

A Few Questions. 11/1/93
--P.M.

(1)

Q: When did Monsanto make an effort to check the levels of dioxin in workers' blood? Did Gaffey produce any memos on this subject?

Q: On what basis did Gaffey conclude that maintenance workers were not exposed?

Q: When did Gaffey know that maintenance workers were exposed?

Q: When did Gaffey know that all Monsanto workers were exposed to one degree or another?

Note: Suskind/Hertzberg listed maintenance workers as exposed.

Why did Marcie Strauss do the verbatim & critique? Are there extant memos asking her to do it?

Q: Why was 12/31/77 selected as the cutoff date for the Gaffey study?

Q: May we see all drafts of the 3 Monsanto studies to see if Gaffey's comments appear on them?

Q: Name everyone who worked on the Gaffey study in any capacity any of the epidemiological studies conducted by Monsanto while Gaffey was manager of epidemiology (including clerks, data gatherers, typists, peer reviewers, etc.), their dates of hire and termination with Monsanto, and their present address, if known.

Q: Who peer-reviewed the 3 Monsanto studies?

Q: What were the editors' comments on the Gaffey study?

Q: When did Gaffey first realize he had included 4 workers as "unexposed" in your study who had been heavily exposed in a previous study?

Talk to Rex Carr about why he believes Suskind pulled his name off the Gaffey study. I note that the Suskind/Hertzberg study make absolutely no reference to the Zack/Gaffey study; neither does Suskind's article, "Chloracne, 'the hallmark of dioxin intoxication.'" Was there a rift between Suskind and Gaffey. At one point in the Kemner transcript, Carr says Suskind took his name off the Zack/Gaffey study because he knew there was something wrong with it.

Ask for correspondence linking the Judge Hamilton to Monsanto? (Gerry Ortbals says she was required to have lunch with Monsanto's CEO before she could be approved for the bench.)

Request the names of workers Gaffey omitted from his study and

the reasons why he omitted them?

Specifically ask Gaffey for his data on the Soft Tissue Sarcomas that Fingerhut found?

What was Gaffey's role in the 1980 press release?

Did gaffey participate in writing or approving other press releases?

What role did Gaffey play in the other Monsanto studies?

Who did Gaffey report to? We need to ask this person about Gaffey's duties and responsibilities.

What workers did Fingerhut include compared to Gaffey? Did she include maintenance workers as "exposed" or not? A: She did not include them in her cohort and she did not use them as a control group.

Q: Has Gaffey appeared as an expert witness in dioxin trials?

Q: Please list all lawsuits that Mr. Gaffey has discussed with, participated in, provided data or information for, including the nature of those communications, data or advice.

Q: Ask Gaffey for any correspondence or notes of conversations between him & Zack re the Nature allegations (in 2 articles) by Silbergeld & Hay.

Q: Can we ask Gaffey about his relationship to Paul Wright? I believe Wright was the head of Gaffey's department and Wright went to jail for fraud. Did this set the tone for Mr. Gaffey's work? Rob Hager told me he could get us a specialist in "corporate culture" who would say that the "culture" of Monsanto could have had a hefty influence on Gaffey's conduct.

And see the attached references
to "lost" studies of the
health of Monsanto workers.
— P.

closer look at some of Harshaw's neglected and decaying plants, and knocked its offer down to about \$85 million. Talks between Gulf and Engelhard collapsed in December.

Enter Kaiser. The aluminum company posted a \$115 million net loss on 1982 sales of \$2.9 billion, and the only operating group that made any money was Industrial Chemicals. About one-third of that group's sales came from Filtrol, a catalyst company acquired by Kaiser early in 1982. Now Kaiser wants to merge Filtrol with Harshaw, and the merged company will borrow \$35 million to compensate Gulf for Harshaw's greater book value. Over six years, Kaiser will pony up another \$115-130 million for Gulf's 50% interest in the joint venture. By then, notes a bitter Harshaw manager, Gulf's top brass will "all be retired."

Kaiser is visiting Cleveland this week to review Harshaw's dismal results of late. Harshaw made \$4.5 million—almost all from its International Div.—on 1982 sales of about \$210 million. But this year, through May, Harshaw is about \$100,000 in the red. Three divisions posted heavy losses: Industrial Chemicals, which makes hydrofluoric acid and derivatives; Metal Finishing, a producer of electroplating salts and equipment; and Crystal and Electronics,

which sells detection devices. Only catalysts, pigments and international are in the black this year.

In the past few months, Industrial Chemicals, the biggest loser—\$1.7 million in the hole so far this year—has gone through the wringer. Its antimony business was sold to a Bolivian company in April, and its cobalt salt business has just been shut down. The cobalt inventories and customer lists were picked up by Mooney Chemicals. Last month, the group's sales force and its research and development people were all let go; four product managers became salesmen.

And Kirk, Harshaw's president, made himself *de facto* general manager of Industrial Chemicals, rather than replace the one who recently left. In the opinion of colleagues, Kirk did that in hopes of at least keeping that job should the Kaiser deal succeed. Kirk says, however, that he "wouldn't be interested" in staying on just as a general manager.

Kirk, 58, is described by subordinates as a despot ("Meetings are just a lecture," says one), and is largely blamed for Harshaw's poor showing in his 10 years as president. In the past five years, Kirk has fired 11 general managers, and lost four comptrollers. "Being a general manager at Harshaw," remarks one who has held that title, "is a high-risk job." □

the director of Diamond's health and environmental affairs. But McBurney says that he is unable to recall a letter referring to the 1955 chloracne work. "I'm sure we would have asked for the records if we were offered them," he says.

No test records. Diamond Shamrock has no knowledge of the whereabouts of any reports generated by the seven-year IHF study or the 1979 IHF letter, spokesman Charles Yeakum said after a search of the company's IHF file. McBurney, whose service with Diamond Shamrock and Diamond Alkali dates back to 1963, asserts that he was "unaware" that the IHF chloracne study took place. And a preliminary computer search of sealed documents in the Agent Orange case does not show any IHF test records, according to Victor Yannecone, attorney for the plaintiffs.

The existence of the Diamond study came to light after *Chemical Week* acquired a copy of a 1963 report written by two former U.S. Public Health Service physicians, who visited the Newark plant during a major outbreak of chloracne. In it, Donald J. Birmingham, one of the report's authors, referred to Diamond-sponsored studies that found "areas of high exposure to chloracnogens" by testing various intermediates used to produce 2,4,5-T. Details of the experiments were not revealed to him, Birmingham says.

While the results of the IHF research are still unknown, a German study conducted at the same time resulted in the discovery that dioxin generated during the production of 2,4,5-T caused chloracne and was also possibly linked to liver disease. A Jan. 1958 IHF bulletin to member companies cited an article which detailed the dioxin-chloracne link.

Along with Diamond Shamrock—which was recently named as a defendant in a damage suit filed by area residents and former workers at the now-quarantined Newark site—Monsanto, another defendant in the Agent Orange case, also commissioned IHF to research the source of chloracne-producing materials. But the records of that research project have apparently been destroyed, says Dan Bishop, a spokesman for the company.

Discovered. Based on available records, Bishop estimates that the study may have been performed in the early 1950s, shortly after a reactor explosion led to a major chloracne outbreak at Monsanto's 2,4,5-T plant in Nitro, W. Va. Documents referring to the study were discovered while combing files in preparation for a lawsuit brought by

Dioxin health studies disappear

The extent of company knowledge about the potential dangers of dioxin is a key theme in the Agent Orange lawsuit brought by Vietnam veterans claiming a host of illnesses due to their exposure to dioxin-contaminated defoliants. And last week, *Chemical Week* learned that the results of several dioxin-related health studies that could affect the direction of both the Agent Orange suit and similar cases brought by former chemical company workers, are apparently missing and may have been destroyed.

Included in the papers are test data and results of a seven-year health study that was begun in 1955 by Diamond Alkali (now Diamond Shamrock) to determine the causes of chloracne, a skin rash. The health problems had developed among workers who manufactured 2,4,5-trichlorophenoxyacetic acid (2,4,5-T) and other chemicals in Diamond's facility at Newark, N. J. Dioxin is formed as a by-product during the manufacture

of 2,4,5-T, a domestic herbicide and an ingredient in Agent Orange.

The health studies in question were performed for Diamond Alkali between 1955 and 1962 by the Pittsburgh-based Industrial Hygiene Foundation (now Industrial Health Foundation) an independent consulting group supported by industry that specializes in occupational health and safety. According to Richard Gerlach, the organization's vice-president for technical services, all material relating to the animal studies was either returned to Diamond Shamrock or destroyed in May 1979 when IHF instituted a new policy for retaining documents. All that remains of the study, Gerlach says, is a card indicating the years in which the research was performed.

Diamond Shamrock did receive correspondence from IHF in 1979 regarding the disposition of several studies sponsored by Diamond Alkali, explains Richard McBurney, who recently retired as

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mer workers at the Nitro facility, shop relates.

A company official who recently contacted IHF was told that the records of it study had been destroyed, according to Bishop. "They told us that all they had left was a little white index card," he says. □

Users turn to experts purchasing spot gas

Chemical companies are increasingly buying natural gas directly from producers in the spot market as prices fall and supplies increase (ENR, June 22, p. 14). But most chemical firms, long accustomed to buying only on long-term contracts from their local pipeline, are at a loss to know what constitutes a fair price when negotiating with a supplier for spot gas. So increasingly they're turning to consultants and specialized data services to gain the leverage they need to avoid overpayments. These specialized data services, which use computers to analyze stacks of data on public filings, can give chemical firms an exact picture of what a pipeline is willing to pay for the same gas. William Foster, principal at Energy Planning (Houston), a consulting firm, observes that chemical companies are "realizing this very competitive market in gas." He says some of the computer services specialize in the intrastate market. Energy Planning, a two-year old consulting to the gas industry, re-

lies on data filed with the Texas Railroad Commission. It has devised computer programs that allow it to break out certain categories of information very quickly. As a result, its Natural Gas Information Service can track a host of transactions from every producing well in Texas. Data includes the name of the buyer, the volume bought, the price paid, and the transaction date.

Interest in this type of search is building quickly. According to the company, at least a dozen chemical companies have approached it for such data, many in just the last month. The price for a custom search (table) ranges upwards from about \$65.

Crystal ball. Other computer companies offer services specially for the interstate market. Foster and Associates, in Washington, D.C., gathers data from filings required under the Natural Gas Policy Act (NGPA). Under law, filings are required every six months, but some pipelines have already filed for second-half 1983, allowing a glimpse at the situation through the end of the year.

William Foster, the firm's principal, observes that most of the current interest in his data comes from pipelines that buy gas. But, he adds, the firm does have "some chemical clients." A Washington rival that also relies on NGPA filings is Du Pont and Associates. And at least one firm specializes in data on high-cost gas. Resource Analysis & Management Group, headquartered in Oklahoma City, won permission in April to offer data on prices and contract

terms collected from filings under Section 107 of NGPA.

Once a database is created, a consultant can "massage" the data for a variety of services. Among the most popular ones for chemical clients right now are price projection services and price renegotiation services.

Nearly all these consultants offer some price projection services. One projection calls for gas prices to increase somewhat from the current market-clearing prices of \$3/Mcf, rising to \$3.50/Mcf in the intrastate market and to \$4.50/Mcf in the interstate market. But, as another warns, it's one thing to buy gas at bargain prices and quite another to arrange transportation and to secure regulatory approvals.

Equally popular is the closely related service of advice on price renegotiation. John A. Brickhill, a vice-president at Foster and Associates, says his firm is getting more requests from chemical companies for this service. One of the chief beneficiaries of this type of service, he thinks, is the smaller chemical plant. In fact, he says, his firm recently concluded deals that have "satisfied both parties." □

Bayer's plant resumes after terrorist attack

Following a terrorist attack that caused \$50 million worth of damage, operations are far from normal at the 27,000-ton/year acrylic-fibers plant operated by West Germany's Bayer in Lima, Peru. But this week the plant is getting back on track. The May 27 attack, in which terrorists bombed power pylons to black out the entire metropolitan area for several hours, was the worst yet in the capital city.

The attack could have significant implications for the business climate in Peru because it may signal a serious escalation in the country's leftist guerrilla movement, which has so far concentrated its activities in rural areas of the central Andean highlands. But while businessmen in Peru say that they are concerned, there is no indication of cutbacks in activity or investment as a result of terrorism.

Initially, Bayer will restart its plant at one-third capacity. During the blackout, the terrorists, apparently familiar with the layout, overpowered guards and entered the 120,000-square-meter facility from four directions, planting numerous bombs around installations.

The terrorists presumably belonged

How data-base firms can tell users what pipelines are paying for gas

Pipeline	Monthly volume (Mcf)	Average price (\$/Mcf)	Producing property*	
			Lease	Name
HR Pipeline	6,569	\$2.15	073803	Raul Martinez
	4,298	2.26	085021	Webb County No. 1
United Gas	2,688	3.58	084700	Luz T. Oliveria No. 1-A
	2,767	3.52	094612	Genaro Garcia No. 1
	4,342	3.49	085168	Estella Garcia No. 3-C
	2,769	3.48	084988	Estella Garcia No. 2
Innesco	4,717	3.63	095223	J.F. Walder Heirs No.1-70
	12,835	5.65	087777	S.J. Martin No. 3-A
	19,790	5.70	087688	S.J. Martin No. 1-A
	438	5.74	086307	S.J. Martin No. 2-A
	13,354	5.17	091463	Bruni-Mineral Trust No. 2-A
	2,292	5.19	088742	Bruni-Mineral Trust No. 1-A
	27,889	5.17	095711	Mercurio Martinez No. 1
	26,007	5.20	094521	Vaquillas Ranch Ltd. No. 1
Transcontinental	2,538	3.38	088390	S.J. Martin No. 4-A
	2,810	3.43	088358	Mayers GU No. 3-1
	14,618	3.40	088357	Mayers GU No. 2-1
	3,977	3.52	088303	Mayers GU No. 1

*Produced by Sanchez-O'Brien. Source: Energy Planning Associates



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A matter of record

Your story, "Dioxin health studies disappear" (June 29, p. 15), is incomplete with respect to the status of dioxin research done for Monsanto by the Industrial Health Foundation. This research, on file at the West Virginia Health Dept., is part of sealed court records in a class-action suit in Charleston, W. Va.

Dan R. Bishop
Director, Environmental Comm.
Monsanto
St. Louis, Mo.

Reader Bishop fails to note that the IHF documents in the West Virginia suit were produced not by Monsanto but by a government witness in the Agent Orange pretrial hearings.

Support denied

The table in your cover story, "Chemical Industry Councils" (June 1, p. 29), presented incorrect data on the Industrial and Environmental Assn. of South Carolina. This organization does *not* have "Chamber of Commerce support."

The state chamber has not been involved in the formation of this organization, and we do not endorse it. Instead, we encourage the chemical manufacturers in South Carolina to participate through the chamber's environmental committee to meet their regulatory and legislative needs.

Lowell Reese
Executive Vice-President
South Carolina Chamber of Commerce
Columbia, S. C.