

Paso del Norte

Air Quality Report

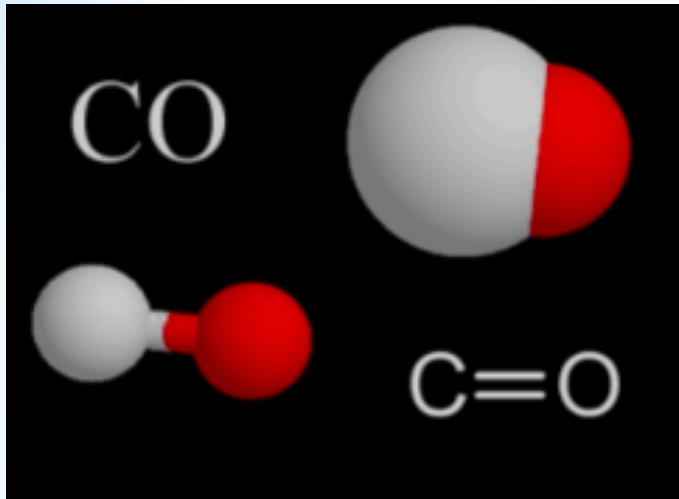


August 31, 2021

Carlos Rincon, US EPA Region 6

* Overview

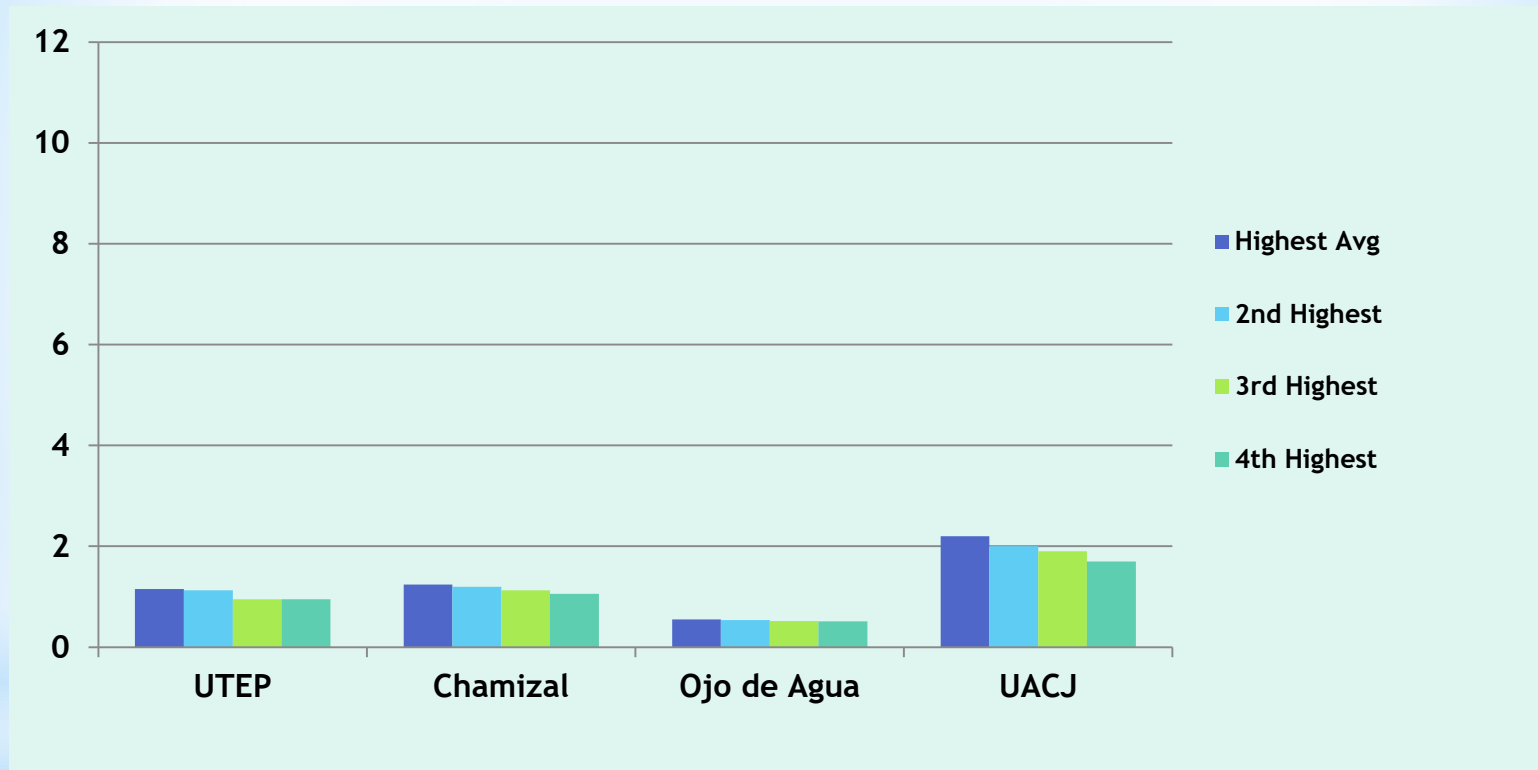
- * Current air monitoring networks
- * January-July 2021 data by pollutant
- * Design Values
- * Open discussion



* Carbon monoxide (CO)
Monóxido de carbono

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

El Paso and UACJ
(January - July 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.

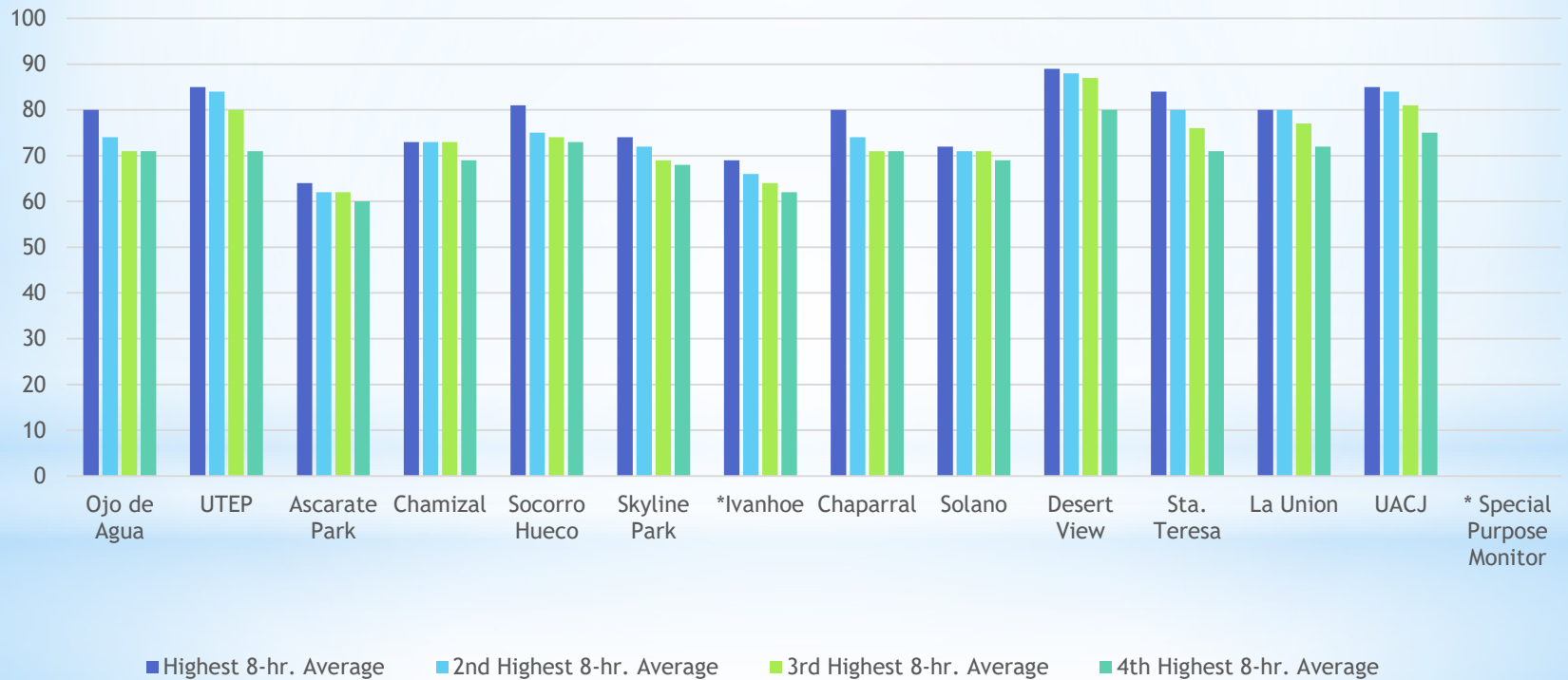


* Ozone (O_3)
Ozono

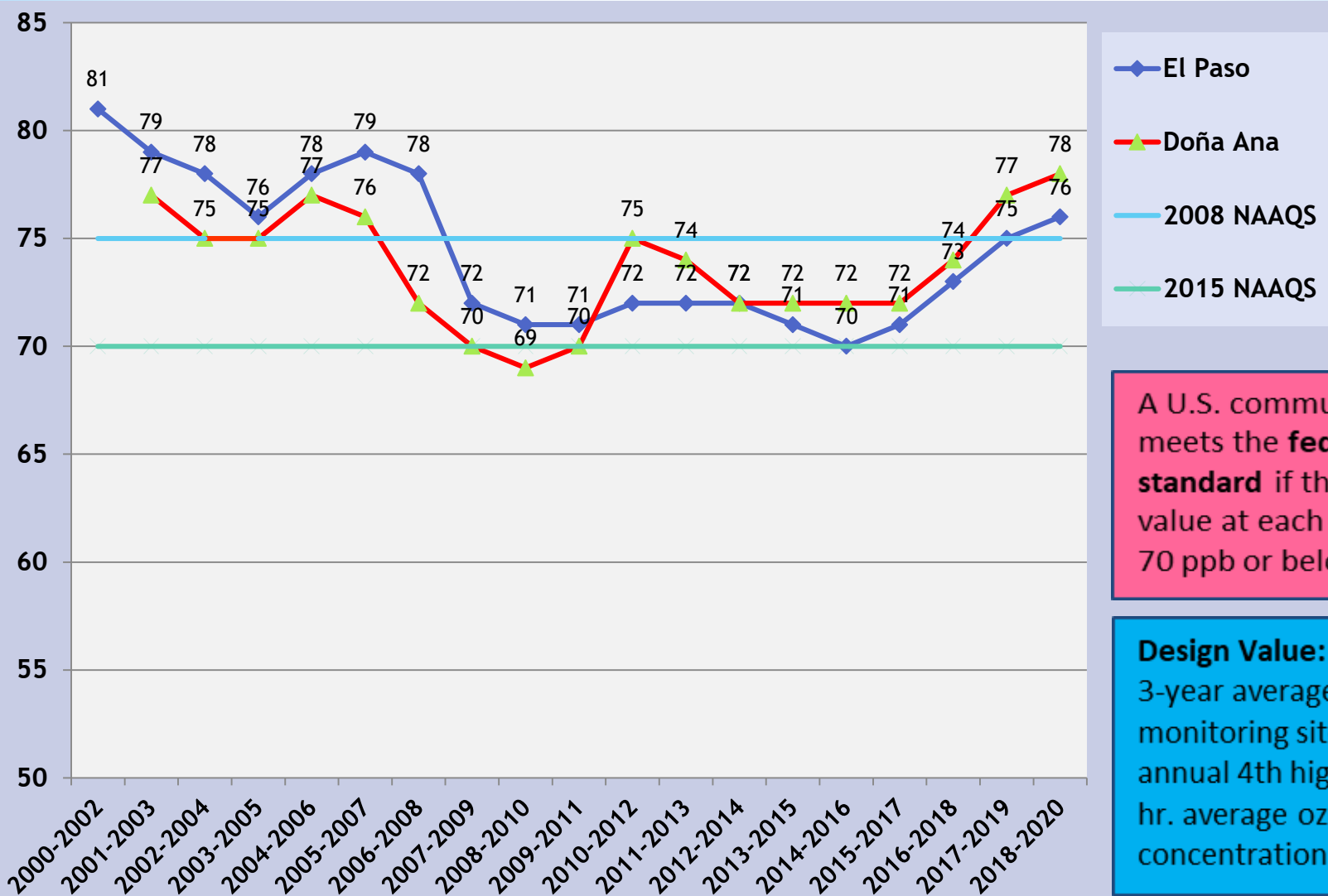
*Ozone 8-Hour Averages (ppb)
 Four Highest Values at Monitors in the Paso del Norte
 (January - July 2021)
 Promedio móvil de 8 horas en Ciudad Juárez

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

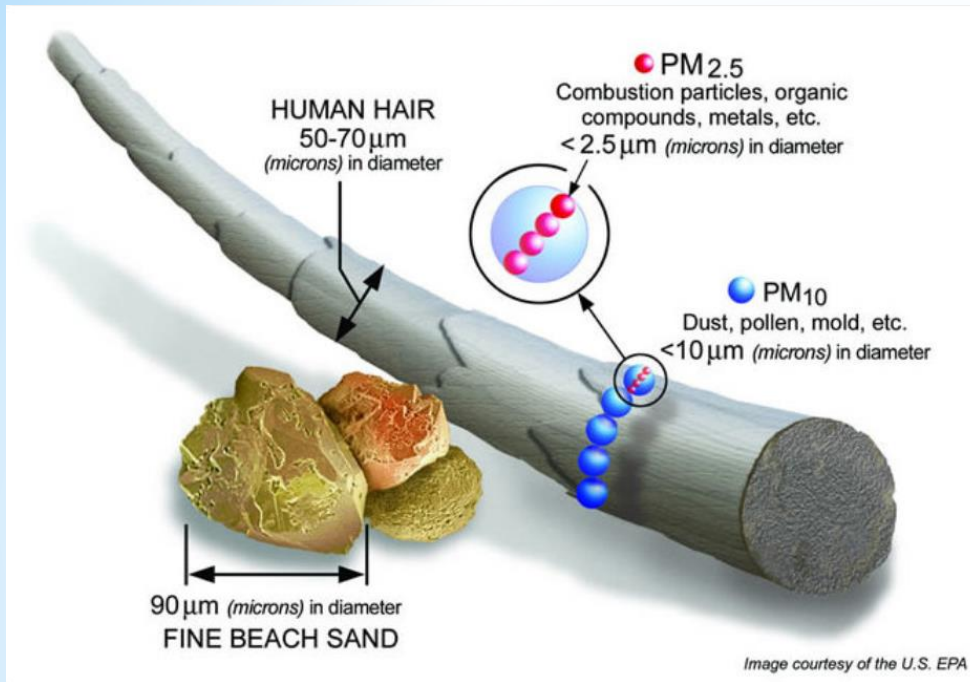


Ozone 8-Hr. Design Values El Paso and Doña Ana County only (highest value of all sites in each area, 2002 - 2020)



A U.S. community meets the **federal standard** if the design value at each site is at 70 ppb or below.

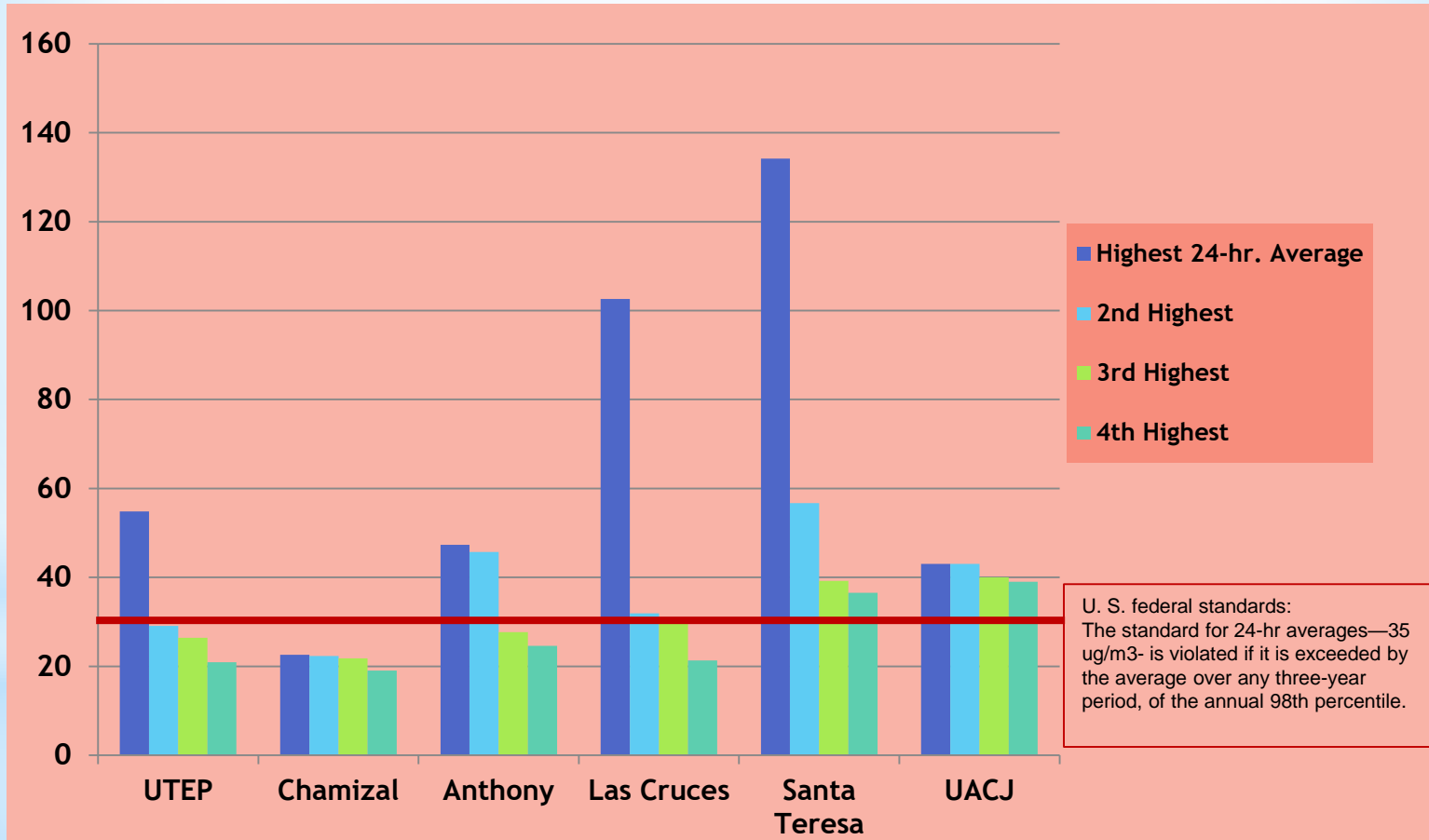
Design Value:
3-year average, at each monitoring site, of the annual 4th highest 8-hr. average ozone concentration.



* 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 UACJ
January - July 2021

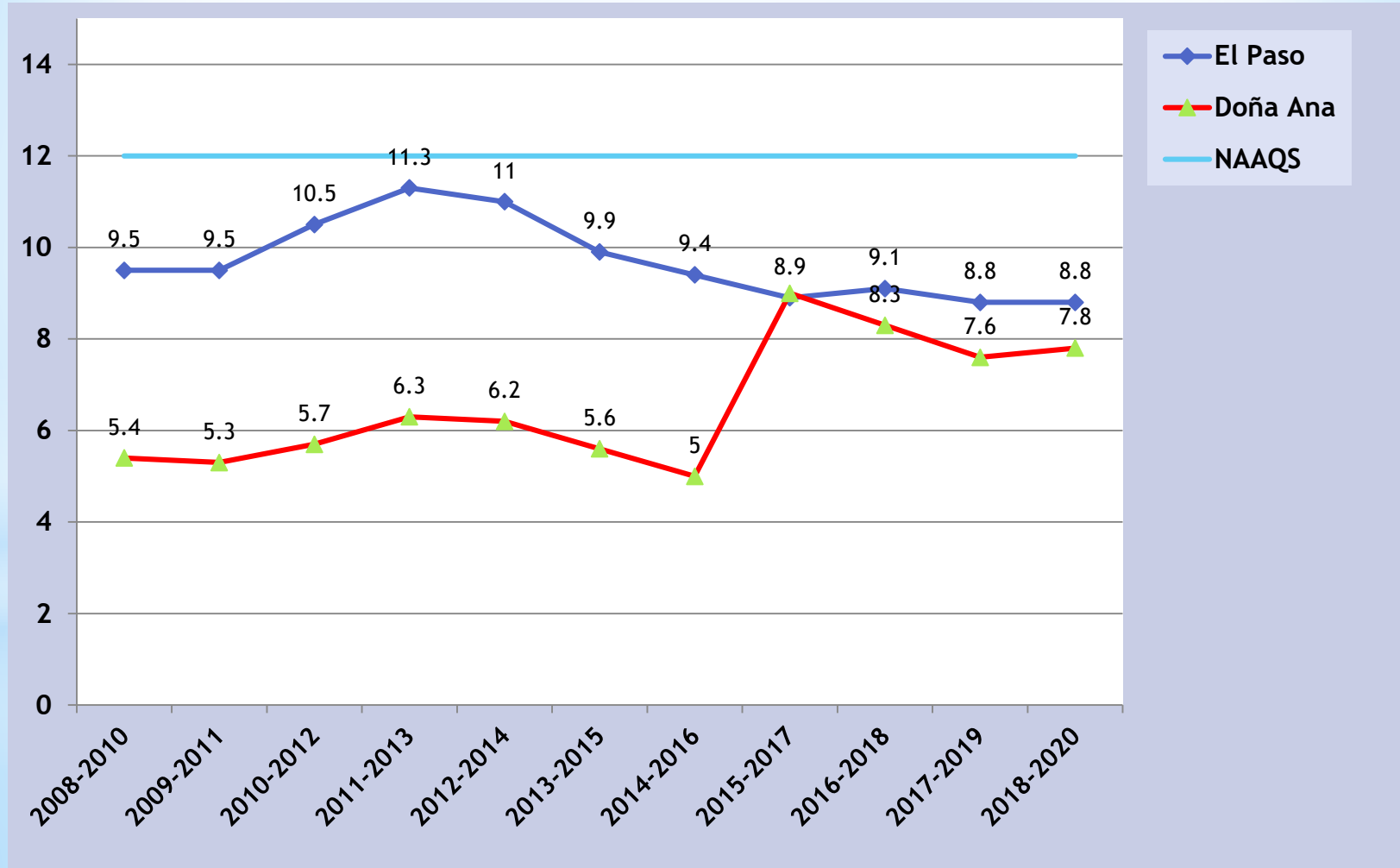


PM_{2.5} Compliance with U.S. Federal Standards El Paso and Doña Ana Counties

Annual Design Value

U.S. Standard

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

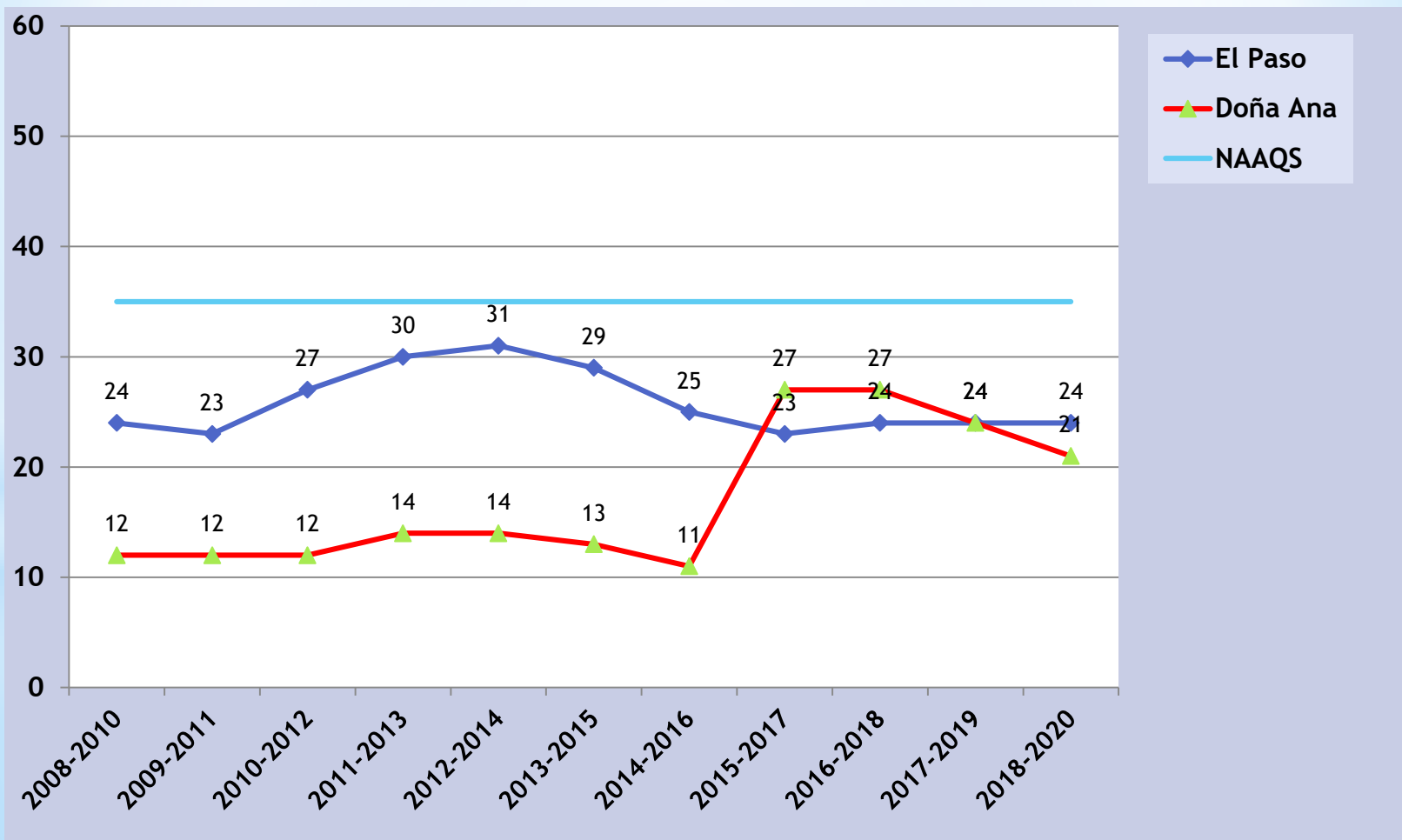


PM_{2.5}
Compliance with U.S. Federal Standards
El Paso and Doña Ana Counties

24-Hour Design Value

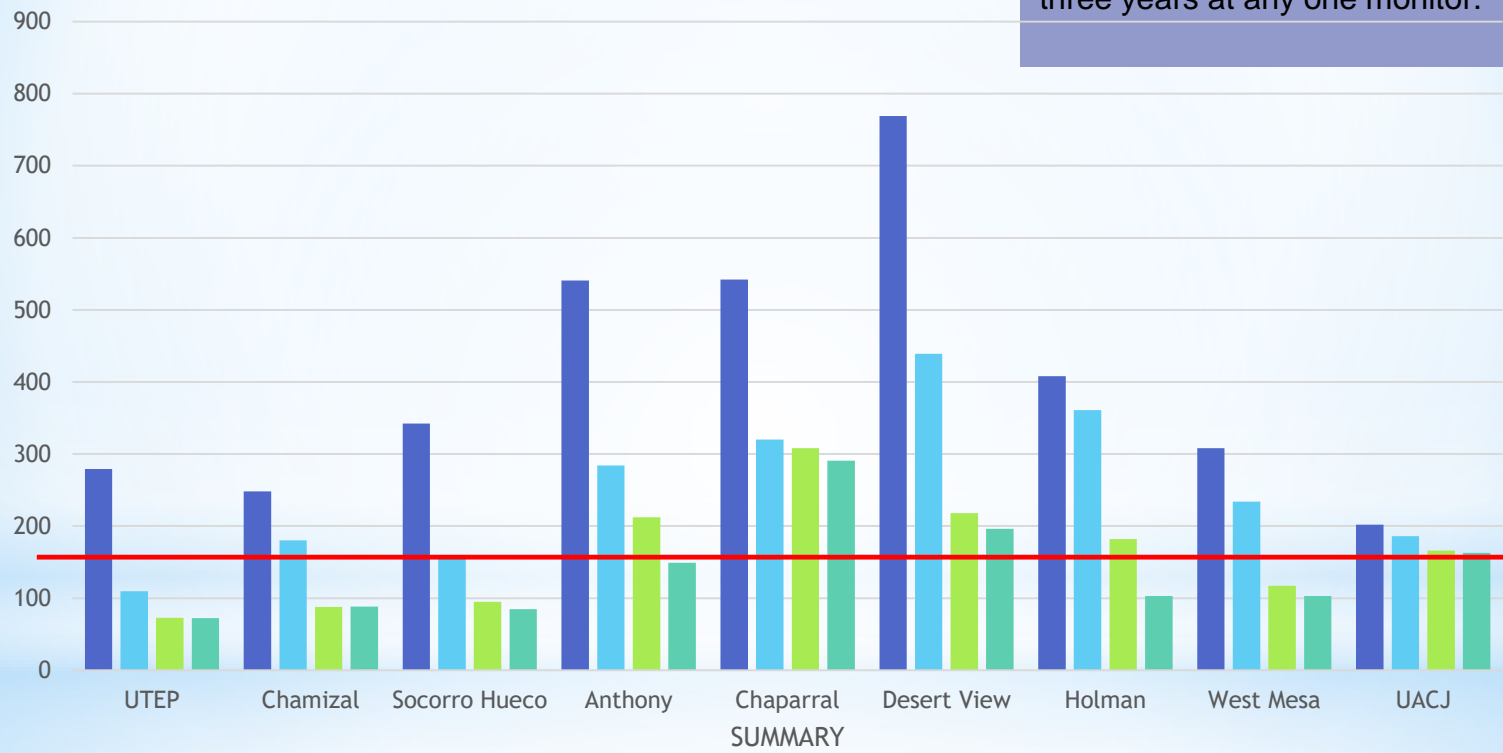
U.S. Standard

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 UACJ
January - July 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.

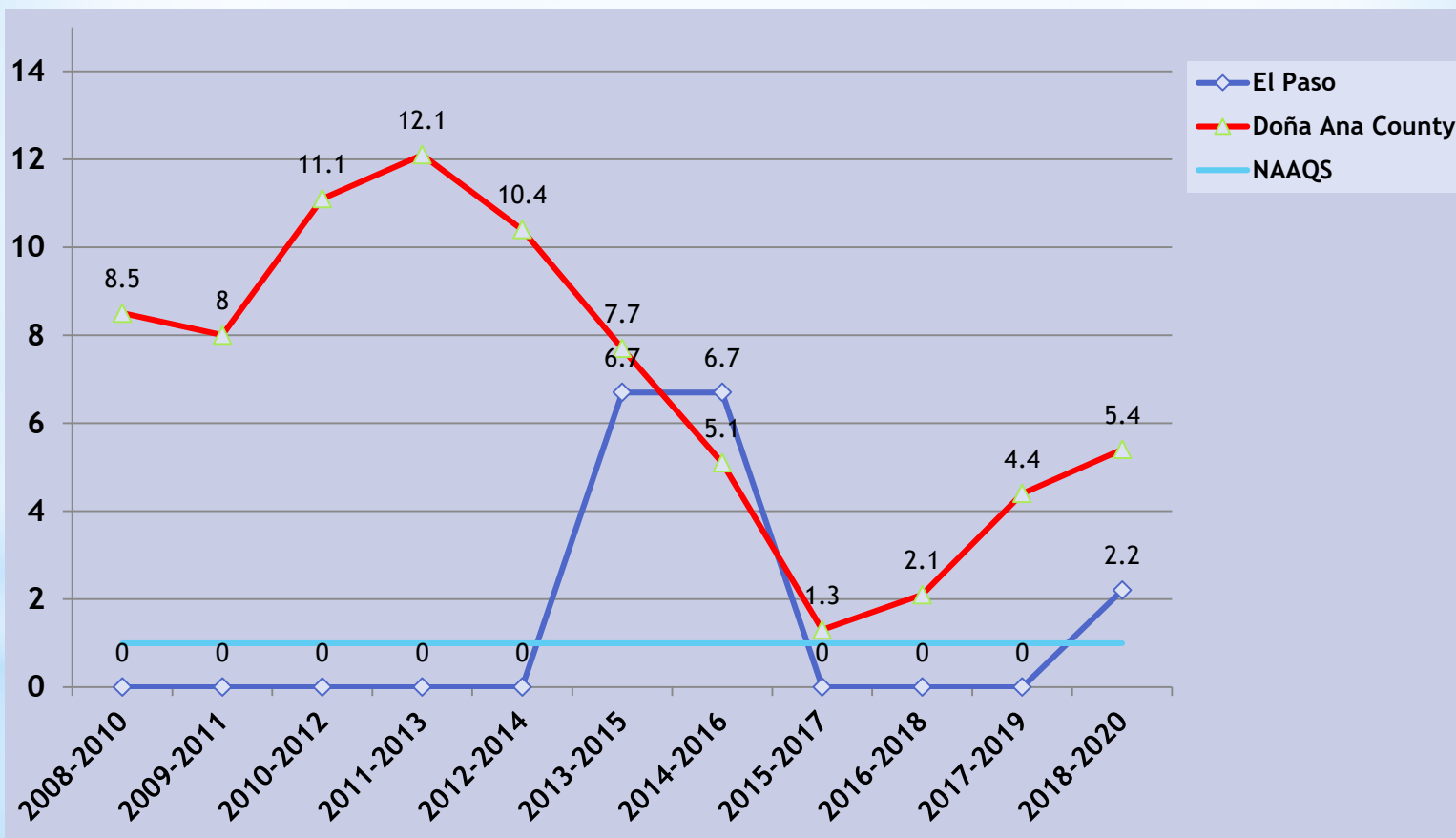


■ Highest ■ 2nd Highest ■ 3rd Highest ■ 4th Highest

SUMMARY

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

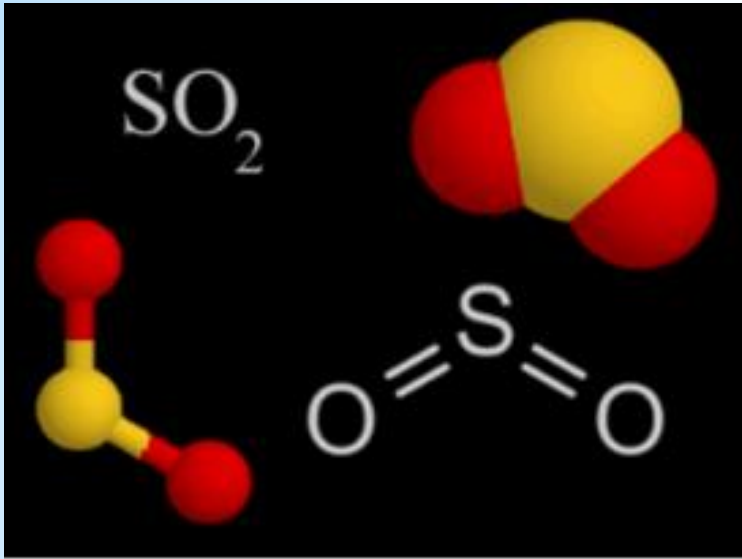
Cumplimiento con los límites de exposición crónica | Media aritmética anual 2021

Compliance with exposure limits | Annual arithmetic mean 2021

Parámetro Parameter	Límite de exposición crónica anual Annual exposure limit	Promedio trimestral Quarterly mean
PM _{2.5}	12 µg m ⁻³	21.36*
PM ₁₀	40 µg m ⁻³	106.74*

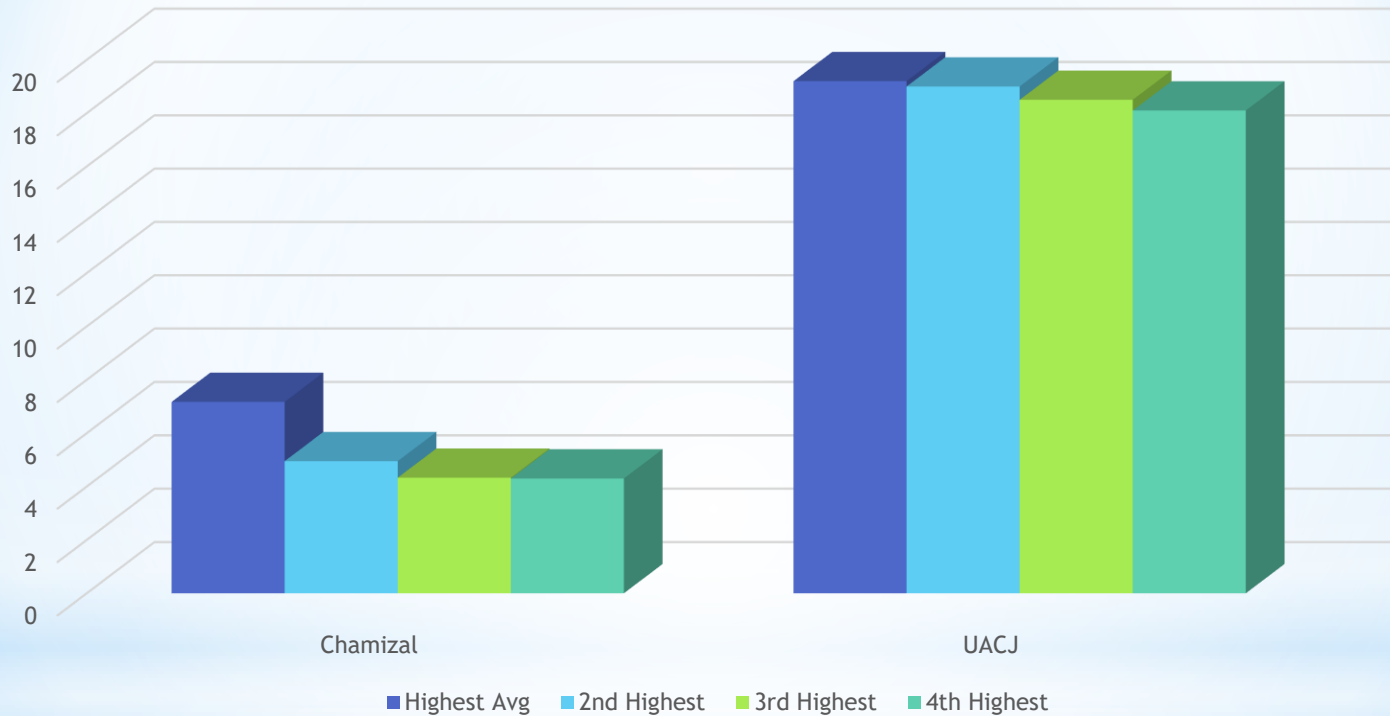
* Este valor corresponde al primer trimestre del año y no puede ser utilizado para evaluar el límite de exposición anual según la NOM-025-SSA1-2014

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



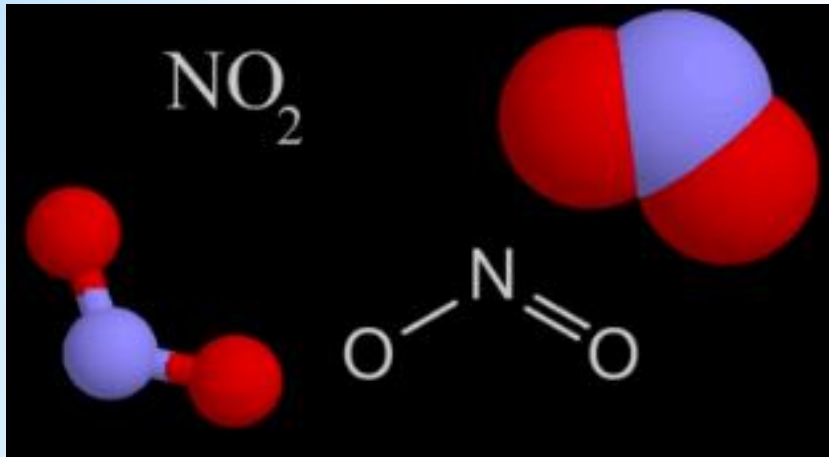
* Dióxido de azufre
Sulfur Dioxide SO₂

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



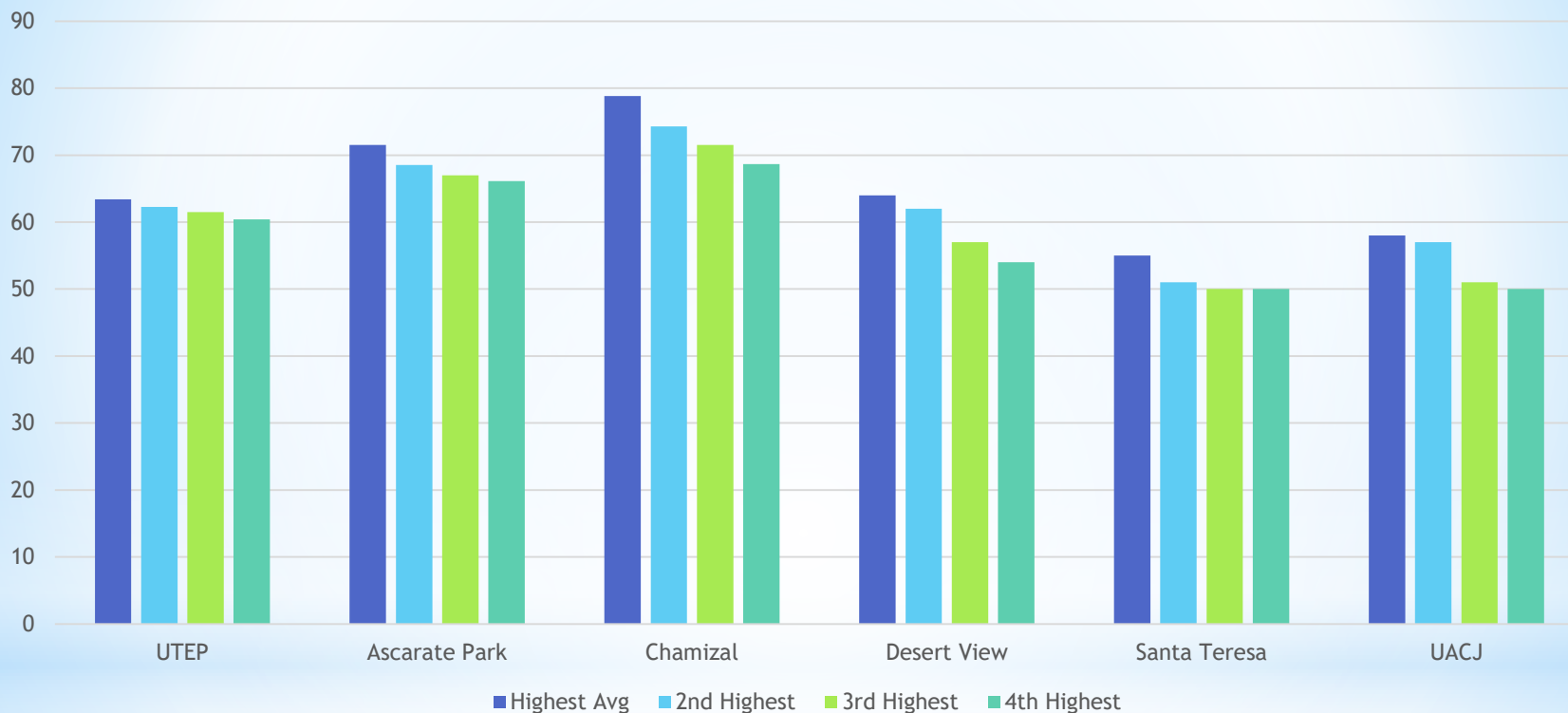
U.S. federal standard:
0.075 ppm, 99th percentile of 1-hour daily
maximum concentrations, averaged over 3 years

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



* Dióxido de nitrógeno
Nitrogen Dioxide NO₂

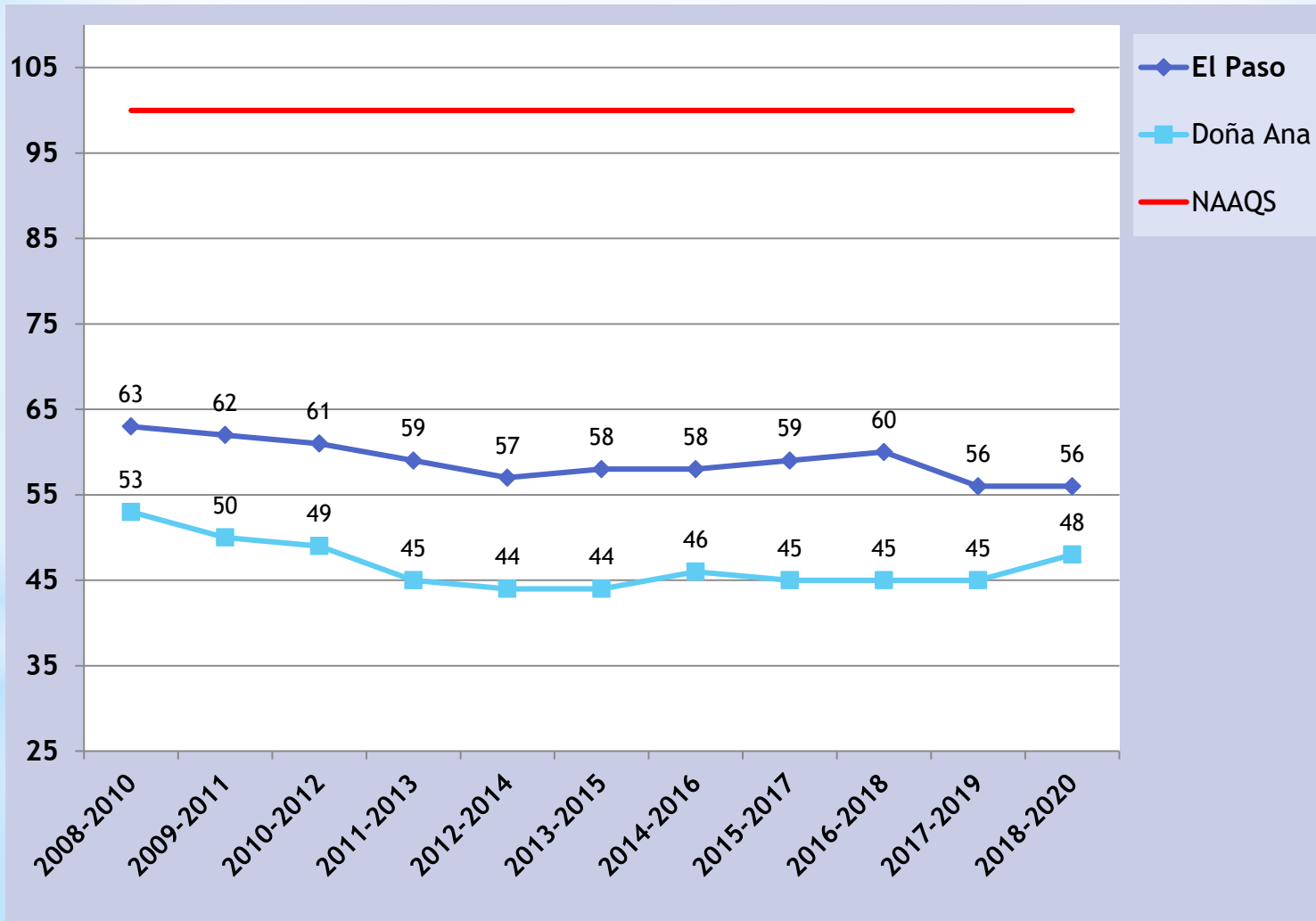
NO₂
Four Highest 1-Hour Averages (ppb)
El Paso del Norte
(January - July 2021)



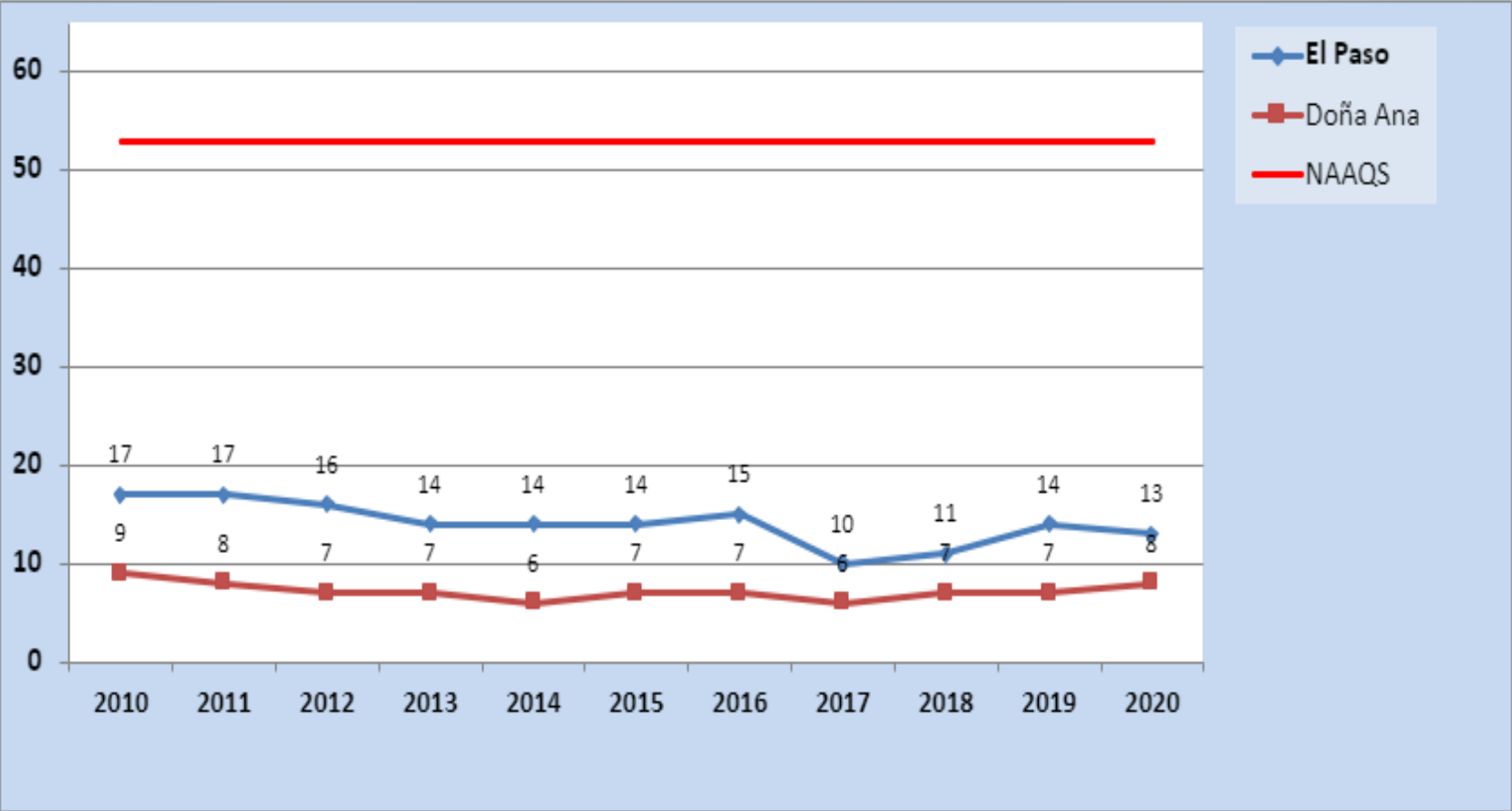
U.S. federal standard:
100 ppb 98th percentile of 1-hour daily
maximum concentrations, averaged over 3 years

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

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



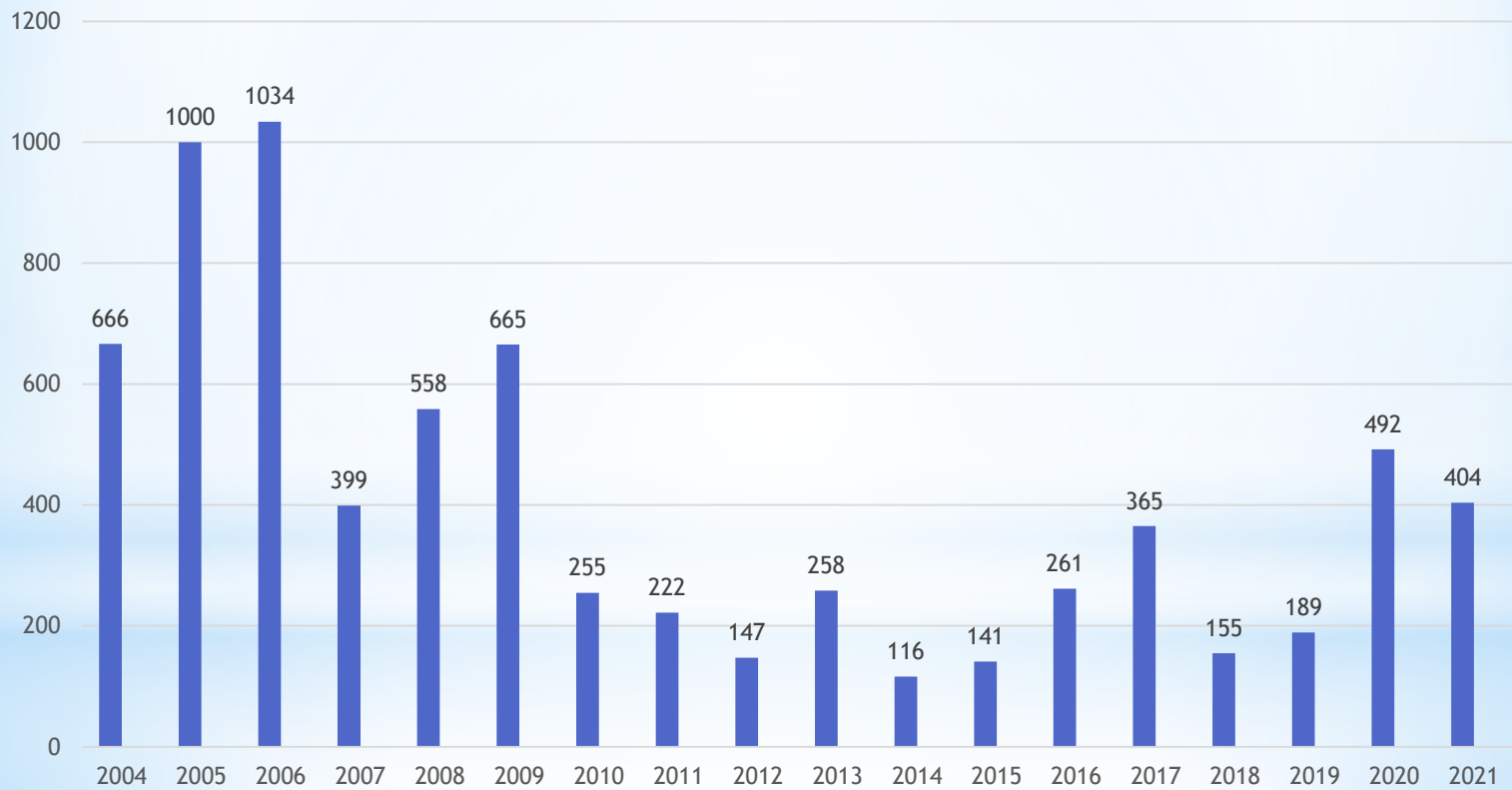
NO₂
Design Values Annual Mean (ppb)
El Paso & Doña Ana Counties



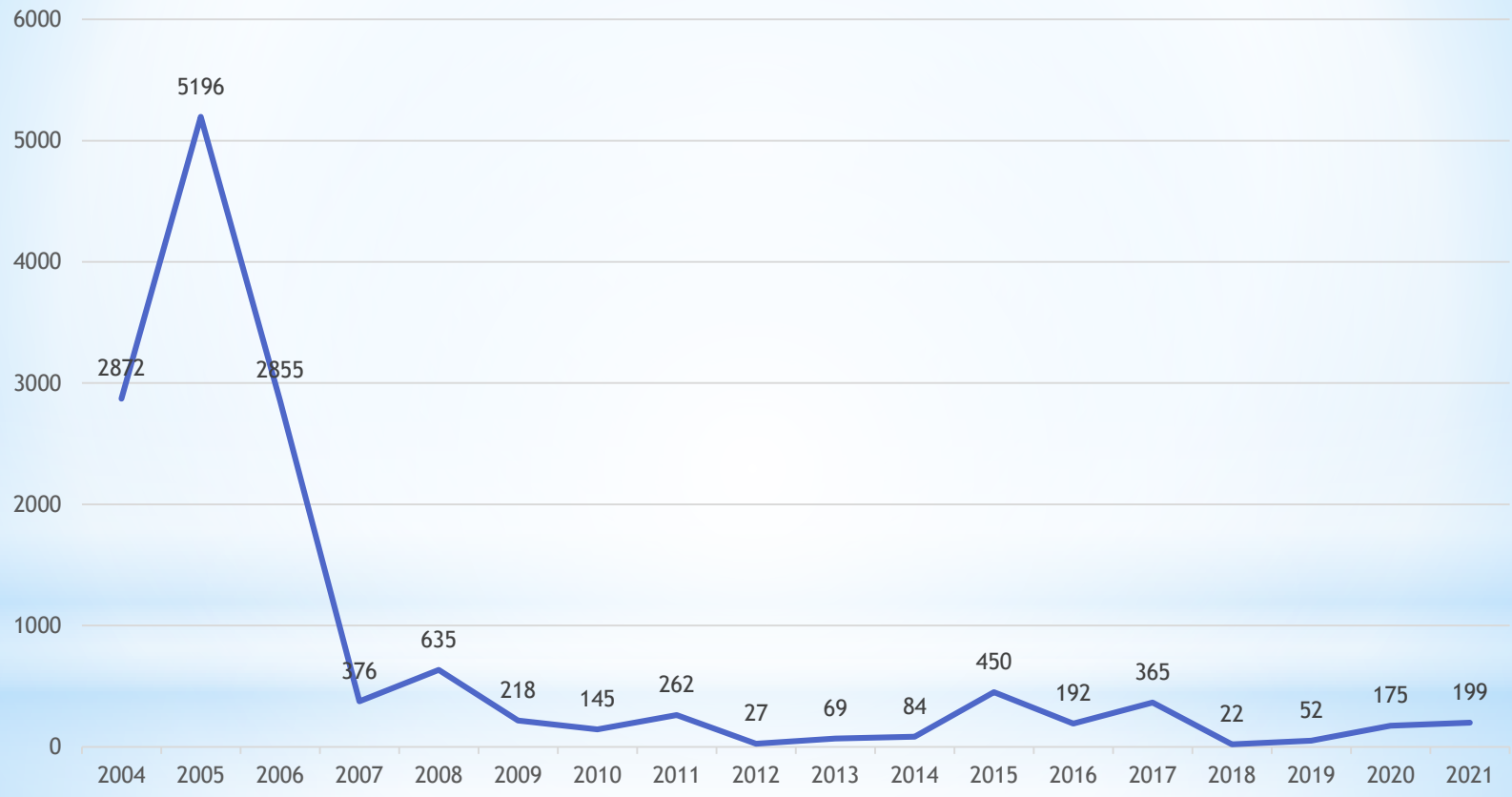


* Hydrogen Sulfide (H₂S)
Sulfuro de hidrógeno

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)



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* Questions?
¿Preguntas?



*Thank you!
Gracias!

