



Exceptional Events

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Exceptional Events Rule (EER)

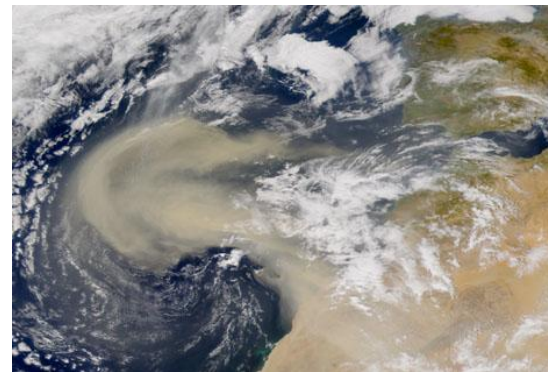
The Basics

- Sets criteria and process for EPA to agree to exclude event-influenced data when determining NAAQS compliance and design values.
- Final rule published March 22, 2007 (Effective date = May 21, 2007)
- Scope: General rule which applies to all NAAQS.
 - CFR language defining NAAQS for ozone, PM_{2.5}, PM₁₀, and Pb explicitly provides for exclusion of event-influenced data.
 - Preamble states EPA intention to effectively apply same scheme for other NAAQS also, via 107(d)(3) discretion.
 - EPA will formally extend the rule to other pollutants as NAAQS are revised, in time for new mandatory designations.
- Replaces previous EPA policy/practices.

Definition of “Exceptional Event”

40 CFR 50.1(j)

- Event affected air quality
- Event was either
 - Natural or
 - Caused by human activity and unlikely to recur at a particular location
- Event was not reasonably controllable or preventable
- Event was not related to:
 - Air mass stagnation
 - Inversion
 - High temperature
 - Lack of precipitation
 - Source noncompliance



Exceptional Events Rule

Requirements

Three broad categories of requirements that must be met:

1. Procedural Requirements
2. Technical Requirements
3. Mitigation Requirements

EER Procedural Requirements

- Data are flagged in EPA's AQS database.
 - Within 90 days of end of quarter, or
 - By July 1 of following year
- Public review and comment on the documentation.
- Documentation submitted to EPA.
 - Within 3 years of event
 - 1 year before regulatory action
- EPA concurs with the demonstration.

EER Technical Requirements

Overview

- Must show that the event satisfies the definition of an Exceptional Event (40 CFR 50.1(j))
- There is a clear causal connection between the exceedance and the claimed exceptional event.
- The event is associated with measured concentration in excess of normal historical fluctuations.
- There would have been no exceedances “but for” the event.

EER Technical Requirements

List of Demonstration Criteria

- Affects air quality
- Not reasonably controllable or preventable
- Caused by human activity unlikely to recur at a particular location OR a natural event
- Clear causal relationship
- Concentrations in excess of normal historical concentrations
- No exceedance/violation but for the event
- [Unusually high wind]

EER Technical Requirements

Affects Air Quality

- This criterion can be met by establishing that the event is associated with a measured exceedance in excess of normal historical fluctuations and there is a causal connection between the event and the exceedance.

EER Technical Requirements

Not Reasonably Controllable or Preventable

- The event had only natural sources
- Despite reasonable and appropriate measures on contributing anthropogenic sources, the event caused the exceedance.
 - Identify sources and controls
 - Note on high winds: recurring events from controllable anthropogenic sources are not considered exceptional events, even under conditions of high wind.

EER Technical Requirements

Human Activity or Natural

- Human activity that is unlikely to recur at a particular location
 - Structural fires
 - Industrial accidents

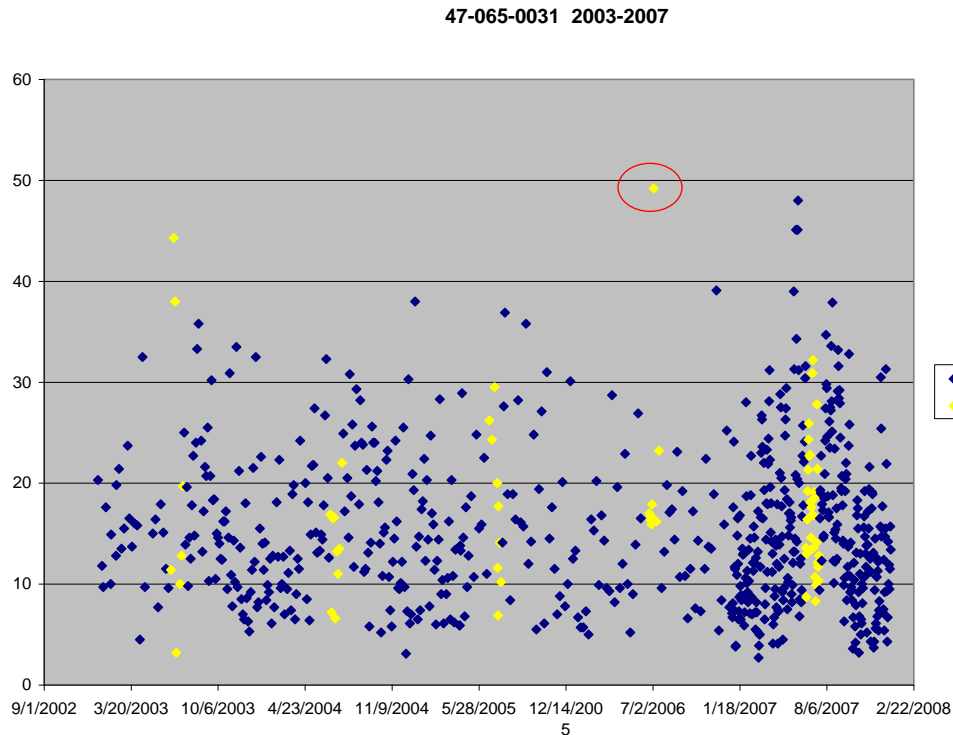
OR

- Natural event
 - High winds (depends on sources of dust)
 - Volcanic eruptions
 - Earthquakes

EER Technical Requirements

Concentrations in Excess of Historical Fluctuations

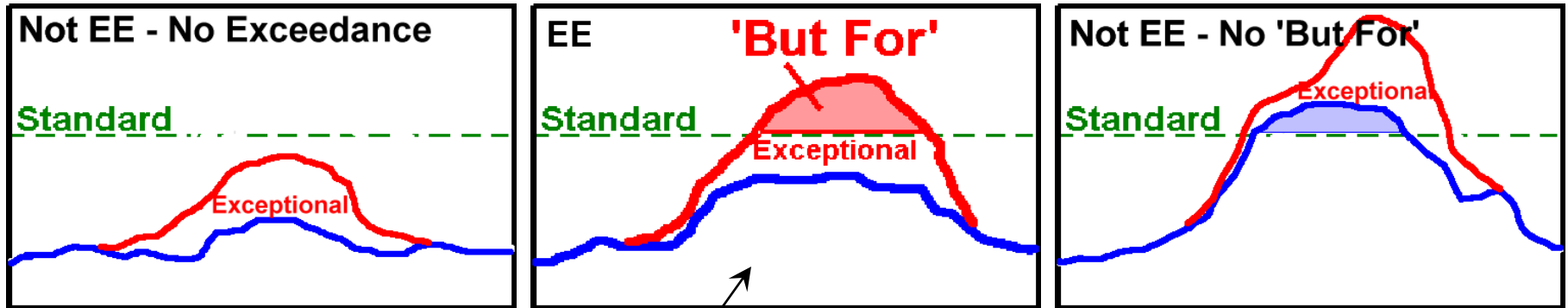
- Data analysis comparing contemporary concentrations with the distribution of all measured data during the past several years.



EER Technical Requirements

But-for Demonstration

- EE Demonstration must **quantitatively** show that without impact from EE, no exceedance would have occurred.
 - Statistical models, remove/replace event data
 - Values closer to the applicable standard will need more rigorous but-for demonstrations.



This is the only scenario in which data may be excluded

EER Mitigation Requirements

- Agencies must take appropriate and reasonable actions to protect public health from exceedances or violations of the NAAQS, including:
 - Public notification,
 - Public education, and
 - Implementation of measures.

Implications for Tribes

- Exceptional event demonstrations require significant resources
- Exceptional events only matter for regulatory data.
- Currently no special treatment for tribes
- Need to identify resources and mechanisms for tribes to address exceptional events.

Additional Information

- Guidance or rule revision for EER is currently being considered by EPA
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