

# Agency Priority Goal Action Plan Improve Air Quality by Implementing Pollution Control Measures to Reduce the Number of Nonattainment Areas

#### **Goal Leader:**

Elizabeth Shaw, Deputy Assistant Administrator, Office of Air and Radiation

#### **Deputy Goal Leader:**

Peter Tsirigotis, Director, Office of Air Quality Planning and Standards Office of Air and Radiation



#### Overview

#### **Goal Statement**

o Improve air quality by implementing pollution control measures to reduce the number of nonattainment areas. By September 30, 2019, EPA, in close collaboration with states, will reduce the number of nonattainment areas to 138 from a baseline of 166.

#### Challenge

- EPA's authority to approve a state's request to redesignate nonattainment areas hinges on the state meeting the minimum requirements of the Clean Air Act (CAA), which include:
  - A demonstration that the area has air quality that is attaining the National Ambient Air Quality Standards (NAAQS);
  - Establishing that pollution reductions are due to implementing permanent and enforceable measures;
  - A 10-year maintenance plan that includes contingency measures to be triggered in the event of a reviolation of the NAAQS; and,
  - Satisfying any other applicable and outstanding attainment planning and emissions control requirements.

#### **Opportunity**

 A number of nonattainment areas have attained a NAAQS or are close to attaining a NAAQS, which is a key step toward redesignation.

### Leadership

Goal Leader:

Elizabeth Shaw

Deputy Assistant Administrator

**Deputy Goal Leader:** 

Peter Tsirigotis, Director

Office of Air Quality Planning and Standards

### **Goal Structure & Strategies**

- Strategy 1: EPA will work with air agencies\* to facilitate submittal of timely and approvable attainment plans (as a means of bringing areas into attainment) and redesignation requests, as appropriate.
  - Develop and provide data, analysis, and technical tools and assistance to industries, states, communities, and tribes to meet CAA obligations and other statutory requirements.
  - Focus on ways to improve the efficiency and effectiveness of the State Implementation Plan/Tribal Implementation Plan (SIP/TIP) process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions.
  - Continue tracking air quality improvements through the collection of monitoring data.
- Strategy 2: Through collaboration with state, local and tribal air agencies, EPA will take actions to improve air quality in nonattainment areas so these areas can expeditiously attain the NAAQS. EPA will:
  - Operate effective nationwide and multi-state emissions control programs, including:
    - The acid rain program and the cross-state air pollution rule, which address global, national, and regional air pollutants from the power sector and other large stationary sources;
    - National mobile source emissions standards, which address emissions from highway and off-road vehicles, small engines, locomotives, and marine vessels; and
    - New source performance standards and preconstruction permit review program, which ensure the best demonstrated emission control technologies are installed as industrial infrastructure is modernized.
  - Fulfill its NAAQS implementation oversight role using tools available under the CAA to hold states accountable for fulfilling attainment planning responsibilities. Example actions include:
    - Taking action on state implementation plans (SIPs); and
    - Determining whether an area has attained a NAAQS by the required attainment date.

<sup>\*</sup>Air agencies refer to air pollution control agencies at the state and tribal level.

### Goal Structure & Strategies, continued

#### External factors

- Under the CAA, states are responsible for initiating the redesignation process, a process that demands time and resources from states which may be limited for such purposes.
- The CAA does not require states to request redesignation, and in some cases states may determine that undertaking the optional process is not a priority.
- Proposed mitigation action: Regular communication between EPA regional offices and air agencies to discuss prioritizing redesignation requests and identifying solutions to challenges/disincentives that may create barriers for states to request redesignation.

#### **EPA Lean Management System (ELMS)**

- EPA continues to deploy its new EPA Lean Management System (ELMS) to achieve the results set forth in the Strategic Plan. As part of ELMS, EPA has conducted multi-day process improvement events to make significant progress in specific priority areas, including permitting, identified in the Strategic Plan.
- Visual management is a major aspect of ELMS that is being used to ensure that improvements from the events
  are achieved and will be sustained over time. Poster boards with regularly updated performance data serve as
  visual management for monitoring progress towards meeting the targets set forth in the Strategic Plan, while
  additional poster boards are being used to track the work flow necessary to achieving the targets. Managers and
  staff have weekly stand-up huddle meetings in front of their visual management boards to discuss the
  performance and flow of the process.
- In addition, national programs and regional offices hold monthly business review meetings to go over both the strategic measures tracked on scorecards, and the implementation plans that track progress on Strategic Plan and priority area projects identified for EPA under President Trump's Executive Order on a Comprehensive Plan for Reorganizing the Executive Branch. The Administrator and Chief of Operations hold quarterly performance reviews to monitor overall progress on the agency's Strategic Plan and priority area projects.
- ELMS is designed to ensure that EPA regularly monitors progress toward meeting targets and takes immediate action if expected performance is off track.

- During the first quarter of FY 2018, as expected, no existing nonattainment areas were redesignated to attainment. The overall goal is on track.
- Specific Q1 activities included:
  - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
  - EPA issued memorandum on "Supplemental Information on the Interstate Transport State Implementation Plan Submission for the 2008 Ozone National Ambient Air Quality Standards under Clean Air Act Section 110(a)(2)(D)(i)(I)."
  - EPA issued Findings of Failure to Submit for 2008 ozone NAAQS nonattainment areas with overdue SIP elements (82 FR 58118; December 11, 2017).
  - EPA continued to operate nationwide and multi-state programs, the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program.

- During the second quarter of FY 2018, three nonattainment areas were redesignated to attainment:
  - 2008 Lead NAAQS: Chicago, IL
  - 2008 Lead NAAQS: Granite City, IL
  - 2008 Lead NAAQS: Delta, OH
- The Q2 goal was for four areas to be redesignated to attainment. A fourth redesignation was signed on March 29, published in the Federal Register on April 4, 2018, and will be effective May 4, 2018, so the overall APG is on track.
- Specific Q2 activities included:
  - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
  - EPA issued memorandum on "Information on the Interstate Transport State Implementation Plan Submissions for the 2015 Ozone National Ambient Air Quality Standards (NAAQS) under Clean Air Act (CAA) Section 110(a)(2)(D)(i)(I)" to help states meet their Good Neighbor obligations for the 2015 ozone NAAQS (March 27, 2018).
  - EPA issued Findings of Failure to Submit for 2012 PM2.5 NAAQS Moderate nonattainment areas with overdue SIP elements (83 FR 14759; April 6, 2018). The findings establish a deadline by which states will become subject to sanctions unless they submit plans to address their PM2.5 NAAQS nonattainment areas.
  - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.

- During the third quarter of FY 2018, one nonattainment area was redesignated to attainment:
  - 1987 PM<sub>10</sub> National Ambient Air Quality Standards (NAAQS): Sheridan County, WY
  - In order to meet the Q3 goal, four nonattainment areas needed to be redesignated to attainment. In Q3, Sheridan County, WY (1987 PM10 NAAQS) was redesignated to attainment. Two additional redesignations (Troy, AL (2008 Lead) and Chico, CA (2006 PM2.5) were signed prior to the end of Q3 and will become effective in Q4.
  - EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Specific Q3 activities included:
  - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
  - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- Additional Q3 information related to National Ambient Air Quality Standards (NAAQS) attainment:
  - EPA and the Department of Justice continue to engage with the D.C. Circuit Court of Appeals regarding the timeline for its response regarding the February 2018 decision in South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018). This decision could prompt additional work with states regarding redesignation requests.

- During the fourth quarter of FY 2018, 3 nonattainment areas were redesignated to attainment:
  - Troy, AL (2008 Lead)
  - Chico, CA (2006 PM2.5)
  - St. Louis-St. Charles-Farmington, MO-IL (2008 Ozone)
    - MO part redesignated FY 2018 Q4; IL part redesignated FY 2018 Q2
  - EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Specific Q4 activities included:
  - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
  - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- Additional Q4 information related to National Ambient Air Quality Standards (NAAQS) attainment:
  - The D.C. Circuit Court of Appeals denied EPA's request for rehearing regarding the February 2018 decision in South Coast Air Quality Management District v. EPA, No. 15-1115 (D.C. Cir. 2018). The result of the final decision is that states responsible for 35 areas designated nonattainment for the 1997 ozone NAAQS must do additional work to qualify these areas for redesignation.
- Overall in FY 2018, EPA took final action on state requests to redesignate 11 areas to attainment. The effective
  date for all but four of the areas occurred by September 30, 2018. Looking ahead, EPA is reviewing its projections
  for FY 2019.

### Summary of Progress – FY 2019 Q1 and Q2

- During the first two quarters of FY 2019, all or portions of 5 nonattainment areas were redesignated to attainment.
- In FY 2018, EPA took final action on state requests to redesignate 11 areas to attainment. The effective date for all but four of the areas occurred by September 30, 2018. The four area actions that were taken in FY 2018 Q4 and became effective this quarter are as follows:
  - Tampa, FL (2008 Lead)
  - Shoshone County; City of Pinehurst, ID (1987 PM10)
  - Shoshone County; Pinehurst Expansion Area, ID (1987 PM10)
  - Pottawattamie County, IA (2008 Lead)
- The fifth area action was for:
  - St. Louis, MO-IL (1997 PM2.5)
    - Missouri portion: redesignated in August 2018; IL portion: redesignation proposed on March 21, 2019
- Specific Q1 and Q2 activities included:
  - EPA regional offices held calls/meetings with their respective air agencies and discussed planning and redesignation priorities.
  - EPA continued to operate nationwide and multi-state programs for the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program, all of which play a role in reducing emissions of criteria pollutants.
- Additional Q1 and Q2 information related to National Ambient Air Quality Standards (NAAQS) implementation:
  - In Q1 and Q2, OAQPS issued three guidance documents to assist states with consideration of air quality data affected by exceptional events in NAAQS implementation efforts:
    - "Guidance on the Preparation of Exceptional Events Demonstrations for Stratospheric Ozone Intrusions (November 2018)."
    - "Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Air Quality Data Influenced by High Wind Dust Events Under the 2016 Exceptional Events Rule (April 2019)."
    - "Clarification Memo on Additional Methods, Determinations and Analyses to Modify Air Quality Beyond Exceptional Events (April 2019)."

### Summary of Progress – FY 2019 Q1 and Q2 (Cont'd)

- EPA will continue to work with all air agencies with qualifying nonattainment areas to facilitate timely redesignation requests.
- Based on additional analysis and discussions that the Regions held with air agencies in FY 2018, OAR expects to
  miss the FY 2019 target of 138, but does expect to meet and/or exceed its FY 2022 long-term performance goal
  of 101 using updated anticipated submittal timing for redesignation requests for areas that qualify for
  redesignation.
- There are several reasons the targets for redesignating areas may have changed:
  - Attaining air quality in nonattainment areas serves as the foundation for redesignation. As air quality improves (or degrades), the opportunity for an area to qualify for redesignation can change. If air quality data issues arise (e.g., data is found to be invalid or incomplete), the state or EPA may not be able to determine whether an area qualifies for redesignation.
  - States must submit a redesignation request and maintenance plan to EPA in order for the agency to review and approve a request for redesignating an area to attainment. State priorities change over time, and the anticipated submittal dates for redesignation requests for areas that qualify for redesignation may subsequently change.
  - Some redesignation requests/maintenance plans implicate certain Agency policies that may be under review or revision. EPA action to approve those requests/plans have been (or may be) put on hold while the underlying policies/issues are worked out.
  - o Court decisions can also impact redesignations.

### **Key Milestones**

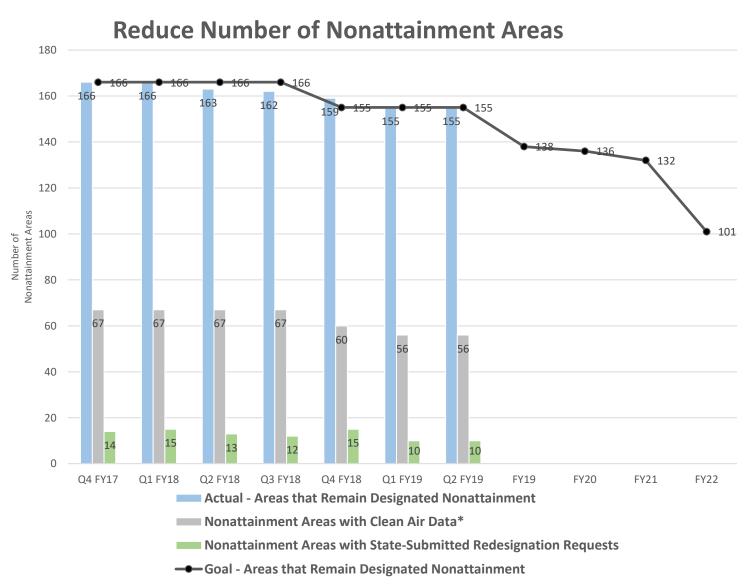
• **Strategy 1:** EPA will work with air agencies to facilitate submittal of timely and approvable attainment plans (as a means of bringing areas into attainment) and redesignation requests, as appropriate.

Milestone Summary									
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments				
Regional offices hold calls/meetings with their respective air agencies and discuss planning and redesignation priorities.	Quarterly	Met	No change	OAR/OAQPS	Regional offices met or exceeded the milestone for Q1 and Q2 in FY 2019.				
Improve the efficiency and effectiveness of the SIP/TIP process, including the Agency's own review process, with a goal of maximizing timely processing of state/tribal-requested implementation plan actions.	Quarterly	Ongoing	No change	OAR/OAQPS	Regional and headquarters offices continued to implement visual management systems and standard work products originally launched in FY 2018 to meet the objectives of the EPA Lean Management System (ELMS). Where applicable, selected Agency air program executives began incorporating SIP-related ELMS project goals into their FY 2019 annual performance plans.				
Continue to track air quality improvements through collection, analysis, and reporting of monitoring data.	Annual	Ongoing	No change	OAR/OAQPS	Regional offices continue to work with states on collection of air monitoring data. Preliminary FY 2018 air quality data have been summarized and OAQPS has initiated the annual data review process with the Regions.				

### **Key Milestones**

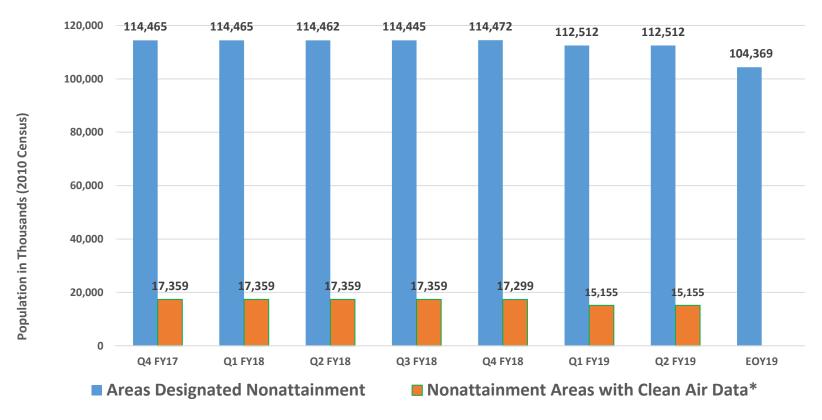
• **Strategy 2:** Through collaboration with state, local and tribal air agencies, EPA will take actions to improve air quality in nonattainment areas so these areas can expeditiously attain the NAAQS.

Milestone Summary									
Key Milestone	Milestone Due Date	Milestone Status	Change from last quarter	Owner	Comments				
Provide tools and guidance documents (as necessary).	Quarterly	Met	No change	·	<ul> <li>In FY 2019 Q1 and Q2, OAR issued three guidance documents to assist states with consideration of air quality data affected by exceptional events in NAAQS implementation efforts:</li> <li>1. "Guidance on the Preparation of Exceptional Events Demonstrations for Stratospheric Ozone Intrusions (November 2018)"</li> <li>2. "Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Air Quality Data Influenced by High Wind Dust Events Under the 2016 Exceptional Events Rule (April 2019)"</li> <li>3. "Clarification Memo on Additional Methods, Determinations and Analyses to Modify Air Quality Beyond Exceptional Events (April 2019)"</li> </ul>				
Operate nationwide and multi-state programs, the acid rain program and the cross-state air pollution rule; national mobile source emissions standards; new source performance standards; and preconstruction permit review program.	Quarterly	Met	No change	OAR	Program implementation and coordination with states is ongoing. EPA continued progress toward improving the clarity of a variety of permitting regulatory provisions to streamline permit application reviews.				
Take appropriate oversight actions required by the Clean Air Act (as necessary).	Quarterly	Met	No change	OAR/OAQPS	No new oversight actions were necessary in Q1 and Q2 of FY 2019.				



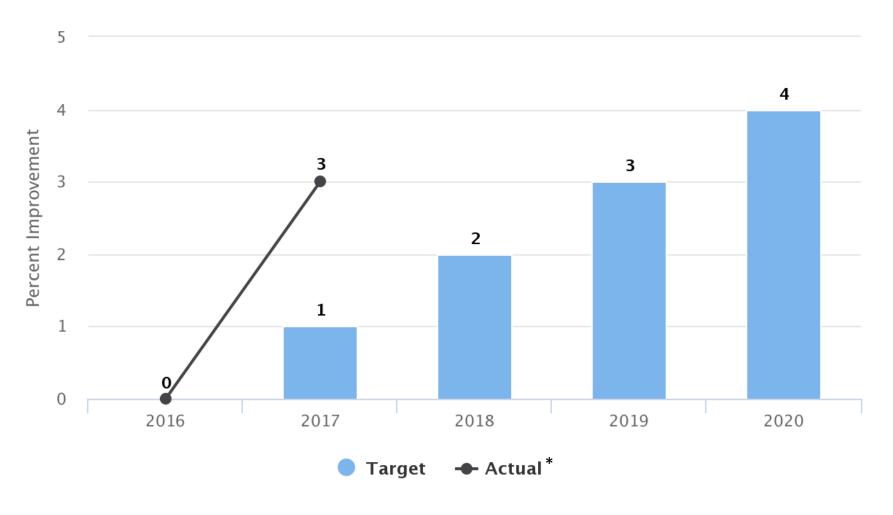
<sup>\*</sup>Clean air data is a key step to redesignation to attainment, which can occur once an area's air quality attains the federal standard.

## Population Living in Areas Designated Nonattainment - Projections at end of FY19



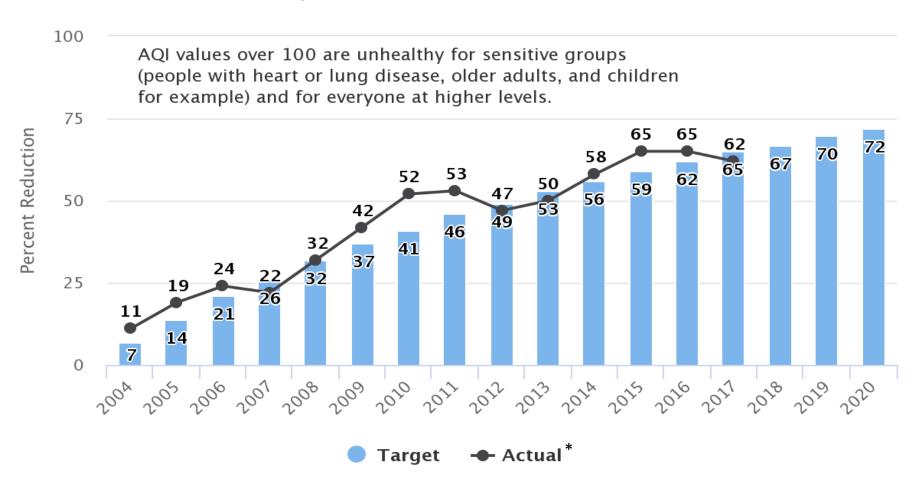
\*Clean air data is a key step to redesignation to attainment, which can occur once an area's air quality attains the federal standard.

#### Percent of Measured Air Quality Improvement in Counties Not Meeting the NAAQS from a 2016 Baseline



<sup>\*</sup>Data for the "actual" update is available August of the following year.

## Cumulative percent reduction in the number of days with Air Quality Index (AQI) values over 100



<sup>\*</sup>Data for the "actual" update is available August of the following year. Cumulative percent reduction is calculated from the baseline year 2003.

This includes both nonattainment and attainment areas, and may include days with AQI values over 100 due to wildfires or other exceptional events.

### Data Accuracy and Reliability

#### **Measurement and Baseline:**

• The nonattainment area metric will track the status of 166 areas designated nonattainment for non-revoked National Ambient Air Quality Standards (NAAQS) at the end of FY 2017 (September 30, 2017). New areas designated nonattainment after October 1, 2017 will not be added to the baseline, but starting in FY 2019 these areas will be tracked. The other air quality indicators will rely on data from EPA's Air Quality System and other information.

#### **Data Sources:**

- The EPA Green Book, a public accessible website <a href="https://www.epa.gov/green-book">https://www.epa.gov/green-book</a>
- Federal Register notices documenting EPA final action on state redesignation requests.

#### Methodology:

- EPA's monthly Green Book publication includes a summary of nonattainment areas, taking into account all final redesignation actions published in the Federal Register.
- Prior to publishing a new monthly Green Book report, an EPA contractor runs a quality assurance check.
- A Data Quality Record has been developed for the strategic measure associated with this Agency Priority Goal: https://www.epa.gov/sites/production/files/2018-05/documents/dqr-1-1-nonattainment-areas.pdf.

### Additional Information - Contributing Programs

#### **Organizations:**

- Office of Air and Radiation (OAR)
  - Office of Air Quality Planning and Standards (OAQPS)
  - Office of Transportation and Air Quality (OTAQ)
  - Office of Atmospheric Programs (OAP)
- Regional offices
- State, local, and tribal air agencies (S/L/T)

#### **Program Activities:**

- o S/L/T develop State/Tribal Implementation Plans
- EPA develops regulations and guidance, as necessary, to facilitate S/L/T implementation
- EPA provides technical assistance and tools, as necessary, to facilitate S/L/T implementation

#### **Regulations:**

- EPA regulations addressing NAAQS and NAAQS implementation include 40 CFR Parts 49 thru 99
- Air quality management and emissions limiting regulations established by other federal and state agencies, as applicable

#### **Policies:**

 EPA and S/L/T policies related to NAAQS implementation (e.g., Procedures for Processing Requests to Redesignate Areas to Attainment, etc.)

#### Other Federal Activities:

- Transportation conformity DOT/FHWA (Federal Highway Administration)
- Fire management USDA (U.S. Forest Service), DOI (National Park Service)
- International pollution management treaties Department of State

#### **Stakeholder / Congressional Consultations**

• The nonattainment redesignation process is a federal and state partnership; EPA works with states and tribes to establish priorities including redesignations