

MANUFACTURING CHEMISTS ASSOCIATION

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To: Technical Task Group on Vinyl Chloride Research

Subject: Senate Hearings on Vinyl Chloride

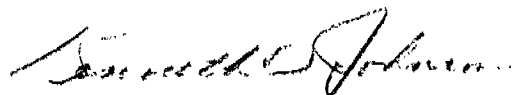
Gentlemen:

The Senate Committee on Commerce, Subcommittee on the Environment, has scheduled one day of overview hearings on vinyl chloride, Wednesday, August 21. We are informed that the hearings will be chaired by Senator John Tunney, who conducted the hearings on the Toxic Substances Control bill last year. Dr. T. R. Torkelson will appear as a witness for MCA; his testimony will focus on the industry research programs, past, present and planned, that MCA has been involved in.

At this time, the other organizations or individuals that are scheduled to appear are: Environmental Protection Agency, National Cancer Institute, the Oil, Chemical and Atomic Workers Union, Dr. Irving Selikoff, and the Society of the Plastics Industry.

The hour and place of the hearings have not yet been announced.

Sincerely,



Kenneth D. Johnson, Ph.D.
Secretary
Technical Task Group on
Vinyl Chloride Research

KDJ/mb

ASI 000018200

Cancer, Death Rates Found High In Little Elk Valley



Leonard Madison, left, a former foreman at the Galaxy plant, died of cancer in early August.

By Bill Richards

Washington Post Staff Writer

PROVIDENCE, Md.—No one is quite sure why, but for the past few years the people of the Little Elk Valley here have been dying off at an alarming rate.

Since 1967, 20 of the 120 people who have lived here for more than two years have died, according to a study of the Little Elk's population by a local doctor. The ages of those who died range from 5 to 70. That figure puts the death rate for the valley about 2.2 times ahead of the rest of surrounding Cecil County, in the northern corner of the state.

More ominous, Dr. Pietro U. Capurro's tabulation shows that at least eight of those deaths, and possibly more, have been from cancer, making the cancer death rate here seven times the rest of the county's 53,000 residents. The county's cancer rate is above average for rural areas in the U.S., according to statisticians from the National Cancer Institute.

Suspicion concerning the valley's unusually high death and cancer levels has been compounded by several types of cancers identified here by Capurro, a 49-year-old pathologist and director of the laboratory at Union Hospital in nearby Elkton.

The cancers—lymphomas, leukemia and pancreas cancer—have all been linked in the past in various studies and by medical researchers to exposure to certain industrial chemicals.

Exposure to certain industrial chemicals can lead to cancer that possibly may not appear for 10 or more years, according to National Cancer Institute specialists.

All of the cancer victims described in Capurro's report lived within a mile of the Little Elk Valley's only industrial plant—The Galaxy Chemical Company, which has been reprocessing chemicals here since 1961.

Paul J. Mraz, the president of Galaxy, described Capurro's findings as "unsubstantiated" and "nothing new" during a short telephone interview recently.

Mraz declined to comment further on the doctor's report or allow a reporter to tour the plant and conduct a lengthier in-person interview, "I can't make any further comment on the advice of my attorney," he said.

During the last four years a number of residents including Capurro, who lived in the valley for four years until 1972, complained that chemical fumes from the plant had made them ill.

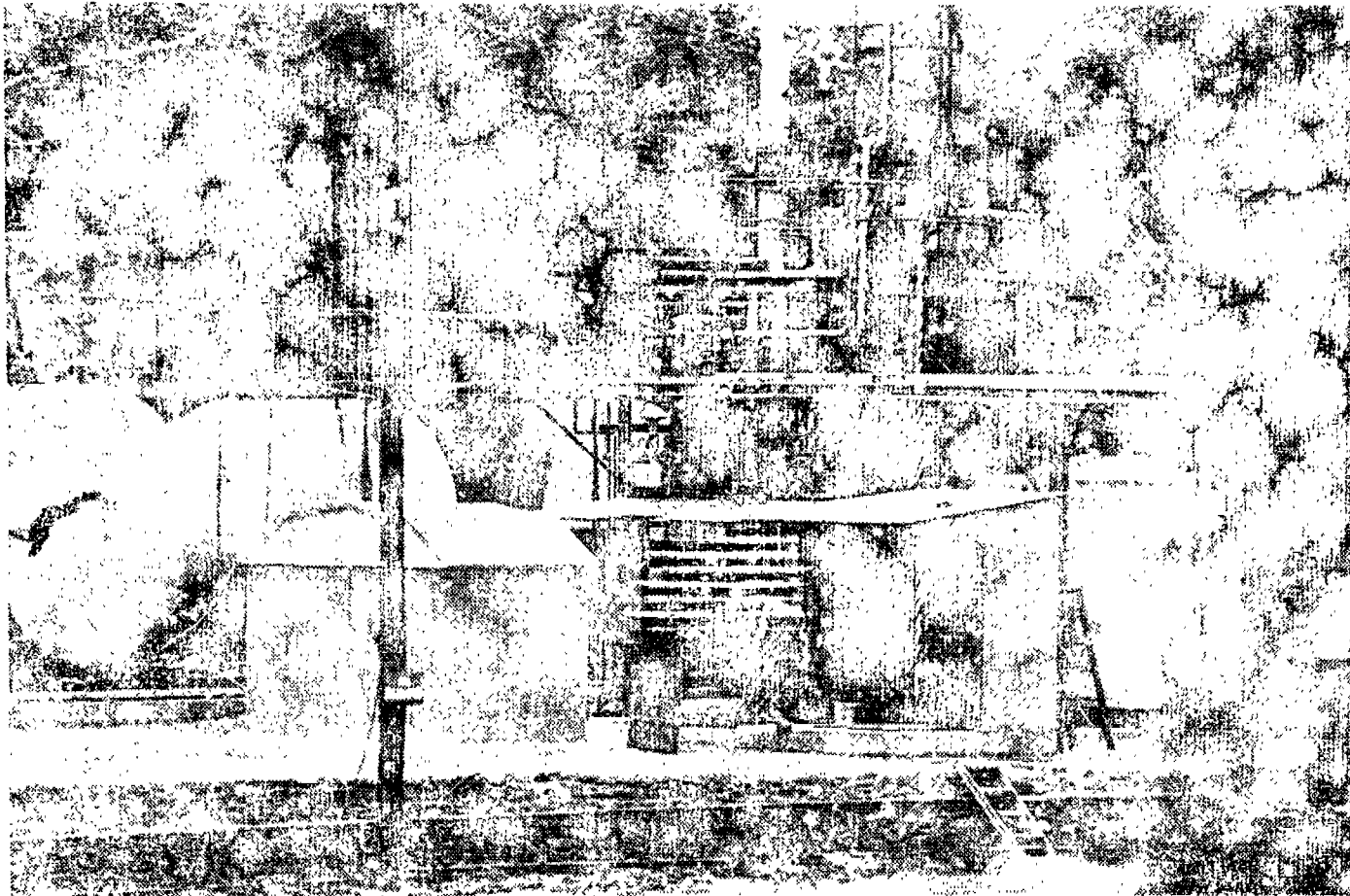
Samples of the air around the Galaxy plant, taken by investigators for the Maryland bureau of air quality control after complaints in 1970 and 1971, showed the presence of about 25 chemicals in the valley's air and water that were foreign to the area but that matched a list of chemicals handled by the plant, according to Carl York, head of the bureau's compliance section.

One of the chemicals repeatedly identified in the samples, York said, was benzene, a substance that Mraz recently acknowledged his



DR. PIETRO CAPURRO
... tabulates death data

ASI 000018201



By Ron Rubich for The Washington Post

At right is some of the equipment at the plant, which reprocesses chemicals.

firm had handled in the past and that he said is still being reprocessed at the plant.

Dr. Herman Kraybill, scientific coordinator for environmental carcinogens (cancer-causing substances) at The National Cancer Institute, said benzene is strongly suspected by researchers of being linked to leukemia in some persons exposed to the chemical.

Carbon tetrachloride, which Kraybill said has been found to produce liver tumors in laboratory rats, mice and hamsters, was found in other samples taken in the valley by Capurro. The laboratory results with carbon tetrachloride, Kraybill said, "raises a high index of suspicion as to its human potential."

Mraz recently told a reporter that his firm handled carbon tetrachloride for only one or two weeks in the late 1960s and does not handle the chemical anymore.

York said that some other chemicals discovered in the valley were so exotic that they could not be adequately identified and their toxicity was not known by researchers.

Neither Capurro nor any other researcher has specifically linked the chemicals found in the valley with the cancer deaths there. Capurro, however, said the findings show a strong need for more testing of the plant and the valley's past and present residents.

Capurro says he has performed his own tests on air and water samples as well as on blood samples from persons living near the plant.

"I can't say that the deaths in the valley from cancer were the result of specific exposure to chemical fumes," he said.

"But there have been a lot of chemicals in that valley's air and water and the blood of those people we tested," he said, "and some of those chemicals cause cancer. And we know there are a lot more malignancies there than you would expect."

"If you're in a room where everyone is scratched and there's a lion in there too, then you've got to suspect the lion."

Capurro is not alone in his belief that something is wrong medically in the valley. State and federal investigators who have been there said that the physical condition of a number of residents there is unusual.

"We know there's something up there in the valley that's not right, some sort of a health problem," said York of the state bureau of air quality control. "What we don't know is whether it's coming from Galaxy."

York worked for eight months in 1967 and 1968 as an engineer for Galaxy at the Little Elk Valley plant and is now responsible for inspecting it and conducting air sampling in the valley.

He said that until 1971 the company dumped residues from its reprocessing operation into an open air evaporation pit behind the plant. Among the substances put into the pit, he said, was the residue from the benzene reprocessing operation.

"We know that benzene was dumped into that pit," said York, "and there were several other chemicals we suspected were carcinogens. But the whole thing was such a gunky mess that it's questionable whether the company even knew what it was evaporating in there."

Leonard Madison, an ex-foreman at the plant who died recently, and a second former supervisor who asked not to be identified, said they witnessed occasions when workers flushed out chemical tanks and tank trucks at the plant into the Little Elk River nearby. (Madison was interviewed shortly before his death from throat cancer.)

The state ordered the waste pit shut down and Galaxy was directed by a Cecil County Court judge in early 1971 to clean up its chemical emissions after it was cited for air pollution violations.

The plant was allowed to reopen by the judge in May 1971, after the judge instructed the state to monitor its emissions and report the findings to him.

York, however, said the state has done no air sampling at the plant in more than a year and that the company has been left to monitor its own choice of chemicals it handles at the plant.

ASI 000018202

Cancer, Death Rates Found High in Md. Valley

Both Mraz and Peter Neger, head of the Mariol Chemical Company, a Middlesex, N.J., firm that supplies Galaxy with chemicals for reprocessing, refused in telephone conversations to disclose what chemicals the plant has handled recently.

Kraybill, of the National Cancer Institute, who has not studied either the valley or its inhabitants, said exposure to carcinogenic chemicals did not mean that cancer would appear immediately. Cancer cases after such exposure, he said, often do not appear until years after exposure.

The presence of the cancer types noted by Capurro, and the identification of chemicals found in past samplings of air "could pose a potential cancer problem which should be further studied by an epidemiological investigator, Kraybill said.

Galaxy's last problem with complaint concerning its chemical emissions occurred in 1972 when a Caroline County judge awarded 10 residents of the valley, including Capurro, a total of \$34,932 after they filed suit complaining they were made ill by the plant's fumes.

Since then, residents near the plant who were interviewed recently by The Washington Post said they had not experienced any problem with fumes until this year. Several persons said they had been bothered by fumes this year in January, March and July.

Olive Feelhy, who runs a general store with her husband George about 150 yards west of the plant, said the fumes had become particularly powerful in recent weeks.

"Three weeks ago," she said, "I noticed a bluish haze coming from the direction of the plant one morning. When I went out to hang my wash it was so strong that I collapsed and had to crawl back inside on my hands and knees."

Nancy Chadwick, who lives on the east side of the plant, said she too had smelled fumes recently. "They blow into the house and my whole family just starts coughing," she said. "Since they've started, we've been tired and dopey all the time."

Rebecca Madison, who also lives in the valley, said several weeks ago she walked by the plant with her 1-year-old son, John Paul. "We must have picked the wrong time because we got a good whiff of whatever it was they were doing in there," she said. "John Paul began throwing up right on the spot."

"I want to get out of here," she said. "I don't know what they're doing in that plant but I don't want my son to grow up breathing that stuff."

Her father, Leonard Madison, 50, worked for Galaxy for 11 years until he developed what was diagnosed 14 months ago as throat cancer. He died in early August.

Interviewed just before his death, Madison said he was down from 175 pounds to 105. He was barely able to speak in a croaking rasp of a whisper and said he believed that a combination of cigarette smoking and inhalation of the fumes at the plant was responsible for his condition.

"No one wore masks," he said. "The chemicals we'd breathe would burn our throats and make us sick but they kept telling us 'it won't hurt you.' I believed them then and now I know better. But it's too late for me now."

Charles Dunlap, 22, a second worker known to have developed cancer, died in 1971 after working for Galaxy at the plant for 13 months. Capurro, who diagnosed the cancer with a nuclear scanning process, said he died of cancer of the pancreas. Mraz said the man had "stomach trouble" before he was hired, but did not know if the man had cancer before he was hired.

No outside agency has conducted a medical investigation of the dozen or so workers now at the plant or on any of the plant's past employees, state air quality official York said. Mraz refused to tell a reporter whether his company has undertaken medical checks on present or past employees.

Madison, York and others who worked for Galaxy said turnover at the plant has been high. A number of the workers there have been sent to Galaxy from the Maryland state employment office in Elkton. State officials said there is no requirement that the employment office notify workers that they may be handling dangerous chemicals.

Turnover in the valley also has been high in recent years. Capurro said that 60 per cent of the population living around the plant had either moved away or died since 1967.

Capurro identified eight of the dead as cancer victims, using hospital records, state and county information, his own records and interviews with the relatives of the dead persons. Two other deaths, he said, may have involved persons who had cancer but died of other causes.

All of the cancer victims, who ranged in age from 5 years old to 70, lived less than a mile from the plant and had been exposed to the valley's air for at least two years. Only one, a part-time painter, had any other exposure to chemicals, the doctor said.

Last year, Capurro sent the results of his findings and the previous reports on chemicals in the valley to Dr. N. E. Day, a highly regarded biostatistician for the World Health Organization's International Agency for Research on Cancer in Lyon, France.

Day wrote back in February of this year that he noted an unusually high incidence of lymphomas and pancreatic tumors in Capurro's findings and that these two types of tumors are increasingly being found among chemists.

"In a population of 120, over seven years, you would expect .068 lymphomas and .067 pancreas tumors," Day wrote.

"The probability of observing two pancreas tumors by chance is about .006," Day continued, "and of observing the four lymphomas is less than .000001, i.e. very small."

Dr. Sidney Cutler, a biostatistician and chief of the biometry branch of the National Cancer Institute, said during an interview that he had no knowledge of the accuracy of Capurro's raw data.

"But," he said, "if we're talking about a population as small as he (Capurro) reports, and in such a limited number of years, the results certainly look unusual."

Both York and Capurro said they have requested a study of the conditions in the valley and of its past and present residents by an outside federal agency.

Such investigations of plants where workers have been believed exposed to carcinogenic chemicals have usually been handled by the National Institute for Occupational Safety and Health (NIOSH), a federal investigative agency under the Department of Health, Education and Welfare.

NIOSH sent Dr. Carey Young, one of its investigators, to the Little Elk Valley in March. Young interviewed Capurro and left after the interview without checking the plant or the valley's residents and has not returned since.

"It was a preliminary interview," he said in a telephone interview from NIOSH headquarters in Cincinnati. "We have other priorities taking our manpower and time. We feel some aspects of the valley's situation are interesting, though, and we may consider some kind of contractual study for a full evaluation some time in the future."

Such vague promises of attention have done little to ease the fears of people like Olive Feelhy, who counts off on her fingers the names of her neighbors who have died recently and repeats the details of each death for visitors to her store.

"This used to be a place where people died of old age and you'd go years without a funeral sometimes," she said. "Good Lord, nowadays I spend more time in the funeral parlor than I do in my own home."