

Blowin' in the Wind: Texas Regulation of Air Quality

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It's Not Easy Being Green: Current Issues in Environmental Law

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Introduction

The Texas Clean Air Act¹ sets the legislative direction for air quality control in the state of Texas. The TCAA establishes the Texas Natural Resource Conservation Commission (“TNRCC”) as the entity charged with the responsibility to administer the Act, establish the level of quality to be maintained in the state’s air, and control the quality of the state’s air by controlling air contaminants by all practical and economically feasible methods.² The TCAA provides that the policy of the state is to “safeguard the state’s air resources from pollution by controlling or abating air pollution and emissions of air contaminants, consistent with the protection of public health, general welfare and physical property, including the aesthetic enjoyment of air resources by the public and the maintenance of adequate visibility.”³ The Act authorizes the TNRCC to regulate sources of air contaminants, which are defined as “a point of origin of air contaminants, whether privately or publicly owned or operated.”⁴ Air contaminant is defined as “particulate matter, radioactive material, dust, fumes, gas, mist, smoke, vapor, or odor, including any combination of those items, produced by processes other than natural.”⁵

I. Relationship between the TNRCC and EPA

A significant portion of the TNRCC’s air quality activities are ensuring satisfaction of all federal air quality requirements administered by the federal Environmental Protection Agency (“EPA”). As set forth below, the EPA oversees a number of air quality programs, actual implementation of which have been delegated to the TNRCC.

A. National Ambient Air Quality Standards

The federal Clean Air Act (“CAAA”) requires the federal Environmental Protection Agency (“EPA”) to promulgate national ambient air quality standards (“NAAQS”) to protect public health and welfare. EPA has established NAAQS for the following air pollutants: ozone, carbon monoxide, sulfur dioxide, particulate matter, nitrogen dioxide and lead.⁶ These standards are applicable nationwide and establish the maximum concentration of the pollutant that should be allowed to occur in the air.

EPA then classifies all areas of the country as either attainment (air quality meets a NAAQS) or non-attainment (air quality exceeds a NAAQS). These classifications are normally made based upon actual monitoring of air quality in an area. Each state is then required to submit a State Implementation Plan (“SIP”) that identifies how the state will achieve and maintain attainment status for all NAAQS in the state. The SIP normally consists of state laws, including agency rules, along with policies and other commitments, that demonstrate that the state will achieve attainment of each NAAQS by the deadline established in federal law.

Attainment of the ozone NAAQS has proven to be very difficult within Texas and the rest of the United States. Ozone is formed in the atmosphere through a complex photochemical reaction primarily involving volatile organic compounds (“VOC”) and nitrogen oxides (“NO_x”). Because it is a photochemical reaction, ozone is a seasonal problem with high levels occurring during summer days when there is sufficient sunlight to generate ozone. There are four ozone non-attainment areas in Texas: El Paso County; the Dallas-Fort Worth area (four counties); the Beaumont-Port Arthur area (three counties); and the Houston-Galveston area (eight counties). Most TNRCC ozone reduction requirements are applicable in nonattainment areas. These include rules that enable the TNRCC to demonstrate a continuing three percent reduction in VOC/NO_x emissions, automobile inspection and maintenance programs, and permitting requirements applicable to new major sources and major modifications of existing sources which require those sources to “offset” their new or increased emissions of nonattainment pollutants by obtaining an even larger amount of emission reductions. The TNRCC is currently considering emission reduction requirements for ozone control that would be applicable in the attainment areas located east of Interstate Highways 37 and 35 to help reduce ozone in adjacent nonattainment areas. Other nonattainment areas in Texas are small portions of El Paso for carbon monoxide and particulate matter, and a small portion of Collin County for lead.⁷

B. New Source Performance Standards

EPA has established New Source Performance Standards ("NSPS") that are applicable to certain types of new or modified sources.⁸ NSPS requirements normally include emission limitations for specific air contaminants, and testing, monitoring, and record keeping requirements. EPA has given the TNRCC the primary authority to administer and enforce NSPS in the state of Texas.

C. Hazardous Air Pollutants

Prior to the 1990 amendments to the FCAA, EPA established a number of regulations applicable to hazardous air pollutants under a program known as the National Emission Standards for Hazardous Air Pollutants ("NESHAP").⁹ TNRCC has been delegated the responsibility for administering and enforcing NESHAP in the state of Texas.

The 1990 FCAA amendments established a new hazardous air pollutant program, listing 189 hazardous air pollutants and providing authority to EPA to add or delete substances.¹⁰ The EPA is establishing Maximum Achievable Control Technology ("MACT") requirements applicable to categories of major sources that emit hazardous air pollutants; major sources are sources which emit 10 tons per year or more of any one of the hazardous air pollutants, or 25 tons per year or more of all hazardous air pollutants combined. MACT applies both to new and existing major sources, although it is possible that MACT for existing sources may be less stringent than it is for new sources. EPA also has authority to establish Generally Available Control Technology ("GACT") requirements applicable to area (non-major) sources of hazardous air pollutants. The TNRCC is in the process of obtaining delegation of the responsibility for enforcing these new hazardous air pollutant standards in the state of Texas.

D. Prevention of Significant Deterioration¹¹

The TNRCC has the responsibility for implementing EPA's Prevention of Significant Deterioration ("PSD") permitting program. This program addresses air pollutants for which a NAAQS is established. The program is designed to ensure that the attainment areas do not experience significant degradation of air quality. This is accomplished by the establishment of a cap on the increase of emissions for each NAAQS air contaminant that may occur in an attainment area. This cap is referred to as the "increment." Major new sources and major modifications of existing sources in attainment areas are required to obtain a PSD permit and demonstrate, among other things, that the increase in emissions from the new or modified sources, in combination with the increases in emissions from other sources that have already occurred in the area, will not exceed the increment.

E. Title V - Federal Operating Permits¹²

Perhaps the most significant change made in the 1990 Federal Clean Air Act Amendments was the establishment of the Title V Federal Operating Permit Program. This program, modeled after the NPDES program under the Federal Clean Water Act, requires major sources, and, perhaps in the future, minor NSPS and NESHAP sources, to obtain an operating permit. The operating permit will identify all air quality requirements that are applicable to the sources. Although the operating permit does not require the installation of additional control technology beyond that already required of the source, it can result in significant additional monitoring and record keeping requirements. Further, all sources subject to the program are required to pay an annual emissions fee indexed to inflation, at a presumptive minimum level of no less than \$25 per ton of emissions. The TNRCC is currently implementing the Title V Operating Permit Program on an interim basis, because of significant differences of opinion with EPA regarding certain aspects of the program. TNRCC and EPA are negotiating to attempt to eliminate those differences to allow the TNRCC to accept full delegation of the program.

F. Other Federal Programs not Implemented by TNRCC

There are a number of significant programs under the Federal Clean Air Act for which the TNRCC does not have delegation of authority, primarily because EPA does not delegate many of these programs to the states. Examples include the program to restrict or eliminate production and use of compounds that deplete the stratospheric ozone layer, the market based emissions trading system for reducing emissions that contribute to acid rain, and the accidental release management program designed to require companies to analyze and mitigate the potential for a catastrophic release of hazardous substances and develop procedures to be implemented should such a release occur.

II. Texas Programs

In addition to implementing the federal programs described above, the TNRCC administers programs that either go beyond minimum federal requirements or address areas not covered under the Federal Clean Air Act. A brief discussion of some of these programs is set forth below, arranged in chronological order of the rules adopted by the TNRCC setting forth the requirements of the programs.

A. 30 T.A.C. Chapter 101 - General Rules

The TNRCC's general air quality rules impose a number of requirements, including notification requirements for sources which have excessive emissions due to major upsets, maintenance activities, or startup or shut down of the sources. The general rules also establish requirements for sources to file emission inventories, the standards for obtaining a variance from any TNRCC air quality rule and inspection and emission fees. The general rules also provide emission banking provisions which allow people to record creditable emission reductions that may be used to satisfy federal nonattainment permitting offset requirements. Perhaps the most significant general rule is 30 T.A.C. § 101.4, commonly referred to as the nuisance rule. This rule prohibits owners or operators of sources from emitting air contaminants in sufficient concentration or duration "as are or may tend to be injurious to or to adversely effect human health and welfare, animal life, vegetation, or property or as to interfere with the normal use or enjoyment of animal life, vegetation or property. This rule, which goes well beyond federal requirements, allows the TNRCC to regulate, among other things, odors that are considered sufficiently offensive as to interfere with the normal use and enjoyment of property. The nuisance rule is a restatement of the prohibition against causing a condition of air pollution which is contained in the TCAA.¹³

B. 30 T.A.C. Chapter 111 - Visible Emissions and Particulate Matter

This chapter includes rules limiting visible emissions from various sources, including opacity limitations for some sources and absolute bans on visible emissions from other types of sources. Other rules under this chapter establish limits on the amount of particulate matter that may come out of stacks from various types of sources, as well as limitations on the amount of particulate matter that may leave a property ("property line standards").

C. 30 T.A.C. Chapter 112 - Sulfur Compounds

This chapter establishes rules limiting emissions of sulfur dioxide, hydrogen sulfide, sulfuric acid, and total reduced sulfur compounds. The regulations under this chapter provide limitations upon both stack emissions and property line standards.

D. 30 T.A.C. Chapter 114 - Motor Vehicles

This chapter establishes rules designed to ensure that emissions from motor vehicles do not exceed the levels established by EPA. The rules under this chapter include inspection and maintenance requirements for motor vehicles in the ozone nonattainment areas, prohibitions against tampering with emission control equipment on motor vehicles, and prohibition against the sale or lease of motor vehicles that

are not equipped with either the control systems originally part of the motor vehicle or an equivalent control system. This chapter also includes regulations applicable to fleet vehicles and mass transit authorities requiring use of alternative fuels.

E. 30 T.A.C. Chapter 115 - Volatile Organic Compounds

This is the largest chapter in the TNRCC's air quality regulations and establishes limitations on Volatile Organic Compound ("VOC") emissions for the purposes of reducing ozone concentrations. Most of the regulations in this chapter are applicable only in the nonattainment areas, although there are some regulations applicable in areas that once were nonattainment but have subsequently achieved attainment status.

F. 30 T.A.C. Chapter 116 - Permits for New or Modified Sources

This regulation establishes permitting requirements applicable to new or modified facilities in the state. All new or modified facilities, major and minor, must apply for and obtain a construction permit or qualify for an exemption from the permitting requirements before any work may be begun on the construction of the facility. A facility is each discrete piece of equipment that constitutes or contains a source. "New" facilities include replacement of an existing facility, even if the replacement has less emissions. "Modification," subject to some exceptions, generally occurs whenever a physical change in or change in the method of operation of an existing facility results in an increase in emissions. The TNRCC has established over 100 exemptions that are applicable to facilities the TNRCC has determined make an insignificant contribution of air contaminants to the atmosphere.¹⁴

In order to obtain a permit, an applicant must pay a permit fee based upon the capital cost of the proposed project, must publish notice of its application in two consecutive issues of a newspaper of general circulation in the area, and post signs notifying the public of the filing of the application. The public notice establishes a thirty day public comment period during which the public may comment upon the application and request that a contested case hearing be held to determine whether the application should be granted. Further requirements to obtain a permit include demonstrating that emissions from the proposed facility will be in compliance with all TNRCC rules and that the facility will utilize at least the Best Available Control Technology ("BACT") with consideration given to the economic reasonableness and technical practicability of eliminating emissions. This BACT requirement normally results in permitted facilities having to meet significantly stricter emission limitations than are contained in the other TNRCC rules and regulations. TNRCC permits normally contain a number of conditions and restrictions, including testing, monitoring and record keeping requirements and limitations on the emission of the air contaminants from each facility covered by the permit.

This chapter also includes the rules implementing the federal nonattainment and PSD permitting requirements for major sources and major modifications. This chapter also contains provisions for altering, amending and renewing permits and obtaining an emergency order to authorize the expeditious replacement of facilities destroyed by catastrophic events beyond the reasonable control of the owner.

G. 30 T.A.C. Chapter 117 - Nitrogen Compounds

This chapter establishes limitations on nitrogen oxide compounds from certain sources. This chapter will become increasingly significant as EPA and the TNRCC put an increased focus on reduction of nitrogen oxide emissions for the purposes of limiting ozone concentrations.

H. 30 T.A.C. Chapter 118 - Air Pollution Episodes

This chapter establishes levels of pollution that constitute a "generalized condition of air pollution, requiring immediate action to protect human health and safety" and authorizes the TNRCC to order reductions in emissions or shut downs of sources in order to address a generalized condition air pollution.

The chapter also includes requirements for owners or operators of major stationary sources in El Paso, Galveston, Harris, Jefferson and Orange counties which have emit 100 tons per year or more of certain specified air contaminants, to prepare and maintain an emission reduction plan for use if a generalized condition of air pollution is declared by the TNRCC.

I. 30 T.A.C. Chapter 119 - Carbon Monoxide

This chapter restricts carbon monoxide emissions from certain specified sources.

III. Enforcement¹⁵

Violations of the TCAA or the air quality rules of the TNRCC may be punished by administrative penalties of up to \$10,000.00 per day for each violation, or by court imposed civil penalties from \$50.00 to \$25,000.00 per day for each violation. Lawsuits for civil penalties and injunctive relief may be brought by the state or by the local government with jurisdiction over the location of the alleged violator. The FCAA allows "citizen suits" in federal court for certain violations. Criminal prosecution with substantial penalties and imprisonment can occur for knowing or intentional violations of the TCAA or any order, permit, exemption or rule adopted under the TCAA.

IV. Conclusion

The Texas Clean Air Act and the implementing rules and policies of the TNRCC establish a comprehensive system of regulation designed to improve air quality in Texas. In addition to generally applicable regulations limiting emissions, the permitting system requires approval of new or modified facilities prior to beginning construction. Permit processing can take months and even years if significant public comment is received. The broad definition of air contaminant, combined with the TNRCC's nuisance rule allows the agency to respond to complaints regarding odors and dust that do not adversely affect health and bring enforcement action if it believes that the emissions interfered with the normal use and enjoyment of property. Accordingly, both large and small businesses need to be aware of the TNRCC's broad jurisdiction to regulate air quality.

1. Texas Health and Safety Code Chapter 382.
2. Texas Health and Safety Code § 382.011.
3. Texas Health and Safety Code § 382.002(a).
4. Texas Health and Safety Code § 382.003(12).
5. Texas Health and Safety Code § 382.003(2).
6. 40 C.F.R. Part 50.
7. Attainment / Non-Attainment designations are at 40 C.F.R. Part 81.
8. 40 C.F.R. Part 60.
9. 40 C.F.R. Part 61.
10. 42 U.S.C. § 7412(b).
11. See 30 T.A.C. § 116.160-.163.
12. See 30 T.A.C. Chapter 122 for Texas Regulations.

13. 382.085(a).
14. Standard exemptions are contained in 30 T.A.C. Chapter 106.
15. See Chapter 7, Texas Water Code.