

**United States House of Representatives,  
Committee on Energy and Commerce,  
Sub-Committee on Environment  
Hearing on March 22, 2017  
*H.R. 806, Ozone Standards Implementation Act of 2017*  
Questions on the Record Submitted to Ms. Nancy Vehr  
Questions from the Honorable John Shimkus**

**Question 1:** My understanding is that EPA's Exceptional Events Rule allows states to exclude certain emissions data from consideration when determining compliance with national ambient air quality standards.

a. If EPA fails to take action with respect to an exceptional event petition, does that mean that your state is effectively penalized because those emissions are considered in determining your compliance with the new standards?

**Response:** Yes. An exceptional event is considered to be an exceedance or a "violation" unless and until EPA approves the demonstration. EPA's failure to act on a petition results in inflated monitor data that misrepresents the condition of air quality. Ultimately, EPA's inaction may result in permitting delays and inaccurate characterization of air quality to the public, inaccurate emission inventories and modeling results that EPA then uses to establish federal policies and regulations. As a result, state resources are shifted from addressing areas of concern to addressing situations that are actually not problematic. The attendant consequences from EPA inaction, are more fully addressed in the attached letter dated May 23, 2016, entitled "Wyoming Department of Environmental Quality (WDEQ) Exceptional Events Demonstration Packages; 2011-2014.

b. Is the Exceptional Events Rule likely to provide relief to states for emissions exceedances due to wildfires?

**Response:** Unlikely, because of the currently burdensome, resource intensive, time-consuming and costly process, and the possibility of EPA inaction. *See* attached letter from EPA Region 8, received April 28, 2016 noting that EPA had received, but not acted on, demonstrations for particulate matter exceedances due to wildfires.

c. What potential modifications to the exceptional events provisions of the Clean Air Act would you suggest to provide more meaningful relief?

**Response:** One potential modification would be to require EPA action by a set deadline, or in the event of EPA inaction, the demonstration would be automatically approved. Other modifications such as workable technical tools, clear and timely guidance, streamlining federal review, and other measures that honor and recognize the work undertaken by states, may also be effective for providing meaningful relief at the agency implementation level.

**Question 2:** Witnesses noted in testimony that it is unfair that, under current law, local jurisdictions may be subject to penalties for failure to attain standards, even though the failure is due to emissions from sources that are outside the jurisdictions' authority to control.

a. To assist with our identifying the problem fully, would you provide examples of the types of emissions or pollutants, natural or anthropogenic, that are outside your state's control and that may impede your ability to reach attainment of air quality standards so as to subject you to fees or other penalties?

**Response:** Examples of natural or anthropogenic emissions that are outside of Wyoming's control and may impede Wyoming's ability to attain ambient air quality standards include: international transport of emissions; smoke from in-state or out-of-state wildfires; stratospheric ozone intrusions; emissions from motor vehicles and other EPA-regulated engines; biogenic emissions and emissions from other naturally occurring phenomena such as mineral springs, geysers, and the like; climatological and meteorological conditions such as drought, high-winds, excessive precipitation, etc.; and other sources of emissions that contribute to background levels.

b. Are there circumstances in your view in which relief from penalties may be provided either to local or to state level jurisdictions?

**Response:** Under relief mechanisms currently available under the Clean Air Act and associated regulations, while relief is theoretically possible, it is extremely rare to the point that it is unattainable. These relief mechanisms include Rural Transport Areas, International Transport Areas, and Exceptional Event Demonstrations. In their current form, these mechanisms are extremely resource intensive, costly and rarely approved. For example, Rural Transport Areas only provide relief for rural areas that have been or will be designated moderate nonattainment or higher, not marginal nonattainment areas. EPA has only approved two such areas and those approvals were in regards to the 1979 Ozone Standard. Relief under International Transport only applies to areas located within a five mile radius of an international border. Thus, such relief is not available to inter-mountain west states such as Wyoming. The challenges with relief under the Exceptional Event process were addressed in my response to Question 1.

**Question 3:** Your testimony raised concerns about the quality of modeling data. When promulgating nonattainment designations in air quality control regions, should the Administrator base such designations on modeling predictions that do not incorporate state/local air agency input in lieu of the state's air quality monitoring data?

**Response:** No. Multisource and background modeling tools are complex and must be developed to a level that assures accuracy for their intended application.

Inaccurate models may result in the needless expenditure of time and resources on a non-existent issue. Such an approach is detrimental to public health and the environment because time and time and resources will be directed towards addressing a non-existent issue instead of addressing an issue that may provide public health and environmental benefits. Early and meaningful engagement with and input from states is critical to the development of modeling inputs and adjustments, and also an understanding of modeling limitations.

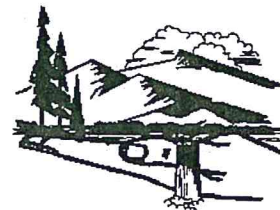
**Question 4:** Are there any other considerations we should take into account concerning H.R. 806 that you believe we did not cover sufficiently in the hearing?

**Response:** No.



# Department of Environmental Quality

*To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.*



Matthew H. Mead, Governor

Todd Parfitt, Director

May 23, 2016

Monica Morales  
Acting Director  
Air Program  
U.S. Environmental Protection Agency  
Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129

**RE: Wyoming Department of Environmental Quality (WDEQ) Exceptional Events Demonstration Packages; 2011-2014**

Dear Ms. Morales:

The State of Wyoming, Department of Environmental Quality – Air Quality Division (AQD) has reviewed your letter, and offers the following comments, regarding the Environmental Protection Agency (EPA) Region 8's preliminary review of, and decision to not act upon, WDEQ's exceptional event demonstration submittals for calendar years 2011-2014. The AQD appreciates EPA Region 8's notification of preliminary review, but ultimately finds the EPA's proposed inaction on WDEQ's request for concurrence on monitoring data flagged as influenced by exceptional events to be very disappointing. The AQD renews its requests for EPA Region 8 action.

The EPA's inaction – to shelve Wyoming's exceptional event submissions until the EPA views them as the subject of an attainment demonstration or other EPA regulatory decision – signals the EPA's general disregard for the significant time and staff resources committed by the AQD for each individual exceptional event demonstration. The EPA's response to Wyoming's submittals may discourage other state regulatory agencies from performing thorough, meticulous work on future exceptional event demonstrations under the presupposition that these demonstrations will be merely shelved once they reach federal review. This does not align with the objectives of the EPA or WDEQ, as both entities should be wholly committed to providing outstanding responsiveness on environmental policy issues.

Furthermore, the EPA's justification for inaction is also problematic. Although certain exceptional event demonstrations that appear on the enclosed table of WDEQ's 2011-2014 packages may not directly pertain to a specific pending regulatory decision – such as whether an area will be considered nonattainment – they nevertheless represent exceedances of the National Ambient Air Quality Standards (NAAQS) that the AQD has determined were caused by circumstances beyond regulatory control. Unless these flagged data demonstrations are approved by the EPA, they are ultimately considered to be "violations" – regardless of whether such a "violation" is warranted – and Wyoming is left with possible



undue consequences of delays to New Source Review permitting actions, performing follow-up casework with stakeholders, as well as the abiding perceptions of the general public. Additionally, the AQD and other state agencies face the burden of implementing federal policies that are developed on the basis of elevated monitored data – data that should have been excluded from emission inventories as a result of being properly classified as exceptional events – and therefore, exceptional event demonstrations that are not acted upon by the EPA still influence regulatory decisions that directly impact states. Whereas in the past, EPA Region 8 had conferred with the AQD in compiling this list of shelved exceptional event demonstrations, there was no two-way dialogue in this instance. The AQD does not believe this is a reasonable or efficient practice. The AQD respectfully requests that the EPA acts on WDEQ’s concurrence requests or reopens its dialogue with WDEQ regarding which flagged monitored data will be considered for the EPA’s full review.

### **Prior State Involvement in Demonstration Selection**

As previously noted, the April 2016 letter from EPA Region 8 runs contrary to prior discussions between the EPA and the AQD regarding whether flagged data would be fully considered and reviewed by the EPA. The EPA’s guidance on exceptional event demonstrations acknowledges that states should highlight the significance of each flagged event, and Wyoming has consistently followed this guidance by detailing the importance of certain demonstrations in its cover letter to the EPA. In this most recent instance, however, the AQD was merely informed that a series of 46 exceptional events – event demonstrations that AQD staff had invested significant time, resources, and analysis into compiling – would not be acted upon by the EPA unless the demonstrations became the subject of a future attainment demonstration or other specific EPA regulatory decision.

The EPA’s practice is troublesome for the AQD on several fronts. It disregards a significant analytical and laborious effort undertaken by the AQD over the years – an effort that Wyoming undertook with the full expectation that the EPA would ultimately consider and act on the flagged data. The EPA’s failure to act wastes state agency resources. The AQD maintains that, if it has technically demonstrable justification to compile an exceptional event demonstration, and if it has undertaken the effort in compiling that demonstration, then the EPA should fulfill its responsibility to take action. The EPA should honor the work undertaken by state agencies by providing its full consideration.

### **Concerns Regarding State-Level Regulatory Decisions**

The AQD is in the unique position of having several industrial ambient monitors required through New Source Review permits that must meet EPA requirements, and therefore, data that are currently eligible for treatment under the Exceptional Event Rule. There have been several instances where data have been influenced by exceptional events at these monitors. In these instances, the AQD has demonstrated the regulatory significance of these events and has submitted demonstrations for review by the Region. The EPA’s follow-through on the regulatory review process would lessen regulatory uncertainty by allowing a regulatory mechanism to demonstrate the effect of exceptional events upon ambient data used for permitting and regulatory decisions at the state level. This would benefit all regulatory entities involved, as it would allow for the AQD to operate as efficiently and decisively as possible in acting upon ambient monitored data.

## Placing Undue Accountability on State Agencies

The EPA's approach is further problematic to the AQD because the state agency is ultimately left to deal with the lingering consequences of NAAQS "violations" that were entirely beyond the control of any regulatory entity. These consequences are not necessarily limited to specific EPA attainment or other regulatory determinations. The notion that only such pending regulatory determinations are relevant in evaluating flagged monitoring data is a significant misconception on the EPA's behalf.

While the EPA's evaluation of a certain exceptional event demonstration may not have specific bearing on whether or not a certain area is able to attain the NAAQS, these monitored data are nevertheless included in conjunction with national emission inventories and modeling exercises that are ultimately considered by the EPA in establishing policy and developing federal regulations. Exceptional event demonstrations make compelling cases that certain elevated monitored data should be disregarded when creating regulatory policy. When the EPA disregards and fails to act on these demonstrations, however, the consequence is the inclusion of inflated monitored data that misrepresents the prevailing air quality conditions. For example, the shelved data on Wyoming's exceptional event demonstration list from the 2012 summer is attributable to the omnipresence of wildfire emissions in the state, or transported into the state, due to an extraordinarily active wildfire season. The EPA's reluctance to act on Wyoming's exceptional event demonstration submissions ultimately means that these exceedances represent "violations" of the NAAQS – from a regulatory standpoint, and in the eyes of the public – even though these events were beyond regulatory control. This is simply an unfair and unsound practice and is ultimately counterproductive to the state, the EPA, and the public.

Additionally, the EPA's inaction is problematic because there are many circumstances where the consideration of exceptional event-influenced data would impact regulatory domains beyond NAAQS attainment. One such example is regional haze, where a wildfire-heavy summer – including wildfires burning in other states – would contribute significantly to pollutant levels in Wyoming and impact the presence of regional haze, despite the State of Wyoming having no capacity to control those emissions. This was, again, the case in 2012, where levels of PM<sub>2.5</sub> in Wyoming increased dramatically between June and September because of the omnipresence of wildfires – largely attributable to the extraordinarily dry meteorological conditions.

Although Wyoming still attained the primary annual arithmetic mean and the primary 24-hour average for both the 2006 and 2012 PM<sub>2.5</sub> NAAQS, the elevated PM<sub>2.5</sub> levels attributable to exceptional events still impacted the state's capacity to demonstrate that the state's overall marginal levels of PM<sub>2.5</sub> did not contribute significantly to regional haze. These exceptional events were significant in number (there were several multi-day wildfires throughout the summer) and had impacts beyond the State's regulatory capacity. Ultimately, the EPA's consideration of monitored data, bereft of exceptional event demonstrations results in a misrepresentation of the adequacy of existing state regulations and shifts state resources from addressing areas of concern to addressing situations that are not problematic.



## Conclusion

The AQD hopes that its request and suggestions ensure that the EPA fully considers these exceptional event demonstrations. The EPA's action is extremely beneficial for the planning and submittal of regulatory documents that may be influenced – both in scope and in details – by the classification of exceptional events that impact monitored data, and consequentially impact the regulatory decisions that air agencies must make. It is important to the State of Wyoming that the EPA honors its commitment to act on these exceptional event demonstrations.

Thank you for the opportunity to reply to your letter. As always, the AQD is available to discuss any of the concerns outlined in this letter. Please feel free to contact the AQD at 307-777-7391.

Sincerely,



Nancy E. Wehr  
AQD Administrator

Cc: Adam Clark, EPA Region 8  
Cara Keslar, AQD  
Amber Potts, AQD  
Mike Morris, AQD



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APR 28 2016

Ref: 8P-AR

Nancy Vehr, Administrator  
Air Quality Division  
Wyoming Department of Environmental Quality  
200 West 17<sup>th</sup> Street  
Cheyenne, Wyoming 82002

Re: Wyoming Department of Environmental Quality  
(WDEQ) Exceptional Events Documentation  
Packages; 2011-2014



Dear Ms. Vehr:

This letter is in response to WDEQ's submittals of demonstrations of exceptional event influence on PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone monitoring data for calendar years 2011-2014. The demonstration documents contain information regarding monitoring data flagged by WDEQ to indicate that PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS) exceedances were affected by high winds, PM<sub>2.5</sub> NAAQS exceedances were affected by wildfires, and ozone NAAQS exceedances were affected by stratospheric intrusions.

A preliminary review of the demonstrations submitted indicates that the flagged PM and ozone data may have been influenced by exceptional events; however, at this time the EPA will not take action on WDEQ's request for concurrence on the referenced data flags. The data are not anticipated to be involved in any pending regulatory decision by the EPA, therefore, the EPA is not making a concurrence decision on the demonstrations submitted. If at some point in the future the flagged data would be included in an attainment demonstration or involved in other regulatory decisions, the EPA would then undertake a full review of the submitted demonstrations to allow a concurrence decision at that time.

The enclosed table provides a summary of the flagged PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone monitoring data WDEQ provided for the calendar years 2011-2014 subject to this letter. With this letter, the EPA is determining our review of the WDEQ 2011-2014 packages listed in the enclosed table to be complete. As always, the EPA staff are available to answer any questions your staff may have and to provide help where needed. For additional information, please feel free to contact me, or your staff may contact Kyle Olson, of my staff, at (303) 312-6002.

Sincerely,



Monica Morales, Acting Director  
Air Program





EE Date	Year	Location	Monitor ID	Parameter	Monitored Value
5/30/2011	2011	South Pass	56-013-0099-1	O <sub>3</sub>	81 ppb
1/11/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	312 µg/m <sup>3</sup>
1/12/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	167 µg/m <sup>3</sup>
1/13/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	325 µg/m <sup>3</sup>
1/16/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	179 µg/m <sup>3</sup>
1/18/2012	2012	Naughton	56-023-0820-2	PM <sub>10</sub>	174 µg/m <sup>3</sup>
		Mountain Cement	56-001-0800-3	PM <sub>10</sub>	170 µg/m <sup>3</sup>
1/21/2012	2012	School Creek - 3	56-005-0086-1	PM <sub>10</sub>	226 µg/m <sup>3</sup>
		School Creek - 2	56-005-0087-1	PM <sub>10</sub>	223 µg/m <sup>3</sup>
		N Antelope/ Rochelle RO-1	56-005-0869-2	PM <sub>10</sub>	200 µg/m <sup>3</sup>
3/26/2012	2012	Mountain Cement	56-001-0800-3	PM <sub>10</sub>	204 µg/m <sup>3</sup>
4/12/2012	2012	Buckskin Mine N	56-005-1899-1	PM <sub>10</sub>	180 µg/m <sup>3</sup>
6/5/2012	2012	Wyodak	56-005-0901-1	PM <sub>10</sub>	237 µg/m <sup>3</sup>
		Bridger Coal JB-4	56-037-0860-1	PM <sub>10</sub>	215 µg/m <sup>3</sup>
6/6/2012	2012	Thunder Basin	56-005-0123-1	O <sub>3</sub>	88 ppb
6/26/2012	2012	Pinedale	56-035-0101-1	PM <sub>2.5</sub>	47.0 µg/m <sup>3</sup>
6/28/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	53.8 µg/m <sup>3</sup>
6/29/2012	2012	Lander	56-013-1003-1	PM <sub>2.5</sub>	41.8 µg/m <sup>3</sup>
		Casper	56-025-0001-1	PM <sub>2.5</sub>	36.5 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	110.6 µg/m <sup>3</sup>
6/30/2012	2012	Big Piney	56-035-0700-1	PM <sub>10</sub>	190 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	143.7 µg/m <sup>3</sup>
7/1/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	85.4 µg/m <sup>3</sup>
7/2/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	97.4 µg/m <sup>3</sup>
7/3/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	74.7 µg/m <sup>3</sup>
7/4/2012	2012	Gillette Col.	56-005-0800-1	PM <sub>2.5</sub>	56.5 µg/m <sup>3</sup>
		Belle Ayr BA-4	56-005-0892-1	PM <sub>2.5</sub>	55.3 µg/m <sup>3</sup>
		Antelope 3	56-009-0819-1	PM <sub>2.5</sub>	47.0 µg/m <sup>3</sup>
		Big Piney	56-035-0700-1	PM <sub>2.5</sub>	68.4 µg/m <sup>3</sup>
7/5/2012	2012	Big Piney	56-035-0700-1	PM <sub>2.5</sub>	38.6 µg/m <sup>3</sup>
9/18/2012	2012	Wyoming Range	56-035-0097-1	PM <sub>2.5</sub>	39.1 µg/m <sup>3</sup>
9/20/2012	2012	Wyoming Range	56-035-0097-1	PM <sub>2.5</sub>	52.3 µg/m <sup>3</sup>

EE Date	Year	Location	Monitor ID	Parameter	Monitored Value
		Pinedale	56-035-0101-1	PM <sub>2.5</sub>	44.8 µg/m <sup>3</sup>
9/21/2012	2012	Rock Springs	56-037-0007-1	PM <sub>2.5</sub>	37.6 µg/m <sup>3</sup>
		Jackson Hole	56-039-1006-1	PM <sub>2.5</sub>	39.2 µg/m <sup>3</sup>
12/2/2012	2012	Buckskin Mine N	56-005-1899-1	PM <sub>10</sub>	167 µg/m <sup>3</sup>
12/20/2012	2012	N Antelope/ Rochelle RO-1	56-005-0869-2	PM <sub>10</sub>	188 µg/m <sup>3</sup>
3/4/2013	2013	Black Thunder	56-005-0891-2	PM <sub>10</sub>	166 µg/m <sup>3</sup>
3/17/2013	2013	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	261 µg/m <sup>3</sup>
		Black Butte I-80	56-037-1868-1	PM <sub>10</sub>	432 µg/m <sup>3</sup>
6/13/2013	2013	Kemmerer Mine	56-023-0800-1	PM <sub>10</sub>	273 µg/m <sup>3</sup>
1/13/2014	2014	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	166 µg/m <sup>3</sup>
2/21/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	204 µg/m <sup>3</sup>
3/17/2014	2014	Black Butte #10	56-037-0868-2	PM <sub>10</sub>	202 µg/m <sup>3</sup>
		Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	242 µg/m <sup>3</sup>
4/28/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	219 µg/m <sup>3</sup>
7/14/2014	2014	Black Butte Lucite Hills	56-037-0852-1	PM <sub>10</sub>	294 µg/m <sup>3</sup>