The people vs. PCBs

A look at those most endangered by the chemical used at the big plant on the Hudson: the fishermen who are losing their livelihood and the workers who don't want the plant shut down

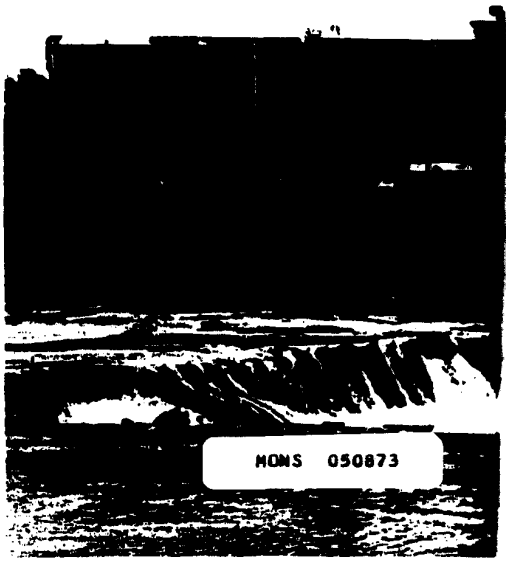
by LUCINDA FLEESON

Polychlorinated biphenyls (PCB) have leaked or been purposely dumped into nearly every major watershed in the country, exposing fish, wildlife and human beings to possibly dangerous and deadly effects. But the Hudson River is acknowledged to have higher concentrations of the chemical than any other, mainly because two upstate General Electric Co. plants have been discharging 30 pounds a day since 1942.*

In New York State, two groups of people have suffered greatly from this pollution: 240 commercial fishermen who can no longer earn their living since a state order closed the Hudson, and hundreds of GE plant workers who have breathed, touched and practically eaten PCB for three decades. This article is about how these people feel about PCB.

**In August, the U.S. House of Representatives voted a ban on the manufacture of PCBs, though at this writing the measure still awaits Senate action and faces a possible Presidential veto.*





Out on the Hudson to net the shad, Everett Nack (foreground) and Bud van Deusen row for Clearsack Banks. That's where salt from the sea encounters PCBs from GE's Hudson Falls plant (right), though the water has been looking cleaner.

PHOTOS BY LUCINDA FLEESON

The plant workers

Hudson Falls, N.Y.—General Electric physicians here termed it "Pyranol reaction," a watery acne on face, hands and arms of workers, or a nausea, dizziness and irritation of eyes and breathing passages. Over the past 30 years, 66 Hudson Falls and Ft. Edward plant workers have been documented by company files to have suffered the reaction. Most of them contracted it while working in the pit of the plant called the treat room, where newly-completed capacitors are impregnated with pyranol, the trade name for PCB. (Capacitors regulate electricity in home appliances.)

Eighteen men and women work in the treat room on each shift. The men place the capacitors, which vary from 1¼ inches to several feet wide, into open baskets and lower them into vats. The women solder shut the holes in the capacitors when they emerge dripping with hot PCB.

PCBs were once used in many industries, where no doubt many more workers were exposed to the chemical while manufacturing washable wall coverings, envelope adhesives and carbonless carbon paper, among other things. But its use in the U.S. was restricted in 1972 to insulating transformers and electric capacitors, because of its unique combination of non-conductivity and fire-resistance.

Although PCB was restricted precisely because of concern for worker safety, General Electric took no special precautions to protect the workers here. In June the federal Occupational Safety and Health Administration charged the company with exposing workers to PCB fumes which "could cause death or serious physical harm." Airborne concentrations of PCB averaged about twice the federal limit for safety. General Electric officials have stated that they will not contest the charges, will merely pay the $1,300 fine for violating safety laws.

Dorothy Dansby, known to all as Dot, has worked at the Hudson Falls plant for 27 years and is president of United Electric Union Local 332, representing 80% of the plant workers. Fifteen years ago she was transferred out of the west room when she broke into a red rash on her face, hands and arms up to the elbow. "I went to the company doctor who was very surprised because up until then they thought that just fair-skinned people got the reaction, and I'm fairly dark." Her eyes were also irritated, "almost like a pink eye." The doctor put a medical report into her folder so she would never have to work in direct contact with Pyranol.

continued on page 18



The people vs. PCBs

continued from page 11

Now Dot works on the assembly bench, assembling up to 6,000 capacitors per day. Still, it is nearly impossible for any of the production workers to escape some contact with PCB. Dot, for instance, keeps a can of Pyranol at her side, into which she dips an artist's brush to apply the substance as a lubricant. Previously she had been assigned to the rework area where rejected capacitors were disassembled and salvaged, frequently spurting out colorless liquid PCB when opened.

Pyranol has an oily, fishy smell which the workers say they got used to. "I used to come home and my husband would ask, 'What's that smell?'" Dot said.

Three possible liver cancer deaths among GE workers have been identified by the State Health Department, although the cause has not yet been connected with PCB. Two women in Dot's department died of cancer, one last December, one three years ago. One day on a coffee break, Dot and the women in her department got to talking about the cancer deaths at the plant in the past five years. They counted 15, primarily women who had died of breast cancer.

A preliminary look by the State Health Department at the cancer rate for residents of the three surrounding counties did not show an unusual increase, but the rate for former GE workers has not yet been studied. A year-long study is now planned. "Sometimes I feel there's nothing here, that we're just performing perfunctory tests," said Charles Lawrence, associate research scientist for the State Cancer Control Bureau. "Other times, I think that we're really going to turn up a problem."

GE is by no means the sole contributor of PCB to the Hudson Valley. Appliances such as refrigerators and television sets find their way to garbage dumps where their capacitors crack open and spill it out. Wastes containing PCB are buried too and leach into the ground, eventually reaching the river.

Federal Environmental Protection Agency officials estimate that minute quantities of this very long-lasting chemical can be found in the tissues of 45% of all Americans. Fred Dicker is a reporter for The Albany Times-Union, never worked at GE and hasn't eaten much river fish; yet when he volunteered for testing his blood contained 23 parts per billion of two forms of PCB.

Animal studies have shown that ingestion of high levels of PCBs caused internal organ and reproductive disorders. In human beings PCBs have caused jaundice, damage to organs, particulary the liver, reproductive problems in women, and are now suspected, although not proved, to be carcinogenic.

In 1968, in an incident well-known to industry, 1,000 Japanese residents of the island of Kyushu were diagnosed as having "Yusho" disease after eating rice oil contaminated with 1,000 to 3,000 parts per million of PCBs. Symptoms included severe and painful acne, skin darkening, eye discharges, neurological disorders and several stillbirths. The majority of newborns born to women who had eaten the PCBs were underweight and several had abnormal skin pigmentation and hair development. (Hudson River rock bass have been found to have 350 ppm of PCB; other species have ranged from zero to around 30 ppm.)

The whisper of suspected cancer is hard to ignore. Dot, for one, has heard that whisper, and wonders about her four pregnancies while working in the plant. Two babies died at two days, and a daughter was born weighing four pounds. "You just can't say what caused it," she said. "You just don't know. The way I look at it, I could work someplace else and still be exposed to PCBs. My husband is a printer and I know there have been PCBs in ink. Anyway, I like my job and, after all, GE didn't ask me to work here."

The Pyranol reaction was so clearly visible in some workers that it is hard to understand how others managed not to suspect that something was dreadfully wrong with PCB. But they worked without a protest, except for a rare request for transfer. Most of them, of course, are utterly dependent on GE and probably find it hard to believe that a clear liquid they work with every day could be harmful 10 or 20 years later.

"I'm not going to jeopardize my job for something stuck in a dang fool newspaper," said Ruth Jackson, a treat room veteran of more than 20 years, one of many workers who refused to be interviewed. "I've worked in it for more years than anyone and nothing's happened to me."

One man in the Ft. Edward plant worked in the treat room for 10 years before he suddenly reacted, his fingers swelling like balloons and the skin sloughing off his arms in sheets. Another man who still works directly with the chemical refuses either to ask for a transfer to another department or undergo exhaustive medical testing arranged by the union. Instead he wears long-sleeved shirts buttoned down to the wrist to hide the rash.

Arrangements for a three-day TV filming by CBS "Sixty Minutes" were abruptly canceled after a union membership vote agreed that all would refuse interviews.

GE is the largest taxpayer and employer in Washington County, which has had more than 11% unemployment this year. The PCB controversy began in August 1975, almost exactly one year after the company began laying off 600 out of 2,000 workers. The A&P closed down and small shops which used to employ four or five people have cut back to one or two. Jobs are scarce.

The Hudson River, on the other hand, seems of minor importance. The Hudson Falls plant backs right up to the junk-strewn brink of the river where mucky water steams as it slides over the falls. The Town of Ft. Edward pumps its sewage into the river and many factories besides GE's discharge wastes into it.

continued on page 51

NEW YORK SUNDAY NEWS • OCTOBER 5, 1975

MONS 050875

The people vs. PCBs

continued from page 19

No one has swum in or eaten fish out of the river for years. "It's too bad about the fish," said Dot, commenting on the woes of downstream fishermen, "but we're talking about 2,000 jobs here. It's our livelihood and the plant can't close." She and Bernie Leonka, local union business agent, have had a Herculean task convincing their membership that publicly pressing for health measures was not going to lead them straight to the unemployment lines.

Before state hearings were held last fall, the treat room had common sinks where workers washed their hands and the water ran out into the river. Workers sometimes ate in the treat room, frequently without washing first. They took their PCB-soiled clothes home and washed them in the family wash (just as asbestos and vinyl chloride workers had unwittingly exposed their families in recent years). A single ceiling fan, installed only in 1975, removed fumes. The gloves provided by GE were of loose-fitting canvas, impossible for handling 1¼ and 2-inch capacitors. Several women worked in the treat room throughout pregnancy as a matter of course, although prenatal exposure to PCBs was documented as dangerous in the 1968 Japanese incident.

During the 1960s one foreman independently and instinctively transferred all pregnant women out of the treat room. When he left, he took that policy with him. Still, as recently as this year Mrs. Kathy Reynolds gave birth to a child after working with PCB throughout pregnancy. The child appears to be fine and is undergoing tests.

Union officials last December publicly demanded better protection and plant housekeeping measures. GE provided these things immediately, and now contends that it had planned to all along. After 30 years of working with PCB, workers now have more gloves and aprons, an in-plant laundry, and measures have been taken to separate, contain and dispose of all spilled PCB.

One of Dot Danehy's chief complaints was that workers were not informed of the risk until August 1975, although the State Environmental Commission had known of GE's discharges since 1971. Two union members reported that they were once ordered to tear poison warning tags off PCB containers coming into the plant. Plant officials say they know nothing about the incident.

Dot suffered a serious ebb of support last December after a newspaper editorial, which was distributed throughout the plant, erroneously praised the local union leadership for backing Ogden R. Reid, state environmental conservation commissioner, in his efforts to stop PCB pollution, even if it meant shutting the two plants. The union had no intention of supporting a shutdown.

On Jan. 12 a local politician was quoted as predicting that Commissioner Reid would close the plant within 10 days. That afternoon plant workers, in a panic, besieged Dot and Bernie with accusations. State officials later denied the report, branding it a "scare tactic," but not before 1,016 workers had signed a petition backing the GE position against Reid's efforts to end the PCB problem. Later, quietly, many union members began to feel that somehow they had been had, and now seem to support Dot. And the union continues to press for plant safety measures.

The fishermen

Clavernack, N.Y.—If you call Everett Nack a river rat, he'll tell you it's the truest thing that can be said about him. In his 40 years, he's picked just about everything and anything that can be picked from the Hudson River for a profit. He has made turtle lasagna from river snappers, trapped muskrat, raccoon and fox, peddled river-smoothed driftwood, stocked the Presidential Palace in Mexico City with goldfish from the river and sold live bait to fishermen.

continued on page 36

MONS 050876

We make people nervous

continued from page 7

used to be kept gleaming, and the rays of sunlight that slanted down from its high windows gave the waiting room the reverent quality of a cathedral. But the staff was cut and the riggers who used to put up the scaffolding happened to have low seniority and were let go. No one on the remaining force is licensed to set up the rigging, so the high windows haven't been washed since. Many buildings no longer even have a regular schedule. Some have windows encrusted with a thick mustard-cloud film. The West Side is dirtiest but even posh East Side apartment buildings don't shine like they used to.

Window cleaners have another worry: changing safety standards, though they break their own rules when it suits them, swinging their belts from one window to another instead of stepping inside and doing it right.

They usually ignore minor injuries. Even Nork, who urges his members to get medical attention for every injury, still has a prune-sized lump on his head from a slamming window 25 years ago, because he was too indifferent to go to a doctor.

If they have a near accident, they go right back out on the ledge so they won't lose their nerve. There's one popular story of a man who was smashed against a building by a sudden gust of wind. When the boss saw him next day, his face bruised, eye black, knee and arm stiff, he asked, "What did you do when it happened?" The cleaner answered: "Went around to the other side, where there was no wind."

All window cleaners vividly recall the fatal accidents, including the last three in 1972, which killed four persons. A scaffold tipped over at One Astor Plaza and plunged from the 54th floor, hitting a cleaner and a roofer on the ninth-floor setback. Another scaffold fell 20 feet to the ground from the General Motors Building, dealing a cleaner a fatal concussion. And a cleaner on a belt fell to his death from the seventh floor of a Madison Ave. hotel.

For 40 years New York had the strictest of state safety standards. But 25 states had no standards at all, and last year New York's standards were superseded by less rigid ones of the federal Occupational Safety and Health Act. New York could have maintained its own, but Gov. Carey agreed to have them pre-empted, a decision the union is still fighting.

"It's a crime and a disgrace," Nork says. "Excuse me, but I get hot under the collar when I think about it. We've been improving our standards steadily for 40 years. I agree that a cleaner in the Middle West needs just as much protection as one in New York, but why can't they adopt our standards, instead of making us adopt lower ones?"

The state required frequent inspection of equipment, limited the height of ladders, prohibited inside cleaners from reaching out with more of the body than one arm and ordered them not to work on a building where even one anchor was loose. Federal standards are similar but require less frequent inspection. They place the responsibility on the employer, usually a contractor, rather than the building owner.

"What good is it to tell the contractor a building is dangerous?" Nork asks. "The people who can fix it are the owners."

But there are some hazards no law can

ABRAF

MORE THAN A PANTY
LESS THAN A GIRDLE..

MONS 050877

The people vs. PCBs

continued from page 32

But he's no hick. Making a living from a valley only two hours from mid-Manhattan takes a certain amount of finesse. Lately, Everett has been reading state Department of Environmental Conservation (DEC) reports.

On Aug. 8, 1975, DEC Commissioner Reid warned the public not to eat striped bass taken from the Hudson because of PCB contamination. In February the river was closed to all fishing south of Ft. Edward, with an exception for the spring run of shad and sturgeon. Tests hadn't been completed for these species, and it was hoped that they had escaped the pollution because they lived primarily in the Atlantic.

Out on the river at dawn on a Sunday, Everett and his fishing companion, Bud van Deusen, made what may be one of their last shad catches. Dressed in groin-high black waders, flannel shirt, denim overalls and a thick red sweater, Everett threw out iron rings that were attached to the bottom of his 700-foot-long net as Bud rowed across the river. With each toss of a ring, a wooden buoy at the top of the net slipped off the back of the 12-foot boat until the net was laid out.

To reach the Claverack banks, where the tides deliver a mere savor of salt, the PCBs discharged from the upstate General Electric plants had to travel 75 miles, over the Troy Dam and through Albany Locks. The river banks reflect on a century of battle between the environment and industry. On the west are the Catskills and an Audubon bird sanctuary reachable only by boat; on the east freight trains roll by every half hour.

No one was out shad fishing except for Everett. Last year three others fished the same waters, but this year they didn't bother.

"There's always been a big ax hanging over our heads," Everett said. "Either they'd dredge the channel and the silt would get so heavy that it would kill all the fish, or the sewage from Albany would just lie there and ferment, using up all the oxygen in the water. The fish would suffocate from Albany down to Hudson City."

The PCB announcement last August came as a shock because the river was finally purging itself of the stink of raw human sewage and oil, chemicals and cement dust from riverside factories. Clean water laws had forced installation of effluent treatment plants.

"Fish used to have an oily taste from the pollution, but now it is sweet and tastes good. Hell, everybody's been real pleased with the fishing. Last summer on weekends people were lining the docks. You could bait one line for black bass on one side of the dock and have another line on the other side for catfish."

Everett even bought a nearby transparent, monofilament nylon net to replace his three-strand nets. "The river was getting so clean that the fish were beginning to see the net and go around it," he explained. Clams and blue crabs were being pulled from the river for the first time in years.

The PCB announcement came as a shock to fishermen, because the river was finally purging itself of sewages and oil

Like the GE plant workers, Everett knows he was caught in the middle of a state-wide political controversy. Commissioner Ogden R. Reid began investigating PCB pollution by GE (the state's largest industrial employer) amid a time of fiscal disaster in city and state. Industries were fleeing New York taxes to Connecticut and New Jersey. And Reid, a former gubernatorial rival of Gov. Carey who later resigned under pressure, was loudly told by Carey-appointed John Dyson, Commissioner of Commerce, that strict state PCB standards could prompt GE to relocate.

Loss of GE would hurt in a calculable way; loss of the Hudson was harder to measure. National

MONS 050878

Marine Fishery officials assess the annual value of commercial shad fishing in the Hudson to be $50,000 and all other catches another $50,000. Sarah Chasis, a Natural Resource Defense attorney suing GE for reclamation of the river, says these figures are absurdly low. But the fishermen, many of them part-timers with other jobs, don't report all of their income. And now they can't protest their losses without incriminating themselves.

Iver Anderson of Red Hook was one of the few full-time fishermen who kept accurate records. He grossed $12,333 from eeling in 1975, his first year of fishing after quitting a truck driving job. This year he expected to make more than $50,000 by catching 300 pounds of eel a day and selling them to a European export firm for 50 cents per pound.

Last August when state officials reported that fish from the river contained more PCB than the five parts per million allowed by the federal Food and Drug Administration, Iver dumped 3,000 pounds of eel back into the river. Now he's moving to Connecticut to try for eels there.

The real value of the river, according to the National Marine Fishery, is as a spawning ground for shad and striped bass which return to ocean waters from New Jersey to Maine. Sport fishing for striped bass alone in those waters is estimated to generate expenditure of $13 to $36 million annually.

Everett has wrathful criticism for GE, but what really raises his ire is the state's DEC, which knew of the PCB discharge and allowed it to continue for so long. "The DEC doesn't know beans about the river," he says. "They don't even know what fish are in the river."

As the boat and trailing net drifted downriver with the slack tide, Everett's black and white buoys began to jump upright as fish hit the net. "On a good day, they're jumping up and down like a set of piano keys," Everett said.

When you fish the Hudson with nets, you've got to keep binoculars in the boat to scan the horizon to see what's coming. "You get that big net just laid out and then you look and there's a big white ship," he says. "When you see it coming round that bend upriver, you've got just seven minutes to get out straight away. Otherwise you lose the net or end up with two pieces."

The net had been laid out for 15 minutes when a block-long seagoing tanker appeared around the bend. Freighters cut through from New York to Albany like truckers putting the hammer down outside Kansas City. The ships displace so much water that they send waves that can nearly capsize a fishing boat.

Everett, with no time for picking the fish, cursed and yanked in fish and net, which spilled into the bottom of the boat in a heavy heap. Instead of getting home for breakfast at 10:30 and getting back to the river for two noon drifts, he got home at 1 p.m. It took two hours to untangle fish and nets.

He brought home to his wife Stella 150 shad from the morning drifts, 100 of which were roes worth $3.50 apiece. Last spring Stella couldn't keep up with the demand for shad of customers who stopped at the house. This year women who used to buy 20 bucks for a dollar apiece to stock their freezers haven't stopped to buy even one. Those that do stop ask about PCB.

"But the bait was best," Everett said. "You could go out in one day and get a five-gallon bucket holding three to five thousand hardheads and sell it for $75 or $100." When shadding was good, two men could net more than 600 pounds a day, splitting $1,000 a week.

Everett estimates that one-fifth of his income came from the river, the rest from his contract construction business. The close of the river will mean a loss of $20,000 invested over the years in boats, nets, leased ponds and other equipment.

Everett has kept his bait business going in the basement of his house by driving 400 miles to Lake Champlain for fish. Next year there may be no fishing at the spring shad run. He says he'll have to hustle his construction business, an industry that is not exactly booming.

Meanwhile, GE has proposed to build a $4 million effluent treatment plant and has announced that it will probably be able to meet the federal Environmental Protection Agency deadline of zero PCB emission by June 1977. The company has also agreed to pay $3 million toward cleaning the Hudson of PCBs and another $1 million on research to end the problem. □

MONS 050879