

ATTACHMENT 1

Exceptional Event Analysis of PM₁₀ Federal Exceedance On July 29, 2006, in Trinity County

Background

In a letter dated November 27, 2006, the North Coast Unified Air Quality Management District (District) requested that the federal PM₁₀ exceedance that occurred at the Weaverville monitoring site on July 29, 2006 be identified as caused by an exceptional event due to wildfire smoke (Attachment A). Our evaluation of this event is based upon the following information developed by the District and Air Resources Board (ARB) staff.

- Attachment A – District request for exceptional event analysis
- Attachment B – Analysis and synoptic meteorological documentation
- Attachment C – Media documentation
- Attachment D – Sample Tracking Report

Analysis

As noted in Attachment A and further detailed in Attachment B, the Weaverville monitoring site located in Trinity County in the North Coast Air Basin experienced a violation of the PM₁₀ 24-hour National Ambient Air Quality Standard on July 29, 2006. A copy of the sample report is included as Attachment D.

As noted in Attachment D, the 24-hour PM₁₀ concentration at the Weaverville monitoring site on July 29, 2006 was 161 $\mu\text{g}/\text{m}^3$. Typical 24-hour PM₁₀ concentrations at this site range from 10 to 30 $\mu\text{g}/\text{m}^3$.

A description of the Bar Complex wildfire in the area is presented and a District summary of the effect of this event, as well as a description of the meteorological conditions, is detailed in Attachment B. Attachment C includes media reports of the effects of the smoke from both the wildfire and a subsequent structural fire in the area near the monitoring site.

Conclusion

ARB Staff have reviewed the data and analysis submitted by the District, as well as conducted its own analysis. Concentrations at the Weaverville monitoring site were over a hundred times the typical levels for that site in July. Analysis of the wind flow patterns during the time in question corroborate the contribution of the fire to the levels of particulate matter observed at the site. Media reports of smoke impacts, including evacuations of residents near the monitoring site further support the District's conclusions. The ARB concurs with the District assessment that smoke from the Bar Complex fire, and a subsequent structural fire, contributed to the federal PM₁₀ exceedance at Weaverville on July 29, 2006.