

AIR QUALITY STANDARDS

On June 15, 2004, EPA (Environmental Protection Agency) ended the 1-hour average ozone standard and replaced it with a new 8-hour average ozone standard. The new standard went into effect exactly one year later - on June 15, 2005. Because the 8-hour standard measures longer-term exposure to the ozone rather than short-term spikes, it is thought to be more protective of human health.

The 1-hour standard was set at 125 parts per billion (ppb) of ozone during any one-hour block. The 8-hour standard is set at 85 ppb of ozone over an eight-hour average. It is calculated by taking the fourth highest 8-hour maximum concentrations from each of the last three years of air quality monitoring data and then taking an average of the three numbers. If the resulting number is 85 ppb or above, then the area will fail to meet the 8-hour standard. (As a reference point: one ppb is equivalent to one penny in \$10 million or one second in 32 years).

Under the 1-hour standard, the five-parish area of East Baton Rouge, West Baton Rouge, Livingston, Ascension and Iberville was listed as “severe”, indicative of failure to meet the federal requirements in a substantial manner. Under the 8-hour standard, the Baton Rouge area is rated as “marginal” – a rating that indicates only a slight exceedance of the requirements and which does not carry the penalty of using reformulated gasoline.

Moving from an ozone designation of “severe” to “marginal” means a reduction in federal requirements to industries. Under “severe”, major industrial sources are identified as those releasing 25 tons or more of pollution a year. Under “marginal”, major industrial sources are identified as those releasing 100 tons, which means fewer industrial facilities come under the restrictions pertaining to major sources.

Although the air quality designation for Baton Rouge has improved from “severe” to “marginal”, many of the improvements put in place the past few years, such as additional air monitoring, will remain. For the past several summers, the focus has been on finding and reducing the number of highly reactive hydrocarbons being released. These compounds – primarily released by industry – can help form ozone very quickly and can result in spikes in ozone levels during hot, windless afternoons with an atmospheric temperature inversion where still air is trapped near the earth’s surface.