Despite treaty ban, U.S. farmers continue to use methyl bromide

By Rita Beamish, The Associated Press
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WATSONVILLE -- Shoppers rifle through store shelves brimming with succulent tomatoes and plump strawberries, hoping to enjoy one last round of fresh fruit before the Western growing season ends. There is no hint of a dark side to the blaze of red.

Strawberries are a painful subject for Guillermo Ruiz. The farmworker believes his headaches, confusion and vision trouble stem from a decade working in the fields with methyl bromide, a pesticide that protects the berries with stunning efficiency.

Cheri Alderman, a teacher whose classroom borders a farm, fears her students could inhale a dangerous whiff of the fumigant as it drifts from the adjacent strawberry field. "A little dribble of poison is still poison," she says.

The concerns stretch globally.

Other nations watch as the United States keeps permitting wide use of methyl bromide for tomatoes, strawberries, peppers, Christmas trees and other crops, even though the U.S. signed an international treaty banning all but the most critical uses by 2005.

The chemical depletes the earth's protective ozone layer and can harm the human neurological system, an increasing concern as people settle further into what was once just farm country.

Methyl bromide's survival demonstrates the difficulty of banishing a powerful pesticide that helps deliver what both farmers and consumers want: abundant, pest-free and affordable produce.
The Bush administration, at the urging of agriculture and manufacturing interests, is making plans to ensure that methyl bromide remains available at least through 2008 by seeking and winning treaty exemptions. Also, the administration will not commit to an end date.

The administration's "fervent desire and goal" is to end methyl bromide's use, said Claudia McMurray, deputy assistant secretary of state.

The amount of the fumigant that the administration requested under treaty exemptions for the next two years is lower than in 2005. Golf course sod, for instance, won an exemption this year but not next.

"I can't say to you that each year the numbers (of pounds used) would automatically go down," she said.

The reason is that farmers who each year grow Florida tomatoes, California strawberries, Georgia peppers and North Carolina Christmas trees worth billions of dollars are struggling to find a suitable replacement.

Alternative organic techniques are too costly, and substitute chemicals are not as effective, growers say.

"We're not totally clueless. We've seen this train coming. We've tried every alternative and put every engine on the track, but none of them run," said Reggie Brown, manager of the Florida Tomato Committee.

**Wipes out plant parasites**

Odorless and colorless, methyl bromide is a gas that usually is injected by tractor into soil before planting, then covered with plastic sheeting to slow its release into the air. It wipes out plant parasites, disease and weeds. It results in a spectacular yield, reduced weeding costs and a longer growing season.

Workers who inhale enough of the chemical can suffer convulsions, coma and neuromuscular and cognitive problems. In rare cases, they can die.

Less is known about the long-term effects of low levels of contact, said Dr. Robert Harrison, an occupational and environmental health physician at the University of California, San Francisco.

The U.S. signed the Montreal Protocol treaty, committing to phase out methyl bromide by 2005 as part of the effort to protect the Earth's ozone layer.

A provision allows for exemptions to prevent "market disruption." The U.S. has used it to persuade treaty signers to allow U.S. farmers to continue using the chemical.
That exemption process leaves the U.S. 37 percent shy of the phaseout required by 2005, with at least 10,450 tons of methyl bromide exempted this year. While that compares with about 28,080 tons used in 1991, this year's total is higher than it was two years ago.

U.S. officials are heading to a Montreal Protocol meeting in Senegal on Dec. 7 to begin negotiations on exemptions for 2007 and are preparing requests for 2008.

That is not what the treaty envisioned, said David Doniger, senior scientist with the Natural Resources Defense Council. In the 1990s, he worked on the protocol as head of ozone programs for the Environmental Protection Agency.

"Nobody expected you would use the exemptions to cancel the final step of the phaseout or even go backward," Doniger said.

**Health and safety standards**

With methyl bromide probably sticking around for several years, the EPA is re-examining its health and safety standards.

California, which grows more than 85 percent of the nation's strawberries and other methyl bromide-dependent crops, launched regulations last year to improve its strictest-in-the-nation protections for farmworkers and others.

The increased protections are not enough for Alderman, a teacher at Pajaro Middle School in the California agricultural belt south of the Santa Cruz beaches.

Kids chase balls across the grassy playing field. Opposite a chain link fence, just beyond the range of an errant baseball, is a field where strawberries grow.

When air monitoring detected elevated methyl bromide levels four years ago, Alderman joined the outcry. County officials say they pressed the grower; this fall he used a different chemical on the fields nearest the school.

**Seeps into the air**

Alderman, however, remains concerned because government scientists say methyl bromide seeps into the air. "We have that nice ocean breeze that blows it all this way," the teacher said.
Even California's required buffer zones and ban on applying methyl bromide within 36 hours of school time is not enough, she said. The school draws youngsters on weekends too, and families live nearby. "It's ridiculous to think that as long as we don't do it on school days, then were OK," she said.

The American Association of Pesticide Control Centers logged 395 reports of methyl bromide poisonings from 1999 to 2004. A national total remains elusive because farmworkers often do not seek medical care.

Advocates for farmworkers contend in a San Francisco Superior Court lawsuit that even California's exposure limits to protect neighbors are too lax. State regulators lately have emphasized stricter enforcement and tougher penalties.

Ruiz and Jorge Fernandez, two California farmworkers, say they saw plenty wrong in the strawberry fields they worked, starting with the dogs, birds and deer that lay lifeless when the workers arrived to remove plastic sheeting from fumigated fields.

"That's how we knew this was a dangerous chemical," Ruiz Fernandez said.

His own symptoms added concern. "My eyes watered. I threw up. It gave me headaches," he said.

Ruiz and Jorge Fernandez say they had developed nervousness and depression by the time they stopped working in 2003. They saw the plastic come loose in high winds or leak when animals punctured it.

Other workers had symptoms, they said, but kept silent because they feared for their jobs.

**No alternative, growers say**

The two are in a disability dispute with their former employer, who denies allegations that workers were forced to remove plastic sooner than required.

Growers feel hamstrung. Despite millions of dollars spent on research, no alternative addresses all soils and pests as well as methyl bromide, they say.

"It just works so good and just does so many things so well," said Mike Miller, a strawberry grower in Salinas.

He and other farmers believe the fumigant is safe when used correctly.

"I'm comfortable working with the product and educating our personnel," said Jim Grainger, a fourth-generation farmer who grows 700 acres of steak tomatoes in Florida.

Among those pushing for continued exemptions are financial heavy hitters such as the family of Floyd Gottwald, vice chairman of methyl bromide producer Albemarle Corp. of
Richmond, Va. The Gottwalds contributed more than $420,000 to President Bush's campaigns and to other Republicans over the past six years.

The size of the U.S. inventory of methyl bromide inventory is secret. The EPA refuses to disclose how much, saying the figure is confidential business information. Doniger's group says in a suit against the agency that the amount exceeds 11,000 tons.

Its continued use makes people such as Lynda Uvari uneasy.

In her neighborhood of Ventura, people thought they had the flu a few years back.

Then they noticed that their illness coincided with fumigation of a nearby field. They settled a suit with the strawberry grower.

Now Uvari wonders about methyl bromide's legacy, even whether it could be linked to her son's endocrine problems.

"That's in the back of our minds all the time," Uvari said. "You always question."