



Paso del Norte Air Quality Report

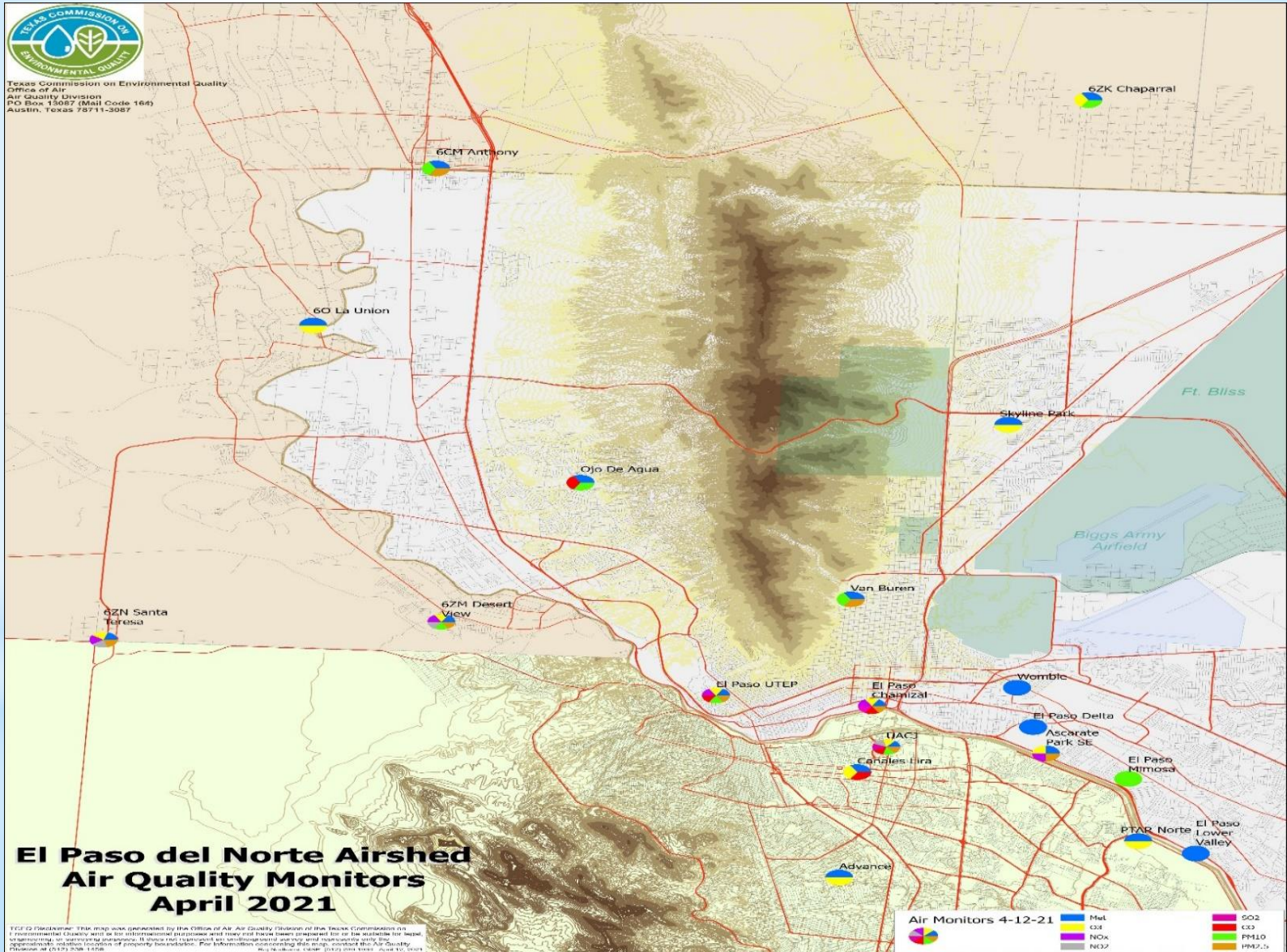
February 10, 2022

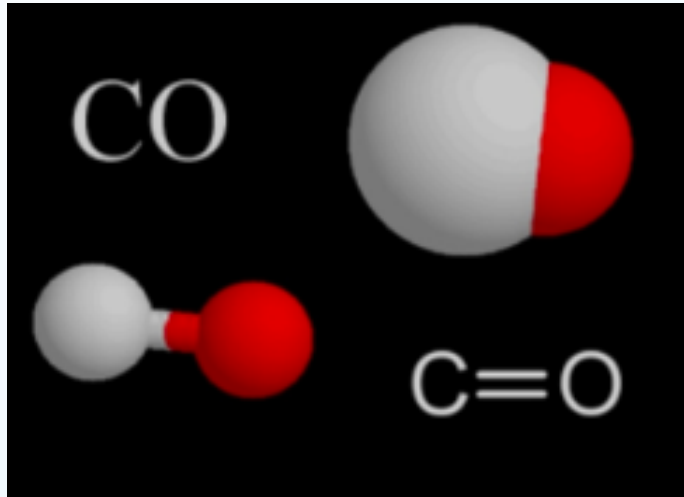
Carlos Rincon, US EPA Region 6

* Overview

- * Current air monitoring networks
- * January-December 2021 data by pollutant
- * Design Values.-
 - The preliminary design value for 2021 was not available for this meeting but we will update the graph for next JAC meeting
- * Open discussion

Paso del Norte Airshed current air monitoring stations

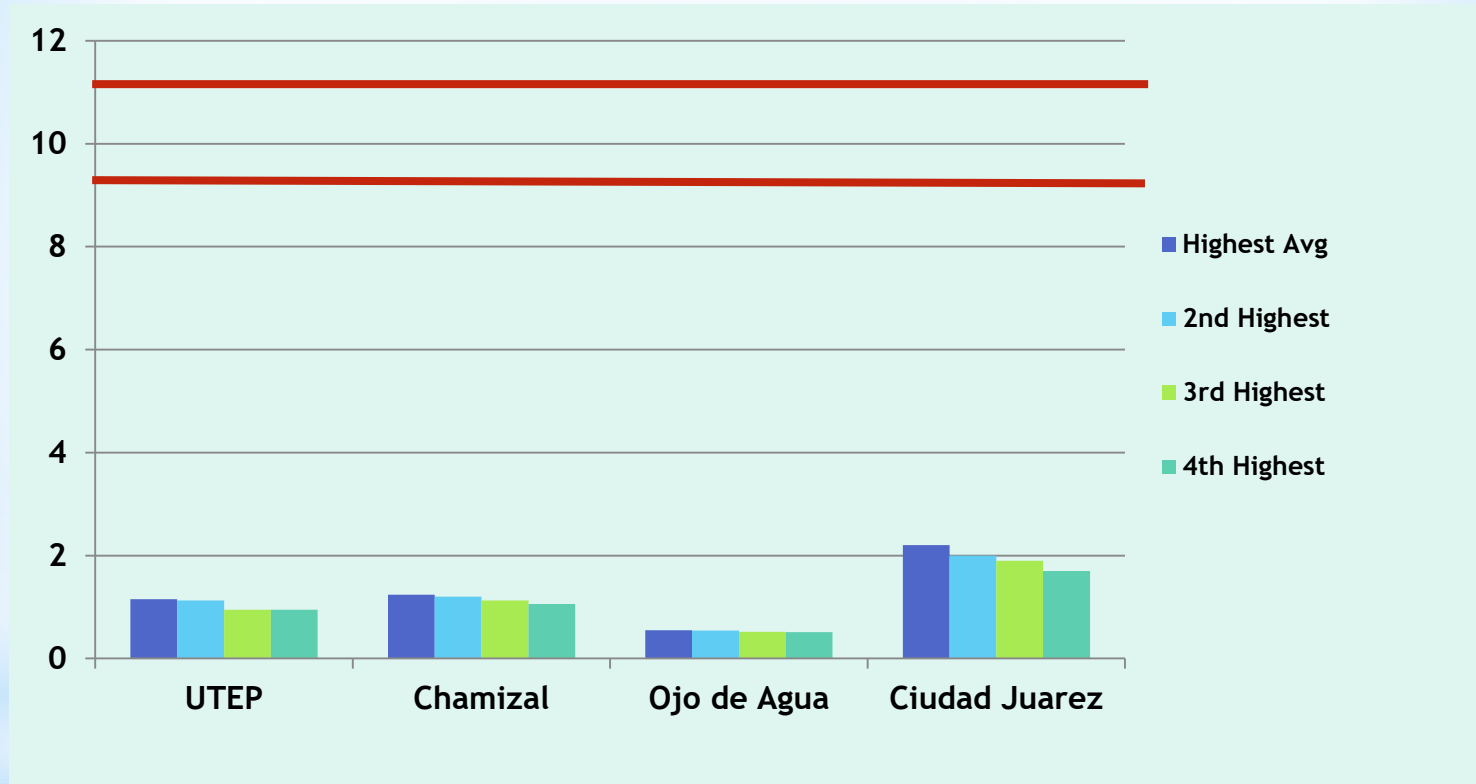




* Carbon monoxide (CO)
Monóxido de carbono

CO 8 Hr. Averages Four Highest Values in (ppm)

El Paso and Ciudad Juarez
(January - December 2021)



The **U.S. federal standard, 9.0 ppm**, is violated when more than one reading at the same monitor in one calendar year is at or above that value.

The highest allowable limit in Mexico for CO is **11 ppm** in 8-hour rolling average.

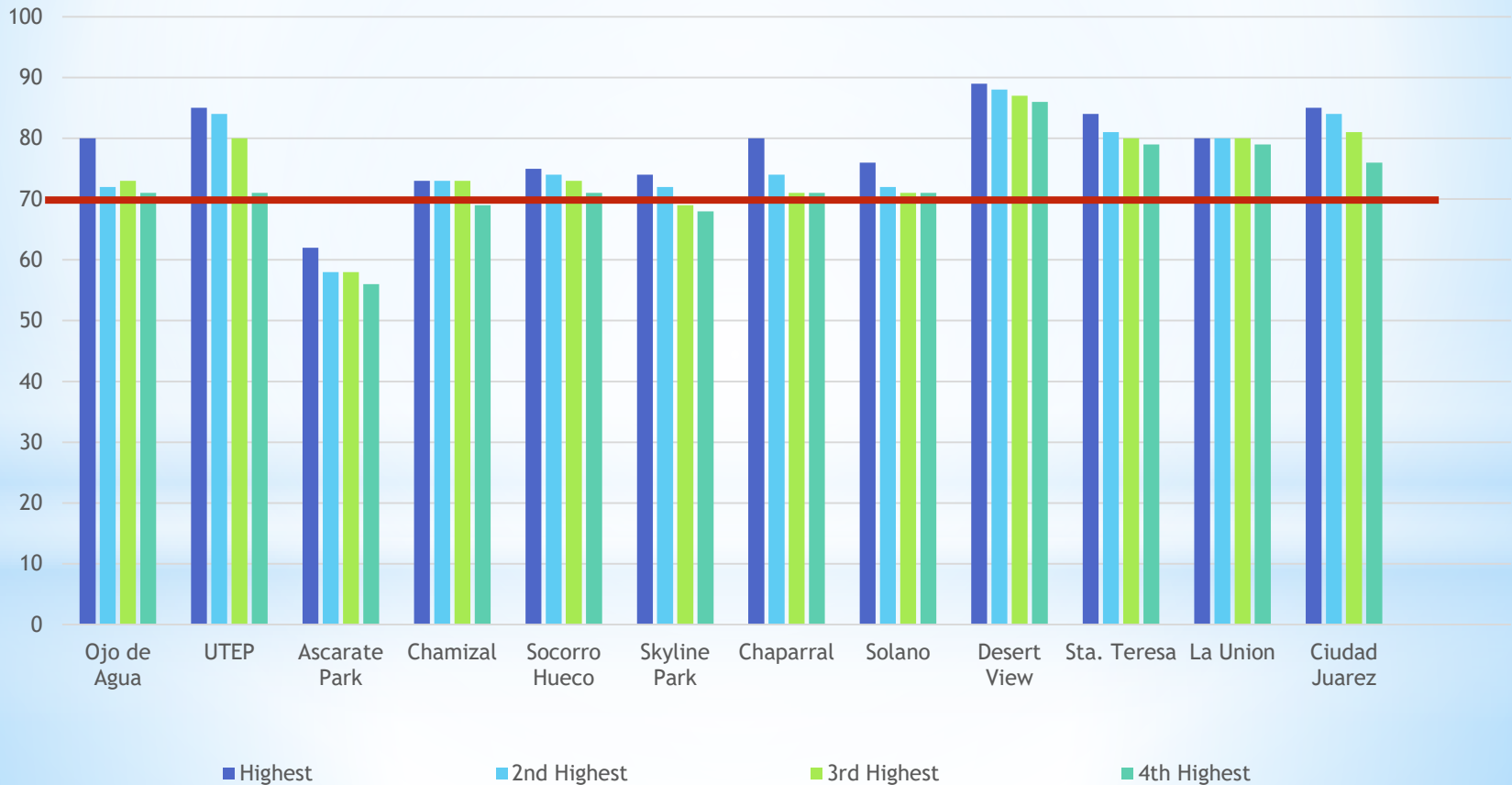


* Ozone (O_3)
Ozono

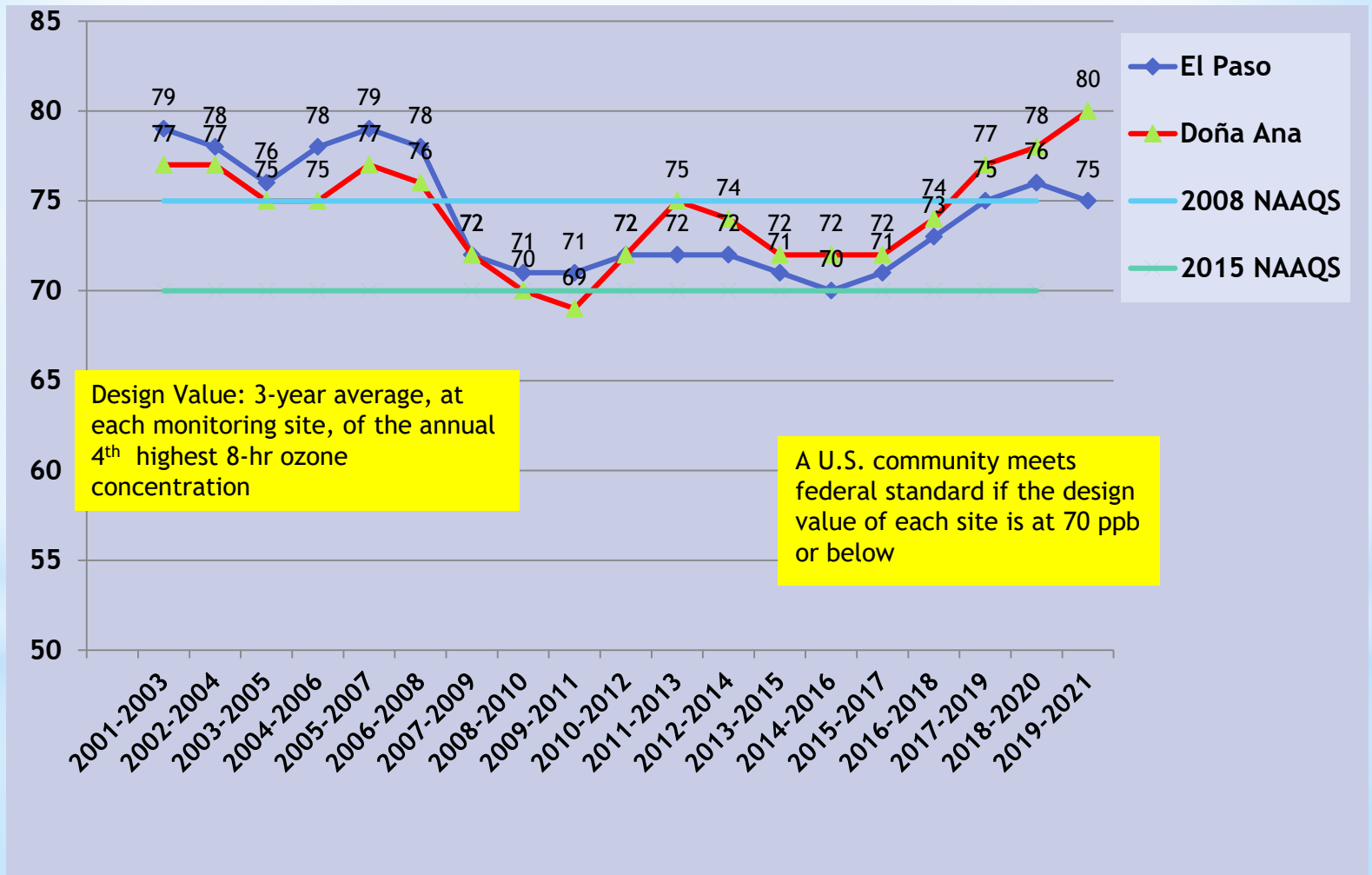
***Ozone 8-Hour Averages (ppb)**
Four Highest Values at Monitors in the Paso del Norte
(January - December 2021)

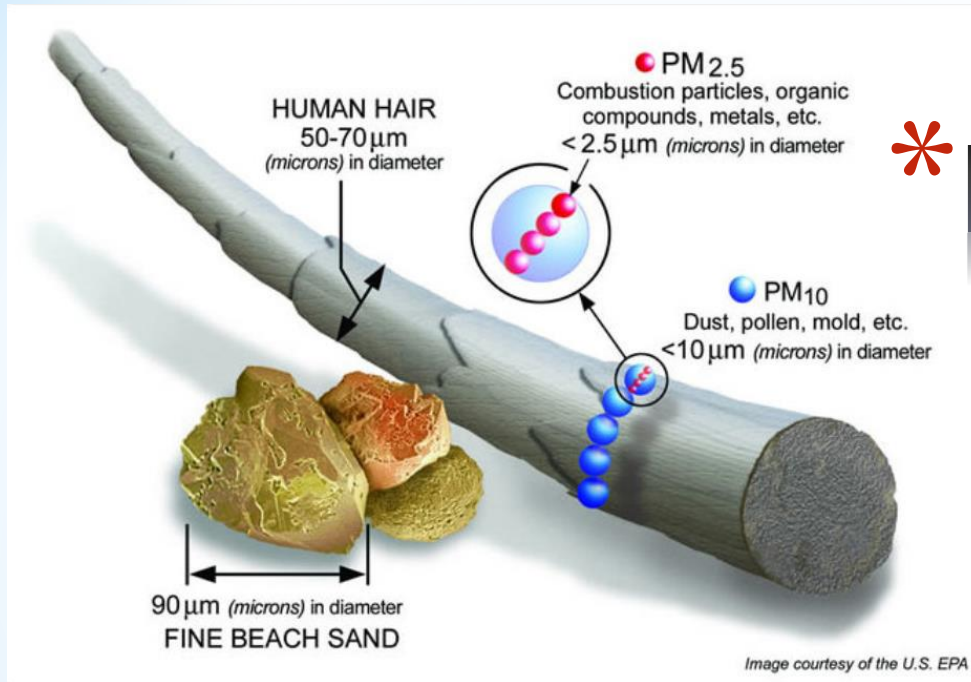
El límite máximo permisible en México para O₃ es de **70 ppb** ppm en promedios móviles de 8 horas.

U.S. federal standard:
70 ppb for the 3-year average of the
 4th highest value



* Ozone 8-Hr. Design Values
 El Paso and Doña Ana County only
 (highest value of all sites in each area, 2002 - 2021)



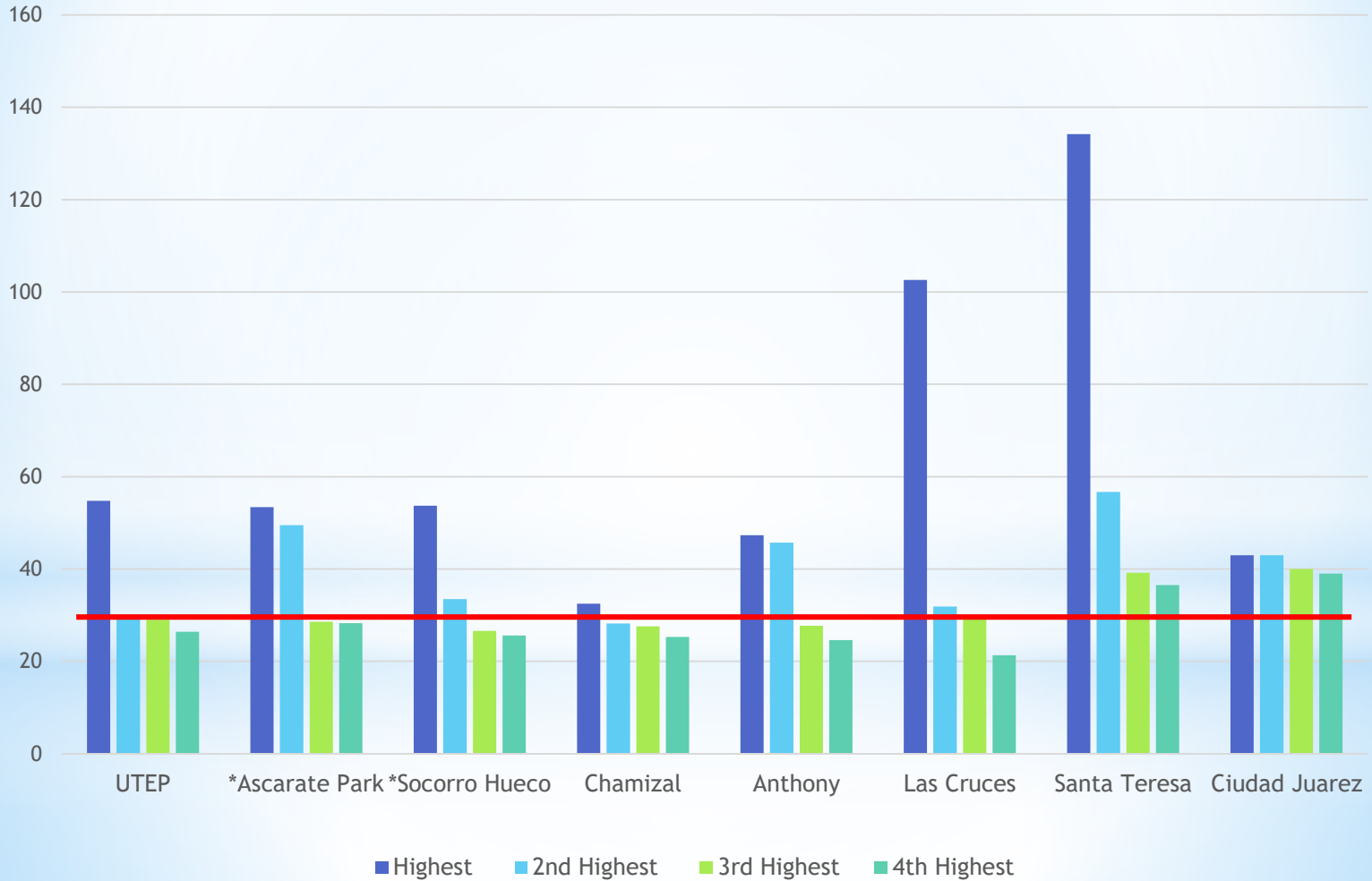


* PM 2.5

* PM 10

* Particulate Matter (pm) material particulado

* PM_{2.5}
Four Highest 24-Hour Averages (µg/m³)
El Paso, Doña Ana County and Ciudad Juarez
January - December 2021

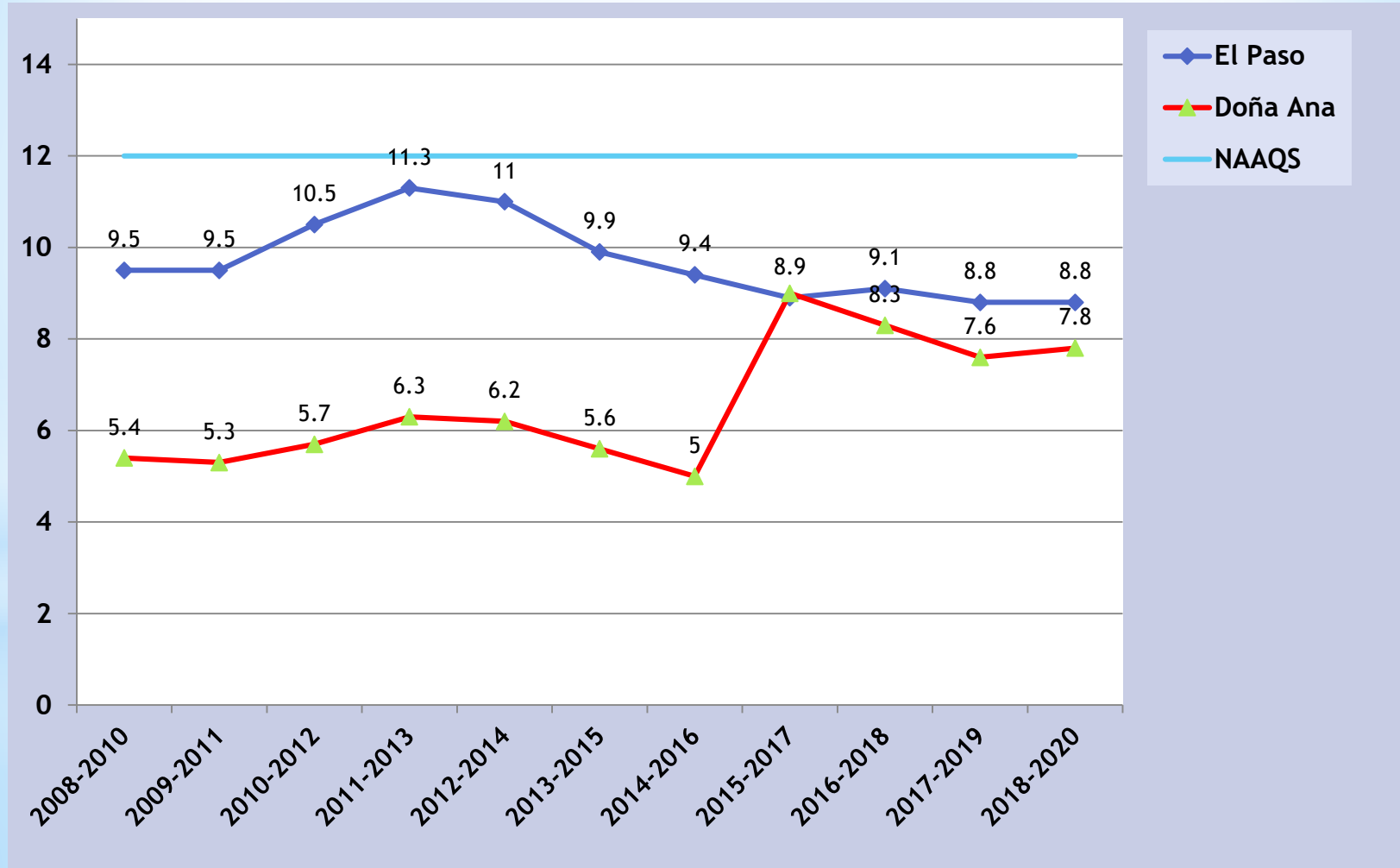


PM_{2.5} Compliance with U.S. Federal Standards El Paso and Doña Ana Counties

Annual Design Value

U.S. Standard

12 $\mu\text{g}/\text{m}^3$

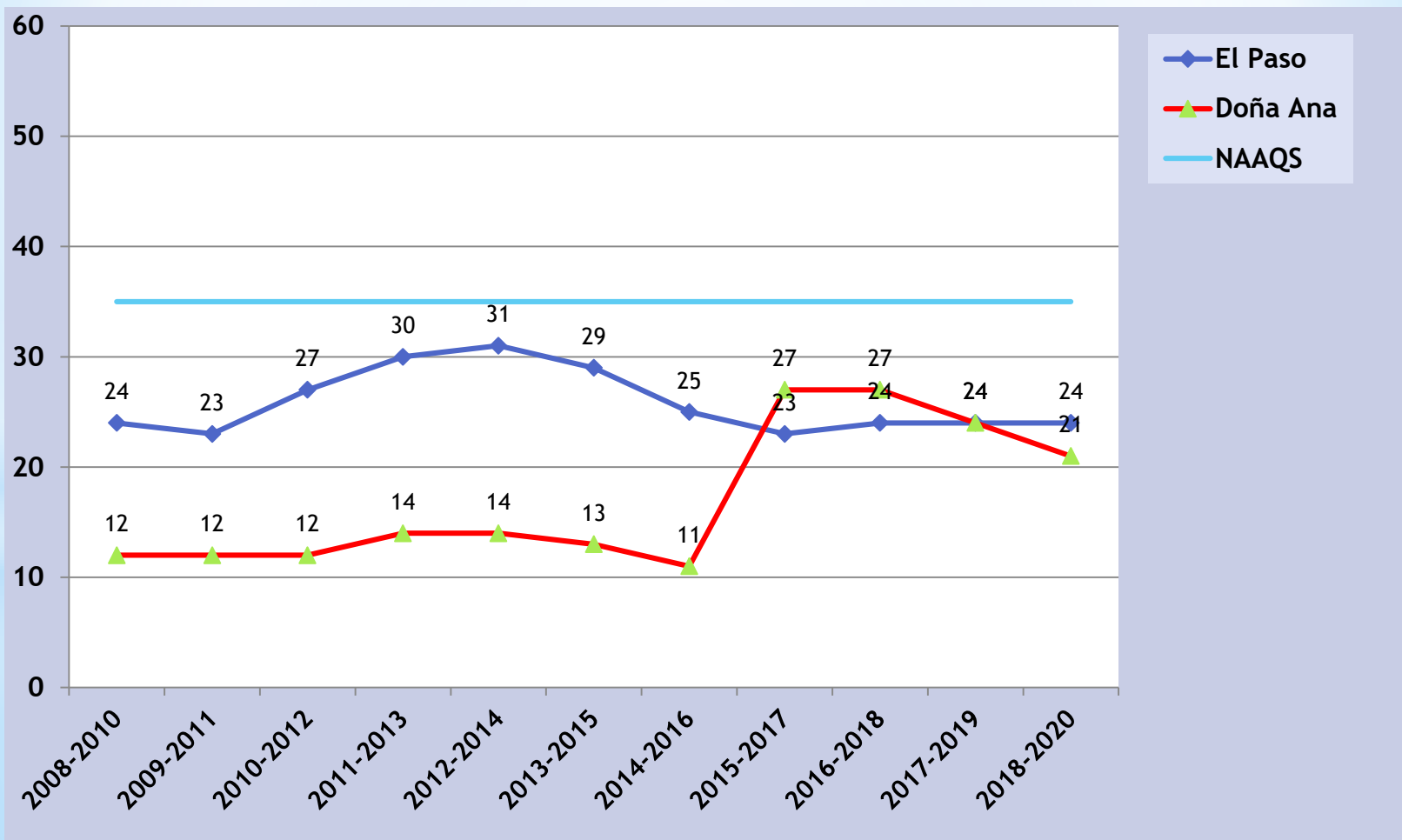


PM_{2.5}
Compliance with U.S. Federal Standards
El Paso and Doña Ana Counties

24-Hour Design Value

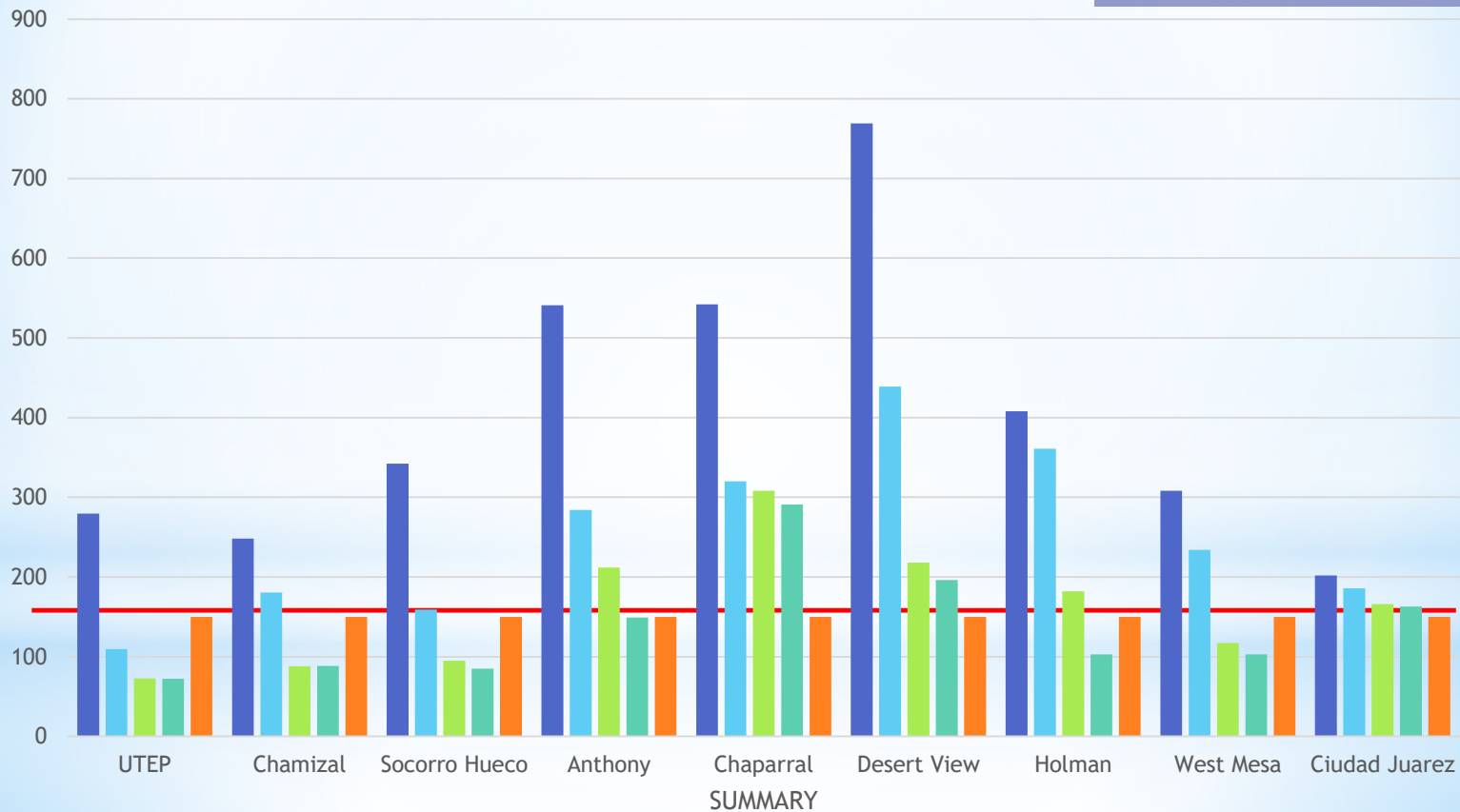
U.S. Standard

35 $\mu\text{g}/\text{m}^3$



* **PM₁₀**
Four Highest 24-Hour Averages ($\mu\text{g}/\text{m}^3$)
El Paso, Doña Ana County and Ciudad Juarez
January - December 2021

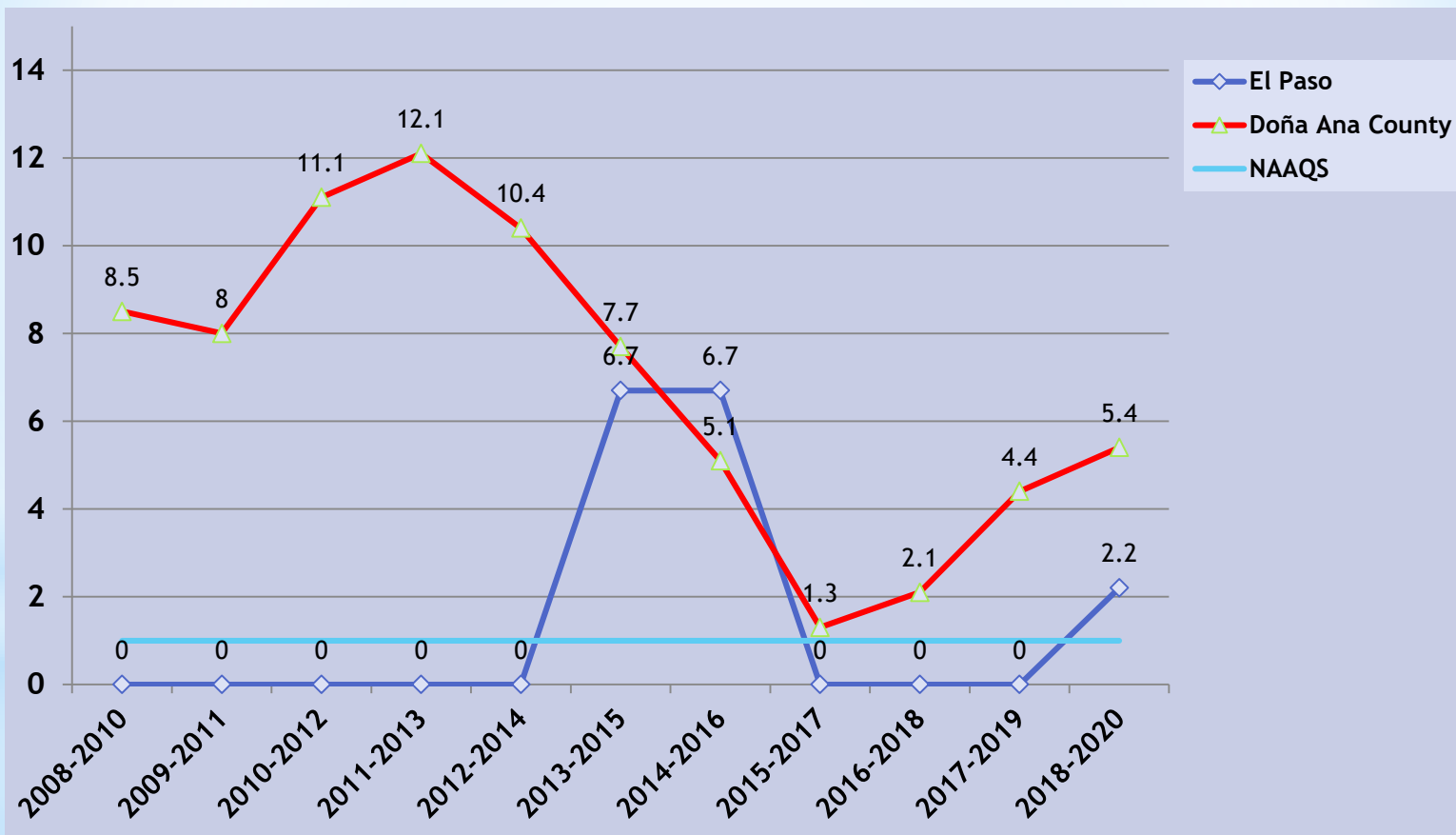
U.S. federal standard:
150 $\mu\text{g}/\text{m}^3$, not to be exceeded more
 than once per year on average over
 three years at any one monitor.



■ Highest ■ 2nd Highest ■ 3rd Highest ■ 4th Highest

PM₁₀
Compliance with U.S. National Ambient Air Quality Standard
for 24-Hour Design Value
El Paso and Doña Ana Counties
2008 - 2020

Estimated Number of Exceedances



Exceptional Events

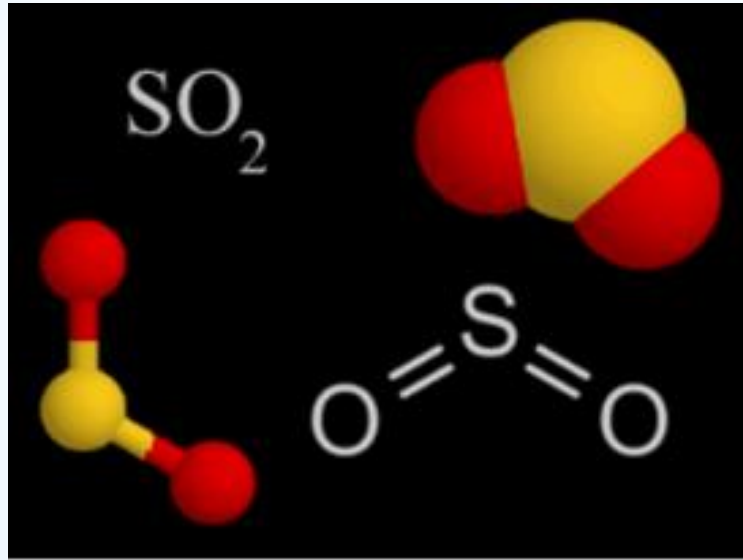
High-Wind Blowing Dust PM₁₀ Exceedances of NAAQS in Doña Ana County

Year	Events	Observed Exceedances	Concentrations (µg/m ³)	EPA Review Process
2020	8	13	157- 504	AQS Flagged
2019	8	25	156-734	Preliminary Engagement
2018	7	18	158-326	Submitted to EPA for Review
2017	11	27	157-721	Concurrence
2016	11	28	162-689	Concurrence

Cumplimiento con los límites de exposición crónica | Media aritmética anual 2021 Ciudad Juárez

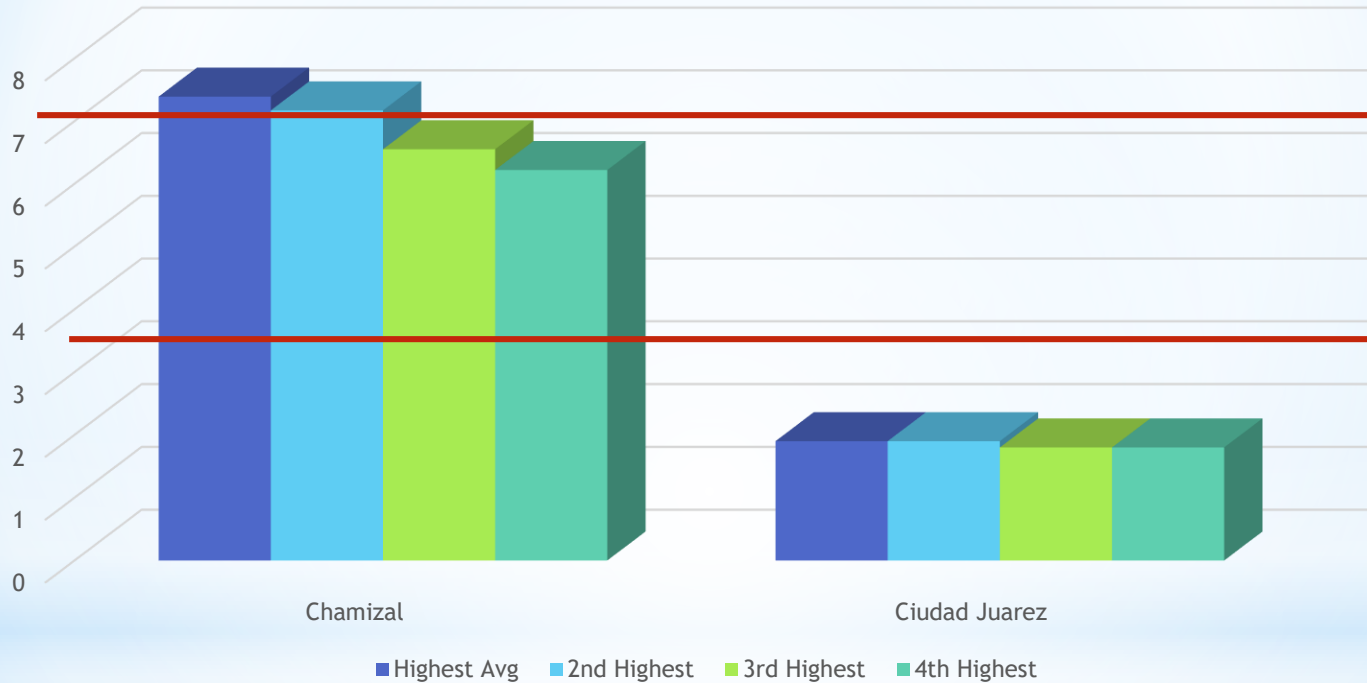
Parámetro Parameter	Límite de exposición crónica anual Annual exposure limit	Promedio trimestral Quarterly mean
PM _{2.5}	12 µg m ³	24
PM ₁₀	40 µg m ³	117

**Dentro de esta información se consideran los eventos de tolvaneras



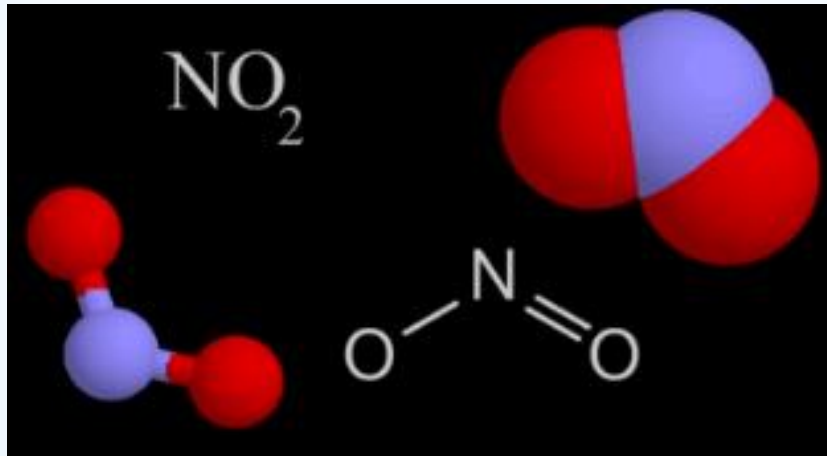
* Dióxido de azufre
Sulfur Dioxide SO₂

SO₂ Four Highest 1-Hour Averages (ppb) El Paso and Ciudad Juárez (January - December 2021)



U.S. federal standard:
0.075 ppm, 99th percentile of 1-hour daily
maximum concentrations, averaged over 3 years

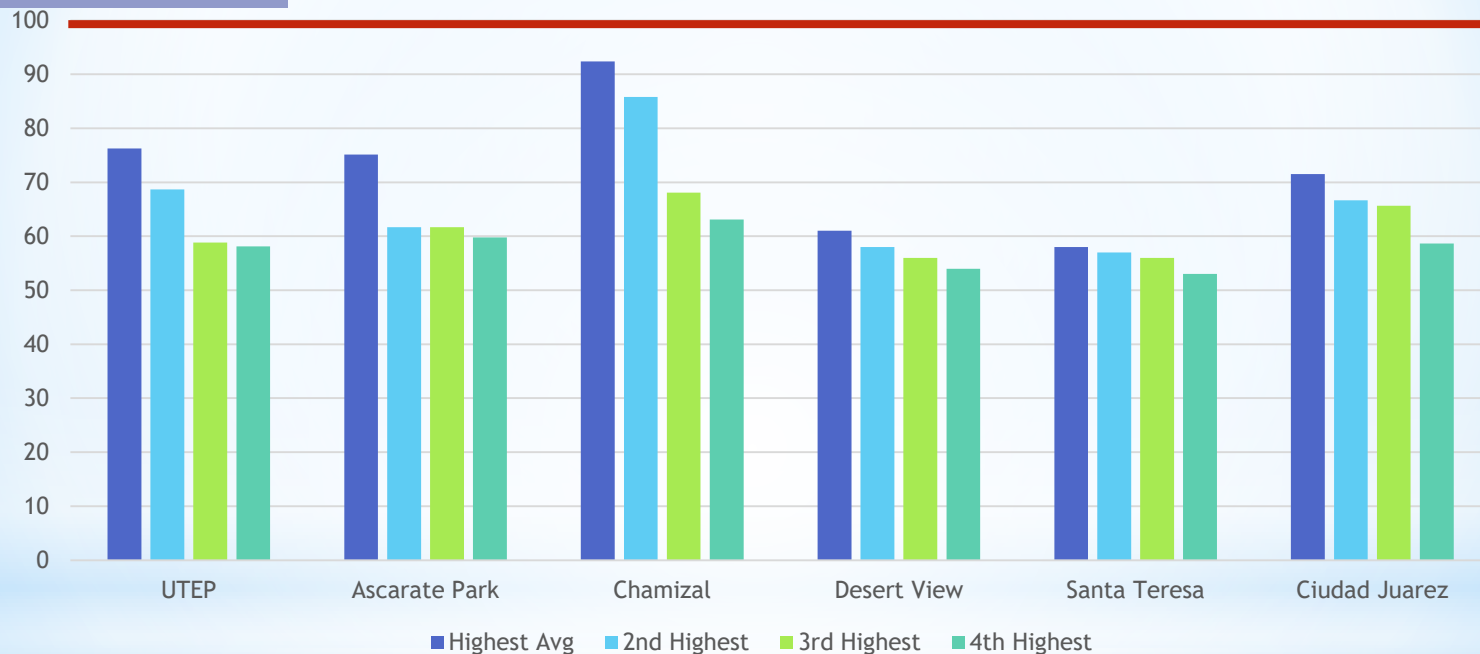
The highest allowable limit in Mexico
for SO₂ is **0.04 ppm** in daily averages.



* Dióxido de nitrógeno
Nitrogen Dioxide NO₂

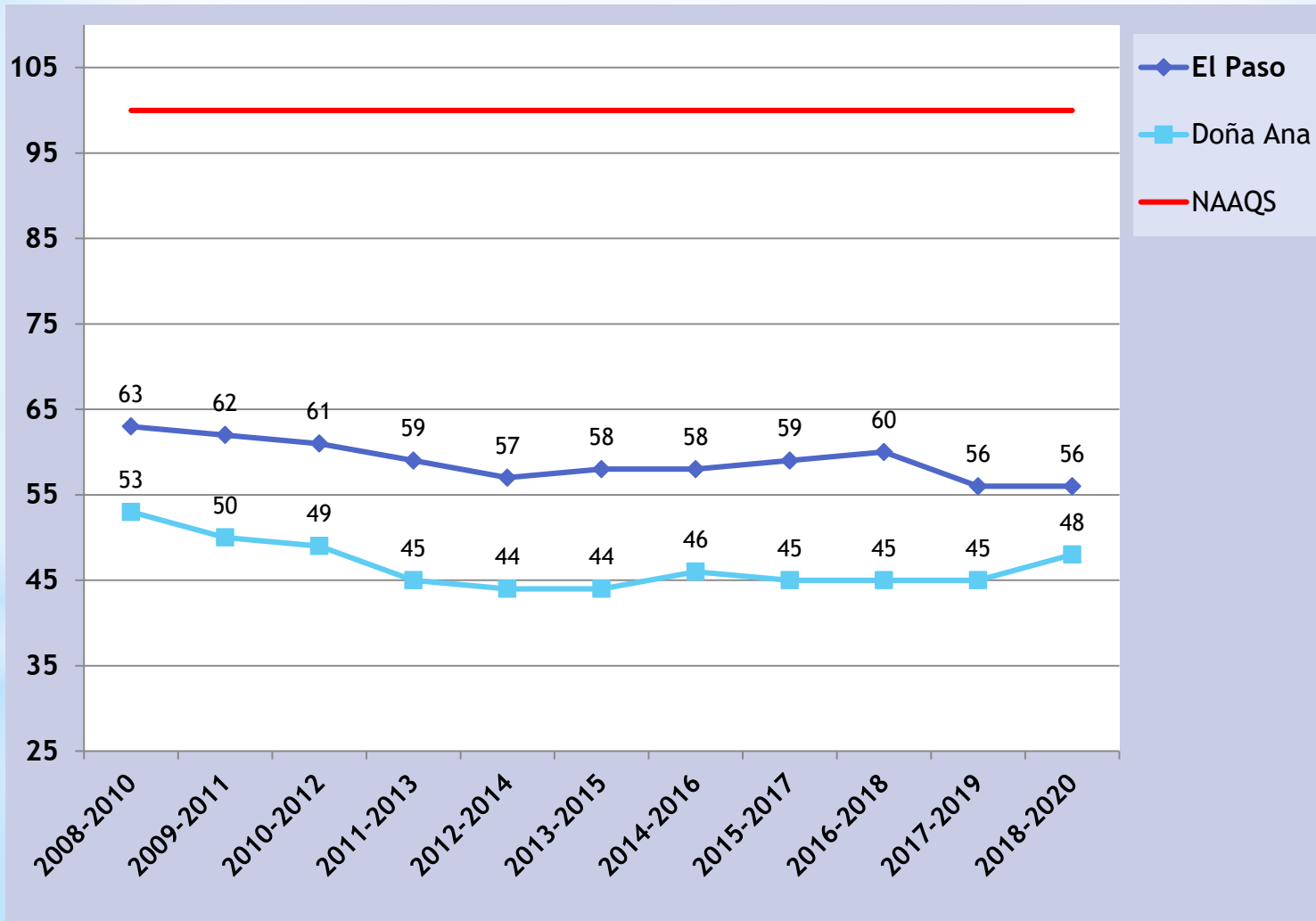
NO₂ Four Highest 1-Hour Averages (ppb) El Paso del Norte (January - December 2021)

The highest allowable limit in Mexico for NO₂ is 210 ppb in hourly averages.

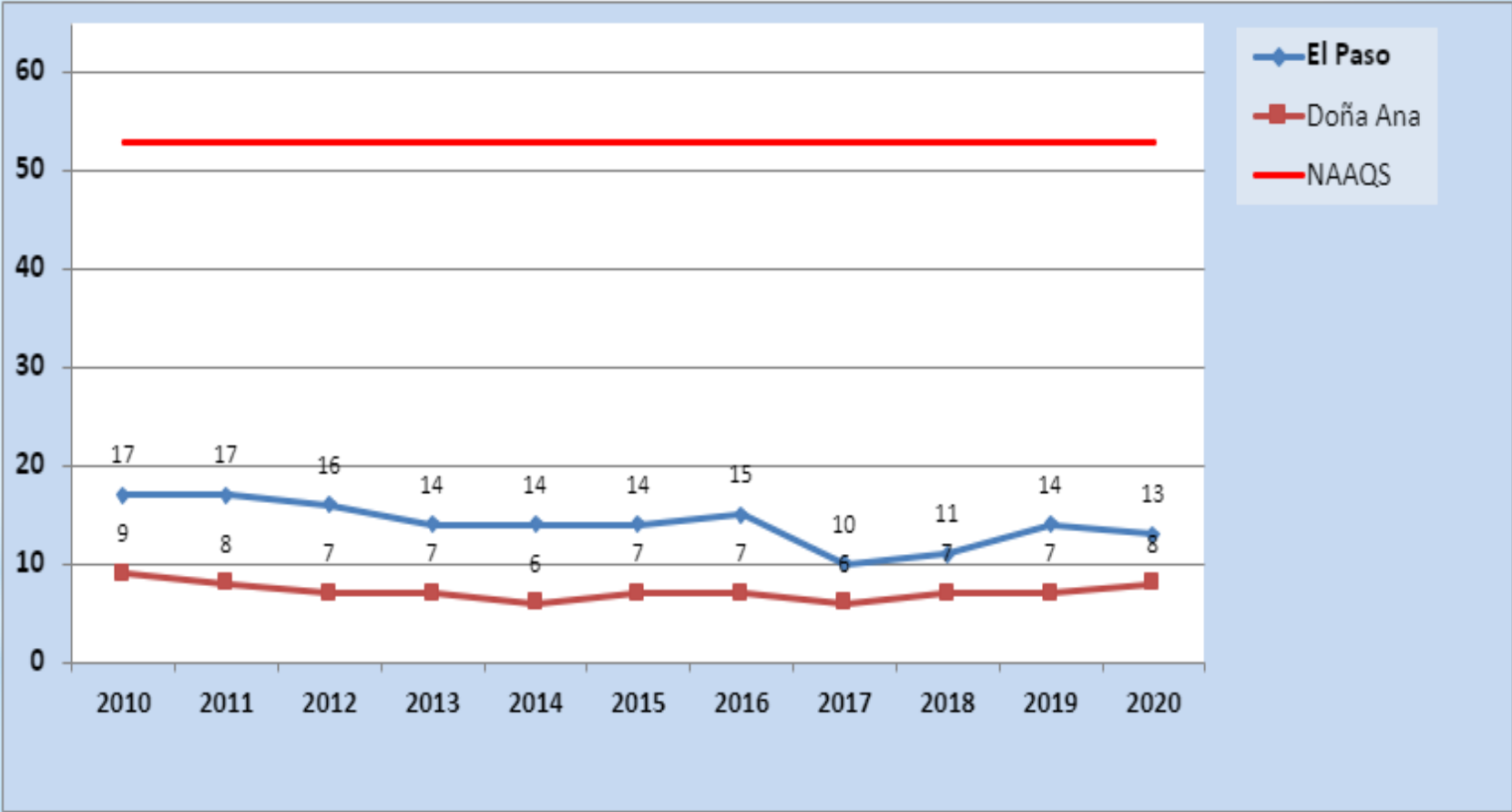


U.S. federal standard:
100 ppb 98th percentile of 1-hour daily
maximum concentrations, averaged over 3 years

NO₂
Design Values 1-Hour Averages (ppb)
El Paso & Doña Ana Counties



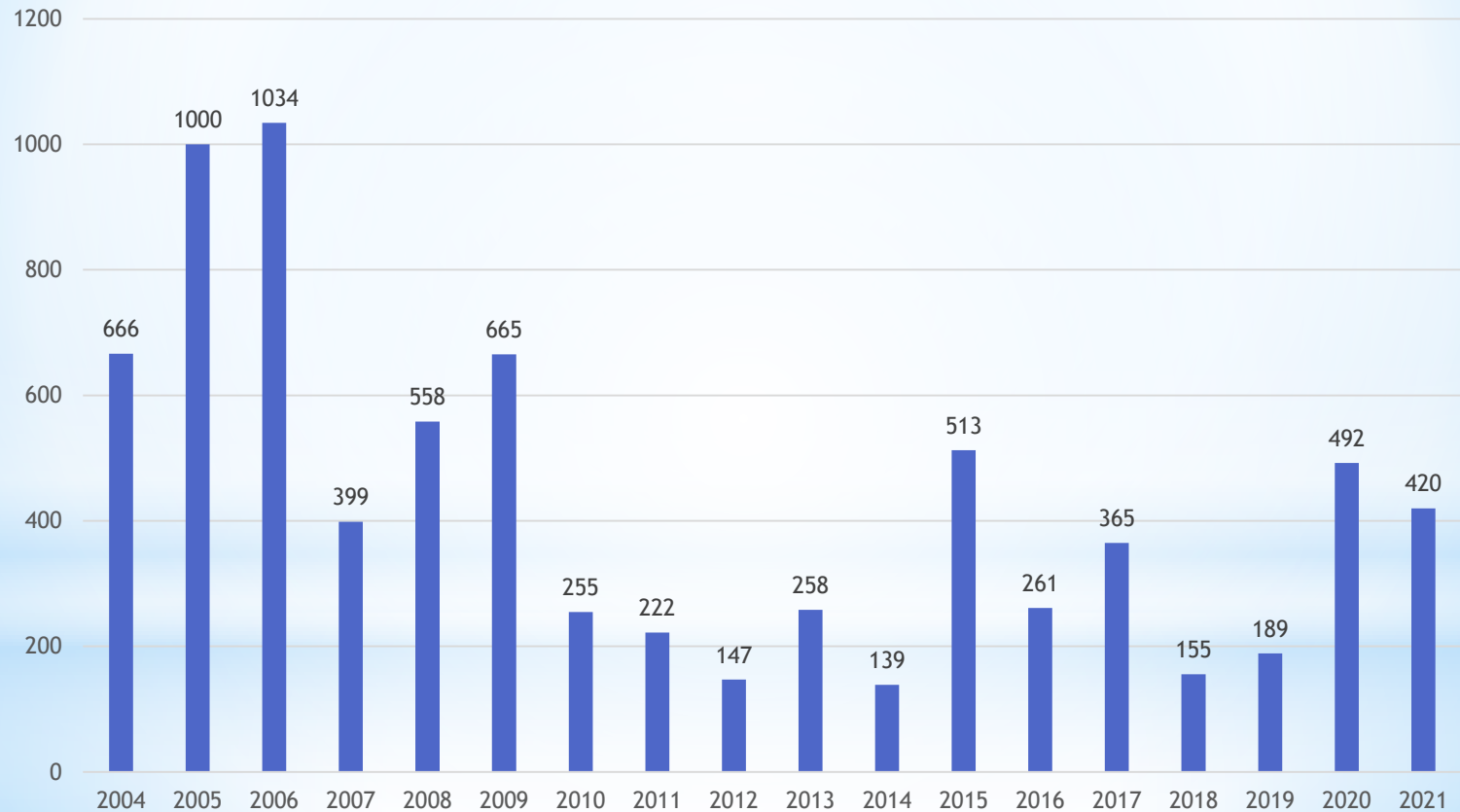
NO₂
Design Values Annual Mean (ppb)
El Paso & Doña Ana Counties



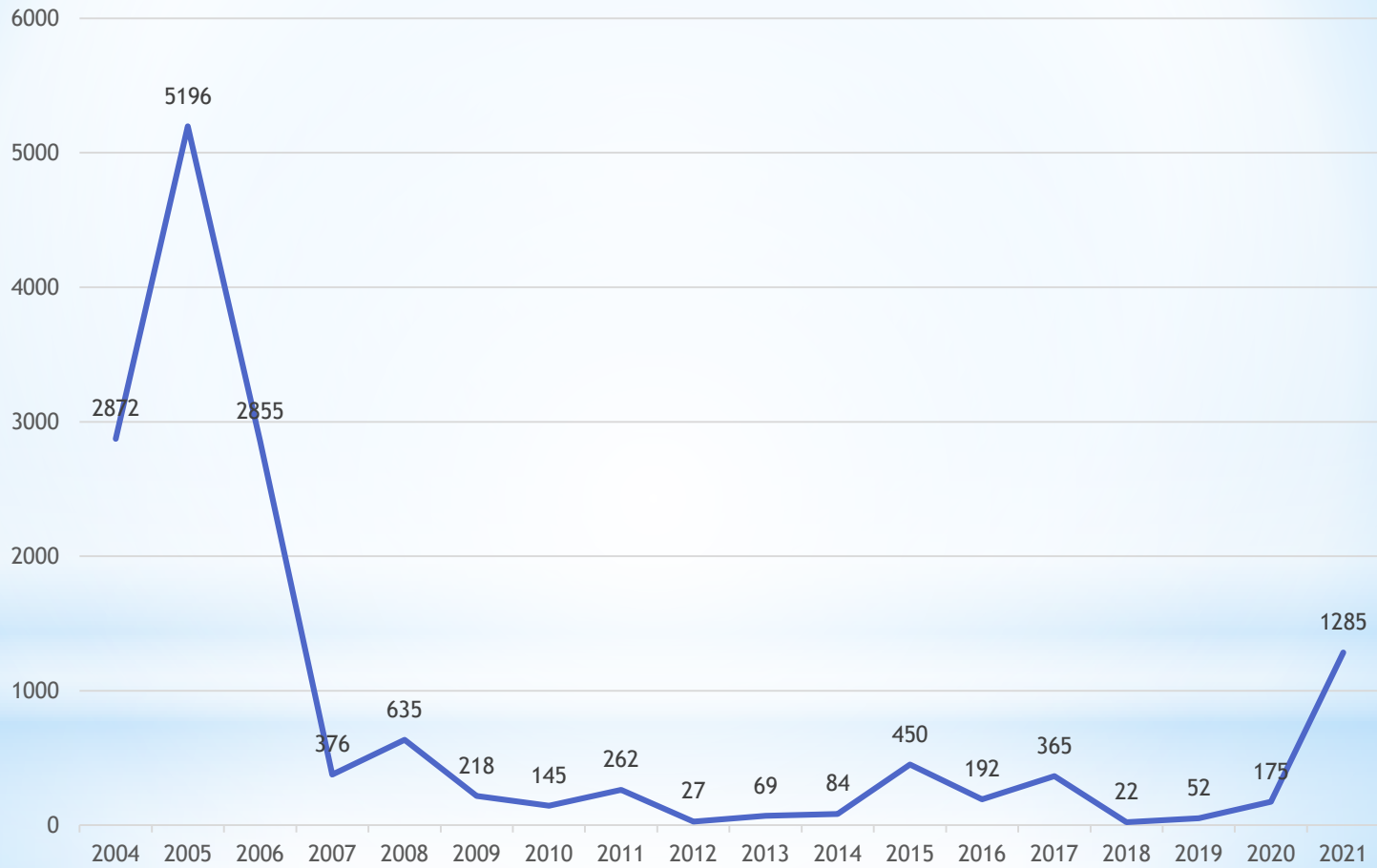


* Hydrogen Sulfide (H₂S)
Sulfuro de hidrógeno

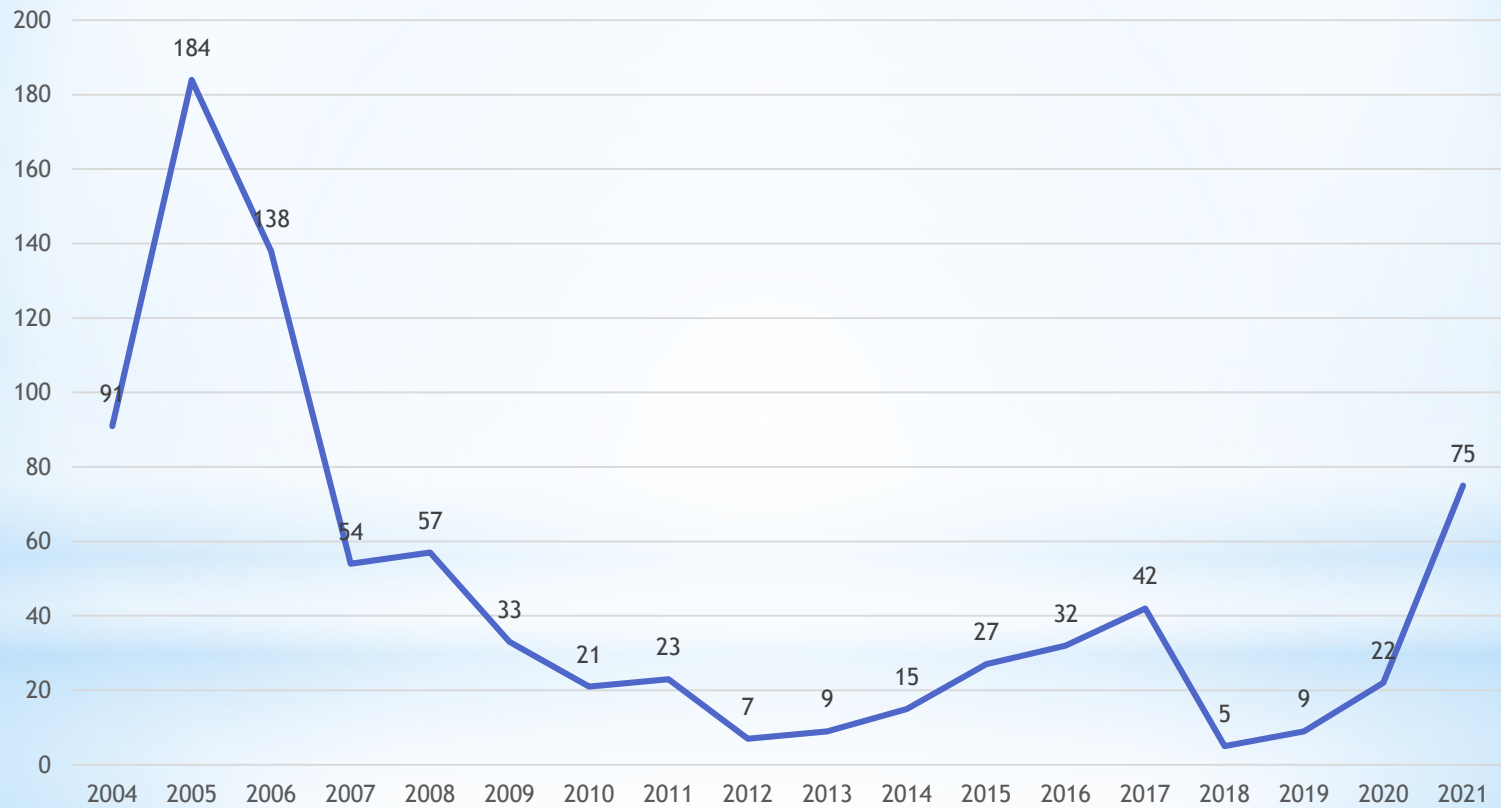
Hydrogen Sulfide - 30-Minute Averages Highest Value (in ppb) Each Year at “Lower Valley” Monitor (2004-2021)



Hydrogen Sulfide - 30-Minute Averages Number of Exceedances (in ppb) Each Year at “Lower Valley” Monitor (2004-2021)



Hydrogen Sulfide Number of Days with 30-Minute Exceedances at “Lower Valley” Monitor (2004-2021)



NMED

Armando Paz

armando.paz@state.nm.us

TCEQ

Border Affairs

ba@tceq.texas.gov

Nos pueden contactar

en:

You can find us at:

■ fvazquez@uacj.mx

■ frida.toquinto@uacj.mx



* Questions?
¿Preguntas?



*Thank you!
Gracias!

