

RACHEL'S HAZARDOUS WASTE NEWS #311

Providing news and resources to the Movement for Environmental Justice -- November 12, 1992

JACKSONVILLE

On Tuesday, October 27, one week before his election as President of the United States, Governor Bill Clinton of Arkansas gave the final order to start burning dioxin in an incinerator in a residential area of Jacksonville, Arkansas, a community of 29,000 people 15 miles northeast of Little Rock. The incinerator was built in the residential neighborhood with state funds for the purpose of burning 30,000 barrels of mixed hazardous wastes abandoned in Jacksonville by a company called Vertac Chemical, which manufactured pesticides and herbicides there from 1948 to 1986.

The *New York Times* (Nov. 2, 1992, pg. B11) reported that the Governor made the decision himself to start the burn: "Mr. Clinton, who has overseen the investigation and cleanup at Vertac most of the last 13 years, gave final approval on Tuesday to a plan to burn the chemical wastes in an incinerator...." The *Times* said (Oct. 28, 1992, pg. A14), "No other environmental issue in Arkansas has so dominated the public debate during Gov. Bill Clinton's 12 years in the Governor's Mansion as the chemical contamination in Jacksonville and what to do about it."

Over the years the Vertac site was used for manufacture of DDT, aldrin, dieldrin, toxaphene and the chemical warfare defoliants 2,4-D, Silvex, 2,4,5-T, and Agent Orange. In 1979 state and federal investigators discovered dioxin on the Vertac property and in the soil and water several hundred yards from the site. Official surveys subsequently found dioxin from the plant in Jacksonville's central city park, making its once-popular swimming and fishing lake off limits to the public.

Almost immediately, citizens began pressing for a thorough, safe cleanup of the Vertac site. In what has now become a familiar story, state and federal authorities delayed cleanup. According to the *New York Times*, "Since 1979... Vertac's toxic wastes and what to do about them have been the source of considerable strife in the community and have dominated the attention of Gov. Bill Clinton and his environmental advisers." (Oct. 30, 1992, pg. A16.)

In 1986, Vertac declared bankruptcy and willed its 93-acre site to the people of Arkansas. Vertac's executives abruptly left town and have never been successfully traced. The *New York Times* said, "Vertac abandoned the plant leaving behind roughly 30,000 barrels of chemical wastes, along with acres of contaminated soil, tanks filled with toxic materials, and miles of poisonous piping. The EPA [U.S. Environmental Protection Agency] considers the site one of the country's worst hazardous waste sites, not only because of [the] extent of the contamination but also because the plant is only a few blocks from a day care center, a hospital, and hundreds of houses." (Oct. 28, 1992, pg. A14.)

By 1989 state and federal officials had made firm

plans to build an incinerator in a residential neighborhood of Jacksonville to burn some 22 million pounds of Vertac's dioxin-laced wastes.

On at least two occasions a majority of the citizens of Jacksonville expressed, through referendums and public meetings, that they did not want the incinerator built. Many local people considered it a dirty, dangerous way to "get rid of" the wastes. They pointed out that cleanup teams had already packed the 30,000 barrels in special drums, which were not an immediate threat. The real threat was the wastes already released into the community, the ground and the groundwater. Incinerating the 30,000 barrels would be a cosmetic gesture that did not address the residual problems. State and federal officials ignored these expressions of sentiment and forged ahead with their plan to burn the visible evidence, to make Jacksonville look clean again. The real cleanup of soil and water would have to wait for a later time.

In 1990, Marco Kaltofen, a chemical engineer with the National Toxics Campaign presented Governor Clinton with a White Paper outlining alternatives to incineration, including chemical destruction (dechlorination), and above-ground storage in steel-reinforced concrete buildings.¹ Subsequently in 1991 the U.S. Office of Technology Assessment (an arm of Congress) released a report called *Dioxin Treatment Technologies*, in which they reported the successful destruction of dioxin-containing wastes by chemical dechlorination processes. Chemical dechlorination occurs inside a closed container, releasing nothing to the surrounding environment. Jacksonville has two other Superfund dumps besides the Vertac site, and OTA reported that a chemical dechlorination technology called BCD had been shown to successfully detoxify soils from these other sites. "Test results confirmed that BCD is a candidate technology for the cleanup of halo-carbon-contaminated liquids and soils in an environmentally acceptable manner (closed system)," OTA said.² The term "halo-carbon" in this case referred specifically to 2,4-D, Silvex, 2,4,5-T, and dioxins, which were successfully destroyed by the BCD process. The U.S. Navy has selected BCD technology to clean up its contaminated sites, and has built a BCD decontamination machine which is in use now to clean up PCB-contaminated soils in Stockton, California. State and federal officials in Arkansas turned a blind eye to these alternative technologies.

At public meetings throughout 1989 and 1990—some of which we attended—state and federal environmental officials insisted repeatedly that the Vertac site incinerator would emit zero dioxin into the surrounding community.

A trial burn was conducted during October, 1991. State and federal officials examined the data and declared the incinerator a resounding success. But Greenpeace chemist Pat Costner analyzed the trial burn data

and published her own analysis, showing that the incinerator had not achieved the required 99.9999% destruction of the wastes, but had in fact achieved only 99.96% destruction. This meant that the incinerator was releasing 400 times as much dioxin as the regulations intended.

State and federal officials studied Costner's analysis and subsequently admitted that she was right. Costner then calculated that the incinerator would release somewhere between 150 and 800 grams of dioxin into the community during the two-year burn. Is this a lot of dioxin? EPA has established a "safe" level of dioxin as 0.000001 micrograms of dioxin per kilogram of body weight per day. If you ate this much dioxin every day for a lifetime and retained it all in your body, you would accumulate a body burden of 1.79 micrograms of dioxin. (A microgram is a millionth of a gram, and there are 28 grams in an ounce.) So we'll call 1.79 micrograms an "EPA safe" dose.

If we say, somewhat arbitrarily, that 10 times this amount represents an "EPA unsafe" dose, we can calculate that the Vertac incinerator will emit somewhere between 8 million and 45 million "EPA unsafe" doses of dioxin into the community of Jacksonville during the two-year burn. State and federal officials say the proposed burn does not violate any state or federal laws and thus should be allowed to proceed. One Arkansas health department official excused the dumping of 150 to 800 grams of dioxin into the community saying, "You have to appreciate how much dioxin there is in this community already." Pat Costner points out that this will be the largest intentional release of dioxin that has ever been executed.

Officials of the Arkansas Health Department say they had nothing to do with choosing incineration to get rid of the Vertac wastes. However, they have made careful plans to take advantage of the experiment by gathering data about dioxin levels in human tissues in Jacksonville residents before and after the burn. The pre-burn study of dioxin in blood and urine of Jacksonville residents will be released some time during the next month or so. After the experimental burn is over, new samples will be taken and comparisons will be made to see what levels of toxins (if any) have lodged in the tissues of the human subjects of the Jacksonville dioxin experiment. "I can say without fear of contradiction, we will have the best database on [dioxin in tissues of] the general population of the U.S. that has ever been

developed," Dr. Morris Kranmer, principal investigator of the study, told us. No long-term followup of health effects in the community has been planned.

Despite massive pressure from national environmental groups and local community organizations, one week before the election, Bill Clinton gave the final order to begin the Jacksonville dioxin burn experiment. The *New York Times* noted, "Unfavorable publicity about the Vertac project contributed to Mr. Clinton's reputation as a leader with a less than sterling environmental record, his aides said. 'He's been beaten up pretty badly over this,' said Kenneth L. Smith, Mr. Clinton's top environmental advisor." (Nov. 2, 1992, pg. B11.)

The *Times* went on: "The Vertac project has become typical of toxic waste cleanups around the country in which costs escalate amid interminable delays caused by Federal rules aimed at gaining public trust. Mr. Smith said the Governor believed that unless changes were made in the rules and the public began to accept some degree of risk, fewer toxic-waste cleanup projects could proceed or ever larger sums of money would be siphoned from the Government's budget for all environmental programs."

No sooner had the Governor given the go-ahead than a coalition of five organizations—including the Washington-based Government Accountability Project—sued in court to stop the experiment. Judge Stephen M. Reasoner ruled October 29 that the experimental burn could go ahead for three days, during which the state must test the incinerator's ability to destroy dioxin with 99.9999% efficiency. If anything less than 99.9999% is achieved, "the Court orders that the burning be stopped immediately," said Judge Stephen M. Reasoner.

The experimental burn occurred over the weekend, but by that time Governor Clinton's attention had been swept up by other matters, namely a nation to which he has solemnly promised that things will now be different.

[1] Marco Kaltofen and Sanford J. Lewis, *A White Paper on the Feasibility of Alternatives to Incineration of Wastes at the Vertac Site in Jacksonville, Arkansas* (Boston: National Toxics Campaign Fund, October 27, 1990).

[2] U.S. Congress, Office of Technology Assessment, *Dioxin Treatment Technologies--Background Paper* [OTA-BP-O-93] (Washington, D.C.: U.S. Government Printing Office, November, 1991).

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