

CLOSE ENCOUNTER OF THE TOXIC KIND

by Rosa Jackson

Every so often, we hear of a PCB spill occurring somewhere close to home. We might be somewhat concerned, but we feel safe in the knowledge that it hasn't affected us in any way. This summer, though, I had a close encounter of the toxic kind when a transformer blew up in my back alley and sprayed PCBs on my newly-planted vegetable garden. This forced me to become informed about the potential hazards of the substance.

The encounter began in a seemingly innocuous way: I woke up one morning to find that we were experiencing a power failure. Not thinking this was anything too out of the ordinary, I proceeded to get ready for work as usual.

Our downstairs tenant, however, wasn't taking the situation so calmly. She knocked on our door, and in a near-hysterical voice, said, "I can't use my curling iron! Can you call Edmonton Power?" Certain that she was overreacting, I called Ed-

"The transformer on the power line blew up and sprayed PCBs onto your yard."

monton Power and then left for work.

I had completely forgotten the morning's events when I received a phone call at work from my neighbor. "Did you notice anything strange this morning?" she said.

"Well, yes, we had a power failure, but I called Edmonton Power and they're taking care of it," I replied.

"Uh... It's a little more complicated than that," said my neighbor.



"The transformer on the power line blew up and sprayed PCBs onto your yard."

PCBs! Suddenly, I could feel my heart pounding. I knew little about PCBs, but vaguely remembered hearing reports from Quebec of people being evacuated from their homes because of them.

"What's Edmonton Power doing to clean it up?", I asked my neighbor.

She explained that that morning she had found her cars covered with a sticky oil. The Edmonton Power crew tested for the presence of PCBs and found that the oil contained 23 ppm (parts per million) of the substance. The standards which are considered safe in Alberta are 5 ppm for residential areas, 0.5 ppm for agriculture (i.e.



my vegetable garden), and 50 ppm for commercial industrial sites.

Having obtained these results, the crew began hosing down the vehicles with water. Concerned that the clean-up be conducted properly, my neighbor phoned Alberta Environment and informed them of the spill. Shortly thereafter, seeming uncertain how to deal with the spill, the supervisor of the clean-up informed her he would call a halt to the procedure until Alberta Environment had assessed the situation.



A representative from Alberta Environment arrived at the site and recommended that several inches of soil be removed where the oil had splattered. A tree which was dripping with the oil would have to be pruned until no signs of oil remained.

Obviously, water was not going to be sufficient to clean up this mess. Members of the Edmonton Power crew took the neighbors' cars to a car wash, claiming that this would rid them of any contaminants. Meanwhile, under the direc-



tion of the Alberta Environment representative, the remainder of the crew excavated my entire vegetable garden, as well as ours and the neighbors' gravel driveways, and took the contaminated soil to the Clover Bar dump. They also vacuumed the residue into a containment truck and spray-washed all solid surfaces.

Following the clean-up, tests were again conducted, this time by Alberta Environment. These residual tests showed no detectable levels of PCBs.

I came home in a panic just as the crew was getting set to excavate my vegetable garden. The area was cordoned off and the crew were



wearing Ghostbusters outfits: were they filming a bad sci-fi movie, or was this really a toxic spill?

As I mourned the loss of my garden, I wondered what would have happened to us if they had done no more than spray the area with water. I felt grateful that the explosion had happened at 3:00 a.m. rather than during the day, when people rather than cars could have been sprayed.



But what are the potential perils of PCBs? And what exactly are PCBs, anyway.

We were assured by an Edmonton Power representative — who never took his sunglasses off — that PCBs aren't nearly as harmful as previously believed. In fact, he said, table salt injected into the bloodstream is more harmful than the same amount of PCBs. (We weren't about to try this one to find out.)

While he conceded that PCBs would make you sick if you ate them, and would give you a rash if they came into contact with your skin, he insisted that they are only dangerous when they burn — as



they did in Quebec.

Not completely convinced by the Edmonton Power diplomat's spiel, we did some research of our own. Briefly, this is what we discovered:

* PCB stands for polychlorinated biphenyls, synthetic chemical compounds consisting of chlorine, carbon and hydrogen. They were first produced in 1881 and in 1929 were manufactured for a variety of industrial and commercial uses. PCBs are almost insoluble in water and are denser than water.

* PCBs have mainly been used as a dielectric fluid coolant and insula-

PCBs' resistance has led to their widespread presence in the environment.

tor for electrical capacitors and transformers. They have also been used as hydraulic and heat transfer fluids, and as surface coating for carbonless copy paper, washable wall coverings and upholstery fabrics.

* PCBs' resistance to decomposition has led to their widespread presence in the environment. They have been found in the oceans of the world, in Arctic bears, in rainfall, as well as in human beings throughout the world.

* According to the Edmonton Power literature on PCBs, PCBs are less toxic than nicotine and gasoline, but more toxic than table salt. They are approximately as toxic as glycol (antifreeze in our cars).

* Some of the potential health hazards of PCBs are chloracne, a painful and disfiguring skin condition and liver damage following

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- toxics
- ozone depletion
- recycling
- waste management
- reused paper

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ENVIRONMENT AWARENESS WEEK
October 2 - 6, 1989

TUESDAY OCTOBER 3

Speaker - Laura Keeth, Toxics Watch Project, "Toxics" 12:30 - 1:30 pm
FREE Room 034 SUB

WEDNESDAY OCTOBER 4

Forum - aldermanic candidates - Ward 5 noon - 1 pm
"Student Concerns - Environmental Focus" Myer Horowitz Theatre
FREE

THURSDAY OCTOBER 5

Speaker - Brian Staszewski, Environmental Resource Centre 12:30 - 1:30 pm
"From global concerns to local actions" TL-11
FREE Tory Lecture Hall

Speakers - Dr. Robert Dykes, Paul Merrell, John Bennet, Jim Butler, Dr. Woodrow Morrison, Dorothy McDonald. Topics range from forestry and wildlife, to ozone depletion and native science. 7 - 10:30 pm
FREE Myer Horowitz Theatre

FRIDAY OCTOBER 6

Speakers - Lloyd Egan, Environmental Services, City of Edmonton; Pam Kerslake, Alberta Environment; Tooker Gomborg, host of Terradox - CJSR; "Recycling" noon - 1 pm
FREE Myer Horowitz Theatre

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