EPA’s mission should be focused on providing states with the tools and data needed to do their jobs.
In this article, I focus on the tasks that the U.S. Environmental Protection Agency (EPA) can carry out to assist states in meeting their obligations contained in the U.S. Clean Air Act (CAA). I propose that EPA’s mission should be focused on providing states with the tools and data needed to do their jobs. In most cases, it is the role of the states to implement new federal rules, to permit air sources, to monitor the air, to inspect sources, and to carry out enforcement activities. States need timely tools and guidance to carry out these duties. Among these, I would highlight the following 10 tasks grouped in four general categories:

**Establishing National Standards**
1. Establishing National Ambient Air Quality Standards (NAAQS)

**Ambient Air Monitoring**
2. Determining what monitoring techniques are appropriate
3. Providing proper oversight of state air monitoring activities

**Tools and Data**
4. Developing air quality models and appropriate guidance for their application
5. Developing appropriate emission factors
6. Overseeing development of national emission inventories
7. Conducting technical analyses to establish contributions and emission reduction budgets for good neighbor State Implementation Plans (SIPs)

**Emission Standards**
8. Establishing NAAQS, including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs)
9. Setting and enforcing national standards for vehicles
10. Setting national standards for non-road engines

**Establishing National Standards**
States, except for maybe California and Texas, typically do not have the in-house expertise to establish health-based ambient air quality standards. Even if they did, you might end up with 50 standards for the same air pollutant. As a result, the public would not be adequately protected and it would be extremely difficult for facilities to permit from one state to another.

**Ambient Air Monitoring**
States do not have the resources to evaluate new monitoring techniques to determine if they meet needed criteria. This function needs to be done by a central organization, so that 50 states are not carrying out the same task. A central organization should oversee states’ ambient air monitoring activities to ensure that quality assurance is being handled properly, and that sites are being located and maintained properly. Failure to carry out ambient air monitoring properly can result in data for an entire state being invalidated with repercussions on neighboring states.

In the long run, it is this air quality data that determine whether an area does or does not meet the NAAQS. It is imperative that the correct standards are set, the correct instruments are deployed and operated appropriately in the field, and samples are properly handled and analyzed.

**Tools and Data**
States are dependent on EPA to provide the proper tools and data, so that they can carry out a number of tasks. First among these is the development of air quality models, including air quality dispersion models, photochemical models, and receptor models. The development of these models should be done by a central organization. However, it should have state input and involvement, especially in evaluating the model’s performance. These models are used to evaluate new industries wishing to locate within a state and to establish limits for existing sources to meet other requirements. The accuracy of such models is extremely important.

Emission estimates from many sources are based on emission factors. These factors were developed by EPA by reviewing stack test results from across the nation or by carrying out original testing for selected source categories. This important task has been dropped by EPA. Many sources are having their emissions determined based on emission factors that are 20 to 30 years old. Many technologies have changed during this period and the factors need to be updated.

EPA carries out two national emission inventory efforts every three years: One is the National Emission Inventory (NEI), which covers criteria pollutants, and the second is the National Air Toxics Assessment (NATA), which looks at air toxic emissions. These inventories are very important, in that they form the basis for national control strategies that rely on air quality modeling results that use emission inventory data as their input. These emission inventories are always out of date by the time they are developed. For example, the 2014 NATA inventory will not be ready until spring 2018. EPA needs to put more resources into more quickly developing current inventories to establish future standards.

EPA is proposing to require many states to establish emission targets to lower their impact on ambient air monitors in other
states. In the past, EPA established the emission targets. The agency now states that it lacks the funds to complete the tasks and expects states to carry the load. This is an unrealistic expectation, calling for numerous states to coordinate and submit one plan. This will result in the expenditure of more resources (i.e., having many states doing modeling instead of just one federal agency.) It is unlikely that a number of states will come to agreement on these targets. In some cases, it may depend on who reduces first, as to the amount that they will need to reduce.

**Emission Standards**

New industries need a common set of standards. EPA has established New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs), and should continue to do so. EPA has also established emission standards for motor vehicles and fuels, and for non-road engines. The CAA establishes that this is EPA's role and not the role of states.

Regardless of whether EPA is releasing new rules or standards, states need timely guidance to implement federal rules. The CAA establishes timeframes to submit SIPs to EPA. However, the states are often put in a position of having to prepare plans without adequate guidance on what elements will make the plan approvable. States need and deserve the complete times granted by the CAA to prepare SIPs that are approvable without revisions.

I have not focused on enforcement as an EPA priority here. Except for national or multi-state cases, the primary authority for enforcing standards from the CAA is the responsibility of the states. There are exceptions in cases where states do not accept authority for carrying out selected tasks. If the states are not doing an adequate job, EPA can remove authority from the state.

It is impossible to address all of the many functions of EPA in a single article. For example, states also need adequate funding to carry out the many tasks to which they are assigned, as well as training. While partially the responsibility of EPA, it is also up to Congress and the White House to determine appropriate funding levels.

In conclusion, I would suggest that there is a role for EPA and the states to work together to continue the process of improving the air quality across the nation.