

Exact amount of PCBs in county impossible to gauge

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What is the impact of PCB locally?

Following is a breakdown of the major utilities and industries in San Bernardino County that use or have found the presence of polychlorinated biphenyls in their machinery and equipment.

The list, however, is incomplete. The exact amount of PCBs present in this county is impossible to gauge because the chemical has been so widely used.

Despite the 1979 manufacturing ban on polychlorinated biphenyls, the toxic substance is still found to some degree in nearly every home, business and office building.

In fact, PCBs are virtually inescapable since they are present wherever electricity is generated, stored and/or used. This can encompass everything from huge electrical transformers and capacitors to television sets, microwave ovens and fluorescent lights.

Southern California Edison Co.

The county's chief utility uses PCBs in 153 of the electrical capacitors atop telephone poles in the city of San Bernardino. It does not use PCBs in its transformers, said Edison's information officer Joe Falkner. Figures for other cities were unavailable. Edison officials said the number of PCB-capacitors in San Bernardino "is comparable to other cities of its size."

Capacitors ordinarily look like large grey or white suitcases and transformers resemble big grey cans. And their functions are quite different. Capacitors store energy until needed. Transformers take "the raw electricity off the (utility) line and 'transform' it down to a voltage that is usable in your home, usually 110 (volts)," Falkner said.

Both types of equipment generate heat and PCB cooling oils have been used to guard against fires and explosions.

Edison also uses PCBs in a large number of capacitors in 17 power substations in the county's central district, which includes San Bernardino, Grand Terrace, Fontana, Rialto and Bloomington.

Each capacitor averages about three gallons of pure PCB liquid, which contains an average of about 500,000 parts-per-million (ppm) of the banned chemical.

No spills have occurred this year and only one spill was reported last year. That incident took place in Fontana in October and was handled "quickly and efficiently. No one was exposed to the PCB and no health problems were reported," Falkner said.

The spill occurred behind the Stater Bros. Market on San Bernardino Avenue and Sierra Way and was found when "an employee patrolling the lines spotted the leak. We went out and cleaned it up, dug out the soil and replaced the capacitor with one containing a non-PCB solution," Falkner said.

Currently, all Edison electrical equipment containing PCB oils is marked with yellow warning tags. New equipment carries blue stickers showing it contains non-PCB fluids.

"We follow very specific guidelines and procedures for handling spills in accordance with the EPA (Environmental Protection Agency)," Falkner said. "The workers wear special protective clothing and full gas masks, gloves and plastic overshoes. The liquid from the spill is removed and placed in steel barrels along with any of the soil that is contaminated and any rags used to wipe it up."

It wasn't always that way, Falkner added.

"Quite honestly, we cleaned up PCB spills rather

baphazardly before 1979. No one thought the spills were any more dangerous than an oil spill and that's how we treated them. We cleaned them up and threw all the soiled rags in the trash.

"PCBs have been used a long time — since the 1930s. It's not like it's something that all of a sudden magically appeared."

Falkner added that to his knowledge no Southern California Edison worker has ever had adverse health problems from exposure to PCB.

Southern California Gas Co.

Although Southern California's largest natural gas utility does not directly use PCB, "trace amounts" were recently found in five locations along its 37,000 miles of pipeline.

The PCB was discovered in routine tests made Feb. 25 and two of the five locations are in the North Needles area where the highest concentrations of PCBs were found, said San Bernardino district manager Ray Sharp.

The PCB concentrations were more than 500 ppm, preliminary tests showed, Sharp said. PCB also was found at the company's Hollywood base station, its Beverly Hills base station and on one of its utility trucks that collects pipeline "drips," as the sediment containing the PCB is called.

"After checking at 27 locations, we found that five areas contained trace amounts of PCBs," Sharp said. "We found the chemical in the drips, which are like traps used in sinks."

Since PCBs are heavier than water, the compound filtered out of the gas as it moved along the pipeline and collected in the drips. "There's no danger of PCB entering anyone's house through their stove or anything like that. The PCB couldn't possibly get that far," Sharp said.

'Don't touch me ... I may be contaminated'

"To our knowledge we have never used a synthetic lubricant with PCB in it, but some gas companies do use it as a lubricant on valves and fittings. About 90 percent of our natural gas comes in from out of state — from New Mexico and Texas — so we assume that's where the PCB came from."

Sharp said extensive chemical tests are now being done to determine the exact amounts of PCB found.

"To our knowledge, none of our workers has had any of the health problems associated with PCB — no skin rashes, gastrointestinal problems, headaches or spiratory problems."

Kaiser Steel Corp.

The Fontana steel plant uses PCB "in various places in the mill and we are currently in the process of phasing it out," said spokesman Joe Clark. According to the federal EPA, the chemical is routinely used as a cooling oil in mill equipment because of the intense heat involved in making steel.

Clark also said that Kaiser operates two electric substations at the plant and both facilities use PCB in "enclosed systems," which means in its electrical transformers and capacitors.

"I think we're just like everybody else. We've been using them and now we're phasing them out," Clark said.

Hoover Dam

The Department of Energy facility on the Colorado River near Needles uses some PCB liquid in its giant electrical capacitors. Like most other users, the Department of Energy is "working to replace the capacitors as they fail and replace them with non-PCB equipment," an official said.

SAN BERNARDINO — The driller's wife said she doesn't remember much about the day her husband came home barefooted and said, "Don't touch me. I may be contaminated."

After the initial shock, her first reaction "was panic. I said, 'Where are your shoes? Where are your socks?' and he said, 'Oh, they confiscated them at work. I worked with some kind of contaminated material; some kind of chemical and it got on my shoes and they said I couldn't take them home.'"

Her husband, Bob, (not his real name) had gone to a site in the desert to do what he thought was routine soil sampling.

What Bob didn't know was that PCB had accidentally been spilled at the site and officials at the local water agency were afraid it had seeped into the water table. The officials wanted some soil tests run and Bob's company was asked to do them.

The true identities of Bob and his wife, who will be referred to as Amy, have been withheld because they fear recriminations. Bob thinks he may be harassed or fired if he talks to the press about the PCB spill that went bad.

"But I felt it was more dangerous not to talk about it," Amy said in a recent interview. "Because I'm afraid that if we don't get something in the paper about this — something to prove that Bob was actually at the spill — we'll have no way of linking the spill to any cancer Bob may develop in the coming years."

After Bob arrived at the location, he quickly discovered "that the whole thing was a bit weird. Because when I got there, the foreman told us that some PCP or something like that had spilled; that it was cancer-causing; that it can harm the liver and stuff if you breathe it in."

"Then they gave us protective clothing — paper coveralls and a full gas mask and gloves and plastic-type bags to tie around our feet. At that point, I started to get nervous about this PCP or PCB stuff, but I felt I had to do it or get fired."

The protective gear, however, didn't seem to afford much protection for Bob. During the eight-hour drilling job, "one of the bags around my shoe just gradually wore thin from walking on it and it tore apart. I got some of the (PCB) oil on my shoes and that's the reason they confiscated them."

And even though the rest of his protective gear remained intact, Bob was admonished to throw out all the clothing he wore to the spill.

"They told me never to wear any of those clothes again. They told me to throw out everything when I got home," he said. "That's when I started to get scared, really scared. I thought, 'What the hell's going on here? I was wearing protective gear, wasn't I?'"

When he got home — minus his shoes and socks — "Bob seemed a bit shook up. He started taking off all his clothes, every single stitch, and put them into a plastic trash bag," recalled Amy.

According to Bob, "They told me to put all the clothes I was wearing into a plastic trash bag — they said to make sure it was a heavy-duty type plastic bag — and to tie up the bag good and take it to a garbage dump."

Bob's boss told him he would be reimbursed for the clothing and boots. Within a week, Bob received a new pair of boots and a check to cover the clothing he'd thrown away.

Bob did not go to his doctor for a skin and blood test, like Amy wanted, "because I guess he didn't even want to think about the possibility that he might have been exposed to the PCB," his wife surmised.

After that first day, which Amy said "has become a big blur to me," she spent a week "trying to find out just what this chemical was. Someone at the (state) water resources board told me they thought it caused liver cancer but they weren't sure.

"I called all kinds of different state and county and federal agencies and got a real run-around. It took me all week to get no where. I just wanted to see if this stuff was dangerous or not."

Amy said one official told her PCB could be breathed through the skin's pores and absorbed through the eye tissue while another told her it was basically harmless and that she was overreacting.

The more phone calls she made, the more "these officials would say I was overreacting. I found hardly anyone sympathetic. And the ones who were concerned gave me a phone number to call someone else. They really didn't want to have anything to do with it. No one wanted to get involved.

"I don't know much about cancer and I'm not a chemist," Amy said. "But I know that if you are exposed to a known carcinogen, then 9 times out of 10 you'll get it; you'll develop cancer."

Bob says he feels fine "right now. I feel great today. But what about 10 years from now? Will I be fine then? Or will I be dying of cancer?"

The problem with PCB is that, although it is a known toxin, its full impact on human health is not known. Some scientists think PCB may be linked to cancer but others point to new evidence that suggests the compound may have no long-term effects.

But to anyone who's been exposed to PCB, that academic debate doesn't mean very much.

"It's the *not knowing* that is killing us," Amy said. "It's like this constant worry in the back of your mind. You try to forget and think it's *nothing* because you don't feel bad. But cancer doesn't make you feel bad at first, does it?"

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