Background Information for Pinal County Air Quality

Hourly Monitoring Data Report

"Daily Parameter Report"

- Three types of pollutants are in the report
  - Ozone
  - PM_{10} (Particulate Matter 10 microns and smaller) and $PM_{2.5}$ (Particulate Matter 2.5 microns and smaller)

- Units for the pollutants in the report are
  - Ozone – Parts Per Million (ppm) by volume
  - PM_{10} and $PM_{2.5}$ – Micrograms per cubic meter (ug/m^3)

- The timing of the data on the report is as follows
  - PM_{10} data is averaged at the hour starting (i.e. hour labeled 5 represent 5:00 a.m. to 5:59 a.m.). Therefore PM_{10} data on the report will appear to be 1 hour behind.
  - Ozone data is averaged at the hour ending (i.e. hour labeled 6 represent 5:01 a.m. to 6:00 a.m.)

- The National Ambient Air Quality Standards (NAAQS) for Ozone and PM_{10} are
  - 8-hour average ozone NAAQS is 0.070 ppm
  - 24-hour average PM_{10} NAAQS is 150 ug/m^3
  - 24-hour average $PM_{2.5}$ NAAQS is 35 ug/m^3
  - Annual average $PM_{2.5}$ NAAQS is 12 ug/m^3

How does the pollutant unit compare to the Air Quality Index (AQI)?

- The AQI is an index for reporting daily air quality. It tells you how clean or polluted the air is, and what associated health effects might be a concern.
- Think of the AQI as a yardstick that runs from 0 to 500. The higher the AQI value, the greater the level of air pollution and the greater the health concern.

The AQI calculator to convert the pollutant concentration to AQI number and category.

- Example of AQI Category/levels to pollutant concentrations are
  - Unhealthy for Sensitive Groups (151-200) on AQI scale corresponds to 155 ug/m^3 to 254 ug/m^3 for PM_{10} and 0.071 ppm to 0.085 ppm for ozone.

Still have questions? Feel free to contact Pinal County Air Quality.