

Little-known Texas loophole lets railroads export pollution to other states

By RANDY LEE LOFTIS

Environmental Writer

rloftis@dallasnews.com

Published: 01 December 2011 10:57 PM

A Text Size  

One of Texas' most successful smog-fighting efforts has a flip side: It's using tax dollars to export pollution to other states.

Railroads operating in Dallas-Fort Worth and greater Houston have used more than \$148 million in state grants to pay part of the cost of replacing older, higher-emitting locomotives with cleaner ones. The program has helped local air quality in Texas' smoggiest cities.

But railroads also are using a little-known loophole that Texas regulators inserted at their request, one that has added to pollution elsewhere.

Rather than scrap the old equipment, as other businesses must do with diesel engines they replace with Texas grants, railroads have kept nearly two-thirds of their dirty, old locomotives chugging in rail yards in other states. The other third were scrapped.

Records reviewed by *The Dallas Morning News* show that some of the 131 locomotives deemed too dirty for Texas have ended up in other metro areas struggling to clean up their own pollution. They include Chicago, Kansas City, Mo., Denver and Los Angeles.

For other locomotives removed from Texas, railroads listed only broad regions of the country as their destinations. Most of the engines wound up in the Midwest.

The Texas locomotive loophole, which railroads said they needed to assure their participation in voluntarily speeding up diesel replacements, illustrates the hidden trade-offs that often come with pollution controls. Emissions reductions in one area might be partly offset by increases elsewhere.

Boomerang smoke?

In addition, pollution in one state or region can drift to another, so there is no guarantee that pollution removed from Texas won't come back.

Although Dallas-Fort Worth and greater Houston generate plenty of air pollution on their own, sometimes huge, multistate air masses carry extra pollution into Texas, worsening local air quality for days. One frequent origin of transported pollution is the Midwest, the main destination for the old Texas locomotives.

The Texas Commission on Environmental Quality said getting older, dirty locomotives off the rails in Texas is the priority for state grants. Spokeswoman Andrea Morrow said sending them to other states would have few if any environmental effects in the receiving states or back in Texas.

"There is not a direct correlation between these engines and an increase in locomotive emissions in other states," Morrow said in an email.

"If emissions in the Midwest increase due to increased locomotive emissions, there is a slim chance that some small portion of these emissions, or transported ozone, could have an impact on Texas.

"However, this increased impact from transport would be insignificant when compared to the improved emissions reductions locally."

The TCEQ's commissioners made locomotives an exception in 2007 when they considered requiring state grant recipients to scrap their old equipment rather than banning it from Texas.

The agency's staff said making sure every truck, forklift or bulldozer actually left the state and stayed out was too complicated and time-consuming.

The Environmental Protection Agency, local officials and North Texas regional planners supported a blanket prohibition on shipping old equipment out of state. For its own federally funded locomotive grants, the EPA requires that replaced engines be retired.

Railroads said locomotives were different from other diesel equipment — big, limited to the tracks and easily monitored. TCEQ commissioners agreed.

The grants come through the Texas Emissions Reduction Program, which helps businesses and local governments replace high-polluting equipment. The TCEQ runs the program and sets its rules under authority from the Legislature.

In many cases, the replaced equipment has years of useful life remaining, but newer versions run much cleaner because of tightened federal standards or better technology. Grants generally help cover part of the cost of the environmental upgrades.

A new-generation switcher locomotive, called a GenSet, costs about \$1.4 million and emits up to 80 percent less pollution than the unit it replaces. Most Texas grants are about \$750,000 per locomotive, just over half the cost.

Money for the grants comes from state fees and surcharges — essentially taxes — on specified business activities, such as construction-equipment purchases and rentals.

Praised program

The program has wide support from industries and environmentalists, who in the past have joined forces to urge the Legislature to boost funding. State officials have made the pollution reductions from the diesel upgrades a major factor in clean-air plans.

The EPA has cited the Texas program as a national example of innovative pollution controls. Participation is voluntary, and grants do not cover upgrades that are required by environmental regulations.

Through Aug. 31, the program had disbursed \$902.6 million in grants, with the largest share, 39 percent, going to on-road projects, mostly trucks. Next came off-road projects such as earthmovers and forklifts, at 32 percent.

Locomotives, including replacements, retrofits, engine swap-outs and demonstration projects, make up less than 1 percent of projects under the program, but they have received 22 percent of the money, a total of \$197.6 million. Replacements account for \$148 million of that total.

Locomotive projects, however, have yielded 35 percent of the program's reductions in smog-causing nitrogen oxides — the most of any grant category.

That gives locomotives by far the most reductions per project. They also are nearly first in the amount of pollution eliminated per dollar spent.

BNSF Railway said incentive grants have been crucial to creating public-private partnerships that lead to cleaner engines, reduced emissions and energy savings.

The Fort Worth-based company has received almost \$46 million in Texas grants toward the early replacement of 71 locomotives. Over the 7- to 10-year terms of the projects, the replacements are expected to reduce smog-causing nitrogen oxides by nearly 7,000 tons in Dallas-Fort Worth and 9,000 tons in greater Houston.

"The program has allowed us to test new unproven technologies faster, provide for emission reductions by sharing financial risk and has helped reduce emissions in Texas non-attainment areas," BNSF environmental operations director David Seep said in an email.

Nonattainment area is the legal term for a metro area that violates the federal standard for ozone, or smog.

For Union Pacific, Texas grants totaling more than \$90 million have helped replace 121 locomotives. Those projects, covering 5 to 10 years, are expected to cut nitrogen oxides by more than 14,000 tons in Dallas-Fort Worth and more than 17,000 tons in greater Houston.

Smaller railroads also have received replacement grants.

Union Pacific now has 43 new-generation, low-emitting switcher locomotives in Dallas-Fort Worth and 55 in greater Houston, spokeswoman Raquel Espinoza said. They reduce emissions of nitrogen oxides by 80 percent and particulate matter by 90 percent.

"We work pretty hard at continuing to improve the air quality," she said.

The EPA model

The EPA provides a number of locomotive replacement grants across the country. For those federally funded grants, the old locomotives must be destroyed.

Like Texas, California allows locomotives replaced with its money to leave the state. Both states let railroads submit GPS data as proof of the transferred engines' locations.

A few line-haul locomotives, the ones that pull trains between cities, have been replaced with state or federal grants. The great majority, however, are switchers, which move cars in rail yards — basically tugboats on land.

Switchers are a main target, in part, because they operate within urban areas, concentrating the emissions in local neighborhoods.

Digital maps prepared for the TCEQ depict computer-simulated concentrations of nitrogen oxides near rail yards in North Texas. Along with nitrogen oxides, diesel engines emit fine particulates that are linked to cancer.

The Fort Worth yard shows the most pollution of any yard in the region. Lesser hotspots occur just south and southeast of downtown Dallas and elsewhere in the region.

Texas has no public-health study program specifically for rail yards, but the efforts to reduce emissions from switcher engines are expected to yield significant benefits.

The region's biggest rail yard, the Tower 55 yard in Fort Worth, is due for a major upgrade using \$101 million in local, state, federal and railroad funds. The project is meant to relieve train congestion, reducing delays and air pollution in and around the yard.

California has enforceable agreements with railroads to limit emissions in the yards. Health studies there, done in cooperation with the railroads, revealed high risks of cancer and other ills for people living near many yards.

The top cancer risk is from airborne particles within the emissions that are so tiny they can reach the deepest parts of people's lungs, said Harold Holmes, manager of rail strategies for the California Air Resources Board.

To find the neighborhoods at the most risk, he said, experts need to do specific health studies at each location. Sometimes the yard with the biggest emissions doesn't pose the most danger. It depends on where the people live.

"Each yard is unique," Holmes said. "When you're looking at public health risks, the proximity to people is really critical."

MORE FROM *DALLASNEWS.COM*

[Fiery pileup leaves teenage driver dead, woman injured in northeast Dallas](#)

[🔒 Founder of Victory Park's toney Ghostbar commits suicide, Colorado authorities say](#)

[🔒 State Farm raising deductible for homeowners insurance](#)

[🔒 Two temp workers for city of Dallas released amid review of rehired retirees](#)

[Dallas cracks down on idling. Not by you. By your truck.](#)

FROM THE WEB

[Environmental Graffiti](#)
[10 Creepiest Abandoned Water Parks on Earth](#)

[Huffington Post](#)
[Tom Weis: Now Is the Time to Fight the Keystone Pipeline](#)

[FoxNews.com](#)
[Rock Fan Kills Himself After Concert Left Him With Tinnitus](#)

[Caring.com](#)
[Worried It's Alzheimer's? 8 Symptoms to Watch For](#)

[HealthCentral.com](#)
[10 Things NOT to Say to Someone with Fibromyalgia](#)

[What's this?](#)