

San Antonio Technical Information Meeting Update on Planning Activities and Reasonable Further Progress Requirements

August 22, 2022

2015 Eight-Hour Ozone Standard

- The standard was set at 70 parts per billion (ppb).
- Bexar County was designated as marginal nonattainment.
 - Designation became effective on September 24, 2018.
 - September 24, 2021 was the initial attainment date, with a 2020 attainment year.



2015 Eight-Hour Ozone NAAQS Emissions Inventory (EI) SIP Revision

- Due two years after the effective date of designations.
- Bexar County EI SIP revision was due by September 24, 2020.
- EI SIP revision combined with Houston-Galveston-Brazoria and Dallas-Fort Worth areas:
 - Establishes 2017 base year inventory;
 - Submitted to the EPA on June 24, 2020; and
 - The EPA published final approval on June 29, 2021.



San Antonio 4th High Ozone Values

2017 4th high	2018 4th high	2019 4th high	2019 Design Value
73	72	75	73

2018 4th high	2019 4th high	2020 4th high	2020 Design Value
73	69	74	72

2019 4th high	2020 4th high	2021 4th high	2021 Design Value
69	74	78	73

All readings are eight-hour ozone averages measured in ppb.

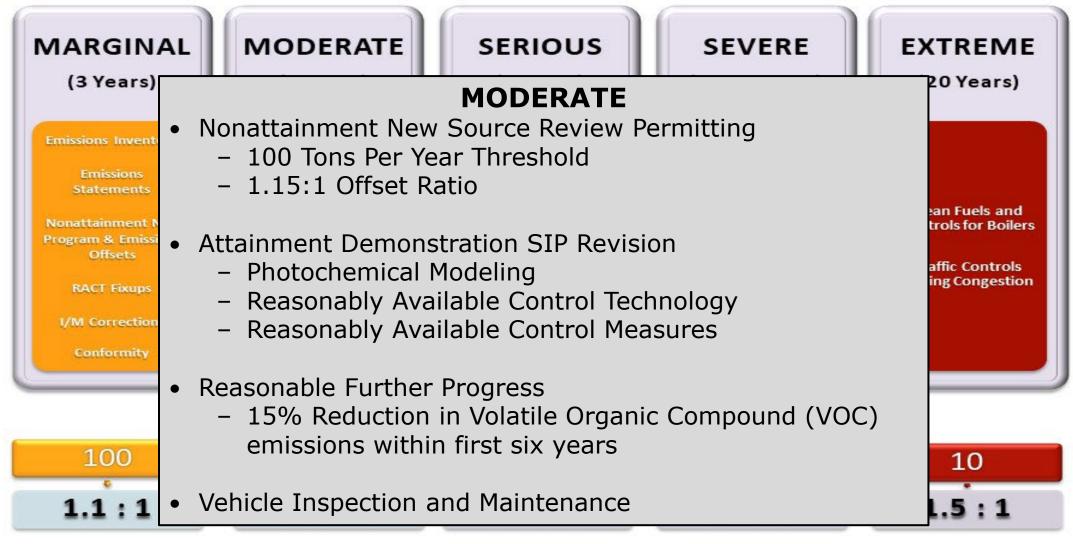


Proposed Reclassification

- Bexar County did not meet the marginal area attainment date.
- On April 13, 2022, the EPA proposed to:
 - Reclassify Bexar County to moderate;
 - Disapprove the federal Clean Air Act (FCAA), §179B demonstration; and
 - Set the deadline for submittal of moderate SIP requirements as January 1, 2023.
- Bexar County's moderate attainment deadline would be September 24, 2024, with a 2023 attainment year.



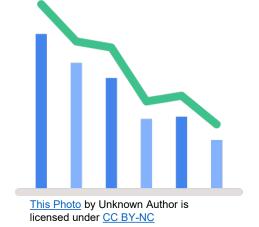
SIP Requirements for Ozone Nonattainment Areas



NSR Offset Ratios

Progress Requirements for Bexar County

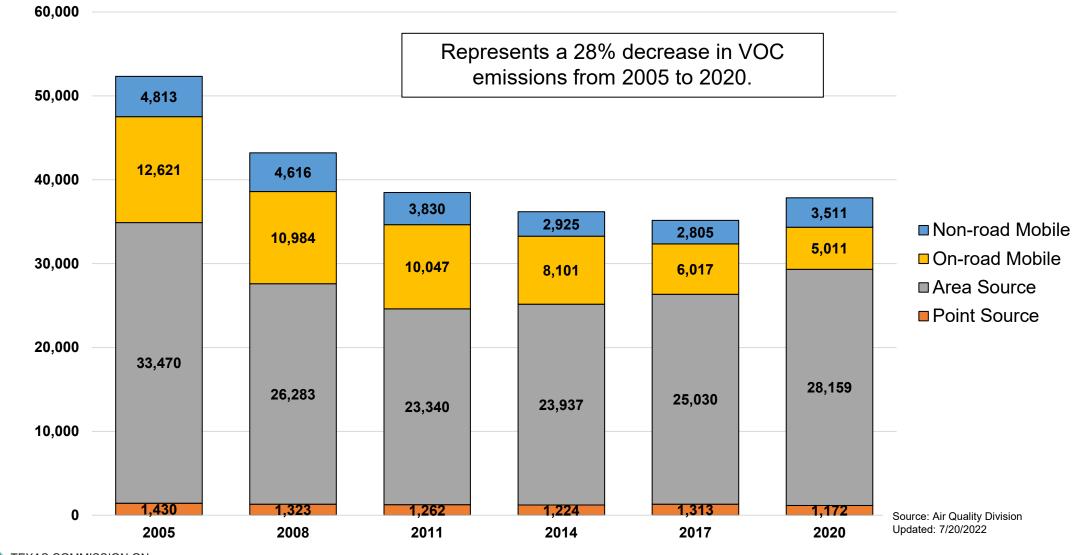
- The FCAA requires a **15% reduction** in emissions that lead to ozone formation the first time an area is classified as moderate nonattainment.
 - This requirement is known as demonstrating reasonable further progress (RFP).
 - Only a certain type of ozone precursor reductions can be used (VOC).



- The reductions must occur over six years, from 2017 to 2023.
- If the progress requirement is not met, additional rules/reductions are required as contingency measures.



Bexar County VOC Emissions Trends



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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What are Area Sources?

- Area sources are small industrial, commercial, and residential sources that generate emissions.
- The TCEQ typically develops emissions as countywide totals for source categories using:
 - Texas-specific data; and
 - EPA methods or models.
- Area source categories include:
 - consumer and commercial products;
 - surface coating;
 - gas stations; and
 - household products.



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Bexar County Area Source VOC Top Emitting Categories

Area Source Category: *Not All Inclusive	2017 VOC Tons Per Year	% of Total Area Source VOC Emissions
Surface Coating Finished Metals	2,389	10%
Architectural Coatings	2,311	9%
Gas Stations	2,094	8%
Consumer and Commercial Personal Care Products	1,860	7%
Consumer and Commercial Household Products	1,763	7%
Consumer and Commercial Pesticide Products	1,743	7%
Oil and Gas Pneumatic Devices	1,135	5%

*There are hundreds of area source emissions categories. Those listed above contributed 5% or more to the total 2017 area source VOC emissions.



Control Strategies for Reductions

- Implementation of Reasonably Available Control Technology (RACT) is required for Bexar County.
 - VOC and NOx RACT are required for moderate nonattainment areas
 - This will be achieved by expanding the applicability of certain 30 Texas Administrative Code Chapter 115 rules.
 - This will result in some VOC reductions that can be applied towards the 15%



Reductions from Required Control Reduction Strategies

- RACT reductions alone are inadequate to demonstrate RFP.
 - Bexar County VOC emissions are primarily from area sources rather than large industrial sources.
 - Existing requirements may already surpass the stringency of many RACT requirements.
- Reasonable Available Control Measures (RACM)
 - Additional reduction strategies that may be needed to model attainment
 - Because impacts are NOx driven in Bexar County these likely to be NOx control strategies.



Reducing Ozone in Bexar County

- Currently, the TCEQ cannot demonstrate the required 15% VOC reduction for RFP with control measures known to us.
- TCEQ staff are researching and estimating any potential federal emissions reductions that may be effective before 2023 (the attainment year) and could be used for Bexar County reductions.
- TCEQ staff are also researching potential control strategies in case further emissions reductions are necessary to demonstrate attainment and/or reasonable further progress, including contingency.



Reducing Ozone in Bexar County

- When assessing potential reduction strategies, the TCEQ generally considers:
 - Effectiveness: Will the reduction help the area to attain or demonstrate progress towards the ozone standard?
 - Cost: What are the economic impacts?
 - Timeline: How quickly could the reduction be implemented? When do the benefits occur?
- The Air Quality Division is requesting feedback on any planned emissions reductions that will occur before the end of 2023 at sources in Bexar County.



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