

## **Department of Environmental Conservation**

DIVISION OF AIR QUALITY
Director's Office

410 Willoughby Avenue, Suite 303 PO Box 111800 Juneau Alaska 99811-1800 Main: 907-465-5105

Toll Free: 866-241-2805 Fax: 907-465-5129 www.dec.alaska.gov

February 20, 2018

Chris Hladick Regional Administrator U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue, Suite 900 Seattle, WA 98101

Subject: Summer 2015 Exceptional Event Waiver request for Fairbanks, AK

Dear Mr. Hladick:

This letter is to formally request US EPA concurrence for exceptional events that occurred in Fairbanks during the summer of 2015. Fairbanks air quality during this timeframe was significantly impacted by smoke from extensive wildfires in the interior of Alaska. The Department of Environmental Conservation Air Quality Division (ADEC) flagged 29 days for the 24 hour PM<sub>2.5</sub> concentrations measured at the three air monitoring sites in Fairbanks, the State Office Building (AQS ID 02-090-0010), NCore site (AQS ID 02-090-0034) and the North Pole Fire site (AQS ID 02-090-0035). Consistent with the requirements of 40 CFR 50.14, ADEC has placed exceptional event flags in AQS for the following dates, which were impacted by wildfire smoke: June 18-28, July 1-31 and August 8, 2015.

The June through July and early August event can be best summarized as sustained westerly wind flow transporting smoke from the large complex of fires in the interior of Alaska into Fairbanks and North Pole. The predominantly west-southwest wind flow was the primary cause of smoke advecting into the Fairbanks area throughout the summer fire season. Because smoke from numerous fires caused the elevated PM<sub>2.5</sub> concentrations, ADEC decided to treat all the days listed above as one event and submit a combined analysis to document this natural event. While not all 24-hour concentrations exceeded the 24-hour of National Ambient Air Quality Standard (NAAQS), all were at least twice as high as levels typical of times with no wildland fire smoke. Daily PM<sub>2.5</sub> concentrations varied with meteorological conditions and fire growth or suppression. Although the PM<sub>2.5</sub> concentrations varied, the cause of the elevated PM<sub>2.5</sub> levels throughout the entire period was wildland fire smoke.

The document provides a demonstration of a clear and causal relationship between wildfire smoke and elevated PM<sub>2.5</sub> concentrations. Without these fires there would not have been any exceedances of the 24 hour averaged PM<sub>2.5</sub> NAAQS or concentrations above 12 µg/m<sup>3</sup> measured at the sampling sites in Fairbanks.

A public notice and comment period of 30 days for the 2015 exceptional events request was provided. No comments were received, but the draft version was updated to correct a few typographical errors found after posting for public comment. The Exceptional Events Waiver Request can be downloaded at <a href="http://dec.alaska.gov/air/air-monitoring/exceptional-events">http://dec.alaska.gov/air/air-monitoring/exceptional-events</a>. A copy of the online public notice announcement is attached.

Sincerely,

Denise Koch, Director Division of Air Quality

Enclosure: Public Notice Announcement

cc: Justin Spenillo, EPA Region 10

Doug Jager, EPA Region 10

Robert Kotchenruther, EPA Region 10

Matthew Jentgen, EPA Region 10

Alice Edwards, ADEC Commissioner's Office

Barbara Trost, ADEC AMQA Mark Smith, ADEC AMQA Cindy Heil, ADEC ANPMS