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Grandfather's Last Days? Voluntary Permits and Economically Sustainable Air Quality in Texas

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Daunting air quality problems in Texas have brought state government under increasing public pressure to enact strict controls on air emissions, particularly from industrial sources. The Texas Natural Resources Conservation Commission (TNRCC) launched a voluntary emissions reduction (VERPs) program to encourage plants exempt from the state's 1971 clean air law to reduce their emissions voluntarily. If the program does not produce significant reductions, the legislature will likely subject these plants to strict standards. Such a failure would be particularly disappointing in light of increasing indications that flexible, market-based policy tools play a crucial role in the development of economically sustainable environmental regulations.

Toward an Economically Sustainable Approach to Air Quality

Since the concept of sustainable development was first popularized in 1987, a growing number of business leaders, recognizing the link between sustainability and business value, have shifted the focus of their corporate environmental policies from compliance to the pursuit of economic and environmental sustainability. At the same time, those who have adopted sustainability often argue for flexible regulatory approaches that permit the market to determine the best way for industry to achieve environmental goals. These advocates decry stringent command-and-control programs that require industry to adopt specific pollution control technologies, mandate strict operating permits, and impose harsh enforcement consequences for noncompliance. Such programs have produced notable improvements in environmental quality, but recent consensus favors limiting this approach, particularly in regard to the tradeoffs between environmental protection and economic efficiency.

These limits have become more apparent as the cost of compliance has increased. It once cost as little as 50 cents to control the emissions of one ton of volatile organic compounds in Los Angeles, but now the expense can top \$50,000.¹ Fortunately, these increasing costs have spurred the development of alternatives, such as flexible permitting systems and emissions credit trading programs. Still,

these alternatives to command-and-control programs can only work when industry sheds its short-term, compliance-based approach to environmental management.

The VERP Program

In 1971, the Texas Legislature created its first major clean air law, which included a grandfather provision exempting existing plants and plants under construction from the requirement to reduce emissions or obtain air permits. At the time, it was believed that these facilities would be replaced or updated before they could have a significant impact on long-term air quality.

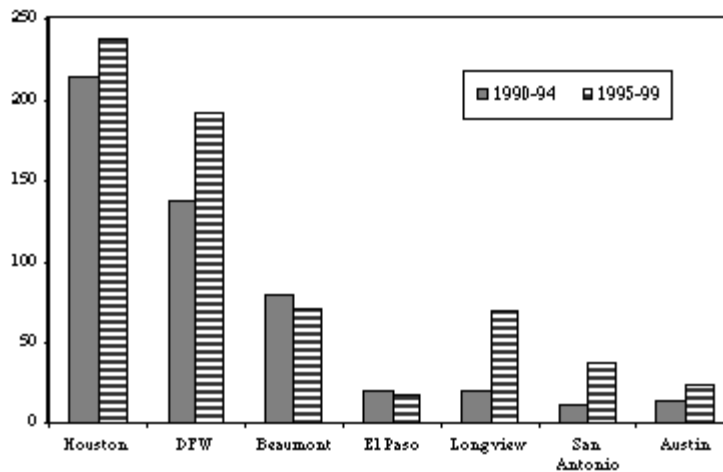
Almost 30 years later, the grandfathered plants are still responsible for a substantial portion of industrial emissions in Texas. During the 1999 legislative session, Senate Bill (S.B.) 766, highlighting the ongoing need to reduce air emissions from these plants, proved one of the most fiercely contested bills passed by the 76th Texas Legislature. In its final version, S.B. 766 authorizes the TNRCC "to issue a voluntary emissions reduction permit to facilities not subject to the requirements of obtaining permits." Grandfathered facilities have until September 1, 2001, to submit their voluntary permit applications to the TNRCC.

The standards for obtaining VERPs are less stringent than those for traditional permits, which require new companies to adopt current Best Available Control Technologies (BACT). In contrast, grandfathered plants can use the ten-year-old BACT requirements. Facilities that volunteer for permits also are subject to less rigorous health reviews and less public notice. In addition, the VERP program allows facilities to offset the emission reduction requirements by acquiring project emission reduction credits.

Although S.B. 766 preserves the grandfather exemption, it includes some penalties for plants with emissions in excess of 4,000 tons per year. If these plants do not volunteer before the deadline, the fees on emissions in excess of the 4,000-ton level will triple every year, beginning at \$26 per ton. By 2005, the fees would exceed \$2,000 per ton.

Environmental Trends

Considering recent air quality trends in Texas, the legislature could easily have opted for a mandatory, command-and-control approach to controlling emissions from grandfathered plants. Public pressure calling for these plants to produce significant emissions reductions did not begin to mount until 1997, more than 25 years after their exemption, when the TNRCC's emissions inventory revealed that grandfathered plants account for 900,000 tons of pollution annually, 36 percent of the state total.² At the same time, several alarming air quality trends developed (see accompanying chart below). Houston passed Los Angeles as the city with the worst smog problem in the United States, according to some measurements. Additionally, in October 1999, a coalition of 44 state environmental groups issued a report arguing that the significant increase in air pollution in Texas since 1995 had placed the state "in an air quality crisis."³



Source: National Air Quality and Emissions Trade Report, Environmental Protection Agency, 1995; see also <http://www.epa.gov/oar/oapqs/greenbk/ofrnptl.html>.

Note: The 8-hour ozone standard is 0.084 parts per million. Ozone values between 0.085 and 0.104 are classified by EPA as "unhealthy for sensitive groups." Houston data include Galveston; Beaumont data include Port Arthur.

Political Trends

The key measure of air quality occurs on a local level in Texas according to the status of the main airsheds under the federal Clean Air Act. Currently, Dallas/Fort Worth (DFW), El Paso, Beaumont/Port Arthur, and Houston/Galveston are in nonattainment with federal air quality standards, and each faces both tough limits on new sources and difficult decisions regarding mandatory emissions reductions from all sources. In March 1999, EPA threatened to impose harsh controls on new businesses and limit the state's access to up to \$1.3 billion in federal highway funds if the air quality plan for the DFW area was not strengthened. The agency also rejected a TNRCC plan to reduce nitrous oxide emissions in and around Houston by more than 50 percent. Furthermore, with the Austin, San Antonio, and possibly even Longview/Tyler/Marshall airsheds edging toward nonattainment, the demand for mandatory permits is likely to be even greater in future legislative sessions.

EPA's announcement regarding the DFW air quality plan came at a critical juncture of the negotiations over S.B. 766 and S.B. 7, which deregulated the state's electric power utility industry. Not surprisingly, S.B. 7 required significant cuts in emissions from older utility plants, effectively requiring permits for grandfathered utilities, which comprise 5 percent of the more than 800 grandfathered plants remaining in 1997.

Prospects for Success

Early reports from regulators, consultants, and industry associations suggest that the remaining non-utility grandfathered plants will volunteer for permits for two main reasons. First, as the utilities covered by S.B. 7 and other plants obtain permits, the grandfather tag will likely become a lightning rod in statewide and local debates on air quality. Second, most observers believe that the September 1, 2001 deadline will mark the end of the grandfather exemption. For currently exempt companies, the VERP program's less stringent permitting requirements are a significant carrot and the potential for increasing penalties on certain emissions are a big stick.

Even if most grandfathered plants enter the VERP program, the true measure of success will be the quantity of air emissions reduced, not the number of permits issued. Such success depends more on industry's belief in the economic benefits of environmental sustainability than on its desire to maintain compliance with state laws.

If the current debates over air quality in DFW and Houston are any indication, obtaining sustainable air quality in Texas will require dramatic cuts in emissions—as much as 75 percent for some pollutants in Houston—from all sources, industrial and mobile. The cost of achieving these reductions can be greatly reduced through the use of market-based approaches. For example, a U.S. Clean Air Act credit trading program that targets sulfur dioxide emissions has been reported to have lowered the annual cost of emission reductions by \$1.3 billion compared with command-and-control regulation.⁴

The public, however, cannot be expected to support flexible environmental programs if industry does not demonstrate its willingness to use the programs to protect environmental quality. By taking advantage of the VERP program and achieving significant emissions reductions, Texas industry can demonstrate this willingness and greatly enhance its position in the ongoing negotiations over how to accomplish the desired level of environmental quality. By making the VERP program a success, these plants can make the case for the continued and expanded use of flexible, market-based approaches to environmental protection.

Notes

1. Paul Portney, "Counting the Cost: The Growing Role of Economics in Environmental Decisionmaking," *Environment*, March 1998.
2. "Too Little Too Late," Environmental Defense Fund, November 1998.
3. "Texas Air Quality Trends," Texas Air Crisis Campaign, October 1999.
4. Portnoy.

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