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T. B. BONNEY

PITTSBURGH OFFICE

MEMORANDUM

PLAINTIFF'S EXHIBIT AL-1398

July 3, 1973

6/28/73

John Zapp

1. Should make a distinction between human and experimental carcinogens TLV list from which OSHA list was obtained (with the addition of A-naphthylamine) does not make this distinction.

2. Oil and Chemical workers, through the courts, forced the promulgation of the emergency temporary standard.

3. Proposed permanent standard to be published in FR. 6/29/73. Understandably, it will be similar to emergency standard with some minor modifications.

4. Will be difficult to temper standard: Four labor representatives and one professional representative who will support their cause. The advisory committee needs and will welcome data.

5. Problems the committee must tackle
   a. No toilets or water available in controlled area. Every time worker leaves controlled area he must change clothing and shower.
   b. What is a controlled area? A lab in which infinitesimal amounts of carcinogens are used?
   c. What airborne concentrations of carcinogens will make an area a controlled area? Any amount? If so, what sensitivity of the analytical method is required?

Chain Robbins

1. No safe levels of 14 carcinogens exist. Therefore, control must be accomplished by work practice.

2. Six compounds known to be human carcinogens. Remaining eight produce cancer in two or more animal species and, therefore, are suspect of being human carcinogens.

3. Contention of employers that standard will cause places of employment to be shut down seems to be without basis.

4. Dry Color Manufacturing Corporation and one other organization filed suit seeking relief from standard. Several petitions from several quarters likewise asking for relief from standard as it applies to MOCA.

5. OSHA welcomes all help offered that will help them write a standard.

ALCOA

411582 0149

Dr. Lassiter, NIOSH

1. Several studies underway involving carcinogens including coal tar pitch volatiles

2. Gathering information about 14 carcinogens. (i.e., justification for a standard). "hazard reviews." Request for information, literature retrieval contracts, morbidity studies of workers using carcinogens, (large use of sputum cytology), interagency cooperation (e.g. National Cancer Institute).

Stockinger

1. TLV committee (Stockinger is chairman) wrote letter to Stender objecting to stringency of requirements under emergency standard. Cites several instances where materials are used but with far less restrictive precautions and no excess in cancers noted. Included mention also of Be, a powerful animal carcinogen but not so for man.

Lipkin

Gastrointestinal Cancer
1. Predisposing factors, low concentration, long-term exposure, individual sensitivity (heredity)

2. Environment is a factor, e.g. incidence in U.S.A. $>$ 40/100,000 Japan $6\frac{1}{2}$/100,000. Yet when Japanese immigrate to U.S.A. their incidence rises.

Hoover

Bladder cancer
(See attachment)
1. Recommends, where data is available and good, manufacturers do their own epidemiological studies.

Van Durran

Chloromethyl ether, B-propiolactone
1. The younger the individual at first exposure, the higher the risk.

Weisberger

1. High risk of lung cancer related to uranium and asbestos exposures except when individual does not smoke.

2. Dimethyl nitrosamine. Why was this material singled out for inclusion of list of 14? All compounds of similar structure are known to be carcinogens. $CH_3 \diagdown N\text{-}NO$ $CH_3 \diagup$

411582 0150

3. Current issue of Preventive Medicine has 10 reviews of Delaney clause.

4. The thing that makes carcinogens unique is that their effect is irreversible???

Woolrich

1. Make differentiation between human and experimental animal carcinogens.

2. Quantities used should influence stringency of handling precautions

3. He has no evidence of carcinogenicity of 3-dichlorobenzidene. Is aware of reports to the contrary.

4. Upjohn keeps its employees using 3-DCB under close scrutiny. No evidence of any bladder tumors.

5. Critical of documentation submitted with O & CW petition for an emergency standard.

6. Benzidene materials are readily metabolized. Speculation that the metabolites are the carcinogens

7. .2mg/kg. Benzidene and 3-DCB. Only metabolites found in urine of animals when benzidene injected. In case of 3-DCB, it was found in urine.

Lee Grant

Suggests that an epidemiological study be made on those who have already been exposed to known and suspected carcinogens.

Rowe

Some materials accused of being carcinogens may be carcinogenic because of impurities present of similar chemical composition. Excellent anayltical techniques available today should allow us to know exact compositions which was not always known in the past.

6/29/73

Workshop Sampling, Analytic, Control

O'Neil

Future standards will probably be influenced by 1. physical properties of material, 2. chemical properties, 3. potency .

Anonymous Comments

Emergency standard does not serve its intended purpose. Requirement for change of clothes and showering when leaving controlled area for drink or use of toilet facilities assumes the worker is contaminated, in which case he shouldn't be in area in first place.

When a standard requires something such as "no known exposure," one penalizes himself if, in attempting to provide maximum protection to his employees, uses an extremely sensitive analytical method for environmental methods.

Kuschner

1. If asbestos workers and uranium workers are to get cancer, they must be smokers. Similarly some carcinogens require an appropriate substrate before they will produce cancer.

2. Does dose rate play a part in chemical carcinogenisis? With ionizing radiation it does, but Kuschner suggests that chemicals may react differently.

3. Animals exposed to benzpyrenes mgs/m^3 and $3\frac{1}{2}$ ppm SO_2. No lung cancer (0/3) from benzpyrene, alone, but was produced when animals exposed to both cantaminants (5/21).

4. bis-chloromethyl ether 0.1 ppm caused lung cancer to animals exposed. Following exposures abnormal but not cancerous cells were observed. In time, the cancers developed. First observed in lung, later in nasal cavity.

$$\begin{matrix} CH_2Cl \\ | \\ O \\ | \\ CH_2Cl \end{matrix} \quad \underset{\rightleftharpoons}{\text{Water}} \quad HCl + CH_2O \text{ (Both highly irritant)}$$

Report On Workshops

Dixon - Medical

1. Controls should be proportional to the hazard

2. Desirability to follow previous employees exposed to carcinogens

3. Dichotomize human and experimental carcinogens

4. Mandatory disclosure of carcinogens in proprietary products

5. Need for appropriate record keeping, medical and environmental surveillance

6. No specific recommendations for medical surveillance made

7. Objectives of preventive program, a. Reduce exposures to lowest level; b. education for employees about hazard and need for good work practices; c. environmental measurements; d. medical surveillance (biological monitoring, look for evidence of malignancy, epidemiological studies, identification of past employees)

8. Dixon doubts that advisory can come up with a sufficiently detailed study within allotted time.

Speicher - Sampling, Monitoring, Control

1. Minimize exposure

2. Periodic sampling--type depending upon material and process. Area, personal, biological and grab samples all have a place.

Dow provides employees with clothing and goggles--standard for any chemical plant. Carcinogens are completely contained in reaction vessels and pipes. If leak occurs, men go to SCBA and impervious suits.

Woolrich

1. In biological laboratories, protective garments, air supplied respirators are required for all employees handling carcinogenic materials (i.e., those with high vapor pressures).

2. In chemistry laboratories, chemists will never weigh materials under a hood--air currents interfere with balance. This must be taken into consideration. Respiratory protection required.

3. Where laundering facilities are required, the soap or detergent must be able to remove the contaminant.

4. For any wide usage, disposable garments generally are not economically feasible.

5. Handling can be minimized if the user will accept a drum from the manufacturer with a certified weight rather than a specified weight. The user can adjust his formulation according to the weight of the carcinogenic component.

Anon

There should be specifications for packages in which carcinogens are contained.

PPG

Need to provide for supervision by competent personnel

Detwiler, Dupont

Prohibit use of returnable drums. (Customer does not always properly seal drums.)

Anon

1. Sampling. Two types, air samples and smear tests. Woolrich adds another, biological monitoring--especially important where skin absorption is a factor.

2. Need for use of judgement

Appears to be limitation on analytical methods . Most of the easy methods are nonspecific. Specificity is obtained at a cost e.g., G.C. followed by mass spectrometer.

3. Adequate ventilation and approximate methods of proving its adequacy

4. Properties of chemicals to determine type of controls

5. Training of employees and supervision to assure that established practices are, in fact, carried out.

6. Provision for appropriate handling of soiled protective clothing. Not to be sent to commercial laundry unless they have provisions for handling

Gross - Analytical

1. Highly sensitive methods lack specificity.

2. Sensitive and specific methods require expensive equipment which small users cannot afford.

3. Specific methods cited for several of the 14 compounds

Teplow - Summary

1. Inclusion of group of dissimilar materials under one regulation has done a disservice to the users. "The promulgation of this standard was a disaster."

2. State of Washington has refused to adopt carcinogen and pesticide standards.

3. Technical papers show the lack of our knowledge of cancer.

4. We need to answer two questions: a. How can we help OSHA develop a workable standard? and b. What can we do to encourage needed research? (IHF may have a role here)

Zapp

Zapp,(a member of advisory committee) asked attendees, in view of limited time available to write the "permanent" standard, if they would approve of limiting the standard to the six known human carcinogens. None expressed disapproval of this action. If Labor Department feels that a letter with such a proposal would be helpful to them, it would be forthcoming from IHF.

T. B. BONNEY