Air Quality Forecasting Begins March 1

MDEQ issues daily ozone and particulate matter (PM2.5) forecasts from March 1 to October 31 for <u>DeSoto</u> <u>County</u>, the <u>Jackson Metro Area</u>, and the <u>MS Gulf Coast</u>. These forecasts keep Mississippi residents, industries, and local governments apprised of current air quality conditions and alert them if an Air Quality Action Day is forecast. These forecasts are updated and available daily via the <u>MDEQ website</u>, <u>MDEQ Twitter account</u>, and <u>email subscription</u>.

Forecasts are issued using EPA's Air Quality Index (AQI). For each pollutant, an AQI value of 100 generally corresponds to an ambient air concentration that equals the level of the short-term national ambient air quality standard (NAAQS) for protection of public health. Therefore, AQI values at or below 100 are generally thought of as satisfactory.

The higher the AQI value, the greater the level of air pollution and the greater the health concern. For example, an AQI value of 50 or below represents good air quality, while an AQI value over 100 is unhealthy for certain sensitive groups of people and then for everyone as the AQI values increase. An AQI value over 300 represents hazardous air quality for everyone.

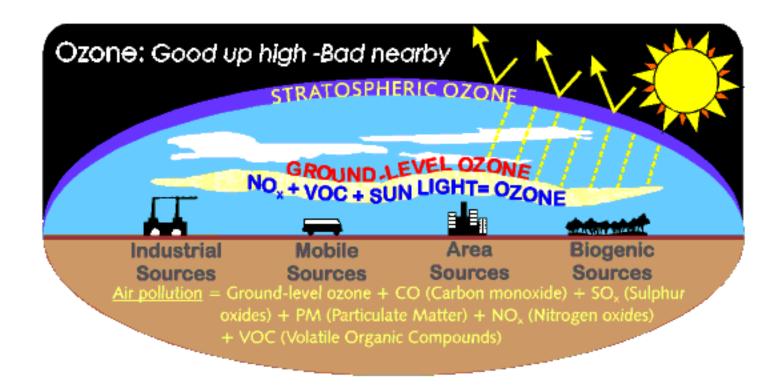
When the short-term standards for ozone and PM2.5 (i.e., the 8-hour standard for ozone and the 24-hour standard for PM2.5) are forecasted to exceed an AQI value of 100, MDEQ issues an Air Quality Action Day. On Air Quality Action Days, sensitive groups such as children and adults with asthma or lung disease should reduce exposure by reducing prolonged or heavy exertion outdoors.

The AQI is divided into six categories. Each category corresponds to a different level of health concern. Each category also has a specific color. The color makes it easy for people to quickly determine whether air quality is reaching unhealthy levels in their communities.

d.			AQI Basics for Ozone and Particle Pollution
Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Source: AQI Basics

Ozone at ground level is the main ingredient in "smog". Ground-level ozone is not emitted directly into the air but is created by chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOCs). This happens when pollutants emitted by vehicles, power plants, refineries, chemical and other industrial manufacturing plants, and various other sources chemically react in the presence of sunlight. Every day, the choices we make can increase or decrease air pollution and affect our health. By making simple changes to our home, transportation, and consumer habits we can help reduce air pollution. For individuals, that includes carpooling, reducing idling, and postponing vehicle refueling and lawn maintenance until after 6:00p.m.



Under the Clean Air Act, EPA establishes primary air quality standards to protect public health and secondary standards to protect public welfare, which includes protecting ecosystems, plants, and animals. Mississippi is meeting, or is "in attainment" for, the current ozone standard of 70 parts per billion (ppb) set by EPA in October 2015. Although Mississippi is meeting the standard, it is crucial that all areas of the state work cooperatively to maintain low ozone levels, because just four days in a year exceeding the daily 8-hour average of 70 ppb could result in EPA issuing a "nonattainment" designation to an area. Any area designated as nonattainment faces potential economic development constraints, including limits to industrial growth and transportation improvement, such as restrictions on highway expansion and development.

Air Quality Action Groups initially formed by MDEQ, cities, counties, government agencies, industries, and public interest groups facilitate local cooperation and coordination. The focus of these stakeholder led groups is to develop cooperative plans to meet air quality standards and to help citizens, businesses, and industries become aware of the issues and how they can be part of the solution. The groups develop outreach materials and plan promotional events to encourage air pollution reduction steps and more efficient ways to notify residents and businesses about Air Quality Action Days.

The Mississippi Gulf Coast Air Quality Action Group and the DeSoto County Air Quality Action Group are recruiting new members. For more information, please contact Rodney Cuevas at RCuevas@mdeq.ms.gov or (601) 961-5566.

For more information on the Air Quality Index or to join the forecasting email list, contact Rodney Cuevas at RCuevas@mdeq.ms.gov or (601) 961-5566.