



## RACHEL'S HAZARDOUS WASTE NEWS #171

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### Dioxin—Part 1

#### DIOXINS AND CANCER: FRAUDULENT STUDIES

For years, industry scientists have been claiming there's no evidence that dioxins cause cancer in humans. Now there is mounting evidence that such claims rely heavily on studies that are fraudulent. Two companies recently accused of producing fraudulent dioxin-and-health data are Monsanto and BASF.

##### Monsanto

A scientist with U.S. Environmental Protection Agency (EPA) says Monsanto falsified data in important studies that Monsanto used to support its claim that dioxin does not cause cancer in humans. Dr. Cate Jenkins, a chemist in EPA's Office of Solid Waste and Emergency Response, says EPA itself relied upon Monsanto's fraudulent data in setting health standards for dioxin, and Jenkins has asked the EPA's Science Advisory Board to reopen the matter of EPA's dioxin standards, to take a fresh look at available data.<sup>1</sup>

Two important sources of dioxins in the environment are old chemical dumps and the incineration of municipal solid wastes,<sup>2</sup> which is why EPA is concerned about allowable levels of human exposures to dioxin.

##### BASF

The British technical journal, *New Scientist*, says, "A new analysis by a West German epidemiologist may have established the first clearcut evidence of a direct link between exposure to dioxins and cancer in humans. Friedemann Rohleder, an independent specialist, has produced a report detailing an unexpectedly high incidence of cancer among workers exposed to dioxins during an industrial accident at a chemicals plant in 1953."<sup>3</sup>

"The plant, operated by the West German company BASF, made trichlorophenol. Rohleder claims the company presented the data in a way that disguised the cancers," says *New Scientist*.

##### Background

Each of these claims of fraud relates to an industrial accident in which workers were exposed to dioxins; follow-up medical studies funded by the responsible companies have been published in mainstream scientific journals, claiming to show that no excess cancers have occurred in the dioxin-exposed workers. In fact, excess cancers have occurred, but

it appears that the data have been manipulated to hide the facts.

##### The Monsanto Case

In 1949, an explosion occurred at a Monsanto chemical factory in Nitro, West Virginia; as a result, many workers in the plant were exposed to the herbicide 2,4,5-T, which was contaminated with dioxin. (This herbicide was later the principal component of Agent Orange, the chemical defoliant used by the U.S. in Viet Nam.) In subsequent years, two Monsanto scientists, J.A. Zack and R. W. Gaffey, studied the exposed workers, comparing their health against the health of a similar group of workers who were not exposed to dioxin or 2,4,5-T.<sup>4</sup>

According to court documents attached to the EPA memo, "Zack and Gaffey deliberately and knowingly omitted 5 deaths from the exposed group and took four workers who had been exposed and put these workers in the unexposed group, serving, of course, to decrease the death rate in the exposed group and increase the death rate in the unexposed group."

Other studies of this same accident were also fraudulent, according to the same court documents, including a study by R.R. Suskind published in the *Journal of the American Medical Association*.<sup>5</sup> "This published study of the workers exposed in the 1949 accident reported only 14 cancers in the exposed group and 6 in the unexposed group (a smaller cohort). However, the medical records produced [by Monsanto] to the Plaintiffs conclusively prove gross miscalculations and omissions... there were 28 cancers in the group that had been exposed to dioxins in 1949 as opposed to only 2 cancers in the unexposed group." Mr. Suskind published two other reports<sup>6</sup> on the same accident, using his same data, to reach the conclusion that dioxin does not cause cancer.

##### The BASF Case

On the night of November 17, 1953, a runaway chemical reaction spewed dioxin-contaminated chemicals over workers and community residents of two small German cities, Mannheim and Ludwigshafen. Subsequently, an epidemiological study was used to deny workers any compensation for ailments they claimed they suffered as a result of exposure. In keeping with German law, the workers retained their own expert to review the data. Their expert, Friedemann Rohleder, received the data from the German government but found, to his surprise, that all the data