

→ Jim Hama
R. C. Isham - BIND

FEB 12 1979

February 12, 1979

SUBJECT : STURGEON, MO., DERAILMENT
POSITION STATEMENT

OCP-Spill

For
Mike Miller
Jim Wilson

~~Frank T. Edwards~~
Don Edwards

TO : D. R. Bishop
W. R. Corey
J. R. Foehr
T. L. Gossage
E. H. Harbison
J. S. Metcalf
J. E. McKee
J. C. McPhillips

J. T. Nolan
P. S. Park
R. G. Pierr
G. Roush
J. J. Spano
R. A. Stohr
G. Young

If you have any corrections or suggestions to this position statement, please phone extension 4-2621. Also attached is the EPA news release of Sunday, Feb. 11.

R. C. Isham
R. C. Isham

RCI:smt

Att.

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POSITION STATEMENT -- TRACE AMOUNTS OF TCDD IN CRUDE ORTHOCHLOROPHENOL
QUESTIONS & ANSWERS TO BE USED ONLY BY MIC PR IN RESPONDING TO DIRECT
MEDIA INQUIRIES

At the request of the EPA we analyzed a reserve sample of the crude orthochlorophenol involved in the derailment at Sturgeon, Mo. (Jan. 10, 1979) for tetrachloro dioxin. On Friday, Feb. 9, our analytical chemists reported finding this impurity at a .037 ppm average level in the reserve sample. We informed the EPA of this that evening and contacted the clean-up contractor the next morning. Since this is an extremely low level of tetrachloro dioxin contamination, just barely above what equipment can detect, we're sure there was no harm to the citizens of Sturgeon.

We have notified the clean-up contractor so he can take the appropriate precautions with his people. The same protective clothing that protects clean-up workers from the crude orthochlorophenol would protect them from the miniscule amounts of tetrachloro dioxin.

Q. Is this the same TCDD found at Seveso, Italy?

A. Probably not. The 2,3,7,8 isomer of tetrachlorodibenzo-para-dioxin released at Seveso can't be formed directly in our process. The impurity found in our sample is most probably a different isomer which is far less toxic.

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Q. Why did Monsanto wait so long to test its batch sample for TCDD?

A. In the past we've analyzed crude orthochlorophenol for TCDD a number of times and never found TCDD. That was using the same analytical equipment which measures for tetrachloro dioxin down to .010 ppm. (three tests). We theorize the TCDD was an impurity in one of the components. Recently another chemical company reported that dioxins are ubiquitous and can be formed a number of ways, for example, by combustion. That is, everything from burning leaves to smoking a cigarette may form dioxins. We'll be working to find out how the small amounts of TCDD got in our product and eliminate the contamination.

Q. Did Monsanto act quickly when it had this new knowledge on TCDD?

A. Very quickly. We learned on the afternoon of Feb. 9 that there were trace amounts of TCDD in our chemical intermediate and informed the EPA that evening.

Q. How can you say there was no harm to the citizens of Sturgeon when they were exposed to the vapor clouds for a long period of time?

A. We monitored the air soon after the train derailment. The highest concentration of crude orthochlorophenol detected was .085 ppm. So if you percentage the .037 ppm TCDD contamination against the highest known crude orthochlorophenol concentration in the air of .085 ppm, you get a number so small it's meaningless to express.

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Q. What would be the symptoms of TCDD poisoning?

A. The first clinical sign would be chloracne. That's pus-like
sacks formed on skin exposed to TCDD.

Q. Is Monsanto doing any more testing of crude orthochlorophenol?

A. Yes, we're continuing to analyze the product for other production
impurities. The EPA had also been sent product from our reserve
sample for their own analysis.

Q. When will the cleanup be completed?

A. It was reported on St. Louis radio on Feb. 9 that the cleanup
is 95% complete. We understand the cleanup contractor is taking
out all contaminated material down to a 200 ppm level.

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EPA NEWS RELEASE OF 9 a.m. SUNDAY, FEB. 11

(Phoned from EPA Region VII Public Affairs Department to UPI, AP, Kansas City Star, Columbia Daily Tribune).

On Friday evening, Feb. 9, the Monsanto Chemical Co. told EPA Region VII officials that the shipment of chlorinated phenolic compounds which was spilled in a rail car derailment in Sturgeon, Mo., on Jan. 10 contained trace quantities of a compound known as dioxin (TCDD). Monsanto reported three samples measured, averaging 37 ppb (34, 36, 40 ppb). The company could not identify which particular forms of TCDD were present. Acting on this information, Harry Gilmer, EPA Region VII on-scene coordinator, ordered the extraction of a sample of soil taken at the spill site sent to the University of Ill., Champaign. With the assistance of Region VII, Dr. Billie Fairless, Dr. R. D. Kleopfer, Dr. C. Cook of the University performed analyses which confirmed the presence of 2,3,7,8 TCDD at a level less than 0.01 ppb.

Gilmer's team had explored the possibility of dioxin contamination and had both performed some analyses and had contacted Monsanto on this point. According to medical scientists at EPA headquarters in Washington, DC, the new information is of concern but presents no cause for change in the cleanup procedures currently underway. Dr. J. Seïster, senior medical advisor to the office of toxic substances, stated, "The presence of dioxin in the spill material changes the scope of our review but does not present cause for immediate alarm in the levels reported."

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Dr. Seister had led a team of medical and public health experts before a town meeting in Sturgeon on Thursday night held at the request of Senator Tom Eagleton. Concern among residents is still strong as odors from the spill linger. Seister's group answered questions on the known and suspected effects of phenol and various chlorinated phenolic compounds as well as orthochlorophenol which were known at that time to be present in the spill material. They were preparing a report of recommendations for further studies in the area to be presented early this week.

Additional samples of the spill material have been obtained from Monsanto by Region VII officials. These are being prepared for further analyses. Steve Jellineck, EPA assistant administrator to toxic substances will be meeting with Seister's group on Monday to coordinate further activities. "We intend to take all necessary steps to assure the continued identification and removal of these spill chemicals," declared Jellineck. "EPA headquarters will provide Region VII with any assistance needed to complete the job and protect the health of local residents."