

# Terence Thorn

Houston has been out of compliance with federal Ozone standards under the Clean Air Act for more than a decade. Our Ozone levels are largely the product of emissions by vehicles as well as large industrial plants, oil refineries, and chemical and petrochemical plants all of which need to reduce both VOCs and NO<sub>x</sub> emissions in order to improve Houston's air quality. The estimated 1.4 million vehicles in Houston drive an average of 36 miles per day - the highest driving per capita according to the Federal Highway Administration. At the same time the Houston metropolitan area has a projected growth rate of almost 10% a year and the population could exceed 8 million people in 5 years. The newcomers won't be riding bicycles to work.

You don't have to look far to see the environmental and health impact of these emissions. A 2023 report published by the Environmental Integrity Project identified 6 Houston areas where residents were exposed to the highest levels of ozone in 2023 at 100 ppb (the 2008 standard is 75 ppb). It is also revealed that more than 90 percent of the residents in 4 of these areas are people of color, and that about 50 percent of these households are low income.

While large cities tend to have relatively high levels of ozone, Houston's problems are exacerbated by our climate where heat and sunlight contribute to the presence of ozone. This problem will only get worse. The summer of 2023 brought unparalleled stretches of triple-digit temperatures throughout the southern Texas, and we saw a record stretch of 44 consecutive days at or over 100 degrees in June and July, smashing the previous record of 23 consecutive days set in 1994. While the record-setting conditions in 2023 were driven in part by a unique set of factors, each of the past eight years have already among the eight warmest ever observed. Our environmental problems will accumulate and will be more complex. Historic efforts to reduce air pollution won't succeed simply because the future will not be like our past.

I am old enough to remember the passage of the 1970 Clean Air Act Amendments which have resulted in a steady reduction in air pollution across the U.S. It was a deliberate response aimed at correcting the demonstrated failures of previous regulatory efforts and targeted the heavy, noxious smog you could feel when you walked outside back then. Particulate emissions contributed to what my father called "a two shirt day"- the first shirt's collar was so stained by dirt you had to change it to go out in the evening. In my lifetime the CAA remains one of the country's greatest environmental successes.

Sadly, while our air and water are cleaner, some things have not changed, and we hear the same arguments against better regulations to control air pollution. In 1970, opponents of more stringent regulations said the Clean Air Act Amendments would impose undue burdens on the cities and that environmental protection and economic growth were not compatible. Some even said pollution was the inevitable price of progress. Here in Houston today the mantra from polluters is "do you want a job or clean air?" It is time to shelve this rhetoric.

Addressing our air pollution will require a multi-faceted approach that involves a combination of regulatory measures, technological advancements, and public awareness campaigns. The severity and complexity of the problem means that both governmental and non-governmental parties need to play a role and the TCEQ needs to step up and help drive this effort by revising:

- 1) The TCEQ needs to implement the most stringent possible plan to bring the Houston-Galveston-Brazoria (HGB) area back into attainment for ozone pollution in accordance with the 2008 National Ambient Air Quality Standards as required by the Clean Air Act.

This could include industry-specific regulations such as flaring restrictions and fuel quality standards for cleaner gasoline and diesel all of which can lead to significant reductions in vehicle

emissions.

The Houston area needs more than small, incremental changes and "business as usual" measures to bring down ozone levels once and for all.

2) The TCEQ's greatest failure is not following through with oversight and enforcement. There must be more focus on enforcement and an increase in penalties for repeat violators.

3) We need stronger requirements in the SIP that would end unauthorized and uncontrolled industrial flaring industrial flaring.

4) Houston has been awarded billions of dollars in federal funding and private investment to help develop hydrogen technology seen as critical to reducing the country's greenhouse gas emissions. This effort with its incredible challenges will be managed by a partnership of industry, academic and supporting organizations. It is inconceivable that a similar effort can't be put together to focus on our air pollution problems.

Working with the TCEQ, such an effort would examine and help develop not-yet-available, cutting-edge, technologies and innovative ideas, with associated ranges of potential emissions reductions.

Striking developments since the 1970 amendments have been the explosion of knowledge about the nature of air pollution, and the advanced new technologies available to control that pollution. Houston's growing reliance on advanced air quality monitoring systems is a testament to the city's commitment to addressing its environmental challenges.

5) There exists a systemic problem with emissions permitting as illustrated by the recent controversy over a Pasadena tank farm. The process of evaluating pollution permit applications must include greater community outreach and education on how the process works and how residents can better participate in the permitting process.

An investigation by ICN and the Texas Tribune based on hundreds of pages of government and court records and dozens of interviews, revealed numerous ways in which large companies sidestep major source permitting. Ten recent cases provide a tutorial on how to do this.

There is no better example of applying yesterday's solutions to tomorrow's problems than the SIP using 1995 non-attainment new source review regulations.

A cleaner environment can drive economic growth and save much of the huge costs of healthcare expenses, lost productivity, and ecosystem damage. Strong economic growth, technological advancement and effective regulatory policies are why the environment is cleaner today than when I was a child. The improving air quality in Houston will require different approaches and new strategies that take into account the specific opportunities that exist going forward. Unfortunately, the SIP as submitted is a step backwards and needs to be revised.