



ENVIRONMENTAL DEFENSE FUND

finding the ways that work

June 26, 2009

Ms. Kathy Pendleton
MC 164
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087
kpendlet@tceq.state.tx.us

Re: Proposed Section 185 Fee Implementation Plan

Dear Ms. Pendleton,

Environmental Defense Fund (EDF) and Galveston Houston Association for Smog Prevention (GHASP) respectfully submit these comments on the proposed implementation of section 185 penalty fees for major stationary sources in Severe and Extreme ozone areas failing to timely attain the health-based ozone NAAQS. These comments respond to the Texas Commission on Environmental Quality's (TCEQ) draft Subchapter B: Failure to Attain Fee and Equivalent Alternative Obligation, Division 1: Failure to Attain Fee, 101.100, 101.110, 101.115, 101.120, 101.125, 101.127, 101.130, 101.140, 101.145, 101.147, 101.150, 101.160, and 101.170 and Division 2: Equivalent Obligation, 101.200 and 101.210 to implement Section 185 penalty fees for volatile organic compounds and or nitrogen oxides emissions (VOC and or NOx) for the 1-Hour or 8-Hour Ozone National Ambient Air Quality Standards State Implementation Plan (SIP) revision as required by the Federal Clean Air Act Amendments (FCAAA).

We urge the TCEQ to work more constructively in developing a fee program that maximizes the opportunity of collecting fees and securing emission reductions in ozone-forming pollutants in the nonattainment area. In Houston, there is a vital opportunity to ensure that these penalties effectively benefit the communities that suffer the adverse health effects of delayed compliance with the nation's health-based air quality standards.

**TCEQ's Fee Implementation Program is Inconsistent with its Own Modeling Data
Characterizing Ozone Formation**

We respectfully urge Texas and EPA to carry out section 185 consistent with the law to impose penalty fees for each covered major stationary source of VOCs and NOx. This should be done without aggregation of pollutants and without aggregation across facilities. TCEQ's own modeling data indicates that NOX and VOC precursors do not contribute equally to ozone formation. There is no basis for allowing aggregation of NOX and VOCs in a penalty program developed to reduce ozone concentrations. In fact, aggregation of pollutants would delay

progress in reducing ozone concentrations in the area as the TCEQ's own data demonstrate that NOx are the rate limiting ozone precursors.

At the most recent Southeastern Texas Photochemical Modeling Technical Committee meeting, and based on all the available monitoring and modeling data, the following conclusions were drawn concerning the 2018 SIP demonstration of attainment of the 1997 8-hr ozone standard at the three highest reading monitors in the Houston region¹:

- The modeling data indicate that the reduction in ozone concentrations is greatest for the NOX + VOC reduction and least for the VOC-only reduction.²
- The response of the design value 2018 for NOX-only reductions from all sources was almost as much as the response for NOX + VOC emission reductions.
- With approximately 21% NOX-only reductions from all sources (80 tons per day), all three monitors are projected to be in attainment.
- With approximately 16% NOX-only reductions (60 tons per day) from elevated point sources, all three monitors are projected to be in attainment.

TCEQ modeling data are clear that the fastest and most expeditious way to attainment is by reducing NOX and VOCs in disparate proportions as the pollutants do not contribute equally in ozone formation. Any attempt by TCEQ to propose a program that ignores the hard facts that its own scientists produced is clearly counter to the efforts of the organization and only serves to delay improved air quality and better health to the citizens of the region.

TCEQ Rule Falls Short of EPA's Alternative Baseline Guidance

EPA's 2008 guidance³ provides that for facilities that operate on an intermittent, irregular, or non-continuous cycle, the baseline is presumed to be calculated from the last consecutive 24 months' worth of data that represents their normal operating conditions. The most recent emissions data should be used to calculate the baseline in these circumstances. In no situation should TCEQ simply allow industry to default to a self-determined baseline based on the highest emissions period in the historical timeframe.

The guideline proposed in the EPA memo regarding baseline determinations is explicit:

The PSD rules require adequate source information for the selected 24-consecutive month period⁴. As indicated in the PSD rules, the data (needed to calculate the actual

¹ http://www.tceq.state.tx.us/assets/public/implementation/air/am/committees/pmt_set/20090623/20090623-karp-2018_future_yr.pdf

² TCEQ modeling data indicates that ozone concentrations are more sensitive to reductions in NOX emissions than reductions in VOC emissions.

³ EPA Memo from William Harnett to Regional Air Division Directors, Regions I-X. Guidance on Establishing Emissions Baselines under section 185 of the Clean Air Act (CAA) for Severe and Extreme Ozone Nonattainment Areas that Fail to Attain the 1-hour Ozone NAAQS by their Attainment

⁴ The adequacy of given source operating data for the selected time period is to be determined on a case-by-case basis by the reviewing authority.

emissions factors, utilization rate, etc.) must adequately describe the operation and associated pollution levels for each emissions unit. Otherwise, another 24-consecutive month period must be selected (40 CFR 52.21(b)(48)(i)(d) and (ii)(e). Once calculated, the average annual emissions rate must be adjusted downward to reflect (1) any non-compliant emissions⁵ (40 CFR 52.21(b)(48)(i)(b) and ii(b), and (2) for each non-utility emissions unit, the most current legally enforceable emissions limitations that restrict the source's ability to emit a particular pollutant or to operate at the levels that existed during the 24-month period that was selected (40 CFR 52.212(b)(48)(ii)(c).

For a source with emissions units capable of burning more than one type of fuel, the current emissions factors must be related to the fuel or fuels that were actually used during the selected 24-consecutive month period. For example, when calculating the baseline emissions for a source that burned natural gas for a portion of the 24-month period and fuel oil for the remainder, the PSD rules require States to retain that fuel apportionment, but also use the current legally enforceable emissions factors for natural gas and fuel oil, respectively, to calculate baseline emissions. If, however, the source is no longer allowed or able to use one of those fuel types, then the calculations must assume use of the currently allowed fuel for the entire 24-month period. This applies to sources that use multiple feedstock or raw materials, which may vary in use during the source's ongoing production process.

TCEQ Commits a Fatal Flaw in Failing to Set Criteria to Define Irregular or Cyclical Operations

The proposed fee program outlined by the TCEQ fails to define which facilities can be considered to have emissions that are irregular or cyclical in nature. The SCAQMD proposed using the t-test for determining whether emissions were cyclical. A draft definition from this proposal is as follows:

CYCLICAL major stationary source is a major stationary source where the annual VOC (or NOx) emissions in the attainment year deviates [varies] significantly from the adjusted annual VOC (or NOx) emissions, adjusted for adopted local, state and federal rules or regulations that would have restricted the sources ability to both operate or emit a particular pollutant that existed during the five (5) consecutive years immediately preceding the attainment year for which the demonstration of cyclical operations/emissions is being made, such that, the outcome of the standard Students "t-Test" results in a rejection of the null hypothesis that the difference between the baseline year VOC (or NOx) emissions and the average of the five (5) consecutive years immediately preceding the attainment year VOC (or NOx) emissions values is equal to zero (0), within a 95% level of confidence. A major stationary source that has cyclical annual emissions of either VOC, or NOx, or both is, for the purposes of this rule, defined

⁵ The result of this restriction is that the plant capacity utilized during a particular period of time (assuming that capacity was within allowable levels) may be referenced, but not the non-compliant pollution levels. The second restriction similarly limits baseline emissions to levels that are consistent with current legally allowable emissions rates.

as a cyclical major stationary source. In order to be classified as cyclical, a source must be approved by the Executive Officer pursuant to the protocol in subdivision (f).

Proposed Equivalent Alternative Obligation is Baseless

The TCEQ has proposed equivalent alternative programs of allowing for the retirement of emission credits or program allowances in their draft rule. Given the current exchange value estimates of the emission credits and the flooded market for NO_x MECT allowances (June 2009 estimates: HRVOC allowances: ~ \$5k per ton for 2008 or 2009; NO_x MECT allowances: \$500/ton for the 2008s, \$3000/ton for the 2009s; VOC ERC:~\$2-5k per ton; and NO_x ERC:~\$25k per ton⁶), the idea that the alternative obligation scheme that TCEQ has proposed will help to reduce ozone concentrations (ie the reason for the penalty program in the first place), is unfounded, particularly considering that the current penalty fee, taking into account the consumer price index (CPI⁷), is calculated to be \$8126/ton.

Furthermore, the proposed alternative obligation fails to account for the fact that ozone generation in the Houston area is NO_x limited. There is no protection in TCEQ's proposed equivalent obligations to protect facilities from retiring the cheapest credits, even if the pollutants represented by those credits would not be the most expeditious way to reduce ozone concentrations.

Recently, the TCEQ has proposed a 25% reduction in the HECT program. While a necessary effort to help address the fact that TCEQ's credit trading program is one of the most over-allocated trading schemes in the country, TCEQ has not completed any market research or any analysis on the implications of such a proposal with respect to the value of the NO_x and VOC program allowances. The idea that TCEQ would propose alternative obligations that involve credit markets that to date have demonstrated to be ineffective without having completed any research on the effects of such a proposal is naive and unsupportable. Ultimately, allowing facilities to retire emission reduction credits that are not traded anyway do not benefit the facilities nor do they result in improved air quality in the region. Instead, it would allow facilities to escape the intent of the protections afforded to all Americans by Congress in the Clean Air Act.

Ozone Continues to be a Serious Health Threat

Ozone has a cascade of human health impacts on children, the elderly, those who make a living through hard work in the outdoors, and many others in our community. Those that live and work in Houston must be certain that the penalties collected through a fee implementation program adopted by the TCEQ are devoted to measures that protect the public that has for far too long born the heavy burden of ozone air pollution.

We appreciate your consideration of our comments. We look forward to working with TCEQ staff and other stakeholders to create a solid program that will help the region attain this important ozone standard.

⁶ Personal communications

⁷ <http://www.bls.gov/cpi/cpid08av.pdf>

Sincerely,

A handwritten signature in black ink, appearing to read 'E.C.' followed by a stylized flourish.

Elena Craft, Ph.D.
Air Quality Specialist
Environmental Defense Fund