

- SUBJECT:** Establishing the clean school bus program within the TERP
- COMMITTEE:** Environmental Regulation — committee substitute recommended
- VOTE:** 7 ayes — Bonnen, Howard, Driver, Homer, T. King, Kuempel, W. Smith
0 nays
- WITNESSES:** For — Hazel Barbour, Clean Air Force of Central Texas; Bill Carpenter, Houston Independent School District; Dwight Harris, Texas Federation of Teachers; Casey Magnuson, Texas PTA; Glen Maxey, American Lung Association of Texas; Patty Quinzi, Association of Texas Professional Educators

Against — None
- BACKGROUND:** **Texas Emissions Reduction Plan (TERP).** The 77th Legislature in 2001 enacted SB 5 by Brown, creating the Texas Emissions Reduction Plan (TERP), a set of incentive-based programs intended to reduce ozone-producing emissions enough to satisfy EPA requirements in non-attainment areas without implementing more stringent regulatory measures. TERP programs earn the state credit in the SIP for reducing NO_x. TERP and its related funding sources are set to expire in 2008.
- The primary TERP program that counts toward the SIP is the Texas Commission on Environmental Quality's (TCEQ's) Emissions Reductions Incentive Grant (ERIG) program, which provides grants to reduce NO_x emissions from high-emissions diesel sources in affected counties. The EPA has identified 41 counties in Texas that are eligible to receive TERP funding. The EPA has classified the Houston/Galveston/Brazoria (HGA) and Dallas/Fort Worth (DFW) areas as non-attainment zones and many other areas as near-non-attainment zones for current air quality standards.
- Types of diesel retrofit technologies:**
- *Oxidation catalysts.* A diesel oxidation catalyst (DOCs) chemically converts unburned fuel and oil to carbon dioxide and water. DOCs reduce particulate matter emissions by 20 to 30 percent and typically cost \$1,000 to \$2,000. DOCs typically can be

installed as a direct muffler replacement. They do not require engine modifications and are generally maintenance free.

- *Particulate matter filters.* Diesel particulate filters (DPFs) trap particulates from engine exhaust and must be periodically "regenerated" by burning off the trapped particulate matter. DPFs are most appropriate for 1995 and newer buses and require ultra-low sulfur diesel fuel. Filters can reduce particulate matter emissions by as much as 90 percent and typically cost between \$5,000 and \$10,000.

DIGEST:

CSHB 3469 would establish a clean school bus program in Texas as a component of TERP. The objective of the clean school bus program would be to reduce children's exposure to diesel exhaust from school buses. The program would provide grants for projects designed to reduce emissions of diesel exhaust. Grant recipients would use clean school bus grant money to fund non-administrative costs of projects to reduce school bus emissions only. The program would expire in 2013.

Eligible projects. The following types of projects would be eligible for grants from the clean school bus program:

- diesel oxidation catalysts (school buses built before 1994);
- diesel particulate filters (school buses built from 1994-1998);
- emission-reducing, add-on equipment for school buses (including devices that reduce crankcase emissions);
- EPA-approved alternative fuels or fuel additives that would reduce particulate emissions; and
- other technologies that would result in significant emissions reductions.

Eligible applicants. Any Texas school district with at least one diesel-fueled school bus would be eligible to apply for grants under the program. Countywide school districts that provide transportation systems also could apply for clean school bus grants. TCEQ would have authority to establish, review, and modify the eligibility requirements of the program to include more potential applicants.

To receive grants for retrofit technology, school buses would have to have at least five years of life remaining or the school district would have to agree to use the retrofit device on another bus after the first bus no longer was being used.

Funding. The clean school bus program would be funded through TCEQ's diesel emissions reduction incentive program, which currently has a statutory dedication of 87.5 percent of TERP funding. A maximum of 1.5 percent of the funds in the diesel emissions reduction program would be allocated to the clean school bus program. Funds would be allocated to the clean school bus program only after necessary funds had been allocated to ensure Texas achieved emissions reductions goals in the SIP.

CSHB 3469 would take immediate effect if finally passed by a two-thirds record vote of the membership of each house. Otherwise, it would take effect on September 1, 2005.

**SUPPORTERS
SAY:**

CSHB 3469 would help protect the health of children who ride school buses and of school bus drivers by decreasing their exposure to unhealthy diesel exhaust. Sooty particles in diesel exhaust are especially dangerous because they easily are inhaled and reach deep into the lungs where they can trigger an inflammatory response. Breathing in air heavy with tiny particles can be dangerous even over a short time. Because these particles are so minuscule, they can enter the circulatory system and damage blood vessels.

Children who ride school buses are especially susceptible to the harmful effects of exposure to diesel exhaust. Levels of particulate matter in and around school buses can be up to 5 to 10 times higher than background levels, making school buses a "hot spot" of pollution exposure for school children. Children are especially vulnerable to air pollution because they breathe more air per pound of body weight and their lungs still are developing. A recent study concluded that children riding in conventional diesel buses for 13 school years would have a 4 percent higher risk of contracting cancer from diesel exhaust, as well as higher risks for respiratory ailments and hospitalizations for asthma, when compared to children riding in cleaner buses.

Although some programs currently provide grants to school districts to reduce diesel emissions from school buses, not nearly enough funding is available to support the demand for these grants. Congress included \$5 million in the EPA's 2003 budget for a cost-shared grant program designed to assist school districts in upgrading their bus fleets. The EPA's Clean School Buses USA program received applications for more than 50 times the amount of money available. CSHB 3469 would provide the additional

funding necessary to ensure that more school districts had access to grant funding for cleaner school buses.

The costs of retrofit technologies for school buses would be minimal compared to the consequence of exposing children to diesel exhaust from riding in and waiting near school buses. The price of an oxidation catalyst for a diesel school bus can range from \$1,000 to \$3,000 — a small price to pay to protect the health of Texas school children. The installation of oxidation catalysts requires only the replacement of a muffler, and oxidation catalysts do not require much maintenance after they have been installed.

HB 3469 would improve air quality in Texas by reducing the overall quantity of dangerous particulates in the air. Although emissions from school buses do not represent the largest source of air pollution, reducing their emissions would eliminate a significant amount of pollution from the air. As the EPA continues to adopt stricter clean air standards, it is important that Texas take every available step to reduce air pollution.

TERP would provide a reliable source of funding for the clean school bus program. Comptroller's estimates project that revenues in the TERP account will increase from \$143 million in fiscal 2004 to an estimated \$158 million in fiscal 2007. The TERP account could provide more than enough funds to meet the state's need for cleaner school buses.

**OPPONENTS
SAY:**

The clean school bus program should have a more stable, long-term funding source. The funding source proposed by HB 3469 would expire in less than ten years and is contingent upon Texas meeting its SIP goals. Given the instability of the proposed funding source, the clean school bus program in Texas could have trouble achieving its goal. A more stable source of funding, such as a fee, would ensure that the program could reach a substantial number of Texas school children. Texas school buses transport more than 1 million children each year, and every effort should be made to ensure these children are not exposed to the harmful effects of diesel emissions from older school buses.

**OTHER
OPPONENTS
SAY:**

School districts already can apply for TERP grants to reduce school bus emissions. TCEQ awards TERP funds for nitrous oxide reducing projects in areas identified by the EPA as non-attainment areas. School districts are eligible for these funds, which could be used to help cover the costs of purchasing or retrofitting school buses, building clean fuel infrastructure,

purchasing qualifying fuels, and demonstrating new technologies. TERP pays the incremental cost of a new technology up to an annualized cost of \$13,000 per ton of nitrous oxide reduced.

NOTES:

The committee substitute differs from the original bill in that the substitute would require that the clean school bus program be funded only after enough funds had been allocated for the state to achieve the emissions reductions under the SIP. The substitute also would allow TCEQ to adopt rules expanding the list of eligible applicants to include regional planning commissions, councils of governments, similar agencies, or non-profits. The substitute would restrict grant recipients from using grants to pay administrative costs.

Yesterday, during second reading consideration of HB 2481 by Bonnen, the House adopted an amendment by Rep. Hochberg that is almost identical to CSHB 3469. HB 2481 would extend the TERP until 2013 and, as of September 1, 2008, reduce the percentage of TERP funding for diesel emissions reduction program from 87.5 percent to 64 percent. The House is scheduled to consider HB 2481 on third reading and final passage today.