

THE NATION

# Study adds to doubts about acid-rain law

## Chemical levels still climbing in lakes, report says

By Traci Watson  
USA TODAY

A study of lakes in New York's Adirondack Mountains adds to a growing body of evidence that a widely hailed U.S. program to control acid rain is unlikely to do so.

The study, released Monday by the General Accounting Office, concludes that despite cutbacks in the emission of pollutants that cause acid rain, the levels of one important family of acidic chemicals continue to rise in 25 Adirondack lakes.

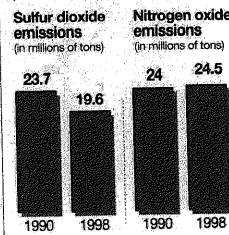
The report's conclusions, which are consistent with previous studies, came as no surprise to scientists. Many had decided well before the report's publication that the 1990 law designed to heal high-acid lakes and streams would probably prove inadequate.

"I would be very surprised if you would find anyone who would say (the 1990 law) would solve the problem," said environmental engineer Charles Driscoll of Syracuse University.

But a spokesman for utility companies, Dan Riedinger of the Edison Electric Institute, said it is too early to

### Acid rain emissions

Sulfur dioxide emissions continue to decline, but nitrogen oxide emissions have increased slightly. Two-thirds of the sulfur dioxide comes from power plants, while more than half the nitrogen oxide pollution comes from vehicles.



Source: GAO

By Quin Tien, USA TODAY

evaluate whether the law is working because many of its provisions are still being phased in.

Most acid rain is born in car engines and power plants, where burning fossil fuel creates the pollutants sulfur dioxide and nitrogen oxides. The chemicals enter lakes and streams by drifting down from the sky or by riding to Earth in raindrops and snowflakes.

Like a shot of vinegar, the chem-

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icals make water more acidic. That leads to changes harmful to fish and other forms of life.

High levels of acidity have plagued lakes and streams in the Northeast, Midwest and Appalachian Mountains for decades, spurring Congress in 1990 to restrict the acid-causing pollutants. Since the law passed, emissions of sulfur dioxide have dropped, while emissions of nitrogen oxides have remained roughly the same.

The report found that sulfur compounds in 48 of the 52 mountain lakes declined from 1992 through 1999, while nitrogen compounds rose in 25 of the 52. The reason, the report said, is that land and vegetation around the lakes already have absorbed or neutralized as much nitrogen as they can, causing any additional amounts to slide off into the water.

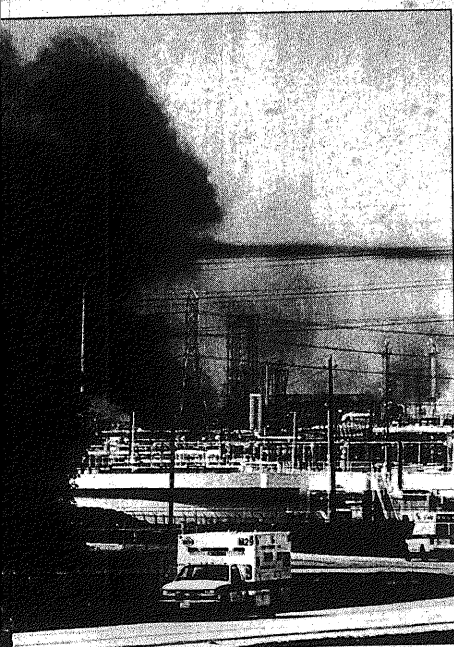
A 1999 study in *Nature* found that levels of sulfur compounds have

dropped dramatically in many lakes and streams in the Northeast and upper Midwest, but the acid levels are not falling in sync. The study's authors concluded that such high levels of acidic chemicals have washed over the land for so long that acid-neutralizing minerals have all been used up. It might take years for them to build up again, scientists say.

Even EPA officials acknowledge that the 1990 law to control acid rain probably will not return the most acid-sensitive lakes and streams to their original, unpolluted state. The law requires sulfur dioxide emissions to be cut roughly 50% from 1980 levels.

EPA officials said they're doing all they can to solve the problem and point to other programs that were developed to fight smog but could reduce acid rain, as well. A slew of recent regulations that crack down on pollution from cars, sport-utility vehicles and Midwest power plants will take effect in the next 10 years, officials said, and that might be enough to restore all but the most fragile bodies of water.

Still, some scientists argued that every measure that isn't outrageously costly or difficult should be taken. "Our science isn't good enough to tell us how much (pollution reduction) is needed," said acid-rain expert Steve Kahl of the University of Maine. "I say, let's make reasonably easy fixes, and continue to make progress."



By Tim Johnson, AP

rocked again: Emergency vehicles speed to the Phillips Petroleum plant and sparked a fierce Monday, killing one worker and injuring at least 61 people.

## Chemical plant near Houston hit by blast

Associated Press

DENVER, Texas — An explosion at a Phillips Petroleum chemical plant and sparked a fierce Monday, killing one worker and injuring at least 61 people. At least 10 people were severely injured in the plant's third fatal explosion in 11 years.

and anxiety-related disorders, hospital spokesmen said.

Phillips spokesman Norm Berkley said the plant employs about 850 and said about 600 would have been there at the time of the explosion.

Workers in nearby plants and area residents were urged to stay indoors. Schoolchildren were kept inside after the bell rang. Smoke continued to billow from the plant for hours after the blast and was

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