

PPG

Inter-Office Correspondence

TO: G. Wimer
L. White
D. Magill

DATE: January 4, 1990

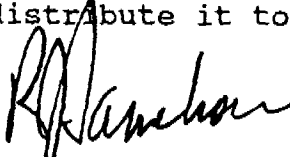
FROM: R. J. Samelson

LOC: 36 West

SUBJECT: OHC/VCM/Dioxin

CONFIDENTIAL

The attached information regarding the OHC/VCM/Dioxin issue is self explanatory. Lamar White has some Lake Charles information regarding this issue, and by this memo, I am asking him to distribute it to our task group.



R. J. Samelson

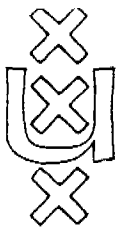
RJS/dkk

Attachment

cc: P. M. King

File: O.U., Lake Charles, VCM, Dioxin

SL 105666



LABORATORY OF ENVIRONMENTAL AND TOXICOLOGICAL CHEMISTRY

UNIVERSITY OF AMSTERDAM

Nieuwe Achtergracht 166, 1018 WV Amsterdam - The Netherlands

telephone: 020 - 5256504

Mr. Arthur Dungan
Safety, Health & Environment
The Chlorine Institute, Inc.
2110 L Street, N.W.
Washington, D.C. 20036
U.S.A.

- copy for
Pulp & Paper Task Group
Environment & Health Committee - Voting Members
- RGS
- DRO
- Tom Marshall - GAGU
- Pat Schmeckenbach - Decentralized Chemical - Campus Chem, TX - phone on other site
ON's Art Dunge 12/27/89

Amsterdam, 8 december 1989.

Re: Your letter dated November 30, 1989.

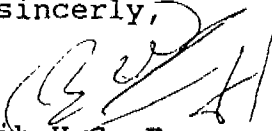
Dear Mr. Dungan,

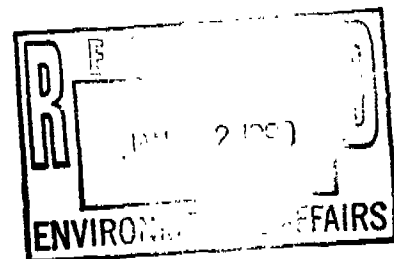
With reference to your request for a copy of the paper that I presented at the DIOXIN '89 symposium I herewith inform you that the paper will be available within 1.5 months. I recently returned from a seven weeks visit to Canada, where I worked at the Canadian Wildlife Service in Ottawa. Therefore I was not able to prepare the manuscript yet. Due to contractual agreements I first have to complete a report for the Dutch government, before written publication of the research is allowed. Please let me know, however, whether you are interested in receiving a copy of my slides that I showed at the symposium. Of course the information contained in these slides is incomplete without oral comment but can give you a first impression of the dioxin related problems of the oxyhydrochlorination process and the experimental methods we used.

Preliminary I can inform you that the whole range of chlorinated dibenzofurans including the 2,3,7,8-chloro-substituted isomers, was determined in both laboratory experiments and in primary VCM effluents. No tetra and pentachlorodibenzo-p-dioxins were found to be formed. The highest amounts in both effluents, related harbor sediments and lab experiments were found to be the hepta- and octachlorodibenzofurans and -dioxins. As expected from mechanistic aspects we also found huge amounts of other chlorinated aromatics (e.g. chlorobenzenes) and ethylene oligomerization products.

After completion of the manuscript I will send you a preprint of it.

Yours sincerely,


dr. Erik H.G. Evers
Lab. of Environmental and Toxicological Chemistry
Univ. of Amsterdam
Nieuwe Achtergracht 166
1018 WV Amsterdam
The Netherlands
Telephone : 31 20 5256636 or -6504 (secre.)
Telefax : 31205255698 or -5802



SL 105667

Second NESHAP, Following Vinyl Chloride

The agency noted that the rule was the second NESHAP to be set after the landmark 1987 ruling in *NRDC v. EPA*. In that decision, EPA said, the court mandated a two-step process for regulating hazardous air pollutants. The rule for benzene was the first issued under the decision (20 ER 858).

The court required a two-step process, first setting an acceptable level of risk, based solely on health considerations and then establishing enforceable standards that provide an "ample margin" of safety to the public. The second step allows cost and technological feasibility to be considered.

Comments will be accepted until Feb. 13, 1990, on regulations affecting the NRC-licensed facilities that are stayed with this rule.

More information is available from James M. Hardin, Environmental Standards Branch, Criteria and Standards Division (ANR-460), Office of Radiation Programs, EPA, 401 M St. S.W., Washington, D.C. 20460; telephone (202) 475-9610.

Air Pollution

INVENTORY OF SULFUR DIOXIDE EMISSIONS ISSUED; WILL FORM BASIS FOR CUTS IN CLEAN AIR MEASURE

A final inventory of sulfur dioxide emissions issued by the Environmental Protection Agency Dec. 11 will serve in part as the basis for emissions reductions required under the president's clean air proposal.

The data were developed by the National Acid Precipitation Assessment Program and provide estimates of emissions from major man-made sources of acid deposition in the United States and Canada in 1985, EPA said.

The 1985 NAPAP *Emissions Inventory, Version 2* looked at sulfur dioxide, nitrogen oxides, volatile organic compounds, total suspended particulates, and carbon monoxide. It was based on a combination of actual measurements and estimates based on engineering judgment and modeling.

The report consists of two volumes, *Development of Annual Data and Modelers Tapes* (EPA-600/7-89-012a) and *Development of the National Utility Reference File* (EPA-600/7-89-013a). It updates an earlier report on 1985 acid rain precursor emissions that was issued in early 1989 (19 ER 2068).

The information is available on 90 large magnetic tapes, an EPA official told BNA. The official said the information will be in great demand. He anticipated that it would be used by utilities, both in support of and in opposition to the material contained in the report. He also foresaw use of the report to set emissions levels under the Bush bill. The official said he expected some utilities to challenge the data strongly.

Examining the three NAPAP "priority pollutants" of sulfur dioxide, nitrogen oxides, and volatile organic compounds, the report said that:

- Overall, utilities generate nearly 70 percent of the 23 million tons per year of U.S. sulfur dioxide emissions, with industry generating about 24 percent and the remainder coming from transportation or miscellaneous generators;

- Utilities generate 32 percent, industry 20 percent, and transportation 43 percent of the 20.5 million tons of nitrogen oxides emissions;

- For VOCs, transportation activities account for 40 percent, industries 17 percent, utilities 0.2 percent, and other sources the rest of the 22 million tons per year of emissions; and

- Canadian sources produced far lower levels of emissions than U.S. sources. Canadian sources generated 4 million tons

of sulfur dioxide compared to 23 million tons per year in the United States, 2 million tons of nitrogen oxides compared to 20.5 million tons in the United States, and 2.4 million tons of VOCs compared to 22 million tons by U.S. sources.

Plant Size A Factor

While VOC emissions were somewhat evenly distributed by plant size, both sulfur dioxide and nitrogen oxides emissions were heavily influenced by plant size, with a few large plants generating most emissions. For sulfur dioxide sources, 2 percent of the plants generated 68 percent of the emissions, and 5 percent of generators emitted 72 percent of the nitrogen oxides.

The report's primary purpose is scientific, although it is politically salient because of the Clean Air Act reauthorization, EPA said. The report is intended to supply scientists with the historical basis needed to assess the impacts of various sources and determine long-term trends in the generation of major man-made sources of acid deposition in the United States and Canada.

The two-volume report is available only from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Va. 22161; telephone (703) 487-4650. For technical information, contact J. David Mobley, (MD-62), EPA, Air and Energy Engineering Research Laboratory, Research Triangle Park, N.C. 27711; telephone (919) 541-2612.

Water Pollution

EPA CRITICIZED FOR NOT REPORTING SAMPLING INFORMATION ON DIOXIN IN FISH

PORTLAND, Ore. — (By a BNA Staff Correspondent) — The Environmental Protection Agency is under fire for not immediately releasing sampling data on dioxin in the Columbia River and its tributaries.

The Oregon Department of Environmental Quality, the Washington Department of Ecology, and an environmental group all faulted EPA Region X after the data were released Dec. 8 in response to a Freedom of Information Act request by the Eugene-based Northwest Coalition for Alternatives to Pesticides.

The study collected data on dioxins in fish downstream from pulp and paper mills. Opinions differ on what the traces of dioxins and furans in the fish mean. Of special concern to the environmental group, however, is that the most recent fish samples revealed higher levels of dioxins in commercial fish and shellfish such as crab, crayfish, and sturgeon than previously reported.

The Oregon Environmental Quality Commission has been grappling with the proposed siting of another large pulp and paper plant on the lower Columbia River. The commission sets policy for the Department of Environmental Quality. The proposed plant by WTD Industries would be the first new paper plant in the state in more than a decade, but in October the commissioners turned down the company's initial discharge permit request because of concerns about dioxin. However, WTD insisted its new mill would discharge far less dioxin than the existing mills and plans to continue its efforts to obtain a permit.

William Hutchison, chairman of the Oregon Environmental Quality Commission, said the commissioners felt they did not have all the information they needed when faced with the discharge permit request by WTD this fall. While reluctant to comment specifically on the EPA data, he said if anyone has information on dioxins in the Columbia River it should be

*RJS-
Sylli
And
Posn
Corollary
@ H. ch.*

made available. With EPA expecting the states to implement environmental standards, it is important that it provide the states with information they need, he told BNA.

"It is unfortunate that we learned of some of the information in the Region X files only when it was released to a local environmental group under a Freedom of Information Act request," Fred Hansen, director of the Oregon Department of Environmental Quality, said in a Dec. 11 letter to EPA Administrator William K. Reilly. The information released to the environmental group and its implications for regulatory actions are significant, he said.

At EPA, Ken Brooks, director of the agency's Oregon office, countered that EPA technical staff had been sharing the controversial fish sampling data with their counterparts at DEQ before the public release in an effort to determine its significance. However, upper management at DEQ may not have been aware of the raw data or its implications, he told BNA. Repeated calls to EPA officials at Region 10 headquarters in Seattle were not returned.

"I am disturbed that EPA is not alerting states when significant information is available," Chris Gregoire, director of the Washington Department of Ecology, said in a Dec. 12 letter to Reilly. Although EPA had provided periodic updates of raw data on dioxin levels, it was "especially unfortunate" that the significance of this data was released first in a public forum, she said.

The situation followed another incident in which EPA's lack of forewarning to the department prevented it from preparing answers to public inquiries, Gregoire said. "This recurring pattern leads me to ask that EPA reassess its public information strategy to allow your partners—the states—to effectively meet their responsibilities to their residents," she said.

Industry Critical Of Use Of Sampling Data

For its part, the pulp and paper industry was critical of environmentalists' and EPA's use of the sampling data in calculating long-term cancer effects in humans. In its study, EPA used a "toxic equivalency concentration factor" that measured the toxicity of dioxins and furans other than just 2,3,7,8-TCDD, the most potent of the dioxins. Then this factor was used to determine the carcinogenic risk to humans, a scientifically improper risk assessment, according to Douglas Morrison, a public affairs analyst with the Northwest Pulp & Paper Association in Bellevue, Wash.

The EPA survey was a screening study, not a systematic one, Morrison told BNA. An industry-funded study of dioxins in Northwest rivers is to be released soon and will show a lower risk to humans than the EPA study, he said.

Morrison discounted the health risks indicated by the EPA data, claiming that the Food and Drug Administration's threshold for issuing warnings is much higher than most of the EPA samples. The FDA recommends concern when the toxic equivalency concentration factor reaches 8 parts per trillion, a more serious concern at 25 parts per trillion, and a "do not eat" warning at 50 parts per trillion, he said.

However, some of the most recent samples of fish and shellfish in the Columbia River below a number of pulp and paper mills showed toxic equivalency concentration factors as high as 92 parts per trillion in carp near the Boise Cascade Corp. plant at Wallula, Wash. While few people eat carp, they do eat crayfish, and a crayfish sample taken out of the Willamette River in Portland showed a level of 26 parts per trillion.

Using EPA's formula for assessing health risks, the expected lifetime risk from regularly eating crayfish at the Portland location would be 378 cancers per million people, far in

excess of previous risk estimates, according to John Bonine, a professor at the University of Oregon School of Law who worked with the anti-pesticide group.

Concerns About Not Sharing Data

The EPA data came to the environmental group when it asked the agency for all recent information on fish samples for dioxins in the Columbia River, according to Mary O'Brien, staff scientist for the coalition. EPA responded promptly to the FOIA request, she said. However, she said, the group was concerned that EPA officials had sat through earlier meetings of the Oregon Environmental Quality Commission when the issue of dioxin risk in the Columbia had been discussed and did not offer to share their most recent data.

O'Brien also faulted DEQ for not providing Oregon legislators information on dioxin levels at a Dec. 8 legislative committee meeting. "It's astounding how little information DEQ gives its legislators," she said.

Fourteen pulp and paper mills in Oregon and Washington use the chlorine bleaching process, Morrison said. Both states have adopted a water quality standard equivalent to EPA's standard for discharges of effluent with 2,3,7,8-TCDD.

The states have placed 12 of the mills on the short list of violators of the Clean Water Act's Section 304(l), according to an attorney for the Northwest Pulp and Paper Association. Section 304(l) is a new section of the Water Act designed to control toxic water pollution.

According to the pulp and paper industry in the Northwest, the federal standard for 2,3,7,8-TCDD of 0.013 parts per quadrillion is stricter than the health risks warrant. "When EPA calculated the number they didn't have site-specific numbers on fish. What we are saying is that we can bring forth good scientific evidence for a lower standard," Morrison said.

General Policy

HOUSE OPENS INQUIRY OF INSPECTOR GENERAL, QUESTIONING PRACTICES IN EPA INVESTIGATIONS

House subcommittee leaders said Dec. 6 that they have launched an investigation into the Environmental Protection Agency Office of Inspector General, citing allegations of misdirected federal money, questionable investigative practices, and the failure to pursue crooked contractors.

Reps. John D. Dingell (D-Mich) and Thomas J. Bliley (R-Va), the chairman and ranking minority member of the House Energy and Commerce Subcommittee on Investigations and Oversight, said they had received allegations that the IG office has "failed to aggressively pursue unscrupulous super-fund contractors."

A House aide would not elaborate on the charges but said the investigation was just beginning.

In a letter to EPA Inspector General John C. Martin, the congressmen requested numerous documents dating back to 1984 involving IG investigations. The request also asked to review IG staff work documents.

The aide said that this "is a major investigation" of the operations of EPA's IG office. The aide could not predict when the inquiry would be concluded.

The aide also confirmed that the inquiry will delve into charges that Martin acted improperly when he was investigating whether EPA Administrator William K. Reilly improperly intervened in a dispute over North Carolina's regulation of hazardous waste.

An EPA source told BNA that Martin met with Reilly before launching the inquiry into the North Carolina case. Martin allegedly cleared Reilly of impropriety.