



April 2023 Air Quality Planning Update

Regulatory Updates

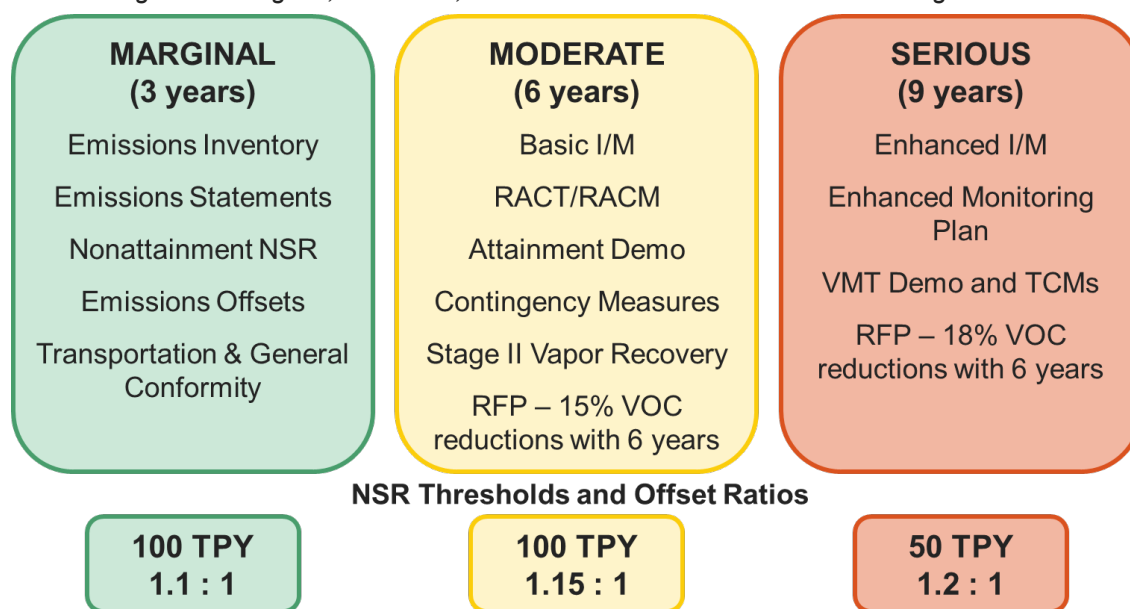
The Texas Commission on Environmental Quality (TCEQ) is proposing to update the State Implementation Plan (SIP) to include a Bexar County emissions inspection and maintenance (I/M) program through a rulemaking at its May 31 Commission meeting. The cost and start date will be determined through this rulemaking, which will include a 30-day public comment period and is expected to be adopted by November 8. Emissions inspection fees in Austin are \$11.50, while fees in DFW and Houston are \$18.50. The cost of Bexar County emissions inspections is expected to be somewhere within this range. The Bexar County I/M program must be operational no later than November 7, 2026.

San Antonio - New Braunfels MSA Ozone Status

In October 2015, the U.S. Environmental Protection Agency (EPA) promulgated its revised National Ambient Air Quality Standards (NAAQS) for ground-level ozone. The annual fourth-highest MDA8 ozone concentration, averaged over three years, measured at each regulatory monitor within an area must not exceed 70 parts per billion (ppb). The highest of these three-year averages is that area's design value, which is the metric used by the EPA to determine attainment of the ozone NAAQS. Failure to attain results in a nonattainment designation, with five classification levels of increasing severity based on an area's design value or length of time out of attainment. Each subsequent classification results in additional and more stringent federal air quality regulations intended to bring the area back into attainment.

Bexar County was originally designated nonattainment with a marginal classification under the 2015 ozone NAAQS on September 24, 2018. This triggered a three-year deadline to attain the NAAQS by September 24, 2021 (attainment date), or effectively, the end of the 2020 ozone season (attainment year). Bexar County missed its attainment date based on having a 2020 design value of 72 ppb, which initiated another three-year deadline to achieve the NAAQS (September 24, 2024). Failure to attain the NAAQS by the 2023 attainment year will result in a reclassification to serious nonattainment. The Federal regulations and thresholds are shown in Figure 1.

Figure 1: Marginal, Moderate, and Serious Nonattainment Federal Regulations



2023 Ozone Season

The 2023 ozone season began on March 1. To attain the ozone NAAQS by the end of this year, the maximum allowable fourth highest MDA8 must not exceed the values presented in Table 1. It will be very difficult for either non-compliant monitor to attain the standard by the end of 2023.

Table 1: 2022 Maximum Allowable 4th-Highest MDA8 to Attain Ozone NAAQS

Monitor	4 th -Highest MDA8 (ppb)		Maximum Allowable 4 th -Highest MDA8 to Attain NAAQS in 2023
	2021	2022*	
San Antonio NW C23	70	76	66
Camp Bullis C58	78	75	59
Calaveras Lake C59	66	70	76

*Ozone data validated through August 2022; Data will be certified by EPA no later than May 2023

This will be the final year of ozone data that will be used to determine whether we get bumped up to serious nonattainment. Figure 1 shows the regulations that are required under serious nonattainment.

The current four highest ozone values at regulatory monitors for 2023 are provided in Table 2.

Table 2: Four Highest MDA8 at Bexar County Regulatory Monitors, 2023*

Monitor Site	Date	PPB	Date	PPB	Date	PPB	Date	PPB
San Antonio NW C23	4/17/2023	61	3/4/2023	61	4/12/2023	58	4/1/2023	58
Camp Bullis C58	3/4/2023	63	4/17/2023	61	4/13/2023	60	4/1/2023	60

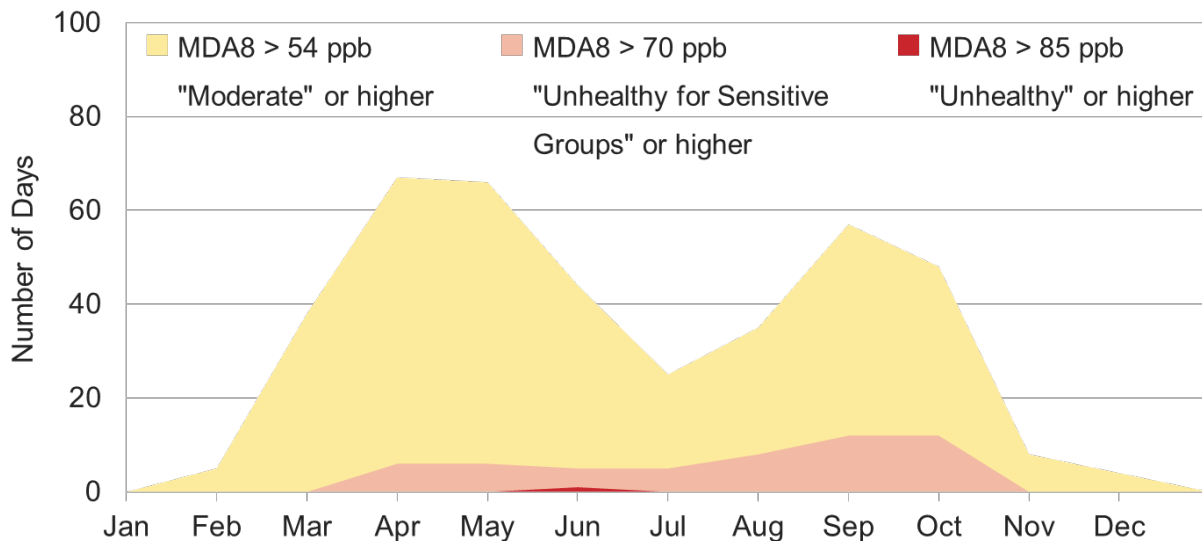
Calaveras Lake C59	2/27/2023	65	3/4/2023	64	3/3/2023	63	4/13/2023	58
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* Ozone data not yet validated for 2023

The TCEQ issues Ozone Action Day alerts when air quality is expected to be unhealthy for sensitive groups the following day. AACOG offers to forward these alerts to people who sign up to receive them at <http://www.aacog.com/list.aspx>. In addition, AACOG offers complimentary Ozone Action Day Alert flags for area schools to display when high ozone levels are predicted. Ozone Action Day alerts warn people, especially those sensitive to pollution (older people, children, and those with underlying respiratory conditions, like asthma), to limit their exposure outdoors. It is also an opportunity for the public to take measures to mitigate their contribution to pollution by reducing energy consumption at home and by driving less. To date, no Ozone Action Day alerts have been issued in 2023.

Figure 2 shows the seasonal distribution of high ozone days at selected thresholds using data from 2010-2021. There are two clear peaks during the ozone season where the frequency of elevated ozone days increases sharply. The first of these peaks is in the spring, generally from April through June, and the second peak is in the fall, from August through October. These months have weather patterns that are most favorable for ozone formation. High ozone events in July are less common, a phenomenon known as the “mid-summer minimum,” usually a result of persistent southeasterly winds from the Gulf of Mexico transporting relatively clean air into the region. The historical frequency of high ozone days declines after mid-October.

Figure 2: Ozone Exceedances at Regulatory Monitors by Monthly Period, 2016-2022



2022 Ozone Season Recap

The 2022 ozone season ended on November 30 with two Bexar County monitors exceeding the 2015 ozone NAAQS: San Antonio NW CAMS 23 and Camp Bullis CAMS 58 (Table 3). These values will be certified by EPA no later than May 2023. With 76 ppb now on the books for CAMS 23, it will be much more difficult for that monitor to attain the NAAQS by the end of next ozone season.

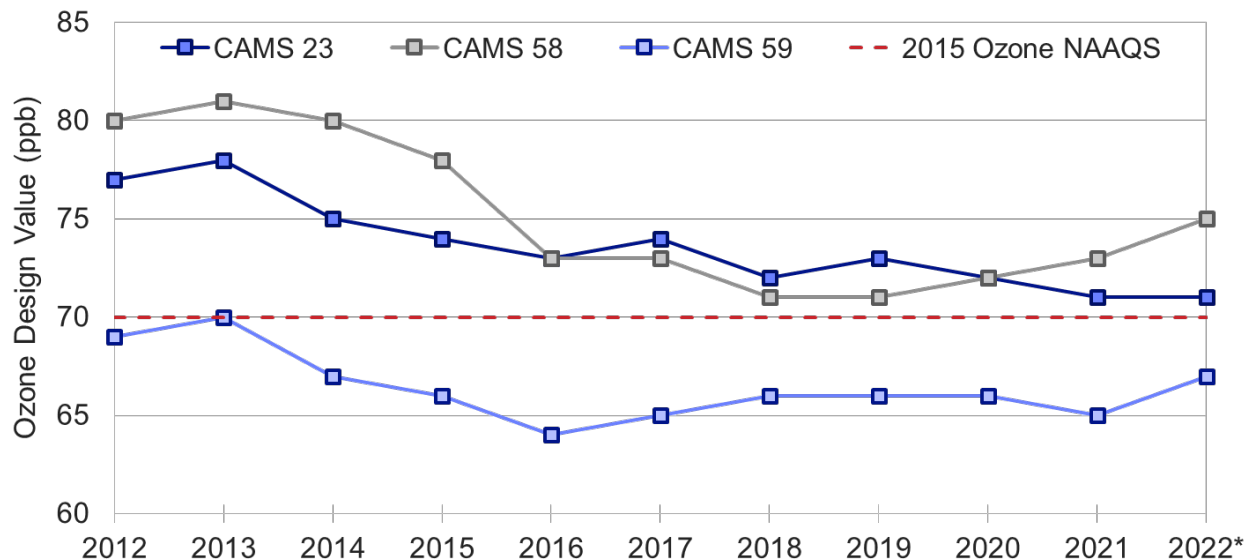
*Table 3: Fourth-Highest MDA8 and Preliminary Three-Year Averages at Bexar County Regulatory Monitors, 2020-2022**

Monitor	Fourth-Highest MDA8 (ppb)			Preliminary Three-Year Average
	2020	2021	2022*	
San Antonio NW C23	69	70	76	71
Camp Bullis C58	74	78	75	75
Calaveras Lake C59	66	66	70	67

* Ozone data validated through September 2022 and will be certified by EPA by May 2023

The design value trend from 2012 - 2022 at each regulatory monitor is shown in Figure 3. Although a downward trend was noted through 2016, design values have remained relatively steady since then.

*Figure 3: Design Value Trend at Bexar County Regulatory Monitors, 2012 – 2022**



* Ozone data validated through September 2022 and will be certified by EPA by May 2023

The EPA’s Air Quality Index for ozone defines “moderate” days as those having a maximum daily average 8-hour ozone (MDA8) between 54 and 70 ppb, and “unhealthy for sensitive groups” days as those with MDA8 between 71 and 85 ppb.

Grant Funding Opportunities

Table 4 is a list of active state grants for mobile source vehicle replacements.

Table 4: List of Active Grants for On-Road Mobile Source Replacement

Program	Description	Deadline
Governmental Alternative Fuel Fleet Grant Program (GAFF)	Grants to assist with purchasing or leasing new vehicles that operate primarily on compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen fuel cells, or electricity. Statewide eligibility.	5/16/2023
Diesel Emission Reduction Incentives (DERI) Rebate Grant Program	A first come, first served grant program to upgrade or replace diesel heavy-duty vehicles and equipment. Examples of commonly funded equipment: haul trucks, forklifts, agricultural tractors, cement trucks, water trucks, and excavators. Only eligible in nonattainment or affected counties.	8/31/2023