

Senate Bill 1134: Relating to Air Permitting Requirements for Certain Oil and Gas Facilities *Before the Senate Natural Resources Committee*

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I testify in strong support of Senator Hegar's bill (SB 1134). This legislation recognizes the importance of representative and credible ambient air quality monitoring data in the assessment of the air emissions associated with oil and gas production sites. Monitored data is a far more accurate foundation for determining protectiveness levels in permits and for determining which regulatory requirements will assure that protectiveness.

In January of 2011, the Texas Commission on Environmental Quality adopted a new Permit by Rule (PBR) and new Standard Permit for Oil and Gas Sites (OGS). As adopted the new PBR extends to new or modified OGS in the Barnett Shale region this year and apparently to all OGS in Texas next year. These new TCEQ rules covering thousands of OGS throughout Texas are a major expansion of the permitting structure and the regulatory requirements for the Texas oil and gas industry ... at or beyond the scope of the Texas statutory mandate for promulgating PBRs.

TCEQ has consistently determined that air emissions from OGS in the Barnett Shale area and elsewhere in Texas are not causing any short-term or long-term health effects. TCEQ, however, apparently used worst case emission scenarios to model health impacts from OGS. SB 1134 wisely makes credible air quality monitoring—to measure actual emissions from OGS—more determinative than computer simulations of worst case scenario OGS emissions.

TCEQ uses air quality monitoring, modeling and other technical analyses when determining appropriate regulatory requirements—like emission limits—to protect human health. In TCEQ's extensive recent amendments to the Permit by Rule (PBR) and Standard Permit for oil and gas production sites (OGS), TCEQ relied heavily on air dispersion modeling, arguably with worst-case inputs in the model.

The emissions from OGS—in contrast to emission from stationary industrial sources—are “fugitive” in nature. Air

dispersion models work best when predicting impacts from those industrial “point sources” with elevated stacks, steady-state properties and known pollutant concentrations. Air dispersion models do not predict as accurately with fugitive sources like OGS—near ground level with multiple, varied, small, and intermittent emission sources. Appropriately monitored ambient data is a far more accurate measurement of the impacts of emissions from fugitive sources like OGS than computer, i.e. modeled, simulations. As SB 1134 wisely requires, the computer models should be validated on the basis of credible monitored data.

Most of the data that TCEQ has from monitoring OGS under the existing PBR does not validate the modeling driving the major changes to the OGS PBR. As recently as January 10, 2010, TCEQ concluded in a document entitled Health Effects Review of Barnett Shale Formation Area Monitoring Projects: “Existing TCEQ fixed-site monitors near oil and gas activity in the Dallas/Fort Worth Metroplex have not reported annual averages of any [volatile organic compounds] including benzene, above long term health comparison values since monitoring began in 2000.” Given the far higher concentration of OGS in the Barnett Shale area than other parts of Texas, this study, while not dispositive, is persuasive for the rest of the state with far less concentrated OGS in remote rural areas.

Monitoring, as well as modeling, can be skewed to minimize or maximize emissions. SB 1134, and perhaps other bills to increase ambient monitors of OGS in the Barnett Shale area, hopefully will lead to a careful, comprehensive and representative ambient monitoring project to assess the protectiveness of facilities operating in compliance with the existing PBR. The “credible” monitoring data stipulated in SB 1134 should derive from ambient monitors appropriately located: in areas to which the public has access and can be expected to have more than fleeting exposure. Monitoring of appropriate duration is important. One-hour sampling should only be compared to one-hour comparison values; annual sampling should be compared to annual comparison values.

Samples from mobile air quality monitoring conducted in the Barnett Shale are not representative of the air quality to which the public is being exposed. Many samples were taken in areas to which public does not have access, or were of inappropriate duration. Instantaneous air canisters or infrared cameras may help determine the presence of specific compounds in a plume but should not be used for a health-effects review.

Estimating the level of 24-hour concentrations by multiplying a one-hour exposure by twenty-four is not realistic. Monitoring reports should not speculate about annual impacts based on short-term monitoring results. Nor should the protectiveness of the PBR be assessed by sites out of compliance with the PBR. As SB 1134 stipulates, worst-case short term samples and worst case modeling runs should not drive emission limits unless validated by credible, representative ambient air quality monitoring data.

TCEQ's OGS rules for PBR and Standard Permit bind thousands of production sites across the state of Texas. The majority of these sites are operated by independent companies with few employees. Although a huge increase in the cost of compliance under new TCEQ authorizations might be absorbable by the few large corporations, the cost could force shut-down of part or all of the operations of small independents.

SB 1134 is wise to require the Regulatory Impact Analysis (RIA) under existing General Government Code 2001.0225. For major rules, these provisions require a careful cost-benefit analysis to help regulators design a rule with the most palpable environmental benefit at the least cost. EPA and most states have used similar regulatory analyses for over thirty years as a standard feature of rulemaking. Other than the provisions for Major Rules, Texas lacks an administrative requirement for estimating economic impact and environmental effectiveness. I understand that TCEQ has only conducted one RIA under the provisions enacted over 14 years ago.

The boom in Texas oil and gas production is of great value to all Texans. Under a PBR, oil and gas production sites are considered in Texas law as an "insignificant source of emissions." Concentration of OGS near or within highly-populated areas is a new chapter of oil and gas production in Texas and often more an issue of land use than air quality. SB 1134 will help Texas maintain our "win-win" approach to environmental protection and economic growth. Texas has and can continue to do both at the same time. ★

