IX. POLICY ISSUES

BRIEF DESCRIPTION OF ISSUE

Issue 1: Should the legislature consider revising the state's air permitting process?

DISCUSSION

Overview of Current Process

The Texas Clean Air Act (TCAA), Texas Health and Safety Code, Chapter 382, governs all air quality permitting in the state and implements provisions of the federal Clean Air Act (FCAA). The TCAA requires authorization for all air contaminants in addition to authorization of federally regulated air pollutants. The federal permitting program requires states to evaluate six pollutants for which there are National Ambient Air Quality Standards (NAAQS) and about 200 additional air toxic pollutants of concern. Currently, the state has a database of more than 8,000 contaminants that have been evaluated under the TCAA.

The TCEQ reviews and authorizes applications and registrations for facilities through two major air-permitting programs: New Source Review (NSR) Permits and Title V Federal Operating Permits (FOP). For permitting purposes a "major source" is a stationary source's annual potential to emit and is used to determine the applicability of federal NSR and Title V.

The NSR Permit Program requires stationary sources of air contaminants to obtain authorization before their construction begins. NSR is also referred to as *construction permitting* or *preconstruction permitting*. Before work begins, a person who plans to construct a new facility or to modify an existing facility must:

- satisfy the criteria of a streamlined authorization (*de minimis* facility or source, permit by rule [PBR], standard permit); or
- obtain an NSR case-by-case permit that includes an evaluation of best available control technology (BACT) and a finding that there will be no adverse off-property impacts from any air contaminants being emitted by the facility.

The Title V FOP Program requires major sources, and certain minor sources, to obtain a permit that consolidates all applicable air requirements in a single document. A Title V permit grants a source permission to operate. There are two types of operating permits: General Operating Permits (GOPs) and Site Operating Permits (SOPs). The GOP is a streamlined Title V authorization that is designed to cover numerous similar sources. The SOP documents all requirements that apply at a site, or an area for large sites.

The Texas NSR program gives the public the opportunity to comment on authorizations. For initial NSR case-by-case permits, permit amendments with significant emission

increases, and permit renewals, notice is given via newspaper publication and sign posting, both of which are also in alternate languages when certain criteria are met. The public has the opportunity to comment on the application as well as to request a contested-case hearing on initial NSR case-by-case permits, permit amendments with significant emission increases, and permit renewals. The commission's ability to grant a hearing request for a renewal with no increase in emissions and for denial of a renewal is limited by statute, more so than for other permit actions. In addition, the public is invited to comment on sources or facilities added to the *de minimis* list and on PBRs, standard permits, and GOPs during their initial development. For Title V SOPs, the public can request a notice and comment hearing and can petition the U.S. Environmental Protection Agency (EPA) objecting to the permit.

Review for Cumulative Effects (Impacts)

The TCAA authorizes the prevention and remedy of air pollution based on effects and interference from contaminants present in the atmosphere, i.e., direct effects.

For pollutants with an established NAAQS, the EPA requires, and the TCEQ conducts, a review for cumulative impacts if emissions from a new major source or major modification to an existing major source exceed *de minimis* concentrations. During the past three legislative sessions, interest has steadily increased in modifying the TCAA to require the evaluation of cumulative effects before a permit, amendment, or renewal could be issued. Over that same period, some members of Congress, the legislature, the EPA, and the public expressed concerns about the cumulative impacts on the formation of ozone from major sources such as electric generating facilities (power plants) and cement kilns, particularly in areas classified as in nonattainment or near nonattainment for the ozone NAAQS.

The term *cumulative* is usually understood to refer to the direct effects from the combined impact of multiple facilities emitting the same pollutant. For air toxics, the TCEQ uses the term *aggregate*, and reserves *cumulative* for the combined impact of multiple facilities emitting multiple pollutants. However, in this discussion, *cumulative* will be used for air toxics as well as criteria pollutants.

Cumulative-Effects Evaluation for Air Toxics

The TCEQ conducts NSR permit reviews for new and modified facilities to ensure that the operation of a proposed facility will not cause, or contribute to, a condition of air pollution. For a case-by-case NSR, permit reviews involve evaluations of best available control technology (BACT) and predicted air concentrations related to proposed emissions from the new or modified facility. To evaluate cumulative effects, the TCEQ uses effects screening levels which are chemical-specific air concentrations set to protect human health and welfare. ESLs are developed through a national process involving peer review and stakeholder input; include an adjustment factor to address cumulative exposure; and offer regulatory flexibility as comparison levels, not ambient-air standards.

The TCEQ uses ESLs in air-permit review to evaluate cumulative effects by evaluating site-wide emissions and considering:

- input from regional investigators and the public;
- site-specific, mobile, and/or area ambient air-monitored concentrations;
- predicted magnitude and frequency of exceedance of ESLs;
- results from gas-find infrared cameras; and
- assessment of conservative worst-case modeling assumptions versus practical operation.

Modeled predictions of concentrations above an ESL would not necessarily result in adverse health or welfare effects, but would trigger a more in-depth review.

The TCEQ places increased emphasis on any site that is in an Air Pollutant Watch List area for a chemical of concern. In addition to the standard technical review process, the agency explores with the applicant ways to mitigate impacts from site-wide emissions with a goal of no net emissions increase. However, very limited increases may be allowed if a site had previous large decreases, or analysis of emissions and dispersion would not add to known or previously accepted impacts, and ambient air monitoring is acceptable.

Cumulative Effects Evaluation for Ozone

Unlike other criteria pollutants, ozone is not directly emitted but formed by complex chemical interactions that are highly dependent on daily variations in meteorological parameters and precursor emissions from mobile and biogenic as well as major and minor stationary point sources.

The TCEQ follows available federal guidance and conducts a cumulative evaluation using existing air quality data from representative ambient air monitors within the proposed area of a new or modified major source. This background information, along with the representative emissions from the facility, is used to make a scientific determination of the proposed facility's potential ozone contribution to nearby surrounding areas.

The TCEQ does not directly evaluate cumulative ozone impacts due to long-range transport for several reasons:

- there are no EPA-preferred or -recommended screening or refined photochemical models for NSR prevention of significant deterioration (PSD);
- the magnitude and complexity of modeling related to the State Implementation Plan (SIP);
- the lack of a *de minimis* ozone concentration; and
- the fact that evaluation of control strategies for multiple regions, facilities, and modeling scenarios would significantly increase air-permitting costs and delay issuance.

Benefits of Texas' Air Permitting Program

The BACT review in Texas has resulted in continual improvement in technology for controlling air pollution. The development of refined computer-modeling techniques has allowed a closer look at the impacts associated with emissions from various types of processes, and this has resulted in new and additional controls as BACT. For example, the control of tank-loading emissions has reduced emissions of volatile organic compounds, critical to the formation of ozone, by thousands of tons per year.

Since 1994, the TCEQ has implemented a number of permitting programs that have significantly reduced emissions. The first of these, the flexible permitting program, is a voluntary authorization mechanism that an applicant may choose in lieu of obtaining a traditional NSR permit. These permits provide options through the use of emission caps, certain control technology, and other operational flexibility to achieve emission reductions with the ultimate goal of having a well-controlled facility after the final cap is implemented. Some very large emission reductions have been achieved through the flexible permitting program, resulting in improved air quality.

Many of the facilities authorized in the early days of the flexible permitting program were facilities that were previously "grandfathered" from the requirement to obtain a permit. These grandfathered facilities were constructed before September 1, 1971, and had not been modified since that time. The 1997 emissions inventory contained 898,075 tons of emissions from these sources. In addition, there were unquantified emissions from sources not required to submit an emissions inventory. In 1999, the 76th Legislature passed SB 7 (the electric utility restructuring bill) and SB 766, a voluntary program to reduce emissions from, and encourage permitting of, grandfathered facilities. In the 2001 session, the 77th Legislature made the permitting of grandfathered sources mandatory as part of the agency's sunset review in HB 2912.

SB 7 resulted in emissions reductions of 102,436 tons per year from these previously grandfathered sources. The voluntary and mandatory permitting requirements for previously grandfathered facilities reduced actual emissions from these facilities by more than 260,000 tons either through the addition of controls or shutdown.

Currently, the TCEQ air permits staff is in the process of reviewing permit applications for the authorization of planned maintenance, startup, and shutdown (MSS) activities at petroleum refineries and chemical plants. Carbon-black facilities, electric generating facilities, and various oil and gas facilities are expected to file MSS applications over the next few years. These permits reduce emissions from planned MSS activities through the implementation of BACT and impacts review.

EPA Oversight

Title I of the FCAA requires states to develop SIPs to address attainment and maintenance of federal clean air quality standards. Title I requires a pre-construction permitting program for both major and minor NSR sources. Since 1972, Texas, through

the Texas Air Control Board (TACB) and its successor agencies, has regularly submitted revisions to the SIP to address changing federal requirements as well as updates to Texas' NSR permitting program. The EPA approved the Texas NSR program in 1972 and numerous subsequent revisions, and in 1992 the EPA gave the TACB full delegation for federal PSD NSR permits. Title V of the FCAA establishes the FOP program. The EPA approved Texas' FOP program in 2001 (commonly referred to as "Title V"). Title V requires major sources and certain minor sources to obtain a permit that consolidates all applicable air requirements in a single document. A Title V permit grants a source permission to operate. The EPA comments to the TCEQ on individual draft Title V and major NSR permits.

The EPA retains program implementation and enforcement oversight of Texas' implementation of federal requirements and can impose sanctions against the state for failure to comply with the approved SIP and federal requirements. The EPA approval of the SIP and other federal requirements is accomplished through documents submitted by the TCEQ to the EPA, and documents created by the EPA that reflect those approvals. In addition, compliance with the FCAA is documented in permits and enforcement actions by the TCEQ.

The TCEQ implements and enforces these two permitting programs established in both federal and state law. In addition to issuing permits, the TCEQ implements these programs by adopting rules with the EPA commenting on the proposed TCEQ permitting rules. The TCEQ's adopted rules are submitted to the EPA, which must review and approve TCEQ rules into the SIP to ensure compliance with federal law; the EPA then proposes its action (such as approval) in the *Federal Register*, and takes formal public comment. The EPA's final action is then published in the *Federal Register*.

Although not all rules implementing state statutes are required to be submitted as SIP revisions, where a state statute or rule potentially conflicts with, or is less stringent than, a federal requirement (or a requirement that has been approved into a SIP), federal law requires that states demonstrate that the new requirement does not backslide from existing federal law and approved SIPs. The EPA uses this standard to review rules submitted by states when determining whether approval of rules is required by federal law or would strengthen the SIP.

POSSIBLE SOLUTIONS AND IMPACT

Issues Associated with EPA Oversight

The TCEQ does not delay rule effectiveness until EPA SIP approval. To do so might arguably be an unconstitutional delegation of state authority to the federal government. If the EPA did not approve the changes, then the state would continue to be obligated to enforce the federal requirements and would be required to change the rules to make them acceptable under federal law.

Although the EPA approved the original Texas NSR permitting program and many updates, the EPA has not approved significant portions of various subsequent air permitting rules submitted to it since 1993 as revisions to the SIP, creating a "SIP gap," i.e., the difference between what is enforceable by the TCEQ and by the EPA (the approved SIP). This gap occurs during the period between the effective date of the TCEQ's adopted rules and the date the EPA approves those actions as a revision to the SIP. Often, new or amended rules adopted by the TCEQ are more stringent than, or are at least as stringent as, the existing SIP, and therefore no problems are expected regarding the enforcement of any new requirement.

As part of the settlement of a lawsuit by the Business Coalition for Clean Air (BCCA) on the EPA's failure to act on approximately 25 rule packages the TCEQ had submitted, the EPA has agreed to a schedule to eliminate the SIP gap over the next four years. The EPA has informed the TCEQ that it does not expect to fully approve all of the TCEQ's NSR permitting rules that are pending EPA review. Although the TCEQ has a good track record in enforcing its rules and permits, the EPA's position is that it cannot enforce some TCEQ permits until rule deficiencies are corrected, allowing the EPA to approve them as part of the SIP.

In addition to the SIP-gap rulemaking issues, several environmental groups filed formal petitions with the EPA stating that Texas' air permitting program has three deficiencies, specifically, the TCEQ is:

- implementing a non SIP-approved NSR permitting program;
- implementing a SIP that is inadequate to assure compliance with the FCAA; and
- failing to adequately administer and enforce the approved Texas FOP program.

The groups seek an order against the state of Texas that:

- finds that the state is not properly implementing certain SIP requirements, including requirements relating to the construction of new sources or the modification of existing sources;
- immediately applies sanctions under FCAA section 179; and
- prohibits construction of new major stationary sources or the modification of major stationary sources subject to federal NSR PSD permitting requirements.

The petitions include, but are not limited to, NSR-related issues of which some are also SIP-gap issues. These include: public participation; issuance and enforcement of flexible permits; use of *de minimis*, permit-by-rule and standard permit authorization mechanisms (especially by major sources); permitting of emissions MSS activities; BACT; and cumulative impacts from new sources. The TCEQ's permitting programs have achieved significant benefits for air quality in Texas, and the TCEQ is committed to working with the EPA to resolve differences between state and federal rules.

The federal requirements for FOP programs originate from authority in Title V of the FCAA, which requires that these permits incorporate all other FCAA requirements, including Title I permitting requirements. Because NSR requirements are applicable

requirements of FOPs, EPA disapproval of portions of Texas' NSR permitting program would affect how Texas incorporates those NSR requirements into FOPs, and potentially the continued approval of Texas' FOP program.

As allowed by the FCAA, environmental groups are filing public petitions with the EPA alleging defects with specific FOPs. The EPA partially granted two petitions, and advised the TCEQ how to revise the relevant FOPs. Petitions by environmental groups and citizens may result in additional EPA scrutiny of individual FOPs and the Title V program in general.