Monitoring Air Quality

Air quality in the United States is regulated through the National Ambient Air Quality Standards (NAAQS) set by the U.S. Environmental Protection Agency (EPA). EPA sets NAAQS for six pollutants: particulate matter, ozone, sulfur dioxide, nitrogen dioxide, lead, and carbon monoxide.

Ozone (O_3)

Ground-level ozone is formed when volatile organic compounds (VOCs) such as fumes from fuels, paints, solvents and vegetation combine with oxides of nitrogen (NO_X) from fuel combustion in the presence of heat and sunlight. Ozone pollution can cause inflammation of the lungs. Ozone season in Georgia is March 1 – October 31. Hot, dry summer days are very conducive to ozone formation.

The current ozone standard or NAAQS is 70 ppb. An exceedance of the ozone standard occurs when the measured daily maximum 8-hour average ozone concentration is above the ozone NAAQS. If the exceedances occur frequently enough, the design value (i.e., 3-year average of 4th highest ozone concentrations recorded each year) may exceed the ozone NAAQS and the area may be designated as nonattainment for ozone.

Seven counties in the Atlanta metro area were designated by EPA as nonattainment for the 2015 ozone standard in 2018 (Bartow, Clayton, Cobb, DeKalb, Fulton, Gwinnett, and Henry). In 2020, the Atlanta metro area attained the 2015 ozone standard. The Air Protection Branch submitted a formal redesignation request to EPA on February 25, 2022. EPA approved the request on October 17, 2022. Currently, there are no ozone nonattainment areas in Georgia. However, the most recent ozone design value in Atlanta (based on 2022-2024 data) exceeded the 70 ppb standard, triggering the evaluation and implementation of contingency measures to help the area meet the standard.

8-Hr Ozone, 3-Yr Averages of 4th Max. Value for each Metropolitan Statistical Area (MSA)