



**ACTION ALERT**



**THE REFRACTORIES INSTITUTE**  
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July 18, 1978

To: The Official Representative of Each  
Active and Associate Member Company  
in the United States:

Subject: PRELIMINARY CLASSIFICATION OF  
SUSPECTED CARCINOGENS

The day after the Institute's testimony at the OSHA hearings on suspected carcinogens, OSHA released its long-awaited preliminary classifications. While these lists are only tentative and subject to change as the rulemaking process continues, they do give us the first authoritative indication of how chemical substances in use in the refractories industry may be controlled.

I am attaching a list of OSHA's proposed Category I, II and III classifications for chemicals reported by members of the TRI Safety and Health Committee as being in use in the industry. There are 14 substances classified as Category I, five as Category II, 22 as Category III, and one (Silica) classified both as Category II and III---a situation I am trying to clarify.

Needless to say, I was disappointed to see so many Category I classifications for our industry. Chromium compounds received more attention than I expected, but coal tar and coal tar pitch compounds received less. Remember, however, that these are only tentative classifications.

#### CATEGORY I

Exposure to substances classified as Category I is considered to constitute "a grave danger" and such chemicals are proposed to be regulated most stringently, first under an emergency standard, then under a permanent standard designed to reduce workers' exposure to the "lowest feasible level" or possibly zero if substitutes are available. Activities required of manufacturers or processors by the proposed permanent standard include (i) exposure monitoring and measurement; (ii) regulated (limited access) areas; (iii) control through engineering and work practices; (iv) respiratory protection; (v) protective clothing and equipment; (vi) housekeeping; (vii) waste disposal; (viii) hygiene facilities; (ix) medical surveillance; (x) employee training; (xi) precautionary signs and labels; and (xii) recordkeeping. The extent of these activities would be similar to those discussed at the May membership meeting in connection with the proposed silica standard, but the cost impact would probably vary from substance to substance.

## CATEGORY II

Category II substances are potential carcinogens for which the evidence is "only suggestive" rather than convincing. They would be regulated less stringently, but the regulation would require most of the activities mentioned above in one form or another. A major difference is that exposure limits, instead of being at the "lowest feasible level", are to be set at the level of existing OSHA standards (29 CFR 1910.1000), or (where none exists) at "an appropriate level based upon acute or chronic effects of exposure...other than carcinogenicity", or, if the present OSHA standard is inadequate to prevent those effects, it shall be lowered by the Secretary to an "appropriate" level. Also, there is no emergency standard provision for Category II substances, nor a requirement for regulated areas, nor the need for special lunchrooms. The difference in the cost of compliance for a Category I classification compared to Category II for a given substance could vary from trivial to catastrophic, depending upon the difference, if any, between an "appropriate level" to prevent acute or chronic effects from exposure and the "lowest feasible level".

## CATEGORY III

Category III substances require no special new controls but since they are recognized toxic substances there may already be recommended or regulated exposure limits which should still be followed. Category III substances can of course, be upgraded to II, or II to I, if new test results or other convincing scientific information is forthcoming.

## STRATEGY

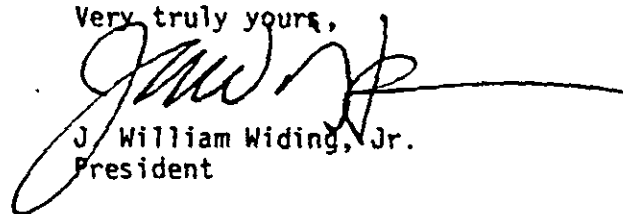
If the OSHA procedure is adopted as proposed and these classifications are upheld, it is obvious that many extremely expensive and far-reaching changes in how the industry does business will be required. This is not the time to throw in the towel, however. It is the time to get to work on developing a counterstrategy. If you have any data on these Category I or II classifications which would indicate they are incorrect (overly stringent), now is the time to get it together. In fact, if you can get such information in my hands by August 1, I can have it included in the post-hearing record. Of particular interest here is the question of whether Chromium (III) should be controlled to the same degree as Chromium (VI), as well as the question of whether either deserves a Category I classification.

Beyond that, it will take further discussions and planning to decide how TRI should respond to these initial classifications. One thing seems clear to me, however, and it is this: we stand a much better chance of softening their impact if we start work immediately instead of waiting for OSHA to publish final classifications. The time for response later when a notice of proposed rule-making appears in the Federal Register will be far too short to accomplish anything of significance.

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I would appreciate hearing from each member who expects to be affected by these classifications as quickly as possible during the post-hearing comment period.

Very truly yours,

A handwritten signature in dark ink, appearing to read 'JWW', with a long horizontal line extending to the right.

J. William Widing, Jr.  
President

JWW/hm

cc: Environmental Protection Committee  
Safety and Health Committee  
Technical Advisory Committee  
Toxic Substances Subcommittee  
H. W. Fulton, Jr.

PRELIMINARY CLASSIFICATION OF  
SUSPECTED CARCINOGENS  
REPORTED BY SOME REFRACTORIES PRODUCERS

CATEGORY I

Acetic acid, Lead (2+) salt  
Asbestos  
Benzene  
Carbon Tetrachloride  
Chromic acid, Chromium (3+) salt (3:2)  
Chromic acid, Dipotassium salt  
Chromic acid, Disodium salt  
Chromite  
Chromium  
Chromium (III) oxide (2:3)  
Chromium (VI) oxide (1:3)  
Ethylenediamine, N,N'-Dimethyl-  
N,N' Dinitroso  
Serpentine  
Tannic acid

CATEGORY II

Ethyl alcohol  
Iron (III) oxide  
Petroleum  
Petroleum asphalt  
Phenanthrene  
Silica, Crystalline (also Category III)

CATEGORY III

Anthracene  
Boric acid  
Brucite  
Cellulose, Carboxymethyl ethe  
Sodium salt  
Cobalt (II) nitrate (1:2)  
Cobalt (2+) oxide  
Ethylene oxide  
Fluorescein, Disodium salt  
Hexamethylenetetramine  
Iron (II) sulfate (1:1)  
Magnetite  
Mercury  
9-Octadecenoic acid (Z)  
(Syn: Oleic acid)  
Olivine  
Phenol  
Phenol, Pentachloro-  
(Syn: Dowicide G)  
Polyethylene  
Polyethylene glycol  
(Syn: Carbowax)  
Polyvinyl alcohol  
(Syn: PVA)  
Silica, crystalline  
(also Category II)  
Silver  
Stearic acid, Methyl ester  
Styere polymer