

# Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

**To:** Commissioners **Date:** September 5, 2003

**Thru:** LaDonna Castañuela  
Chief Clerk

**From:** Randolph Wood, Deputy Director  
Office of Environmental Policy, Analysis, and Assessment

**Subject:** Consideration of a Petition for Proposed Rulemaking

**Docket No.:** 2003-0758-RUL

**Rule Log No.:** 2003-068-PET-AI

## **Who Submitted the Petition:**

The petition was submitted on behalf of Public Citizen's Texas office, Environmental Defense, Texas Public Interest Research Group, and the Sustainable Energy and Economic Development Coalition. The commission received the petition via e-mail on August 8, 2003.

## **What the Petitioners Request:**

The petitioners request adoption of rules that would require boilers, process heaters, and stationary engines and gas turbines at minor sources in the East Texas Region (defined as all counties traversed by or east of I-35 or I-37, as well as Bosque, Coryell, Hood, Parker, Somervell, and Wise Counties) to meet requirements currently applicable only to such sources in the eight-county Houston/Galveston (HGA) ozone nonattainment area; require that stationary diesel engines use only low sulfur diesel as of June 1, 2006; require registration and signage for diesel units claimed exempt; and require that all stationary, diesel reciprocating internal combustion engines in the East Texas Region meet the emission rate specified in the air quality standard permit for electric generating units by May 1, 2010.

## **Recommended Action and Justification:**

While the petition raises valid points, the executive director's recommendation is to deny the petition for rulemaking, but direct staff to include consideration of the issues raised in the petition as part of the next state implementation plan (SIP) revisions for Beaumont/Port Arthur (BPA), Dallas/Fort Worth (DFW), and HGA, which are tentatively scheduled for proposal in April 2004, with adoption in October 2004. This will enable the suggested rule revisions to be evaluated as one of the potential control strategies for these ozone nonattainment areas, with modeling used to determine the appropriate geographical scope for controls. Not only would this timetable ensure that modeling was available to support any rulemaking done at that time, it would also allow for evaluation of whether the rules requested should apply only to minor sources, or whether they should also apply to major sources, and whether they should apply to sources other than small diesel electric generating units. In addition, any

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rulemaking initiated in the fall of 2003 would most likely not be completed by April 2004. Since Chapter 117 would be open, the commission could not propose Chapter 117 rulemaking on the current schedule for the next SIP revisions for BPA, DFW, and HGA. Inclusion of consideration of the suggested rule revisions in any April 2004 rulemaking will ensure that no such administrative impediment exists.

The petitioners are concerned that the large number of small diesel electric generating units, in conjunction with the increased operation of these units anticipated by the Public Utility Commission of Texas, threaten the viability of the ozone nonattainment area SIPs because operation of these units for peak shaving would most likely occur on hot summer days conducive to ozone formation, thereby increasing the chance of an ozone exceedance. The petitioners also expressed concern about the health of the citizens of the State of Texas that reside near operating units.

The issues raised by the petition should be evaluated in broader context by considering the following background information.

Since 1999, the Public Utility Commission of Texas has anticipated that small electric generating units may become an attractive option for electric customers as an alternative to central station generating units as a primary source of electricity due to electric restructuring and electric reliability concerns. These electric generating units, sited at or near a load that will use all or most of the electricity generated, may be equipped to export electricity to the electrical grid. A standard permit for electric generating units issued by the commission authorizes certain electric generating units installed or modified after June 1, 2001 that generate electricity for use by the owner or operator and/or generate electricity to be sold to the electric grid. The commission issued this standard permit under authority of the Texas Clean Air Act, Texas Health and Safety Code, §382.05195, concerning Standard Permits, and Chapter 116, Subchapter F, concerning Standard Permits.

Before issuance of the standard permit in 2001, the commission authorized the majority of the small electric generating units under the conditions of a permit by rule under §106.512, or permit under Chapter 116, Subchapter B. Because a number of electric generating unit technologies exist which can meet and exceed the emission limits in §106.512, the commission determined that it was inappropriate to allow new or modified engines or turbines to operate under the §106.512 emission standards. As a result, the standard permit contains emission limits more stringent than the emission limits in §106.512. The standard permit is designed to provide a streamlined permitting method to encourage the use of "clean" electric generating unit technologies. The standard permit requires best available control technology and replaces the use of the permit by rule in §106.512 that has less stringent standards for nitrogen oxides (NO<sub>x</sub>). In a rulemaking concurrent with issuance of the standard permit, the commission revised §106.512 to disallow its use to authorize construction or modification of electric generating units, except for engines or turbines used to provide power for electric water pumps used for irrigating crops or for the operation of facilities authorized under Chapter 106, Subchapter E, Aggregate and Pavement; or the Air Quality Standard Permit for Concrete Batch Plants. However, units which qualified for §106.512 before June 1, 2001 may continue to operate under this permit by rule.

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Thousands of small diesel electric generating units have been installed in Texas. As part of the December 2000 SIP revision for the HGA ozone nonattainment area, staff analyzed the 1997 point source NO<sub>x</sub> emissions inventory, categorizing the emitting sources by equipment type to identify how to reasonably obtain the necessary reductions in HGA. Based on this analysis, major sources in HGA were found to include 196 stationary emergency diesel engines, representing 5.4 tons per day of NO<sub>x</sub> emissions. Some of these engines are used to power emergency firewater pumps, but most run emergency backup generators. Based on vendor information for HGA, there are an estimated 2,500 additional stationary diesel engines, mostly emergency backup generators. The exact number is unknown because many of these sources have not been inventoried as point sources for the emissions inventory. The DFW ozone nonattainment area would be expected to include a comparable number of small diesel electric generating units.

In HGA, revisions to Chapter 117 adopted on September 26, 2001 limit the operation of small diesel electric generating units in non-emergency situations at both major and minor sources. No similar restrictions apply elsewhere in Texas for units authorized to operate before the June 1, 2001 effective date of the standard permit.

**Applicable Law:**

Texas Government Code, §2001.021, which establishes the procedures by which an interested person may petition a state agency for the adoption of a rule; and 30 TAC §20.15, which provides such procedures specific to the commission;

Texas Water Code (TWC), §5.102, concerning General Powers, §5.103, concerning Rules, and §5.105, concerning General Policy, which authorize the commission to adopt rules necessary to carry out its powers and duties under TWC;

Texas Clean Air Act, Texas Health and Safety Code, §382.011, concerning General Powers and Duties, which authorizes the commission to control the quality of the state's air; §382.012, concerning State Air Control Plan, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; and §382.017, concerning Rules, which provides the commission the authority to adopt rules consistent with the policy and purposes of the Texas Clean Air Act;

Federal Clean Air Act Amendments of 1990 as codified in 42 United States Code (USC), §7410, which requires a demonstration of attainment of the national ambient air quality standard for ozone; 42 USC, §7502(a)(2), which requires attainment as expeditiously as practicable; and 42 USC, §7511a(b) - (d), which requires states to submit ozone attainment demonstration SIPs for moderate, serious, and severe ozone nonattainment areas such as BPA, DFW, and HGA, respectively.

**Affected Public:**

A change to Chapter 117 as requested would affect all owners and operators of boilers, process heaters, and stationary engines and gas turbines at minor sources in the East Texas Region.

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The rules requested by the petitioners would only apply to minor sources, rather than to both major and minor sources. In addition, the petition focuses on emissions from small diesel electric generating units, yet the requested rule revisions would apply the HGA minor source rules for boilers, process heaters, and stationary gas turbines (including duct burners) to BPA, DFW, and 95 additional counties in the eastern half of Texas. It does not appear that this was the petitioners' intent.

**Affected Agency Programs:**

The Field Operations Division of the Office of Compliance and Enforcement conducts field inspections from regional offices to verify compliance with the Chapter 117 rule provisions. The Office of Permitting, Registration, and Evaluation, Air Permits Division, develops federal operating permits for these sources. The Strategic Assessment Division, Strategic Implementation Plans Section, of the Office of Environmental Policy, Analysis, and Assessment develops the Chapter 117 rules and SIP revisions.

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Attachment: Petition

cc: 5 copies to the Chief Clerk for distribution

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