

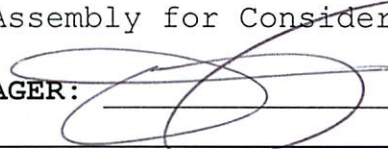
**SUBJECT:** A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH AUTHORIZING THE BOROUGH MANAGER TO ENTER INTO A MEMORANDUM OF UNDERSTANDING WITH THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION FOR AIR QUALITY COORDINATION.


**AGENDA OF:** May 2, 2017

**ASSEMBLY ACTION:**

*pulled from agenda - no action taken 5-2-17* 

**MANAGER RECOMMENDATION:** Present to Assembly for Consideration.

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

Route To:	Department/Individual	Initials	Remarks
	Originator	<i>FR</i>	
	Planning and Land Use Director	<i>EP</i>	
	Borough Attorney	<i>AK</i>	
	Borough Clerk	<i>John</i>	<i>4/25/17</i> 

**ATTACHMENT (S):** Resolution Serial No. 17-042 (2 pages)  
 Memorandum of Understanding (7 Pages)  
 Air Quality FAQ's (2 Pages)  
 Public Outreach Summary (1 Page)  
 Fiscal Note  Yes  No

**SUMMARY STATEMENT:** The Matanuska-Susitna Borough (Borough) and the Alaska Department of Environmental Conservation (DEC) have been collaborating to monitor air quality in the Borough since 1998. DEC provides air quality monitoring stations, installed initially in response to concerns about wind-born dust from the Matanuska and Knik River drainages. Monitoring stations in the Butte and Palmer now measure wind-born dust (PM<sub>10</sub>) and particulates associated with wood smoke (PM<sub>2.5</sub>)

The Borough issues air quality alerts to the public in response to heightened air pollution levels as measured by the DEC monitoring stations. MSB maintains an air quality phone line

which indicates the daily air quality levels. MSB has also conducted air quality public outreach to community councils, residents and the general public. In 2016-2017, MSB and DEC collaborated on an extensive public information campaign to alert residents to air quality problems caused by wood smoke, particularly in the Butte area. The campaign included mailings, presentations, displays, radio, social media and television ads. DEC contributed \$50,000 to fund the campaign which was implemented by MSB staff.

In the Memorandum of Understanding, the Borough agrees to continue to provide forecasts of air quality for PM<sub>2.5</sub> and PM<sub>10</sub> with daily updates during periods of poor air quality. The Borough will initiate efforts to reduce PM<sub>2.5</sub> air quality levels to maintain healthy standards through reasonable, cost-effective strategies. Open burning ordinances or requirements related to land clearing may be implemented. The Borough will take the lead in developing local control programs and conducting public outreach activities.

DEC will operate and maintain the monitoring stations and assist the Borough with air quality alerts. They will be responsible for issuing approvals of open burning of materials from Fire Service training, land clearing operations of 40 acres or more and petroleum based materials. DEC will assist the Borough with public outreach activities and provide technical assistance related to state and federal requirements.

Air quality levels for PM<sub>2.5</sub> in the Butte have been at or above national health standards for several years due to wood smoke pollution. This Memorandum of Understanding clarifies the responsibilities of the Borough and DEC in operating the air quality program and addressing current and future pollution issues.

**RECOMMENDATION OF ADMINISTRATION:**

Staff respectfully recommends the Assembly authorize the Borough Manager to enter into the Memorandum of Understanding with the Alaska Department of Environmental Conservation for air quality coordination.

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

I. Purpose

The purpose of this memorandum of understanding is to clarify the joint responsibilities for air pollution control and monitoring within the Matanuska-Susitna Borough with an emphasis on fine particulate matter (PM<sub>2.5</sub>) and coarse particulate matter (PM<sub>10</sub>). The Alaska Department of Environmental Conservation (DEC) and the Matanuska-Susitna Borough (Borough) have joint responsibility for air pollution control in the Borough. The parties to this Memorandum of Understanding recognize that clear lines of responsibility must be established and maintained to maximize the efficient utilization of available resources and to provide the greatest protection to the public's health and safety. It is with this recognition that these two parties hereby enter into this agreement.

II. 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.

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

DEC:

will operate and maintain the 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;

may conduct special air monitoring studies of criteria pollutants to identify/better define air quality problem areas, 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

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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, and

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

The Borough will:

develop and provide PM<sub>10</sub> forecasts to address potential impacts during the spring and fall to address wind blown dust from the Matanuska and Knik river beds, or other large dust sources. A daily forecast will be provided during periods of poor air quality. The PM<sub>10</sub> forecast will be posted on the Borough's and State's web page and the Borough's phone system for media and the general public. As part of that forecast, the Borough will provide a description of the air dispersion (poor, fair, or good) forecast for each day, with weekend and holiday projections made the previous Friday.

develop and provide PM<sub>2.5</sub> forecasts to address potential impacts during the summer wildfire season and the winter PM<sub>2.5</sub> season. A daily forecast will be provided during periods of poor air quality. The PM<sub>2.5</sub> forecast will be posted on the Borough's and State's web page and the Borough's phone system for media and the general public. As part of that forecast, the Borough will provide a description of the air dispersion (poor, fair, or good) forecast for each day, with weekend and holiday projections made the previous Friday.

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

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

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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.

The Borough will:

increase its efforts to maintain the national ambient air quality standard for PM<sub>2.5</sub>;

implement PM<sub>2.5</sub> strategies to maintain the standard that are shown to be reasonable and cost effective;

assist DEC to study PM<sub>2.5</sub> concentrations at cold temperatures, and the resultant impact of PM<sub>2.5</sub> on the prospects for maintaining the PM<sub>2.5</sub> standard in the Borough, including potential use of new and innovative programs; and

take the lead in collaboratively developing with DEC a PM<sub>2.5</sub> attainment plan should the area be unable to maintain the health based air quality PM<sub>2.5</sub> standard.

#### 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, and for the open burning of petroleum-based materials or other materials in a way that gives off black smoke.

DEC will:

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

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

issue air quality advisories in a back up capacity, if needed, and include open burning prohibitions in its air quality advisories if determined to be

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appropriate to the air pollution event.

The Borough will:

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

consider establishing open burning ordinances or requirements related to land clearing for new development as efforts towards maintaining attainment of the PM2.5 standard, especially in the Butte area.

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

### V. Area Source Control Programs

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

The Borough will:

implement voluntary programs related to fuel burning that assist in mitigating PM 2.5 air pollution;

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

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

DEC will:

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

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

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

The Borough and DEC will:

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

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

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

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

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

### VI. 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.

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

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

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Pursuant to the confidentiality provisions recognized in the Alaska Public Records Act, AS 40.25.120, applicable to public agencies such as the department and the Borough, each agency agrees to maintain the confidentiality of enforcement documents exchanged as part of this joint enforcement program. In addition, each agency agrees, subject to relevant law or court order, to withhold a complainant's personal information if the complainant requests that the information be kept confidential. See ADEC's Informant Policy, dated February 21, 1997 adopted herein by reference. For complaints under consideration for a change of agency lead, upon request an agency will share copies of draft compliance and enforcement documents, subject to the mutual understanding that these documents are enforcement confidential and will be withheld from disclosure to the extent allowed by AS 40.25.120.

VII. 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 the agreement.

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

For purposes of this agreement, the Borough's project manager is,  
Eileen Probasco, 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.

VIII. 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



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MOU (non 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.

IX. Execution/Modification and Duration of Agreement

This agreement will be in effect upon signature by both parties until amended or revoked. The agreement may be terminated upon 90 days' written notice by either party.

Alaska Department of  
Environmental Conservation

Matanuska-Susitna Borough

By: \_\_\_\_\_  
Larry Hartig  
Commissioner

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

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

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

By: \_\_\_\_\_  
Nikolay Barkov  
DEC Finance Officer

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

## Air Quality FAQ's

### 1. Is the Borough going to restrict the use of wood stoves?

There are no current or future plans to restrict the use of wood stoves in the Borough. Wood stoves are an important heating source for many Borough 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 them properly.

### 2. Does the new MOU with DEC require the Borough to establish air quality regulations?

The proposed 2017 MOU between DEC and MSB would replace a 2006 MOU that describes cooperative efforts to address air quality issues. There are no requirements in the 2017 MOU to establish regulations or expend funds.

### 3. What is PM<sub>2.5</sub> and where does it come from?

Particulate pollution, also called particulate matter or PM, is a mixture of solid and liquid particles that are suspended in air. Fine particulate matter (PM<sub>2.5</sub>) is less than 2.5 micrometers in diameter. PM<sub>2.5</sub> is a product of combustion, primarily caused by burning fuels. Examples of sources include power plants, vehicles, wood burning stoves and wildland fires.

### 4. Does dust from glaciers cause air pollution?

Blowing dust particles do cause air pollution and can negatively affect people's health. Dust particles are measured as PM<sub>10</sub> since they are larger than PM<sub>2.5</sub> particles. The Borough issues air quality alerts when PM<sub>10</sub> levels are high to warn people of respiratory issues. Since the causes of dust pollution in the Borough primarily come from natural sources (glacial silt), the borough is not required to control sources of dust pollution.

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**5. Will the Borough have to adopt air quality regulations such as Fairbanks has done?**

The Fairbanks North Star Borough has had a designated non-attainment area for PM<sub>2.5</sub> since 2009. It includes the more developed areas of the Borough around the City of Fairbanks and North Pole. Once an area is designated non-attainment, the local government is required by the Environmental Protection Agency to develop a plan to reduce pollution which may include regulations.

The Mat-Su Borough does not have a designated nonattainment area and is working with residents to voluntarily take steps to avoid that designation.

**6. What's the primary cause of rising PM<sub>2.5</sub> levels in the Mat-Su?**

PM<sub>2.5</sub> levels increase on very cold windless days when people are burning large quantities of wood to heat their homes. The primary area of concern for PM<sub>2.5</sub> is in the Butte. DEC maintains a monitoring station in the Butte which has recorded PM levels since 1998. In 2017, PM<sub>2.5</sub> levels were above national health standards in the Butte for four days in January and February.

**7. How can people reduce PM 2.5 pollution from wood smoke?**

Burn dry wood. Dry wood burns hotter, heats more efficiently and causes less creosote build-up in stove pipes. Convert to natural gas if available. The Butte area does have natural gas but many people have not yet been connected.

**8. What does it cost to connect to natural gas?**

The costs vary depending on the length of the connection and conversion of appliances such as furnaces. Starting costs can be around \$5,000. Contact Enstar and heating contractors for estimates.

For more information go to: <https://www.matsugov.us/environment/airquality>

Or contact: MSB Planning and Land use Department, 907-861-7851.

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## Public Outreach Summary

### **Clean Air Campaign (October 2016 - March 2017)**

*Project Manager: Frankie Barker, Environmental Planner*

This summarizes the public outreach for the Clean Air Campaign to address winter air quality issues conducted by the Mat-Su Borough, the Department of Environmental Conservation and their contractor, MSI Communications. The particular area of focus was the Butte which has an air quality monitoring station that has recorded air quality readings (PM<sub>2.5</sub>) above national health standards.

The project time period was from October 2016 to March 2017 to correspond with the primary wood burning season during cold winter months. This information provides a summary of the Borough's work to ensure that stakeholders had many opportunities to learn about the project through a variety of sources. The stakeholders of this project are the 1400 residents who live within the Butte Community Council boundaries. Project was funded by AK DEC (\$50,000) and implemented by MSB Environmental Planner.

Activity	Quantity*	Dates
Community Council Mailing	1400	October 2016
Community Council Presentation	30 attendees	October 2016
Newspaper Ads - Print	18	October 2016 -February 2017
Newspaper Ads – (ADN) digital	202,133 impressions	October 2016 - March 2017
Posters – displayed at local businesses	30	October 2016 - March 2017
MSB Facebook	35 likes 17 shares	November 2016 - December 2017
Burnwise Alaska- Facebook	1,987 likes	October 2016-February 2017
Radio Ads (multiple runs per day)	5 stations	October 2016 - February 2017
TV – MTA & GCI (multiple runs per day)	6 weeks	October – December 2016
U Tube videos	100,128 views	October 2016 – February 2017
Facebook Video Ads	183,186 impressions	October 2016 – February 2017
Display Boards – DSJ Lobby & Permit Center	Public	October 2016– March 2017
Assembly Presentation (DEC)	50 attendees	February 2017

\*Quantities listed are estimates

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