



# Final Exceptional Events Rule Revisions and Final Wildfire/Ozone Implementation Guidance

*US EPA*

*Office of Air Quality Planning and Standards*

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# Overview

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# Key Points

- EPA initiated the Exceptional Events Rule revisions and guidance development process to address certain substantive issues raised by state, local and tribal co-regulators and other stakeholders since promulgation of the 2007 rule and to increase the clarity and efficiency of the Exceptional Events Rule criteria and process.
- The exceptional events improvement efforts over the past several years have been collaborative involving multiple public webinars, listening sessions, meetings, best practices discussions and a public hearing in December 2015.
- The Exceptional Events Rule revisions and related guidance are key mechanisms in implementing the 2015 Ozone NAAQS.
- The effective date of the rule is September 30, 2016.



# Background

- November 2015 - Notice of Proposed Rulemaking for rule revisions and Notice of Availability for draft guidance (80 FR 72840)
- December 8, 2015 – Public hearing in Phoenix, Arizona
- February 3, 2016 – Close of comment period
- September 16, 2016 – Administrator signed final Exceptional Events Rule revisions. OAQPS Office Director signed final wildfire/ozone guidance.
- September 30, 2016 – Rule effective date; posted to Federal Register Public Inspection site.
- October 3, 2016 – Publication in the Federal Register

# General Exceptional Events Rule Background



- Elements of the Exceptional Events Rule
  - Applies to all criteria pollutants and NAAQS and all event types to which the rule applies
  - Applies to all state air agencies, to (delegated) local air agencies, to tribal air agencies that operate air quality monitors that produce regulatory data and to federal land managers/federal agencies if agreed by the state
  - Establishes procedures and criteria for identifying and evaluating air quality monitoring data affected by exceptional events
  - Provides a mechanism by which air quality data can be excluded from regulatory decisions and actions
  - Affects design value calculations, NAAQS designation decisions, attainment determinations, and State / Tribal / Federal Implementation Plan (SIP/FIP/TIP) development

# Final Exceptional Events Rule Revisions

(Note: changes from proposal indicated by underline)



- Clarify the types of determinations and actions to which the authorizing statutory authority in Clean Air Act (CAA) section 319(b) applies
  - Designations / Redesignations
  - Classifications
  - Attainment determinations (including clean data determinations)
  - Attainment date extensions
  - Findings of SIP inadequacy leading to SIP call
  - Other actions on a case-by-case basis
- Return to the core statutory elements of CAA section 319(b)
  - The event affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation (as supported by a comparison of the of the claimed event-influenced concentration(s) to concentrations at the same monitoring site at other times);
  - The event was not reasonably controllable and the event was not reasonably preventable; and
  - The event was a human activity that is unlikely to recur at a particular location or was a natural event.

# Final Exceptional Events Rule Revisions



- Clarify “not reasonably controllable or preventable” criteria
  - Clarify that “controllable” and “preventable” are separate tests
  - Rely on pollutant-relevant controls in attainment/maintenance SIP/FIP/TIPs approved within 5 years of the date of the event
  - Indicate that air agencies generally have no obligation to specifically address controls for emissions originating outside their jurisdictional (*i.e.*, state/tribal/international) border(s)
- Clarify high wind elements currently addressed in guidance
  - Include provisions for the high wind threshold
  - Include provisions and criteria for “extreme” events
- Codify requirements for the content and organization of exceptional events submittals
  - Make initial notification by the state to the EPA of a potential exceptional event a required (but waivable) preliminary step before submitting a demonstration (based on best practices)
  - Include narrative conceptual model
  - Address 3 core statutory elements (*i.e.*, clear causal relationship supported by comparison to historical concentrations, human activity unlikely to recur/natural event, not reasonably controllable or preventable)
  - Include documentation that public comment process was conducted

# Final Exceptional Events Rule Revisions



- Remove “general schedule” deadlines for data flagging and demonstration submittal
- New fire-related rule language and preamble text
  - Clarify that all wildfires on wildland are natural events
  - Clarify that prescribed fire is a human-caused event eligible for treatment as an exceptional event and provide a streamlined path to show how air agencies can satisfy rule criteria
    - Rely on land/resource management plans (for frequency of recurrence and for “not reasonably preventable”)
    - Identify recommended components of Smoke Management Programs (in preamble) and Basic Smoke Management Practices (BSMP) (in rule text)
    - Require land managers, burn managers and air agencies to collaborate regarding the process by which the agencies will work together to include general expectations for selection and application of appropriate BSMP (2-year phase in period)
  - Define fire-related terms in regulatory language (prescribed fire, wildfire, wildland)



# Final Exceptional Events Rule Revisions



- Mitigation Regulatory Requirements
  - Preamble identifies areas with recurring events (generally three events in a 3-year time period, which for final rule purposes was 1/1/13 – 12/31/15)
  - Requires development of mitigation plan (elements are specified) to be prepared and submitted for EPA's review
  - Identified areas have 2 years from the effective date of the rule to submit after which time the EPA will not concur with demonstrations for events that are the focus of the mitigation plan
- Other provisions
  - Address who may submit a demonstration
    - States and Tribes operating monitors that produce regulatory data
    - Local agencies with delegated responsibility for air quality management
    - Federal land managers with the concurrence of the affected air agency
  - Event aggregation
  - Preamble includes intended timelines for EPA response

# Exceptional Events Schedule in 2015 Ozone NAAQS



- Developed flagging and demonstration submission rule language that specifies the schedule that would apply to any future NAAQS revision. (Dates are calculated based on the promulgation date of the NAAQS.)
- Promulgated schedule splits available time between the air agencies and the EPA and ensures that EPA has time to assess any exceptional events demonstrations that would substantively affect initial area designations
- For the 2015 Ozone NAAQS, the relevant data years include:
  - 2014-2016 for ozone designations promulgated in October 2017 (CAA 2-year schedule)
  - 2017 data - only if designations are completed under a 3-year schedule
- 2015 Ozone NAAQS established demonstration submission deadlines as follows:
  - ~~October 1, 2016~~ November 29, 2016 (for 2013 - 2015 data)
  - May 31, 2017 (for 2016 data)
  - May 31, 2018 (for 2017 data)
- The final Exceptional Events Rule revisions retain the same schedule that we promulgated in the 2015 Ozone NAAQS, but extend by 60 days (from the effective date of the Exceptional Events Rule) the demonstration submission schedule for demonstrations for 2013-2015
- Designation recommendations still due on October 1, 2016

# Final Wildfire/Ozone Exceptional Events Implementation Guidance



- Full document name: *Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations*
- What does the final guidance do?
  - Incorporates and applies the Exceptional Events Rule revisions to wildfire/ozone events
  - Provides example analyses, conclusion statements, and technical tools that air agencies can use to provide evidence that the wildfire event influenced the monitored ozone concentration

# Final Wildfire/Ozone Exceptional Events Implementation Guidance



- Uses a tiered approach for analyses to support the clear causal relationship criterion
  - Tier 1 clear causal analyses
    - Appropriate when wildfire influences on ozone concentrations are clearly higher than non-event-related concentrations or occur outside of the area's normal photochemical ozone season
    - Use time series plots and evidence of transport to the monitor
  - Tier 2 clear causal analyses
    - Appropriate when the influences of the wildfire on ozone levels are higher than non-event-related concentrations and when fire emissions compared to the distance of the fire from the affected monitor indicate a clear causal relationship
    - Use Q/D (emissions/distance) screening criterion, threshold-based monitored concentrations and evidence of transport to and influence at the monitor
  - Tier 3 clear causal analyses
    - Appropriate when Tier 1 or Tier 2 analyses are not conclusive
    - Additional analyses that supplement Tier 1 and Tier 2 analyses
  - Appropriate tier to be determined by the EPA Regional office with the affected air agency during the "Initial Notification" discussions

# Final Wildfire/Ozone Exceptional Events Implementation Guidance



- Tier 2 Key Factors
  - Q/D greater than or equal to 100 tons per day/kilometer
    - The guidance provides a detailed explanation of calculating emissions over distance
    - The guidance provides an example of how to aggregate multiple individual fires
  - A comparison to non-event related high ozone concentrations.
    - The event is in the 99<sup>th</sup> or higher percentile of the 5-year distribution of ozone monitoring data, OR
    - is one of the four highest ozone concentrations within 1 year (among those concentrations that have not already been excluded under the Exceptional Events Rule, if any)



# Next Steps

- Additional Program Elements
  - Continued development of exceptional events tools (*e.g.*, website, templates, tools)
  - Revisions to *Interim Exceptional Events Guidance Documents*
  - Stratospheric Ozone Intrusion Guidance
  - Alternate Paths for Data Exclusion Guidance
  - Prescribed Fire Guidance
- Communication and outreach
  - Public outreach webinar (September 21)
  - Continued internal EPA coordination



# Available Resources

- Exceptional Events Website at <http://www2.epa.gov/air-quality-analysis/treatment-data-influenced-exceptional-events>
  - Select “Exceptional Events Rule and Guidance” link on main page
  - Documents page contains:
    - Pre-publication copy of final rule
    - Final wildfire/ozone guidance
    - Response to comments document
    - Fact sheets
    - 2015 proposed rule documents
    - 2013 interim guidance documents
- EPA Regional office staff and/or EPA Office of Air Quality Planning and Standards staff
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# Questions and Discussion