ALASKA LEGISLATURE COMMITTEE FILES 1983-1984 8672

2815 SRES SB 79

2815

the Board may review the citation and supporting documentation in camera or issue appropriate protective orders.

(13) Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the Commissioner any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Commissioner so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(14) Nothing in this subsection shall be construed as requiring the disclosure under any circumstances of process or percentage of mixture information which is trade secret.

APPENDIX A

HEALTH HAZARD DEFINITIONS (Mandatory)

Although safety hazards related to the physical characteristics of a chemical can be objectively defined in terms of testing requirements (e.g. flammability), health hazard definitions are less precise and more subjective. Health hazards may cause measurable changes in the body -- such as decreased pulmonary function. These changes are generally indicated by the occurrence of signs and symptoms in the exposed employees -- such as shortness of breath, a non-measurable, subjective feeling. Employees exposed to such hazards must be apprised of both the change in body function and the signs and symptoms that may occur to signal that change.

The determination of occupational health hazards is complicated by the fact that many of the effects or signs and symptoms occur commonly in non-occupationally exposed populations, so that effects of exposure are difficult to separate from normally occuring illnesses. Occasionally, a substance causes an effect that is rarely seen in the population at large, such as angiosarcomas caused by vinyl chloride exposure, thus making it easier to ascertain that the occupational exposure was the primary causative factor. More often, however, the effects are common, such as lung cancer. The situation is further complicated by the fact that most chemicals have not been adequately tested to determine their health hazard potential, and data do not exist to substantiate these effects.

There have been many attempts to categorize effects and to define them in various ways. Generally, the terms "acute" and "chronic" are used to delineate between effects on the basis of severity or duration. "Acute" effects usually occur rapidly as a result of short-term exposures, and are of short duration. "Chronic" effects generally occur as a result of long-term exposure, and are of long duration.

The acute effects referred to most frequently are those defined by the American National Standards Institute (ANSI) standard for Precautionary Labeling of Hazardous Industrial Chemicals (Z129.1-1982) -- irritation, corrosivity, sensitization and lethal dose. Although these are important health effects, they do not adequately cover the considerable range of acute effects which may occur as a result of occupational exposure, such as, for example, narcosis.

Similarly, the term chronic effect is often used to cover only carcinogenicity, teratogenicity, and mutagenicity. These effects are obviously a concern in the workplace, but again, do not adequately cover the area of chronic effects, excluding, for example, blood dyscrasias (such as anemia), chronic bronchitis and liver atrophy.

The goal of defining precisely, in measurable terms, every possible health effect that may occur in the workplace as a result of chemical exposures cannot realistically be accomplished. This does not negate the need for employees to be informed of such effects and protected from them.

Appendix B, which is also mandatory, outlines the principles and procedures of hazard assessment.

For purposes of this section, any chemicals which meet any of the following definitions, as determined by the criteria set forth in Appendix B are health hazards:

(1) Carcinogen: A chemical is considered to be a carcinogen if:

(A) It has been evaluated by the International Agency for Research on Cancer (IARC), and found to be a carcinogen or potential carcinogen; or,

(B) It is listed as a carcinogen or potential carcinogen in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or,

(C) It is regulated by the Alaska Occupational Safety and Health Section as a carcinogen.

(2) Corrosive: A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact. For example, a chemical is considered to be corrosive, if, when tested on the intact skin of albino rabbits by the method described by the U.S. Department of Transportation in Appendix A to 49 CFR Part 173, it destroys or changes irreversibly the structure of the tissue at the site of contact following an exposure period of four hours. This term shall not refer to action on inanimate surfaces.

(3) Highly toxic: A chemical falling within any of the following categories:

(A) A chemical that has a median lethal dose (LD_{50}) of 50 milligrams or less per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(B) A chemical that has a median lethal dose (LD_{50}) of 200 milligrams or less per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(C) A chemical that has a median lethal concentration (LC_{50}) in air of 200 parts per million by volume or less of gas or vapor, or 2 milligrams per liter or less of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

(4) Irritant: A chemical, which is not corrosive, but which causes a reversible inflammatory effect on living tissue by chemical action at the site of contact. A chemical is a skin irritant if, when tested on the intact skin of albino rabbits by the methods of 16 CFR 1500.41 for four hours exposure or by other appropriate techniques, it results in an empirical score of five or more. A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques.

(5) Sensitizer: A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

(6) Toxic: A chemical falling within any of the following categories:

(A) A chemical that has a median lethal dose (LD_{50}) of more than 50 milligrams per kilogram but not more than 500 milligrams per kilogram of body weight when administered orally to albino rats weighing between 200 and 300 grams each.

(B) A chemical that has a median lethal dose (LD_{50}) of more than 200 milligrams per kilogram but not more than 1,000 milligrams per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between two and three kilograms each.

(C) A chemical that has a median lethal concentration (LC_{50}) in air of more than 200 parts per million but not more than 2,000 parts per million by volume of gas or vapor, or more than two milligrams per liter but not more than 20 milligrams per liter of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200 and 300 grams each.

(7) Target organ effects: The following is a target organ categorization of effects which may occur, including examples of signs and symptoms and chemicals which have been found to cause such effects. These examples are presented to illustrate the range and diversity of effects and hazards found in the workplace, and the broad scope employers must consider in this area, but are not intended to be all-inclusive.

(A)

Hepatotoxins:	Chemicals which produce liver damage
Signs & Symptoms:	Jaundice; liver enlargement
Chemicals:	Carbon tetrachloride; nitrosamines

(B)

Nephrotoxins:	Chemicals which produce kidney damage
Signs & Symptoms:	Edema; proteinuria
Chemicals:	Halogenated hydrocarbons; uranium

(C)

Neurotoxins:	Chemicals which produce their primary toxic effects on the nervous system
Signs & Symptoms:	Narcosis; behavioral changes; decrease in motor functions
Chemicals:	Mercury; carbon disulfide

(D)

Agents which act on the blood or hematopoietic system:	Decrease hemoglobin function; deprive the body tissues of oxygen
Signs & Symptoms:	Cyanosis; loss of consciousness
Chemicals:	Carbon Monoxide; cyanides

(E)

Agents which damage the lung:	Chemicals which irritate or damage the pulmonary tissue
Signs & Symptoms:	Cough; tightness in chest; shortness of breath
Chemicals:	Silica; asbestos

(F)

Reproductive toxins:	Chemicals which affect the reproductive capabilities including chromosomal damage (mutations) and effects on fetuses (teratogenesis)
Signs & Symptoms:	Birth defects; sterility
Chemicals:	Lead; DBCP

(G)

Cutaneous hazards:	Chemicals which affect the dermal layer of the body
Signs & Symptoms:	Defatting of the skin; rashes; irritation
Chemicals:	Ketones; chlorinated compounds

(H)

Eye hazards:	Chemicals which affect the eye or visual capacity
Signs & Symptoms:	Conjunctivities; corneal damage
Chemicals:	Organic solvents; acids

APPENDIX B

HAZARD DETERMINATION (Mandatory)

The quality of a hazard communication program is largely dependent upon the adequacy and accuracy of the hazard determination. The hazard determination requirement of this standard is performance-oriented. Chemical manufacturers, importers, and employers evaluating chemicals are not required to follow any specific methods for determining hazards, but they must be able to demonstrate that they have adequately ascertained the hazards of the chemicals produced or imported in accordance with the criteria set forth in this Appendix.

Hazard evaluation is a process which relies heavily on the professional judgement of the evaluator, particularly in the area of chronic hazards. The performance-orientation of the hazard determination does not diminish the duty of the chemical manufacturer, importer or employer to conduct a thorough evaluation, examining all relevant data and producing a scientifically defensible evaluation. For purposes of this standard, the following criteria shall be used in making hazard determinations that meet the requirements of this standard.

(1) Carcinogenicity: As described in paragraph (d)(4) and Appendix A of this section, a determination by the National Toxicology Program, the International Agency for Research on Cancer, or the Alaska Occupational Safety and Health Section that a chemical is a carcinogen or potential carcinogen will be considered conclusive evidence for purposes of this section.

(2) Human data: Where available, epidemiological studies and case reports of adverse health effects shall be considered in the evaluation.

(3) Animal data: Human evidence of health effects in exposed populations is generally not available for the majority of chemicals produced or used in the workplace. Therefore, the available results of toxicological testing in animal populations shall be used to predict the health effects that may be experienced by exposed workers. In particular, the definitions of certain acute hazards refer to specific animal testing results (see Appendix A).

(4) Adequacy and reporting of data: The results of any studies which are designed and conducted according to established scientific principles, and which report statistically significant conclusions regarding the health effects of a chemical, shall be a sufficient basis for a hazard determination and reported on any material safety data sheet.

The chemical manufacturer, importer, or employer may also report the results of other scientifically valid studies which tend to refute the findings of hazard.

INFORMATION (Advisory)

The following is a list of available data sources which the chemical manufacturer, importer, or employer may wish to consult to evaluate the hazards of chemicals they produce or import:

-- Any information in their own company files such as toxicity testing results or illness experience of company employees.

-- Any information obtained from the supplier of the chemical, such as material safety data sheets or product safety bulletins.

-- Any information available from the Occupational Safety and Health Section of the Department of Labor, Pouch 7-022, Anchorage, Alaska 99510, Phone (907)264-2599.

-- Any pertinent information obtained from the following source list (latest editions should be used):

Condensed Chemical Dictionary
Van Nostrand Reinhold Company
135 West 50th Street
New York, NY 10020

The Merck Index: An Encyclopedia of Chemicals and Drugs
Merck and Company, Inc.
126 E. Lincoln Avenue
Rahway, NJ 07065

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man
Geneva: World Health Organization
International Agency for Research on Cancer, 1972-1977
(Multivolume work)
49 Sheridan Street
Albany, New York

Industrial Hygiene and Toxicology, by F. A. Patty
John Wiley & Sons, Inc.
New York, NY
(Five volumes)

Clinical Toxicology of Commercial Products
Gleason, Gosselin and Hodge

Casarett and Doull's Toxicology; The Basic Science of Poisons
Doull, Klaassen, and Amdur
Macmillan Publishing Co., Inc.
New York, NY

Industrial Toxicology, by Alice Hamilton and Harriet L. Hardy
Publishing Sciences Group, Inc.
Acton, MA

Toxicology of the Eye, by W. Morton Grant
Charles C. Thomas
301 - 327 East Lawrence Avenue
Springfield, IL

Recognition of Health Hazards in Industry
William A. Burgess
John Wiley and Sons
605 Third Avenue
New York, NY 10158

Chemical Hazards of the Workplace
Nick H. Proctor and James P. Hughes
J.P. Lipincott Company
6 Winchester Terrace
New York, NY 10022

Handbook of Chemistry and Physics
Chemical Rubber Company
18901 Cranwood Parkway
Cleveland, OH 44128

Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment with Intended Changes
American Conference of Governmental Industrial Hygienists
6500 Glenway Avenue, Bldg. D-5
Cincinnati, OH 45211

Note: The following documents are on sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Occupational Health Guidelines
NIOSH/OSHA (NIOSH Pub. No. 81-123)

NIOSH/OSHA Pocket Guide to Chemical Hazards
NIOSH Pub. No. 78-210

Registry of Toxic Effects of Chemical Substances
U.S. Department of Health & Human Svcs.
Public Health Service
Center for Disease Control
National Institute for Occupational Safety & Health
(NIOSH Pub. No. 80-102)

The Industrial Environment - Its Evaluation and Control

U.S. Department of Health & Human Svcs.
Public Health Service
Center for Disease Control
National Institute for Occupational Safety & Health
(NIOSH Pub. No. 74-117)

Miscellaneous Documents

National Institute for Occupational Safety & Health

1. Criteria for a recommended standard.... Occupational exposure to "_____"
2. Special Hazard Reviews
3. Occupational Hazard Assessment
4. Current Intelligence Bulletins

BIBLIOGRAPHIC DATA BASES

Service Provider	File Name
Bibliographic Retrieval Services (BRS) Corporation Park Building 702 Scotia, New York 12302	AGRICOLA BIOSIS PREVIEWS CA CONDENSATES CA SEARCH DRUG INFORMATION NEDLARS MEDOC NTIS POLLUTION ABSTRACTS SCIENCE CITATION INDEX SSIE
Lockheed - DIALOG	ARGICOLA

Lockheed Missiles & Space Co., Inc. P.O. Box 44481 San Francisco, CA 94144	BIOSIS PREV.1972-PRESENT BIOSIS PREV.1969-1971 CA CONDENSATES 1970-71 CA SEARCH 1972-1976 CA SEARCH 1977-PRESENT CHEMNAME CONFERENCE PAPERS INDEX FOOD SCIENCE & TECH. ABSTR. FOODS ADLIBRA INTL. PHARMACEUTICAL ABSTR. NTIS POLLUTION ABSTRACTS SCISEARCH 1978-PRESENT SCISEARCH 1974-1977 SSIE CURRENT RESEARCH
SDS - ORBIT SDC Search Service Department No. 2230 Pasadena, CA 91051	AGRICOLA BIOCODES BIOSIS/BIO6973 CAS6771/CAS7276 CAS77 CHEMDEX CONFERENCE ENVIROLINE LABORDOC NTIS POLLUTION SSIE
Chemical Information System (CIS) Chemical Information Systems, Inc. 7215 Yorke Road Baltimore, MD 21212	Structure & Nomenclature Search System Acute Toxicity (RTECS) Clinical Toxicology of Commercial Products Oil and Hazardous Materials Technical Assistance Data System

Service Provider	File Name
National Library of Medicine Department of Health & Human Services Public Health Service National Institutes of Health Bethesda, MD 20209	Toxicology Data Bank (TDB) MEDLINE TOXLINE CANCERLIT RTECS

Alaska State Legislature

Senate

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

March 11, 1983

Memo

To: Bettye
From: Pat
Subject: SB 79, "Right-to-Know", Hazardous and Toxic Substances in Workplace legislation

Attached is the bill comparison done for our first hearing in Juneau on February 28. At that time you announced your intention to have an ad hoc group of interested parties get together to try to work out problems and come up with a new acceptable version of the bill. This work has been initiated, but it still several weeks away from completion probably.

However, you might want to comment, if asked, on the following possible changes which you are considering to make the bill more reasonable:

1) Rather than using 40,000 substance lists, the Department of Labor would be instructed to develop a list that relates to Alaska and known hazardous substances and would not include:
   a. Substances because of volume or manner of use are not considered hazardous; and
   b. Substances used for personal use. This would exclude grocery items, car gas, etc.

2) Information sheets on substances to be given to employees could be the same as required by OSHA and would be obtained from manufacturers and wholesalers. Would not have to be developed by individual employers.

3) Copies of information would go to Dept. of Labor who would issue regs determining who would have access to info but would be subject to trade secret provisions of existing law.

4) Labeling provisions would be stripped down considerably to only include barrels or large containers or deleted all together.

5) Posting of information would be in "appropriate place" in workplace rather than any specific place.

Senate Resources Committee
May 11, 1983

LETTER OF INTENT, SB 79

The purpose of this legislation is to inform employees of the identity of and the health hazards and proper handling procedures for hazardous and toxic substances in their workplace through a communication and safety education program adopted by employers. While this legislation is designed to cover most employers in the state utilizing substances defined in the bill, it is not the intent to require employers to be responsible for the generation or creation of the information required to be posted or communicated to employees. Rather, the bill is designed under the assumption that federal regulations will be promulgated in the near future by the Occupational Safety and Health Administration (OSHA) which will require manufacturers to develop and distribute information for all the substances covered by the bill. The provision requiring that such information accompany substances imported into the state and the provision requiring the State Department of Labor to keep information on file for all substances covered by the bill are designed to aid employers in readily obtaining the required information.

It is the intent of the Committee that the Department of Labor play an active role in informing employers of the requirements of this bill and aiding them in meeting the requirements. Among the tasks required of and intended that the Department undertake are: the development of a poster outlining the provisions and employee rights under the bill and the printing of sufficient copies for all applicable employers; the compilation of all relevant information on the various substances covered by the bill and formulation of an information retrieval system capable of answering telephone inquiries by employers and employees on various substances and products; the compilation and printing of a list of the various substances identified in the bill as hazardous and toxic for use by employers; the provision of assistance to employers upon request in developing safety education programs; and the surveying of various employers or industries to identify the types of substances used and problems being encountered. In this last task it is intended that such surveys be made in cooperation with business and industry groups or associations.

It is the intent of the Committee that the Department complete the specific tasks identified in section 1 of the bill at least several months in advance of the July 1, 1984 effective date for section 2 of the bill requiring posting and training by employers.

The bill authorizes the Department to identify substances to be covered by the bill. It is the intent of the Committee that this authority be used only on a case-by-case basis pursuant to the Administrative Procedure Act to cover a very few substances which might be of specific concern in the

state but for some reason, such as bureaucratic delay, have not yet been identified on the federal level pursuant to OSHA regulation. It is not the intent of the Committee to direct the Department to engage in a major identification, testing or research program which would result in large numbers of additional substances or additional lists of substances beyond those identified in the bill.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

Senate Resources Committee
April 20, 1983

COMMENTS ON DRAFT SUBSTITUTE
FOR SB-79

Page 1, Section 1--Substances Covered

-- Several people commented that there remained ambiguity as to how the Department of Labor was to arrive at a list of hazardous and toxic substances and how their definitions were to relate to the lists of substances contained on page 5 in the definitions section.

-- A specific comment was made that the regulations from DOL should be set within a timeframe.

-- Need more specific criteria for which substances are to be included or excluded; particularly relating to "amounts which to not pose a health risk" (lines 14-15).

Staff Comment

Although our intent was to have the DOL use the lists in the definitions from which to arrive at a list best representing the Alaskan situation and avoiding "frivolous" substances or limit substances such as sand to those unusual circumstances where they do constitute a health hazard, this section is obviously unclear as to how to use the lists. It probably could use additional direction and clarification. The draft OSHA regulations contain several lists including the Subpart Z list which must be included and also spell out more specific instances and substances that are not to be included.

Pages 1 & 2, Section 2--Manufacturer's and Wholesaler's Info Requirements

-- Business interest emphasized that the requirements relating to manufacturers were covered by the pending OSHA regulations. The "final" draft regulations would also cover distributors and importers of substances.

-- Line 7-8. One comment was made that the symptoms should be described in laymen's terms, as in (5) on line 14.

Page 3, Section 3--Employer Info and Training Requirements

-- Labor and Health commentors emphasized that the pending OSHA regs ("final" draft and draft) do not cover non-manufacturing employers as contained in this section.

-- Lines 3-7. In the case of employer with many substances, recommended that rather than posting of multiple MSDS's, that only notice of where detailed info on substances was available for inspection need be posted. New MSDS could be posted for 30 days.

-- Lines 11-12. Several comments that all employees should receive MSDS info annually, that agents should be permitted to ask for information. One comment that info should be provided in native language.

-- Line 15. Training:
  -- Employers wanted to be able to utilize existing training programs to maximum extent possible.

  -- Several comments that training for all employees should be required annually.

  -- In line 18, delete the word "routinely" to ensure coverage of all circumstances.

-- After line 23, it was recommended to add an additional requirement to inform employees on where they can get additional information on substances.

-- Lines 24-27. Many comments received opposed 30-day grace period on supplying MSDS info to employees. Said too long to adequately protect worker. Some suggestions for shorter time (like 7 days), other for different approach like calling DOL for info and supplying verbal info. Business argued more for good faith effort including notification of DOL after 30 days if info not forthcoming from manufacturers.

Staff Comment

MSDS on most common hazardous and toxic substances are now readily available commercially in response to other state laws such as New York's, or on file now with the DOL. Use of DOL as clearinghouse for MSDS information would be very possible.

-- Lines 27-28. A recommendation was made to require employers give information on safety to employees when checking out equipment.

-- Page 3, lines 28-29, and Page 4, lines 1-2. A suggestion was made to insert the words "on request" for TA from DOL to employers.

-- Page 4, lines 1-2. A suggestion was made to require the DOL to monitor the training programs of employers.

Page 4, Line 3--Reports to be filed with DOL

-- Several comments were made on the overall needs for and objectives of this section's requirements. One set of comments felt that such reports to the DOL were needless paperwork. Others felt that information on only a few especially hazardous and toxic substances was needed to track use in the state. Others felt that only certain information, not all MSDS info, was necessary.

-- Some felt that there needed to be better clarification of which substances were to be required to be reported and how such a list compared with the list of substances provided for on page 1, first section. Also, timeframe needed for DOL to specify list.

-- Also, clarification is needed as to whether MSDS information is to be required or whether different or additional information is to be required.

-- Many commented that reports should be annual and that new info needs timeframe.

-- One comment was that only manufacturers and wholesalers should make reports.

Staff Comments

This section needs work and clarification based on what objectives are to be achieved. The list of substances required in Section 1 and the list required in this section and the informational requirements need to be reconciled.

Page 4, line 19--Access to Records

-- Several comments were made expressing concern on how trade secrets were to be protected and whether additional guidance was needed in the provision. Recommended new OSHA reg language be used.

-- Concern was expressed that information on exposure monitoring already required under existing OSHA regs was not covered in this bill. It was recommended that the additional access language contained in HB 197 be included.

Page 4-5, Sec. 4--Definitions

-- Page 5, line 15. It was recommended that terms such as "combustible" be defined per existing OSHA and ANSI standards.

-- Page 5, line 27-29. Several commentors felt NIOSH list should be eliminated and avoid any confusion that the entire list should or might be used.

-- Page 6, line 1. A comment was made to place more criteria on DOL's ability to add substances to the list by regulation. (The regulation authority which is referenced is section 1 of this bill, which does contain limitations.)

-- Page 6, lines 11 and 19. A recommendation was made to delete the exclusion for employers using primary residences.

-- Page 6, line 14. The references are in error.

-- Page 6, lines 19-21. Problems with multiple-employer job sites were pointed out, and it was recommended that employers be required to meet the provisions of the act for their employees regardless of their location.

Additions to Bill

-- There were several suggestions to add labeling requirements into the bill as contained in the original SB 79.

-- There was a suggestion to retain the anti-waiver provision in the original SB 79 regarding employees rights to information.

-- There was a request for a specific exemption from the bill for hospitals.

-- Intrastate transportation carriers expressed concern with the bill's requirements due to their unique circumstances of handling a variety of pre-packaged, pre-labeled substances which are not used, but only transferred from one carrier or mode of transportation to another.

[illegible] OF OSHA STANDARDS ACTIONS

Date: 3/1/83

Health

Project Name (Major Rule = *)	Initiation Date	Advance Notice Date (ANPRM)	Public Comments Due	Proposal Date (NPRM)**	Public Comments Due	Hearing Date	Close of Hearing Record	Final Rule Date**	Comments
Access to Employee Exposure and Medical Records - Revision	08/07/81	08/07/81	09/21/81	07/13/82	09/14/82	10/05/82	12/13/82	06/00/83	
Arsenic, Inorganic - Significant Risk Issue	04/00/81	N/A	N/A	04/09/82	06/08/82	07/13/82	09/03/82	01/14/83	
Asbestos - Revision	10/09/75	N/A	N/A						
Carcinogen Policy - Revision	01/20/80	01/05/82	04/05/82	03/00/83					
Coal Tar Pitch Volatiles Modification of Interpretive Rule	10/15/73	N/A	N/A	05/28/82	08/26/82	N/A	N/A	01/21/83	
*Cotton Dust - Revision	04/00/81	02/09/82	03/26/82	03/00/83					
- Stay for Knitting Industry	N/A	N/A	N/A	08/13/82	09/13/82	N/A	N/A	02/04/83	
*Engineering Controls vs Personal Protective Equipment	04/00/81	02/22/83	06/22/83						
*Ethylene Dibromide (EDB	09/21/81	12/18/81	05/31/82	06/00/83					
*Ethylene Oxide (EtO)	08/13/81	01/26/82	03/31/82	07/00/83					
Field Sanitation	07/16/82	03/01/83							
*Hazard Communication - Review	04/00/81	N/A	N/A	03/19/82	05/18/82	06/15/82	09/01/82	05/00/83	

(** Dates for publication in the Federal Register.)

[illegible] esa King
Associated General Contractors
134 N Franklin
Suite A
Juneau, AK 99801

U.S. Department of Labor

Occupational Safety and Health Administration
909 First Avenue
Seattle, Washington 98174

Reply to the Attention of:

March 1, 1983

Ms. Resa King
Association of General Contractors
134 N. Franklin
Juneau, Alaska 99801

Dear Ms. King:

In response to your current inquiries to my staff about the proposed Federal Hazard Communication Standard; Final Rule, 29 CFR 1910.1200, we have contacted the National Office, OSHA, for guidance. The Final Rule is expected to be published about July 1, 1983, provided there are no unexpected delays or court challenges. None are expected at this time.

The Hazard Communication Standard will require chemical manufacturers and importers to assess the hazards of the chemicals which they produce or import and make this information known. All employers in manufacturing (SIC 20-29) will be required to provide information to their employees about the hazardous chemicals. Distributors will be required to properly label containers of the hazardous chemicals.

The standard is under final review in the National Office. Major changes in text are not expected.

We are pleased to be of assistance.

Sincerely,

John A. Granchi
Assistant Regional Administrator
Office of Technical Support

cc: C. A. Mangold

U.S. Department of Labor

Assistant Secretary for
Occupational Safety and Health
Washington, D.C. 20210

APR 22 1982

MEMORANDUM FOR: STATE DESIGNEES
REGIONAL ADMINISTRATORS

FROM: THORNE G. AUCHTER
Assistant Secretary

SUBJECT: OSHA Policy on State Adoption of Standards Different from Federal Standards

As I have discussed with you on several occasions, strong concern has been raised about the cost and the impact of State adoption of standards that are different from comparable Federal standards. This concern is based primarily on four considerations:

1. When State standards differ from comparable Federal standards, employers who do business in more than one State are forced to keep track of and to comply with a variety of requirements. They indicate that this creates unnecessary burdens on their business.

2. The process of researching and developing standards is highly technical and the cost is enormous. The Federal standards development process provides full opportunity for parties in all States to participate, and OSHA is developing means for earlier and fuller State participation in the process. In this context, critics of different State standards argue that there is no clear need for States to duplicate this effort and expense, and that such duplication is particularly difficult to justify in a time of tight budgetary constraints.

3. States which develop their own standards typically take longer than the 6 months from promulgation of a Federal standard which is permitted by OSHA regulations. During this extended period, OSHA must enforce the Federal standard in the State. This responsibility requires OSHA to shift resources from other States and to modify its inspection targeting system to include plan States. Consequently OSHA must dilute enforcement in Federally-covered States. As a result, workers in all

the affected States receive less coverage. The harm from State delay in adopting standards becomes even greater after final approval of the State's program, because thereafter OSHA will not be able to enforce standards in the State pending the State's adoption.

4. Federal OSHA review of different State standards is time-consuming and costly. Combined with the extended promulgation period, the review time may result in a situation in which an approvable standard is not present in a State for a considerable period. Further, under existing OSHA regulations a State may enforce a different standard which it has promulgated, pending completion of OSHA's review. This can result in the State's replacing Federal enforcement with enforcement of a standard less effective than the Federal standard.

The Occupational Safety and Health Act and its legislative history indicate that States have authority under some circumstances to promulgate standards which differ from the Federal. However, such standards must meet certain tests. They must be at least as effective as any corresponding Federal standard and, where applicable to products used in interstate commerce, they must be based upon compelling local conditions and not be an undue burden on interstate commerce.

The requirements of the product standard limitation clause have never been completely defined by OSHA regulations or definitively construed in administrative or judicial proceedings. Recently, however, employer groups in two States have challenged State standards as invalid under this statutory provision. Increased industry awareness of this issue may lead to more challenges in the future. The product clause is potentially a very significant limitation on State standards which are more stringent than corresponding OSHA standards.

In the light of these considerations, several actions related to the issue of different State standards are under consideration.

Proposal 1: Review different State standards more closely in relation to section 18(c)(2), in conjunction with increased opportunity for comment on the impact of the limitation on

the standards by affected parties. This review would give more careful attention to the Congressional concern in section 18(c)(2) that different State standards not unduly burden interstate commerce.

Proposal 2: Revise OSHA regulations to require State adoption of standards identical to the Federal within one month of Federal promulgation, allowing development of a different standard only thereafter. At the same time, preclude enforcement of different State standards until they have been approved Federally while providing that identical State standards are deemed approved upon promulgation. This would eliminate the excessive time after promulgation of a Federal standard that an approvable State standard is not in effect.

Proposal 3: Exclude from State grants funding for development of different State standards. Such exclusion would require development of a formula for determining a reasonable cost for promulgation of standards identical to the Federal. It would eliminate Federal support for duplicate standard-setting processes. In addition, it would eliminate the inequity of funding the cost of promulgating different standards for a few States and thereby denying the use of those funds for other purposes by the States that adopt identical standards.

I want to encourage your careful attention to this issue. I hope that you will discuss it among yourselves and prepare to share your thoughts on these alternatives as well as any others which you may propose. In order to facilitate discussion, I will include the issue on the agenda for the State designees meeting in Williamsburg, Virginia, on May 17-18. Regional Administrators will discuss the issue at our meeting in Salt Lake City, Utah on June 9-11.

ment by the Field brothers has altered nor diminished our long-term plans for continued improvements in the newspaper and we remain as steadfast as ever in providing our readers with the best newspaper that talent and en-

ests."

Marshall Field noted that the family has owned newspapers in Chicago since 1941. The statement said the company "anticipates that The Chicago Sun-Times will be one of the assets offered for

pendent Press Service.

The syndicate, headquartered in Irvine, Calif., distributes columns, cartoons and features worldwide to more than 2,000 dailies and weeklies.

The news service was

Times.

• Field Electronic Publishing, established in 1981 to develop and test the first commercial teletext experiment approved by the Federal Communications Commission.

Bill asks employer's danger advice

By ROBERTA GRAHAM
Daily News business reporter

Gov. Bill Sheffield has said he strongly favors a bill that would require employers to advise workers of the presence of cancer-causing chemicals in the workplace and to label hazardous substance containers, according to Department of Labor Commissioner Jim Robinson.

Robinson, attending a forum Friday on safety and health in the workplace, announced Sheffield's endorsement of the Senate amended version the bill nicknamed the right-to-know legislation.

Robinson said the governor asked the labor department to take the lead in ensuring the bill is passed.

"He's asked us to lobby Anchorage and Kenai and Fairbanks legislators. He's asked us to push for the bill," Robinson said.

The legislation is currently being opposed by business, which prefers more lenient, proposed federal standards, and supported by labor and consumer groups.

It calls for a manufacturer or a wholesaler, when selling a hazardous or toxic substance, to provide the purchaser a list of those chemicals.

Under the bill, that information must then be posted in the workplace, such as the lunchroom or on an employee billboard. Additionally, it would require the employer, within 30 days, to provide the information to any worker.

Federal agenices have identified some 65,000 cancer-causing agents. But the bill would require the state labor department to draw up a list of only those chemicals used in Alaska. It specifically exempts foods, cosmetics, drugs, tobacco or substances used for personal consumption because most of these items already are regulated by federal statutes.

The employer would be required to train all employees as to the hazards of the chemicals, the potential long-term affects and how to properly handle them.

And, it would give an employee, who believes he has been exposed to toxic chemicals, access to corporate records.

The Senate Resources Committee has held several hearings on S.79 and recently has drafted a substitute bill — the version which the governor likes.

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

FOR FIRE, EXPLOSION, AND REACTIVITY;

(IV) KNOWN ACUTE AND CHRONIC HEALTH EFFECTS OF EXPOSURE TO THE HAZARDOUS CHEMICAL, INCLUDING SIGNS AND SYMPTOMS OF EXPOSURE, AND ANY MEDICAL CONDITIONS WHICH ARE GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE TO THE CHEMICAL;

(V) THE PRIMARY ROUTE(S) OF ENTRY AND PERMISSIBLE EXPOSURE LIMIT (FOR THOSE HAZARDOUS CHEMICALS FOR WHICH OSHA HAS PROMULGATED A PERMISSIBLE EXPOSURE LIMIT), AS WELL AS THE ACGIH THRESHOLD LIMIT VALUE AND ANY OTHER AVAILABLE EXPOSURE LIMIT RECOMMENDATIONS;

(VI) ANY PRECAUTIONS FOR SAFE HANDLING AND USE WHICH ARE GENERALLY KNOWN TO THE CHEMICAL MANUFACTURER, IMPORTER OR EMPLOYER, INCLUDING APPROPRIATE HYGIENIC PRACTICES, PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT, AND PROCEDURES FOR CLEAN-UP OF SPILLS AND LEAKS;

(VII) ANY CONTROL MEASURES WHICH ARE GENERALLY KNOWN TO THE CHEMICAL MANUFACTURER, IMPORTER OR EMPLOYER, SUCH AS APPROPRIATE ENGINEERING CONTROLS, WORK PRACTICES, OR PERSONAL PROTECTIVE EQUIPMENT;

(VIII) EMERGENCY AND FIRST AID PROCEDURES;

(IX) THE DATE OF PREPARATION OF THE MATERIAL SAFETY DATA SHEET OR THE LAST CHANGE TO IT; AND

(X) THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE MANUFACTURER OR OTHER RESPONSIBLE PARTY PREPARING OR DISTRIBUTING THE SHEET.

(3) WHERE COMPLEX MIXTURES IN A WORKPLACE HAVE SIMILAR CONTENTS AND HAZARDS, BUT VARY IN SPECIFIC COMPOSITIONS, THE IMPORTER OR EMPLOYER MAY PREPARE ONE MATERIAL SAFETY DATA SHEET TO APPLY TO ALL OF THESE SIMILAR MIXTURES.

(4) IF NO INFORMATION IS FOUND FOR ANY GIVEN CATEGORY ON THE MATERIAL SAFETY DATA SHEET, THE IMPORTER OR EMPLOYER SHALL MARK IT TO INDICATE NO INFORMATION WAS FOUND.

(5) THE CHEMICAL MANUFACTURER, IMPORTER OR EMPLOYER SHALL ENSURE THAT THE INFORMATION ON THE MATERIAL SAFETY DATA SHEET ACCURATELY REFLECTS THE AVAILABLE SCIENTIFICALLY WELL-ESTABLISHED DATA REGARDING THE HAZARDOUS CHEMICAL. IF THE CHEMICAL MANUFACTURER, IMPORTER OR EMPLOYER BECOMES AWARE OF ANY INFORMATION WHICH IS BOTH NEW AND SIGNIFICANT REGARDING THE HEALTH HAZARD OF A CHEMICAL, THIS SHALL BE ADDED TO THE MATERIAL SAFETY DATA SHEET WITHIN THREE MONTHS. IF THE CHEMICAL IS NOT CURRENTLY BEING PRODUCED OR IMPORTED THE CHEMICAL MANUFACTURER OR IMPORTER SHALL ADD THE INFORMATION TO THE MATERIAL SAFETY DATA SHEET BEFORE THE CHEMICAL IS INTRODUCED INTO THE WORKPLACE AGAIN.

(6) CHEMICAL MANUFACTURERS OR IMPORTERS SHALL ENSURE THAT MANUFACTURING PURCHASERS OF HAZARDOUS CHEMICALS ARE PROVIDED AN APPROPRIATE MATERIAL SAFETY DATA SHEET WITH THEIR INITIAL SHIPMENT, AND WITH THE FIRST SHIPMENT AFTER A MATERIAL SAFETY DATA SHEET IS UPDATED. IN LIEU OF PHYSICALLY ATTACHING MATERIAL SAFETY DATA SHEETS TO CONTAINERS SHIPPED, THE CHEMICAL MANUFACTURER OR IMPORTER MAY MAIL THEM TO THE MANUFACTURING PURCHASER AT THE TIME OF THE SHIPMENT. IF THE MATERIAL SAFETY DATA SHEET IS NOT PROVIDED WITH THE SHIPMENT, THE MANUFACTURING PURCHASER SHALL OBTAIN ONE FROM THE CHEMICAL MANUFACTURER OR IMPORTER AS SOON AS POSSIBLE.

(7) DISTRIBUTORS SHALL ENSURE THAT MATERIAL SAFETY DATA SHEETS ARE PROVIDED TO MANUFACTURING PURCHASERS OF HAZARDOUS CHEMICALS.

(8) THE EMPLOYER SHALL MAINTAIN COPIES OF THE REQUIRED MATERIAL SAFETY DATA SHEETS FOR EACH HAZARDOUS CHEMICAL IN THE WORKPLACE, AND SHALL ENSURE THAT THEY ARE READILY ACCESSIBLE TO EMPLOYEES IN EACH WORK AREA.

(9) EMPLOYERS MAY USE PROCESS SHEETS, OPERATING PROCEDURES OR OTHER SUCH WRITTEN MATERIALS AS ALTERNATIVES TO MATERIAL SAFETY DATA SHEETS WITHIN THEIR PLANTS, AS LONG AS THE ALTERNATIVE INCLUDES ALL OF THE INFORMATION REQUIRED ON THE MATERIAL SAFETY DATA SHEET, AND IS READILY ACCESSIBLE TO EMPLOYEES IN EACH WORK AREA. THESE ALTERNATIVES MAY ALSO BE USED TO COVER GROUPS OF HAZARDOUS CHEMICALS IN A WORK AREA WHERE IT MAY BE MORE APPROPRIATE TO ADDRESS THE HAZARDS OF A PROCESS RATHER THAN INDIVIDUAL HAZARDOUS CHEMICALS. HOWEVER, THE EMPLOYER SHALL ENSURE THAT IN ALL CASES THE REQUIRED INFORMATION IS PROVIDED FOR EACH HAZARDOUS CHEMICAL INVOLVED, AND IS READILY ACCESSIBLE TO EMPLOYEES IN THE WORK AREA.

(10) MATERIAL SAFETY DATA SHEETS SHALL BE MADE AVAILABLE TO EMPLOYEES AND THEIR DESIGNATED REPRESENTATIVES, AND UPON REQUEST, TO THE ASSISTANT SECRETARY

SECTIONS 6(B) AND 8(G) OF THE ACT, 29 CFR IS HEREBY AMENDED BY ADDING A NEW SECTION 1910.1200 AS SET FORTH BELOW.

LIST OF SUBJECTS IN 29 CFR PART 1910

OCCUPATIONAL SAFETY AND HEALTH, HAZARD COMMUNICATION.

(SEC. 6(B), 8(C), AND 8(G). PUB. L. 91-596, 84 STAT. 1593, 1599, 1600; 19 U.S.C., 655, 657; 29 CFR PART 1911; SECRETARY OF LABOR'S ORDER NO. 8-76 (41 FR 25059))

PART 1910 OF TITLE 29 OF THE CODE OF FEDERAL REGULATIONS (CFR) IS HEREBY AMENDED BY ADDING A NEW SECTION WHICH READS AS FOLLOWS:

1910.1200 HAZARD COMMUNICATION.

(A) PURPOSE. THE PURPOSE OF THIS SECTION IS TO ENSURE THAT THE HAZARDS OF ALL CHEMICALS PRODUCED, IMPORTED, OR USED WITHIN THE MANUFACTURING SECTOR ARE EVALUATED, AND THAT INFORMATION CONCERNING THESE HAZARDS IS TRANSMITTED TO AFFECTED EMPLOYERS AND EMPLOYEES. THIS TRANSMITTAL OF INFORMATION IS TO BE ACCOMPLISHED BY MEANS OF COMPREHENSIVE HAZARD COMMUNICATION PROGRAMS, WHICH ARE TO INCLUDE CONTAINER LABELING, MATERIAL SAFETY DATA SHEETS AND EMPLOYEE TRAINING.

THIS OCCUPATIONAL SAFETY AND HEALTH STANDARD IS INTENDED TO OCCUPY THE FIELD IN TERMS OF COMMUNICATING HAZARDS TO EMPLOYEES IN THE MANUFACTURING SECTOR. ANY STATE WHICH DESIRES TO ASSUME RESPONSIBILITY IN THIS AREA MAY ONLY DO SO UNDER THE PROVISIONS OF 18(B) OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (P.L. 91-596, 84 STAT. 1608) WHICH DEALS WITH STATE PLANS.

(B) SCOPE AND APPLICATION. (1) THIS SECTION REQUIRES CHEMICAL MANUFACTURERS OR IMPORTERS TO ASSESS THE HAZARDS OF CHEMICALS WHICH THEY PRODUCE OR IMPORT, AND ALL EMPLOYERS IN SIC CODES 20 THROUGH 39 (DIVISION D, STANDARD INDUSTRIAL CLASSIFICATION MANUAL) TO PROVIDE INFORMATION TO THEIR EMPLOYEES ABOUT THE HAZARDOUS CHEMICALS WHICH THEY USE, BY MEANS OF A HAZARD COMMUNICATION PROGRAM LABELS, PLACARDS, MATERIAL SAFETY DATA SHEETS, AND INFORMATION AND TRAINING. IN ADDITION, THIS SECTION REQUIRES DISTRIBUTORS TO TRANSMIT THE REQUIRED INFORMATION TO MANUFACTURING PURCHASERS.

(2) THIS SECTION APPLIES TO ANY CHEMICAL WHICH IS KNOWN TO BE PRESENT IN THE WORKPLACE IN SUCH A MANNER THAT EMPLOYEES MAY BE EXPOSED UNDER NORMAL CONDITIONS OF USE OR IN A FORESEEABLE EMERGENCY.

(3) THIS SECTION APPLIES TO LABORATORIES AS FOLLOWS:

(I) EMPLOYERS SHALL ENSURE THAT EXISTING LABELS ON INCOMING CONTAINERS OF HAZARDOUS CHEMICALS ARE NOT REMOVED OR DEFACED;

(II) EMPLOYERS SHALL MAINTAIN ANY MATERIAL SAFETY DATA SHEETS THAT ARE RECEIVED WITH INCOMING SHIPMENTS OF HAZARDOUS CHEMICALS, AND ENSURE THEY ARE ACCESSIBLE TO LABORATORY EMPLOYEES;

(III) EMPLOYERS SHALL ENSURE THAT LABORATORY EMPLOYEES ARE APPRISED OF THE HAZARDS OF THE CHEMICALS IN THEIR WORKPLACES IN ACCORDANCE WITH PARAGRAPH (H) OF THIS SECTION; AND

(IV) EMPLOYERS NEED NOT IMPLEMENT ANY OTHER PROVISIONS OF THIS SECTION IN THEIR LABORATORIES.

(4) THIS SECTION DOES NOT APPLY TO CHEMICALS WHICH ARE FOODS, DRUGS, COSMETICS, OR TOBACCO PRODUCTS INTENDED FOR PERSONAL CONSUMPTION BY EMPLOYEES WHILE IN THE WORKPLACE.

(5) THIS SECTION DOES NOT APPLY TO:

(I) ANY HAZARDOUS WASTE AS SUCH TERM IS DEFINED BY THE SOLID WASTE DISPOSAL ACT, AS AMENDED BY THE RESOURCE CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED (42 U.S.C. 6901 ET SEQ.), WHEN SUBJECT TO THE LABELING REQUIREMENTS OF THAT ACT AND REGULATIONS ISSUED UNDER THAT ACT BY THE ENVIRONMENTAL PROTECTION AGENCY;

(II) ANY PESTICIDE AS SUCH TERM IS DEFINED IN THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (7 U.S.C. 136 ET SEQ.), WHEN SUBJECT TO THE LABELING REQUIREMENTS OF THAT ACT AND REGULATIONS ISSUED UNDER THAT ACT BY THE ENVIRONMENTAL PROTECTION AGENCY;

(III) ANY FOOD, FOOD ADDITIVE, DRUG, OR COSMETIC, (E.G., FLAVORS AND FRAGRANCES), AS SUCH TERMS ARE DEFINED IN THE FEDERAL FOOD, DRUG, AND COSMETIC ACT (21 U.S.C. 301 ET SEQ.) AND REGULATIONS ISSUED UNDER THAT ACT,

(1)

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FORESEEABLE EMERGENCIES;

(IV) ANY DISTILLED SPIRITS, WINE, OR MALT BEVERAGE AS SUCH TERMS ARE DEFINED IN THE FEDERAL ALCOHOL ADMINISTRATION ACT (27 U.S.C. 201 ET SEQ.) AND REGULATIONS ISSUED UNDER THAT ACT;

(V) ANY CONSUMER PRODUCT OR HAZARDOUS SUBSTANCE AS THOSE TERMS ARE DEFINED IN THE CONSUMER PRODUCT SAFETY ACT (15 U.S.C. 2051 ET SEQ.) AND FEDERAL HAZARDOUS SUBSTANCES ACT (15 U.S.C. 1261 ET SEQ.) RESPECTIVELY, WHEN SUBJECT TO A CONSUMER PRODUCT SAFETY STANDARD OR LABELING REQUIREMENT OF THOSE ACTS, OR REGULATIONS ISSUED UNDER THOSE ACTS BY THE CONSUMER PRODUCT SAFETY COMMISSION, AND WHEN PRESENT IN QUANTITIES OR CONCENTRATIONS WHICH ARE NOT HAZARDOUS TO EMPLOYEES UNDER CONDITIONS OF NORMAL EXPOSURE OR USE, INCLUDING FORESEEABLE EMERGENCIES;

(VI) TOBACCO OR TOBACCO PRODUCTS;

(VII) WOOD OR WOOD PRODUCTS (INCLUDING PRESERVED WOOD); AND

(VIII) ANY ARTICLE.

(C) DEFINITIONS.

/ARTICLE/ MEANS A MANUFACTURED ITEM (I) WHICH IS FORMED TO A SPECIFIC SHAPE OR DESIGN DURING MANUFACTURE, (II) WHICH HAS END USE FUNCTION(S) DEPENDENT IN WHOLE OR IN PART UPON ITS SHAPE OR DESIGN DURING END USE, AND (III) WHICH DOES NOT RELEASE, OR OTHERWISE RESULT IN EXPOSURE TO, A HAZARDOUS CHEMICAL UNDER NORMAL CONDITIONS OF USE.

/ASSISTANT SECRETARY/ MEANS THE ASSISTANT SECRETARY OF LABOR FOR OCCUPATIONAL SAFETY AND HEALTH, U.S. DEPARTMENT OF LABOR, OR DESIGNEE.

/CHEMICAL/ MEANS ANY ELEMENT, CHEMICAL COMPOUND OR MIXTURE OF ELEMENTS AND/OR COMPOUNDS.

/CHEMICAL MANUFACTURER/ IS AN EMPLOYER IN SIC CODES 20 THROUGH 39 WITH A FACILITY WHERE CHEMICAL(S) ARE PRODUCED OR PROCESSED FOR USE OR DISTRIBUTION.

/CHEMICAL NAME/ IS THE SCIENTIFIC DESIGNATION OF A CHEMICAL IN ACCORDANCE WITH THE NOMENCLATURE SYSTEM DEVELOPED BY THE INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY (IUPAC) OR THE CHEMICAL ABSTRACTS SERVICE (CAS) RULES OF NOMENCLATURE, OR A NAME WHICH WILL CLEARLY IDENTIFY THE CHEMICAL FOR HAZARD EVALUATION PURPOSES.

/COMBUSTIBLE LIQUID/ MEANS ANY LIQUID HAVING A FLASHPOINT AT OR ABOVE 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE), BUT BELOW 200 DEGREES FAHRENHEIT (93.3 DEGREES CENTIGRADE), EXCEPT ANY MIXTURE HAVING COMPONENTS WITH FLASHPOINTS OF 200 DEGREES FAHRENHEIT (93.3 DEGREES CENTIGRADE), OR HIGHER, THE TOTAL VOLUME OF WHICH MAKE UP 99 PERCENT OR MORE OF THE TOTAL VOLUME OF THE MIXTURE.

/COMMON NAME/ MEANS ANY DESIGNATION OR IDENTIFICATION SUCH AS CODE NAME, CODE NUMBER, TRADE NAME, BRAND NAME OR GENERIC NAME USED TO IDENTIFY A CHEMICAL OTHER THAN BY ITS CHEMICAL NAME.

/COMPRESSED GAS/ MEANS:

(I) A GAS OR MIXTURE OF GASES HAVING, IN A CONTAINER, AN ABSOLUTE PRESSURE EXCEEDING 40 PSI AT 70 DEGREES FAHRENHEIT (21.1 DEGREES CENTIGRADE); OR

(II) A GAS OR MIXTURE OF GASES HAVING, IN A CONTAINER, AN ABSOLUTE PRESSURE EXCEEDING 104 PSI AT 130 DEGREES FAHRENHEIT (54.4 DEGREES CENTIGRADE) REGARDLESS OF THE PRESSURE AT 70 DEGREES FAHRENHEIT (21.1 DEGREES CENTIGRADE); OR

(III) A LIQUID HAVING A VAPOR PRESSURE EXCEEDING 40 PSI AT 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE) AS DETERMINED BY ASTM D-323-72.

/CONTAINER/ MEANS ANY BAG, BARREL, BOTTLE, BOX, CAN, CYLINDER, DRUM, REACTION VESSEL, STORAGE TANK, OR THE LIKE THAT CONTAINS A HAZARDOUS CHEMICAL. FOR PURPOSES OF THIS SECTION, PIPES OR PIPING SYSTEMS ARE NOT CONSIDERED TO BE CONTAINERS.

/DESIGNATED REPRESENTATIVE/ MEANS ANY INDIVIDUAL OR ORGANIZATION TO WHOM AN EMPLOYEE OR FORMER EMPLOYEE GIVES WRITTEN AUTHORIZATION TO EXERCISE SUCH EMPLOYEE'S RIGHTS UNDER THIS SECTION. A RECOGNIZED OR CERTIFIED COLLECTIVE BARGAINING AGENT SHALL BE TREATED AUTOMATICALLY AS A DESIGNATED REPRESENTATIVE WITHOUT REGARD TO WRITTEN EMPLOYEE AUTHORIZATION.

/DIRECTOR/ MEANS THE DIRECTOR, NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, OR DESIGNEE.

/DISTRIBUTOR/ MEANS A BUSINESS WHICH SUPPLIES OR SELLS CONTAINERS OF HAZARDOUS

OR FORESEEABLE EMERGENCIES TO HAZARDOUS CHEMICALS IN A WORKPLACE IN SIC CODES 20 THROUGH 39, INCLUDING, BUT NOT LIMITED TO PRODUCTION WORKERS, LINE SUPERVISORS, AND REPAIR OR MAINTENANCE PERSONNEL. OFFICE WORKERS, GROUNDS MAINTENANCE PERSONNEL, SECURITY PERSONNEL OR NON-RESIDENT MANAGEMENT ARE GENERALLY NOT INCLUDED, UNLESS THEIR JOB PERFORMANCE ROUTINELY INVOLVES POTENTIAL EXPOSURE TO HAZARDOUS CHEMICALS.

/EMPLOYER/ MEANS A PERSON ENGAGED IN A BUSINESS WITHIN SIC CODES 20 THROUGH 39 WHERE CHEMICALS ARE EITHER USED, OR ARE PRODUCED OR PROCESSED FOR USE OR DISTRIBUTION.

/EXPLOSIVE/ MEANS A CHEMICAL THAT CAUSES A SUDDEN, ALMOST INSTANTANEOUS RELEASE OF PRESSURE, GAS, AND HEAT WHEN SUBJECTED TO SUDDEN SHOCK, PRESSURE, OR HIGH TEMPERATURE.

/EXPOSURE/ OR /EXPOSED/ MEANS THAT AN EMPLOYEE IS SUBJECTED TO A HAZARDOUS CHEMICAL IN THE COURSE OF EMPLOYMENT THROUGH ANY ROUTE OF ENTRY (INHALATION, INGESTION, SKIN CONTACT OR ABSORPTION, ETC.), AND INCLUDES PAST EXPOSURE AND POTENTIAL (E.G., ACCIDENTAL OR POSSIBLE) EXPOSURE.

/FLAMMABLE/ MEANS A CHEMICAL THAT FALLS INTO ONE OF THE FOLLOWING CATEGORIES:

(I) /AEROSOL, FLAMMABLE/ MEANS AN AEROSOL THAT, WHEN TESTED BY THE METHOD DESCRIBED IN 16 CFR 1500.45, YIELDS A FLAME PROJECTION EXCEEDING 18 INCHES AT FULL VALVE OPENING, OR A FLASHBACK (A FLAME EXTENDING BACK TO THE VALVE) AT ANY DEGREE OF VALVE OPENING;

(II) /GAS, FLAMMABLE/ MEANS:

(A) A GAS THAT, AT AMBIENT TEMPERATURE AND PRESSURE, FORMS A FLAMMABLE MIXTURE WITH AIR AT A CONCENTRATION OF THIRTEEN (13) PERCENT BY VOLUME OR LESS; OR

(B) A GAS THAT, AT AMBIENT TEMPERATURE AND PRESSURE, FORMS A RANGE OF FLAMMABLE MIXTURES WITH AIR WIDER THAN TWELVE (12) PERCENT BY VOLUME, REGARDLESS OF THE LOWER LIMIT;

(III) /LIQUID, FLAMMABLE/ MEANS ANY LIQUID HAVING A FLASHPOINT BELOW 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE), EXCEPT ANY MIXTURE HAVING COMPONENTS WITH FLASHPOINTS OF 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE) OR HIGHER, THE TOTAL OF WHICH MAKE UP 99 PERCENT OR MORE OF THE TOTAL VOLUME OF THE MIXTURE.

(IV) /SOLID, FLAMMABLE/ MEANS A SOLID, OTHER THAN A BLASTING AGENT OR EXPLOSIVE AS DEFINED IN 1910.109(A), THAT IS LIABLE TO CAUSE FIRE THROUGH FRICTION, ABSORPTION OF MOISTURE, SPONTANEOUS CHEMICAL CHANGE, OR RETAINED HEAT FROM MANUFACTURING OR PROCESSING, OR WHICH CAN BE IGNITED READILY AND WHEN IGNITED BURNS SO VIGOROUSLY AND PERSISTENTLY AS TO CREATE A SERIOUS HAZARD. A CHEMICAL SHALL BE CONSIDERED TO BE A FLAMMABLE SOLID IF, WHEN TESTED BY THE METHOD DESCRIBED IN 16 CFR 1500.44, IT IGNITES AND BURNS WITH A SELF-SUSTAINED FLAME AT A RATE GREATER THAN ONE-TENTH OF AN INCH PER SECOND ALONG ITS MAJOR AXIS.

/FLASHPOINT/ MEANS THE MINIMUM TEMPERATURE AT WHICH A LIQUID GIVES OFF A VAPOR IN SUFFICIENT CONCENTRATION TO IGNITE WHEN TESTED AS FOLLOWS:

(I) TAGLIABUE CLOSED TESTER (SEE AMERICAN NATIONAL STANDARD METHOD OF TEST FOR FLASH POINT BY TAG CLOSED TESTER, Z11.24-1979 (ASTM D 56-79))-FOR LIQUIDS WITH A VISCOSITY OF LESS THAN 45 SAYBOLT UNIVERSAL SECONDS (SUS) AT 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE), THAT DO NOT CONTAIN SUSPENDED SOLIDS AND DO NOT HAVE A TENDENCY TO FORM A SURFACE FILM UNDER TEST; OR

(II) PENSKY-MARTENS CLOSED TESTER (SEE AMERICAN NATIONAL STANDARD METHOD OF TEST FOR FLASH POINT BY PENSKY-MARTENS CLOSED TEST, Z11.7-1979 (ASTM D 93-79))-FOR LIQUIDS WITH A VISCOSITY EQUAL TO OR GREATER THAN 45 SUS AT 100 DEGREES FAHRENHEIT (37.8 DEGREES CENTIGRADE), OR THAT CONTAIN SUSPENDED SOLIDS, OR THAT HAVE A TENDENCY TO FORM A SURFACE-FILM UNDER TEST; OR

(III) SETAFLASH CLOSED TESTER (SEE AMERICAN NATIONAL STANDARD METHOD OF TEST FOR FLASH POINT BY SETAFLASH CLOSED TESTER (ASTM D 3278-78)).

ORGANIC PEROXIDES, WHICH UNDERGO AUTOACCELERATING THERMAL DECOMPOSITION, ARE EXCLUDED FROM ANY OF THE FLASHPOINT DETERMINATION METHODS SPECIFIED ABOVE.

/FORESEEABLE EMERGENCY/ MEANS ANY POTENTIAL OCCURRENCE SUCH AS, BUT NOT LIMITED TO, EQUIPMENT FAILURE, RUPTURE OF CONTAINERS, OR FAILURE OF CONTROL EQUIPMENT WHICH MAY OR DOES RESULT IN AN UNCONTROLLED RELEASE OF A HAZARDOUS CHEMICAL INTO THE WORKPLACE.

/HAZARDOUS CHEMICAL/ MEANS ANY CHEMICAL WHICH IS A CORROSIVE LIQUID, A

[illegible] UNSTABLE (REACTIVE) OR WATER-REACTIVE.

/HAZARD WARNING/ MEANS ANY WORDS, PICTURES, SYMBOLS, OR COMBINATION THEREOF APPEARING ON A LABEL WHICH INSTRUCT EMPLOYEES AS TO IMMEDIATE ACTION THEY SHOULD TAKE FOR THEIR OWN PROTECTION.

/HEALTH HAZARD/ MEANS A CHEMICAL WHICH, UPON EXPOSURE, MAY RESULT IN THE OCCURRENCE OF ACUTE OR CHRONIC HEALTH EFFECTS IN EMPLOYEES. THE TERM /HEALTH HAZARD/ INCLUDES CHEMICALS WHICH ARE CARCINOGENS, REPRODUCTIVE TOXINS, IRRITANTS, CORROSIVES, SENSITIZERS, HEPATOTOXINS, NEPHROTOXINS, NEUROTOXINS, AGENTS WHICH ACT ON THE HEMATOPOIETIC SYSTEM, AGENTS WHICH DAMAGE THE LUNG, CUTANEOUS HAZARDS OR EYE HAZARDS. APPENDIX A PROVIDES FURTHER DEFINITIONS AND EXPLANATIONS OF THE SCOPE OF HEALTH HAZARDS COVERED BY THIS SECTION.

/IDENTITY/ MEANS ANY CHEMICAL OR COMMON NAME WHICH IS INDICATED ON THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THE CHEMICAL. THE IDENTITY USED SHALL PERMIT CROSS-REFERENCES TO BE MADE AMONG THE REQUIRED LIST OF HAZARDOUS CHEMICALS, THE LABEL AND THE MSDS.

/IMMEDIATE USE/ MEANS THAT THE HAZARDOUS CHEMICAL WILL BE UNDER THE CONTROL OF AND USED ONLY BY THE PERSON WHO OBTAINED IT AND ONLY WITHIN THE WORK SHIFT IN WHICH IT IS OBTAINED.

/IMPORTER/ MEANS THE FIRST BUSINESS WITH EMPLOYEES WITHIN THE CUSTOMS TERRITORY OF THE UNITED STATES, WHICH HANDLES CONTAINERS OF HAZARDOUS CHEMICALS PRODUCED IN OTHER COUNTRIES AND INTENDED FOR SALE AND DISTRIBUTION TO MANUFACTURING PURCHASERS WITHIN THE UNITED STATES.

/LABEL/ MEANS WRITTEN, PRINTED, OR GRAPHIC MATERIAL DISPLAYED ON OR AFFIXED TO CONTAINERS OF HAZARDOUS CHEMICALS.

/MANUFACTURING PURCHASER/ MEANS AN EMPLOYER WITH A FACILITY CLASSIFIED IN SIC CODES 20 THROUGH 39 WHO PURCHASES A HAZARDOUS CHEMICAL FOR USE WITHIN THAT FACILITY.

/MATERIAL SAFETY DATA SHEET (MSDS)/ MEANS PRINTED MATERIAL CONCERNING A HAZARDOUS CHEMICAL WHICH IS PREPARED IN ACCORDANCE WITH PARAGRAPH (G) OF THIS SECTION.

/MIXTURE/ MEANS ANY COMBINATION OF TWO OR MORE CHEMICALS IF THE COMBINATION IS NOT, IN WHOLE OR IN PART, THE RESULT OF A CHEMICAL REACTION.

/ORGANIC PEROXIDE/ MEANS AN ORGANIC COMPOUND THAT CONTAINS THE BIVALENT -O-O- STRUCTURE AND WHICH MAY BE CONSIDERED TO BE A STRUCTURAL DERIVATIVE OF HYDROGEN PEROXIDE WHERE ONE OR BOTH OF THE HYDROGEN ATOMS HAS BEEN REPLACED BY AN ORGANIC RADICAL.

/OXIDIZER/ MEANS A CHEMICAL OTHER THAN A BLASTING AGENT OR EXPLOSIVE AS DEFINED IN 1910.109(A), THAT INITIATES OR PROMOTES COMBUSTION IN OTHER MATERIALS, THEREBY CAUSING FIRE EITHER OF ITSELF OR THROUGH THE RELEASE OF OXYGEN OR OTHER GASES.

/PYROPHORIC/ MEANS A CHEMICAL THAT WILL IGNITE SPONTANEOUSLY IN AIR AT A TEMPERATURE OF 130 DEGREES FAHRENHEIT (54.4 DEGREES CENTIGRADE) OR BELOW.

/TRADE SECRET/ MEANS ANY FORMULA, PATTERN, PROCESS, DEVICE, INFORMATION OR COMPILATION OF INFORMATION (INCLUDING CHEMICAL NAME OR OTHER UNIQUE CHEMICAL IDENTIFIER) THAT IS USED IN AN EMPLOYER'S BUSINESS, AND THAT GIVES THE EMPLOYER AN OPPORTUNITY TO OBTAIN AN ADVANTAGE OVER COMPETITORS WHO DO NOT KNOW OR USE IT.

/UNSTABLE (REACTIVE)/ MEANS A CHEMICAL WHICH IN THE PURE STATE, OR AS PRODUCED OR TRANSPORTED, WILL VIGOROUSLY POLYMERIZE, DECOMPOSE, CONDENSE, OR WILL BECOME SELF-REACTIVE UNDER CONDITIONS OF SHOCKS, PRESSURE OR TEMPERATURE.

/USE/ MEANS HANDLE, REACT, PROCESS, PACKAGE OR REPACKAGE, OR TRANSPORT (OTHER THAN THAT TRANSPORTATION UNDER THE JURISDICTION OF THE U.S. DEPARTMENT OF TRANSPORTATION, E.G., WITHIN A PLANT).

/WATER-REACTIVE/ MEANS A CHEMICAL THAT REACTS WITH WATER TO RELEASE A GAS THAT IS EITHER FLAMMABLE OR PRESENTS A HEALTH HAZARD.

/WORK AREA/ MEANS A ROOM OR DEFINED SPACE IN AN ESTABLISHMENT WHERE HAZARDOUS CHEMICALS ARE PRODUCED OR USED, AND WHERE EMPLOYEES ARE PRESENT.

/WORKPLACE/ MEANS AN ESTABLISHMENT AT ONE GEOGRAPHICAL LOCATION CONTAINING ONE OR MORE WORK AREAS.

(D) HAZARD DETERMINATION. (1) CHEMICAL MANUFACTURERS AND IMPORTERS SHALL EVALUATE CHEMICALS PRODUCED IN OR IMPORTED INTO THEIR WORKPLACES TO DETERMINE IF THEY ARE HAZARDOUS. EMPLOYERS MAY RELY ON THE EVALUATION PERFORMED BY THE

(2) CHEMICAL MANUFACTURERS, IMPORTERS OR EMPLOYERS EVALUATING CHEMICALS SHALL ENSURE THAT THEY HAVE THOROUGHLY CONSIDERED THE AVAILABLE SCIENTIFICALLY WELL-ESTABLISHED EVIDENCE IN MAKING THEIR HAZARD DETERMINATIONS. THE CHEMICAL MANUFACTURER OR EMPLOYER SHALL ENSURE THAT THE CHEMICAL IS EVALUATED FOR ITS POTENTIAL TO PRESENT ANY OF THE PHYSICAL OR HEALTH HAZARDS COVERED BY THIS SECTION, AND ENUMERATED IN THE DEFINITION FOR A HAZARDOUS CHEMICAL. APPENDIXES A AND B ARE MANDATORY, AND ARE TO BE CONSULTED TO IDENTIFY THE SCOPE OF HEALTH HAZARDS COVERED AND THE COMPLETENESS OF EVALUATION EXPECTED.

(3) THE CHEMICAL MANUFACTURER, IMPORTER OR EMPLOYER SHALL TREAT CHEMICALS LISTED IN THE FOLLOWING SOURCES AS BEING HAZARDOUS WHENEVER THEY ARE PRESENT IN THE WORKPLACE:

(I) 29 CFR PART 1910, SUBPART Z, TOXIC AND HAZARDOUS SUBSTANCES, /GENERAL INDUSTRY STANDARDS/, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; AND

(II) /THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORK ENVIRONMENT/, AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (LATEST EDITION).

THE CHEMICAL MANUFACTURER, IMPORTER, OR EMPLOYER IS STILL RESPONSIBLE FOR EVALUATING THE SPECIFIC HAZARDS ASSOCIATED WITH THE CHEMICALS IN THESE SOURCE LISTS.

(4) CHEMICAL MANUFACTURERS AND IMPORTERS SHALL INFORM DOWNSTREAM EMPLOYERS WHEN A CHEMICAL HAS BEEN IDENTIFIED AS A CARCINOGEN IN ONE OF THE FOLLOWING SOURCES:

(I) NATIONAL TOXICOLOGY PROGRAM (NTP), /ANNUAL REPORT ON CARCINOGENS/ (LATEST EDITION); OR

(II) INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) /MONOGRAPHS/ (LATEST EDITIONS).

CHEMICAL MANUFACTURERS, IMPORTERS AND EMPLOYERS SHALL NOTE THIS INFORMATION ON THE MATERIAL SAFETY DATA SHEET FOR THE CHEMICAL PREPARED IN ACCORDANCE WITH PARAGRAPH (G) OF THIS SECTION.

(5) THE HAZARDS OF MIXTURES OF CHEMICALS SHALL BE DETERMINED AS FOLLOWS:

(I) IF A MIXTURE HAS BEEN TESTED AS A WHOLE TO DETERMINE ITS HAZARDS, THE RESULTS OF SUCH TESTING SHALL BE USED TO DETERMINE WHETHER THE MIXTURE IS HAZARDOUS;

(II) IF A MIXTURE HAS NOT BEEN TESTED AS A WHOLE TO DETERMINE WHETHER THE MIXTURE IS A HEALTH HAZARD, THE MIXTURE WILL BE ASSUMED TO HAVE THE SAME HEALTH HAZARDS AS DO THE COMPONENTS WHICH COMPRISE ONE PERCENT (BY WEIGHT OR VOLUME) OR GREATER OF THE COMPOSITION, EXCEPT THAT CHEMICALS IDENTIFIED AS CARCINOGENS UNDER PARAGRAPH (D)(4) ABOVE WILL BE IDENTIFIED WHEN PRESENT IN CONCENTRATIONS OF 0.1 PERCENT OR GREATER;

(III) IF MIXTURE HAS NOT BEEN TESTED AS A WHOLE TO DETERMINE WHETHER THE MIXTURE IS A PHYSICAL HAZARD (E.G., FLAMMABLE), THE CHEMICAL MANUFACTURER, IMPORTER, OR EMPLOYER MAY USE WHATEVER SCIENTIFICALLY VALID DATA IS AVAILABLE TO EVALUATE THE PHYSICAL HAZARD POTENTIAL OF THE MIXTURE; AND

(IV) IF THE EMPLOYER HAS EVIDENCE TO INDICATE THAT A COMPONENT PRESENT IN THE MIXTURE IN CONCENTRATIONS OF LESS THAN ONE PERCENT COULD BE RELEASED IN CONCENTRATIONS WHICH WOULD EXCEED AN ESTABLISHED PERMISSIBLE EXPOSURE LIMIT OR THRESHOLD LIMIT VALUE, OR COULD BE HAZARDOUS TO EMPLOYEES IN THOSE CONCENTRATIONS, THAT COMPONENT SHALL BE IDENTIFIED.

(E) WRITTEN HAZARD COMMUNICATION PROGRAM.

(1) EMPLOYERS SHALL DEVELOP AND IMPLEMENT A WRITTEN HAZARD COMMUNICATION PROGRAM FOR THEIR WORKPLACES WHICH AT LEAST MEETS THE CRITERIA SPECIFIED IN PARAGRAPHS (F), (G), AND (H) OF THIS SECTION FOR LABELS AND PLACARDS, MATERIAL SAFETY DATA SHEETS, AND EMPLOYEE INFORMATION AND TRAINING, AND WHICH INCLUDES THE FOLLOWING:

(I) THE PROCEDURES CHEMICAL MANUFACTURERS, IMPORTERS OR EMPLOYERS USED TO DETERMINE THE HAZARDS OF THE CHEMICALS WHICH THEY PRODUCE, IMPORT OR USE;

(II) A LIST OF THE HAZARDOUS CHEMICALS KNOWN TO BE PRESENT IN EACH WORK AREA (USING AN IDENTITY THAT IS REFERENCED ON THE APPROPRIATE MATERIAL SAFETY DATA SHEET); AND

(III) THE METHODS THE EMPLOYER WILL USE TO INFORM EMPLOYEES OF THE HAZARDS OF NON-ROUTINE TASKS (FOR EXAMPLE, THE CLEANING OF REACTOR VESSELS), AND THE HAZARDS ASSOCIATED WITH CHEMICALS CONTAINED IN UNLABELED PIPES IN THEIR WORK

WITH THIS SECTION PROVIDED THAT IT MEETS THE CRITERIA ESTABLISHED IN THIS PARAGRAPH.

(3) THE WRITTEN HAZARD COMMUNICATION PROGRAM, INCLUDING THE REQUIRED LISTS OF HAZARDOUS CHEMICALS, SHALL BE MADE AVAILABLE TO EMPLOYEES OR THEIR DESIGNATED REPRESENTATIVE, THE ASSISTANT SECRETARY AND THE DIRECTOR.

(F) LABELS AND PLACARDS. (1) THE EMPLOYER SHALL ENSURE THAT EACH CONTAINER OF HAZARDOUS CHEMICALS IN THE WORKPLACE IS LABELED, TAGGED OR MARKED WITH THE FOLLOWING INFORMATION:

(I) IDENTITY OF THE HAZARDOUS CHEMICAL(S) CONTAINED THEREIN; AND

(II) APPROPRIATE HAZARD WARNINGS.

(2) WHEN STATIONARY CONTAINERS IN A WORK AREA HAVE SIMILAR CONTENTS AND HAZARDS, THE EMPLOYER MAY POST SIGNS OR PLACARDS TO CONVEY THE REQUIRED INFORMATION RATHER THAN AFFIXING LABELS TO EACH INDIVIDUAL CONTAINER.

(3) THE EMPLOYER MAY USE BATCH PROCESS SHEETS, BATCH TICKETS, OPERATING PROCEDURES, OR OTHER SUCH WRITTEN MATERIALS AS ALTERNATIVES TO INDIVIDUAL LABELS ON STATIONARY PROCESS EQUIPMENT, AS LONG AS THE ALTERNATIVE USED INDICATES THE APPROPRIATE IDENTITY AND HAZARD WARNING(S), AND IS READILY ACCESSIBLE TO EMPLOYEES IN THEIR WORK AREA.

(4) THE EMPLOYER OR IMPORTER SHALL ENSURE THAT EACH CONTAINER OF HAZARDOUS CHEMICALS LEAVING THE WORKPLACE IS LABELED, TAGGED OR MARKED WITH THE FOLLOWING INFORMATION:

(I) IDENTITY OF THE HAZARDOUS CHEMICAL(S);

(II) APPROPRIATE HAZARD WARNINGS; AND

(III) NAME AND ADDRESS OF THE MANUFACTURER OR OTHER RESPONSIBLE PARTY.

(5) CHEMICAL MANUFACTURERS SHALL ENSURE THAT EACH CONTAINER OF HAZARDOUS CHEMICALS LEAVING THE WORKPLACE IS LABELED IN ACCORDANCE WITH THIS SECTION IN A MANNER WHICH DOES NOT CONFLICT WITH THE REQUIREMENTS OF THE HAZARDOUS MATERIALS TRANSPORTATION ACT (18 U.S.C. 180) ET SEQ.) AND REGULATIONS ISSUED UNDER THAT ACT BY THE DEPARTMENT OF TRANSPORTATION.

(6) THE EMPLOYER NEED NOT AFFIX NEW LABELS TO COMPLY WITH THIS STANDARD IF EXISTING LABELS ALREADY CONVEY THE NECESSARY INFORMATION.

(7) THE EMPLOYER IS NOT REQUIRED TO LABEL PORTABLE CONTAINERS INTO WHICH HAZARDOUS CHEMICALS ARE TRANSFERRED FROM LABELED CONTAINERS, AND WHICH ARE INTENDED ONLY FOR THE IMMEDIATE USE OF THE EMPLOYEE WHO PERFORMS THE TRANSFER.

(8) THE EMPLOYER SHALL NOT REMOVE OR DEFACE EXISTING LABELS ON INCOMING CONTAINERS OF HAZARDOUS CHEMICALS, UNLESS THE CONTAINER IS IMMEDIATELY RELABELED WITH THE REQUIRED INFORMATION.

(9) THE EMPLOYER SHALL ENSURE THAT LABELS ARE LEGIBLE AND PROMINENTLY DISPLAYED ON THE CONTAINER.

(10) DISTRIBUTORS SHALL ENSURE THAT CONTAINERS OF HAZARDOUS CHEMICALS DELIVERED TO MANUFACTURING PURCHASERS ARE LABELED IN ACCORDANCE WITH PARAGRAPH (F)(4) OF THIS SECTION.

(G) MATERIAL SAFETY DATA SHEETS. (1) CHEMICAL MANUFACTURERS AND IMPORTERS SHALL DEVELOP A MATERIAL SAFETY DATA SHEET FOR EACH HAZARDOUS CHEMICAL THEY PRODUCE OR IMPORT. EMPLOYERS SHALL OBTAIN OR DEVELOP A MATERIAL SAFETY DATA SHEET FOR EACH HAZARDOUS CHEMICAL WHICH THEY USE.

(2) EACH MATERIAL SAFETY DATA SHEET SHALL CONTAIN AT LEAST THE FOLLOWING INFORMATION:

(I) THE IDENTITY USED ON THE LABEL, AND, EXCEPT AS PROVIDED FOR IN PARAGRAPH (I) OF THIS SECTION ON TRADE SECRETS:

(A) IF THE HAZARDOUS CHEMICAL IS A SINGLE SUBSTANCE, OR A MIXTURE WHICH HAS BEEN TESTED AS A WHOLE TO DETERMINE ITS HAZARDS, ITS CHEMICAL AND COMMON NAME(S); OR

(B) IF THE HAZARDOUS CHEMICAL IS A MIXTURE, THE CHEMICAL AND COMMON NAME(S) OF ALL INGREDIENTS WHICH HAVE BEEN DETERMINED TO BE HEALTH HAZARDS, AND WHICH COMPRISE GREATER THAN 1 PERCENT OF THE COMPOSITION, EXCEPT THAT CHEMICALS IDENTIFIED AS CARCINOGENS UNDER PARAGRAPH (D)(4) OF THIS SECTION SHALL BE LISTED IN CONCENTRATIONS GREATER THAN 0.1 PERCENT; AND

(C) THE CHEMICAL AND COMMON NAME(S) OF ALL INGREDIENTS WHICH HAVE BEEN DETERMINED TO BE A PHYSICAL HAZARD;

(II) PHYSICAL AND CHEMICAL CHARACTERISTICS OF THE HAZARDOUS CHEMICAL (SUCH AS [illegible])

EXPOSURE AND MEDICAL RECORDS, WILL BE MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THAT REGULATION.

(H) EMPLOYEE INFORMATION AND TRAINING. EMPLOYERS SHALL PROVIDE EMPLOYEES WITH INFORMATION AND TRAINING ON HAZARDOUS CHEMICALS IN THEIR WORK AREA AT THE TIME OF THEIR INITIAL ASSIGNMENT, AND WHENEVER A NEW HAZARD IS INTRODUCED INTO THEIR WORK AREA.

(1) INFORMATION. EMPLOYEES SHALL BE INFORMED OF:

(I) THE REQUIREMENTS OF THIS REGULATION;

(II) ANY OPERATIONS IN THE WORK AREA WHERE HAZARDOUS CHEMICALS ARE PRESENT; AND

(III) THE LOCATION AND AVAILABILITY OF THE WRITTEN HAZARD COMMUNICATION PROGRAM, INCLUDING THE REQUIRED LISTS OF HAZARDOUS CHEMICALS, AND MATERIAL SAFETY DATA SHEETS REQUIRED BY THIS SECTION.

(2) TRAINING. EMPLOYEE TRAINING SHALL INCLUDE AT LEAST:

(I) METHODS AND OBSERVATIONS THE EMPLOYEE MAY USE TO DETECT THE PRESENCE OR RELEASE OF A HAZARDOUS CHEMICAL IN THE WORK AREA;

(II) THE HAZARDS OF THE CHEMICALS IN THE WORK AREA;

(III) THE MEASURES EMPLOYEES CAN TAKE TO PROTECT THEMSELVES FROM THE HAZARDS, INCLUDING SPECIFIC PROCEDURES THE EMPLOYER HAS IMPLEMENTED TO PROTECT EMPLOYEES FROM EXPOSURE TO HAZARDOUS CHEMICALS, SUCH AS APPROPRIATE WORK PRACTICES, EMERGENCY PROCEDURES, PERSONAL PROTECTIVE EQUIPMENT TO BE USED, ETC.; AND

(IV) THE DETAILS OF THE HAZARD COMMUNICATION PROGRAM DEVELOPED BY THE EMPLOYER, INCLUDING AN EXPLANATION OF THE LABELING SYSTEM AND THE MATERIAL SAFETY DATA SHEET, AND HOW EMPLOYEES CAN OBTAIN AND USE THE APPROPRIATE HAZARD INFORMATION.

(I) TRADE SECRETS. (1) THE EMPLOYER MAY WITHHOLD THE CHEMICAL NAME AND OTHER SPECIFIC IDENTIFICATION OF A HAZARDOUS CHEMICAL PROVIDED THAT:

(I) THE EMPLOYER CAN SUBSTANTIATE THAT IT IS A TRADE SECRET;

(II) THE OTHER INFORMATION CONTAINED IN THE MATERIAL SAFETY DATA SHEET ON THE PROPERTIES AND EFFECTS OF THE HAZARDOUS CHEMICAL IS DISCLOSED;

(III) THE EMPLOYER INDICATES ON THE MATERIAL SAFETY DATA SHEET THAT THE SPECIFIC CHEMICAL IDENTITY IS BEING WITHHELD AS A TRADE SECRET; AND

(IV) THE CHEMICAL NAME IS MADE AVAILABLE TO HEALTH PROFESSIONALS IN ACCORDANCE WITH (I)(2) BELOW.

(2) AN EMPLOYER SHALL, UPON REQUEST, DISCLOSE THE WITHHELD CHEMICAL NAME TO A HEALTH PROFESSIONAL (I.E., PHYSICIAN, INDUSTRIAL HYGIENIST, TOXICOLOGIST, OR EPIDEMIOLOGIST) PROVIDING MEDICAL OR OTHER OCCUPATIONAL HEALTH SERVICES TO EXPOSED EMPLOYEES.

(3) WHENEVER TRADE SECRET INFORMATION IS DISCLOSED TO AN EMPLOYEE OR DESIGNATED REPRESENTATIVE (INCLUDING HEALTH PROFESSIONALS), THE EMPLOYER MAY REQUIRE, AS A CONDITION OF DISCLOSURE, THAT THE RECIPIENT:

(I) INDICATE IN WRITING THE OCCUPATIONAL HEALTH PURPOSE FOR WHICH THE THE INFORMATION IS NEEDED; AND

(II) AGREE IN WRITING NOT TO USE THE TRADE SECRET INFORMATION FOR THE PURPOSE OF COMMERCIAL GAIN, AND NOT TO PERMIT MISUSE OF THE TRADE SECRET INFORMATION BY A COMPETITOR OR POTENTIAL COMPETITOR OF THE EMPLOYER.

(4) IN THE CASE OF A MEDICAL EMERGENCY WHERE THE NAME OF A HAZARDOUS CHEMICAL IS REQUIRED FOR PROPER EMERGENCY OR FIRST-AID TREATMENT, THE EMPLOYER SHALL IMMEDIATELY DISCLOSE THE NAME OF A TRADE SECRET CHEMICAL TO THE TREATING HEALTH PROFESSIONAL, REGARDLESS OF THE EXISTENCE OF A WRITTEN STATEMENT OF NEED OR A CONFIDENTIALITY AGREEMENT. THE EMPLOYER MAY REQUIRE A WRITTEN STATEMENT OF NEED AND A CONFIDENTIALITY AGREEMENT AS SOON AS CIRCUMSTANCES PERMIT.

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(5) THE CONFIDENTIALITY AGREEMENT AUTHORIZED BY PARAGRAPH (I)(3)(II) ABOVE MAY RESTRICT THE USE OF THE INFORMATION TO THE HEALTH PURPOSES INDICATED IN THE WRITTEN STATEMENT OF NEED, PROHIBIT DISCLOSURE OF THE INFORMATION TO ANYONE WHO HAS NOT ENTERED INTO A SIMILAR AGREEMENT WITH THE CONSENT OF THE EMPLOYER, AND PROVIDE FOR APPROPRIATE LEGAL REMEDIES IN THE EVENT OF A BREACH OF THE AGREEMENT, BUT MAY NOT INCLUDE REQUIREMENTS FOR THE POSTING OF A PENALTY BOND OR THE PAYMENT OF LIQUIDATED DAMAGES IF THE PARTY REQUESTING THE TRADE SECRET INFORMATION OBJECTS TO SUCH PROVISIONS.

(6) NOTWITHSTANDING THE EXISTENCE OF A TRADE SECRET CLAIM, AN EMPLOYER SHALL, UPON REQUEST, DISCLOSE TO THE ASSISTANT SECRETARY ANY INFORMATION WHICH THIS SECTION REQUIRES THE EMPLOYER TO MAKE AVAILABLE. WHERE THERE IS A TRADE SECRET

CLAIM, SUCH CLAIM SHALL BE MADE NO LATER THAN AT THE TIME THE INFORMATION IS PROVIDED TO THE ASSISTANT SECRETARY SO THAT SUITABLE DETERMINATIONS OF TRADE SECRET STATUS CAN BE MADE AND THE NECESSARY PROTECTIONS IMPLEMENTED.

(J) EFFECTIVE DATES. EMPLOYERS SHALL BE IN COMPLIANCE WITH THIS SECTION WITHIN THE FOLLOWING TIME PERIODS:

(1) CHEMICAL MANUFACTURERS AND IMPORTERS WILL LABEL CONTAINERS OF HAZARDOUS CHEMICALS LEAVING THEIR WORKPLACES, AND PROVIDE MATERIAL SAFETY DATA SHEETS WITH INITIAL SHIPMENTS, AND DISTRIBUTORS WILL ENSURE SUCH INFORMATION IS PROVIDED TO MANUFACTURING PURCHASERS, BY ——(2 YEARS).

(2) ALL EMPLOYERS WILL BE IN COMPLIANCE WITH ALL PROVISIONS OF THIS SECTION BY ——(2 1/2 YEARS).

APPENDIX A, HEALTH HAZARD DEFINITIONS

ALTHOUGH SAFETY HAZARDS RELATED TO THE PHYSICAL CHARACTERISTICS OF A CHEMICAL CAN BE OBJECTIVELY DEFINED IN TERMS OF TESTING REQUIREMENTS (E.G., FLAMMABILITY), HEALTH HAZARD DEFINITIONS ARE LESS PRECISE AND MORE SUBJECTIVE. HEALTH HAZARDS MAY CAUSE MEASURABLE CHANGES IN THE BODY—SUCH AS DECREASED PULMONARY FUNCTION. THESE CHANGES ARE GENERALLY INDICATED BY THE OCCURRENCE OF SIGNS AND SYMPTOMS IN THE EXPOSED EMPLOYEES — SUCH AS SHORTNESS OF BREATH, A NON-MEASURABLE, SUBJECTIVE FEELING. EMPLOYEES EXPOSED TO SUCH HAZARDS SHOULD BE APPRISED OF BOTH THE CHANGE IN BODY FUNCTION AND THE SIGNS AND SYMPTOMS THAT MAY OCCUR TO SIGNAL THAT CHANGE.

THE DETERMINATION OF OCCUPATIONAL HEALTH HAZARDS IS COMPLICATED BY THE FACT THAT MANY OF THE EFFECTS OR SIGNS AND SYMPTOMS OCCUR COMMONLY IN NON-OCCUPATIONALLY EXPOSED POPULATIONS, SO THAT EFFECTS OF EXPOSURE ARE DIFFICULT TO SEPARATE FROM NORMALLY OCCURRING ILLNESSES. OCCASIONALLY, A SUBSTANCE CAUSES AN EFFECT THAT IS RARELY SEEN IN THE POPULATION AT LARGE, SUCH AS ANGIOSARCOMAS CAUSED BY VINYL CHLORIDE EXPOSURE, THUS MAKING IT EASIER TO ASCERTAIN THAT THE OCCUPATIONAL EXPOSURE HAS THE PRIMARY CAUSATIVE FACTOR. MORE OFTEN, HOWEVER, THE EFFECTS ARE COMMON, SUCH AS LUNG CANCER. THE SITUATION IS FURTHER COMPLICATED BY THE FACT THAT MOST CHEMICALS HAVE NOT BEEN ADEQUATELY TESTED TO DETERMINE THEIR HEALTH HAZARD POTENTIAL, AND DATA DOES NOT EXIST TO SUBSTANTIATE THESE EFFECTS.

THERE HAVE BEEN MANY ATTEMPTS TO CATEGORIZE EFFECTS AND TO DEFINE THEM IN VARIOUS WAYS. GENERALLY, THE TERMS /ACUTE/ AND /CHRONIC/ ARE USED TO DELINEATE BETWEEN EFFECTS ON THE BASIS OF SEVERITY OR DURATION. /ACUTE/ EFFECTS USUALLY OCCUR RAPIDLY AS A RESULT OF SHORT-TERM EXPOSURES, AND ARE OF SHORT DURATION. /CHRONIC/ EFFECTS OCCUR AS A RESULT OF LONG-TERM EXPOSURE, AND ARE OF LONG DURATION. NEITHER OF THESE TERMS GIVES SUFFICIENT GUIDANCE TO THOSE ATTEMPTING TO DEFINE A HEALTH HAZARD.

THE ACUTE EFFECTS REFERRED TO MOST FREQUENTLY ARE THOS DEFINED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) STANDARD FOR PRECAUTIONARY LABELING OF HAZARDOUS INDUSTRIAL CHEMICAL (Z129.1-1976) — IRRITATION, CORROSIVITY, SENSITIZATION AND LETHAL DOSE. ALTHOUGH THESE ARE IMPORTANT HEALTH EFFECTS, THEY DO NOT ADEQUATELY COVER THE CONSIDERABLE RANGE OF ACUTE EFFECTS WHICH MAY OCCUR AS A RESULT OF OCCUPATIONAL EXPOSURE, SUCH AS, FOR EXAMPLE, NARCOSIS.

SIMILARLY, THE TERM CHRONIC EFFECT IS OFTEN USED TO COVER ONLY CARCINOGENICITY, TERATOGENICITY, AND MUTAGENICITY. THESE EFFECTS ARE OBVIOUSLY A CONCERN IN THE WORKPLACE, BUT AGAIN, DO NOT ADEQUATELY COVER THE AREA OF CHRONIC EFFECTS, EXCLUDING, FOR EXAMPLE BLOOD DYSCRASIAS (SUCH AS ANEMIA), CHRONIC BRONCHITIS AND LIVER ATROPHY.

THE GOAL OF DEFINING PRECISELY, IN MEASURABLE TERMS, EVERY POSSIBLE HEALTH EFFECT THAT MAY OCCUR IN THE WORKPLACE AS A RESULT OF CHEMICAL EXPOSURES CANNOT REALISTICALLY BE ACCOMPLISHED. THIS DOES NOT NEGATE THE NEED FOR EMPLOYEES TO BE INFORMED OF SUCH EFFECTS AND PROTECTED FROM THEM.

APPENDIX B, WHICH IS MANDATORY, OUTLINES THE PRINCIPLES AND PROCEDURES OF HAZARD ASSESSMENT.

FOR PURPOSES OF THIS SECTION ANY CHEMICALS WHICH MEET THE FOLLOWING DEFINITIONS ARE HEALTH HAZARDS:

1. CARCINOGEN: A CHEMICAL IS CONSIDERED TO BE A CARCINOGEN IF:

(A) IT HAS BEEN EVALUATED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), AND FOUND TO BE A CARCINOGEN OR POTENTIAL CARCINOGEN; OR

ON CARCINOGENS/ PUBLISHED BY THE NATIONAL TOXICOLOGY PROGRAM (NTP) (LATEST EDITION).

2. CORROSIVE: A CHEMICAL THAT CAUSES VISIBLE DESTRUCTION OF, OR IRREVERSIBLE ALTERATIONS IN, LIVING TISSUE BY CHEMICAL ACTION AT THE SITE OF CONTACT. FOR EXAMPLE, A CHEMICAL IS CONSIDERED TO BE CORROSIVE IF, WHEN TESTED ON THE INTACT SKIN OF ALBINO RABBITS BY THE METHOD DESCRIBED BY THE U.S. DEPARTMENT OF TRANSPORTATION IN APPENDIX A TO 49 CFR PART 173, IT DESTROYS OR CHANGES IRREVERSIBLY THE STRUCTURE OF THE TISSUE AT THE SITE OF CONTACT FOLLOWING AN EXPOSURE PERIOD OF FOUR HOURS. THIS TERM SHALL NOT REFER TO ACTION ON INANIMATE SURFACES.

3. HIGHLY TOXIC: A CHEMICAL FALLING WITHIN ANY OF THE FOLLOWING CATEGORIES:

(A) A CHEMICAL THAT HAS A MEDIAN LETHAL DOSE (LD50) OF 50 MILLIGRAMS OR LESS PER KILOGRAM OF BODY WEIGHT WHEN ADMINISTERED ORALLY TO ALBINO RATS WEIGHING BETWEEN 200 AND 300 GRAMS EACH.

(B) A CHEMICAL THAT HAS A MEDIAN LETHAL DOSE (LD50) OF 200 MILLIGRAMS OR LESS PER KILOGRAM OF BODY WEIGHT WHEN ADMINISTERED BY CONTINUOUS CONTACT FOR 24 HOURS WITH THE BARE SKIN OF ALBINO RABITS WEIGHING BETWEEN TWO AND THREE KILOGRAMS EACH.

(L) A CHEMICAL THAT HAS A MEDIAN LETHAL CONCENTRATION (LC50) IN AIR OF 200 PARTS PER MILLION BY VOLUME OR LESS OF GAS OR VAPOR, OR 2 MILLIGRAMS PER LITER OR LESS OF MIST, FUME, OR DUST, WHEN ADMINISTERED BY CONTINUOUS INHALATION FOR ONE HOUR (OR LESS IF DEATH OCCURS WITHIN ONE HOUR) TO ALBINO RATS WEIGHING BETWEEN 200 AND 300 GRAMS EACH.

(4) IRRITANT: A CHEMICAL, WHICH IS NOT CORROSIVE, BUT WHICH CAUSES A REVERSIBLE INFLAMMATORY EFFECT ON LIVING TISSUE BY CHEMICAL ACTION AT THE SITE OF CONTACT. A CHEMICAL IS A SKIN IRRITANT IF, WHEN TESTED ON THE INTACT SKIN OF ALBINO RABBITS BY THE METHODS OF 16 CFR 1500.41 FOR FOUR HOURS EXPOSURE OR BY OTHER APPROPRIATE TECHNIQUES, IT RESULTS IN AN EMPIRICAL SCORE OF FIVE OR MORE. A CHEMICAL IS AN EYE IRRITANT IF SO DETERMINED UNDER THE PROCEDURE LISTED IN 16 CFR 1500.42 OR OTHER APPROPRIATE TECHNIQUES.

(5) SENSITIZER: A CHEMICAL THAT CAUSES A SUBSTANTIAL PROPORTION OF EXPOSED PEOPLE OR ANIMALS TO DEVELOP AN ALLERGIC REACTION IN NORMAL TISSUE AFTER REPEATED EXPOSURE TO THE CHEMICAL.

(6) TOXIC: A CHEMICAL FALLING WITHIN ANY OF THE FOLLOWING CATEGORIES:

(A) A CHEMICAL THAT HAS MEDIAN LETHAL DOSE (LD50) OF MORE THAN 50 MILLIGRAMS PER KILOGRAM BUT NOT MORE THAN 500 MILLIGRAMS PER KILOGRAM OF BODY WEIGHT WHEN ADMINISTERED ORALLY TO ALBINO RATS WEIGHING BETWEEN 200 AND 300 GRAMS EACH.

(B) A CHEMICAL THAT HAS A MEDIAN LETHAL DOSE (LD50) OF MORE THAN 200 MILLIGRAMS PER KILOGRAM BUT NOT MORE THAN 1,000 MILLIGRAMS PER KILOGRAM OF BODY WEIGHT WHEN ADMINISTERED BY CONTINUOUS CONTACT FOR 24 HOURS (OR LESS IF DEATH OCCURS WITHIN 24 HOURS) WITH THE BARE SKIN OF ALBINO RABBITS WEIGHING BETWEEN TWO AND THREE KILOGRAMS EACH.

(C) A CHEMICAL THAT HAS A MEDIAN LETHAL CONCENTRATION (LC50) IN AIR OR MORE THAN 200 PARTS PER MILLION BUT NOT MORE THAN 2,000 PARTS PER MILLION BY VOLUME OF GAS OR VAPOR, OR MORE THAN TWO MILLIGRAMS PER LITER BUT NOT MORE THAN 20 MILLIGRAMS PER LITER OF MIST, FUME, OR DUST, WHEN ADMINISTERED BY CONTINUOUS INHALATION FOR ONE HOUR (OR LESS IF DEATH OCCURS WITHIN ONE HOUR) TO ALBINO RATS WEIGHING BETWEEN 200 AND 300 GRAMS EACH.

IN ADDITION, THE FOLLOWING IS A TARGET ORGAN CATEGORIZATION OF EFFECTS WHICH MAY OCCUR, INCLUDING EXAMPLES OF SIGNS AND SYMPTOMS AND CHEMICALS WHICH HAVE BEEN FOUND TO CAUSE SUCH EFFECTS. THESE EXAMPLES ARE PRESENTED TO ILLUSTRATE THE RANGE AND DIVERSITY OF EFFECTS AND HAZARDS FOUND IN THE WORKPLACE, AND THE BROAD SCOPE EMPLOYERS MUST CONSIDER IN THIS AREA, BUT ARE NOT INTENDED TO BE ALL-INCLUSIVE.

1.	HEPATOTOXINS:	CHEMICALS WHICH PRODUCE LIVER DAMAGE
	SIGNS AND SYMPTOMS:	JAUNDICE; HEPATITIS
	CHEMICALS:	CARBON TETRACHLORIDE; NITROSAMINES
2.	NEPHROTOXINS:	CHEMICALS WHICH PRODUCE KIDNEY DAMAGE
	SIGNS AND SYMPTOMS:	DECREASED ELIMINATION OF WASTES
	CHEMICALS:	HALOGENATED HYDROCARBONS; URANIUM
3.	NEUROTOXINS:	CHEMICALS WHICH PRODUCE THEIR PRIMARY

IN BODY FUNCTIONS

	CHEMICALS:	MERCURY; CARBON DISULFIDE
4.	AGENTS WHICH ACT ON THE BLOOD OR HEMATOPOIETIC SYSTEM:	LOWER BLOOD PRESSURE; DEPRIVE THE BODY TISSUES OF OXYGEN
	SIGNS AND SYMPTOMS:	LEUKEMIA; ANEMIA
	CHEMICALS:	CARBON MONOXIDE; CYANIDES
5.	AGENTS WHICH DAMAGE THE LUNGS:	CHEMICALS WHICH IRRITATE OR DAMAGE THE PULMONARY TISSUE
	SIGNS AND SYMPTOMS:	COUGH; TIGHTNESS IN CHEST; FIBROSIS
	CHEMICALS:	SILICA; ASBESTOS
6.	REPRODUCTIVE TOXINS:	CHEMICALS WHICH AFFECT THE REPRODUCTIVE CAPABILITIES INCLUDING CHROMOSOMAL DAMAGE (MUTATIONS) AND EFFECTS ON FETUSES (TERATOGENESIS)
	SIGNS AND SYMPTOMS:	BIRTH DEFECTS; STERILITY
	CHEMICALS:	LEAD; DBCP
7.	CUTANEOUS HAZARDS:	CHEMICALS WHICH AFFECT THE DERMAL LAYER O BODY
	SIGNS AND SYMPTOMS:	DEF[illegible]NGS OF THE SKIN; RASHES; IRRITATION
	CHEMICALS:	KETONES; CHLORINATED COMPOUNDS
8.	EYE HAZARDS:	CHEMICALS WHICH AFFECT THE EYE OR VISUAL CAPACITY
	SIGNS AND SYMPTOMS:	CONJUCTIVITIS; CORNEAL DAMAGE
	CHEMICALS:	ORGANIC SOLVENTS; ACIDS

APPENDIX B, HAZARD DETERMINATION

THE QUALITY OF A HAZARD COMMUNICATION PROGRAM IS LARGELY DEPENDENT UPON THE ADEQUACY AND ACCURACY OF THE HAZARD DETERMINATION. THE HAZARD DETERMINATION REQUIREMENT OF THIS STANDARD IS PERFORMANCE-ORIENTED. CHEMICAL MANUFACTURERS OR IMPORTERS ARE NOT REQUIRED TO FOLLOW ANY SPECIFIC METHODS FOR DETERMINING HAZARDS, BUT IT IS INCUMBENT UPON THEM TO DEMONSTRATE THAT THEY HAVE ADEQUATELY ASCERTAINED THE SCIENTIFICALLY WELL-ESTABLISHED HAZARDS OF THE CHEMICALS PRODUCED.

HAZARD EVALUATION IS A PROCESS WHICH RELIES HEAVILY ON THE PROFESSIONAL JUDGMENT OF THE EVALUATOR, PARTICULARLY IN THE AREA OF CHRONIC HAZARDS. THE PERFORMANCE-ORIENTATION OF THE HAZARD DETERMINATION DOES NOT DIMINISH THE DUTY OF THE CHEMICAL MANUFACTURER OR IMPORTER TO CONDUCT A THOROUGH EVALUATION, EXAMINING ALL RELEVANT DATA, AND PRODUCING A SCIENTIFICALLY DEFENSIBLE EVALUATION. FOR PURPOSES OF THIS STANDARD, THE FOLLOWING PARAMETERS WILL BE USED TO HELP DEFINE /SCIENTIFICALLY WELL-ESTABLISHED/.

1. CARCINOGENICITY: AS DESCRIBED IN PARAGRAPH (D)(4) AND APPENDIX A OF THIS SECTION, A DETERMINATION BY THE NATIONAL TOXICOLOGY PROGRAM OR THE INTERNATIONAL AGENCY ON RESEARCH AND CANCER THAT A CHEMICAL IS A POTENTIAL CARCINOGEN WILL BE SCIENTIFICALLY WELL-ESTABLISHED EVIDENCE FOR PURPOSES OF THIS STANDARD.

2. HUMAN DATA: EPIDEMIOLOGICAL STUDIES AND CASE REPORTS OF ADVERSE HEALTH EFFECTS WILL BE CONSIDERED IN THE EVALUATION.

3. ANIMAL DATA: HUMAN EVIDENCE OF HEALTH EFFECTS IN EXPOSED POPULATIONS IS GENERALLY NOT AVAILABLE FOR THE MAJORITY OF CHEMICALS PRODUCED OR USED IN THE WORKPLACE. THEREFORE, THE AVAILABLE RESULTS OF TOXICOLOGICAL TESTING IN ANIMAL POPULATIONS WILL BE USED TO PREDICT THE HEALTH EFFECTS THAT MAY BE EXPERIENCED BY EXPOSED WORKERS. IN PARTICULAR, THE DEFINITIONS OF CERTAIN ACUTE HAZARDS REFER TO SPECIFIC ANIMAL TESTING RESULTS (SEE APPENDIX A).

4. ADEQUACY OF DATA. THE RESULTS OF ANY STUDIES WHICH ARE DESIGNED AND CONDUCTED ACCORDING TO ACCEPTABLE SCIENTIFIC PRINCIPLES, AND WHICH REPORT STATISTICALLY SIGNIFICANT CONCLUSIONS REGARDING THE HEALTH EFFECTS OF A CHEMICAL, WILL BE REPORTED.

5. REPORTING OF DATA. THE CHEMICAL MANUFACTURER OR IMPORTER NEED NOT REPORT IN A CONCLUSIONARY FASHION DATA THEY DON'T AGREE WITH, I.E., IF THEY DO NOT AGREE THAT THE CHEMICAL IS A CARCINOGEN, THEY DO NOT HAVE TO STATE THAT IT IS. HOWEVER, THE EMPLOYER MUST STATE THAT THE NTP OR IARC HAVE REPORTED THAT IT MAY BE A POTENTIAL CARCINOGEN. IF ANY STUDY MEETS THE SCIENTIFIC CRITERIA

MANUFACTURER OR IMPORTER AGREE WITH THE FINDINGS OR NOT.

SOURCES

— ANY INFORMATION EMPLOYERS HAVE IN THEIR OWN COMPANY FILES SUCH AS TOXICITY TESTING RESULTS OR ILLNESS EXPERIENCE OF COMPANY EMPLOYEES.

— ANY INFORMATION OBTAINED FROM THE SUPPLIER OF THE CHEMICAL, SUCH AS MATERIAL SAFETY DATA SHEETS OR PRODUCT SAFETY BULLETINS.

— ANY PERTINENT INFORMATION OBTAINED FROM THE FOLLOWING SOURCE LIST (LATEST EDITIONS SHOULD BE USED):

/CONDENSED CHEMICAL DICTIONARY/ BY A. AND E. ROSE
REINHOLD PUBLISHING CORPORATION
450 WEST 33RD STREET
NEW YORK, NY 10001

/THE MERCK INDEX: AN ENCYCLOPEDIA OF CHEMICALS AND DRUGS/
MERCK AND COMPANY, INC.
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/IARC MONOGRAPHS ON THE EVALUATION OF THE CARCINOGENIC RISK OF CHEMICALS TO MAN/
GENEVA: WORLD HEALTH ORGANIZATION
INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, 1972-1977
(MULTIVOLUME WORK)

/INDUSTRIAL HYGIENE AND TOXICOLOGY, BY F.A. PATTY/
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/CASARETT AND DOULL'S
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/CHEMICAL HAZARDS OF THE WORKPLACE/
NICK H. PROCTOR AND JAMES P. HUGHES
J.P. LIPINCOTT COMPANY
PHILADELPHIA, PA

/HANDBOOK OF CHEMISTRY AND PHYSICS/
CHEMICAL RUBBER COMPANY
18901 CRANWOOD PARKWAY
CLEVELAND, OH 44128

/THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS IN THE WORKROOM ENVIRONMENT WITH INTENDED CHANGES/
AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
1014 BROADWAY
CINCINNATI, OH 45202

/DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, BY N. IRVING SAX/
REINHOLD PUBLISHING CORPORATION
450 WEST 33RD STREET
NEW YORK, NY 10001

NOTE: THE FOLLOWING DOCUMENTS ARE ON SALE BY THE SUPERINTENDENT OF DOCUMENTS

NIOSH/OSHA
/NIOSH/OSHA POCKET GUIDE TO CHEMICAL HAZARDS/
NIOSH PUB. NO. 78-210
/REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES/
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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/THE INDUSTRIAL ENVIRONMENT - ITS EVALUATION AND CONTROL/
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1. CRITERIA FOR A RECOMMENDED STANDARD....
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2060 Diamond Blvd 99502
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GORDER EXCAVATING CO — P532
7929 Lake Otis Pkwy 99507
SC 1629

GRANTS RADIO & TV — P539
1201 W 33rd Ave 99503
SC 5054 5732 7622

GREATLAND GOLD — P543
411 E Northern Lts Blvd 99503
SC 3311 5944

GUN TRADERS INC — P556
351 Muldoon Rd 99504
SC 5941

HAYNES CORP — P587
414 W 6th 99501
SC 5812 5611 6512

INDUSTRIAL CLEANING SERVICES — P669
129 W Potter Dr 99509
SC 1799

INTERNATIONAL BLDG SUPPLIES* — P655
1840 W Intl Airport Rd 99502
SC 5211

JORDANS CARPET CENTER INC — P691
126 W Intl Airport Rd 99502
SC 5713 1752

KOSLOSKY ENTERPRISES INC — P731
547 W 4th Ave 99501
SC 5611

LINDER FREDERICK & MARGARET — P776
3542 W 82nd Ave 99502
SC 6514 1531

LOCHER MC WIL INC — P782
8500 Anon St 99507
SC 1623 1629

MC KAYS HARDWARE* — P810
1005 W Fireweed Ln 99503
SC 5251 5074

MILLERS EQP & RECREATIONAL CTR — P872
1045 Whitney Rd 99501
SC 5012 5551

MORIARTY JOHN F — P893
710 Orca 99501
SC 5199 5552

NORTHERN TECHNICAL SERVICES — P933
750 W 2nd Ave 99501
SC 8911

PEOPLES BK & TR CO — P994
601 G St 99501
SC 6022

PIONEER REALTY INC — P1011
506 W Northern Lights Blvd 99503
SC 6531 1522 1542

POLAR BEAR BUILDERS INC — P1019
3412 Seward Dr 99501
SC 1521 1522 1542

POLAR EQUIPMENT INC — P1019
1325 W Northern Lights 99503
SC 5565 5541 5551 5072 5571 7538

[illegible] CONSTRUCTION CO* — P1054

SNESKO PRODUCTION CO* — P1166
605 W 5th Ave 99510
SC 1382 1311

STEWARD TAMPKE JV — P1227
431 W 54th Ave 99502
SC 1542

STP SALES INC — P1222
PO Box 8640 99508
SC 5931

TAYLOR RIGGING CO INC — P1250
1642 Dowling Rd 99509
SC 1541 1622 1629

TRANSALASKA DATA SYSTEMS INC — P1281
200 Center Ct 99502
SC 5081 7379 5999

UNITED UTILITIES INC — P1309
5400 A Street 99509
SC 4811

WAUKESHA AK CORP — P1350
239 E Intl Airport Rd 99502
SC 5084

BETHEL

GUINN LUMBER CO INC — P555
Main Street 99559
SC 5211 5999 5551 5599 1521

J D VARIETY — P642
4th & Willow 99559
SC 5331

DELTA JCT

BERGSTAD SIGURD & LYS — P131
Mile 1421 Alaska Hwy 99737
SC 7033 5271

EAGLE RIVER

EAGLES NEST CARPET SERVICE — P396
Eagle River Loop Rd 99577
SC 5719 1799

FAIRBANKS

ACME ELECTRIC CO INC — P12
127 Minnie 99701
SC 1731 5063

ALASKA RENTALS & SALES INC — P27
Fairbanks Intl Airport 99706
SC 7394 5599

ARCTIC FIRST FED S & L ASSN — P64
570 Gaffney Rd 99701
SC 6122

CRAFTONS FURNITURE INC — P305
260 Old Steese Hwy 99701
SC 5712 5719

H & S WAREHOUSE INC — P559
1426 Wells St 99707
SC 4212 4214

INTERIOR ENERGY CORP — P656
S Cushman & Van Horn Rd 99707
SC 5923 5172

JERNSTROM KENNETH CO* — P678
217 W City 99701
SC 5145 5141

LARSONS INC — P753
405 Noble St 99701
SC 5944 5999 7699

NORTHWARD OPERATING CORP — P938
455 3rd Ave 99701
SC 6512 6513 7011

SANDERS CONSTRUCTION CO INC — P1121
2761 Phillips Field Rd 99701
SC 1541 1542

SOURDOUGH HEATING INC — P1184
523 10th Ave 99707
SC 5999 5722 5074

TOTAL ELECTRIC SUPPLY* — P1276
2102 Cushman 99701
SC 5063 5023 5719

JUNEAU

E C CABLE CO* — P55
Mi 3 1/2 Glacier Hwy 99802
SC 4899

E M SENPENDI BK — P59
[illegible] Seward St 99801
SC 6022

GASTINEAU [illegible] — P805

MARK N TAN INC — P818
Mi 3 1/2 Old Glacier Hwy 99801
SC 5411

PADDOCK T O CO* — P872
Salmon Creek Frontage Rd 99801
SC 1629 1622

KENAI

KENAI STEEL BUILDINGS — P708
255 Willow St 99611
SC 1542

KETCHIKAN

FIRST BK — P449
331 Dock St 99901
SC 6022

NOME

NOME NATIVE COMMUNITY ENTPS* — P929
Bering & Seppala Drive 99762
SC 5953 5571 5551 5251

PALMER

ARCHIES DRIVE-IN — P63
Mile 37 Parks Hwy 99645
SC 5812

DILLEY DAVE & SONS — P360
County Rd 99545
SC 1611

PETERSBURG

TRADING UNION INC — P1280
Main St 99833
SC 5399

SITKA

HAMES CORP — P567
1867 Halibut Point Rd 99835
SC 5411

SITKA ENGINE & EQUIPMENT CO — P1170
1506 Sawmill Creek Blvd 99835
SC 5551 7699

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ALASKA FISH WHOLESALER INC — P27
36109 Kenai Spur Rd 99669
SC 5531 5941 5041 5251 5072

ALASKA OIL SALES INC — P27
35235 Kalifornsky Beach Rd 99669
SC 5171 5172 5583 5984

CARVER BURTON & CO* — P225
Kalifornsky Beach Road 99669
SC 7535 4953

UDELHOVEN OILFIELD SYS SVS INC — P1299
PO Box 1129 99559
SC 7629

TOK

40-MILE AIR — P1411
Mile 1325 Alaska Hwy 99780
SC 4521

UNALAKLEET

RYAN AIR SERVICE INC — P1110
Main St 99684
SC 4511

WASILLA

WEEEP ENTERPRISES — P1253
Mile 43 Parks Hwy 99687
SC 5812 7394

WRANGELL

CITY MARKET INC — P260
Front St 99929
SC 5399

WHITE CONSTRUCTION LTD* — P1370
1432 Zimovia Ave 99929
SC 1521 1522 1531 1541 1542

Norstar, with assets of about $3.5 billion and deposits of about $2.9 billion is the eleventh-largest banking organization in New York. Northeast, which is the third-largest banking organization in Maine, has assets of about $551 million and deposits of $465 million. The transaction is valued at about $51 million.

The Fed's March 21 order points out that both Maine and New York recently have passed laws which allow out-of-state bank holding companies to enter the state. Maine's law allows acqusition of a banking institution in Maine by a bank holding company that controls a bank located in another state as long as that other state authorizes the acqusition of a financial institution in that state by a Maine bank holding company under terms no more restrictive than those imposed under Maine law. New York has a similar provision.

The Fed ruled that conditions for approval of such acquistions under New York law are not more restrictive than those provided under the Maine statute and consequently approved the application.

The acquistion will not eliminate any existing competition in the Maine market, the Fed said, and is unlikely to have any significant adverse effects on probably future competition in Maine. The Fed pointed out that there are a number of probably future entrants into the Maine market from out-of-state institutions. There are about 20 New York institutions that might enter the market, and about five Massachusetts banking organizations that could be considered as future entrants.

Massachusetts recently passed a law that allows out-of-state banks to enter the state, but only if the out-of-state organizations are located in New England.

The Fed also ruled that Norstar could acquire Northeast Consumer Services Corp., which is Northeast's credit-card issuing, financing and servicing subsidiary, and Northeast Data Processing Corp., the holding company's data processing subsidiary.

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JOB SAFETY: OSHA'S DRAFT LABELING RULE TIGHTENS TRADE SECRET PROVISIONS

A draft Occupational Safety and Health Administration final rule on hazard communication would depart from the agency's March 1982 proposal by tightening trade secret provisions, widening industry coverage to include chemical distributors and importers, and strengthening the agency's position that state rules will be pre-empted by the federal action.

Procedures for hazard determination, preparation of material safety data sheets, and container labeling, as well as the rule's effective dates, also would be changed from those enumerated in the proposal. The draft final rule, shown to BNA, was prepared by agency staff and was submitted to OSHA Administrator Thorne Auchter. If approved by Auchter, it will be sent on to the Labor Department and the Office of Management and Budget for review, according to an agency spokesman.

Many provisions, such as those governing employee training, the obligation of chemical companies to label their products and provide users with material safety data sheets, and the right of employees to gain access to the data sheets, remained essentially unchanged from the March proposal for a flexible, performance-oriented rule.

Trade secret provisions in the draft final rule, however, would eliminate a proposed exception for certain narrowly defined "high-hazard" chemicals, such as carcinogens, mutagens, and teratogens, the identities of which the proposal said must be disclosed under any circumstances. Recognizing that "chemical identity information can constitute a bona fide trade secret," the draft rule extends protection to any chemical identity that the manufacturer can substantiate as a trade secret, regardless of the hazard posed.

Unlike the proposal, however, which granted trade secret access only to treating physicians with a need to know, the draft rule would allow trade secret disclosure to "any

health professional" involved in providing occupational health services. Confidentiality agreements may be required. The agreements may require the health professional to state t occupational health purpose for the information, but they may not require posting of penalty bonds or payment of liquidated damages, unless the party requesting the data agrees to their imposition.

In conducting hazard evaluations for chemicals, employers must find hazardous in any occupational setting those chemicals already regulated by OSHA standards or listed in the American Conference of Governmental Industrial Hygienists table of threshold limit values. Suspected or confirmed carcinogens identified by the International Agency for Research on Cancer and the National Toxicology Program similarly must be listed as carcinogens.

In an attempt to answer testimony at hearings last summer that the rule provided no guidance to employers on what constitutes a "scientifically well-established hazard" that must be listed in warning information, the draft rule included two mandatory appendices. On discussed the difficulty in definitely identifying all possible health effects and indicated the broad hazard determination approach intended by the rule, and gave definitions for certain acute hazards.

The other appendix listed reference sources for hazard data and would specify that both human and animal data should be used in determining a chemical's hazard. The appendix stated, "If an available study indicates that an adverse health effect is likely to occur, and th study is conducted according to scientific principles and results in statistically significant findings, the employer is required to report it whether he agrees with the finding or not." Tl listing need not imply the employer's approval or disapproval of the study, however.

Procedures for evaluating a mixture in cases where it has not been evaluated as a whole were changed to require disclosure of all ingredients posing physical hazards. Health hazard of a mixture component need be disclosed only if the component constitutes 1 percent or mor of the total—0.1 percent or more of the total if a carcinogen—or may be released under norm conditions of use in such a way that even a small quantity exceeds an OSHA permissible exposure limit or otherwise poses a hazard.

In another departure from the proposal, the draft final rule would extend coverage to importers and distributors of chemicals. "All aspects of the supply chain" must be covered make the rule effective, the agency said in defense of the new scope, which would apply the same duties to importers as it would to chemical manufacturers, and would require distributors to ship labeled containers and "provide downstream purchasers with access to a appropriate material safety data sheet."

Laboratories, which were excluded in the proposal, were included in the draft final rul only to the extent that they must maintain labels on incoming containers, keep data sheets the have received, and train employees in hazard recognition and avoidance.

A brief section on pre-emption expressly would limit state responsibility in hazard communication to enforcement of rules promulgated under state plans as detailed in Section 18(b) of the Occupational Safety and Health Act. This presumably would rule out state jurisdiction in the six states under federal OSHA that have enacted right-to-know laws. Approximately nine others without state plans are considering or have considered passing their own legislation.

Effective dates in the draft final rule were pulled back by a year, with manufacturers expected to comply within two years of final publication and users within 30 months.

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BANKING: LaFALCE PUSHES FOR HIGHER PERCENTAGE OF EXPORTS FOR TRADING COMPANIES

Bank-affiliated export trading companies should not conduct 49 percent of their business in imports but should only import incidentally to their main business, House Banking

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

copy to Governor/copy bill file — Juneau SB 79 file

Alaska Health Project

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-- Alaskans Have a Right to Know --

This summer Alaska's Governor Bill Sheffield signed into law right-to-know legislation (S.B. 79) to provide information to workers about hazardous and toxic substances in the workplace.

The bill passed Alaska's Senate 17 to 1 and breezed through the House 39 to 0. It was supported by health, labor, and environmental groups.

"I'm delighted that the legislature has enacted this bill so quickly. It enjoys wide public support," said Sen. Joe Josephson (D) of Anchorage, one of the bill's sponsors.

Initially the right-to-know legislation was opposed by industry representatives for being too inclusive, broad, and overreaching. They also said the bill was unnecessary because a proposed U.S. Occupational Safety and Health Administration (OSHA) right-to-know regulation would be adequate.

"The Alaskan bill includes all affected Alaskan employers and employees in contrast to the pending federal regulation which only deals with manufacturers. According to Alaska Department of Labor estimates, less than 5 percent of Alaskan employers would have been covered by the proposed federal regulation," said Alaska Health Project Executive Director Steven Kadish.

Kadish's group, Alaska Health Project, supported the Alaskan legislation and worked with different groups involved to reach a bill that was agreeable to the diverse interests.

(more)

"Never let it be said that business interests are only out for a buck or that environmentalists never compromise," Alaska Sen. Bettye Fahrenkamp (D) said about passage of the right-to-know legislation which she co-sponsored with Josephson, Sen. Vic Fischer (D), and Sen. Arliss Sturgulewski (R).

"Passage of this legislation marks the first time that a coalition of health, labor, and environmental groups has formed to protect workers' health in Alaska," Kadish said.

The bill requires that information on health hazards accompanies products containing any one of about 800 known hazardous substances when they are imported into the state. It also calls for employers to post notices and provide training in workplaces where the hazardous materials are used.

The new law gives employees the right to request information on possibly hazardous substances they are working with. If an employer does not have that information, the measure allows the employer three working days to request the information from the state Department of Labor or the manufacturer. If the employee requesting information does not receive a response from the employer within 15 calendar days, the employee has the right to refuse working with the hazardous substance until the information is made available.

"Without enough information about the potential hazard of a material, a worker cannot take precautions to prevent an accident or illness," said Mick Hotrum, a business and safety representative for the Alaska District Council of Laborers.

(more)

In addition to support from health, labor, environmental groups -- and the eventual support of industry representatives -- the right-to-know bill has enthusiastic backing from Alaska's Department of Labor.

"We are pleased that Governor Sheffield has signed S.B. 79 into law. With so many hazardous and toxic substances used in and around the workplace it is very important that the working men and women in Alaska be informed as to what they are handling.

"This department stands ready to assist employers in their safety education programs and to provide information as to the requirements of this law," said Commissioner of Labor Jim Robison.

In discussing the legislation, Kadish pointed out two areas he feels are shortcomings of the bill.

"The bill does not provide for specific labeling of individual products, nor does it require any reporting to the state about specific hazardous materials," he said.

"Some of us will want to monitor the contributions it makes and be ready to offer amendments (to the bill) if experience shows them to be necessary," Josephson commented.

A representative from one of the grass roots environmental groups that supported the legislation cited possible implications the bill has for the community.

"Although the right-to-know bill is a landmark bill for workers, it also marks a potential turning point for community health and environmental protection. The bill could provide the impetus for communities to demand their right to know about toxic substances they are exposed to on a daily basis.

"Furthermore, information gathered on the types, quantities, and hazards of substances used by industry will assist state and local environmental protection groups in managing wastes that result from industry's activities," said David Wigglesworth of the Alaska Center for the Environment.

(30)

The right to know

Industry presses for a national standard

When Congress set up the Occupational Safety and Health Administration early in the 1970s, labor groups expected the federal agency to do a job that they felt states could not—and industry would not—do: police the workplace to ensure worker safety. Now, OSHA is tackling the controversial right-to-know issue, the outcome of which will determine how much information companies must give their employees about the substances used in the workplace. And it looks as though the usual OSHA-labor alliance has been turned on its ear.

Hearings in Cincinnati led to a local right-to-know law, which was passed this month.

In fact, the unions are downright hostile toward OSHA's attempts to set up a national right-to-know standard. Whereas labor had for more than a decade pushed for a strong, federal right-to-know rule instead of separate state standards, labor leaders are now dismayed by the most recent OSHA proposal. "It's a right-to-conceal standard," claims Sylvia Krekel, occupational health specialist for the Oil, Chemical and Atomic Workers (OCAW). In contrast, chemical industry groups, which generally oppose across-the-board regulations, are virtually unanimous in backing federal preemption of state and local right-to-know statutes.

Both camps are now getting a chance to voice their views publicly. On June 15, OSHA began hearings in Washington to discuss its proposed rules (*CW, June 21, 1982, p. 52*). Under the agency's suggested standard for "hazard communication"—the nomenclature that OSHA chose for right-to-know and other labeling rules—chemical manufacturers would have to provide information about hazardous substances to their own employees and to industrial customers that use those materials. The standard specifies that manufacturers make available to employees an up-to-date list of hazardous substances, label all containers of these substances, and train employees in handling them.

Manufacturers, though arguing that no new regulation is needed, find it more palatable to deal with a single "unnecessary" rule than to deal with 50—thus their stated reasons for backing OSHA. For example, the Chemical Specialties Manufacturers Assn. (CSMA) is actively supporting the proposed federal regulation, even though the association's view, according to its counsel, Lawrence A. Levin, is "that workers are adequately protected now by common practice in the industry." Adds Horace A. Thompson, management chairman of the American Bar Assn.'s section on occupational safety and health laws: "It's not a burning issue in terms of the need for information; it's a burning issue in terms of the inconsistent state regulations."

Grudging support. But there is another, more important, item involved in industry's rather grudging support of the OSHA standard. Within its framework, chemical manufacturers would wield considerable power. The proposed standard covers only "hazardous" substances—and the manufacturer determines what is hazardous. This is in marked contrast to most state right-to-know laws, which spell out which chemicals must be tagged and described.

That difference appeals to many executives in the chemical industry. "The responsibility falls on the manufacturer, and we believe that's where it belongs," says Patrick C. Joyce, until recently an attorney for the Chemical Manufacturers Assn. (CMA).

Unions and their allies, however, cite figures on occupational disease—25 million workers are exposed to circumstances identified as hazards by the National Institute of Occupational Safety and Health (NIOSH)—as evidence that employers may be unreliable sources of information on dangerous substances. And the unions cite recent "horror" stories to bolster their position.

Manufacturer's burden. In fact, the well-publicized occupational health disaster at Occidental Chemical's pesticide formulation operation in Lathrop, Calif., where workers became sterile after years of exposure to dibromochloropropane (DBCP), is often credited with launching labor's campaign for the right to know. According to Roberta Lynch, research director of the Chicago Area Committee on Occupational Safety and Health, workers learned that the company had not disclosed the full results of animal studies that showed that DBCP caused health problems. "That's what really started this whole movement," Lynch recalls.

Labor's collective memory also still

"It's a right-to-conceal standard."

Sylvia Krekel, Oil, Chemical and Atomic Workers

rankles over asbestos, the grisliest of stories in the safety-and-health chronicle. Asbestos, once a common substance in U.S. Navy shipyards and other workplaces, causes mesothelioma, a rare and terminal cancer, and asbestosis, which thousands of workers have contracted. Lawsuits are still being filed, charging both the federal government and industry with failure to warn about hazards that, the suits contend, were first noted more than 40 years ago.

The crux of the matter. Thus, the manufacturer's responsibility clause of the federal proposal remains the crux of labor's break with OSHA on the right-to-know issue. "We've consistently wanted a federal approach, but industry is going after federal standards that are unacceptable," says Sheldon Samuels, safety-and-health director for the AFL-CIO's Industrial Union Dept. "If the chemical industry doesn't want a fair, thorough remedy, it's going to have to pay through the nose." Says Rafael Moure, an OCAW industrial hygienist: "I would welcome a good federal standard, but in its absence I have to go with the logistical nightmare of different requirements."

Labor groups have all but given up hope on a compromise standard. They are still disgruntled over the fate of the health agency's first proposal, which unions found acceptable. Eula Bingham, OSHA's administrator in the Carter Administration, issued that proposal in January 1981, seven years after an OSHA advisory committee had recommended a standard. But the Reagan Administration has held back from implementing that proposal, calling it part of a deliberate "midnight" rule-making blitz by outgoing administrators.

OSHA's new head, Thorne G. Auchter, ran into trouble with the Office of Management and Budget when he tried to issue a modified proposal. But industry's heavy lobbying led Vice-President George Bush, chairman of Reagan's Regulatory Relief Task Force, to rally round the new proposal in March 1982. The current thinking in Washington is that the issue would never have made its way to public debate had industry not feared a proliferation of state laws.

Labor and its supporters, viewing reliance on the federal government as futile, have been rigorously lobbying in state capitals and in cities across the country for state and local right-to-know legislation. Already, 10 states have passed right-to-know statutes, and bills are likely to be introduced in about 13 more states during the coming legislative session.

OSHA's authority. OSHA's legal authority to preempt state laws has not been established. The Occupational Safety and Health Act guarantees states the right to set up their own, separate OSHA programs. Although about half the states currently have their own OSHA programs, few have issued standards that differ from the federal agency's. Therefore, there have been no precedent-setting court cases.

"I'm concerned that there's no explicit federal preemption in the proposal," says ABA's Thompson. Without preemption, he fears, "federal regulations may only add to the confusion rather than resolve it."

A look at some of the state bills goes a long way to explain industry's adamant support of preemption. California recently concluded hearings on a list of more than 700 substances that employers are required to list and label. West Virginia, Wisconsin and Connecticut use the OSHA subpart Z list, which itemizes about 400 toxic substances or physical agents and their permissible exposure limits. Michigan, Oregon and Washington leave the job of defining hazardous substances to the employer.

New York outdoes all of those states, and requires manufacturers to identify for workers the entire NIOSH list of 40,000 substances commonly used in industry. New York's statute is particularly infuriating to industry. "Common table salt is treated the same way as benzene," says Brian T. McMahon, government affairs manager for the New York Business Council.

While McMahon and other industry spokesmen complain bitterly about the intrinsic burden of classifying a myriad of substances, others suggest that perhaps industry should not have full responsibility for identifying hazardous chemicals. "This is normally the function of OSHA, to determine what is hazardous and what is not," notes John W. Whittlesey, chief labor counsel for Union Carbide. "A real question is whether OSHA can delegate its standard-setting to a manufacturer."

Other chemical executives are leery

"The need for information is not the burning issue."

Horace A. Thompson, American Bar Assn

of OSHA's vague definition of a health hazard, which includes any chemical that "may result in the occurrence of acute or chronic health effects in employees." Even CMA's Joyce concedes that the proposed standard is not foolproof—it allows industry to keep a substance unlabeled until scientific conflicts over its potential danger are resolved. "There is no simple answer as to what industry will do if there is contradictory evidence," Joyce says. "It's going to be the proverbial case-by-case decision."

Nagging questions. Legal and philosophical questions of just where responsibility belongs are at the heart of the controversy over right-to-know rules. But there are also nagging procedural questions about how any standard should be implemented. OSHA's proposal calls for labeling of all containers found in the workplace, but its requirements are "performance-oriented." This means that the employer can decide how to label the container—by chemical name, generic name or trade name; what kind of hazard warning is included; and whether the label will be on the container or posted alongside.

Union industrial hygienists fear that the use of generic names will foil their efforts to assess the risks at hand and will fail to alert workers to substances better known by other names. If generic classifications are used, they explain, DBCP or vinyl chloride—which many workers recognize as toxic—could be listed as "halogenated hydrocarbons," a meaningless designation to all but the most sophisticated workers.

The standard is more explicit when it comes to supporting documentation. It would require manufacturers to make a material-safety data sheet (MSDS) available to all employees, explaining in detail various potential hazards of the chemicals. The MSDS, which is already used by many firms, would include data on the effects of long-term exposure and describe health conditions that exposure may aggravate.

User community. Manufacturers are also expected to distribute data sheets to their customers, who must then make them available to their own employees. Although several industry groups question OSHA's legal power to force manufacturers to give an MSDS to any downstream, user of chemicals, most acknowledge the rule's wisdom: Manufacturers are more experienced in dealing with the questions of what is or is not hazardous and in training employees to deal with dangerous substances. "You're talking about the transfer of knowledge to the user community," explains McMahon of the New York Business Council. After New York passed its right-to-know law, he recalls, "the first question I was getting was, 'What's a NIOSH directory?'."

From the viewpoint of both workers and health officials, it is essential that hazard warnings accompany every step of a chemical's journey to end-product.

The chemical industry backs federal preemption of states' and cities' right to know

Dr. Stephen M. Hessl, chairman of Chicago's Cook County Hospital's division of occupational medicine, recounts the case of an 18-year-old worker at a metal-coating operation who was suffering a severe respiratory infection that eventually landed him in intensive care. Hessl asked his patient to describe substances he worked with at the pl Ignorant of the chemical composition the specific powder he used on the and afraid to ask his employer about the worker instead brought a samp Hessl analyzed the powder and fou traces of arsenic.

The original supplier, Amoco, v well aware of the powder's proble but informed Hessl that trimellitic hydride, which was also present in t substance, was actually to blame f the worker's ailment. "They were ve cooperative," Hessl recalls. "They co firmed that the patient had had a re tion to the material." As for the wor er's boss, Hessl says, "I don't think [t employer] knew himself" that the pow der contained either substance.

Such stories lend weight to labor insistence on the need for precise labe

Communities want to know, too

Labor groups are not alone in clamoring for strong right-to-know laws. Now, local communities are also demanding more comprehensive information about substances used within their geographic limits. Some require industry to tell officials not only what chemical substances are used, but how much of the material is present and what the firm does with it. And a few even tell local businesses to disclose the exact location of hazardous substances within a plant.

Many of the existing and proposed rulings are designed to enable localities to plan better the most effective response to an emergency—say, a fire or an explosion. The need for this information has been well documented. A recent study by Ohio State University's Disaster Research Center finds that most U.S. communities are ill prepared for chemical emergencies. While many private firms are equipped to cope with in-plant accidents, the study suggests that towns and cities are particularly deficient in contingency plans for crises related to the transportation of toxics.

Several localities are not willing to settle for rules that just help them handle emergencies. They want regulations to provide health officials and citizens with general information on public exposure to toxic or potentially toxic substances. For example, California's public right-to-know drive is "largely a public-health program," says Kenneth Finney, Governor Edmund G. Brown, Jr.'s assistant for the control of toxic substances. "The need for information hasn't been met at the local level," Finney says. "It is local officials and residents who face the reality of toxic hazards in their communities."

Understandably, the idea of yet another set of regulations mandating the disclosure of data perturbs industry groups. "We're just now realizing that public right to know may override worker right to know in terms of the problems it may present," says Robert E. Belliveau, associate manager of technical government relations for Procter & Gamble. Belliveau, who has worked extensively with the Chemical Specialties Manufacturers Assn. on the right-to-know issue, explains that companies are alarmed at the demand for quantitative information that industry views as confidential.

The California ordinance. California's model ordinance, which requires detailed information from companies about chemicals and their uses, epitomizes the type of law that industry fears. The state took the lead in passing a statewide statute for workplace-labeling in 1980 and is now encouraging cities and counties to adopt its proposed community rules. Moreover, Governor Brown is requesting an allocation of $428,000 in the state's 1982-

ing of chemicals. Indeed, the OSHA proposal describes the exact chemical identity as "the passkey to the scientific literature" concerning a substance's toxic effects. But industry is equally adamant in saying that an employer should not be forced to reveal the chemical name for a substance as long as the company provides detailed information on the hazards of exposure.

Herein, for labor and industry alike, lies the thorny question of trade secrets. And the OSHA standard as it now reads satisfies neither camp. Labor is angered that the agency would allow employers to withhold the chemical identity of a substance—except from a treating physician—if employers can prove that disclosure would jeopardize the product's competitiveness and if a full description of the hazards of exposure is made in the material-safety data sheet. That rule "is full of loopholes an unscrupulous company can drive trucks through," charges Michael Wright, United Steelworkers of America's industrial hygienist. Franklin Mirer, occupational health and safety director for the United Auto Workers, says "OSHA's standard gives employers a free opportunity to call anything a trade secret."

The traditional alliance between labor and OSHA is being turned on its ear

Industry, meanwhile, is irate that OSHA has exempted from trade-secret protection any suspected carcinogens, teratogens, mutagens, or any other substances known to cause severe, irreversible damage to humans. "There is no protection for the chemical which may be carcinogenic, even though there is differing opinion on what is carcinogenic," says Robert P. Vogel, regulatory counsel at Rohm and Haas, who feels industry would like to see more protection for trade secrets involving suspected carcinogens.

Both industry and labor spokesmen have offered to compromise on the trade-secret issue. An OCAW official suggests that NIOSH should determine which formulations are eligible for trade-secret protection. And some unions and companies have suggested that manufacturers provide unions with complete information about proprietary products—as long as the unions sign nondisclosure agreements. But that method could also make unions vulnerable to law suits from ailing workers.

The Steelworkers and the International Chemical Workers Union say they would sign nondisclosure agreements to gain access to substance lists, while UAW's Mirer says his union would not. "If the information is a secret, then I don't want it," he says. Meanwhile, industry and labor are miles apart in their definition of "secret." Says the Steelworkers' Wright: "We are willing to recognize trade secrets, [but] anything a competitor can analyze in a lab shouldn't be included."

Duplication. Thayer Talcott, Dow Chemical's manager of product-safety compliance, concedes that process is the key to duplicating his company's products, which he says could not be easily duplicated working from a substance list. "I have heard manufacturers of disinfectants and the like say that the whole secret of their business is in the particular combination," Talcott notes. But while many such customers claim their products are more easily duplicated—and therefore in greater need of protection—these are the very products that can be most easily analyzed.

Talcott maintains that competitors would learn the workings of process-oriented products like Dow's if they got their hands on a complete list of chemical components. "If you're talking with analytical chemists, they'll say, 'We can find anything if you give us enough time and equipment'," Talcott explains. "But that might mean six to nine months and hundreds of thousands of dollars worth of equipment." With an ingredient list in hand, says Talcott, breaking down a competitor's process would be far less costly.

What purpose the listing of exact chemical compositions would serve for workers—confusion or help—also stirs disagreement. Talcott, for one, insists

1983 budget for educational programs and local hearings on the matter.

Brown's program has broad backing—from environmentalists to labor groups to firefighters. "We feel it is a good idea that firemen have a clear understanding of hazardous substances they face in the event of a fire emergency," says Robert Griffith, director of safety and health for the Federated Firefighters of California.

San Diego County and three California cities—Vallejo, Santa Monica and Union City—have passed their own measures. Vallejo's version is limited to keeping the local fire department informed about local industry's use of toxics. Santa Monica, on the other hand, requires local companies to report by Sept. 1 on three types of material: hazardous wastes, as defined by the state's administrative codes; priority pollutants, as listed by the Environmental Protection Agency; and radioactive materials, as defined by the Nuclear Regulatory Commission.

To many minds, it may seem that the right-to-know concept was born in Jerry Brown's state, but in actuality the first such ordinance was passed by Philadelphia. Since then, at least one other East Coast city has followed suit: Danbury, Conn., passed a public right-to-know ordinance in 1981. "The objective was to provide emergency-response officials with information," says Jack S. Kozuchowski, coordinator of the city's Environmental and Occupational Health Services Dept. Kozuchowski, describing Danbury's ordinance as "really keyed to emergency response," explains that the rules were established after an employee of a local firm died fighting a chemical fire in a storage shed.

The ordinance "has not been vigorously enforced," says a spokesman for Danbury-headquartered Union Carbide. Nonetheless, local industry has lobbied hard against it. And it looks as though the provision will soon be substantially revised. The original ordinance required companies to report to local officials on any of more than 1,000 substances, but the city council will consider altering this to allow companies to submit emergency-response plans instead of a list of substances. The revision would also pare the hazard list to only those substances targeted as hazardous by the U. S. Transportation Dept.

Philadelphia, having passed the first municipal right-to-know law in 1980, now has the longest-running experience in implementing such requirements. The city's law spans the dual health and safety concerns of local requirements: The fire department monitors the storage, handling and transportation of dangerous materials; and the Air Management Services Dept. monitors toxic emissions. So far, the Air Management Service Dept. has found toxic emissions at 135 of the 650 enterprises that returned the department's questionnaire. Air Management Services Commissioner William Reilly is now looking into the emissions at those plants. So far, he says, "we have not uncovered anything alarming."

that chemical names do not convey much information to people who are not schooled in chemistry. But health professionals dispute this view. "Workers can't pronounce them and can't spell them," counters Susan M. Daum, a physician specializing in occupational disease, "but they can copy them down and bring them to me."

Daum is one of a growing cadre of physicians who want right-to-know laws that will both mandate generic chemical names and force companies to keep records in perpetuity of what chemicals were used at what time. They note that many forms of cancer and other diseases have incubation periods measurable in decades, and that it can be essential to know what a patient was exposed to in the past to make an accurate diagnosis today. "If you don't know what you're exposed to, now and 20 years ago, you don't have a chance in the world of figuring out whether [a workplace substance] played a role" in the onset of disease, Daum insists.

'State legislatures have been more eager to put new laws on the books than enforce them'

Some state laws mandate long-term record-keeping, but OSHA's proposals ask only for current lists. To labor, this is unacceptable. "Our union is the last one to want to rely on epidemiological studies," says an OCAW official, "but if some things occur only in human populations and we don't keep the records, we're never going to see the connection" between disease and exposure.

Some right-to-know advocates suggest that manufacturers are wary of keeping records for the long term, fearing better-documented linkage between disease and occupational exposure. But industry disputes this view. "If you have claims being filed, you want to have those records to support your side," says Union Carbide's Whittlesey. "The real problem with keeping records is the expense and the nuisance of keeping a lot of paper. You can proliferate records until they're coming out of your ears, but eventually the space they take up will cost you money."

By requiring only current listings of chemical hazards, OSHA claims it has kept the cost of setting up record-keeping systems down to an estimated $14.7 million for all companies combined. The agency estimates the total cost for implementing its proposals at $581.9 million initially—and $227.9 million each year thereafter. OSHA predicts that initial hazard evaluation would be the most expensive component, accounting for $230 million of industry's costs. Labeling would cost industry an additional $177.8 million to start, OSHA reckons, followed by annual expenditures of $69.8 million. Startup educational programs would require about $125 million.

"We think the proposal overstates the benefits and underestimates the cost," says CSMA attorney Levin. He notes that OSHA puts the cost of educational programs at an estimated $41 per employee during the first year of compliance and $16/year thereafter. But he says that OSHA did not include in its figures either the cost of employee time spent in training or the cost of bringing in an industrial hygienist to conduct the training sessions. Thus, CSMA estimates that the same programs will cost $160 per employee during the first year.

Dr. Stephen M. Hessl (left) wants hazard data to follow substances downstream

The cost of it. Levin and others also argue with OSHA's overall estimates for record-keeping costs. According to Levin, costs will be particularly high for smaller companies producing a variety of formulations. He points to one CSMA member company that must fill in MSDS forms on 2,000 different substances. But even giant Du Pont considers the costs unwieldy. Ned K. Walters, Du Pont's chief of safety and fire protection, estimates that the cost of compliance for one of his company's departments will be twice OSHA figures.

Cost figures from both sides are ballpark estimates at best, for the full scope of the final standard has yet to be decided. So far, the preliminary standard exempts new chemicals in development and all imported substances from hazard communication procedures. Neither of the two exemptions is exhilarating to industry or overly bothersome to labor. Of far more concern to industry is that OSHA has to date refused to exempt laboratories from the rules. And labor is unhappy that the agency has excluded service workers and other non-manufacturing employees.

There is also considerable dissidence—and no little confusion—about requirements for the pipes and reactor vessels used in chemical processes. As OSHA now stands, pipes are exempt from regulations but reactor vessels must be labeled. "Two-thirds of our membership is working with piping systems," says OCAW's Krekel. "We've had a lot of fatalities due to lack of labels in piping."

Krekel cites an accident last year at a Port Arthur, Tex., refinery, where a brick mason died from lack of oxygen when an air hose was mistakenly connected to an unmarked nitrogen flue-gas line. "I'm not saying label the entire piping system," Krekel says. "Label the line ends and label the valves—it would be cost effective."

No simple matter. Industry is no less troubled by OSHA's insistence that it should label reactor vessels. Du Pont's Walters notes that in one of its departments the company uses the same ves-

s to create 50 different products ed on 25 ingredients. Because the mical composition of the contents of essel is constantly being changed, he ys, "it is not always a simple matter label a container."

As a result of all this dissatisfaction, SHA's standard will undoubtedly be amstrung by court battles for years fore it can be implemented. And that another reason why labor is lobbying strongly for state rules. Says AFL-IO industrial hygienist Margaret Seminario: "There will be a real need, practically speaking, to protect people during the next five years."

Even so, unions doubt that the states will vigorously enforce their own statutes. "The state legislatures have been more eager to put laws on the books than to enforce them," notes the Steelworkers' Wright. "You have to push very aggressively to get much action."

Lesser evil. But unions and their allies will press for state rules as the lesser of two evils, simply because they perceive OSHA under Administrator Auchter as an empty shell. "There's really a deep concern on the part of working people about the decimation of OSHA," says Harriet S. Applegate, associate director of the Ohio Public Interest Group. "There's a sense that there's nothing to protect people unless they protect themselves."

Applegate was part of a Cincinnati group that drafted a citywide ordinance for workers' right to know after a joint study by Johns Hopkins and Howard universities, released in 1980, showed that the city led the nation in the incidence of several types of cancer. Despite fierce opposition from the business community, the city council passed a compromise version of the ordinance on June 3.

The bill mandates that employers use National Fire Protection Assn. labels on containers for substances defined as hazardous on OSHA's subpart Z list—a list far shorter than the NIOSH list first proposed. The chemical's name is to be available on the MSDS, except in the case of trade secrets, with the city managers to act as referees if trade secrecy conflicts arise.

Unless OSHA moves far more quickly than most observers expect, what happened in Cincinnati seems likely to be repeated. "We've targeted the right to know as one of the most critical issues for the 1980s," says Warren Stickle, CSMA's director of legislative affairs. "It's going to be an issue that will arise in state after state, community after community." □

Now the generic drugs can be look-alikes, too

When the U.S. patent held by Hoffmann-La Roche for its tranquilizer Valium expires in 1985, more than a dozen makers of generic drugs are expected to seek the Food and Drug Administration's approval to market diazepam, the generic name for the chemical on which Valium is based. And once such approval is granted, each of these companies will likely bring out a pill resembling the size, shape, and color of the little yellow tablets that bring La Roche more than $200 million/year. Companies in the generic market predict that their less-expensive copies could cut Valium sales in the U.S. by 20-30%.

Like any big producer confronted by the expiration of its patent on a big seller, La Roche would be happy to throw a legal monkey wrench into the plans of the generic marketers. "These companies should not be permitted to use the reputation of a brand product," says a La Roche spokesman. "We strongly feel that copying a branded product in any way is a false and deceptive marketing practice."

Court rulings allow makers of generics to carbon-copy name brands as patents expire

Unfortunately for La Roche, that point of view has few friends in court. In the case of *Inwood Laboratories et al vs. Ives Laboratories*, the Supreme Court early this month set a precedent likely to render futile any legal maneuvering that La Roche, or any other name-brand company, has in mind to disrupt competitors' plans to market less expensive, generic look-alikes. And the name-brand manufacturers are uneasily awaiting a ruling by the U.S. Court of Appeals for the Second Circuit (New York City) on another aspect of the same case. Here the industry fears the court will uphold a lower-court decision squarely in favor of the rights that generic manufacturers have to emulate formerly patented products.

The Supreme Court handed down its *Inwood vs. Ives* decision on June 1. The court said that neither Inwood, a small generic drug producer based in New York City, nor a number of other small companies that had joined in the case, should be prevented from marketing drugs identical in composition and appearance to Cyclospasmol. The patent on Cyclospasmol, a circulatory drug developed by the Ives Laboratories division of American Home Products, expired in 1972.

At issue was the validity of an FDA regulation allowing a generic marketer such as Inwood to duplicate the blue-and-red Cyclospasmol capsules. Marketers of generics insist they copy the appearance of a name-brand drug such as Cyclospasmol in order to avoid confusion at wholesale and consumer levels.

Ives argued unsuccessfully in a federal district court that the practice opens the door to mislabeling by pharmacists, whether intentionally or accidentally, and consequently in lost sales for Ives. However, the Second Circuit Appeals Court, on its first hearing of the case, decided that branded drugs deserve protection, reversed the lower court ruling, and enjoined the generic makers from selling copies. The Supreme Court then overturned the appeals court ruling, agreeing with the district court that generic drug companies cannot be held responsible for the possible action of a pharmacist.

A broader claim. However, the Supreme Court did not rule on Ives' broader claim—that the marketing of a look-alike generic constitutes an infringement against the trademark of a name-brand drug. And sources in the pharmaceuticals industry predict that, from their point of view, this claim will fare no better since it, too, was denied by the federal district court and was not ruled on by the appeals court.

The Supreme Court has remanded Ives' broad infringement claim to the appeals court for final disposition, with instructions that the appeals court not overturn the district court ruling unless Ives can unequivocally invalidate the generic drug manufacturers' argument that look-alike drugs are necessary to prevent harmful mixups of dissimilar drugs by consumers. This appeals court ruling is expected later this year.

Buoyed by victory in the Cyclospasmol case, the generic drug industry is now looking ahead with gleeful anticipation. Over the next three years, more than 40 major name-brand drugs will lose their patent protection. Among them is Inderal, a cardiovascular drug

Hazardous Materials: How Much Should Workers Know?

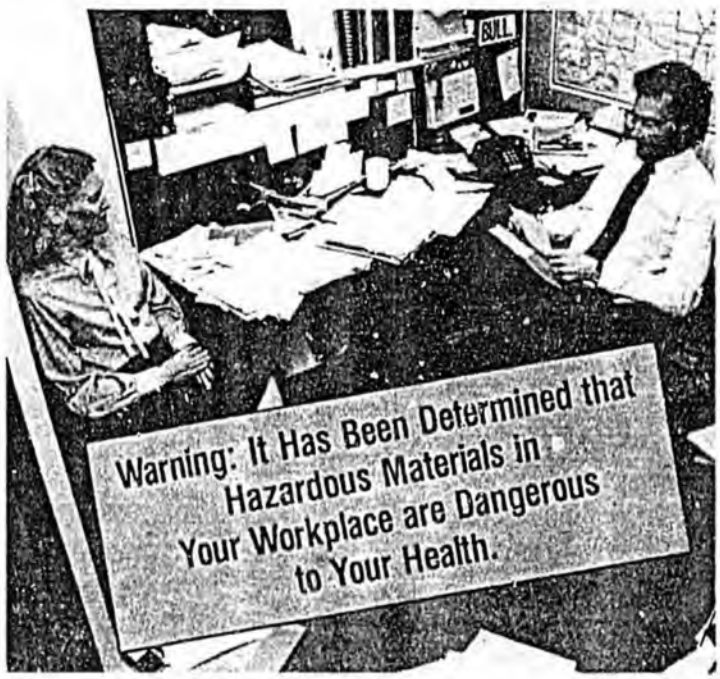
Brian Weberg

"I started in textiles in 1936 at Dan River. I worked there until 1968. Then I moved into Fieldcrest in 1968 and worked there until 1976. While I was there, they found this breathing trouble. They sent me to Chapel Hill and [the doctor] gave me an 8-hour examination. He ordered me out of the cardroom, to be transferred out of the cardroom.

I went back, but the job they were going to move me on had already been taken. So I continued working in the cardroom. They were always giving me the blowing test, kept that going all the time. I would get choked up at times, and I'd have to move to a window so I could breathe. On my way to the car, it was low, the lot. I would have to stop as much as two times to rest to get into my car. It was getting shorter all the time.

So in 1976, March 1, they retired me."

Roy Dowdy, a "brown lung" victim.



Brown lung, black lung, asbestosis and mesothelioma ...these are diseases of industrialization. The rush of labor to the factories and mines exacted, it is now clear, a heavy health toll on many workers.

Until recently, occupational exposure to hazardous substances had been considered simply part of the job. There is little reason to assign fault for this perception: Workers needed jobs and factories needed labor. However, we are beginning to realize that for some workers the health costs were not clear. Under an "iron law of latency" that works silently, we now know that many diseases resulting from occupational exposure to toxic substances may not manifest themselves for periods of from five to possibly 40 years.

The National Institutes of Health estimates that 11 million workers have been exposed to asbestos since the early 1940's. And in 1978, the U.S. Department of Health, Education, and Welfare concluded that as many as 5.6 million Americans may die of diseases rsulting from workplace exposure to asbestos.

While many of those who suffer from the consequences of past exposure have been forced to seek restitution through litigation, recent governmental actions have focused on awareness and prevention to lessen the risks to current and future workers.

Prevention clearly was the intent of the first substantive governmental action on hazardous materials in the workplace—the federal Occupational Safety and Health Act of 1970. But labor unions especially have not been satisfied with efforts to date. And firefighters often argue that they need more information about dangerous chemicals that they may be forced to deal with in an emergency.

The problem has been exacerbated by the rapid increase in the use of chemicals in today's workplace.

Seven states have responded by enacting worker "right-to-know" legislation. Similar bills were introduced in at least 16 other legislatures this year.

Right-to-know legislation establishes employee rights to specific information about hazardous substances that may be found

in the workplace. These laws usually require employers to:

- Notify employes of potential harzards;
- Provide information on safe handling and emergency response for specific chemicals; and
- Create employee education and training programs on the risks of working with hazardous substances and on reducing these risks.

Some statutes also require companies to notify the public, law enforcement officials or fire departments, of hazardous substances being used at local work sites.

The debate, essentially, is over costs—both to the industries involved and to the state for enforcement. Industry has not automatically opposed legislation, but it is concerned that state regulations provide flexibility in compliance and that some degree of consistency among states be maintained. Business groups such as the Chemical Manufacturers Association (CMA) fear that strict and inconsistent state laws will lead only to confusion, hardship and unnecessary costs—without equivalent gains in worker safety.

These worries have led CMA and other industry associations to support federal legislation in this area. Indeed, regulations have been proposed by OSHA to provide significant employer discretion in the administration of a federal "hazard communication" program.

Organized labor also has fought for a federal initiative on this issue. But the program that the federal Occupational Safety and Health Agency (OSHA) proposed in early 1981—a program "tough" enough to gain labor's support—was withdrawn by the Reagan Administration and replaced by the industry-backed "hazard communication" plan.

What States Are Doing

Apparently having lost its bid at the federal level, labor has joined environmentalists, community groups and police and fire protection officials in an effort to promote state and local right-to-know regulations. Labor's shift in emphasis to the state and local level has been paralleled by a signficant increase in activity on this issue in state legislatures.

The seven states that have adopted right-to-know laws are: California, Connecticut, Maine, Michigan, New York, West Virginia, and Wisconsin. Legislative battles over similar proposals are being waged in more than a dozen states. The debate in New Jersey, for example, has been particularly intense; a recent *Wall Street Journal* article notes that chemical makers "see the New Jersey contest as a turning point that provides an opportunity to weaken the right-to-know movement."

Most proposals center on providing workers a Material Safety Data Sheet (MSDS), which is considered the primary means of chemical safety information. There is little disagreement among industry and labor on what should be included in a MSDS.

It is generally accepted that chemical manufacturers are the best source of MSDS information, and legislation usually requires manufacturers to provide the data when requested by an employer regulated under a right-to-know statute. California specifies that out-of-state chemical manufacturers also provide MSDS information on hazardous substances they ship into the state.

More controversial than the contents of a MSDS is the issue of which chemicals should require a MSDS and how the MSDS should be made available to workers. Legislatures have thus far handled these questions in various ways.

New York's law is considered the strictest, and one reason is because its regulations require employers to provide MSDA-type information on any substance listed in the National Institute for Occupational Safety and Health (NIOSH) Registry of the Effects of Toxic Substances (RTECS), or a chemical that has shown "positive evidence of acute or chronic health hazards in human, animal or other biological testing." The registry lists more than 50,000 substances. Industry claims that such a broad definition will require them to provide detailed information on such common substances as "table salt and beach sand."

Another reference, the OSHA "z" list, was adopted by Wisconsin. This list contains about 400 substances and is preferred by industry because it makes compliance easier.

Labor, however, does not hide its desire for extensive definitions of hazardous substances. In providing "tips to remember" for legislators when drafting bills, the AFL-CIO suggests they "seek the broadest scope of chemicals possible. The NIOSH RTECS list is a good place to start."

Some states, though, have avoided the problems of lists and instead left the matter of defining hazardous substances to administrative rule. Another option is to let employers decide what substances in their workplaces are hazardous,

When Questions Are Easier Than Answers

In the debate over workers' right-to-know legislation, there is no shortage of issues:

- What workplaces should be subject to regulation?
- What is a hazardous substance, and who decides?
- Who should be notified about potential workplace hazards and how should notification be accomplished?
- How can important trade secrets be protected if companies are forced to disclose the chemical composition of hazardous substances in the workplace?
- Should workers have the right to refuse to work if adequate information about workplace hazards is not provided by the employer?
- Should records be kept of worker exposure to specific chemicals? How long should the records be kept and by whom?
- What constitutes a good education and training program? Should it be made available before or after the employee enters a new work environment?
- Who should be responsible for supplying detailed safety data on substances designated as hazardous?

and this approach reportedly is being taken in OSHA's proposed federal regulations.

The next step, after deciding which substances are hazardous and what information employers have to provide, is how to notify workers of potential hazards. This is the soul of the regulation—where the workers' right to know is satisfied.

Industry argues that different types of workplaces and situations require different approaches to successful communications about hazards. However, lobbyists working for comprehensive legislation claim that labeling of chemicals in the workplace is a must.

"Without labeling, workers have no way of knowing what precautions to take," says a spokesman for the New Jersey Environmental Lobby. Maine's law, for example, requires that "Each container present in the work area shall be labeled, tagged or marked with the common or chemical names of the chemicals contained." But strict labeling language often does not survive the legislative process and appear in the law.

The main thrust of most right-to-know legislation is a requirement that employers notify workers that potential chemical hazards exist in the workplace, and they have the right under law to know those hazards. Employers are often required to post notice of these rights and inform workers that they may obtain a MSDS for any hazardous substance to which they may be exposed. Some legislation requires that lists of hazardous substances present in a particular workplace be posted.

Education and training programs are often included as a required means of employee notification. Wisconsin, for example, requires education and training to take place before "an employee's initial assignment to a workplace where the employee may be routinely exposed to any toxic substance or infectious agent." Similar provisions in Maine also call for retraining on an annual basis.

There is little disagreement that education and training is the most effective approach to minimize worker injuries from hazardous substances. Industry does argue, however, that such requirements should be flexible so that training can be "consistent with the hazardous nature of the substances and mixtures and with the operations and processes of the workplace."

Under some right-to-know laws, workers also may have the right to refuse to work should they believe that their employer has not followed the regulations. Wisconsin stipulates that if an employee has not received requested information on a toxic substance within 15 days, the employee may refuse to work with or be exposed to the toxic substance. Legislation often includes an associated right—the right against employer retaliation—for those employees who exercise any of their rights established under the law.

Trade Secrets and Records

A major concern of employers, particularly chemical manufacturers, is that right-to-know laws will jeopardize company trade secrets, and they oppose strict language on what chemical specifications must be included in a MSDS. Most legislation, however, includes trade secret protection.

New York, for example, allows manufacturers to withhold the identity of trade secrets from a MSDS and instead register the information with the state health commissioner. If requested, manufacturers must provide employers with information on the toxic effects of a trade secret substance, but can withhold information on its chemical identity. Trade secret provisions may also include employee rights to trade secret information in a medical emergency.

Because of the potentially high cost of compliance, record-keeping has become a major point of contention in the debate. The issue is not only over whether or not records should be kept, but over who should keep them and for how long.

Records of worker exposure are useful since so many diseases related to hazardous substances demonstrate a period of lateney, up to 40 years for some substances. Know-

The debate is over costs—both to industry and to the state for enforcement.

A Genetic Factor

Genetic makeup is one factor that may indicate an employee's health risk when exposed to certain chemicals. According to *U.S. News & World Report*, at least 23 companies already use genetic testing to screen high-risk cases or monitor the health of exposed workers, with many more firms planning to adopt the procedures in the next few years.

Genetic testing raises two major issues:

- How will information gained through genetic testing be used? Will people with certain genetic traits be denied jobs, thus raising the question of discrimination? Or will the information simply be provided to employees as an additional factor in their decision to accept a particular work situation?
- Is the technology sufficiently developed and understood to be used in employment decisions? Some scientists argue that employee monitoring—not screening—is the only appropriate application of current techniques.

The lack of federal laws on genetic testing by employers and the prospect of its expanded use suggest that states will be pressed to deal with these issues. Four states already have related regulations. New Jersey's rule, which outlaws discrimination based on "atypical" genetic characteristics, is the most comprehensive.

ing what hazardous chemicals a worker has been exposed to and when can be invaluable in preventative care, diagnosis, and treatment.

Federal regulations already require that employers maintain exposure and health records on employees. State right-to-know legislation with record-keeping provisions modifies those requirements by assuring that worker exposure to specific substances is included in those records. States may also extend the period that the records be kept. A broader goal of record-keeping might be to establish a data base on worker exposure for epidemiological studies.

Maintenance of these records can be very expensive. Industry claims that because they are already required by federal law to keep records, the imposition of additional, possibly conflicting regulations would only increase costs and provide few additional benefits.

Proponents of a stronger state emphasis on records argue that, although they recently won the right of access to these federally mandated records, the information is insufficient when considering the potential health consequences of exposure.

Several alternatives have been tried or are being considered. Employers in Maine must keep "chemical identification lists" for 20 years and make them available to any "affected employee, former employee, designated physician or representative or the director."

Oregon legislators, who have had a long right-to-know debate, drafted a compromise in their bill: Exposure records would only have to be maintained by the employer for as long as an employee worked for the employer. Upon ending employment, the employee would be given the records and take responsibility for them. This provision, simple as it sounds, has raised concern among Oregon employers with inherently high worker turnover rates.

Another alternative would make the state the keeper of the records for a certain period beyond termination of employment, but this could create a huge administrative burden for the state.

How Effective are Right-to-Know Laws?

It is difficult, at this point, to evaluate the effectiveness of enacted right-to-know laws. Many are in the early stages of implementation; West Virginia's attempt is tied up in the courts.

Most notably, however, few states have allocated sufficient money for the enforcement of the regulations. A spokesman at the Chemical Manufacturers Association, when asked if any of its New York members had experienced an unnecessary burden under that state's strict right-to-know regulations, commented that the New York law has "never been enforced to any degree," but that manufacturers were making a good faith effort to comply. He added that most states are finding that "it's a very significant cost to administer and enforce a (right-to-know) law."

The AFL-CIO, in its suggestions to bill drafters, recommends that agencies with "expertise and a track record for action" be selected to enforce and administer the regulations. "It will do little good," it adds, "to work for the passage of legislation that will not be enforced."

The final test of state commitment to improving the right of workers to know what hazardous materials they are exposed to in the workplace will rest in a legislature's willingness to include realistic enforcement provisions in the bills.

Because effective enforcement requires money—a scarce resource for most legislatures—it is likely that this will be the toughest test for many states to pass.

Brian Weberg is a staff associate for NCSL's Legislative Information Systems and Services.

The Shadow of OSHA

Casting a shadow over the ability of states to enforce their right-to-know laws is the prospect of federal OSHA regulations slated to be issued in final form this summer. It is not clear exactly how the OSHA rules will read.

Known as the Hazard Communication Program, the OSHA rules probably will apply only to manufacturers, giving them fairly broad discretion to decide what chemicals in their workplaces constitute a hazard and thus must be made known to employees. Trade secret protection reportedly will be broad.

It also seems likely that OSHA will include in the regulation a provision for state preemption, but it is difficult to say how extensive the preemption might be.

Clearly, states that currently operate OSHA programs under "state plans" will have to submit right-to-know laws to OSHA for approval. States lacking their own plan will be preempted. But under the expected rule, the preemption would probably extend only to regulation of the manufacturing sector.

An AFL-CIO legal analysis concludes that preemptions will only occur where:

1) the OSHA standard is stronger than the state and local protections; or
2) state laws are in direct conflict with provisions of the federal standard. Since the OSHA standard will not cover many industrial sectors and will not cover the public, it is unlikely it can preempt all state activity.

Existing and proposed OSHA rules—plus other regulations such as the Federal Insecticide, Fungicide, and Rodenticide Act which sets standards for the labeling of pesticides—present a confusing framework to state lawmakers. Some argue that this confusion will be exaggerated only if states continue to enact right-to-know laws.

But even if a federal right-to-know standard is deemed the more effective policy route, it seems clear that the current OSHA proposal falls short of the protections many states have or wish to establish.

Right to know' laws on hazardous substances necessary

STEVEN KADISH

The recent PCB spill in the rt area of Anchorage was a ainatic reminder of the mmunity's exposure to hazrdo s and toxic materials. CB or polychlorinated bihenyls is a known cancerusing substance. Since the te 1970s, the use of PCBs s been banned for most rposes in the United States. Hundreds of hazardous and xic substances are used in nchorage every day. Although most are not as danerous as PCBs, these subances can seriously affect e health of those exposed to em.

Workers are in the front ne of potential exposure to ese hazardous substances. or example, carpenters, roofrs, cement finishers, carpet yers and others use various inds of possibly toxic adhelves and glues. Many busiesses including printing, etal manufacturing, launries and others use potentially hazardous solvents for cleaning purposes. Mechanics can be exposed to hydraulic and other lubricating fluids that are harmful. The grisly story of those exposed to asbestos is well-known.

The disturbing fact is that many workers in many occupations are unknowingly exposed to substances that are hazardous to their health. Few companies presently inform workers or community residents about the identity of the chemicals they are exposed to, or about the possible hazards from those chemicals.

Some statistics help describe the magnitude of the problem. Nationally, there are 300,000 to 400,000 new cases of occupationally-related diseases each year. The U.S. Department of Labor has estimated that "nearly 60 percent of the total number of recorded occupational illnesses are related to chemical exposures." Annually 100,000

die of job-related disease. To put these figures in perspective the National Safety Council estimates approximately 52,000 motor vehicles deaths in 1979, a typical year. 59,000 Americans died in the Vietnam War.

In addition to the human suffering, unnecessary and dangerous exposures to hazardous substances mean production losses, lost wages, health care payments, and higher workers compensation costs.

The "right to know" about hazardous substances that workers and communities are exposed to is developing into one of the biggest public health issues of the 1980s. Nine states and several major cities have already passed "right to know" laws. At least 12 more states will have legislation introduced this year.

"Right to know" legislation is designed to help reduce the incidence of job-related disease and to guard communities against health hazards from nearby companies that use dangerous substances. Last year a "right to know" bill was introduced in the Alaska State House.

"Occupational cancer can be prevented," said Philip Landrigan, MD of the National Institute of Occupational Safety and Health in a "Cincinnati Enquirer" article. "Unlike multiple sclerosis or many cases of diabetes, the causes of a number of occupational cancers are known. Prevention can therefore be achieved by reducing the exposure of workers to the substances which are known to cause those cancers," he added.

With "right to know" employees and employers could begin to take the necessary preventive measures to eliminate or reduce exposures to toxic and hazardous materials. In communities, residents and health officials could have access to information that would help them deal more effectively with illnesses and accidents resulting from hazardous substances.

The U.S. Occupational Safety and Health Administration (OSHA) has just recently concluded public hearings on its version of "right to know," known as the Hazard Communication Standard. While a step in the right direction, there are some major problems with the proposed regulations. The 60 million workers in transportation, agriculture, construction and other sectors are not covered.

Also, the proposed regulation may not be any help for many years to come. Labor, management, government officials and the health & science communities have been able to agree on a federal standard. "As a result, all this dissatisfaction OSHA's standard will undoubtedly be hamstrung in court battles for years before it can be implemented," notes "Chemical Week."

State and local "right to know" legislation provides an option for action now. "There will be a real need, practically speaking, to protect people during the next five years," says Peg Seminario an industrial hygienist with the AFL-CIO.

Our newly elected governor and legislature should take note. They have an opportunity to prevent unnecessary illness, production losses, health and insurance payments and human suffering.

Steven Kadish is executive director of the Alaska Health Project.

Bill No. Senate Bill 79

Date February 3, 1983

Title "An Act relating to toxic and hazardous substances in the workplace"

Contact: Judy Knight
465-2700

Richard Arab
465-4856

As part of its occupational safety and health program, the Department of Labor enforces regulations to protect employees from certain hazardous and toxic substances, and provides consultation and training services to employers and employees on the safe handling and use of these substances. Because it has historically been difficult to identify specific workplaces in the state where toxic and hazardous substances are present, the reporting provisions of this bill may enhance the department's efforts to direct its limited occupational safety and health resources to those workplaces where hazardous exposures actually exist.

Often employers and employees are not aware of the toxic or other harmful qualities of a particular substance being used or handled in the workplace. The labeling and training requirements provided in this bill would go a long way toward filling this void. This would, in turn, effect implementation of protective measures or controls by the employer to safeguard employees.

It should be noted however that in the absence of a federal law that requires manufacturers to provide the information required in this bill, Alaska employers may not be able to obtain and provide it to the Department or to employees (most toxic and hazardous substances are not manufactured in Alaska). Accordingly, the Department's recommendation would be that the bill be amended to hold wholesalers, rather than employers, responsible for obtaining the information from the manufacturers and providing it to buyers. Since there are more wholesalers in the state than there are manufacturers, this amendment would effect a larger universe for compliance with the provisions of the bill. We would also point out that the existing language in the bill, as well as the amendment we are proposing in this regard, may pose legal questions with respect to interstate commerce.

The department also recommends that Sec. 18.60.066(a)(5) and 18.60.067 (b)(9) be amended to clarify that these provisions specifically relate to personal protective equipment.

If this bill is passed many employers will, no doubt, look to the Department of Labor for assistance in providing the required training and in implementing effective protective measures. Accordingly, we would anticipate an increase in the demand for consultative and training services. A fiscal note is attached which reflects the costs associated with providing the increased services.

APPROVED BY Jan Robinson

DATE 2/22/83

POSITION PAPER/Department of Labor

STATE OF ALASKA
FINAL STATEMENT OF FISCAL IMPACT

Bill No: Senate Bill 79 Date on Bill: February 3, 1983
Title: "An Act relating to toxic and hazardous substances in the workplace"
Sponsor: Josephson, Sturgulewski, Fischer
Requestor: Senate Resources

1. Estimated fiscal impacts on:

a. Expenditures:

(Thousands of Dollars)

			FY 83	FY 84	FY 85	FY 86		
Capital								
Operating				128.4	114.0	120.9		
Total								

b. Revenues:

Revenue								

2. Source of funds to offset fiscal impact of bill:

N/A

3. Assumptions:

The Department will collect and disseminate information regarding hazardous chemicals and/or substances to the general public, and as a result will also be making increased work site inspections.

4. This statement has been reviewed by the OMB in the Office of the Governor. It may be considered to represent the policy of the Sheffield Administration and the final estimate of fiscal impact.

Prepared By: NB Robert J. Bacolas Phone: 465-4856
Division: Labor Standards and Safety Date: February 22, 1983

Approved by Commissioner: NB Jim Robison Date: February 22, 1983
Department: Labor

Reviewed by OMB: Date:
Phone:

5. Distribution:
Original to Legislative Finance
Copy to Department
Copy to Sponsor
Copy to Requestor

2/8/83

Detail Analysis for House Bill 79

Under this bill the Department of Labor will be responsible for collecting and disseminating information regarding hazardous chemicals and/or substances at work or storage sites in Alaska.

An Industrial Hygenist position in Anchorage will be required to review and respond to requests about the effects of hazardous chemicals or substances, recommend remedial action if required, and communicate this information to the requestor. In addition one clerical position will be required to provide support for the hygenist.

In addition to the Personal Services costs associated with the Industrial Hygenist and the clerical position there will be a need to increase the department's current contract for laboratory services ($5,000), as well as it's management services and rent allocation ($7,479 and $6,800 respectively). All other costs in Contractual Services are normal operating costs. Additionally, the Industrial Hygenist position will require various scientific measuring and sampling equipment ($7,700), as well as basic office equipment. The travel budget for FY '84 includes $7,500 for recruiting and relocation expenses for the hygenist position and $5,000 needed for extensive in-state travel to visit Alaskan work sites.

Line item costs are as follows:

	FY '84
Personal Services	$ 71,550
Travel	12,500
Contractual	29,525
Commodities	1,500
Equipment	13,300
TOTAL:	$128,375

One time items are $13,300 for equipment and $7,500 for travel.

Alaska State Legislature

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Senate

Committee on Resources

February 28, 1983

COMPARISON OF MAJOR PROVISIONS OF "RIGHT TO KNOW"
LEGISLATION, SB 79 and HB 197

Who must comply with the terms of the bill

SB 79---All employers who manufacture, store, use or transport hazardous or toxic substances must comply with information, labeling, reporting and education program provisions of the bill. Only employers using substances in a workplace which is used as a personal residence are excluded.

HB 197--The manufacturer of a hazardous or toxic substance is responsible for developing information and providing it to purchasers. In turn, wholesalers are required to supply same information to purchasers. Wholesalers are not required to provide information to purchasers when such information is already required by federal law.

What substances are covered by the bill

SB 79---All substances listed by the U.S. Department of Transportation, those listed in regulations pursuant to the Occupational Safety and Health Act and those listed in the registry of the National Institute for Occupational Safety and Health would be defined as "hazardous" or "toxic".

HB 197--The Department of Labor would adopt regulations which would define "hazardous" and "toxic" substances using the above lists. The regulations would exclude those substances not posing a health risk because of their physical state, volume, or concentration and those goods, drugs, cosmetics or tobacco products intended for personal use.

What are the reporting requirements

SB 79---Employers are required to provide a "material safety data sheet" (MSDS on substances used, their effects, conditions for safe use and exposure associated to the Department of Labor.

Presumably all information received by the Department, except for trade secrets, would be available to the public.

Reporting requirements continued

HB 197--The Department of Labor would issue regulations on what substances would be required to be reported by manufacturers, wholesalers, or employers to the Department. Information required would include substance descriptions, health effects, exposure conditions, safety procedures, quantities of substances used and other information.

The Department's records, except for trade secrets, would be open for inspection by employees, physicians, and certain other concerned persons. The Department "may" disclose information to the public.

How is information made available to employees

SB 79---An employer is required to make available information on substances to employees or their agents within five working days of a request. All employees and applicants for employment would be provided information on the substances which they would specifically be exposed to. Signs notifying employees of these rights would be required.

A waiver by employees or applicants of this information would be declared void.

Employers would be required to provide employees at least annual safety education programs on substances used or exposed to.

HB 197--Employers must give information to each new employee and to other employees on request (not their agents). Must give new employees and other employees on request safety training on substances.

Employers must post in the workplace information on substances used.

No anti-waiver provision contained.

What are the labeling requirements

SB 79---Containers of more than one gallon of the substances must be labeled by the name, hazards, exposure treatment and safe handling procedures. Pipes and fixtures containing substances in workplace must be labeled.

HB 197--No labeling requirements.

What is the role of the Department of Labor

SB 79---The Department is authorized to assist employers in the supplying of information to the Department. Presumbly the Department would be responsible for the enforcing of reporting requirements. Also, they would monitor and possibly issue additional requirements for the employee safety education programs.

HB 197--The Department would adopt regulations defining substances to be covered; would receive and presumably enforce, information on substances used by manufacturers, wholesalers and employers; and adopt regulations relating to the access to records and information.

No provisions relating to technical assistance are contained.

Alaska State Legislature

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Senate

Committee on Resources

MINUTES

May 11, 1983
3:10 p.m.

Beltz Room
Room 211, Capitol

MEMBERS PRESENT

Senator Fahrenkamp, Chair
Senator Ziegler, Vice Chair
Senator Eliason
Senator P. Fischer
Senator V. Fischer
Senator Mulcahy
Senator Sturgulewski

CALENDAR

SB 79 An Act relating to toxic and hazardous substances in the workplace; and providing for an effective date.

Pat Pourchot, committee aide, explained that the proposed committee substitute and letter of intent were the product of meetings between business, labor, health, and environmental groups, who worked together to arrive at a bill agreeable to all. He said the bill had been pared down to dovetail with federal OSHA regulations, and he went over specific provisions of the bill.

T.J. Thrasher, co-chair of the Alaska Employers' Committee, said she had participated in the meetings to work on the bill, and that the language of the committee substitute was acceptable.

Jim Robison, Commissioner of the Department of Labor, said that the Administration supports the committee substitute, and commended those who worked on the bill. There was discussion of how the OSHA regulations would relate to the committee substitute.

Senator Josephson's staff presented written testimony to the committee.

Mike Andrews of the Fairbanks Painters Union and Anchorage Painters Local, supported the committee substitute.

Senator Vic Fischer moved to adopt the committee substitute. The motion passed without objection.

Senator Vic Fischer moved to adopt the letter of intent. The motion passed without objection.

Senator Vic Fischer moved that the committee substitute, with the letter of intent, be reported out of committee with individual recommendations. The motion passed without objection.

The meeting adjourned at 3:34 p.m.

Alaska State Legislature

Senate

Resources Committee

cial Business

Bettye Fahrenkamp
Chairman

Pouch V
State Capitol
Juneau, Alaska 99811

February 28, 1983
3:05 p.m.

Beltz Room
Room 211 Capitol

MEMBERS PRESENT

Senator Fahrenkamp
Senator Ziegler
Senator Elias on

Senator Paul Fischer
Senator Vic Fischer
Senator Mulcahy
Senator Sturgulewski

SB 79 Relating to toxic and hazardous substances in the workplace.

Senator Josephson presented written testimony supporting SB 79. He stated that OSHA has held hearings on "right to know" standards, however they are concerned only with manufacturing which effects very few Alaskans. Even if National rules were adopted it would not preclude states from adopting rules that are less stringent than the federal ones. He added that the savings to the State through fewer health emergencies, fewer law suits, fewer road closures, lost work-days, Medicaid, and general medical assistance claims would be great.

Judy Knight, Department of Labor testified that labeling and training requirements would fill a void presently experienced in the implementation of protective measures by the employer to safeguard employees. Often employers and employees are not aware of the toxic or other harmful qualities of a particular substance being handled in the workplace. Department's recommendation would be that the bill be amended to hold wholesalers, rather than employers responsible for obtaining the information from manufacturers and providing it to the buyer. The Department of Labor feels that implementing effective protective measures would increase the demand for consultative and training services which would increase the cost.

Richard Arub, Department of Labor stated that regarding Federal standards versus State standards, we have an obligation under the State plan to have as effective regulations as the federal regulations.

Steven Kadish, Director, Alaska Health Project supports SB 79. There are more than 150 industrial facilities in Alaska that generate more than 2,200 pounds of hazardous waste per month. He recommended that language be included in the Senate Bill from sections (a) and (b) of the House Bill.

Bill Schneider, representing the Alaska Employers' Committee testified that SB 79 shows no evidence that the bill will accomplish its purpose of promoting safety and health in the Alaska workplace. Instead, the bill provides ...sive regulatory burden, additional bureaucracy and unreasonable expense to ...ska's taxpayers.

Jay Nelson, Alaskan Environmental Lobby testified in support of SB 79.

J. P. Tangent testified in opposition to SB 79 not because of lack of concern for employees health and safety but because most employers are overburdened now with existing state and federal regulations.

Beverly Ward representing Atlantic Richfield Company testified that SB 79 is lacking (1) a uniform program (2) any program should be based on risk assessment and the communication of identified hazards; and (3) standards should be performanced-based to maximize flexibility, effectiveness, and to reduce unnecessary costs. ARCO is concerned about the conflicting federal, state, and local laws and regulations covering the identification and labeling of chemicals.

Wally Kubley, Louisiana Pacific, testified that the act is redundant and that existing state and federal agencies are already covering the intent of the provisions of the Act.

A film entitled "Song of the Canary" was shown.

Meeting adjourned at 4:00 p.m.

RIGHT TO KNOW

An Act Relating to Hazardous or Toxic Substances.

Questions and Answers on House Bill 197 and Senate Bill 79.

1. What is it?
"Right to Know" refers to legislation which requires that the use of certain hazardous and toxic materials found in the workplace are made known to the workers exposed to them, so that appropriate preventive health measures can be taken. On January 27, 1983 Senate Bill was introduced by Senators Josephson, Fahrenkamp, V. Fischer, and Sturgulewski. The House Labor and Commerce Committee introduced House Bill 197 on February 14.

2. Why do we need it?
Hundreds of toxic and hazardous substances are used throughout Alaska every day. Many of these materials are first used in the workplace and then often take the form of hazardous wastes. Few companies presently inform workers about the identity of those chemicals they are exposed to, or about the possible hazards from those chemicals. The result is that workers are unknowingly exposed to substances that are hazardous to their health.

For Workers. Some statistics help describe the magnitude of the problem. Nationally, there are over 300,000 new cases of occupationally-related diseases each year. The US Department of Labor has estimated that "nearly 60% of the total number of recorded occupational illnesses are related to chemical exposures." Annually 100,000 die of job-related disease. That death toll equals a 747 Jumbo Jet aircraft crashing every day of the year. To compare, there are 52,000 motor vehicle deaths each year. With 3,000 new chemicals introduced in our workplaces each year, the situation is likely to become worse.

For Businesses. In the January 31, 1983 issue of Time, the American Cancer Society said, "When workers aren't there, business doesn't work. Each year cancer strikes 120,000 in the workforce and causes our economy to lose more than $10 billion in earnings." Production losses, retraining costs, workers compensation charges, and health payments are real costs to employers. Right to Know legislation would help limit these business costs.

For Health Professionals. The symptoms of occupational illnesses are sometimes confused with other illnesses. Nausea, dizziness, respiratory problems, and a variety of cancers are among the ills that may result from workplace exposures in many Alaskan occupations. In order for the health professional to properly diagnose and then treat these disorders, the chemical substances a worker is exposed to is essential information. The current labeling information is inadequate for these purposes. Right to Know enables workers to inform their physicians and other medical professional basic information that may affect their health.

For Communities. The exposure to hazardous and toxic substances is not limited to their use in the workplace. The transportation, storage, and disposal of these materials can threaten the public's health. Recently, there have been numerous Alaskan and national examples of hazardous materials emergencies. Those transporting toxic and hazardous substances need to know what they are carrying and what to do in emergencies to limit the impact on the community. Public safety officials need to be able to accurately identify a substance and how it should be handled in emergencies. Right to Know provides essential information in these circumstances.

With Right to Know employees and employers could begin to take the necessary preventive measures to eliminate or reduce exposures to toxic or hazardous materials. In communities, residents, public safety officials, and health professionals could have access to information that would help deal more effectively with illness and accidents resulting from hazardous substances.

3. How do the proposed bills work?

In both the House and Senate legislation, the employer is required to supply employees with a Material Safety Data Sheet (MSDS) on specified toxic and hazardous substances to include: the chemical and trade name of the substance, permissable exposure levels, chronic and short term health effects, safe use conditions, proper clean-up procedures, and emergency medical treatment. An employee education program covers much of the same information so that the employee better understands this information. This education program is provided by the employer. The MSDS is also filed with the state.

MSDS already have been prepared by the manufacturer of the toxic and hazardous substances to be regulated. An employer, then, simply has to take an inventory of the substances covered by the proposed legislation and request a MSDS from the manufacturer. In fact, the US Longshoremen and Harborworkers Compensation Act requires that a MSDS be attached to all ocean transported hazardous goods. This means that MSDS information should be readily available on many of Alaska's products as they are shipped by sea. Finally, enforcement of these provisions would be part of the Department of Labor's Occupational Safety and Health Section regular inspection for workplace safety and health.

4. Other States and Right to Know?

To date, nine states and several major cities have passed Right to Know laws. Bills in another 13 states are likely to be introduced in the next legislative session. The states and cities that already have Right to Know laws include:

California	Connecticut
Maine	Michigan
New York	Virginia
West Virginia	Philadelphia, PA
Cincinnati, OH	San Diego, CA

5. A Proposed Federal Standard?

The US Occupational Safety and Health Administration (OSHA) has just recently concluded public hearings on its version of Right to Know, known as the Hazard Communication Standard. While a step in the right direction, there are some major problems with the proposed regulations. First, the proposal only applies to employees in manufacturing. The 60 million workers in transportation, agriculture, construction and other sectors are not covered. Only a small portion of Alaskans are employed in manufacturing.

Also, the proposed regulations may not be any help for many years to come. Labor, management, health professionals and others have not been able to agree on this federal standard. "As a result of all this dissatisfaction, OSHA's standard will undoubtedly be hamstrung by court battles for years before it can be implemented," notes Chemical Week, a trade magazine for the chemical industry.

State Right to Know legislation provides an option for action now. "There will be a real need, practically speaking, to protect people during the next five years, says, Peg Seminario an industrial hygienist with the AFL-CIO.

6. How much will it cost?

This year's HB 197 is virtually identical to last year's HB 806. The fiscal note on HB 806 in 1982 was $58,600. This is comparable to costs for New York State when adjusted. Because the proposed Senate legislation asks the State to assist employers in preparing MSDS and other information. The cost may be slightly higher for this bill than for the House version.

Many large employers are already operating at close to compliance. These large employers should attain compliance at little additional cost. Small and medium sized firms will probably face some minimal start-up costs. In the Senate bill, the Department of Labor's assistance to employers helps minimize these costs and makes compliance easier. Labeling requirements in the Senate bill may increase costs to employers when compared to the House bill.

This information sheet was prepared by the Alaska Health Project, PO Box 1037, Anchorage, AK 99510, 272-8734.

* There are over 150 industrial facilities that generate over 2200 pounds of hazardous waste each per month in Alaska. Are you working in one of these buildings? Do you live near one of them?

* In the fall of 1982, transformers containing PCBs, a cancer-causing substance, being hauled along the Parks highway from Fairbanks to Anchorage began to leak resulting in a massive clean-up effort. The boxes containing the transformers were not properly labeled to indicate the contents or the health hazards of exposure from PCBs. Also, these containers were not adequate for the transportation of hazardous materials. How often are PCBs and other hazardous substances transported in this manner?

* In Ketchikan in the summer of 1982, some residents spent a weekend vomiting, coughing and complaining of stomach cramps when they were exposed to a wood preservative, pentachlorophenol. A company was spraying the preservative on a rooftop when strong winds carried the vapor to a nearby residential area. The residents exposed to this chemical were unaware of this activity and the health hazards associated with it.

* This summer a toxic fire occurred 8 miles north of Livengood when a tractor trailer truck carrying a class B poison, MMT caught fire. The fire started when a rock punctured one of the 35-gallon drums containing the poison. No one at the scene, including the driver knew how this chemical should be handled. The haul road was closed for 7 hours. The three people exposed to the fire's fumes were rushed to the hospital and suffer serious pulmonary disorders. What would happen if this same incident occured in Anchorage or Fairbanks?

Right to Know: What is it?

"Right to Know" refers to legislation which requires that the use and composition of certain hazardous and toxic materials found in the workplace are made known to the workers and communities exposed to them, so that appropriate preventive health measures can be taken. It is legislation that would help deal specifically with the examples above and others like them.

Right to Know: Why do we need it?

Hundreds of hazardous and toxic substances are used throughout Alaska every day. Many of these materials are first used it the workplace and then often take the form of hazardous wastes. Few companies presently inform workers or community residents about the identity of the chemicals they are exposed to, or about the possible hazards from those chemicals. The result is that both workers and residents are unknowingly exposed to substances that are hazardous to their health.

Some statistics help describe the magnitude of the problem. Nationally, there are 300,000 to 400,000 new cases of occupationally-related diseases each year. The US Department of Labor has estimated that "nearly 60% of the total number of recorded occupational illnesses are related to chemical exposures." Annually 100,000 die of job-related disease. In comparison, there are 52,000 motor vehicle deaths each year, and about 59,000 Americans died in the Vietnam War!

With "Right to Know" employees and employers could begin to take the necessary preventive measures to eliminate or reduce exposures to toxic and hazardous materials. In communities, residents and health officials could have access to information that would help them deal more effectively with illnesses and accidents resulting from hazardous substances.

Other States and Right to Know

To date, nine states and several major cities have passed "Right to Know" laws. Bills in another 13 states are likely to be introduced in the next legislative session. The states and cities that already have "Right to Know" include:

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New York	Virginia
West Virginia	Philadelphia, PA
Cincinnati, OH	San Diego, CA

A Proposed Federal Standard?

The US Occupational Safety and Health Administration (OSHA) has just recently concluded public hearings on its version of "Right to Know", known as the Hazard Communication Standard. While a step in the right direction, there are some major problems with the proposed regulations. First, the proposal only applies to employees in manufacturing. The 60 million workers in transportation, agriculture, construction and other sectors are not covered. Only a small portion of Alaskans are employed in manufacturing.

Also, the proposed regulations may not be any help for many years to come. Labor, management, government officials, and the health and science communities have not been able to agree on this federal standard. "As a result of all this dissatisfaction, OSHA's standard will undoubtedly be hamstrung by court battles for years before it can be implemented," notes Chemical Week, a trade magazine for the chemical industry.

State "Right to Know" legislation provides an option for action now. "There will be a real need, practically speaking, to protect people during the next five years, says, Peg Seminario an industrial hygienist with the AFL-CIO.

Key Elements of A Strong Right to Know Law

An effective "Right to Know" law must include the following:

*employees are informed about and trained to work with hazardous and toxic materials they may be exposed to;

*hazardous and toxic substances containers and piping are accurately and adequately labeled;

*trade secret provisions are developed to protect both the employees' health and the employers' production processes;

*an outreach and information program that effectively teaches all Alaskan employers and employees about their rights and responsibilities under "Right to Know"; and

*information involving this act is centrally and systematically filed, and available to the public, health providers and fire departments.

What Your Can Do

Contact Your Legislator. A version of "Right to Know" was introduced in the Alaska State House last session, but received little attention. Your legislator needs to know that "Right to Know: is a priority of yours that should be enacted.

Write a Letter to the Editor. This part of the newspaper is widely read. It is your opportunity to let the community know about the problem of hazardous and toxic substances and what can be done about it by passing a "Right to Know" law.

Organize a Public Forum to Discuss Right to Know. Many people have questions, fears, and examples of their exposures to hazardous and toxic substances and how a "Right to Know" law would have helped them. A forum open to the community with knowledgeable speakers would help develop strong support for "Right to Know" legislation and act as an educational opportunity.

Document Experiences with Hazardous Substances. People's real experiences with exposure to hazardous materials provide a powerful message and help us to better understand how widespread the problem is. If you or others you know have had dangerous or potentially dangerous contact with toxic or hazardous substances, please let us know. Contact the organizations listed below.

Contact Your Friends and Other Organizations. Although there are many reasons to support "Right to Know" legislation, some people are opposed to it, including the Chemical Manufacturers of America and some businesses who see this type of action as unnecessarily costly. "Right to Know" will only pass in Alaska with widespread support. Encourage your friends and organizations to contact their legislator.

For more information contact:

Paul Dunham, AFL-CIO, 2501 Commercial Drive, Anchorage 99501, 279-3825
Steven Kadish, Alaska Health Project, PO Box 1037, Anchorage 99510, 272-8734
David Wigglesworth, Alaska Center for the Environment, 1069 W. 6th, Anchorage 99501, 274-3621

Alaska State Legislature

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Senate

Committee on Resources

March 24, 1983

Memo

To: Ad hoc Review Committee for SB 79: "Right to Know" legislation

From: Senate Resources Committee Staff

Subject: Rough draft Committee Substitute for SB 79

Attached for your review and comment is a beginning draft substitute for SB 79 dealing with hazardous and toxic substances in the workplace.

At our hearings in Juneau on February 28 and in Fairbanks on March 11, 1983 most persons testified in support of the basic intent and purposes of the bill--the informing of employees of potential exposures to hazardous and toxic substances in their workplaces. However, many persons expressed concern that the particular provisions of SB 79 created unreasonable economic and bureaucratic burdens on employers and the state. It was also stated the either existing or proposed federal laws/regulations would accomplish the same intent of SB 79 and as such made this legislation unnecessary and duplicative.

Senator Fahrenkamp has acknowledged the problems in the current bill and directed staff to pursue a committee substitute with concerned interest groups under the assumption that most persons were in basic accord with the general intent and purposes of the legislation and that state law would not necessarily duplicate federal efforts. Staff was instructed to look into this latter assumption also. It is our conclusion that existing federal OSHA law and regulation is quite limited to only setting workplace exposure levels to a very few toxic substances such as asbestos and does not deal with "right to know" provisions per se. It was also concluded that proposed OSHA regulations may or may not be adopted this summer or by any other time certain. Furthermore, these regulations cover only manufacturers of substances which would cover only a relatively small portion of the employers in Alaska. It was found, however, that federal and state law and regulations do require substantial labeling requirements for hazardous and radioactive substances which are shipped or transported. In conclusion, however, it was found that Alaska state law on this subject could be structured in a manner which would address the basic intent of the legislation without being duplicative of federal law or regulation.

The attached draft borrows heavily from the similar bill which has been introduced in the House, HB 197. It was felt that this legislation met many of the objections to SB 79 and would form a better starting point for discussions.