

REPORTS

The Death of Joe Harding

It is afternoon when we arrive at the small town of Paducah, Kentucky. Here is located one of America's three uranium enrichment plants, with approximately 2,400 employees. An increasing amount of information has lately been coming from here on mysterious diseases and unusually high mortality in cancer, probably as a result of long-time work with uranium and with the toxic chemicals used in enrichment.

This evening we'll meet Joe T. Harding, 58, who for years has had grave physical troubles after working at the plant. But the company has refused him, as so many others, any compensation.

Joe has just returned from seven weeks at a hospital in Memphis. He no longer consults doctors in his hometown Paducah.

"I did that for many years," says Joe. "But you see, here the doctors don't dare tell you the truth and sometimes they don't even dare to examine you properly. They tell you one thing verbally, at their office — 'that's nothing normal, it's probably radiation damage' — but when you ask them to put it on paper they never do it. Or they write that they don't know."

"They are afraid of being sued by the company. Union Carbide dominates everything round here. That's also why people here don't like to talk about you getting diseases or dying from working at the plant. Almost everybody has someone in the family, or a relative or a friend working there. And you don't want to risk their jobs."

Joe sits in his wheel-chair. It is difficult for him to breathe and he talks slowly but clearly and distinctly. His descriptions are exact when telling us about his work at the plant, his diseases and physical sufferings — and his eight year long struggle against the Union Carbide Corporation.

"You have to say when you need to rest," I say. "We have plenty of time. All of Saturday and Sunday, at least. And even more, if we need. You promise to say?"

Joe nods, and starts his story.

In October 1952, when Joe was 31 years old, he started working for Union Carbide in Paducah. The plant



Peter de Ru

was all new and very secret. During the first three months Joe went through the company's training school.

"They really brainwashed you, it's the only word that fits. They made us believe that everything they said about security at the plant was true, were pure facts. Everything was so safe, so riskless. They promised us that we would never be exposed to any more radiation than a person who wears a luminous dial wrist watch."

"Today we know the truth about those promises. I can feel it in my body, and I know what has happened to many of my fellow-workers."

For many years Joe has systematically collected all information he has got hold of on uranium, radiation and nuclear power. And for just as long he has also been making lists of dead and sick work-mates.

Of the about 200 healthy young men who started working with enrichment at the same time as Joe, approximately 50 have, according to his estimate, died from leukaemia, cancer or some unidentified ailment

probably related to radiation or toxic chemicals. A further ten are, like Joe, severely ill.

"Inside the plant everything was secret. The different buildings were called only by numbers and all the gases and chemicals we were handling also had code-names. Often we didn't know at all what we were working with, what we got on our hands and in our lungs."

"The uranium hexafluoride was for instance only called PG, process gas. We were told to keep quiet about our jobs, and informed that any one of our work-mates could be a security man. So you didn't talk very much about the job, least of all about problems. You had a family depending on you, and the pay was fairly good, as the plant ran 24 hours a day, 7 days a week."

"For 12 and a half of my slightly more than 18 years at the plant I was working in the areas where radiation was at its highest. All these years I breathed uranium hexafluoride so thick that you could see the haze in the air when looking at the ceiling light, and you could taste

it coated on your teeth and in your throat and lungs. After a couple of hours' work the uranium dust on the floor was so thick that you could see your tracks when walking around.

"There were leaks almost daily. Gas or liquid was leaking almost constantly from some part of the many miles of tube-systems in the plant. Sometimes the leaks were so serious that they had to leave certain areas for a couple of hours. The only protective clothing they wore were white coveralls, yellow leather shoes, gloves, a white cotton skull cap and — sometimes — a dust-foe respirator of the same simple type used by spray painters and sand blasters. A respirator that will only catch some of the solid particles.

"There was no particular lunch-room or lunch-hour. You just sat down somewhere, blew away the uranium dust and had your lunch packet. When I think about how all these years we actually had uranium for lunch it just terrifies me.

"We wore film badges that were supposed to show how much radiation you had been exposed to. They were collected about once a month and sent to the laboratory in Oak Ridge, Tennessee, for analysis. But we never heard from them, so one time, three or more of us laid our film badges on top of a smoking chunk of uranium for eight hours. Still we didn't hear from them.

"About every ten days we had to give a urine sample that should show if we had got too much uranium in our bodies. But even though we knew the leaks were almost routine, we never heard from the laboratory. The same three or more operators then dropped a chunk of smoking uranium straight into our urine samples. But still we never heard from them."

Joe thinks the company kept quiet because the quantities of uranium in the urine samples probably quite often were much higher than permitted, as well as the radiation doses shown by the film badges. Perhaps the company had two sets of records and files on the most exposed workers — one official file with fine data and one that showed the real ones.

Or they just 'improved' the real amounts registered. These statements are confirmed to us some days later by several of Joe's former fellow-workers.

"In the same way cheating was done with the radiation surveys of the Product Withdrawal Room and of the cylinders with enriched uranium that should be shipped away. We zeroed the meters in the places where the surveys should be made! They of course showed nothing, if you didn't happen to hit a particularly 'hot' spot. All the back-

ground radiation disappeared at the zeroing. All that time we didn't understand that, however."

The workers were also encouraged to falsify and 'clean' the results of the radiation surveys, should they, in spite of everything, be too high. Joe tells how he reacted the first time it happened to him:

"I was on the mid-night shift when a cylinder I surveyed showed to be too hot to hold the levels for shipment. I called over to the supervisor in the control room and said, 'Hey buddy, I've a cylinder here in No. 2 position that we can't ship, it's too hot'.

"But the supervisor just said, 'What do you mean we can't ship it? See if you can't get me a better reading'.

"I hadn't worked there for so long and thought that maybe I had done something wrong, so I read it again with two or three different meters. Same result. I called him back and said, 'I just can't ship it, it's just too hot'.

"He just said, 'Listen, we've already got this cylinder reported to go on this truck. So let's get a real good reading and get it shipped'.

"He's the boss and you start to realize that he actually means just what he said. So you just say to hell with the meter, you put down an acceptable reading and you ship it. When that has happened a couple of times, and you've heard the others it dawns on you that everybody is doing the same thing. Then you understand why the radiation meters sit in the corner and get cobwebs on them.

"Everybody thought the same, I guess, 'Why make trouble, I'd just risk losing my job'. It was the same with the leaks and releases that got outside the plant, why fight it? And if we had tanks with contaminated liquid or gases that had to be got rid of, we'd just wait till a dark night and shoot it right up the stack."

The workers repairing the leaks were particularly exposed. To protect themselves from the heat they used blankets made of asbestos. So besides uranium and toxic chemicals they often also inhaled great amounts of asbestos fibres.

According to Joe Harding and several of his fellow-workers, working conditions at the plant during the 50s and 60s were thus outright scandalous and perilous. But not only in the light of what we know today about the effects of low-level radiation or toxic chemicals. Because Union Carbide as well as the Atomic Energy Commission (AEC, later Department of Energy) knew quite a lot even by then. The very same AEC that kept secret the risks with the bomb tests in Nevada also concealed the risks at the enrichment plants.

The enrichment facilities were militarily important and The Cold War was at its worst. From Paducah the uranium was transported to the plants in Oak Ridge, Tennessee, and Portsmouth, Ohio, where it was further enriched, both for nuclear fuel and for high-grade uranium for the production of nuclear weapons. And neither Union Carbide nor Goodyear, which runs the plant in Portsmouth, wanted to lose their profitable licences.

Even today working conditions seem not to have improved very much. In Portsmouth, the workers recently carried out a seven month long strike, protesting among other things against deficient safety. And in Paducah workers continue to get cancer and mysterious ailments. But the Union Carbide Corporation persistently denies that any one of their workers has ever been hurt by radiation or chemicals. No medical study of elderly workers has been done.

"It took me many, many years till I began to realize how terrible our working conditions were. Not even when I myself was getting ill did I want to understand"

In the middle of 1953, after only six months at the plant, Joe started getting open sores on his legs. They later spread to almost all parts of his body. For three years he was treated with salves and strong antibiotics by the company doctor, who could not explain what kind of sores they were.

During the following years he was treated at various hospitals and by several distinguished skin specialists. But the sores didn't heal, and one dermatologist told Joe in confidence:

"There's no point you coming here, I'm just wasting your time, these are no usual sores, there's nothing I can do. It's probably radiation damage."

"But I just laughed at him. I still was so blind, so brainwashed. Radiation damage, hell no!

"In 1954 I began getting stomach troubles for the first time in my life. I had pains and often vomited. I knew it wasn't an ulcer, because it didn't get better with that treatment. But I kept tough and for several years tried to hide the fact that there was something wrong with me.

"After five years of stomach troubles and having lost many pounds I at last went to a doctor. He said it was serious, and that it probably was radiation damage. I still didn't believe it and kept working as usual.

"Two years later, in 1961, I just couldn't stand it any longer. I had terrible pains and had gone from 175 to 125 pounds since 1954. I went back to the same physician

who had examined me last. This time I didn't laugh when he said it was radiation damage and that I'd better get myself a good surgeon pretty fast. I was operated on the same year, they removed 95 per cent of my stomach and parts of my intestines. After the operation I weighed 112 pounds."

No real diagnosis was ever made on Joe's stomach troubles. It wasn't an ulcer, but radiation damage was not convenient to write. For several years the removed parts of his stomach were preserved in formaldehyde at the hospital — so unusual were the observable changes of the tissue.

The stomach operation changed Joe's life completely. He now had to eat small amounts 6 to 8 times a day, take several kinds of vitamin pills and food supplement and give himself a shot of B12 every week. But he kept working for Union Carbide.

"Only now did the brainwashing begin to crumble and disappear, so strong had it been, and was for every one who worked at the plant. I was getting unbrainwashed and suspicious", Joe says.

In 1965 three growths were removed from Joe's lower lips.

"They made no diagnosis, just said there was something wrong but that they didn't know what."

Three years later it was discovered that Joe had pneumonia on one side. Since then he's had pneumonia almost constantly, 11 times all together.

The physicians who examined his lungs said that they looked 'strange', and that the insides were covered with 'unusual' tiny pits or holes. Even his pneumonia was of an unusual kind, they said.

"But **what** it was, they didn't know", says Joe. "They just said that 'This is real different. We haven't seen anything like it before'."

In 1970 nail-like growths began developing from the finger-print side of Joe's fingers and thumbs. Somewhat later they started growing also from his knuckles and finger joints.

"Now I have fingernails growing even from my wrists, elbows and shoulders," Joe says. "And something like toenails are growing from my ankles and knee caps. Various doctors have said it is mutations, cell changes caused by radiation.

"Two years ago I also started having this trembling, shaking or jerking you notice in my body. One doctor I have consulted thinks it is damage to my central nervous system from radiation."

During the recent stay at the hospital in Memphis it was discovered that Joe had large areas, hitherto unknown, with cancer tissue in the lower part of his abdomen,

and tumours in the inside of his back.

In 1954 Joe had injured one of his knees when falling from a truck on the plant area. That was the only injury for which the company took responsibility — somebody had been negligent with the safety devices.

In the course of the years his knee injury deteriorated, and in 1968 Joe went through an operation that left him with a permanently crippled knee. He was transferred to the control room, a job that didn't strain his knee so much.

— But Union Carbide wanted to get rid of me entirely. They pretty well knew what other physical troubles I had and why. They were afraid it should become too obvious that my troubles were related to my work with the uranium. So they took my knee problems as a pretext for terminating me.

— I didn't want to be terminated, I managed my job well in the control room. I knew exactly what had to be done when the fellows out in the plant called me over about different problems, I had worked out there myself for many years."

Only a couple of hours have passed since we left him, late yesterday evening. Joe had been very faint and weak but so alive and intense when telling us about his work at the uranium enrichment plant here in Paducah, in the borderlands between the North and the South.

Today we were to have continued our conversations, our interview. Joe had prepared himself several days to give us as much background and facts as possible. In the middle of the week an investigation team would come from the Department of Energy. They were to inspect the plant, interview Joe and many of his fellow-workers. And in April Joe was to testify at the Radiation Victims' Hearings in Washington. Today he is dead.

Fully 18 years' work with uranium have cost him his life. The responsibility rests heavily, principally on Union Carbide which runs the plant. But also on the US Government, which owns it. And on Sweden. Because here the uranium used in Swedish reactors is also enriched.

Outside, there is a snowstorm. The ice-cold wind blows straight through doors and windows. Tomorrow, Sunday, we'll see Joe a last time. The funeral is on Monday.

But we are many who will carry Joe's cause onward. The responsibility can never be buried.

Pierre Frühling