PCBs spread by waste-oil use?

Federal and state environmental officials are focusing on waste-oil dealers as a major source of widespread PCB (polychlorinated biphenyl) contamination in Midwest waterways.

Investigators have shown that much of the waste oil and solvents from industrial sources, such as chemical firms, electrical equipment manufacturers and power plants, are contaminated with PCBs, once widely used in transformers and electric motors. Officials have found that most waste-oil dealers fail to check whether the material they collect is contaminated before they recondition it for resale. As a result, PCB-laden oil is making its way into home and industrial furnaces and onto county roads for dust control. It is "one of the major sources in the country for water pollution," declared an Environmental Protection Agency official.

Max Wilcomb of EPA's Kansas City, Mo., office, says the waste-oil haulers are "modern-day Typhoid Mary's. They don't understand the problem and can't figure out what's happening to them."

In one major investigation, Minnesota pollution authorities are scrutinizing the activities of more than 20 waste-oil dealers in the state who they allege are distributing contaminated oil. The latest case is Hicks Oil (Pipestone, Minn.), which received oil shipments from a transformer salvager in South Dakota whose oil contained PCBs (*CW, Jan. 18, p. 18*), according to the Minnesota Pollution Control Agency (MPCA). Hicks says it was assured by the salvager that the oil contained no PCBs. The company resells oil for use on roads and as fuel to industries and schools, MPCA adds.

MPCA also says two other dealers, Mankato Oil (Mankato, Minn.) and Hy Friedman (Minneapolis), allegedly sold PCB-laden fuel to customers, including private homes. Those firms claim they weren't aware they were selling contaminated oil.

Samples of recycled oil sold by such dealers has turned up fairly high PCB levels, says MPCA's Richard Kable, who adds that he often finds recycled oil with 100 parts per million of the contaminant. "These are local, small-time collectors . . . who get the oil themselves from old transformers," often mixing it with No. 6 fuel oil for large industrial customers, or with old drain oil for resale to others. PCB concentration in oil originally collected from junked transformers or motors is often "in thousands of parts per million," he adds.

The burning of PCB-contaminated oil in furnaces releases the pollutants into the air, says MPCA, and they eventually wind up in ground runoff into lakes and streams. "That's one of the biggest sources" of PCB contamination in waterways, adds MPCA biologist Marvin Hora.

Because PCBs are not water-soluble, they accumulate in river sediment and are ingested by fish. PCB levels in fish sampled in Minnesota waters within the last several years have been high enough to prompt a ban on consumption of a batch of carp in Lake Pepin and a warning to those who fished parts of the Mississippi River near Minneapolis not to eat more than one meal of fish per week. Although the ban has been lifted, the consumption warning is still in effect. MPCA says PCB levels in the fish are still high.

Not Alone: Kable says his state is not the only one with such a problem. "Minnesota is probably more aware than other states," Hora adds, perhaps because thousands of gallons of PCB-laden oil shipped from the state was almost applied to roads in Iowa last year.

"The problem is widespread in Michigan, too," says EPA Regional (Chicago) Toxic Substances Coordinator Karl Bremer, although state officials try to track waste-oil haulers. The burning of contaminated oil is probably responsible for PCB pollution in Wisconsin, where EPA analyses of snow samples from golf courses in nonindustrial areas revealed PCB residues, he adds.

When oil that contained numerous hazardous substances, including PCBs, seeped from an illegal disposal site into a stream at Ditmer, Mo., last April, state and federal officials traced the source to waste collector Raymond Bliss. EPA initiated a $500,000 cleanup, averting pollution of a nearby scenic river.

Harry Gilmer of EPA's regional office in Kansas City said the dumping incident involved extremely toxic wastes. At certain spots around the disposal site, he said, PCB concentrations in the ground reached 4%. The origin of most of the wastes was unknown, Gilmer said, although EPA traced the presence of bromophenylchlorophenyl ether to Monsanto. The company says it gave Bliss some wastes, although since the mid-1960s it has had a policy of tracing its wastes to assure they are disposed of properly.

EPA says identifying the source of contaminants in waste oil, and even of the wastes themselves, is very difficult. Collectors receive oil from filling stations, truck fleets, junkyards, transformer salvagers, and power plants in addition to "the backdoors of industry," as one official calls it. EPA's Bremer contends that many waste haulers are paid by companies to cart away their wastes. No questions are asked and "they just want to get rid of the stuff," he adds. On the other hand, Walt Kovalick of EPA's Hazardous Waste Disposal section in Washington, D.C., says, "Some companies are so concerned about their wastes that they send inspectors out to watch where the wastes go."

EPA says the new Resource Conservation and Recovery Act will go a long way toward controlling improper oil recycling. Under that law, waste receivers will need permits to operate and will have to prove to EPA that they are disposing of wastes legally. In addition, waste generators will have to test their wastes and identify the chemical components. Says EPA's Wilcomb of the pending law: "We still don't have teeth, but we're gettin' em."

Offers for coke unit

Allied Chemical is weighing at least three proposals to take over its 240,000-tons/year, fire-damaged Semet-Solvay Division coke plant at Tonawanda, N.Y. Allied, which had been trying to sell the coke unit before the fire, decided earlier this month to shut down operations permanently because it estimated that repairs and rehabilitation would cost more than $8 million (*CW, Jan. 18, p. 18*). Since the fire, Allied has lowered its asking price by an undisclosed amount.

One bidder is J.D. Crane, who is leaving his job as vice-president of Donner-Hanna Coke Corp. in Buffalo to form Tonawanda Coke Corp. and to buy the coke plant. Crane began organizing the company after his attempt to get Donner-Hanna to buy the plant failed last year. Crane says he would need co-operation from several state agencies to get the plant back into operation, and that this must be done no later than the end of January.

The coke-oven battery, he says, can be kept idle-hot for only a limited time. Main fire damage was to pollution control and tar storage facilities; the 65 coke ovens were not seriously affected.

Allied says that one of the potential purchasers inspected the plant recently. The company adds that a plant operated by its plastics division on a 135-acre complex adjacent to the coke unit will be unaffected by the closing of the coke operation.

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