

Montana



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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Ref: 8P-AR

AUG 18 2008

The Honorable Brian Schweitzer
Governor of Montana
225 North Roberts
Helena, MT 59620-0801

Dear Governor Schweitzer:

Thank you for your recommendations on the status of fine particle pollution throughout Montana.

We have reviewed the December 11, 2007 letter from you submitting Montana's recommendations on air quality designations for the 2006 24-Hour PM_{2.5} standards. We have also reviewed the technical information submitted to support Montana's recommendations. We appreciate the effort your State has made to develop this supporting information. Consistent with the Clean Air Act, this letter is to inform you that the Environmental Protection Agency (EPA) intends to make modifications to Montana's recommended designations.

In your letter, Missoula County and Ravalli County were recommended for a PM_{2.5} nonattainment designation based on data from 2004-2006. EPA is making final decisions on the designations based on the most recent three years of data or 2005-2007. In this regard, we have enclosed information on the Montana Department of Environmental Quality exceptional events "flags" for wildfire impacts with EPA's concurrence. As a result, neither Missoula County nor Ravalli County had a violation of the PM_{2.5} standard for 2005-2007. Therefore, we are proposing to designate these areas as attainment.

We also acknowledge your request that we consider a one-year delay of our decision on nonattainment based on insufficient information for the Libby area in Lincoln County. In previous designations, insufficient information was considered as either missing or incomplete monitoring data. In the case of Libby, there is complete monitoring data that indicates the area is violating the PM_{2.5} standard for 2005-2007. Thus we are unable to provide a one-year delay. However, if Montana can provide complete, quality-assured certified data for 2008, showing no violation of the standard, EPA would reconsider the nonattainment designation for Libby. This data must be submitted prior to the effective date of the designations, which is 90 days after the Federal Register publication of the Administrator's decision. In addition, the Libby area can be redesignated to attainment if the 2007-2009 air quality monitoring data shows the area is attaining the 24-hour PM_{2.5} standard.

As you know, EPA has been very supportive and involved in the Libby woodstove changeout program. We recognize that air quality improvements have resulted. EPA remains committed to providing any available assistance so that Libby can attain the PM_{2.5} standard.

We have enclosed a detailed description of the Libby area where EPA intends to modify your state recommendations, and the basis for such modification. The Director of the Montana Department of Environmental Quality, Mr. Richard Opper, also will receive a copy of this letter and the enclosures. Should you have additional information that you wish to be considered by EPA in this process, please provide it to us by October 20, 2008.

Fine-particle pollution represents one of the most significant barriers to clean air facing our nation today. Health studies link these tiny particles – about 1/30th the diameter of a human hair – to serious human health problems including aggravated asthma, increased respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and even premature death in people with heart and lung disease. Fine particle pollution can remain suspended in the air for long periods of time and create public health problems far away from emission sources. Reducing levels of fine-particle (PM_{2.5}) pollution is an important part of our nation's commitment to clean, healthy air.

You should also be aware that EPA is opening a 30-day public comment period on our intended designation decisions. We intend to make final designation decisions for the 2006 24-Hour PM_{2.5} standards by December 18, 2008. If you have any questions, please do not hesitate to contact me, or your staff may call Catherine Roberts, Particulate Matter Program Coordinator at 303-312-6025. We look forward to a continued dialogue with you as we work together to implement the PM_{2.5} standards.

Sincerely,



Carol Rushin
Acting Regional Administrator

cc: Richard Opper, Director, Montana Department of Environmental Quality
Judy Hanson, Administrator, Permitting and Compliance Division
Dave Klemp, Chief, Montana Air Resources Management Bureau

Enclosures (2)



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Technical Support Documentation
MT DEQ flagging demonstration
2007 wildfire season

MT DEQ submitted a request for exclusion of 2007 Wildfire PM data under the Exceptional Events Rule on December 7, 2007. The submission met the CFR required deadline for submittal, in this case, December 18, 2007, as detailed in 40 CFR 50.14(c)(3)(i) “12 months prior to the date that a regulatory decision must be made.” The package was reviewed against the Exceptional Events Rule as well as the Region 8 developed internal Exceptional Events Checklist. For 2007, Montana DEQ flagged nearly 14,000 PM₁₀ and PM_{2.5} data points from 12 counties in MT. Many of these were information only flags on hourly PM₁₀ and PM_{2.5} data which did not contribute to NAAQS exceedances or violations. EPA Region 8 was able to concur on a total of 107 flags (both hourly and 24-hour data) on PM₁₀ and PM_{2.5} data showing exceedances or violations in AQS which were subject to the Exceptional Events Rule. These flags affected 10 monitoring sites in 8 counties on 12 calendar days of 2007.

1. Public Notification: EPA review concluded that the CFR requirements for public notification were met through the following:
 - a. The demonstration was made available for 30 days of public comment. MT DEQ notified EPA that no comments were received.
 - b. Demonstration package included copies of MT DEQ Daily Forest Fire Smoke Advisories detailing the current situation.
 - c. Demonstration package included copies of MT DEQ Notice of Public Hearing
 - d. Individual notice was made to each person on the MT DEQ’s interested party list.
 - e. Real time particulate information is available on MT DEQ website (MT DEQ monitors, NWS ASOS visibility monitors and USFS remote access nephelometers and BAMS).
 - f. The demonstration included forest fire smoke reports detailing locations and severity.
2. Flagging of Data:
 - a. MT DEQ met the schedule for submission of data with an exceptional event flag as detailed in 40 CFR 58.16. Forest fire flags were placed on all data affected by the wildfires with the understanding that EPA would only concur on exceeding or violating data, the remaining flags would be informational only.

EPA reviewed the demonstration and placed concurrence flags on data based on the MT DEQ package which met the following rule requirements:

Basic Table Information: The values listed in the following table caused an exceedance or violation and were concurred upon based on the technical analysis of the demonstration package. EPA’s technical analysis focused on only the values that caused an exceedance or violation.

1. MT DEQ submitted PM₁₀ and PM_{2.5} data that were affected.

- a. A spreadsheet was submitted with all values flagged, date, parameter code, POC number, AQS site ID and site name and city.
- b. A spreadsheet comparison of flagged values to historical mean and max data indicating the flagged value was higher than a typical day at that monitor. EPA reviewed and concurs that the flagged values were outside of the typical air quality concentrations.

Site Name	Site ID	Date	Value	Parameter	POC
Butte Greeley School	30-093-0005	8/1/2007	35.4	88101	1
Butte Greeley School	30-093-0005	8/7/2007	38.4	88101	1
Butte Greeley School	30-093-0005	8/13/2007	86.6	88101	1
Butte Greeley School	30-093-0005	8/16/2007	43.3	88101	1
Butte Greeley School	30-093-0005	8/19/2007	50.3	88101	1
Butte Greeley School	30-093-0005	8/31/2007	47.5	88101	1
Butte Greeley School	30-093-0005	9/12/2007	35.4	88101	1
Butte Greeley School	30-093-0005	8/13/2007	195.3	81102	4
Butte Greeley School	30-093-0005	8/14/2007	160.8	81102	4
Butte Greeley School	30-093-0005	8/15/2007	158.7	81102	4
Great Falls High School	30-013-1026	7/29/2007	37.0	88101	1
Great Falls High School	30-013-1026	8/4/2007	51.2	88101	1
Great Falls High School	30-013-1026	8/13/2007	35.3	88101	1
Great Falls High School	30-013-1026	8/19/2007	35.3	88101	1
Great Falls High School	30-013-1026	8/31/2007	48.0	88101	1
White Fish Dead End	30-029-0009	8/4/2007	40.5	88101	1
White Fish Dead End	30-029-0009	8/13/2007	65.9	88101	1
White Fish Dead End	30-029-0009	8/16/2007	49.4	88101	1
Kalispell Flathead Electric	30-029-0047	8/4/2007	35.7	88101	1
Kalispell Flathead Electric	30-029-0047	8/13/2007	50.2	88101	1
Kalispell Flathead Electric	30-029-0047	8/16/2007	67.1	88101	1
Bozeman WWTP	30-031-0006	8/13/2007	85.3	88101	1
Bozeman WWTP	30-031-0006	8/19/2007	35.8	88101	1
Belgrade Conagra	30-031-0008	8/13/2007	71.5	88101	1
Belgrade Conagra	30-031-0008	8/19/2007	37.6	88101	1
Helena Lincoln School	30-049-0018	8/7/2007	45.6	88101	1
Helena Lincoln School	30-049-0018	8/19/2007	57.8	88101	1
Helena Lincoln School	30-049-0018	8/31/2007	56.9	88101	1
Missoula Health Department	30-063-0031	8/16/2007	70.8	88101	1
Missoula Health Department	30-063-0031	8/16/2007	70.1	88101	2
Missoula Health Department	30-063-0031	8/19/2007	49.5	88101	1
Missoula Health Department	30-063-0031	8/31/2007	45.4	88101	1
Missoula Health Department	30-063-0031	9/12/2007	35.4	88101	1
Hamilton PS #46	30-081-0007	8/4/2007	49.7	88101	1
Hamilton PS #46	30-081-0007	8/7/2007	42.2	88101	1
Hamilton PS #46	30-081-0007	8/16/2007	131.9	88101	1
Hamilton PS #46	30-081-0007	9/15/2007	51.4	88101	1
Thompson Falls High School	30-089-0007	8/16/2007	75.1	88101	1

Detailed Description of the Event:

1. Event Description
 - a. The events, wildfires, meet the CFR definition in 40 CFR 50.1 to qualify under the rule because they affected air quality, are not reasonable controllable or preventable, are natural events and were determined by EPA to be Exceptional Events. From July through September 2007, wildfires burned several thousand acres in Montana and Idaho.
2. Clear Causal Relationship:

The demonstration package included:

 - a. Satellite imagery, which EPA reviewed and concurs that on the days in question, a plume was present in the monitored area.
 - b. Photos of fire plumes depicting the magnitude of the smoke from the fires, which EPA concurs was significant.
 - c. Forest fire smoke reports detailing locations and severity of the smoke on the days in question, which EPA reviewed and concurs that the information corresponds with the exceedance or violation data.
 - d. Smoke impact forecasts from the state meteorologist predicting impacts on specific local areas. EPA reviewed these forecasts and determined that they were fairly reliable in predicting the areas of impact.
3. Concentration higher than typical air quality, including background and no exceedance or violation “but for” the event:

The demonstration package included:

 - a. MT DEQ statement of no evidence implicating any other agent or event, other than wildfires, contributing PM on the noted dates.
 - b. Spreadsheet comparison of flagged value to historical mean and max data indicating recorded value was higher than a typical day at that monitor. For all PM_{2.5} monitors upon which EPA provided concurrence, the summertime monthly historical means for 2004-2006 were less than 9 µg/m³, and the highest value not historically impacted by wildfire smoke was 22 µg/m³, both well below the exceedance level data on which EPA provided concurrence. Therefore, “but for” the fires, there would have been no exceedances.
 - c. MT DEQ knowledge of local air quality indicates that exceedances never occur in the summer unless there are wildfires present. EPA concurs based on previously stated analysis as well as working with the state and their data over the years gaining an understanding of the air quality issues and trends in the state.

For additional supporting documentation, please see (Letter dated December 14, 2007 to Callie Videtich, Director Air and Radiation Program EPA Region VIII, from Charles Homer, Air Resources Management Bureau of the Montana Department of Environmental Quality, providing exceptional events data and demonstrations impacting Montana's air monitoring data for designating areas attaining and not attaining the 2006 24-hour PM2.5 NAAQS) placed in the docket for this rulemaking