hour rated capacity;
- (3) 0.1 grains for incinerators larger than 1,000 pounds per hour rated capacity.

(C) Particulate matter emitted from tepee burners may not exceed, on the basis of a cubic foot of exhaust gas corrected to 12 percent CO<sub>2</sub> and standard conditions:

- (1) 0.1 grains for those burners installed or modified on or after July 1, 1972;
- (2) 0.2 grains for those burners in operation before July 1, 1972.

(D) Particulate matter emitted from air curtain incinerators may not result in a visible emission, excluding condensed water vapor, which causes a reduction in visibility of greater than 20 percent for periods aggregating more than three minutes in any hour. A person may not operate an air curtain incinerator, regardless of size, without prior written approval from the director.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.130 INDUSTRIAL PROCESSES AND FUEL-BURNING EQUIPMENT.**

- (A) Visible emissions, excluding condensed water vapor, from industrial processes or fuel-burning equipment may not result in a reduction of visibility through the exhaust effluent of greater than 20 percent for periods aggregating more than three minutes in any hour.
- (B) Particulate matter emitted from industrial processes of fuel-burning equipment may not exceed, on the basis of a cubic foot of exhaust gas corrected to standard conditions:
- (1) 0.05 grains except as noted in paragraphs (2) and (3);
  - (2) 0.1 grains for those sources in operation before July 1, 1972, and for fuel-burning equipment using coal or municipal waste as fuel;
  - (3) 0.15 grains for fuel-burning equipment using wood waste as fuel.
- (C) Sulfur compound emissions from industrial processes or fuel burning equipment may not exceed 500 ppm expressed as SO<sub>2</sub>.
- (D) A person may not cause or permit bulk materials to be handled, transported or stored without taking reasonable precautions to prevent particulate matter from becoming airborne.
- (Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.135 PULP MILLS.**

- (A) Air contaminant emissions from pulp mills may not exceed, based on 24-hour averages and each ton of pulp produced:
- (1) twenty pounds of sulfur oxides from sulfite pulp mills, expressed as SO<sub>2</sub>, from all blow pits, washer vents, storage tanks, digester relief and recovery systems;
  - (2) two pounds of particulate matter from all blow pits, washer vents, storage tanks, digester relief and recovery systems in kraft or sulfite mills;
  - (3) five ppm of total reduced sulfur, expressed as H<sub>2</sub>S on a dry basis, from each kraft pulp mill recovery furnace stack.
- (B) Noncondensibles from kraft pulp mill digesters and multiple effect evaporators shall be treated to reduce emissions of total reduced sulfur to a level equal to that which would be obtained by the reduction achieved by thermal oxidation in a lime kiln.
- (C) Operators shall maintain and operate continuous emission recording and ambient air monitoring devices as specified by the director. Data acquired shall be available for inspection by, and provided on a routine basis to, the director.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.140 MOTOR VEHICLE EMISSIONS.**

(A) A person may not operate, drive, cause or permit to be driven or operated any motor vehicle upon a public street or highway that emits any visible emission for a period in excess of five consecutive seconds except for those motor vehicles powered by compression ignition or diesel-powered engines, and except when the presence of uncombined water is the only reason an emission fails to meet this requirement.

(B) A person may not operate, drive, cause or permit to be driven or operated any diesel-powered motor vehicle that emits, for a period in excess of ten consecutive seconds, any air contaminant that obscures an observer's vision to a degree greater than 40 percent opacity.

(C) A person may not operate, drive, cause or permit to be driven or operated any motor vehicle that violates or exceeds any federal or state law, regulations, emission standard or limitation applicable to the motor vehicle for the control of emissions of carbon monoxide, hydrocarbons or oxides of nitrogen.

(D) All motor vehicles and traffic, except emergency vehicles, shall be routed around areas designated by the director where ambient air levels of carbon monoxide reach or are predicted to reach ten milligrams per cubic meter on an eight-hour average.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.145 MARINE VESSELS.**

Within three miles of the coastline of the borough, visible emissions from any marine vessel, excluding water vapor, may not result in a reduction of visibility through the exhaust effluent of greater than 40 percent for periods aggregating more than three minutes in any one hour.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.150 AIR POLLUTION PROHIBITED.**

A person may not permit any emission which is injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.155 PERMIT TO OPERATE.**

(A) A permit to operate is required if the facility is capable of emitting into the ambient air, regardless of whether air quality control equipment is operating, more than:

- (1) twenty-five tons per year of sulfur dioxide or particulate matter;

- (2) one hundred tons per year of either nitrogen oxides, or carbon monoxide, or hydrocarbons.
- (B) A permit to operate is required for all mercury retorts, regardless of size.
- (C) A permit to operate is required for all fuel-burning electric generating equipment greater than 250 kilowatts capacity put into operation after July 1, 1972.
- (D) A person may not operate or cause the operation of a source requiring a permit without applying for and obtaining a permit from the director. Application for a permit to operate shall be made by the owner or operator on forms provided by the director.
- (E) Submittal of emission data is required when the amount of hydrocarbons, carbon monoxide, nitrogen oxides, sulfur oxides, or particulate matter which can be emitted from a facility into the ambient air, regardless of whether air quality control equipment is operating, is greater than five tons per year. Data submittal is required every two years, starting July 1, 1980, on forms provided by the director.
- (F) A person may not construct or modify a facility requiring a permit to operate until detailed plans and specifications are submitted to the director and approved. These plans and specifications shall include the following information:
- (1) two sets of plans and specifications, clearly indicating the layout and the construction which shall be undertaken;
  - (2) two sets of maps or aerial photographs indicating land use and zoning, if any, within one mile of the facility. The map or aerial photograph shall be of adequate scale to show all homes, industrial buildings, watercourses, roads and other applicable details and shall indicate the general topography;
  - (3) an engineering report outlining the proposed methods of operation, the quantity and source of material to be processed, the proposed use and distribution of the processed material and related process details, and a process flow diagram indicating the points of emission, including estimated quantities and types of air contaminants to be emitted;
  - (4) a description and specification of all air-quality control devices;
  - (5) an evaluation of the effect on the surrounding ambient air of the emissions from the facility; and
  - (6) plans for emission reduction procedures during an air episode.
- (G) Approval to construct a new source may not be granted unless the applicant shows to the

satisfaction of the director that:

- (1) the new source shall not prevent or interfere with the attainment or maintenance of any applicable ambient air quality standard specified in MSB [8.30.115](#);
- (2) the new source will operate without causing a violation of applicable regulations established under A.S. 46.03.

(H) A compliance schedule is required as part of a permit to operate for facilities emitting air contaminants in excess of the limitations of this article.

(I) A permit to operate may:

- (1) not be transferred without the written consent of the director;
- (2) not be issued for a period greater than five years after which the permit must be renewed for continued source operation. A permit requiring a compliance schedule must be reviewed and renewed every year of its duration;
- (3) not be granted to a person under subsection (H) of this section unless a compliance schedule approved by the director is included; or
- (4) require that specific emission reduction procedures be taken during an air episode.

(J) Upon notice, a person operating facilities emitting air contaminants judged by the director to be highly toxic shall be required to obtain a permit to operate.

(K) The director may require an applicant for a permit to operate to install, use and maintain monitoring equipment; to sample emissions in accordance with methods prescribed by the director at locations, intervals and by procedures as specified; to provide source test ports, to provide emission data and information from analyses of any test samples; and to provide periodic reports on process emissions.

(L) If an application for a permit to operate is denied, the director shall notify the applicant in writing of the reasons.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.160 REVOCATION OR SUSPENSION OF PERMIT.**

A permit to operate may be revoked or suspended if the conditions of the permit or applicable laws or regulations are violated.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.165 AIR EPISODES.**

(A) An air episode shall be declared when, in the director's opinion, the concentration of air contaminants in the ambient air has reached or is predicted to reach any of the following levels:

(1) *Air alert.*

- (a) sulfur dioxide: 800 micrograms per cubic meter (24-hour average);
- (b) particulate matter: 3.0 coefficient of haze units or 375 micrograms per cubic meter (24-hour average);
- (c) carbon monoxide: 17 milligrams per cubic meter (8-hour average);

(2) *Air warning.*

- (a) sulfur dioxide: 1,600 micrograms per cubic meter (24-hour average);
- (b) particulate matter: 5.0 coefficient of haze units, or 625 micrograms per cubic meter (24-hour average);
- (c) carbon monoxide: 34 milligrams per cubic meter (eight-hour average);

(3) *Air emergency.*

- (a) sulfur dioxide: 2,100 micrograms per cubic meter (24-hour average);
- (b) particulate matter: 7.0 coefficient of haze units, or 875 micrograms per cubic meter (24-hour average);
- (c) carbon monoxide: 46 milligrams per cubic meter (eight-hour average).

(B) The director shall prescribe and publicize curtailment actions when the above levels of air contaminants are, or are about to be, reached.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

**8.30.170 SOURCE TESTING.**

(A) The director may conduct source testing in order to determine compliance with this article.

(B) Testing to determine compliance with this article shall be by methods of measurement approved by the director and undertaken at points as to characterize the actual discharge into the ambient air.

(C) Particulate matter emission requirements specified in this article shall be measured by the methods comparable to those outlined in the American Society of Mechanical Engineers Power Test

Code PTC 27-1957, entitled "Determining Dust Concentration in the Gas Stream," modified to include a high efficiency filter.

(D) Air contaminant emission tests shall be conducted at maximum rated burning or operating capacity of the unit, or another rate as determined by the director to characterize the emissions from the unit.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

#### **8.30.175 CIRCUMVENTION.**

(A) The use of air for dilution of emission contaminants without affecting any total decrease in contaminants is prohibited as a method to effect compliance with the requirements of this article.

(B) Any facility modified on or after July 1, 1972 shall meet the requirements applicable to new facilities installed on or after July 1, 1972.

(C) The total of the capacities for all process fuel-burning or incinerator units in a facility shall be considered as the facility capacity for that type of unit.

(D) Persons owning or operating facilities emitting air contaminants subject to the limitations of this article shall be held responsible for ensuring that those facilities comply with this article.

(E) The director may require an operator of any air contaminant source to maintain records and periodically report on the nature and amounts of emissions as necessary to determine compliance of the source with the applicable emission or ambient air standards pursuant to this article.

(F) The director shall deny to any person the construction or modification of any air contaminant emission source if the director finds that the construction or operation of the source shall result in a violation of the applicable emission standards, or shall interfere with the attainment or maintenance of the ambient air standards pursuant to this article.

(Ord. 94-001AM, § 8 (part), 1994; Ord. 80-32, § 2 (part), 1980)

## CHAPTER 8.33: AIR QUALITY ALERTS AND EMERGENCIES

### Section

8.33.010 Air quality alerts and emergencies

#### **8.33.010 AIR QUALITY ALERTS AND EMERGENCIES.**

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- (A) The borough manager shall declare an air quality alert or emergency to be in effect whenever particulate matter concentrations reach unhealthy levels following the U.S. Environmental Protection Agency Air Quality Index Program.
- (B) Notice of an air quality alert or emergency is adequate if published in a newspaper of general circulation within the borough, or if given orally at least three times during a six-hour period by at least one radio station operating in the borough, or if made available to the general public in the form of a recorded telephone message, the telephone number for which is published in the telephone directory or newspaper of general circulation within the borough.

(Ord. 00-196, § 2, 2000)

I move to amend ordinance 19-032, MSB 8.25.020 (pg. 3 of ord.), by inserting Paragraph (C) to read:

(C) This intent of this chapter is to protect the right of residents to heat their homes with wood. This chapter does not regulate wood stoves or any indoor heating sources.

typo  
8.75.020  
passed w/ J Sum. 6M. TL opposed  
4:3

I move to amend ordinance 19-032, MSB 1.45.100(C) (pages 5 and 6 of ord.), to change the proposed fines as follows:

Ordinance Number	Description	Fine Amount
8.75.050	Open burning - general restrictions	
	1 <sup>st</sup> Offense	\$30
	2 <sup>nd</sup> Offense	\$70
	3 <sup>rd</sup> Offense	\$150
8.75.060(C)	Open burning during air quality advisory	
	1 <sup>st</sup> Offense	\$30
	2 <sup>nd</sup> Offense	\$70
	3 <sup>rd</sup> Offense	\$150

Failed  
w/ JS & TB  
in support  
2:5

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Summer primary amendment  
fines change to: \$1500, \$3000, \$5000

Failed w/  
J Sum & GM  
in support  
2:5