



*Texas Commission on Environmental Quality*

August 5, 2025

# Summary of 2023 and 2024 Exceptional Event Demonstration for Fine Particulate Matter at El Paso Chamizal Monitor in El Paso County

## Background on Particulate Matter

The U.S. Environmental Protection Agency (EPA) sets health-based standards for the amount of very small particles, also known as particulate matter, allowed in the air. Fine particulate matter is made up of particles that are 2.5 micrometers and smaller (PM<sub>2.5</sub>), much smaller than the width of a human hair. Breathing air with high levels of particulate matter can cause health problems.

## Exceptional Events Caused Elevated Concentrations of PM<sub>2.5</sub>

Exceptional events are unusual or naturally occurring events that affect air quality and are not reasonably controllable or preventable. States can request that EPA not consider air quality data affected by an exceptional event when determining if an area met an air quality health standard. EPA has stated that events that affect air quality such as wildfires, prescribed fires, high winds blowing dust, dust from the Saharan Desert, fireworks to celebrate days such as July 4<sup>th</sup>, etc., can be considered exceptional events. In 2023 and 2024, air quality at El Paso Chamizal monitor in El Paso County was impacted by PM<sub>2.5</sub> exceptional events on multiple dates. Below is a list of dates and the type of exceptional event that the Texas Commission on Environmental Quality (TCEQ) identified as affecting air quality.

Date	Type of Event
January 10, 2023	Dust from dry/desert areas
January 28, 2023	Structural fire
February 5, 2023	Dust from dry/desert areas
February 26, 2023	High winds blowing dust
November 5, 2023	Structural Fire
November 23, 2023	Dust from dry/desert areas
December 31, 2023	New Year's Eve Fireworks
January 7, 2024	High winds blowing dust
January 11, 2024	High winds blowing dust
February 28, 2024	Dust from dry/desert areas
March 24, 2024	High winds blowing dust
March 31, 2024	High winds blowing dust

Date	Type of Event
April 15, 2024	High winds blowing dust
April 25, 2024	High winds blowing dust
June 19, 2024	Smoke from wildfires in U.S.
July 24, 2024	Smoke from wildfires in U.S.
July 25, 2024	Smoke from wildfires in U.S.
July 26, 2024	Smoke from wildfires in U.S.
August 1, 2024	Dust from Saharan desert
August 23, 2024	Smoke from wildfires in U.S.
October 3, 2024	Smoke from wildfires in U.S.
October 29, 2024	High winds blowing dust

Due to these exceptional events, the levels of PM<sub>2.5</sub> at El Paso Chamizal monitor within El Paso County were not reasonably controllable or preventable. TCEQ plans to submit an exceptional event demonstration to EPA to exclude monitor data from these days.

### Analyses to Support the Demonstration

Analyses of data related to the proposed exceptional events from 2023 and 2024 at El Paso Chamizal monitor in El Paso County show that the measured PM<sub>2.5</sub> 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 EPA agrees with the demonstration for 2023 and 2024 days at El Paso Chamizal monitor in El Paso County, the PM<sub>2.5</sub> concentrations on the referenced dates would not be considered when EPA determines whether the affected county met the PM<sub>2.5</sub> health-based standard.