

PM_{2.5} Designation Recommendation
Justification for county recommendations
December 2007

The following counties are currently designated nonattainment for PM_{2.5} in the **CLEVELAND-AKRON-LORAIN** area:

Cuyahoga County

7 monitors

Justification for continuing nonattainment:

- Annual and 24-hour monitor violations;
- Notable 2005 SO₂ and NO_x emissions forecasted to increase by 2009;
- High population, over one million; and
- Notable commuting level; 15,692 Cuyahoga County workers commute to Lake County and 14,207 workers commute to Summit County (violating monitors).

Lake County

2 monitors

Justification for continuing nonattainment:

- High 2005 SO₂ and notable NO_x emissions;
- Population is 233,000 with a projected slight upward trend;
- High level of commuting; 36,741 Lake County workers commute to Cuyahoga County (2000 Census); and
- Due to the high SO₂ emissions and level of commuting into Cuyahoga County (violating monitors) Lake County is considered a contributing county.

Lorain County

2 monitors

Justification for continuing nonattainment:

- High 2005 SO₂ emissions;
- Population is 302,000 with a projection of little change;
- High level of commuting; 36,888 Lorain County workers commute to Cuyahoga County (2000 Census); and
- Due to the high SO₂ emissions and level of commuting into Cuyahoga County (violating monitors) Lorain County is considered a contributing county.

Medina County

1 monitor

Justification for continuing nonattainment:

- Population is 169,000 and is projected to steadily increase;
- Significant level of commuting; 26,572 Medina County workers commute to Cuyahoga County(2000 Census); and
- Due to the level of commuting into Cuyahoga County (violating monitors) Medina County is considered a contributing county.

Summit County

2 monitors

Justification for continuing nonattainment

- 24-hour monitor violations;
- Notable 2005 SO₂ emissions;
- Population is 546,000 and is projected to steadily increase; and
- High level of commuting; 34,476 Summit County workers commute to Cuyahoga County (2000 Census).

Portage County

1 monitor

Justification for continuing nonattainment

- Population is 155,000 and is projected to steadily increase;
- Significant level of commuting; 19,049 Portage County workers commute to Summit County (2000 Census); and
- Due to the level of commuting into Summit County (violating monitors), Portage County is considered a contributing county.

Ashtabula (partial nonattainment designation)
No monitors

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- Insignificant 2005 SO₂ and NO_x emissions demonstrates that Ashtabula is not contributing to Cuyahoga or Summit County's PM_{2.5} problems;
- First Energy has a power plant located in Ashtabula County. As part of the CAIR requirements, it is forecast that significant reductions in emissions will occur;
- Population is 103,000 with little growth expected; and
- Low level of commuting; 5,775 Ashtabula County workers commute to Lake County, 2,683 workers commute to Cuyahoga County (2000 Census)

The following counties are currently designated nonattainment for PM_{2.5} in the **COLUMBUS** area:

Delaware County

No monitors

Justification for continuing nonattainment:

- Population is 157,000 and is projected to increase at a significant pace;
- High level of commuting; 31,708 Delaware County workers commute into Franklin County (2000 Census); and
- Due to the level of commuting into Franklin County (violating monitors) Delaware County is considered a contributing county

Fairfield County

No monitors

Justification for continuing nonattainment:

- Population is 140,000 and is projected to steadily increase;
- High level of commuting; 28,259 Fairfield County workers commute to Franklin County (2000 Census); and
- Due to the level of commuting into Franklin County (violating monitors) Fairfield County is considered a contributing county.

Franklin County

3 monitors

Justification for continuing nonattainment:

- Annual and 24-hour monitor violations;
- High 2005 NOx emissions; and
- High population; over 1 million.

Licking County

No monitors

Justification for continuing nonattainment:

- Population is over 156,000 and is projected to increase at a significant pace;
- Significant level of commuting; 23,755 Licking County workers commute to Franklin County (2000 Census); and
- Due to the high level of commuting into Franklin County (violating monitors) Licking County is considered a contributing county.

Coshocton County (partial nonattainment designation)
No monitors

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- There is an AEP power plant located in Coshocton County. As part of the CAIR requirements, it is forecasted that significant reductions in emissions will occur;
- Coshocton County is located northeast (downwind) of Franklin and Licking counties and therefore it is unlikely that emissions generated in Coshocton County are contributing to Franklin County's PM_{2.5} problems;
- Low population; 37,000 with a projected very slight upward trend; and
- Commuting is not a factor; 271 Coshocton County workers commute to Franklin County (2000 Census).

The following counties are currently designated nonattainment for PM_{2.5} in the **CINCINNATI-HAMILTON OH-KY-IN** area:

Butler County

4 monitors

Justification for continuing nonattainment:

- Annual and 24-hour monitor violations;
- Notable 2005 SO₂ and NO_x emissions;
- Population is 355,000 and is projected to increase at swift pace; and
- High level of commuting; 47,984 Butler County workers commute to Hamilton County (violating monitors).

Clermont County

1 monitor

Justification for continuing nonattainment:

- High 2005 SO₂ and notable NO_x emissions;
- Population is 193,000 and is projected to increase at a swift pace;
- High level of commuting; 40,090 Clermont County workers commute to Hamilton County (2000 Census); and
- Due to the level of SO₂ and commuting into Hamilton County (violating monitors) Clermont County is considered a contributing county.

Hamilton County

8 monitors

Justification for continuing nonattainment:

- Annual and 24-hour monitor violations;
- High 2005 SO₂ and notable NO_x emissions; and
- High population; 823,000.

Warren County

No monitors

Justification for continuing nonattainment:

- Population is 202,000 and is projected to increase at a swift pace;
- Significant level of commuting; 21,347 Warren County workers commute to Hamilton County and 11,325 to Montgomery County; and
- Due to the level of commuting into Hamilton and Montgomery County (violating monitors) Warren County is considered a contributing county.

The following counties are currently designated nonattainment for PM_{2.5} in the **DAYTON-SPRINGFIELD** area:

Clark County

1 monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- No monitor violations;
- Insignificant 2005 SO₂ and NO_x emissions;
- Population is 142,000 with little projected growth;
- Low level of commuting; 7,856 Clark County workers commute to Montgomery County (2000 Census); and
- Due to the level of commuting and being located northeast of Montgomery County it is unlikely that Clark County is contributing to Montgomery County's PM_{2.5} problem.

Greene County

1 monitor

Justification for continuing nonattainment:

- Population is 152,000 and is projected to gradually increase;
- Significant level of commuting; 24,925 Greene County workers commute to Montgomery County (2000 Census); and
- Due to the level of commuting into Montgomery County (violating monitors) Greene County is considered a contributing county.

Montgomery County

2 monitors

Justification for continuing nonattainment:

- Annual and 24-hour monitor violations;
- Notable 2005 SO₂ and NO_x emissions and are forecasted to increase by 2009; and
- Significant population; 542,000.

Ohio, Pennsylvania, West Virginia and Kentucky – “river counties”

The following counties are currently designated **ATTAINMENT** for PM_{2.5} in the **YOUNGSTOWN-WARREN, OH-PA** area:

Justification for including these counties as nonattainment:

Mahoning County

2 monitors

- 24-hour monitor violations;
- Population is 251,000 with a projected downward trend; and
- Significant level of commuting; 19,210 Mahoning County workers commute to Trumbull County (2000 Census).

Trumbull County

1 monitor

- 24-hour monitor violations;
- Notable 2005 SO₂ and NO_x emissions;
- Population is 217,000 with a projected downward trend; and
- Notable level of commuting; 12,003 Trumbull County workers commute to Mahoning County (2000 Census).

The following county is currently designated nonattainment for PM_{2.5} in the **STEUBENVILLE-WEIRTON, WV-OH** area:

Justification for continuing nonattainment:

Jefferson County

2 monitors

- Annual and 24-hour monitor violations;
- High 2005 SO₂ and notable NO_x emissions.

The following county is currently designated nonattainment for PM_{2.5} in the **WHEELING, WV-OH** area:

Belmont County

No monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- The R.E. Burger power plant is located in Belmont County. As part of the CAIR requirements, it is forecasted that significant reductions in emissions will occur;
- Population is 69,000 and is projected to gradually decrease; and
- Low level of commuting; 4,603 Belmont County workers commute to Ohio County, WV (2000 Census).

The following county is currently designated nonattainment for PM_{2.5} in the **PARKERSBURG-MARIETTA, WV-OH** area:

Washington County

No monitor

Justification for continuing nonattainment:

- High 2005 SO₂ and notable NO_x emissions;
- Population is 62,000 and is projected to increase slightly.

The following counties are currently designated nonattainment for PM_{2.5} in the HUNTINGTON-ASHLAND, WV-KY-OH area:

Lawrence County

1 monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- No monitor violations;
- Insignificant 2005 SO₂ and NO_x emissions;
- Population is 63,000, projected to remain generally unchanged;
- Low level of commuting; 7,179 Lawrence County workers commute to Cabell County, WV (2000 Census); and
- Due to the location of the monitor it is likely the levels being detected are coming from across the river. The low SO₂ and NO_x emissions demonstrate that Lawrence County is not a significant source of PM_{2.5}.

Scioto County

1 monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- No monitor violations;
- Insignificant 2005 SO₂ and NO_x emissions;
- Population of 76,000 with a projection of slight upward trend; and
- Commuting is not a factor; 455 Scioto County workers commute to Lawrence County.

Adams County (partial nonattainment designation)

No monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- There are two DPL generating stations located in Adams County. As part of the CAIR requirements, it is forecast that significant reductions in emissions will occur;
- Low population; 28,000 with a projection of a slight upward trend; and
- Commuting is not a factor; 935 Adams County workers commute to Hamilton County.

Gallia County (partial nonattainment designation)
No monitor

Recommend changing PM_{2.5} designation to attainment.

Justification for changing designation to attainment:

- The Ohio Power and Ohio Valley Electric power plants are located in Gallia County. As part of the CAIR requirements, it is forecasted that significant reductions in emissions will occur;
- Low population; 31,000 with a projection of a slight upward trend; and
- Commuting is not a factor; 669 Gallia County workers commute to Mason County, WV.