

2012 Annual Fine Particle (PM_{2.5}) Standards

On December 14, 2012, after reviewing available health science, United States Environmental Protection Agency (U.S. EPA) strengthened the annual primary standard to a level of 12.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and retained the existing secondary standard at a level of 15.0 $\mu\text{g}/\text{m}^3$ to provide the requisite level of public health and welfare protection ([78 FR 3085](#)).

Attainment of the 2012 annual primary and secondary PM_{2.5} standards is determined by evaluating the three-year average of the annual arithmetic mean PM_{2.5} concentration at each monitoring site in the area, also known as the design value, which must be less than or equal to 12.0 $\mu\text{g}/\text{m}^3$ for the primary standard and less than or equal to 15.0 $\mu\text{g}/\text{m}^3$ for the secondary standard.

On January 15, 2015, U.S. EPA designated as “nonattainment” Clark and Floyd counties as part of the Louisville, KY-IN nonattainment area under the 2012 primary annual PM_{2.5} standard of 12.0 $\mu\text{g}/\text{m}^3$ ([80 FR 2205](#)). The designation was based on monitoring data for Clark and Floyd counties for 2011 – 2013 showing one of the area’s monitors had a design value above the standard. Because air quality monitoring data for 2014 was nearly complete at the time of the designations, U.S. EPA provided a process for reevaluating the area using 2014 data. Monitoring data for Clark and Floyd counties for 2014, when combined with the 2012 and 2013 data, showed all monitors were below the standard and, on April 7, 2015, U.S. EPA redesignated the Louisville area, including Clark and Floyd counties, from “nonattainment” to “unclassifiable” noting that an air quality determination was not possible due to invalid monitoring data for Jefferson County, Kentucky ([80 FR 18535](#)).

Also, on January 15, 2015, U.S. EPA designated as “unclassifiable” Lake and Porter counties as part of the Chicago, IL-IN unclassifiable area under the 2012 primary standard. Quality-assured and certified air monitoring data for Lake and Porter counties for 2011 – 2013 did not indicate a violation of the standard. However, U.S. EPA determined that 2011 – 2013 PM_{2.5} monitoring data for Illinois’ portion of the area was invalid and, therefore, was unable to make an air quality determination for the area.

Sufficient quality-assured ambient air monitoring data has since been obtained for both areas that demonstrates attainment of the standard. On July 3, 2018, based on the most recent three years of quality-assured, certified PM_{2.5} monitoring data (i.e. 2015 – 2017), Indiana requested that U.S. EPA redesignate Clark, Floyd, Lake, and Porter counties from “unclassifiable” to “attainment/unclassifiable” under the 2012 primary annual PM_{2.5} NAAQS. On December 27, 2018, U.S. EPA designated Clark, Floyd, Lake, and Porter counties as “unclassifiable/attainment” under the standard ([83 FR 66631](#)).

On December 18, 2020, after reviewing available science, U.S. EPA concluded that the 2012 standards provided the requisite level of public health and welfare protection and, therefore, retained the standards ([85 FR 82684](#)).

On February 7, 2024, after reviewing available health science, U.S. EPA strengthened the annual primary standard to a level of 9.0 $\mu\text{g}/\text{m}^3$ to provide the requisite level of public health e protection. The final rule was published in the Federal Register on March 6, 2024 ([89 FR 16202](#)).

On December 27, 2024 ([89 FR 105692](#)), after reviewing available science, U.S. EPA concluded that the annual secondary standard of 15.0 $\mu\text{g}/\text{m}^3$ provided the requisite level of public welfare protection, and, therefore retained the standard.