

AIR POLLUTION CONTROL POLICIES of the COMMONWEALTH

A REPORT TO

**THE HONORABLE JAMES S. GILMORE III, GOVERNOR,
AND
THE GENERAL ASSEMBLY OF VIRGINIA**



**Department of Environmental Quality
COMMONWEALTH OF VIRGINIA
October 2001**

CONTENTS

| | |
|--|-----------|
| Introduction | 1 |
| I. Air Quality Monitoring | 1 |
| II. Air Pollution Control Policies | 2 |
| Clean Air Programs | 2 |
| State Implementation Plan | 6 |
| Ozone Attainment Planning for One-Hour Standard | 7 |
| Ozone Attainment Planning for Eight-Hour Standard | 9 |
| EPA NOx SIP Call | 9 |
| III. Conclusion | 12 |

INTRODUCTION

With few exceptions, the air in Virginia continues to meet national air quality standards. Governor Gilmore, the State Air Pollution Control Board, and the Department of Environmental Quality (DEQ) are working to maintain the good quality of Virginia's air while implementing positive changes in the air quality management policies of the Commonwealth. This report details the status of Virginia's air quality and the policies and regulations that govern how Virginia manages its air quality program. This report is prepared in accordance with §10.1-1307 of the Code of Virginia in order to apprise the Governor and the General Assembly of matters relating to the Commonwealth's air pollution control policies and on the status of the Commonwealth's air quality.

I. AIR QUALITY MONITORING

The DEQ maintains an extensive air quality monitoring network throughout the Commonwealth. Ambient air quality was measured by 111 instruments at 55 sites during 2000. These monitoring sites were established in accordance with the U.S. Environmental Protection Agency's (EPA's) siting criteria contained in the Code of Federal Regulations (CFR), Title 40, Part 58, Appendices D and E. Virginia's monitoring network operations conform to EPA guidance documents and to generally accepted air quality monitoring practices. All data reported for the Virginia air quality monitoring network were quality assured in accordance with requirements contained in 40 CFR Part 58, Appendix A. These data are published annually in the *Virginia Ambient Air Monitoring Data Report* (copy available upon request). Regional air quality data and forecasts can be found on the DEQ's website at <http://www.deq.state.va.us/airmon/>.

Ambient concentrations of lead, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter (PM) less than or equal to 10 microns in aerodynamic diameter continued to be well within the EPA's national air quality standards in 2000. However, elevated ozone concentrations were observed, particularly in the Northern Virginia, Richmond, and Tidewater areas. Multiple eight-hour concentrations greater than the previous eight-hour standard (0.08 parts per million [ppm]) were observed, and a total of 24 one-hour concentrations greater than the current one-hour standard (0.12 ppm) were recorded at 12 sites.

In 2000, the Virginia DEQ entered its second year of monitoring particulate matter that is less than or equal to 2.5 microns in aerodynamic diameter (PM_{2.5}). Two types of monitors are used to measure PM_{2.5}: continuous and 24-hour mass samplers. Continuous PM_{2.5} monitors are operating at three sites in Virginia: at the Math & Science Center in Henrico County, at the Virginia School in Hampton, and at Seven Corners in Fairfax County. With continuous monitors, a steady stream of ambient air passes through a filter. Data are constantly fed into a microprocessor that provides hourly averages. With the 24-hour mass sampler, ambient air passes through a stretched 47-mm Teflon filter. After 24 hours, the filter is weighed to determine the concentration of PM. Twenty-three of these monitors are located at 20 monitoring sites around the state (three of the sites have collocated monitors for data precision). Data recorded at these sites show that three areas in Virginia may not meet the yearly standard of a three-year cumulative average of 15 micrograms per cubic meter: Bristol, Roanoke/Salem, and Lynchburg. However, three full years of data are needed before a meaningful evaluation can be made.

II. AIR POLLUTION CONTROL POLICIES

CLEAN AIR PROGRAMS

The state's air quality programs are designed to implement the provisions of the Virginia Air Pollution Control Law and to fulfill the Commonwealth's mandates under the federal Clean Air Act (originally enacted in 1970). The basic approach and content of these two laws greatly influence program development. The state law is very broad, giving the agency much latitude and addressing the general development and processing of regulations with little guidance as to their content or other aspects of the programs. The federal law, however, differs sharply by laying out, often in explicit detail, the exact requirements for an air quality program. In cases where the federal law is not explicit, the accompanying federal regulations fill in the gaps in even greater detail—in some cases, going as far as actually requiring states to adopt certain federal regulations verbatim. This, of course, belies the fact that all environmental challenges are site- and situation-specific, and often preclude the use of innovative technology. The chief influences on the Commonwealth's air quality programs are the federal law and the regulations drawn pursuant to it. Under the Clean Air Act, all air quality programs must be submitted for approval by the EPA. Although the programs of the State Air Pollution Control Board are heavily influenced by federal legislation, it is state law that provides the legal basis for programs developed by the Board and the DEQ. Below is a summary of the basic programs established by the laws, both federal and state.

National Low Emissions Vehicle Program

Virginia has been instrumental in the development of a voluntary 49-state car program called the National Low Emissions Vehicle (NLEV) Program. The EPA, based on a request from the Ozone Transport Commission (OTC), promulgated a rule requiring OTC members (states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the Consolidated Metropolitan Statistical Area that includes the District of Columbia) to adopt an OTC-Low Emission Vehicle (OTC-LEV) Program that is identical to the California Car Program. This program would have been in effect only in the 13 states of the OTC. Virginia successfully argued that it would be more practical and beneficial to have a voluntary 49-State Program that would benefit not only the Northeast, but also the rest of the country. Virginia challenged the EPA in court on its ability to require the California Car Program in the OTC states and was successful in its lawsuit. Virginia actively participated in workgroups with the EPA, the auto manufacturers, and the other OTC states to make the NLEV Program a reality. The EPA issued its final rule on the subject on January 7, 1998, and the first "clean" cars were sold in Virginia in the fall of 1998. These cars will significantly reduce both nitrogen oxide (NO_x) and volatile organic compounds (VOCs) in Virginia and will help improve air quality in Northern Virginia.

Virginia adopted the necessary regulations (9 VAC 5 Chapter 200) to allow the NLEV program to be implemented; the regulations were approved by the EPA on December 28, 1999 (64 Federal Register [FR] 72564). Accordingly, Virginia has repealed the Clean-Fuel Fleets Program (9 VAC 5 Chapter 121) as provided in §46.2-1179.1 of the Code of Virginia. The Clean-Fuel Fleets Program covered fleet vehicles in the Northern Virginia area and required that a percentage of annual vehicle purchases by certain fleet owners be clean-fuel vehicles in order to reduce emissions. Replacement with the NLEV program will result in greater emissions reductions statewide and eliminate the unfair economic disparity associated with a program limited to a part of the Commonwealth.

Motor Vehicle Emissions Inspection and Maintenance Program

Since passage of the 1990 amendments to the Clean Air Act, Virginia has put considerable effort into designing a workable emissions inspection program that would improve on the previous program. These program improvements are mandated by Congress, but the initial EPA regulation required a centralized inspection system that was not the best type of program for Virginia. In 1995, the General Assembly passed legislation that specified both the type of inspection system (decentralized) and the inspection equipment that would be used in Northern Virginia. In 1996, Congress and the EPA changed their requirements to allow a decentralized program as adopted by the General Assembly. The DEQ has worked hard to create a program that retains the convenience of having emissions inspections and repairs performed at the same location, while upgrading the equipment to more accurately identify those vehicles that emit excessive pollutants when operating under roadway conditions. With the help of service stations, repair garages, and auto dealerships, a program has been designed that is a model for other states to follow. Acceptance by and support from the repair industry has been very good. Program operation commenced in April 1998. Testing of vehicle emissions can now be done under conditions simulating driving at 15 and 25 miles per hour. The new program is several times more effective in reducing vehicle emissions than the previous program. This enhanced emissions inspection program is one of the largest air pollution reduction measures in the Northern Virginia Air Quality Attainment Plan.

In 2002, the DEQ plans to add testing of the on-board diagnostics (OBD) system on model year 1996 and newer vehicles. All 1996 and newer light-duty vehicles must be equipped with OBD according to federal law. The OBD system monitors key components of the vehicle's emissions control system, records any "diagnostic trouble codes," and warns the driver if there is a condition that could cause excess emissions. The information from the diagnostic trouble codes can be used by the repair technician to facilitate effective and efficient repairs. The Clean Air Act requires that, beginning in 2002, each Vehicle Emissions Inspection Program monitor the OBD system and fail the vehicle if the OBD warning light is illuminated. The OBD test will take the place of a tailpipe test and will thus greatly reduce the amount of time needed for an emissions test. The DEQ will substitute the OBD test for the tailpipe test after an OBD advisory pilot program during which OBD results will be recorded but will not result in an emissions test failure.

As required by the Clean Air Act, each Vehicle Emissions Inspection Program must include remote sensing of vehicle emissions in the program area. In response to this requirement, the General Assembly passed legislation in 1996 to authorize the DEQ to perform remote sensing of vehicle emissions throughout the Northern Virginia area. A pilot study was conducted in 1996 and 1997 to evaluate the feasibility of such a program.

The study indicated that vehicles subject to emissions inspections are 7 to 10 percent cleaner than those that are not. The study found that out-of-state vehicles make up about 15 percent of vehicles in Northern Virginia, and another 13 percent of the vehicles in the program area are registered in other areas of Virginia. Most of the out-of-state vehicles are subject to Emissions Inspection Programs in other states; the vehicles from other parts of Virginia (13 percent) could be subject to emissions inspections in the new program if identified by remote sensing as regular commuters and gross polluters.

The study indicated that remote sensing has the potential to identify gross polluting vehicles and recommends establishing a comprehensive program that will require those vehicles to be repaired. The cost of operating a remote sensing program could be a major obstacle, but remote sensing technology continues to improve. The DEQ is assessing the implementation, on a limited scale, of an ongoing remote sensing program. A second remote sensing pilot study is planned for late 2001 to assess the

efficiency of identifying gross polluting vehicles and requiring out-of-cycle retesting.

State Implementation Plan (SIP) Regulatory Programs

The SIP is designed to attain and maintain the federal ambient air quality standards throughout the state. The standards prescribe limits for six “criteria pollutants”: carbon monoxide, lead, nitrogen oxide, ozone, particulate matter, and sulfur oxide. Regulations are one element of the plan and are included to provide a legal basis for restricting the emission of air pollution from individual sources. The Board’s SIP regulations can be divided into five general categories, as follows:

Stationary Source Regulatory Program. This program covers existing sources of air pollution and requires compliance with emission standards based on emission limits achievable through the use of reasonably available control technology.

New and Modified Source Permit Program. This program covers new facilities and expansions to existing ones and requires that a permit be obtained prior to beginning construction of a new facility or expansion of an existing one. There are three types of permits, and which one applies depends on the type, size, and location of the source. The first, for prevention of significant deterioration, applies to new major sources of air pollution and to major modifications to existing facilities in areas where the air quality meets or is better than the standards. The second, for nonattainment areas, applies to major air pollution sources and major structure modifications in areas where the air quality does not meet the standards. The third type of permit covers smaller air pollution sources not covered by the other two.

Motor Vehicle Emissions Control Program. The Emissions Inspection Program covers motor vehicles in the Northern Virginia area and requires compliance with tailpipe emissions limits. Compliance is achieved by a periodic inspection of the vehicle emissions.

Air Pollution Episode Prevention Program. This program requires that certain sources file plans describing the steps they will take should air quality levels, due to their actions, not meet the standards by a substantial amount.

Conformity Program. This program establishes criteria and procedures for federal agencies to use when determining whether federal non-transportation related actions or transportation plans and projects are in conformance with the SIP in the nonattainment and former nonattainment areas (Northern Virginia, Richmond, and Hampton Roads areas).

Clean Air Act Regulatory Programs

New Source Performance Standards (NSPS). These nationwide technology-based performance standards consist of emissions limits and other limitations to control certain pollutants from some newly built plants and modifications to existing ones. They are enforced by the state through delegation of authority from the EPA and are designed to provide a minimum level of consistency among the states in requirements for new industrial development.

National Emission Standards for Hazardous Air Pollutants (NESHAP). These nationwide health-based emission standards consist of emission limits and other limitations to control certain pollutants from some industry and other activities that emit hazardous air pollutants. They are enforced by the state through delegation of authority from the EPA and are designed to provide a minimum level

of consistency among the states.

Maximum Achievable Control Technology Standards (MACTS). These nationwide technology-based emission standards consist of emission limits and other limitations to control some pollutants from some industry and other activities that emit hazardous air pollutants. They are enforced by the state through delegation of authority from the EPA and are designed to provide a minimum level of consistency among the states.

Designated Pollutant Plan Regulatory Program. This program is similar to a SIP but applies only to designated pollutants. The designated pollutants are ones for which an NSPS has been promulgated but that are not criteria pollutants or hazardous pollutants. It covers existing sources and requires compliance with emission standards based on emission limits achievable through the use of reasonably available control technology.

Operating Permit (Title V) Program. This program covers major regulated industrial/commercial facilities and requires that a renewable permit be obtained to operate such a facility.

Acid Deposition Control Program. This program is designed to reduce sulfur dioxide and nitrogen oxide emissions from electric utilities by 10 million tons per year nationwide in two stages by the year 2000.

State-Only Regulatory Programs

Toxic Pollutant Control Program. This program provides for case-by-case source-specific assessment and establishment of control requirements after evaluation against threshold levels derived from occupational health and safety standards. It covers most regulated sources and several hundred substances.

Medical Waste Incinerator Emissions Control Program. This program is designed to limit emissions of dioxins/furans, particulate matter, carbon monoxide, and hydrogen chloride from regulated medical waste incinerators.

Odor Emissions Control Program. This program provides a general standard for odor and a general approach for determining whether an odor is objectionable. The purpose is to require the source to take action to eliminate or reduce the odorous emissions if deemed to be objectionable to individuals of ordinary sensibility. However, unlike most other emissions standards, there are no definitive requirements in the standard itself; the standard merely provides a mechanism for the DEQ, on a case-by-case basis, to require the owner to reduce emissions after investigation by the DEQ.

Open Burning Emissions Control Program. This program limits or prohibits, in some instances, open burning and restricts emissions of PM and VOCs during the peak ozone season to the level necessary for the protection of public health and welfare. The program also provides guidance to local governments on the adoption of ordinances to regulate open burning. Efforts are being made to encourage local adoption of such programs in response to a recommendation by the 1990 Governor's Commission on Efficiency in Government that open burning be regulated by local governments rather than by the state.

STATE IMPLEMENTATION PLAN

Among the primary goals of the Clean Air Act are the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the prevention of significant deterioration of air quality in areas cleaner than required by the NAAQS.

The NAAQS, developed and promulgated by the EPA, establish the maximum limits of pollutants permitted in the outside ambient air. The Clean Air Act requires that each state submit a plan (called a State Implementation Plan, or SIP), including any laws and regulations necessary to enforce the plan, showing how air pollution concentrations will be reduced to levels at or below these standards (i.e., attainment). Once the pollution levels are under the level required by the standards, the plan must also demonstrate how the state will maintain the air pollution concentrations at the reduced levels (i.e., maintenance). The Virginia State Implementation Plan was submitted to the EPA in early 1972. More than 100 revisions (mostly regulation revisions) to the plan have been made since that original submittal. Generally, the plan is revised, as needed, when there are changes to the Clean Air Act and its requirements.

The SIP is the key to most air quality programs. The Clean Air Act is specific concerning the elements required for an acceptable SIP. If a state does not prepare such a plan, or if the EPA does not approve a submitted plan, then the EPA itself is empowered to take the necessary actions to attain and maintain the air quality standards – that is, it would promulgate and implement an air quality plan for that state. EPA is also, by law, given authority to impose sanctions in cases where there is no approved plan or the plan is not being implemented; such sanctions would consist of loss of federal funds for highways and other projects and/or more restrictive requirements for new industry.

The basic approach to developing a SIP is to examine air quality across the state, delineate areas where air quality needs improvement, determine the degree of improvement necessary, inventory the sources contributing to the problem, develop a control strategy to reduce emissions from contributing sources enough to bring about attainment of the air quality standards, implement the strategy, and take the steps necessary to ensure that the air quality standards are not violated in the future.

The heart of the SIP is the control strategy, which describes the emission reduction measures to be used by the state to attain and maintain the air quality standards. The three basic types of measures are stationary source control measures, mobile source control measures, and transportation source control measures. Stationary source control measures are directed at limiting emissions primarily from commercial/industrial facilities and operations. Mobile source control measures are directed at limiting tailpipe and other emissions from motor vehicles; these measures include Federal Motor Vehicle Emission Standards, fuel volatility limits, reformulated gasoline requirements, the emissions control system anti-tampering program, and the inspection and maintenance program. Transportation source control measures are directed at limiting the location and use of motor vehicles; these measures cover carpools, special bus lanes, rapid transit systems, commuter park-and-ride lots, bicycle lanes, and signal system improvements, among other things.

Most of the DEQ's regulations are designed to provide the means for implementing and enforcing SIP control measures necessary to obtain emissions reductions. About 95 percent of the DEQ's regulations fall into this category and are, therefore, subject to EPA approval. In addition, development and enforcement of regulations promulgated under the Virginia State Implementation Plan must be continually pursued, and the SIP must be revised as federal laws and regulations change.

OZONE ATTAINMENT PLANNING FOR ONE-HOUR STANDARD

For the most part, Virginia's SIP has been effective, and the standards have been attained for most pollutants in most areas. However, attainment of the NAAQS for one pollutant—ozone—has proven problematic. Although ozone is needed at the earth's outer atmospheric layer to screen out harmful rays from the sun, excess concentrations at the earth's surface have an adverse effect on human health and welfare. Ozone is formed by a chemical reaction between volatile organic compounds (VOCs), nitrogen oxide (NO_x), and sunlight. When VOC and NO_x emissions from mobile sources (such as cars) and stationary sources (such as industrial processes, combustion of fuels, gasoline storage and transfer, printing, and dry cleaning) are reduced, ozone is reduced.

In 1977, Congress enacted amendments to the Clean Air Act in order to address unsuccessful SIPs and areas that had not attained the NAAQS (that is, nonattainment areas). Although SIP revisions submitted pursuant to the requirements of the 1977 amendments did eliminate some nonattainment areas, other areas remained.

In 1990, Congress once again enacted comprehensive amendments to the Clean Air Act to address SIP requirements for nonattainment areas. These amendments established a process for evaluating the air quality in each region and for identifying and classifying each nonattainment area according to the severity of its air pollution problem. This process determined that Virginia had three ozone nonattainment areas in metropolitan areas: Hampton Roads, Richmond, and Northern Virginia. There was also one rural ozone nonattainment area: White Top Mountain in Smyth County. Two localities (Arlington County and Alexandria City) in the Northern Virginia area were also designated as nonattainment areas for carbon monoxide. All of these areas, with the exception of the ozone areas in Northern Virginia and White Top Mountain, have now been redesignated as attainment areas by the EPA.

With the establishment of a new eight-hour ozone standard, the EPA revoked applicability of the one-hour standard for all areas, with the exception of those areas that did not meet it. In Virginia, this left the Northern Virginia area as the only one for which the one-hour standard still applies.

After a May 1999 federal court ruling that essentially stopped implementation of the new, more stringent eight-hour standard, EPA had to either reinstate the one-hour standard or leave much of the country without enforceable ozone standards. Therefore, the EPA moved to reinstate its one-hour ozone standard in nearly 3,000 counties across the United States where it had been revoked, but it gave a number of areas with "clean" air quality data additional time to show that they are in attainment under the reinstated one-hour standard.

The EPA officially reinstated the one-hour standard (65 FR 45182) on July 20, 2000, and it required the affected counties to take some additional action to protect their air quality or to avoid future increases in air pollution. Generally, areas were given the air quality designation they had when the EPA first revoked the one-hour standard and replaced it with the eight-hour standard. In most areas, the reinstatement of the one-hour standard will have little practical effect, but it will trigger air quality maintenance plans in areas that have had air quality problems since the one-hour standard was revoked.

The EPA delayed the effective date for the reinstatement of the one-hour standard for at least 90 days, and gave areas with clean air quality data even more time (180 days) before the standard would take effect. Many of the clean data areas had not obtained formal designation of attainment status before the

EPA revoked the one-hour standard, rendering such designation unnecessary. However, reinstatement of the one-hour standard threatened to trigger immediate imposition of additional air quality controls in these clean data areas, including more stringent permit requirements for new and modified stationary sources of air pollution.

Although the EPA is reinstating the one-hour ozone standard, giving the clean data areas a full 180 days before the reinstatement takes place it will give these areas more time to prepare requests for redesignation as attainment areas. White Top Mountain meets the criteria for a clean data area. The reinstatement of the one-hour standard will trigger preexisting air quality contingency measures in the Richmond ozone nonattainment area, which is currently legally in attainment with the one-hour ozone standard but in nonattainment based on 1996–1998 data. Because the contingency measures in the current maintenance plan for the Richmond area are not consistent with the policies of the Commonwealth, the measures are being revised. The most significant change to the measures will be the removal of the Motor Vehicle Inspection and Maintenance Program.

The preexisting air quality contingency measures may also be triggered for the Hampton Roads ozone nonattainment area; Hampton Roads has been legally in attainment with the one-hour ozone standard, but has likely violated it based on 1999–2001 data. This determination is not official because the 2001 data has yet to be quality assured.

Meanwhile, the EPA has approved plans and control strategies to achieve the one-hour standard in the Northern Virginia area. However, the approval is under litigation because, among other things, the attainment date in the plan is not consistent with the time requirements of the Clean Air Act.

OZONE ATTAINMENT PLANNING FOR EIGHT-HOUR STANDARD

On July 17, 1997, the EPA announced revisions to the NAAQS for ozone and particulate matter. After a lengthy review process, these changes were deemed necessary to protect public health and the environment.

For ozone, the EPA initially phased out the one-hour average concentration standard and replaced it with an eight-hour average concentration standard. All areas that met the one-hour ozone standard had to demonstrate attainment with the eight-hour standard, and attainment status was determined from data collected in the years 1997 through 1999. Those areas in nonattainment with the one-hour standard had to demonstrate attainment with that standard before complying with the eight-hour standard. Only the Northern Virginia area remains in nonattainment with the one-hour standard.

In May 1999, the U.S. Circuit Court of Appeals for the District of Columbia remanded the new eight-hour ozone standard on constitutional grounds and ruled that the EPA may not enforce it. As a result, the EPA reinstated the previously revoked one-hour standard.

The Clean Air Act and various other federal laws require that state governors make recommendations to the EPA concerning geographic boundaries with respect to attainment or nonattainment after promulgation of new or revised air quality standards. For the eight-hour ozone standard, the recommendation was due by July 1, 1999. However, Virginia's governor did not make any recommendations as to the geographic boundaries, but instead expressed the view that it was premature to do so in light of the court rulings against the eight-hour standard. The eight-hour standard is currently unenforceable, and the EPA might have to revise the level in the reinstated one-hour ozone standard as

well. In spite of these uncertainties, the EPA indicated that it is duty-bound by law to make its decision, and put forth a new deadline of July 1, 2000, for the governors to make their submittals. On June 29, 2000, the governor submitted the Commonwealth's recommendations as to the geographic areas to be designated as nonattainment areas. A copy of the submittal letter and a list of the recommended nonattainment areas are attached. The final decision on the designations lies with the EPA and the effective date of the designations will be at some later, as yet undetermined, date.

Because the U.S. Circuit Court of Appeals for the District of Columbia removed the EPA's power to enforce the new eight-hour standard, assessment of these potential new nonattainment areas is in the very preliminary stages. For the most part, details of the plans required for each area have not been determined at this time. The EPA contends that implementation of the measures to reduce NO_x under the NO_x SIP call (see discussion below) will remedy most problems; Virginia feels that this view may be optimistic.

EPA NO_x SIP CALL

In March 1995, the EPA agreed to work with the Environmental Commissioners of 37 states to deal with the issue of ozone nonattainment in areas designated "serious" and worse as established by the 1990 amendments to the Clean Air Act. The 37 states included the OTC states, many southern states, several midwestern states and states bordering the Mississippi River on the west, plus Texas, Oklahoma, Kansas, Nebraska, and the Dakotas. This group of states was called the Ozone Transport Assessment Group (OTAG). The serious and worse areas included the northeast corridor from Northern Virginia to New England, or the OTC states; Atlanta, Georgia; and the greater Chicago area. The study was to include extensive air quality modeling to determine whether transport of ozone precursor pollutants (NO_x and VOCs) was affecting the ability of these nonattainment areas to attain the health-based one-hour ozone air quality standard. Five states—Alabama, Kentucky, Michigan, Virginia, and West Virginia—did not support the OTAG recommendations because they felt that more detailed technical analysis should be performed before recommendations were made or a SIP call issued. Many also questioned the legality of a SIP call at that time. Some of the dissenting states, including Virginia, did not simply take issue with the EPA proposal but also developed an alternative proposal under the auspices of the Southeast and Midwest Governor's Ozone Coalition. This alternative proposal was developed because the EPA SIP call required infeasible and unnecessary emission reductions that would adversely affect the economy of Virginia without a commensurate improvement in air quality.

In November 1997, the EPA proposed a NO_x SIP call based on selected OTAG recommendations. The SIP call is a "one size fits all" approach, and it ignored key OTAG recommendations that did not support the EPA action. During the public comment period on the proposed SIP call rule, 13 states, including Virginia, submitted an alternative proposal to the EPA. The EPA rejected that proposal, however, and on September 30, 1998, the EPA administrator signed the final version of the SIP call requiring submission of revised SIPs by September 30, 1999. The final version of the SIP call appeared in the Federal Register on October 27, 1998 (63 FR 57356). The SIP call requires Virginia, along with 21 other states, to implement a program to reduce NO_x emissions in order to attain the ozone air quality standard.

In late November 1998, the Commonwealth of Virginia and other states, together with utility industry representatives, filed a petition with the U.S. Circuit Court of Appeals for the District of Columbia to overturn the NO_x SIP call because it violates the Clean Air Act. The court was also asked to delay the

September 30, 1999, deadline for SIP submittals until April 2000 in order to provide adequate time for the states to prepare SIP revisions.

In May 1999, the U.S. Circuit Court of Appeals for the District of Columbia granted a stay for six months or until a decision might be rendered on the merits of the petition. On March 3, 2000, the court decided in the EPA's favor. On April 20, 2000, however, Virginia and other states petitioned the court for an en banc hearing. The petition for another hearing would further delay the deadline for SIP submittals.

On June 22, 2000, the U.S. Circuit Court of Appeals for the District of Columbia rejected the request for an en banc hearing on the original NOx SIP call decision. Only one judge dissented. The court also lifted the stay on submittal of NOx SIP call SIP revisions and set a date of October 30, 2000, for submittal by the affected 19 states.

On August 4, 2000, six states, including Virginia, asked a federal appeals court to stay the deadline for states to submit NOx SIP call SIP revisions, in order to gain more time to take the case to the Supreme Court. Virginia and the other appeal participants stated in their motion that the SIP submission deadline should be delayed until the Supreme Court decides whether to accept the case, or at the latest until it makes a final determination on the merits of the rule. The parties in the appeal had until September 20, 2000, to request Supreme Court review.

Meanwhile, electric utilities and labor groups filed briefs asking the U.S. Circuit Court of Appeals for the District of Columbia to postpone the NOx SIP call rule's compliance deadlines for air pollution sources. The underlying EPA rule had a SIP submittal deadline of September 30, 1999, and a source compliance deadline of May 1, 2003. On August 30, 2000, the U.S. Circuit Court of Appeals for the District of Columbia issued an order changing the NOx SIP call rule's compliance deadlines for air pollution sources to May 31, 2004.

In the fall of 2000, several industry groups and seven states, including Virginia, asked the U.S. Supreme Court to overturn the 2-1 decision of the U.S. Circuit Court of Appeals for the District of Columbia upholding the NOx SIP call rule. The petitioners argued that the EPA had exceeded its authority in setting the rule and that the EPA had improperly considered the cost of air pollution controls in determining the degree to which each affected state must reduce emissions.

On March 5, 2001, the U.S. Supreme Court denied, without comment, the petitions to call up the records of the lower court for the states' challenge of the EPA's NOx SIP call rule. Thus, the core elements of the NOx SIP call remain in place. However, two suits are still pending in the U.S. Circuit Court of Appeals for the District of Columbia challenging the EPA's emission budgets: one alleging faulty growth projections and the other alleging faulty public participation procedures in developing revised budgets. In their suit, the industry groups argue that the EPA cannot implement the NOx SIP call until these issues are resolved.

On June 8, 2001, the U.S. Circuit Court of Appeals for the District of Columbia remanded to the EPA the growth factors for electrical generating units as well as the EPA's definitions of air pollution sources. Most other pertinent claims were rejected.

Another factor affecting the issue of implementation of the NOx SIP call rule is litigation that, under §126 of the Clean Air Act, challenges the EPA's rule requiring many power plants and other NOx sources in several midwestern and southeastern states to comply with emissions limits established by the

EPA and to participate in an emissions trading program. The plaintiffs argue that this rule is inconsistent with the Clean Air Act and is arbitrary, capricious, and technically deficient. The NOx SIP call and §126 of the Clean Air Act are not “in sync” because they apply to somewhat different sources and have different compliance dates.

On May 15, 2001, the U.S. Circuit Court of Appeals for the District of Columbia remanded the power plants rule to the EPA in order for the agency to “(1) properly justify either the current or a new set of [electric generating unit] utilization growth factors to be used in estimating utilization in 2007, and (2) either alter or properly justify its categorization of cogenerators that sell electricity to the electric grid as [electric generating units].” Aside from the remanding of these two issues, the court otherwise found that “[w]ith respect to all other issues, including those not discussed expressly herein, the petitions are denied,” thus upholding the EPA’s authority to impose emissions limits on affected sources by 2003.

On August 3, 2001, the EPA made available data on the growth rates for heat input by electric generating units for both the NOx SIP call and the rule responding to state petitions under §126 of the Clean Air Act. With this notice (66 FR 40609), the EPA maintained that, based on the existing record, its preliminary view is that the growth calculations and methodology used were reasonable and can be supported with a more robust explanation that takes into account the concerns of the U.S. Circuit Court of Appeals for the District of Columbia. The EPA is also considering new data that has recently been placed in the dockets for the EPA’s ozone transport rules and is seeking public comment. The EPA intends to complete its response to the court’s remands on electric generating unit growth rates in the fall of 2001.

III. CONCLUSION

The State Air Pollution Control Board and the Department of Environmental Quality have worked diligently to promote environmental stewardship and enhance the Commonwealth’s natural beauty. Today, Virginia’s air is getting cleaner, thanks to a working partnership among agencies of the Commonwealth, the business community, and the public. To continue this progress and to avoid the health effects and the costly economic consequences of increased federal regulations that poor air quality can bring, Virginians have cooperated in several air quality initiatives.

In addition to meeting most national standards and requirements for clean air, Virginia also has numerous voluntary programs designed to promote environmental stewardship. Large companies, small businesses, institutions, and private citizens are all encouraged to participate in keeping the air clean. Such voluntary measures can help Virginia avoid activities mandated by the federal government. For example, Virginians have reduced unnecessary driving, lawn mowing, and other activities on hot summer days when weather conditions make unhealthy ozone levels possible. This is just one example of the way Virginians, working together, can meet air quality standards and maintain a healthy environment.