

AIR QUALITY BASICS: Air Pollutant Watch List

The Houston region leads the nation when it comes to emissions of air toxics. These chemicals can cause a variety of health effects, from cancer to diseases of the reproductive, respiratory and neurological systems.

The federal government has identified 188 chemicals as air toxics, but it has not established ambient standards for these pollutants. The Texas Commission on Environmental Quality (TCEQ) does not have such standards, either. However, the agency's Toxicology Section does keep an Air Pollutant Watch List (APWL), which identifies areas in Texas where specific pollutants are measured at levels of concern.

An area or pollutant is added to the APWL when a pollutant is persistently measured at levels that could lead to adverse short-term or long-term health effects or odorous conditions. The TCEQ's Toxicology Section purpose for keeping the list is to:

- Heighten awareness of TCEQ personnel, industry leaders and private citizens in the areas of concern;
- Encourage efforts to reduce emissions;
- Help the TCEQ focus its resources; and
- Provide information for the review of air permits.

If facilities are operating within their permits, there is little that the TCEQ can do from an enforcement perspective. However, the TCEQ can attempt to negotiate pollution reductions with individual facilities, and it can also increase inspection and monitoring activities in the affected areas.

The Houston Region and the APWL

Of the 17 areas on the APWL, seven are in the Houston region. Two are located in Texas City, two are near Baytown's Lynchburg Ferry, one is in Galena Park, one is around Houston's Milby Park, and one is in Freeport. Four of these areas, including both Texas City sites, one of the Lynchburg Ferry sites and the Galena Park site (see graph) are on the list for benzene, a known carcinogen. At all four sites, industrial activities are the suspected source of the pollution.

The Texas City - Ball Park area is also on the APWL for elevated levels of acrolein, butyraldehyde, propionaldehyde, valeraldehyde and hydrogen sulfide.

The second site near the Lynchburg Ferry is on the APWL for styrene. While the

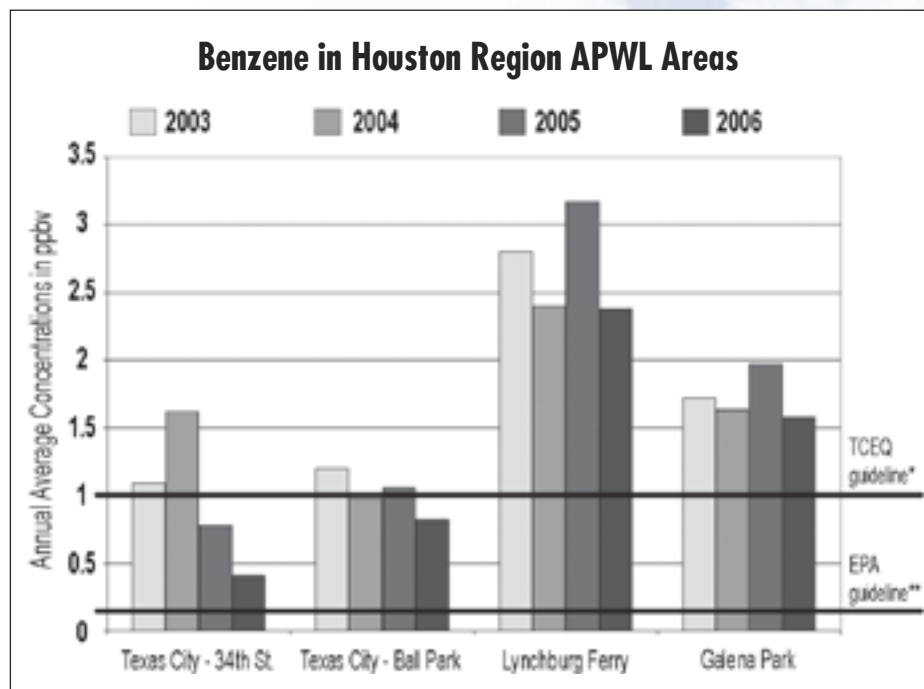
TCEQ appears primarily concerned with odor conditions caused by styrene, some of the levels measured in this area have the potential to cause adverse health effects, according to EPA data. A nearby barge facility is one of the suspected sources, according to a TCEQ memo.

The Milby Park area in Houston makes the APWL for high levels of 1,3-butadiene, a probable carcinogen. Industrial facilities are the primary source of this pollution. Significant decreases have been noted in this area, thanks to state and local agreements with Goodyear and Texas Petrochemicals.

The final area on the APWL is in Freeport. Nickel, cobalt, arsenic and vanadium are the four chemicals of concern in this area. Industrial activities are the probable source. There are a number of facilities in this area, including Conoco-Phillips, Dow Chemical and Gulf Chemical and Metalurgical.

Though the APWL lacks the teeth it would need to be truly effective, it is a good tool for the agency and for local communities. This spring, several bills were introduced in the Texas Legislature that could have protected and improved the APWL. Unfortunately, legislators failed to pass any of the measures.

For more on the Air Pollutant Watch List, visit the TCEQ website at www.tceq.state.tx.us/nav/data/aa_data.html.



Source of data: Texas Commission on Environmental Quality (TCEQ).

* TCEQ's guideline (not an enforceable standard) for benzene is 1 part per billion (ppb), and is based on an additional lifetime cancer risk of not more than 1 person in 100,000.

** EPA's guideline (not an enforceable standard) for benzene is 0.4 - 0.14 ppb, and is based on an additional lifetime cancer risk of not more than 1 person in 1,000,000.