

Environmental Justice Analysis

The Indiana Department of Environmental Management's (IDEM's) Office of Air Quality (OAQ) recently completed an analysis of air monitoring data to determine whether the air in environmental justice (EJ) communities is similar to air found in non-EJ communities. Keith Baugues (Assistant Commissioner, IDEM Office of Air Quality (OAQ)) and Jim Parks (Section Chief, IDEM OAQ Monitoring) began by first determining which of Indiana's air monitoring sites, operated since the year 2000, are environmental justice (EJ) areas. This was done using criteria established by the United States Environmental Protection Agency (U.S. EPA); reviewing several environmental indicators within the vicinity of Indiana's air monitors. For each monitor, the most recent year of air quality data (for both EJ and non-EJ areas) was compared with the appropriate national ambient air quality standards (NAAQS) to determine what fraction of the standard it represents. If a monitor had a value that was 75% of the standard, it was given a score of 75. The table below shows the results of the analysis.

The analysis yielded three key findings. First, IDEM has a lot of monitors in environmental justice areas. Second, the difference between the fraction of the standards seen in EJ areas and non-EJ areas is small. The largest difference is in carbon monoxide (CO) levels. CO monitors are usually located in urban areas where CO levels are highest due to traffic congestion. However, both values are well below the standard. Third, on average, all areas are below the NAAQS. There are very few areas in Indiana left that do not meet the NAAQS.

There was one outlier in the data. One lead site in Lake County was closed before it could get the three years of data to show attainment of the standard. The value is included in the averages. This site has 2 ½ years of data. The source which led to the high lead had been closed for a few years. The site was closed because the building it was on was being demolished.

All Hoosiers deserve clean air. This analysis confirms that all residents are getting essentially the same air quality that, with very little exception, meets all health based standards.

Indiana Air Quality Monitoring Summary

Pollutant	Environmental Justice		Non-Environmental Justice	
	No. Monitors	Avg. % of Std.	No. Monitors	Avg. % of Std.
Carbon Monoxide	9	16.8	3	8.9
Lead	16	18.5	5	22
Nitrogen Dioxide	7	41.3	8	35.2
Ozone	17	97.4	34	94.3
PM-2.5	46	61.0	17	62.0
Sulfur Dioxide	12	23.7	19	28.1