Chemical ruins Preble dairyman

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The misfortune of Loren A. Dillman, Preble County dairy farmer, could be harmful to the health of Ohio's dairy industry.

But that doesn't bother Dillman nearly as much as his fears about what it may be doing to the health of his family—and to the health of his fellowmen.

The misfortune: The state has put Dillman out of business because his milk is contaminated by a widely used chemical compound.

"THEY WERE not wishing publicity on this. The state wanted to keep it all hush-hush. But no one knows what is going to be the overall problem if you or I or our children are subjected to this thing. So the part now is getting this to the people's attention," the farmer says.

The misfortune has many facets.

There's the fact Dillman is a dairy farmer in name only these days because he hasn't sold a drop of milk since Aug. 12.

There's the fact the Foods, Dairies and Drugs Division of the Ohio Dept. of Agriculture won't let him sell the milk because it's adulterated by a chemical compound known by its brand name, Aroclor 1254, and its chemical name, polychlorinated biphenyl.

THERE'S THE fact the milk is adulterated because the cows that produce it are contaminated by the chemical.

There's the fact the cows were contaminated because they ate silage contaminated by the chemical.

There's the fact the silage was contaminated because an epoxy sealing paint on the inner wall of a seven-year-old silo "broke down" and released the chemical into the silage.

There's the fact polychlorinated biphenyls (PCBs for short) have been identified as one of those man-made chemical compounds which, like DDT, somehow work their way into the environment and are persistent about remaining there and accumulating.

THERE'S THE fact little is known yet about long-range insidious effects of PCBs on living things. But there is considerable evidence they can poison aquatic life, interfere with wildlife reproduction, accumulate in body fat, cause lesions in the liver nausea when the dosage is severe and kill if they damage the and skin, induce vomiting and liver badly enough.

There's the fact 20 Dillman calves died last winter—an unusually high mortality rate—and two adult cows died last summer of "some kind of poisoning."

A post-mortem on one of the cows revealed its liver was heavily damaged and there had been massive hemorrhaging in the stomach. Later testing found PCB residue in the animal's tissues.

There's the fact the Dillmans butchered a steer and stored the meat in a freezer, then decided to have it tested for PCB residue before they ate it. There was a concentration of PCB in the meat—high enough to make it inedible.

THERE'S THE fact Dillman's wife has a mouth infection which doctors cannot identify, and there's concern the PCB is involved.

There's the fact Dillman's son and partner, Bill, was hospitalized earlier this year with colitis, and now wonders if PCB contamination had anything to do with the intestinal infection.

There's the fact the younger Dillman's 12-year-old son, Mike, is hospitalized with osteomyelitis (a bone infection) and some liver "abnormalities," and the family wonders if PCB contamination is related to that.

There's the fact the elder Dillman is having muscular problems because his body will not assimilate vitamin E properly, and he wonders if PCB contamination has contributed to that.

"AND IT HAS killed chickens.

And a field that we've been dumping the contaminated milk on and hauled the contaminated silage out on is condemned indefinitely," Dillman says.

"We don't know how soon, if ever, we'll ever dairy again. My herd is ruined and ready for slaughter at the time when it's safe. We've got all these mysterious illnesses. I don't have any animosity because they shut me off from shipping milk. But I think they should stop foot dragging because I think this is more serious than we've ever been told."

The "they" on Dillman's mind is the Foods, Dairies and Drugs Division and the Monsanto Co., PCBs, and not enough is being this country's sole producer of Aroclor 1254, or any PCB compound by any other name.

The dairy farmer's complaint about a lack of speed concern his belief not enough is being done to determine the effects of

done to determine how many other silos in Ohio and elsewhere may be causing food chain contamination as his was.

"I FEEL this is absolutely the poorest coordinated move to try to clear up something I have ever seen," he says.

"Monsanto knew two years ago this stuff was dangerous. The state found the first contaminated silo way last February, yet they did nothing to notify anybody. Lord only knows how many silos have been built containing this stuff . . . Nobody could care less how much they contaminate just so they make the almighty dollar."

Both the state and Monsanto share Dillman's concern over the serious implications of PCB contamination. But they firmly disagree with the suggestion there has been any "foot-dragging" or that the milk adulteration situation poses any health hazard for the public.

"There is one theme that should be in this," says Dr. David A. Hall, chief of the Foods, Dairies and Drugs Division. "Try not to scare hell out of the milk market. There is absolutely nothing wrong with Ohio's milk supply. It is being checked constantly and will continue to be checked constantly."

Hill confirmed the first PCB contamination of milk was discovered early this year. The discovery apparently was the first in the nation, he says.

"OHIO HAS for years been maintaining a surveillance testing program of milk offered for sale," he notes. "We have done it just to make certain there are no residues of pesticides or other chemicals in the milk. Periodically there have been herds not allowed to ship milk because of pesticide residue. But the Aroclor is a new problem this year."

The division chief says there have been "four or five" dairy farmers thus far affected by the contamination. Each was ordered to cease all milk shipments until the PCB residue in their milk dropped to a safe-for-consumption "tolerance level" set by the U.S. Foods and Drugs Administration, he says.

All herds but Dillman's apparently have sufficiently cleared their systems of the chemical to make their milk safe. Their owners have resumed milk shipments.

One of those herd owners is George Schwarzwalder of Big Prairie, a small community near Wooster.

SCHWARZWALDER, who has filed a $125,000 damage suit against Monsanto and the Michigan Silo Co. of Massillon, recalls his situation well.

He was ordered last February, he says, to stop shipping milk because an apparent DDT residue had been detected by the state's routine surveillance program.

"I was surprised because we hadn't used any DDT for 15 years," he says. "There had been other chemicals come along that were just as effective and not as persistent as DDT, so we thought there was no reason to stay with that.

"But they checked our feed and found there was some kind of residue in the silage, which they thought at first was DDT. Then, after several tests that found reactions similar to DDT, they concluded something else was involved. On our suggestion, they checked the silo coating, which was cracking and peeling off, and found it was highly contaminated."

SCHWARZWALDER said his cows were taken immediately off of the contaminated silage and put on other feeds. After four months and one day, the animals' systems were sufficiently cleared of the PCB to make Schwarzwalder's milk safe for shipment again.

Hill says the cows apparently rid their bodies of the PCB through a natural process of consuming their own body fat.

"After a period off the silage, which is a high protein diet, the animals are going to use up some of their own body resources to maintain production," he explains. "Since that is associated with the fat where the PCBs tend to accumulate, they lose weight and are excreting the PCB as they do so."

SCHWARZWALDER says he, like Dillman, was completely cut off from his sole source of income while he waited for his herd to clear itself of the PCB.

He says he also had an unusually high number of calves (15) die last winter, and he is now experiencing breeding problems with some of his cows.

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"We've had much more problems during the last year than we ever had before. Some of it probably is coincidence, but we do attribute the deaths to this Aroclor. We never had losses like that before," he says.

Schwarzwalder's attorney, Richard Kauffman of Wooster, says the suit against Monsanto and the Michigan Silo Co. claims damages are due for a four-month loss of milk and herd.

"I CLAIM Monsanto is liable on the basis the product and the resulting effects are solely their responsibility," Kauffman says.

He also has proposed a satisfactory settlement would be for Monsanto to compensate Schwarzwalder for his milk loss, then buy the farmers' entire herd "and isolate the herd at the state's research center here in Wooster and feed it the contaminated ensilage (silage) and see what happens.

"I think the only way anybody can tell what's really happening is to take these contaminated herds and sacrifice them," he says. "I don't think people need to get frightened about this thing. But it's not the type of thing you play cozy with."

"THIS IS something so brand new on the scene that no one has had any opportunities to get into the work and get any of the answers yet," he says. "But we have tried not to leave any stone unturned.

"We did supply to the National Silo Assn. early in the game a letter stating what we had been running across in these silos so they could alert all of the silo companies throughout the United States as to what we had been encountering.

"We also supplied to all milk producer federations in Ohio basically the same information so they in turn could alert their individual member producers. And we have met with all surrounding states through the Central States Food and Drug Assn. and appraised them of the Aroclor situation and what they could expect — and we've alerted the food and drug officials of the United States and given them insight into what we have.

HILL SAID the state has had good cooperation from Monsanto in trying to determine the scope of the milk contamination situation.

A spokesman for Monsanto's Organic Chemicals Division in St. Louis confirmed Monsanto scientists have "been in contact with Ohio officials in the past."

"And they agree with your state people's judgment that the levels at which the Aroclor residues have been found probably would not be harmful to humans. The levels would be so low so as to not affect humans," he said.

The Monsanto spokesman also said the company first became aware of the possible hazards of PCB compounds in 1966 through work being done by two Swedish scientists.

"AND ABOUT two years ago we came up with a program to restrict the use of the product," he says.

That program includes:

—Helping to identify the substance in the environment.

—Launching an animal feeding study to determine the toxicity of PCBs.

—Alerting all customers "to handle this material with the greatest care and to be specifically watchful to see that none escapes into the environment."

—Taking a "critical look" at the company's manufacturing process to assure that no PCBs escape into the environment via that process.

—Launching studies to determine if PCB compounds can be made biodegradable (decomposable).

—Developing alternate products which retain the functional characteristics of PCBs and are safe to the environment.

—Voluntarily deciding last August to withdraw the sale of PCB compounds for "open system" uses.

THE SPOKESMAN said interim findings from the feeding study indicate there "appear to be no effects on animals at all at various levels of intake."

"But we voluntarily withdrew the product from sale to the open environment because we realized that all evidence pointed to the fact that the PCBs are persisting in the environment and building up in the environment," he said.

Hill says the number of dairy herds thus far affected by the PCB is too small to establish any averages that would help predict how long the chemical might remain in an animal's body.

"But the important thing is not the number of herds that have been affected," he says. "It's that it's a tremendous problem to the herd involved. Heck fire, this is the dairy farmer's only livelihood. We're sorry there's even one herd. We sympathize with them and do everything we can to help."

DILL MAN AGREES his involvement in the PCB problem has taken away his livelihood. But he is not so certain the state really cares, he says.

"We got a telephone call at 10 p.m. on Aug. 12 that our license would be suspended the next day because of a pesticide contamination," he recalls. "But since then, they've told us nothing. All they've done is tell us we are kicked off."

The Preble County dairy farmers figures he could lose as much as $30,000 before his herd is back in production. Part of that loss would be a $4,000 (insurance value) silo he has torn down because it is contaminated and $6,000 he spent on construction of anew silo. The rest will be a loss in milk sales.

Paul L. Maughan, membership relations manager for the Miami Valley Milk Producers Assn., says a dairy herd the size of Dillman's (an average of 40 cows in production at all times, and overall herd size of about 100 head) normally produces about 30,800 pounds of milk a month. That would put about 3,488 gallons of milk on grocery shelves.

MAUGHAN SAID the PCB contamination of the Dillman herd, and that of a nearby neighbor who was banned from shipping only a week, "are our first record of any milk in this area being involved in anything like this. There has been no contaminated milk in this area before."

One of the Dillman family physicians, Dr. Joseph Zore of Richmond, Ind., says he can understand the family's fears and the PCB compound may be involved in some of their illnesses, especially because they had been drinking raw milk from their cows.

"But I personally don't think there is any connections between the infections or anything else," he says. He adds:

"The boy (12-year-old Mike) has a bone infection — osteomyelitis — which is fairly common as far as bone infections go.

"WE DID DO a study of his liver because when he first came in he had diarrhea and there were some abnormalities. That's where this chemical thing came into play, and we do intend to send some specimens to Ohio State University and have them tested for this particular compound.

"But I don't know if they are going to be able to connect the two. Even if he has some in his body, I don't think there is any connection . . . Still though, you know, I don't blame them. I'm sure I'd do the same thing they're doing and go to bed at night and have some sleepless nights if these things were happening to me."

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