

Health Peril Seen in GE Transformer Oil

By RICHARD K. WEIL

A substance in Pyronal, the insulating oil used by General Electric Co. in small and medium-sized transformers, is viewed as a health hazard by officials of seven federal agencies.

Polychlorinated biphenyl, or PCB, as the substance is called, is said to be even more dangerous than DDT.

Like DDT, it resists decomposition and thus persists in the environment for years.

GE buys PCB, a colorless, odorless, molasses-like liquid,

from Monsanto Chemical Co. in St. Louis and mixes it with oil and other substances to come up with Pyronal.

Pyronal — that's a GE trade name — is used because it is heat-resistant. PCB is said to withstand temperatures of up to 1,600 degrees.

Used for 30 Years

A company spokesman said today that Pyronal's "nonflammability allows transformers to be installed inside buildings, factories, mines, subways, schools and electric locomotives. The transformers are her-

metically sealed, the spokesman said, and thus the Pyronal in them does not come in contact with the environment.

Pyronal, which has been in use here for some 30 years, is stored at the company's oil farm on East Street.

A new oil storage installation, considered to be leak-proof, was opened in 1964. But prior to that, leakage from GE's old underground oil system saturated the ground and was a major cause of pollution to the Housatonic River. Some of that leakage was Pyronal, some ordinary oil.

Before developing Pyronal, GE used regular oil in all transformers. But oil has a low kindling temperature, which caused transformer fires in some cases. GE's large transformers still are insulated with regular oil.

Considered Safer

But for small and medium-sized transformers, Pyronal is considered preferable because it is safer. "Still another advantage," the GE spokesman said today, "is that transformers insulated in this way can be smaller in size than oil-filled or air-cooled units."

As a result of mounting concern over the effects of PCB, the company has moved the problem forward in its pollution-control priorities, the spokesman said. But he added, "In spite of the fact that many companies, including GE, have invested research money to seek a substitute insulating liquid, none having similar or neighboring properties has been discovered."

Study Set Up

The New York Times reported today that large amounts of PCB have been found in chick-

ens, turkeys, salmon, eggs and fish meat over the last few months.

The President's Office of Science and Technology and his Council on Environmental Quality formed a study two weeks ago to investigate the presence of PCB in food and other compounds.

Nobel laureates meeting in Goteborg, Sweden, last month concluded that PCB "concentrations may reach levels sufficient to damage ecosystems irreversibly on a worldwide scale before the damage is recognized."

The Goteborg statement

added: "Their entry into the marine environment should be curtailed to every practical extent, even if this requires constrictions on their production and use."

The sudden accumulation of PCB in the environment is what is alarming scientists, James D. Grant, deputy commissioner of the Food and Drug Administration, told the Times, "We want PCB out of the food supply, but we don't yet regard it as an imminent hazard to health."

To date, there have been only a few incidents linking PCB with health hazards to humans.