

Particulate Monitoring in Colerain Township

History of Monitoring:

In 2007, the Southwest Ohio Air Quality Agency (formerly the Hamilton County Department of Environmental Services' Air Quality Management Division) began monitoring for particulate matter 10 microns in diameter and smaller (PM₁₀) in Colerain Township in the area of the Rumpke Sanitary Landfill. This monitoring was at the request of Colerain Township residents due to new potential particulate sources, including a compost operation, being installed at the Rumpke Sanitary Landfill.

The original PM₁₀ monitor began operation in January 2007 near 10795 Hughes Road. Citizens were concerned that this site was not located in the area of highest particulate concentration, therefore a second monitoring site was set up on Struble Road near the intersection of Colerain Avenue in August 2009. The original Hughes Road PM₁₀ monitoring site was shut down in June 2010 since the site was recording consistently lower values compared to the Struble Road site.

Data Collected:

The United States Environmental Protection Agency (U.S. EPA) establishes National Ambient Air Quality Standards for various pollutants. These standards are set at levels which are protective of public health.

The National Ambient Air Quality Standard concentration for PM₁₀ is 150 micrograms per cubic meter for a 24-hour period. The highest concentration recorded at either site was 109. The average PM₁₀ concentration was 42 micrograms per cubic meter in 2010 and 28.3 micrograms per cubic meter in 2011. To date, the Southwest Ohio Air Quality Agency has taken more than 360 PM₁₀ samples combined at both sampling sites.

Going Forward:

The Southwest Ohio Air Quality Agency has operated the PM₁₀ monitoring in Colerain Township for more than five years and has not seen any exceedance of the U.S. EPA health-based standards. As a result, we plan to shut down the Struble Road monitor on December 1, 2012.

It is important to note that this monitor is not needed for monitoring the underground reaction at Rumpke since no particulate emissions have been observed from the reaction area. Other air monitoring of the reaction area will continue. Information on the reaction area and monitoring data is available online at www.SouthwestOhioAir.org under Colerain Township Monitoring.

For additional information, please contact Brad Miller at 513-946-7777.



Current PM₁₀ Monitor located at Struble Road and Colerain Ave.