

VISTA

Interoffice
Communication

To: Distribution

From: D. Penney 
Date: November 2, 1993

Subject: Meeting with Dr. Mundt

The meeting with Dr. Mundt to discuss PVC/VCM worker health issues has been scheduled for 8:30 am, Thursday, November 11, 1993 in Houston, in conference room 3004.

Distribution:

Aberdeen- B. Seymour
Austin- J. Heinze
Houston- T. Grumbles, Dr. Hamm, J. Ledvina, S. Smith
LCVCM- J. Ware

MODE=TRANSMISSION START=NOV-02 14:30 END=NOV-02 14:31
 FILE NO.= 044
 NO. COM ABBR.NO. STATION NAME/ PAGES PRG.NO. PROGRAM NAME
 TELEPHONE NO.
 01 OK 913184945059 001/001

-VISTA R&D

***** -VISTA R&D - ***** 512 331 2594- *****

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 Austin- J. Heinze
 Houston- T. Grumbles, Dr. Hamm, J. Ledvina, S. Smith
 LCVCM- J. Ware

Post-It™ brand fax transmittal memo 7671		# of pages 1
To J. Ware	From D. Penney	
Co.	Co.	
Dept. LCVCM	Phone #	
Fax #	Fax #	
		512 331 2469
		512 331 2594

Post-It™ brand fax transmittal memo 7671		# of pages 1
To J. Ware	From D. Penney	
Co.	Co.	
Dept. LCVCM	Phone #	
Fax #	Fax #	
		512 331 2469
		512 331 2594

VRD 0002030155

MODE=TRANSMISSION START=NOV-02 14:29 END=NOV-02 14:29
 FILE NO.= 043
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 TELEPHONE NO.
 01 OK <00> ABERDEEN 001/001

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Post-It™ brand fax transmittal memo 7671		# of pages > 1
To	D. Seymour	
Co.	D. Penney	
Dept.	Aberdeen	
Fax #	512 331 2468	
	512 331 2574	

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Post-It™ brand fax transmittal memo 7671		# of pages > 1
To	D. Seymour	
Co.	D. Penney	
Dept.	Aberdeen	
Fax #	512 331 2468	
	512 331 2574	

VRD 0002030156

To: C. Putnik

interoffice
communication

VISTA

From: D. Penney
Date: September 30, 1993

Subject: Health and Environmental Issues related to PVC and VC

John Roheim asked that I provide you with a brief summary of the major health and environmental issues I see facing PVC and VC.

Please contact me if you have any questions or would like to discuss any of this in greater depth.

Dave Penney



cc: J. Heinze, J. Roheim

Health and Environmental Issues Facing Vinyl Chloride (VC) and Polyvinyl Chloride (PVC)

There appears to be a broadening concern, fueled largely by environmentalists and shared by others, that chlorinated organics are producing adverse health and environmental effects. Although all chlorinated organics are suspect, certain materials, including PVC, have been singled out for discussion. The following is a summary of the major health and environmental issues pertaining to VC and PVC.

General chlorinated organic issues/Greenpeace activities

Certain environmental groups, especially, Greenpeace, have been successful in linking VC and PVC with the health and environmental concerns for organochlorines as a whole. Isolated data on problem materials such as, DDT, PCBs, dioxins and DDT, are used to jump to broad, erroneous conclusions. This has resulted in the perception that all organochlorines persist in the environment, that they concentrate to toxic levels and produce wide-spread adverse effects.

Greenpeace has actually stated that its strategy is to attack PVC first, because it is a large consumer of chlorine and many of its uses are viewed as nonessential. Success with PVC will be used to leverage action against the petrochemical industry in general. A measure of success has already been achieved in getting the International Joint Commission, the U.S.- Canadian agency which is responsible for the Great Lakes, to recommend a gradual phase-out of the use of chlorine and chlorine-containing compounds. Greenpeace may push for similar measures in other areas of the U.S.

Dioxin

Several months ago, Greenpeace released a publication (Dioxin Factories) which targeted PVC manufacturing as a major source of dioxins in the environment. Others have charged that incineration of PVC also results in the emission of dioxins. The major concern for Dioxin has been its animal carcinogenicity, however, recent laboratory studies have suggested that dioxin may also cause less familiar noncancer effects, such as, endocrine disruption, immune and neurological problems. The human health significance of these laboratory findings is an active area of discussion in the scientific community.

Recycling

Environmental groups have been successful in convincing the public that plastics are a major contribution to the overfilled landfill problem. This concern has stimulated the recycling of some products, such as, soda bottles and milk jugs, which are typically made of polyethylene, polyethylene terephthalate and some PVC. Unfortunately, current economics limit the extent of plastics recycling that is possible.

Additionally, critics of PVC argue that PVC is especially hard to recycle. First, additional work is required to separate PVC from the plastic waste stream. This must be done because PVC

VC/PVC Issues

Page 2

cannot be extruded with other plastics to make recycled plastics. Finally, PVC must be mixed with other additives in order to make useful products. This means that PVC, once removed from the waste stream, must be further separated into various categories for recycling. All of this adds to the already overburdened economics of recycling PVC.

The difficulty of recycling PVC is partially responsible for making PVC a major issue in Europe. Manufacturers of competitive plastics and environmentalists have been instrumental in motivating local governments to enact bans on PVC use, saying that it is too hard to recycle and dangerous to the environment.

Industry Response

Dow Chemical has taken a lead role in forming the Chlorine Coordinating Council (CCC) (Vista is a charter member) to coordinate the efforts of the various industry groups defending organochlorines. CCC's goal is to influence decision makers to apply scientific principles to the assessment of the health and environmental effects of chlorinated organics.

The Vinyl Institute has also been following the activity on chlorinated organics very closely to identify issues specific to PVC. The Vinyl Institute is supporting the CCC, but is also involved in its own initiatives to address the actions of the International Joint Commission and the concerns raised about dioxins in VC/EDC/PVC manufacturing. The Institute is also involved in recycling programs aimed in finding more economical and efficient way to recycle PVC.

Vista is participating in the VC/PVC-related defense activities of both the CCC and the Vinyl Institute.

Vista Chemical Company

12024 Vista Parke Drive
Austin, Texas 78726-4050
(512) 331-2500

P.O. Box 200135
Austin, Texas 78720-0135
Fax (512) 331-2387

VRD 0002030160

September 17, 1993

VISTA

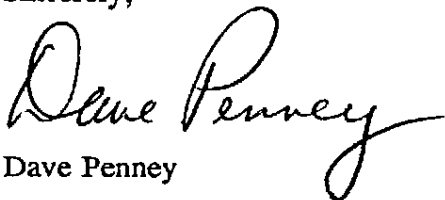
Mr. Bob Burnett
The Vinyl Institute
Wayne Interchange Plaza II
155 Route 46 West
Wayne, New Jersey 07470

Dear Bob:

Attached is a summary of what I found out about the pancreatic cancers and PVC processing reported by Union Carbide. I am going to pursue getting some of the other studies that Dr. Teta referred to in my discussions with her.

I think I would be a good idea to have Dr. Teta come and address the issues management committee.

Sincerely,



Dave Penney

Research Manager, Corp. R&D, Product Safety

B. Hall
CC: S. Hookanson
R. Ouy

To: V. Messick

Interoffice
Communication

VISTA

From: D. Penney 
Date: September 16, 1993

Subject: Union Carbide report of Pancreatic Cancers in a PVC processing operation

I spoke with Dr. Jane Teta of Union Carbide about a report of an increased risk of pancreatic cancer in workers involved in PVC processing. Dr. Teta said that Carbide had recently reported the study to EPA, however, she was not willing to make a copy of the study available for wider distribution before it was accepted for publication. However, Dr. Teta offered to meet with the Vinyl Institute to discuss her findings. I told her that I would contact her if such a meeting was desired. Dr. Teta briefly summarized the study as follows.

Twenty-eight male pancreatic cancer cases which were compared to 140 control cases with no pancreatic tumors were included in the study. Workers were assigned to work areas where both PVC and polyethylene were processed. Men assigned for more than sixteen years to these areas experienced slightly over a seven-fold increased incidence of pancreatic cancer. No excess was seen amongst workers with shorter duration of assignments. Seven of the nine cases of pancreatic cancer began working in this area in the 1940s. All but three cases had worked 20 years or more.

While recognizing that the workers in this study were assigned to units in which both PVC and polyethylene were processed, Teta places most of the blame for the excess pancreatic tumor rate on the PVC processing. She believes this is because PVC processing practices of the time resulted in higher chemical exposures and involved working with more hazardous raw materials than polyethylene. Teta does not believe the increase of pancreatic tumors was due to vinyl chloride exposure. This is primarily because there were no cases of angiosarcoma of the liver. She instead points the finger at the phthalate plasticizers used in PVC, citing diethylhexyl phthalate being reported as carcinogenic in mice and rats. Teta also expressed concern for stabilizers, some of which contain cadmium and lead, which have been demonstrated to produce cancer in animals.

Teta maintains that chemical exposure of workers during PVC processing prior to the 1950s was very high because materials were weighed and fed manually into a blender. Workers climbed inside the blenders to scrape off excess chemical residues whenever different additives were required for different vinyl products. She says that this occurred

as often as twice a day. Teta pointed out that the blenders that were used in polyethylene processing were not cleaned very often because there was little variation in the additives used.

Teta cites, as confirmatory evidence, four previous studies which she says have shown elevated risk of digestive cancer linked to PVC processing.

COMMENTS

The results of this new study bear careful consideration due to the strong excess cancer risk reported. However, its interpretation is complicated by the fact that, as with many other epidemiological studies, all the workers were exposed to a variety of different chemicals in the work place. This makes it impossible to prove that the excess cancer risk is associated with a specific chemical or combination of chemicals.

Dr. Teta stated that the observed excess in pancreatic cancer risk may have been due to practices early on in the industry which resulted in workers being exposed to high concentrations of a variety of chemicals associated with PVC manufacturing. Dr. Teta acknowledged that she was not very familiar with current PVC processing and formulating operations, such as the phasing out of lead and cadmium-based stabilizers. It would be helpful for the industry to document the changes in processes and work practice which have occurred over the years.

I am not aware to what degree Dr. Teta is aware of the toxicological controversy about the potential human carcinogenicity of diethylhexyl phthalate. Many reputable scientists question whether the results obtained in animal studies on this material are applicable to humans.

I think we should ask Dr. Teta to give a presentation on her study to the Vinyl Institute.

Dave Penney

VISTA

To

Date 9/1/93

Ken Eggers - Houston

Nancy Phillip's - Austin

The attached is what I had put together previously for toxicity data. It's not complete, but it shows the general format & type of data I envision for this data.

DPP

Interoffice
Communication

To: Distribution

VISTA

From: D. Penney *DP*

Date: May 11, 1993

Subject: Format for mammalian toxicity data for Product Stewardship database

The Product stewardship implementation plan calls for the establishment of a computerized product stewardship information database. This database would provide a unified system for managing data relevant to product stewardship concerns. This would include physical/chemical, toxicological, end-use, customer complaints, regulatory, storage and transport data, as well as a host of other information.

The broad nature of the information that is to be included in the database argues for the use of a flexible database system. The Product Stewardship Team has evaluated the askSam database system and considers it well suited for this task. It combines user friendliness with the ability to structure databases as loosely or rigidly as desired.

Attached are copies of proposed askSam data entries for select mammalian toxicity studies. I have woven certain data fields with free text to product an askSam record. Hopefully, this record contains the critical data elements for these studies.

Please review the proposed format for these data entries for completeness. What other data elements would you like to see added or dropped? Do we need a Vista study no. for all toxicity and environmental studies? You may address your comments to me. Remember that you may be using the database to retrieve this information yourself.

Distribution:

Austin- L. Britton, C. Hammond, J. Heinze, P. Filler, A. Nielsen, N. Phillips

Houston- A. Clark, T. Grumbles

TEST MATERIAL[Novel II 1618-46

TYPE STUDY[PRIMARY DERMAL IRRITATION STUDY IN RABBITS

REPORT DATE[1-27-92
LABORATORY[STILLMEADOW
LAB STUDY NO[9469-92
VISTA STUDY NO[93-103
SAMPLE NO[V0732-187

RESULT:

The primary irritation index is PII[2.2].

COMMENTS:[Irritation persisted through day 21 and was evidenced by severe swelling and redness. A followup study at more dilute concentrations will be conducted.

NRD 0002030249

VISTA

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From: D. Penney
Date: October 12, 1993

Subject: DIOXIN WORKING GROUP

The third meeting of the Dioxin Working Group was held on October 1, 1993 at CMA headquarters. A major item discussed was the National Resources Defense Council (NRDC) petition on pulp and paper mills. NRDC asked EPA to prohibit any use of chlorine and chlorine-containing materials in pulp and paper mills processes. NRDC took the position that anything short of a total ban would result in the continuation of a significant risk to public health.

A unique aspect of this petition is its argument that background levels of dioxin are already producing health effects. NRDC uses this argument to conclude that any further emissions of dioxin to the environment would only add to an already unsafe situation. Agency acceptance of this argument would set a precedence of potential applicability to a variety of chemicals. NRDC also asserted that no threshold for certain dioxin-related effects has been demonstrated, thus concluding that no level is safe. These arguments echo those made by some scientists at EPA (L. Birnbaum and W. Farland).

Obviously, the way EPA responds to this petition could have major implications for industries besides the pulp and paper industry. The Agency's response could also impact the ongoing discussion about incineration emissions. However, this impact would probably not be felt until the second phase of the Clean Air Act, when health based standards may replace technology based standards.

The likely response of the Agency to the petition was discussed. Some believed if it would be hard for the EPA to deny the petition because: 1) the Clinton administration and Carol Browner, in particular, have not taken positions against environmental groups, 2) many of EPA's own scientists have been making statements that echo those of the petitioners. If the agency does deny the petition, NRDC has threatened to sue the Agency and settle the matter in the courts.

The group decided that it would be useful to form a sub-group to explore potential scientific and legal responses to the petition.

The group also discussed the outcome of EPA's public hearing held on Sept. 7, which reviewed the epidemiological chapter of the dioxin risk assessment. The American Forest and Paper Association (AFPA) provided effective

Distribution

Page 2

comments based on a review by an independent expert panel (executive summary attached) which concluded that there is a lack of data supporting the hypothesis that TCDD is a human carcinogen. The AFPA representative felt that as a result of the meeting it would be hard for EPA to say that dioxin is a known human carcinogen.

The Dioxin Working Group is in the process of redefining its objectives after having been inactive for a number of years. It plans to meet on a monthly basis to get things started.

Distribution:

w/o attachment:

J. Heinze, J. Roheim — **Austin**

T. Grumbles, V. Messick — **Houston**

w/attachment:

M. Scheck — **The Vinyl Institute**



CHEMICAL MANUFACTURERS ASSOCIATION

To: Science & Health Work Group.
Women's Health Issues Team
Dioxin Work Group
[Fax of 2 pages]

Umm
Receive as information. No
action required at this time.

TO: CCC Outreach Task Group
Bob LeBlanc, Elf Atochem, chair
Joy Hutchison, Dow, vice chair
Charlie Dana, Occidental Chemical
David Donaldson, Vulcan
Jim Hasler, Clorox
Stephen Lee, Miles
Linn Noah, PPG
Pete McCarthy, Elf Atochem
Meredith Scheck, Vinyl Institute
Woody Sorensen, LaRoche
John Walker, Georgia Gulf
Bill Werfelman, Olin

Ann Mason
202-887-1180

CC: Joe Ledwing - Houston
John Heinze - Austin
Bud Hall - Austin
Steve Hookanson - Austin

CC: Joe Walker
Ken Arnold, OA&R
Elizabeth Brooks, Ketchum
CCC Matrix Team

FROM: Allison Rajala *Allison*

DATE: October 8, 1993

SUBJECT: PrimeTime LIVE update

As most of you know, today CMA's Sandra Tirey is slated to be interviewed by Diane Sawyer for ABC's PrimeTime LIVE. However, ABC has decided to postpone the story (we are waiting to hear about new dates). Let me bring you up to speed on activity since our meeting in Toronto.

Spokesperson: Sandra Tirey is CMA's Director of Health Issues and brings to the interview deep understanding of health issues as well as compassion. Sandy is new to working with the media, particularly television. However, she has worked very hard with us to understand both the content and the politics of the issue at hand, and we think she is prepared for anything. Sandy spent three half-days in media training--two with Ketchum's media trainer, Vickie Adams, and one with various Ketchum staff. Sandy has a very good handle on our three main messages, and will hold her own in an interview with Diane Sawyer.

Messages: We will not be critiquing the science surrounding the alleged link between DDT and breast cancer. Our messages focus on three themes: we are concerned; the Wolff study points to questions (not necessarily answers); and we will work with the scientific and public health communities to attempt to find answers. If you are interested in the questions for which Sandy is prepared, please contact me directly.



Meeting with producer: Tom Gilroy (CMA), Joe Walker and I met with Doug Longhini, the producer for this segment. We also have spoken to him on the phone several times. We think he is being straightforward with us, as we are with him.

Scope of story: The nature of the story is changing, we believe. The progression over the past 24 hours has been from DDT/organochlorines to strictly DDT to breast cancer in general. We see two main reasons for this transformation: 1) through the scientists we suggested to Longhini, they have uncovered new research (apparently somewhat critical of Wolff's research) that will be unveiled at the APHA meeting the end of October. The primary author, Dr. Krieger, has not been willing to discuss the results prior to the APHA meeting. This study also adds to the uncertainty surrounding the DDT allegation. 2) Diane Sawyer has taken a personal interest in the segment and would rather broaden the story to put environmental factors into the context of the entire breast cancer movement/debate.

New Greenpeace report: We have no new information on the Greenpeace breast cancer report expected to be released Oct. 14 (the original day the segment was to air). We are preparing for it in any case. We will keep you posted.

Managing expectations: While we are not sure when, we are fairly certain there will be a segment on breast cancer and that it will contain a strong DDT/environmental estrogens focus. One reason is that they already have invested quite a bit of footage in the subject. I think it is very important that we manage expectations of our management and communicate with employees. As far as expectations, we believe "success" will be achieved by communicating our three key messages, particularly that of compassion. We are not going to "win" any debate (scientific or otherwise) in this segment, and many within the industry may be tempted to expect a point-by-point rebuttal (which we have encouraged Sandy not to do). To this end, we plan to issue a CCC/CMA/CI communiqué to members describing our expectations. As to employees, most will have been touched personally by tragedy related to breast cancer and will have questions about this issue. At CMA we plan to proactively communicate what we know about the issue, and assure employees that we are looking at this closely and that we care deeply about the subject (basically an expanded version of our key messages). We encourage you to act proactively, and will support you with information if desired (including wise counsel from Sandy).

Status of research project: The Science and Health Committee has reviewed a proposal for follow-up research on a group of people (cohort) exposed to high levels of DDT. This looks promising, although several procedural details still need to be worked out. In any case, support of additional scientific research is likely.

I hope this information is helpful. Please contact me today (my new number at CMA/CCC is 202-887-1303) or Joe at CI if you have any questions.