

PROBLEM

1. Litigation on Health
2. Few Experts - No Health Effects

Ayres
Webster
Waldman
Reggiani?
Carnow
Suskind

3. What Next

Where Contaminated

Other Dioxins

SOLUTIONS

1. Quality Study at Nitro - Carnow vs. West Virginia University
 - a. Chloracne - Other Effects - Clinical
 - b. Mortality Study (Local Review - Dr. Morgan)

2. Dose - Correlation With Animals; Size of Dose

3. Develop Experts

Toxicology
Epidemiology
Four Clinical Studies
Agencies

- 4.. Body Burden - Sources

5. Alleged Exposure?

CONFIDENTIAL
PROTECTIVE ORDER

C04182

Monsanto

DEPARTMENT OF MEDICINE &
ENVIRONMENTAL HEALTH

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April 5, 1983

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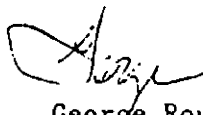
Dear Bob:

I have McCarville's letter to you confirming your visit to St. Louis on May 16. I am obviously pleased that you have agreed to come and I would like to come to Research Triangle to maximize your talk for Monsanto. I would hope that in the process of doing this we would also be maximizing the benefit to CIIT. I will be calling you when I have a trip planned to Washington. Incidentally, the Biohazards Committee will be meeting on May 16, and I would welcome your participation in all or part of that day with us.

On April 14 you are scheduled to meet in Jefferson City to discuss the toxicology and probably the public health aspects of dioxin. One of the obvious concerns, and one which you mentioned at the annual meeting, is the hazard of soil dioxin. I am enclosing a copy of my cursory review of the questions related to soil dioxin, and I would welcome your comments on it. I also would like to know whether CIIT could or would want to be involved in the evaluation of dioxins as a public health problem. It is quite obvious that the public health aspects of dioxin are not going to go away, at least not in the immediate future. It, therefore, is reasonable that CIIT could at least entertain its contribution to this subject. As a way of thinking about what CIIT could do, you could readdress the list that I have enclosed.

It is obvious that Monsanto isn't letting you get away from us simply because you left the Biohazards Committee.

Sincerely,



George Roush, Jr., M.D.
Director

Encl.

C04180

HAZARDS OF DIOXIN IN SOIL

1. Airborne exposure:

- a. Is it measurable in dust? Is the dust respirable?
- b. Is there measurable vapor above contaminated areas?

2. Ingestion exposure:

- a. Fraction of contaminated dirt absorbable
 - 1) Acute toxicity vs. neat
 - 2) Dioxin in gut or excreta - tagged study
 - 3) Simulated separation - HCl?
- b. Chronic - time to equilibrium

(Note: Aged soil may bind more tightly than fresh.)

3. Skin exposure

- a. Dose to chloracne
- b. Dirt on skin - questionable chloracne

[Chemical analyses to be performed on all contaminated soil samples to establish presence and amount of dioxins.]