

# Toxic emissions rise in California

By Edward Ortiz, Sacramento Bee

Toxic chemicals released into the environment by manufacturing plants and facilities in California rose in 2011 after steady annual declines since 2007, according to the U.S. Environmental Protection Agency's yearly Toxic Release Inventory report.



The TRI report also found that releases decreased in Sacramento and Solano counties, but increased year over year in Placer and Yolo counties in 2011, the latest year for which the EPA has toxic release information.

Agency data show that the Valero Refining Co.'s petrochemical refinery in Benicia – in Solano County – was one of the state's top 10 largest releasers of toxic chemicals in 2011, accounting for more than a half-million pounds of toxics released.

The largest emitter of toxics in Sacramento County was the Procter and Gamble plant on Fruitridge Road, which released more than 427,000 pounds of toxics, according to EPA data.

Nationwide, overall releases of toxic chemicals rose in 2011 for the second year in a row, the TRI report shows. Total toxics released increased by 8 percent from 2010.

In California overall, the EPA's data found a 10 percent increase from 2010 in total pollution added to the environment.

In the state report, pollution released into the air statewide

fell 13 percent in 2011, but releases to water and land increased by 10 percent and 9 percent, respectively.

The TRI yearly reports are used as indicators but do not establish what caused the numbers to change.

“There could be any number of different reasons for these numbers to go up or down,” said Lily Lee, toxics release inventory coordinator with the EPA.

Economics, however, may be a factor, she said.

“I have heard from individual facilities that have told me that economic activity may explain why release amounts have gone up in their facilities,” Lee said.

But Lee said the EPA analyzed a 10-year period of national TRI data in order to establish whether there is a link between economic indicators and increases or decreases in toxic releases. That analysis did not find a direct link between the two.

“The caveat is that the TRI report is a national grouping together of a lot of places and all kinds of industries,” Lee said.

Established by a 1986 law, the TRI report is one of the most comprehensive U.S. public pollutant databases. It offers a big-picture look at what is released into the environment in several industry sectors that include manufacturing, metal mining, electric utilities, commercial hazardous waste facilities and petrochemical facilities.

The public report – which encompasses 682 chemicals and categories of chemicals considered by the EPA to be harmful to the environment or human health – is used as an indicator of releases and not whether, or to what degree, the public is exposed to a certain chemical.

The broad strokes of the TRI report may be its biggest

limitation, said Anthony Wexler, director of the Air Quality Research Center at the University of California, Davis.

“When you’re talking about any increases or decreases – that’s too crude a measure,” said Wexler. “Some toxic compounds may be emitted in large quantities but have very low toxicity, whereas other compounds may be emitted in small quantities but be very toxic. It’s the combination of these two factors that govern how ‘bad’ a release is.”

Some of the most problematic substances released are those that persist in the environment and in body tissue. In 2011 there was a 24 percent rise in such chemical releases in California.

One of those substances is lead, which saw a 3 percent increase in 2011, with about 4.9 million pounds added to the environment. Lead has been linked to nerve and brain damage – and other health problems – in children and adults.

For Wexler, of equal or greater concern may be what gets sent into the atmosphere under our noses daily – tailpipe emissions.

“Those kinds of releases are not like from an industry, where releases have to be reported,” Wexler said. “It’s you and me, as well as trucking and bus companies – these are also emitting these (carcinogens).”