

CORPORATE COMMUNICATIONS DEPARTMENT
Union Carbide Corporation

270 Park Avenue, New York, N. Y. 10017

MEMORANDUM

July 25, 1980

TO: Dr. S. G. Austin
Mr. N. E. Bolton
Mr. J. B. Browning
Mr. M. G. Dial Jr.
Mr. Damon Engle
Mr. A. S. Hart
Mr. R. J. Hughes
Mr. M. C. Lewis
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Mr. A. C. MacLeod
Dr. R. E. Pyle
Mr. E. E. Tarika
Mr. H. F. Tomfohrde III
Dr. H. M. D. Utidjian
Mr. A. G. Vorass
Mr. R. W. Wesson

CC: Mr. L. A. Agnello
Ms. A. D. Haughton
Mr. G. D. Holt
Ms. K. A. Richards

In case you did not see them, attached are articles
in the Washington Post, Wall Street Journal and New York Times on
the epidemiology study at Texas City.

Ralph Leviton
RALPH LEVITON

RL:vp
Attachments

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Cancer Outbreak Found in 2 Chemical Plants

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By Victor Cohn and Joanne Omang
Washington Post Staff Writers

A serious outbreak of brain cancer has been discovered in two Texas petrochemical plants, and federal officials fear they may find a high incidence of brain cancer elsewhere in the huge industry that makes chemicals from oil.

In a probe that started in early 1979, 25 brain-tumor cases—24 of them fatal so far—have been discovered among recent and past workers at a Dow Chemical plant in Freeport, Tex. Eighteen other fatal cases turned up at a Union Carbide plant in Texas City, Tex.

Both plants are in the Houston-Galveston area, which is thickly dotted with plants that make or process petrochemicals. But so far, federal investigators have not been able to pinpoint a guilty chemical—or, more likely, a group of chemicals or a process—though there are several under suspicion.

The brain-cancer incidence among workers in the plants in the last 24 years is twice the normal level in the general population. Dr. Richard Waxweiler of the National Institute of Occupational Safety and Health (NIOSH) said yesterday.

All of the victims are men. Few women work in the plants.

Investigators from the two federal agencies involved—the Labor Department's Occupational Safety and

Health Administration (OSHA) and the Department of Health and Human Services' NIOSH—have not yet been able to look in detail at other plants, though they have started some investigations.

They have reports, they said, of possible concentrations of similar brain cancers in plants at Beaumont and Port Arthur, Tex.; Charleston, W. Va.; Louisville, and San Francisco, as well as one in Canada.

"There's no reason to suspect all petrochemical plants," Waxweiler said. But Dr. Victor Alexander of OSHA said there may be "five or six others" at least, and J. William Lloyd, OSHA epidemiologist, said, "There may be

any number of chemical plants involved."

Spokesmen for Dow and Union Carbide noted that the results so far are inconclusive. "We see no common thread that would suggest (that) exposure to any particular material or location in the plant" is involved, said James Hansen for Dow. "There is nothing so far to connect the workplace to the brain cancer."

Damon Engle, manager of Union Carbide's Texas City plant, agreed that the cancer incidence may be higher than the national average but has not yet been proved higher than incidence in the area. "If it is we're just as anxious as anybody to get to the bottom of it," he said.

When the study began in 1979, researchers suspected that the cause of the cancers might be vinyl chloride, which is associated with the glioblastoma multiforma type of cancer being found. But some of the victims had no exposure to vinyl chloride, the NIOSH researchers said.

Tony Mazzochi of the Oil, Chemical and Atomic Workers Union said preliminary reports from other studies found higher-than-normal rates of brain and stomach cancers among petrochemical workers along the Texas Gulf Coast and as a result the union and the National Cancer Institute are studying the entire industry. Eventually 60,000 workers will be checked, he said.

"There is a cancer epidemic among American workers and certainly among the workers we represent," Mazzochi said.

Petrochemicals involve more than 30,000 workers in Texas alone and bring in about \$3 billion annually according to state figures. The Houston Chamber of Commerce reported last year that six of every 10 pounds or gallons of U.S. petrochemical production come from the Texas Gulf Coast. Dow's Freeport plant which covers 4,500 acres and employs 7000 persons is the biggest one there.

OSHA and NIOSH officials are planning a joint conference on the problem possibly in October involving government industry and the scientific and medical worlds. The situation "is something we didn't know about before" said Dr. Irving Selikoff of Mount Sinai Medical Center in New York.

He is editor of the American Journal of Industrial Medicine, which will soon publish the first scientific report on the outbreak, written by a group headed by Dr. Alexander of OSHA.

"We just don't know how widespread this problem is," said Sheldon Samuels, AFL-CIO director of occupational health and safety. There has been no industrywide study of it, just as "there is no systematic epidemiology yet of the American work force," he said.

But he said the fact that Dr. Eulah Bingham, OSHA director, "put together OSHA's first medical and scientific team" meant OSHA had a skilled team to go to the Union Carbide plant early last year and begin to study the brain tumors.

Alexander headed that first investigation, which was triggered by a complaint in late 1978 from a brain cancer victim at Union Carbide.

Ironically, that victim's cancer had spread from another part of his body. So he is not officially considered one of the victims.

But it's important for workers to speak up, Waxweiler said. "If we hadn't heard from that worker," he said, "we wouldn't have known about Union Carbide. We wouldn't have known about Dow or any of it."

Working with Texas doctors and health officials and with Union Carbide—a company that has been "highly and unusually cooperative," Alexander said—Alexander found 18 tumors among 9,000 people who had worked at the Texas City plant since 1956, when the first victim died.

He then investigated "a second plant"—which he would not name—and found five brain tumor deaths. But two of these people had also worked at Union Carbide.

Statisticians at the famed M.D. Anderson Hospital and Tumor Institute in Houston then combed their computerized Texas death records for lists of brain cancer victims and their work records.

This led the investigators to the Dow plant, the site of 25 tumors among more than 30,000 workers since the early 1960s. Studies now are focusing on company records to determine where the men worked and what chemicals they were exposed to in the vast complex, which makes 200 different products, including antifreeze, chlorine, latex, ethylene, vinyl chloride and other industrial chemical building blocks.

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July 25, 1980

High Incidence of Brain Tumors Found In Texas Plants of Carbide, Dow Chemical

By WALL STREET JOURNAL Staff Reporter

WASHINGTON — Federal investigators have discovered an unusually high incidence of brain tumors among petrochemical workers employed by Dow Chemical Co. and Union Carbide Co. in Texas.

Forty-three cases of brain cancer, all but one of which have been fatal, have shown up among present and past employees at Dow Chemical's Freeport facility and Union Carbide's Texas City plant. The findings are likely to lead to an intensified government-industry search for the cause.

"We have an indication of a twofold increased risk of dying of brain cancer if you worked at Dow Chemical," said Gordon Reeve, an epidemiologist for the National Institute of Occupational Safety and Health in Cincinnati. At Union Carbide's plant, he said, "the increased risk varied from none to up to three times" the normal level in the population, and depended on how long a worker was employed there.

Scientists from NIOSH and the Labor Department's Occupational Safety and Health Administration have been studying the two Texas plants for more than a year. But so far, the investigators don't have any leads as to what chemical or chemicals might have caused the cancer, said Richard Waxweiler, another investigator. However, he added, 13 of the 18 Union Carbide victims had worked at the plant for more than 15 years.

Where the Victims Worked

To try to pinpoint the cause of the tumors, federal and industry scientists are studying where the victims, all male, worked in each plant. The NIOSH officials said they may have some firmer hypotheses later this year.

The investigation grew out of a complaint in late 1978 to OSHA by a Union Carbide employee with brain cancer. The subsequent comparison of local hospital records for brain tumors with Union Carbide personnel files turned up 18 cases among the 9,000 individuals who had worked at the plant since it opened in 1941, Mr. Waxweiler said. This

review led to the discovery of 25 brain-cancer victims among the 40,000 Dow Chemical employees since 1942.

OSHA and NIOSH officials are planning to hold a symposium with industry officials on the brain-cancer problem, Mr. Waxweiler said, but a date hasn't been set. Meanwhile, he continued, "it would be wise for the (petro-chemical companies) to look at their own death-record files for brain cancer."

In New York, a spokeswoman for Union Carbide called the latest findings "an interim report" and noted that the study is expected to take another year or two to complete. She said the company is cooperating fully with government investigators. "Currently, we have no reason to believe there is any correlation between these tumors and any occupational exposures," she said.

In Midland, Mich., a spokesman for Dow said it is "inappropriate at this time to draw any conclusions" because the series of studies isn't completed. He said the studies so far haven't shown anything conclusively connecting brain cancer to the workplace or chemicals.

The spokesman said, "At Dow's Texas division, we are talking about approximately 24 deaths, out of more than 40,000 employees, over a 40-year period of observation. The last death from brain cancer involving a Dow employee, or former employee, occurred in 1977. Those are not epidemic proportions."

Dow said it has been cooperating with OSHA and NIOSH in the investigation and plans to meet with scientists from those agencies in Texas on Monday.

Looking at Other Groups

A recent National Cancer Institute study of workers at three Texas oil refineries also found higher-than-normal rates of cancer of the brain, stomach, liver, pancreas, lung and skin. Brain tumors had the highest incidence. Consequently, the institute "is looking at a number of other groups" of chemical, petrochemical and pharmaceutical workers, said Linda Rudolph, a health consultant for the Oil, Chemical and Atomic Workers union, which sought the original study.

Since last August, NIOSH and Union Carbide have been studying 40,000 former and current workers at three Carbide facilities around South Charleston, W.Va., to determine the effects of chemical exposure on their health. A limited study had showed "an unusual distribution" of certain types of cancer among 819 deceased employees, including nine cancers of the central nervous system. "From what we know now, we don't see any similarity" between the West Virginia and the Texas situations, said Mr. Waxweiler of NIOSH.

Both NIOSH and the National Cancer Institute are part of the Department of Health and Human Services.

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Brain Cancer Discovered in Petrochemical Workers

Special to The New York Times

WASHINGTON, July 23—A "high" incidence of brain cancer among the nation's petrochemical workers has led to suspicion here that chemicals may lie at the root of the problem, according to Federal work-safety officials.

Investigators for the Department of Health and Human Services and the Department of Labor have confirmed an "excessively high" incidence of brain cancer in at least seven petrochemical plants in Texas, West Virginia, Kentucky and California.

They said that they had discovered 25 brain-tumor cases, 24 of which were fatal, among workers at a Dow Chemical plant in Freeport, Tex. Eighteen fatalities have been discovered at a Union Carbide plant in Texas City, Tex., the authorities said.

The incidence of brain cancer among the workers in the two Texas plants is twice that of the general population. Spokesmen for the two agencies cautioned that the results were still tentative and that no firm scientific conclusions should yet be drawn.

A spokesman at the Department of Labor's Occupational Safety and Health

Administration said that a lack of available funds had delayed investigations into the magnitude of the incidence of cancer in plants at Beaumont and Port Arthur, Tex.; Louisville; Charleston, W. Va., and San Francisco.

"With varying levels of proof, we believe each of them represents an excessively high" incidence of the disease, said Dr. Victor Alexander, a medical officer with the Labor Department agency.

"We don't have much information about chemicals causing brain cancer," Dr. Alexander added.

"These chemical plants may have 50 to 100 chemicals that they use more than a million pounds of during the year," he said. "It's important to recognize the magnitude that a small number of workers can handle." He said that "at least a dozen" known cancer-causing chemicals were found in most petrochemical plants.

The investigation began in 1979, after a victim of brain cancer at Union Carbide filed a complaint with the Labor Department.

Of the cases under investigation, all the reported victims are men. Women workers are in a minority in the industry and may be less susceptible to brain-cancer

causing agents, according to officials of the occupational safety agency.

A spokesman at the Department of Health and Human Services' National Institute of Occupational Safety and Health said that vinyl chloride was originally suspected of being the brain-cancer causing agent. But the spokesman said that further research turned up cases of the cancer in workers not exposed to the chemical.

Vinyl chloride was found to be the cause of liver cancer among petrochemical workers in industry studies published in 1974 and 1976.