



INTER-COMPANY AND OFFICE CORRESPONDENCE

To: H. McCormick
C. C. Braun

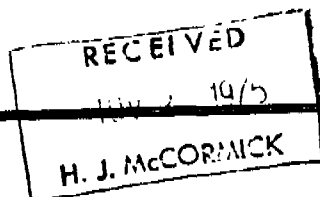
FROM: H. R. Jepsen, Jr.

{ Dept.
Branch
Division
Company

LOCATED AT: Leominster, Mass.

DATE: November 21, 1975

SUBJECT:



Enclosed is an article from the November 20, 1975 issue of the Leominster Tribune. These copies are for your information.

H. R. Jepsen, Jr.
H. R. Jepsen, Jr.

HRJ/cms

enc.

cc: H. A. Peed

BOR 008488

The do's and don'ts of big business

Vinyl chloride and Borden Chemical

by JOAN OLECK

EDITOR'S NOTE. Last week, in part one of this series, reporter Joan Oleck cited evidence on the vinyl chloride hazard to workers in the plastics polymerization industry. Speculated on was the question whether polyvinyl chloride (PVC) is unique for the cancer and illnesses it has been linked to—or whether it is truly the “tip of an iceberg,” the first in a series of carcinogenic chemicals, adding tragically to the already 100,000 occupationally-caused deaths per year.

Vinyl chloride is not an unpleasant chemical to work with. It doesn't clog your ears or make your eyes and nose run. There's no immediate problem with breathing and no odor other than a slight sweet smell at high concentrations.

For these reasons ex-Borden's Chemical worker Anthony Gaudet is not overly concerned about VC. Nor is he worried about his future 20 years hence—the average latency period for the rare liver cancer angiosarcoma which has already killed two dozen of his fellow plastics workers.

Tony Gaudet's worries are much more immediate. They include loss of one-third of his lung capacity, loss of his job, and the weekly struggle to maintain a family of six on an unemployment check of \$113.

Formerly in excellent health before starting at Borden's six-and-a-half years ago, Gaudet owes his problems to a chemical called trypsin. Aside from its use in polyvinyl chloride production, trypsin bears no chemical relation to PVC.

Yet it has much in common with PVC, for the light shed on the way Borden's, specifically, and big business generally, react to chemical hazards in their midst—whether or not government “watchdog” agencies are lurking close behind.

In 1972, two years before vinyl chloride began making headlines, Anthony Gaudet, then a reactor kettle operator at Borden's, developed a painful cough. He guessed correctly that its source was the fine dust lingering in the air from the bags of trypsin workers measure out into the blending tanks of PVC. Trypsin is a pancreatic enzyme which effectively destroys odor-causing bacteria

in these vats. As Gaudet puts it, “if it does that to bacteria, imagine what it does to your insides.”

Gaudet, interviewed at his home in the workingclass Cleghorn district of Fitchburg, is a short, affable man, 35 years old, with a neatly trimmed beard and thick-rimmed glasses. He intersperses the conversation with a dry, hacking cough.

He recalls that once his symptoms started, they became worse and worse. I'd run outside to breathe fresh air,” he says. “After awhile it was so bad I couldn't breathe at all. I kept going to the plant physician. He said it was just a bad cold. He prescribed cough medicine.”

One night in '73 Gaudet became physically ill—“Everytime I took a step I couldn't breathe. I thought I was going to die”—Rushed to Leominster's intensive care unit, he was treated for “everything from heart condition to allergies.”

In the hospital Gaudet requested from Borden's, and got, a compensation check. It was his first and his last.

Back at work again, he still suffered from the trypsin in the air

Continued on Page 5

Continued from p.1

though he was away from his old area. By this time he was under an allergist's care and somewhat relieved by medication. Among his fellow workers, however, half of the 20-25 other kettle operators, were affected, four severely so. Some just gagged, a few coughed up blood. Among them was Donald Collette, president of the union, International Chemical Workers, Local 553. He led the campaign on Borden's to get the trypsin dispensed in pre-weighed packages.

The company refused, citing increased costs. The employees in turn refused to weigh-up the chemical and called in the National Institute For Occupational Safety and Health (NIOSH). Four doctors took five workers, among them Gaudet, to Children's Hospital in Boston for skin and pulmonary tests. Borden's refused salaries for worktime lost.

The medical results, published in the New England Journal of Medicine, concluded that enzyme dust is a matter of concern and demands periodic screening. Following two months of negotiations with the union, Borden's finally agreed to pre-weighed trypsin.

Meanwhile, Gaudet's doctor informed him that he had lost 30 percent lung capacity; he tried transferring to buildings and grounds crew. But by doing so he went off the six-day shift system and lost \$58 salary. "I was being harassed too," he remembers. "It had been stipulated that I stay out of some areas, but they tried to force me, especially the young gung-ho foremen. I was nervous and scared."

Last July Gaudet gave his notice. He has yet to see a compensation check, or reimbursement for the prescriptions or mileage to the doctor that the company promised. He is a man unable to pursue the skills he spent six-and-a-half years obtaining. And he is a man with a record--a medical record--which will effectively prohibit him from many other jobs. In essence, Anthony Gaudet is a chemical casualty.

Since "cancer" produces bigger headlines than asthmatic lung conditions, Borden's, Great American in Fitchburg, and the thirty-plus other U.S. PVC operations have taken great pains to ensure against casualties caused by vinyl chloride monomer (VCM). In the wake of last year's "plastic peril" scare, the Occupational Safety and Health Administration (OSHA) passed stringent regulations. As of April 1, 1975 these called for optional respirators for workers if in-plant VCM levels exceed 1 part per million (ppm) and required respirators for 25 ppm or more. Next April they will be required for 1 ppm or more.

The evidence indicates that

Borden's, for one, is complying with the standards; regular OSHA inspections may or may not be a factor. Workers like Tony Gaudet say, "They're doing it because they have to, it's a dog-eat-dog situation." Others like a 25-year-old production helper who asked not to be identified, say, "I think the safety department is really trying."

"We have meetings. The department gives you a sheet about a chemical, tells you the hazard and what to wear, also the concentration. On the job, everytime there's a (VCM) leak, a safety technician comes running out with his portable detector. They throw you out of the building or you have to put on a respirator."

The helper goes on to describe the elaborate safety procedure required of all kettle cleaners. The various intake valves which are shut off, manual vents which are opened, and circuits locked off are not unlike what this employee remembers from three-and-a-half years ago when he started at Borden's. Nor are the mandatory gloves and the wrist straps to haul the worker from the reactor by rope different, or the "alarm cart" which buzzes every three minutes unless the worker tells the outside world he's all right by shutting it off. What is new, under OSHA standards, is the mandatory air mask and "bubblers," or plexiglass tubes of water placed over the reactor's intake and recovery valves. Should VCM remain in these valves after several preparatory air changes, the water will bubble.

In public relations material Borden Chemical sends out from its central office in Columbus (the Leominster plant will not answer inquiries though the administrator said he'd relate some interesting items on the day he quits), the company claims its PVC reactors postdate the reactors associated with the cancer cases. Borden reactors, it says, are larger and require less entry. "Changes have been made in equipment to minimize leaks, and preventive maintenance has been stepped up. The monitoring system continuously checks the air within the plant and warning devices have been set..."

Union president Collette confirms all these claims--"In all honesty, the company has done alot," he says. "But the union is still pushing. Levels in the reactor rooms are above 1 ppm so everyone will have to wear respiratory equipment next year. The company is putting in some extra ventilation fans. As a union man, I don't feel this is the way to resolve the problem."

"You can adapt to a mask for a limited time, then you start to sweat. For a half hour it's all right but for seven hours it's intolerable." The State Office of Indus-

trial Hygiene also warns against leaks in masks from dentures and beards.

Another problem, says Collette, is the sloppy way in which exhaust systems are checked--"a guy just puts his hand on it to see if it's sucking air"--and complaints by workers of numbness in their hands. "Years ago, before gloves were required, they used to check your hands. Nowadays, the company doesn't seem overwhelmed."

Collette tells of some lapses of attitude on the part of the company: "They had safety meetings (on VC) last July and I heard people say the company said there is no serious data. So I went to a meeting and the safety engineer was playing down the hazard. When I brought this up to the company they acted like they didn't know about it."

Collette also relates an instance in late '74, during the 50 ppm emergency standard, when workers in the shipping department were exposed to levels over 100 ppm and as high as 2000 ppm. The company provided charcoal canister masks which under permanent standards are considered unsafe for levels above 25 ppm. Collette knew of the standards and objected. "The plant manager said OSHA had said we could use them," Collette recalls. "I called him a liar."

For its part in VCM, OSHA has been highly criticized from all sides. PVC producers have called its 1 ppm regulation "unrealistic." Others have demanded a zero ppm. Judy de Pontbriand, member of the Occupational Health and Safety Project in Cambridge, called the 1 ppm limit "playing games with peoples' lives" in light of ignorance about cancer. "OSHA can't be counted on to be an ally of workers," she added, "they're too susceptible to industry pressures." Dr. Ronald Ratney of the OSHA office in Boston, defended the 1 ppm limit: "My own feeling is if you set a zero standard you can say 'my machine gave no reading'; an employer can cop out."

"Reading" OSHA itself can be a chore. This reporter called the Boston office for facts about Leominster-Fitchburg and was invited to pay a visit. In Boston, however, she was told the files had been moved to Springfield and besides, inspectors' reports are closed to public view; only final citations may be seen.

The Springfield director gave a different version: inspectors' reports could be seen but the files would be unavailable for some weeks, due to moving.

The citations proved undramatic with only one "serious" violation by Borden's in 1974 for lack of "Type C" respirators. But Springfield TV producer Peter Friedland, who filmed a documentary on the former PVC facility, Monsanto, filled in the gaps with an interesting OSHA story. In a July, 1974 inspection, said Friedland, an OSHA staffer reported how an emergency ventilation system was turned on at the exact moment he entered the PVC facility. Obviously, any questionable levels would be eliminated by such action. When Friedland queried the area director, he neither questioned the situation nor demanded any follow-up inspection.

After OSHA, the next federal agency most concerned with VC is the Environmental Protection Agency. Its interest lies, not so much in the workplace as in the community.

A May, 1974 EPA study reported in Borden's, "over 100 vents of varying sizes and flow rates which at any specific point in time, could

be a significant source of VCM emissions." Such vents are typical and allowed in PVC operations. Donald Collette said that breakages here are not infrequent and recalls one that poured over 10,000 ppm into the air. He particularly objects to manual vents which workers voluntarily pull to release built-up pressure from the kettles.

The pressure released into the atmosphere carries traces of VC (.06 ppm, on the average) via wind currents into the community. The same thing occurs wherever there are PVC facilities. This October Dr. Peter Infante of the Ohio Department of Health examined 1970-73 birth records for three towns in that state having PVC plants. He subsequently reported birth defects up to three times the normal rate.

Though Infante's study did not definitely correlate PVC and birth defects and was in fact criticized (two of nine towns lacking PVC facilities also showed high birth defects), it raised many questions.

Over long distance telephone, Infante mentioned "three or four" other reports linking VC and mutagenic effects. He described in particular a report (at the Symposium on Environmental Mutagenesis, in Czechoslovakia this past October) on the only county in Norway showing excess birth defects. It is the only county with a PVC facility.

"What needs to be done," said Infante, "is for people to look at populations as a whole, not as individual towns and hospitals. If

you have PVC facilities in your community (Leominster), there ought to be a repeat of the birth defects. Remember, these are babies born to people in the community, not just workers."

NIOSH says the incidence of cancer in PVC workers is 49 percent higher than normal ten years after exposure and 84 percent higher after 15 years. Hence, the babies Infante refers to may as adults witness a tragic epidemic of cancer among men who are working in PVC facilities today. Or they may witness nothing of the sort. Speculation is a chancey business.

As Collette said in a recent phone conversation, "It takes time to believe."

"Workers tell me, 'I've worked in it and it doesn't affect me.' You try to inform people of its seriousness, that it's a long-range problem..."

Here Collette broke off his sentence abruptly. He seemed to be waiting to see if anyone was listening.