Industries, TCEQ fight study linking death, ozone

Backed by Texas’ top environmental officials, some of the country’s biggest industries are working against a possible crackdown on ozone, the air pollutant that afflicts North Texas.

Among their main targets is a nationwide study published in 2009 that for the first time linked long-term ozone exposure to an increased risk of premature death from respiratory causes.

Related research focusing on California, published last year, found a similar association between long-term exposure and death from ischemic heart disease, a far more widespread killer.

Numerous other studies over decades already associate short-term exposures with hospitalization or death, plus a range of lesser health effects.

“What we see with ozone is very convincing,” said Michael Jerrett, lead author of both long-term studies. He is a professor and chair of environmental health sciences at the University of California at Berkeley’s School of Public Health.

The expanding evidence has serious implications for people in smoggy places like Dallas-Fort Worth. Many studies report harm at levels far below those the region sees each summer.

Only Southern California, Houston and Baltimore had worse ozone during the latest official three-year averaging period, Environmental Protection Agency figures show.

The EPA made the 2009 study a key factor in its latest assessment of ozone’s health effects, part of the run-up to a possible new national ozone standard late next year.

Industries such as coal-burning utilities, oil, gas and chemicals, manufacturers and automakers, have urged the EPA’s external scientific advisers to disregard such research.

Links between ozone and deaths “should not be considered in the risk and exposure assessment, and none of these endpoints should be used to inform policy decisions,” consultants wrote last month on behalf of 13 industry groups.

Making the same assertions is a regulator of many of those industries: the Texas Commission on Environmental Quality.

With oil, gas and chemicals as economic and political powerhouses, Texas is the only state whose environmental agency told the EPA’s science advisers that ozone doesn’t kill people.

“The available evidence does not support a consistent association between ozone exposure and mortality,” TCEQ Executive Director Richard A. Hyde wrote on March 10 to the EPA’s ozone expert panel, which was reviewing health evidence.

TCEQ chief toxicologist Michael Honeycutt expanded on that position. He told The Dallas Morning News that researchers and the EPA have exaggerated ozone’s harm.

“They’re torturing data,” he said.

Honeycutt has repeatedly opposed tighter ozone standards. In 2010, at an EPA hearing in Houston, he said Texans wouldn’t go along if it
costs something.

“EPA has failed to thoroughly examine the probability that individual citizens will simply choose to not comply with inconvenient or onerous rules,” Honeycutt said then.

Sierra Club attorney Josh Stebbins, who pressed the EPA’s science advisers last month for strong action, disputed Texas’ assertion that cleaner air is just a government imposition.

“I think a healthy, protective standard is critical to John Q. Public’s children,” Stebbins told The News. “It’s about protecting them.”

The EPA is moving toward a decision by Administrator Gina McCarthy on a possible new standard for ozone, a byproduct of emissions from industries, vehicles and other sources, by late 2015.

It would be the first change since 2008.

That year, the EPA’s volunteer Clean Air Scientific Advisory Committee reviewed the research and said the limit, then 80 parts per billion, should be no higher than 70 ppb.

The George W. Bush administration’s EPA chief at the time, Stephen L. Johnson, picked 75 ppb. His decision proved hugely controversial.

The Clean Air Act says standards must protect the public with an adequate margin of safety.

The advisers, mostly university professors with deep expertise in environmental health and statistics, declared then that 75 ppb was neither protective nor scientifically justifiable.

Johnson’s successor, Lisa P. Jackson, picked up that theme early in President Barack Obama’s first term, pledging to revisit the issue. In 2011, however, with Republicans calling the EPA a job-killer, Obama postponed any action until 2016.

That process is under way.

Health and environmental advocates want an enforceable level far below 75 ppb. They cite strong and growing evidence of harm at lower levels.

In Dallas-Fort Worth, the official three-year average, 100 ppb in 2001-2003, dropped to 87 ppb by 2010-2012. The figure for 2011-2013, still under review, is expected to remain at 87.

The average is derived from peak summer readings.

Local progress has stalled since 2007-2009, and in 2009-2011 the official reading climbed to 90 ppb. At 87 ppb, North Texas’ ozone remains far higher than many scientists say is healthy.

The American Lung Association, which has sued the EPA to force action on ozone, asked the EPA’s advisers last month to consider 55-60 ppb.

More than 2 million U.S. children live in places with unhealthy levels, association consultant Deborah Shprentz told them.

“More than 200,000 of those children have asthma, placing them among [those] most at risk,” she said. “The Lung Association urges EPA to protect their health without delay.”

The task for industry and others has become to question the science. The 2009 study on long-term exposure and death has become their focus.

Jerrett and colleagues compared ozone levels to causes of death across years among 448,000 people in an American Cancer Society research group, or cohort, of 1.2 million, one of the largest collections of human subjects ever assembled.

The 448,000 were those who lived in places with pollution monitors in the continental 48 states or the District of Columbia.

The researchers found a link between deaths from respiratory causes and long-term ozone exposure.

The prestigious New England Journal of Medicine accepted the study after what Jerrett called the most detailed editorial and peer review of any of his 150 published research articles.
Its upshot, Jerrett said, was that ozone speeds up deaths by assaulting people with acute effects during short episodes of pollution. And, over the longer term, he said, it makes them less healthy so it takes less to “push them over the edge.”

Critics note the study’s limitations. It could not track individuals’ exposure, but applied a single level to whole cities. It could not tell whether individuals stopped or started smoking after they answered their initial questionnaires.

Opponents call those fatal flaws. But Jerrett said the data and the conclusions have withstood rigorous audits and reviews, including the smoking issue.

His more recent study linking long-term ozone exposure and death from ischemic heart disease, published in the American Journal of Respiratory and Critical Care Medicine, reduces earlier uncertainties, he said.

Jerrett isn’t the only target.

Several opponents said drops in lung function among adult volunteers in exposure studies were “mild, transient and reversible,” arguing that ozone is not a threat.

Writing for the conservative Texas Public Policy Foundation, former TCEQ chair Kathleen Hartnett White and policy analyst Josiah Neeley said that without respiratory symptoms, those lung effects were not considered adverse under the 2000 guidelines of the American Thoracic Society.

The TCEQ and several other opponents also cited the thoracic society’s guidelines.

The society calls that a misuse of its statement. George D. Thurston, professor of population health and environmental medicine at New York University’s medical school, responded on the society’s behalf after an inquiry by The News.

“People have been misrepresenting what’s in there,” Thurston said. The guidelines refer to healthy adults, not to more vulnerable people such as children with asthma or the elderly, he said.

“If you start adding up all the susceptible people, you’ve got a big chunk of America,” he said.

The society probably will speed up a planned revision in light of the guidelines’ use against a tougher ozone standard, Thurston said. He was a co-author of Jerrett’s 2009 study.

Jerrett said the attention seems like a positive sign.

“It’s a good indication that we’ve done our job in doing sound science,” he said. “I certainly view that as a good thing.”

Follow Randy Lee Loftis on Twitter at @RandyLeeLoftis.

Did you see something wrong in this story, or something missing? Let us know.
that wacko Rick Perry flunkies and self-interested industries are ignoring science and fighting new ozone standards - they've been doing that for a decade. The real question is how that attitude has affected the integrity of the clean air planning process, which assumes a serious state effort to lower smog levels. The fact that the region has made no progress in cleaning the air in the last five to six years despite two state plans that were "guaranteed" to obtain safe and legal air shows how serious these plans really were. So it's kind of a big oversight that the story doesn't mention that yet another new plan is being written by the state that even local officials are chaffing at, as well as the next meeting of local air planners on April 17th in Arlington. Some of us wish the DMN would resume regular environmental beat reporting so that your readers could be better follow this process, which is the only public window into these air plans.

Doodada
Dallas and surrounding cities have a terrible air pollution problem and has for many years. I don't need science to tell me that, it's obvious and I have to smile at all these people arguing to live in the polluted filth like it's an American right. You people have been brainwashed well...

Eric Foster
The solution to ozone is to get on your private jet and fly to your resort home in Bermuda or Aspen silly!

Slim Whitman
Nice of the author to include zero city to city context. The recent weighted average of ozone alert days in LA has been 81 per-year in Dallas it's 13. LA has higher ozone numbers much more often. You'd expect everyone there to be dead by now.

mobile
more than 2 million children .... how many are in DFW? LA could have 80%. You never compare the DFW level to LA - remember that they have many more ozone alert days than we had last year. The health study was based upon Calif numbers not TX.