Bill Gaffey's work is finished. Bill died suddenly of a heart attack at age 71 on October 6, 1995 in St. Louis. As a result, his libel lawsuit against RACHEL'S ENVIRONMENT & HEALTH WEEKLY, and its editor, Peter Montague, has been dismissed by a federal judge.

Gaffey, a mathematician who retired in 1989 as director of epidemiology for Monsanto, the St. Louis chemical giant, sued Montague and the Environmental Research Foundation (ERF), publisher of RACHEL'S, for $4 million in 1991. Gaffey said he had been defamed in RACHEL'S #171. The suit was scheduled for a federal jury trial in St. Louis sometime during 1996.

Shortly after he began working for Monsanto in 1979, Gaffey and one Judith Zack studied workers at a Monsanto plant in Nitro, West Virginia, who had been exposed to dioxin while manufacturing Agent Orange for chemical warfare use in Vietnam. In their study, Gaffey and Zack reported finding no evidence of unusual cancers among Monsanto workers who had been exposed to dioxin for many years.[1] In 1980, this was an important finding.

Gaffey's study was important to Monsanto because the company had gotten itself into serious trouble at the time. In the early 1980s, Monsanto was facing hundreds of millions, possibly billions, of dollars in lawsuits by tens of thousands of Vietnam veterans, and by former Monsanto workers, all claiming they had been harmed by exposure to Agent Orange, or to the dioxin that it contains. If all such claims had been sustained in court, it seems likely that Monsanto would have been bankrupt.[2] Bill Gaffey admitted under oath that he knew he had been hired in 1979 partly to help defend Monsanto against lawsuits over dioxin.

Monsanto tacitly acknowledged the importance of the Gaffey/Zack study when, in October, 1980, three years before the study was published, the company issued a press release headlined, "Study Fails to Link Agent Orange to Deaths of Industrial Workers."[3]

No doubt about it, Bill Gaffey's study was important to Monsanto, fighting for its life. With help from Gaffey, Monsanto successfully defended itself against every lawsuit by Vietnam vets and Monsanto workers who felt they had been harmed by dioxin exposures. The company was salvaged, and it went on to pioneer powerful new biocides and genetically-engineered forms of life, thus rounding out a contribution unique in the annals of American industry. (See REHW #144, #295, #327, #381, #382, #383, #384, #434, #454, #483.)

But Gaffey's work was also important to the federal government. The Veterans Administration relied in part on Gaffey's work to deny medical benefits to tens of thousands of Vietnam veterans exposed to Agent Orange. (Not until 1992 did the VA reverse its position on this.) U.S. Environmental Protection Agency (EPA) relied in part on the Gaffey study to set generous limits on dioxin exposures for the American public, thus providing minimal regulation for politically powerful industries such as paper, oil, and chemicals.[4] EPA now acknowledges that dioxin is a devilishly potent growth dysregulator and "environmental hormone," but in large measure the agency still regulates dioxin by rules set during the era of Bill Gaffey's work. (See REHW #279, #390, #391, #414.) In the mid-1980s, animal studies were showing dioxin to be breathtakingly toxic, but skeptics (and those living doubt for a living) could always point to the Gaffey study (and other work sponsored by Monsanto) as evidence that humans were somehow exempt from harm.

Therefore, it was important news when the veracity of Bill Gaffey's work fell under suspicion. During a worker lawsuit against Monsanto in 1984, plaintiffs' lawyers discovered that Gaffey and Zack had classified four workers as "unexposed" to dioxin when the very same four workers had been classified as "exposed" to dioxin in a previous Monsanto study co-authored by Zack.[5] Reluctantly, Zack confirmed this fact under oath.[6] Thus was it discovered that Gaffey's data had been cooked.

When an official of U.S. Environmental Protection Agency (EPA), Cate Jenkins, learned of this in 1990, she immediately sent a memo to her superiors, attaching a portion of a legal brief about the Gaffey study (and other studies sponsored by Monsanto), indicating she believed there was evidence of fraud.[7] Jenkins has since documented that EPA relied upon Monsanto's studies to set national dioxin standards.[4] As an EPA employee, Jenkins is required by federal law to report any evidence of fraud that she encounters in her work. (Monsanto officials complained vigorously to EPA about Jenkins.[8] EPA promptly transferred Jenkins to an unimportant position with nothing to do. She spent the next several years in a legal battle of her own against EPA, finally winning complete exoneration and reinstated to full duty. See REHW #400 and see our new publication by William Sanjour, ANNALS OF THE EPA: PART 4--THE MONSANTO INVESTIGATION (Annapolis, Md.: Environmental Research Foundation, 1996.)

In RACHEL'S #171, we reported on the Jenkins memo and the accompanying legal brief, and were subsequently sued for $4 million by Gaffey, who said his reputation had been tarnished and his consulting business damaged. The ATLANTA CONSTITUTION[9] and the AUSTIN (TEX.) AMERICAN-STATESMAN,[10] among other newspapers,[11] also reported the allegations of fraud, but were not sued.

At the time Jenkins wrote her memo, it was already a matter of debate in the scientific press that Gaffey and Zack had classified workers as "unexposed" when, in a previous study co-authored by Zack, the same four workers had been classified as "exposed." In NATURE (the British equivalent of SCIENCE magazine in this country) in 1985 and 1986, a vigorous debate was conducted over the Gaffey/Zack study and its misclassification of exposed workers.[12] Neither Zack nor Gaffey chose to join in this debate, though they were specifically invited by the editors of NATURE to respond to allegations that they had misclassified workers.

Did Bill Gaffey's creative reclassification of four workers make any difference in the conclusions of the Gaffey/Zack study? It certainly did. By misclassifying workers, Gaffey was able to say that no excessive cancers could be found among Monsanto's Nitro workers—a complete reversal of the truth.

Properly classifying the four workers would have yielded the conclusion that lung cancers were significantly elevated among dioxin-exposed workers at the Monsanto plant—exactly the reverse of Bill Gaffey's widely-publicized finding. Ellen Silbergeld of the Environmental Defense Fund reanalyzed the Gaffey data, after properly classifying the four workers, and she reported statistically significant cancers among the exposed workers. My own analysis of the Gaffey data yielded a similar conclusion.[13]

If Gaffey had not cooked the data, history might have turned out very differently for Monsanto, for the dioxin-exposed Vietnam veterans who had to fight for a 15 years for recognition of their troubles, and for the millions of Americans exposed to dioxin as a result of EPA's lax (or non-existent) dioxin regulations. Today the nation is still being poisoned by dioxin regulations set partly on the basis of Bill Gaffey's fraudulent study. Yes, Bill's work was extraordinarily important.

As for his claim that RACHEL #171 cost him $4 million in damaged reputation and lost consulting fees: under oath, Gaffey could not name a single colleague who had read RACHEL #171, and he could not document the loss of a single dollar.

In sum, Bill Gaffey's lawsuit against us was completely without merit, a classic SLAPP suit (strategic lawsuit against public participation) - an entirely frivolous action intended merely to harass and frighten us, and to waste our precious resources.[14] Instead what it did was reveal how many, many good friends we have, willing to sacrifice to come to our defense. Now Bill Gaffey is gone. May the victims of his work grant him forgiveness, and
may he rest forever in the coolest spot there is in that unspeakable place that he has surely gone to.

--Peter Montague


[2] For example, see: "More Agent Orange suits filed in Chicago; still others will follow." CHEMICAL WEEK February 28, 1979, pg. 18.

[3] Dan R. Bishop, "Study Fails to Link Agent Orange to Deaths of Industrial Workers [press release]." (St. Louis: Monsanto, October 9, 1980).


[5] Judith Zack and Raymond R. Suskind, "The Mortality Experience of Workers Exposed to Tetrachlorodibenzo-p-dioxin in a Trichlorophenol Process Accident," JOURNAL OF OCCUPATIONAL MEDICINE Vol. 22, No. 1 (January, 1980), pgs. 1-14. In this study, the four workers in question can be found in Table 10, cases 1, 2, 5, and 7. In the Gaffey/Zack study the same four workers can be found in Table 11, lines 5, 6, 9 and 22.


[7] Cate Jenkins, "Memo to Raymond Loehr: Newly Revealed Fraud by Monsanto in an Epidemiological Study Used by EPA to Assess Human Health Effects from Dioxins," dated February 23, 1990. At the time she wrote this memo, Dr. Jenkins was a chemist with the Waste Characterization Branch (OS 332), Characterization and Assessment Division, U.S. EPA, 401 M St., SW, Washington, DC 20460. Loehr was Chairperson of the Executive Committee of the Science Advisory Board (A-101), Office of the Administrator, U.S. EPA, 401 M St., SW, Washington, DC 20460. The Jenkins memo had attached to it 25 pages of a brief filed in Case No. 5-88-0420, in the Appellate Court of Illinois, Fifth District. The author of the brief was Rex Carr, 412 Missouri Avenue, East St. Louis, IL 62201.


[13] In NATURE Vol. 320 (April 17, 1986, pg. 569. Silbergeld wrote, "A reanalysis of the [Gaffey] data, presented by EKS [Ellen K. Silbergeld] at the Dioxin 85 Symposium in Bayreuth in September 1985, indicates an excess mortality due to lung and bladder cancers." Silbergeld reported her reanalysis in a paper at the Fifth International Conference on Dioxin, September 19, 1985, in Bayreuth, Germany. Unfortunately, this paper was never published and Silbergeld in 1993 did not fulfill a request for a copy. I reanalyzed the data myself in an unpublished paper: Peter Montague, THE EFFECT OF CORRECTING CLASSIFICATION ERRORS IN ZACK/GAFFEY'S STUDY OF THE MORTALITY OF DIOXIN-EXPOSED WORKERS (Annapolis, Md.: Environmental Research Foundation, November 22, 1993.) Properly classifying the four workers in question yields the conclusion that lung cancers and cancers of the respiratory tract were significantly increased (p < 0.05) among dioxin-exposed workers, thus reversing the main conclusion of the original Gaffey/Zack paper.


Descriptor terms: william gaffey; judith zack; monsanto; agent orange; dioxin; lawsuits; studies; obituaries; occupational safety and health; vietnam veterans; veterans administration; epa; william sanjour; annals of the epa; cate jenkins; ellen silbergeld; nitro, wv; epidemiology;