EPA's Predicament Over Regulating Pesticides

The agency wants to overturn a law that makes it pay for the pesticides it bans

LAST year on 6 August, in St. Joseph, Missouri, two policemen, who were investigating a possible break-in at the old Byers Warehouse at 18th and Penn Streets, found trouble that they had not planned on. If a burglar was in there, the officers did not find one because once they entered, they were quickly overcome by toxic fumes.

The policemen had inhaled air poisoned by EDB, the infamous grain fumigant banned in 1983 by the Environmental Protection Agency after it was found to pervade food products nationwide. At Byers Warehouse, located in a low-income residential neighborhood, the corrosive chemical was leaking from some of the hundreds of metal cans and drums packed into the building's basement and upper two floors. The policemen eventually recovered, but the incident precipitated a community uproar and a congressional inquiry.

Today, nearly 4 years after the federal government banned EDB, hundreds of thousands of gallons of the leftover chemical have still not been destroyed. The party that has borne the brunt of criticism for the St. Jo's incident and the existence of the EDB stocks is not some shady company, but EPA itself. Under federal law, EPA is responsible for the disposal of the EDB at Byers Warehouse.

To EPA officials and others, the problems with EDB in Missouri illustrate the terrible bind that the agency is in because of a law passed by Congress in 1972. According to the provision, whenever EPA cancels a chemical in an emergency, the agency becomes responsible for compensating the pesticide manufacturers for their remaining inventory and for the actual task of disposing of the hazardous substance. So far, EPA has banned four pesticides on an emergency basis and now faces the prospect of paying hundreds of millions of dollars out of the agency's budget—particularly from the pesticides program—money that otherwise would be spent regulating chemicals.

There is probably no one more frustrated by the law than John A. Moore, EPA's assistant administrator for pesticides and toxic substances. In his opinion, the indemnification rule puts the agency in a "ludicrous" predicament of having the duty to regulate pesticides and also to pay for and dispose of them when they fail federal safety standards. The rule constitutes "an insurance policy that is unique in the federal government," and that ought to be cancelled by Congress, Moore said in a recent interview with *Science*. He and others argue that no other industry in American commerce, including the makers of cars and pharmaceuticals, is compensated for losses if one of its products is recalled because of defects. But Jack Early, president of the National Agricultural Chemicals Association, says that the law is "a reasonable government response to potentially catastrophic losses that could threaten the nation's ability to produce food."

Changing this law, which was passed in 1972, is now Moore's top priority for the pesticides program. In recent months, problems arising from the indemnification and disposal rule have become acute. The pesticides that qualify for compensation and EPA's disposal program are EDB, dinoseb, 2,4,5-T, and Silvex. These cancellations could cost the agency as much as $200 million for indemnification and for storage and disposal, and have led to a myriad of technical problems, according to agency officials and Congressional staff.

Dinoseb poses the biggest bill because of the sheer quanity of the herbicide remaining after it was cancelled a year ago. EPA estimates there are 3 million to 5 million gallons of dinoseb left and it will cost the agency at least $80 million for compensation and disposal. The pesticides program's annual budget is $60 million. For the past 4 years, EPA has tried unsuccessfully to develop a safe way to get rid of more than 300,000 gallons of EDB. As for the 40,000 gallons of 2,4,5-T and 1.3 million pounds of Silvex left over, the agency cannot find an incinerator facility that will accept the dioxin-tainted material.

Some environmental groups charge that the indemnification rule recently deterred EPA from suspending the termite killer chlordane on an emergency basis because the decision would have cost the agency tens of millions of dollars to compensate manufacturers. In August, the agency announced an agreement with chlordane producers to phase out its use over the next few months. Moore says that "even if I had all the money in the world, I wouldn't have issued an emergency suspension" because the toxicity data on chlordane failed to meet the legal requirement that the chemical poses an "imminent hazard." (The finding of an imminent hazard is one of the requirements for an emergency suspension, which, in turn, triggers the indemnification rule.) However, the Coalition Against the Misuse of Pesticides has sued EPA to force it to issue an emergency suspension that would take chlordane off the market immediately.

There is currently a move afoot in Congress to strike the compensation provision, which is part of the federal pesticide law known as FIFRA (the Federal Insecticide, Fungicide, and Rodenticide Act). Senator Patrick J. Leahy (D–VT), chairman of the Committee on Agriculture, Nutrition, and Forestry, and Representative Mike Synar (D–OK), chairman of the Government Operations Subcommittee, are leading efforts to overturn the provision.

But they face a hard fight. The indemnification rule is "very, very important to us," says Luther Shaw, a spokesman for the chemicals association. The chances of its recision are also shaky in light of the fact that it is only one of several controversial reforms of FIFRA that are being vigorously debated by members of Congress, the pesticide industry, farmers, and environmental groups.

The pesticides industry argues that the federal government has an obligation to protect pesticide manufacturers, distributors, and farmers against heavy financial losses that are incurred when EPA issues an emergency suspension of a chemical. Early of the chemicals association points out that pesticides must meet federal requirements before they are approved for marketing. If EPA subsequently concludes that the pesticide poses an imminent hazard, then the federal government should compensate owners of the pesticide, Early contends.

But critics of the rule counter that the pesticide manufacturers have long known about EPA's safety data requirements, but still have not provided adequate information. The four pesticides cancelled so far under emergency suspension are part of a group of more than 600 active ingredients that were approved prior to 1972, when Congress passed more stringent standards. One of these reforms requires manufacturers to submit additional safety data, particularly on whether the chemicals cause cancer or

birth defects, in order to reregister their products. Synar testified before the Senate Agriculture Committee in July that "pesticide producers have long known the data submission requirements for reregistration. If producers . . . do not have scientific studies to support reregistration, they do so at their own risk. Producers should not be . . . indemnified for these business risks."

Synar and others also contend that farmers are compensated for remaining pesticide stocks whether EPA indemnifies or not. A staff aide to Representative George Brown (D–CA) says that manufacturers give credit to their customers for leftover inventory and then consolidate their indemnification claims to EPA.

Moore is scrambling to find enough money just to pay for storage of the four pesticides and the development of disposal methods for EDB, let alone the compensation bills. The problem with indemnification, he says, is that "it's an unbudgeted event" that disrupts program planning in the pesticides office.

The money for indemnification has not always come out of EPA's funds. After 2,4,5-T and Silvex were pulled off the market in 1985, the $20 million in indemnification was taken from a judgment fund from the federal government's general treasury. But then the General Accounting Office told EPA that in the future the money had to come mainly from the pesticides program budget.

So to pay for indemnification and disposal activities, the Office of Pesticides Programs is dipping into the pockets of other projects intended to accelerate reregistration and to gather more toxicity data, according to EPA documents. So far, only 2 of the 600 "old" active ingredients have been fully reviewed as part of the reregistration process. The pesticides program this year has already paid out $878,000 for storage and disposal, almost one-sixth of its total budget. Moore says he needs another $2 million to support "only the most critical disposal activities."

Moore says that he is beset with even bigger problems related to the technical aspects of storage and disposal. There are a limited number of experts on staff to tackle complex chemical engineering tasks, he contends. And, even though EPA does not have the legal obligation to store cancelled pesticides until it is ready dispose of them, the agency has taken possession of EDB and dinoseb stocks because of their corrosiveness.

EDB has caused the most headaches so far because the agency has yet to figure out a way to eliminate the pesticide. Burning it was ruled out because the pesticide corroded an incinerator, says Judy Heckman, who manages EPA's disposal program. EPA scientists then developed a laboratory method to convert EDB into solvents that would be saleable, an environmentalist's dream of resource recovery.


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EPA official John A. Moore. *The compensation rule "is an insurance policy that's unique in the federal government" and ought to be cancelled.*

The agency contracted with a Missouri company, Gard, Inc., to scale up the process. The plan was to put metal containers of EDB, which is highly volatile, directly into a shredder that would chew up the cans and separate out the chemical. Then the liquid would be fed into another machine and transformed into the solvents.

But "there were continuing problems," Heckman says. The leftover 328,000 gallons is actually a mix of four different formulations, which raised questions whether the scale-up method would work. Then "there were a number of mechanical failures with the shredder. We had to manually empty the containers," Heckman explains. After spending more than $1 million on recovery, the agency has now abandoned the chemical process and is reconsidering incineration because of advances in technology.

In the meantime, storage problems with EDB have gotten the agency into hot water with members of Congress and Missouri citizens. EDB, as well as 2,4,5-T and Silvex, were stored at Byers Warehouse by Vulcan Chemical Company, which was holding the pesticides there until EPA accepted them for disposal. After authorities found that leaking cans of EDB, the city of St. Joseph's sued EPA to get the pesticide out.

Shortly thereafter, EPA did take possession of the pesticide, but storage problems continued. Over the next several months, the corroded cans were repacked into larger containers, and then shuttled from the warehouse to the parking lot of an EPA hazardous waste laboratory in Kansas City—which also sued the agency to get the chemical out of its backyard—and then finally to Liberty, Missouri. There much of the EDB has been decanted into a dozen railway tank cars, but there is still some left in cans. Moore says that EPA is pushing the state limit on the number of railway cars containing hazardous waste.

As for the other chemicals, Union Carbide Corporation has sued EPA to force it to accept the stock of 2,4,5-T and Silvex that still remains in Byers Warehouse. Dinoseb worries agency officials because it is even more corrosive than EDB. "It's a hopeless situation," says Moore. "If I could get only one thing from Congress on FIFRA, it's language on storage and disposal."

Synar, who has held hearings on EPA's problems with indemnification and disposal, argues that industry should be responsible for the disposing of cancelled pesticides. Companies are better equipped to work out solutions because they create the chemicals in the first place, he says. Early concedes that some large pesticide producers may be more technically capable than EPA of handling storage problems, but he argues that "the problem is frequently one involving small producers, formulators, and users." The aide to Representative Brown says, however, that experience with the four cancelled pesticides suggests that producers recall their products to maintain good relations with their customers.

It was Rachel Carson's *Silent Spring* that provided the impetus for the 1972 reforms in federal pesticide law. Now, on the 25th anniversary of the book's publication, Congress is again wrestling with more reforms. Last year, a fragile alliance among competing interest groups almost got a new bill passed. This year progress is presently at a stalemate because the House agriculture and energy and commerce committees cannot agree on conferees to defend the House version of the FIFRA bill. The issues themselves are numerous and complex, including the regulation of ground water, levels of pesticide residues in water, limiting the liability of farmers for environmental damage caused by pesticides, patent extension for pesticides, and compensation by producers of generic pesticides to the original manufacturer for use of its toxicity data on a chemical. Since last year's discussions, dinoseb has forced the indemnification issue into greater prominence. Brown's aide says that if Congress does not pass the FIFRA bill this year, then the next shot at it likely will not come until 1990, after a new Congress settles in. ■ MARJORIE SUN