



Texas Commission on Environmental Quality

June 27, 2023

Summary of 2021 Exceptional Event Demonstration for Particulate Matter

Background on Particulate Matter

The U.S. Environmental Protection Agency sets health-based standards for the amount of very small particles, also known as particulate matter, allowed in the air. The particulate matter of concern is either 10 micrometers and smaller (PM₁₀) or 2.5 micrometers and smaller, both smaller than the width of a human hair. Breathing air with high levels of particulate matter can cause health problems.

High Winds Caused Elevation of PM₁₀

Exceptional events are unusual or naturally occurring events that affect air quality and are not reasonably controllable or preventable. States can request the EPA not consider air quality data affected by an exceptional event when determining if an area met an air quality health standard. High winds caused blowing dust on Jan. 16, 2021, in Harris County and Nueces County, and on June 21, 2021, and Dec. 6, 2021, in El Paso County. Due to these high winds, the levels of PM₁₀ at monitors within these counties were not reasonably controllable or preventable. TCEQ plans to submit an exceptional event demonstration to EPA to exclude these data.

Analyses to Support the Demonstration

Analyses of data related to the proposed exceptional events from 2021 show that the measured PM₁₀ concentrations:

- were not reasonably controllable or preventable,
- were associated with natural events due to dust blown into the affected counties, and
- exceeded normal historical fluctuations.

EPA Decides Whether Standards Were Met

If the demonstration for 2021 is approved by EPA, the PM₁₀ concentrations exceeding the National Ambient Air Quality Standard on the referenced dates would not be considered when EPA determines whether the affected counties met the PM₁₀ health-based standard.