U. S. DEPARTMENT OF LABOR

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OCCUPATIONAL EXPOSURE TO ASBESTOS

Notice of Proposed Rulemaking

Docket Number H-033

Comments Submitted By:

Lowell D. White, Ph.D. C.I.H.
23 East 2000 South
Orem, Utah 84057

April 9, 1976

COMMENTS OF LOWELL D. WHITE, Ph.D., C.I.H.

OSHA Proposed Asbestos Standard
Federal Register 40(197):47652-65, 1975

Introduction

As an ABIH certified industrial hygienist, I am vitally concerned with the attainment and maintenance of a healthful workplace. However, the basis of the proposed regulations requires further discussion. The severity of the provisions of the proposed regulations are not justified by the available data.

Comparison of Cigarette Smoke Pollutants and Workplace Asbestos Levels

The concentrations of "carcinogenic agents" and "potential cancer promoting agents" contained in cigarette smoke are compared with the maximum reported workplace level of asbestos in Table I.

TABLE I

Comparison of Pollutants in Cigarette Smoke and Asbestos

Pollutant	Cigarette Smoke (mg/m^3)	Asbestos (mg/m^3)
Benzine-soluble organic particulate matter	82,000 (1)	------
Particulate matter	95,000 (1)	5.4 (2)
Carbon monoxide	45,000 (3)	------
Hydrogen cyanide	1,600 (3)	------
Acetaldehyde	6,700 (3)	------

This comparison of exposures shows that cigarette smokers are exposed to considerably greater levels of potential "carcinogens". For example, an asbestos worker would potentially inhale

over a period of 20 years at the highest conceivable levels cited above about 1,500 times LESS "carcinogenic" material than the average worker who smokes cigarettes (assuming asbestos is carcinogenic). Of course, some difference in retention may exist.

It is common knowledge that cigarette tar and many of its components are carcinogenic to multiple target organs and animal species (1). However, the same cannot be said for asbestos. Even intratracheal installation and ingestion of large doses of asbestos have failed to produce tumors (2-4). From an experimental point of view, this extremely stringent standard is not substantiated by experimental laboratory evidence that asbestos causes cancer. This is incredible, considering that the severity of the standard is justified by the claim that asbestos is a "carcinogen".

Cigarette Smoking and the Epidemiology of Asbestos Worker Lung Cancer

Several investigators have reported that occupational exposure to asbestos causes lung cancer according to the findings of their epidemiological studies (5-7). These studies and others were discussed in detail in the preamble to the proposed regulations.

Such biostatistical studies are not proof of causal relationships but are only useful for identification of potentially rewarding areas for biomedical research. The claims made by these studies that asbestos is a "carcinogen" are particularly suspect since biomedical research has not shown this to be the case. These studies warrent critical scrutiny.

In order to avoid making serious errors in epidemiological surveys, several variables must be taken into account (8):

1. Is the observed association due to chance (random occurence)?
2. What role might other variables play in accounting for all or part of the observed association?
3. To whom does the association apply?
4. Does it appear that the association represents a cause and effect relationship?

The studies reported by Selikoff (5-6) appear to make an attempt to take into consideration the variable (#2 above) known to cause almost all the lung cancer in our society -- cigarette smoking (9). Attached to these comments is the "Cigarette Smoking" page which contains the lung cancer statistics (6). It is easily noted that less than the expected number of lung cancers were

observed among asbestos workers who had never smoked cigarettes. Note for example that 6 cases of lung cancer were expected for all locals in the U.S. and Canada but only 2 were observed. In a more recent report, Selikoff (5) has reported that 7.51 and 4.40 lung cancer deaths were expected among non-smokers but only 2 and 1 respectively were observed. (Table 5) Indeed, the conclusion (circled) states that, "In the absence of cigarette smoking, we have not found lung cancer to be a very serious problem among asbestos workers." (6) This is tricky wording as something which is not "a very serious problem" may still be "a serious problem" and thereby be misleading. These data show simply that asbestos does not cause lung cancer and that non-smokers experience absolutely no risk for excess lung cancer mortality. Indeed, these data suggest that asbestos exposure may reduce their risk for lung cancer.

Cigarette smoking habits and its effect on lung cancer rates simply cannot be excluded from any epidemiological study of lung cancer incidence among occupationally exposed worker populations. The American Cancer Society (9) has reported that heavy smokers have a 15- to 20-fold greater risk of dying from lung cancer than men who have never smoked. Friedman et al. (10) have reported that heavy smokers have a 10-fold excess lung cancer risk than do non-smokers. A recent Swedish study (11) reports that smokers experience a 7- to 28.8-fold excess risk for lung cancer depending upon the type and amount of smoking.

Reference is made again to Attachment 1 which shows the cigarette smoking statistics for a lung-cancer epidemiological study by Selikoff, et al. (6). Note that the asterisk indicates that the expected deaths of lung cancer in these populations are based on U.S. death rates from the U.S. National Office of Vital Statistics. For all U.S. and Canada locals, 8 percent of the non-smokers were expected to die of lung cancer whereas only 4 percent of the smokers were. How ridiculous can you get? As cited above, smokers have a much higher lung cancer rate than do non-smokers. So, in reality, Selikoff, et al. did not actually correct for cigarette smoking. These figures are highly suspect and are obviously calculated and compared in a misleading fashion.

Also for example, U.S. death rates are an improper control group for comparison. These data are not differentiated with respect to cigarette smoking and are a much more diffuse group than was the study group of asbestos workers who had to have worked about 20 years with asbestos to qualify for inclusion. Selikoff, et al. are actually comparing "grapes" with "oranges" as the study and control groups were not identical with respect to all parameters except exposure to asbestos. It is interesting to note that Stell and McGill (12) admitted finding higher levels of cigarette smoking among asbestos workers than among other workers. Therefore, a significant probability exists that cigarette smoking accounts for all the "excess" lung cancer deaths observed among these asbestos workers.

Tables 4 and 5 of the recent report by Selikoff, et al. (5) are attached to these comments. The expected death rates are cited as "based upon age-specific white male death rate data of the U.S. National Office of Vital Statistics from 1963 to 1971, disregarding smoking habits" (emphasis added). Again, non-smokers experience less than the expected rate of lung cancer mortality showing that asbestos does not cause lung cancer. A simple calculation of the data in these tables again show lower rates of lung cancer were expected among smokers than non-smokers. This is incredible. The manipulation of these data in this manner makes the reported conclusions yet more suspect.

Secondly, the control group (U.S. white males) and the study group of asbestos workers are again not matched as to exposure (including cigarette smoking) except for exposure to asbestos.

Third, the admission that the expected deaths are calculated "disregarding smoking habits" is an egregious error in judgement. The failure of these studies to take cigarette smoking into account completely invalidates any and all conclusions made of an association between asbestos exposures and lung cancer.

The Federal Register notice (page 47656, column 1) indicated that a study by Gilliam et al., "found three times the risk of malignant respiratory disease than expected" at average concentrations of 0.24 fibers/ml. The "findings" of this study were undoubtedly used by OSHA to justify the exceptionally low TLV of 0.5 fibers/ml. This study also has several serious flaws:

1. The control group is the general white male population of the U.S.

2. Smoking groups are divided only into "light" and "heavy" smokers for comparison purposes. (Table 2)

The first error has been discussed briefly above. The second is critically important with respect to the conclusions drawn by Gilliam, et al. that "the excesses in respiratory cancer did not seem to be attributed to age, cigarette smoking"..."asbestos minerals at concentrations significantly less than 2 fibers per cc and of short length characteristically stand out as the most prominant independent variable to be associated with this excess of malignant and non-malignant respiratory disease." Gilliam, et al. divided the workers into groups of "light" smokers (up to and including 1 pack per day or less than 10 years) and "heavy" smokers (more than 1 pack per day and more than 10 years). Of course, the most significant lung cancer risk was noted among the "heavy" smokers but since "light" smokers showed an excess of lung cancer this showed "the interactive role of asbestos in the etiology of lung cancer." This conclusion is completely untenable based on these "data" and will be directly addressed.

It is generally recognized that the lung cancer rate increases with increased amounts of cigarette smoking (9-10). The Kahn study (13), in particular, showed lung cancer rates about four times greater at cigarette consumption rates up to 9 cigarettes per day. The lung cancer rate increased to 20 times as much when two packs of cigarettes were smoked each day. The "light" smokers group in the Gilliam et al. study included those workers smoking up to a pack a day. It is to be expected that these men will experience excess lung cancer rates when compared to the U.S. general white male population which has not been differentiated for smoking habits. No lung cancer would be expected only among the non-smokers. These investigators (Gilliam et al.) have simply observed only the small difference expected between these groups due to the variation in smoking habits established in the study. The probability that asbestos had anything to do with the excess induction of lung cancer among these workers is negligible if not zero.

At asbestos levels of even 0.5 fibers per cc these men were being self-exposed to the carcinogenic tar of cigarette smoke at levels up to 1,000,000 times as great (and more). To assert that these minute levels of asbestos were responsible for these lung cancers is equivalent to claiming that a molehill (asbestos) is a mountain and that the mountain (smoking) is actually a molehill. This would be a joke if the consequences and severity of the proposed regulations were not so serious.

The failure to adequately consider the role of cigarette smoking completely invalidates any and all conclusions of an association between asbestos exposures and lung cancer. The comparative data above indicate a significant probability that the differential lung cancer mortality observed among asbestos workers will be found to be associated with variations in smoking habits. It is strongly recommended that the standard be revised upward to at least 2 fibers per cc.

References:

1. Hoffman, D., and Wynder, E.L.: Chemical Analysis and Carcinogenic Bioassays of Organic Particulate Pollutants. in Stern, A., ed: Air Pollution, Academic Press, Inc., New York, Vol. 2, 1968, pp. 187-247.

2. Harwood, C.F. and Blaszak, T.P.: Characterization and Control of Asbestos Emissions from Open Sources. NTIS Report No. EPA-650/2-74-090. September, 1974.

3. Osborne, J.S., Adamek, S. and Hobbs, M.E.: Some Components of Gas Phase of Cigarette Smoke. Anal. Chem. 28: 211-5, 1956.

References (cont.)

4. Gross, P., Harley, R.A., Swinburne, L.M., Davis, J.M., and Greene, W.B.: Ingested Mineral Fibers Do They Penetrate Tissue or Cause Cancer? Arch. Environ. Health 29: 341, 1974.

5. Selikoff, I.J.: Multiple Factor Interactions in Occupational Disease. Paper Presented at the Interdepartmental Workers Compensation Task Force Conference on Occupational Diseases and Workers Compensation, University of Chicago, February 10, 1976.

6. Selikoff, I.J., et al.: Insulation Hygiene Progress Reports, Volume 4, No. 4, Fall 1972. Supplement to the International Association of Heat and Frost Insulators and Asbestos Workers Union Magazine.

7. Gilliam, J.D., Lemen, R.A. Archer, V.E., Wagoner, J.K., and Dement, J.: Morbidity and Mortality Among Hard Rock Miners Exposed to a Asbestiform Mineral. Am. N.Y. Acad. Sci. (in press).

8. MacMahon B., and Pugh, T.F.: Epidemiology Principles and Methods. London, Great Britain, J. & A. Churchill, 1970, pp. 1-117.

9. "Cancer Facts and Figures," Annual Report of the American Cancer Society, 1975.

10. Friedman, G.D., Siegelaub, A.B., and Seltzer, C.C.: Cigarette Smoking and Exposure to Occupational Hazards. American Journal of Epidemiology 98: 175-83, 1973.

11. Anonymous: Today's Health, October, 1975, p. 8.

12. Stell, P.M. and McGill, T.: Asbestos and Laryngeal Carcinoma. Lancet, August 25, 1973, pp. 416-7.

13. Kahn, H.A.: The Dorn Study of Smoking and Mortality Among U.S. Veterans: Report on Eight and One-Half Years of Observation. Nat. Cancer Inst. Monograph 19: 1-125, 1966.

Ref. 6.

CIGARETTE SMOKING

Cigarette smoking and insulation work do not mix.

Research has shown that lung cancer occurs against a background of cigarette smoking:

1. LOCALS 12 AND 32:

On Jan. 1, 1963, there were 370 members of Locals 12 and 32 who had entered the Union before 1943.

	87 never smoked cigarettes	283 had a history of cigarette smoking
Total deaths by Dec. 31, 1971	35	133
Expected deaths of lung cancer*	1.26	3.31
Deaths of lung cancer Jan. 1, 1963-Dec. 31, 1971	1	41

2. ALL LOCALS, U.S. AND CANADA:

There were 17,800 men registered in the International on Jan. 1, 1967. 11,656 completed questionnaires recording their smoking habits.

	2,066 never smoked cigarettes	9,590 had smoked cigarettes
Total deaths by Dec. 31, 1971	73	596
Expected deaths of lung cancer*	5.98	25.09
Deaths of lung cancer Jan. 1, 1967-Dec. 31, 1971	2	134

*Based on U.S. death rates, U.S. National Office of Vital Statistics.

Calculations indicate that asbestos workers who smoke cigarettes have eight times the chance of dying of lung cancer, compared to other cigarette smokers of the same age who do not work in this trade.

Asbestos workers who smoke cigarettes have 92 times the risk of dying of lung cancer, compared to similar men, who neither work with asbestos nor smoke cigarettes.

We have not found significant trouble with pipe or cigar smoking.

In the absence of cigarette smoking, we have not found lung cancer to be a very serious problem among asbestos workers.

Cigarette smoking is not the whole story, however. Mesothelioma and asbestosis occur even without smoking, as does cancer of the stomach, esophagus, colon or rectum. Therefore, dust control is essential.

Two things do not belong in pipe-coverers' lungs:
INSULATION DUSTS AND CIGARETTE SMOKE.

Table 4

Expected and observed deaths among 370 New York-New Jersey asbestos insulation workers, January 1, 1963-December 31, 1973, by smoking habits

	Number of men	Person-years of observation	Cause of death: Lung cancer			Pleural mesothelioma	Peritoneal mesothelioma	Asbestosis
			Expected[a]	Observed	Ratio			
History of cigarette smoking	283	2,195	4.07	45	11.06	7	14	19
Current smokers	181	1,443	2.48	32	12.09	6	7	12
Ex-smokers	102	752	1.59	13	8.18	1	7	7
No history of cigarette smoking	87	708	1.50	2	1.27	0	7	6
Never smoked	48	409	0.84	0	---	0	5	3
Pipe/cigar only	39	299	0.74	2	2.70	0	2	3

[a] Expected deaths are based upon age-specific white male death rate data of the U.S. National Office of Vital Statistics from 1963-71, disregarding smoking habits. Rates were extrapolated from 1972-73 from rates for 1967-71.

Table 5

Expected and observed deaths of lung cancer among 17,800 U.S. and Canada asbestos insulation workers, January 1, 1967-December 31, 1972; relation to cigarette smoking

	No of persons	Deaths from lung cancer		
		Expected[a]	Observed	Ratio
Smoking habits not known	6,144	16.76	94	5.6
History of cigarette smoking	9,590	31.60	179	5.7
No history of cigarette smoking	2,066	7.51	2	0.3
Never smoked	1,457	4.40	1	0.2
History of pipe and/or cigar only	609	3.11	1	0.3

[a]Expected deaths based upon age-specific U.S. mortality rates for white males, disregarding smoking. Lung cancer estimates based on U.S. rates for cancer of lung, pleura, bronchus and trachea, categories 162 and 163 of the International Classification of Diseases and Causes of Deaths, 7th Revision.

ENVIRONMENTAL PROTECTION AGENCY REGULATIONS ON NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(40 CFR 61; 38 FR 8820, April 6, 1973; Amended by Code of Federal Regulations, Volume 40, Revised as of July 1, 1976; 41 FR 27967, July 8, 1976; 41 FR 33264, August 9, 1976; 41 FR 34629, August 16, 1976; 41 FR 36918, September 1, 1976; 41 FR 40108, September 17, 1976; 41 FR 40467, September 20, 1976; 41 FR 43148, September 30, 1976; 41 FR 44860, October 13, 1976; 41 FR 46559, October 20, 1976; 41 FR 53017, December 3, 1976; 41 FR 54758, December 15, 1976; 41 FR 56805, December 30, 1976)

Subpart A—General Provisions

§ 61.01 Applicability.

The provisions of this part apply to the owner or operator of any stationary source for which a standard is prescribed under this part.

§ 61.02 Definitions.

As used in this part, all terms not defined herein shall have the meaning given them in the act:

(a) "Act" means the Clean Air Act (42 U.S.C. 1857 et seq.).

(b) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.

(c) "Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference method or an equivalent method but which has been demonstrated to the Administrator's satisfaction to produce, in specific cases, results adequate for his determination of compliance.

[39 FR 15936, May 3, 1974]

(d) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(e) "Compliance schedule" means the date or dates by which a source or category of sources is required to comply with the standards of this part and with any steps toward such compliance which are set forth in a waiver of compliance under § 61.11.

(f) "Construction" means fabrication, erection, or installation of a stationary source.

(g) "Effective date" is the date of promulgation in the FEDERAL REGISTER of an applicable standard or other regulation under this part.

(h) "Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

(i) "Existing source" means any stationary source which is not a new source.

(j) "Modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any hazardous air pollutant emitted by such source or which results in the emission of any hazardous air pollutant not previously emitted, except that:

(1) Routine maintenance, repair, and replacement shall not be considered physical changes, and

(2) The following shall not be considered a change in the method of operation:

(i) An increase in the production rate, if such increase does not exceed the operating design capacity of the stationary source;

(ii) An increase in hours of operation.

(k) "New source" means any stationary source, the construction or modification of which is commenced after the publication in the FEDERAL REGISTER of proposed national emission standards for hazardous air pollutants which will be applicable to such source.

(l) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(m) "Reference method" means any method of sampling and analyzing for an air pollutant, as described in appendix B to this part.

(n) "Startup" means the setting in operation of a stationary source for any purpose.

(o) "Standard" means a national emission standard for a hazardous air pollutant proposed or promulgated under this part.

(p) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator.

§ 61.03 Abbreviations.

The abbreviations used in this part have the following meanings:

°C—Degrees Centigrade.
cfm—Cubic feet per minute.
ft²—Square feet.
ft³—Cubic feet.
°F—Degrees Fahrenheit.
in—Inch.
l—Liter.
ml—Milliliter.
M—Molar.
m³—Cubic meter.
nm—Nanometer.
oz—Ounces.
v/v—Volume per volume.
yd²—Square yards.
w.g.—Water gage.
inHg—Inches of mercury.
inH₂O—Inches of water.
g—Grams.
mg—Milligrams.
N—Normal.
°R—Degree Rankine.
min—Minute
sec—Second.
avg.—Average.
I.D.—Inside diameter.
O.D.—Outside diameter.
μg—Micrograms (10^{-6} gram).
%—Percent.
Hg—Mercury.
Be—Beryllium.

§ 61.04 Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate and addressed to the appropriate Regional Office of the Environmental Protection Agency, to the attention of the Director, Enforcement Division. The regional offices are as follows:

Region I (Connecticut, Maine, New Hampshire, Massachusetts, Rhode Island, Vermont), John F. Kennedy Federal Building, Boston, Massachusetts 02203.

Region II (New York, New Jersey, Puerto Rico, Virgin Islands), Federal Office Building, 26 Federal Plaza (Foley Square), New York, N.Y. 10007.

Region III (Delaware, District of Columbia, Pennsylvania, Maryland, Virginia, West Virginia), Curtis Building, Sixth and Walnut Streets, Philadelphia, Pennsylvania 19106.

Region IV (Alabama, Florida, Georgia, Mississippi, Kentucky, North Carolina, South Carolina, Tennessee), Suite 300, 1421 Peachtree Street, Atlanta, Georgia 30309.

Region V (Illinois, Indiana, Minnesota, Michigan, Ohio, Wisconsin), 1 North Wacker Drive, Chicago, Illinois 60606.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), 1600 Patterson Street, Dallas, Texas 75201.

Region VII (Iowa, Kansas, Missouri, Nebraska), 1735 Baltimore Street, Kansas City, Missouri 63108.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), 1860 Lincoln Towers, 1860 Lincoln Street, Denver, Colorado 80203.

Region IX (Arizona, California, Hawaii, Nevada, Guam, American Samoa), 100 California Street, San Francisco, California 94111.

Region X (Washington, Oregon, Idaho, Alaska), 1200 Sixth Avenue, Seattle, Washington 98101.

(b) Section 112(d) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce the national emission standards for hazardous air pollutants for stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may exempt sources from a certain federal or State reporting requirement). The appropriate mailing address for those

States whose delegation request has been approved is as follows:

(A) [reserved]

(B) State of Alabama, Air Pollution Control Division, Air Pollution Control Commission, 645 S. McDonough Street, Montgomery, Alabama 36104.

[41 FR 40467, September 20, 1976]

(C) [reserved]

D—Arizona

Pima County Air Pollution Control District, 151 West Congress Street, Tucson AZ 85701.

[41 FR 53017, December 3, 1976]

(E) [reserved]

F—California:

Bay Area Air Pollution Control District, 939 Ellis Street, San Francisco, CA 94109.

Del Norte County Air Pollution Control District, Courthouse, Crescent City, CA 95531.

Fresno County Air Pollution Control District, 515 S. Cedar Avenue, Fresno, CA 93702.

Humboldt County Air Pollution Control District, 5600 S. Broadway, Eureka, CA 95501.

Kern County Air Pollution Control District, 1700 Flower Street (P.O. Box 997) Bakersfield, CA 93302.

Madera County Air Pollution Control District, 135 W. Yosemite Avenue, Madera, CA 93637.

Mendocino County Air Pollution Control District, County Courthouse, Ukiah, CA 95482.

Monterey Bay Unified Air Pollution Control District, 420 Church Street (P.O. Box 487), Salinas, CA 93901.

Northern Sonoma County Air Pollution Control District, 3313 Chanate Road, Santa Rosa, CA 95404.

Sacramento County Air Pollution Control District, 3701 Branch Center Road, Sacramento, CA 95827.

San Diego County Air Pollution Control District, 9150 Chesapeake Drive, San Diego, CA 92123.

San Joaquin County Air Pollution Control District, 1601 E. Hazelton Street (P.O. Box 2009), Stockton, CA 95201.

Santa Barbara Air Pollution Control District, 4440 Calle Real, Santa Barbara, CA 93110.

Stanislaus County Air Pollution Control District, 820 Scenic Drive, Modesto, CA 95350.

Trinity County Air Pollution Control District, Box AJ, Weaverville, CA 96093.

Ventura County Air Pollution Control District, 625 E. Santa Clara Street, Ventura, CA 93001.

[41 FR 27967, July 8, 1976; 41 FR 32264, August 9, 1976; 41 FR 40108, September 17, 1976; 41 FR 54758, December 15, 1976]

(G)—State of Colorado, Colorado Air Pollution Control Division, 4210 East 11th Avenue, Denver, Colorado 80220.

[40 FR 50719, October 31, 1975]

(H) State of Connecticut, Department of Environmental Protection, State Office Building, Hartford, Connecticut 06115

[41 FR 11820, March 22, 1976]

(I)-(K) [reserved]

(L) State of Georgia, Environmental Protection Division, Department of Natural Resources, 270 Washington Street, S.W., Atlanta, Georgia 30334.

[41 FR 24885, June 21, 1976]

(M)-(O) [reserved]

(P) State of Indiana, Indiana Air Pollution Control Board, 1330 West Michigan Street, Indianapolis, Indiana 46206.

[41 FR 43148, September 30, 1976]

(Q)-(T) [reserved]

(U) State of Maine, Department of Environmental Protection, State House, Augusta, Maine 04330.

[40 FR 59729, December 30, 1975]

(V) [reserved]

(W) Massachusetts Department of Environmental Quality Engineering, Division of Air Quality Control, 600 Washington Street, Boston, Massachusetts 02111.

[41 FR 19633 May 13, 1976]

(X) State of Michigan, Air Pollution Control Division, Michigan Department of Natural Resources, Stevens T. Mason Building, 8th Floor, Lansing, Michigan 48926.

[41 FR 1914, January 13, 1976]

(Y)-(DD) [reserved]

(EE) New Hampshire Air Pollution Control Agency, Department of Health and Welfare, State Laboratory Building, Hazen Drive, Concord, New Hampshire 03301.

[41 FR 19633, May 13, 1976]

(FF), (GG) [reserved]

(HH)—New York: New York State Department of Environmental Conservation, 50 Wolf Road, Albany, New York 12233, attention: Division of Air Resources.

[40 FR 48347, October 15, 1975]

(II) North Carolina Environmental Management Commission, Department of Natural and Economic Resources, Division of Environmental Management, P.O. Box 27687, Raleigh, North Carolina 27611. Attention: Air Quality Section.

[41 FR 56805, December 30, 1976]

(JJ)—State of North Dakota, State Department of Health, State Capitol, Bismarck, North Dakota 58501.

[41 FR 44859, October 13, 1976]

(KK), (LL) [reserved]

(MM)—State of Oregon, Department of Environmental Quality, 1234 SW Morrison Street, Portland, Oregon 97205.

[41 FR 7750, February 20, 1976]

(NN)-(UU) [reserved]

(VV) Commonwealth of Virginia, Virginia State Air Pollution Control Board, Room 1106, Ninth Street Office Building, Richmond, Virginia 23219.

[41 FR 8346, February 26, 1976]

(WW) (i) Washington: State of Washington, Department of Ecology, Olympia, Washington 98504.

(ii) Northwest Air Pollution Authority, 207 Pioneer Building, Second and Pine Streets, Mount Vernon, Washington 98273.

(iii) Puget Sound Air Pollution Control Agency, 410 West Harrison Street, Seattle, Washington 98119.

(iv) Spokane County Air Pollution Control Authority, North 811 Jefferson, Spokane, Washington 99201.

(v) Yakima County Clean Air Authority, County Courthouse, Yakima, Washington 98901.

[40 FR 58640, December 18, 1975]

(vi) Olympic Air Pollution Control Authority, 120 East State Avenue, Olympia, Washington 98501.

(vii) Southwest Air Pollution Control Authority, Suite 7601 H, NE Hazel Dell Avenue, Vancouver, Washington 98665.

[41 FR 4264, January 29, 1976]

(XX)-(ZZ) [reserved]

(AAA), (BBB) [reserved]

(CCC)—U.S. Virgin Islands: U.S. Virgin Islands Department of Conservation and Cultural Affairs, P.O. Box 578, Charlotte Amalie, St. Thomas, U.S. Virgin Islands 00801.

[41 FR 34629, August 16, 1976]

(DDD) [reserved].

[39 FR 37987, October 25, 1974; 40 FR 18169, April 25, 1975; 40 FR 42195, September 11, 1975]

§ 61.05 Prohibited activities.

(a) After the effective date of any standard prescribed under this part, no owner or operator shall construct or modify any stationary source subject to such standard without first obtaining written approval of the Administrator in accordance with this subpart, except under an exemption granted by the President under section 112(c)(2) of the act. Sources, the construction or modification of which commenced after the publication date of the standards proposed to be applicable to such source, are subject to this prohibition.

(b) After the effective date of any standard prescribed under this part, no owner or operator shall operate any new source in violation of such standard except under an exemption granted by the President under section 112(c)(2) of the act.

(c) Ninety days after the effective date of any standard prescribed under this part, no owner or operator shall operate any existing stationary source in violation of such standard, except under a waiver granted by the Administrator in accordance with this subpart or under an exemption granted by the President under section 112(c)(2) of the act.

(d) No owner or operator subject to the provisions of this part shall fail to report, revise reports, or report source test results as required under this part.

§ 61.06 Determination of construction or modification.

Upon written application by an owner or operator, the Administrator will make a determination of whether actions taken or intended to be taken by such owner or operator constitute construction or modification or the commencement thereof within the meaning of this part. The Administrator will within 30 days of receipt of sufficient information to evaluate an application, notify the owner or operator of his determination.

§ 61.07 Application for approval of construction or modification.

(a) The owner or operator of any new source to which a standard prescribed under this part is applicable shall, prior to the date on which construction or modification is planned to commence, or within 30 days after the effective date in the case of a new source that already has commenced construction or modification and has not begun operation, submit to the Administrator an application for approval of such construction or modification. A separate application shall be submitted for each stationary source.

(b) Each application shall include:

(1) The name and address of the applicant.

(2) The location or proposed location of the source.

(3) Technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including a description of any equipment to be used for control of emissions. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of such calculations.

§ 61.08 Approval by Administrator.

(a) The Administrator will, within 60 days of receipt of sufficient information to evaluate an application under § 61.07, notify the owner or operator of approval or intention to deny approval of construction or modification.

(b) If the Administrator determines that a stationary source for which an application pursuant to § 61.07 was submitted will, if properly operated, not cause emissions in violation of a standard, he will approve the construction or modification of such source.

(c) Prior to denying any application for approval of construction or modification pursuant to this section, the Administrator will notify the owner or operator making such application of the Administrator's intention to issue such denial, together with:

(1) Notice of the information and findings on which such intended denial is based, and

(2) Notice of opportunity for such owner or operator to present, within such time limit as the Administrator shall specify, additional information or arguments to the Administrator prior to final action on such application.

(d) A final determination to deny any application for approval will be in writing and will set forth the specific grounds on which such denial is based. Such final determination will be made within 60 days of presentation of additional information or arguments, or 60 days after the final date specified for presentation, if no presentation is made.

(e) Neither the submission of an application for approval nor the Administrator's granting of approval to construct or modify shall:

(1) Relieve an owner or operator of legal responsibility for compliance with any applicable provision of this part or of any other applicable Federal, State, or local requirement, or

(2) Prevent the Administrator from implementing or enforcing this part or taking any other action under the act.

§ 61.09 Notification of startup.

(a) Any owner or operator of a source which has an initial startup after the effective date of a standard prescribed under this part shall furnish the Administrator written notification as follows:

(1) A notification of the anticipated date of initial startup of the source not more than 60 days nor less than 30 days prior to such date.

(2) A notification of the actual date of initial startup of the source within 15 days after such date.

§ 61.10 Source reporting and waiver request.

(a) The owner or operator of any existing source, or any new source to which a standard prescribed under this part is applicable which had an initial startup which preceded the effective date of a standard prescribed under this part shall, within 90 days after the effective date, provide the following information in writing to the Administrator:

(1) Name and address of the owner or operator.

(2) The location of the source.

(3) The type of hazardous pollutants emitted by the stationary source.

(4) A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of such source. Identify each point of emission for each hazardous pollutant.

(5) The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

(6) A description of the existing control equipment for each emission point.

(i) Primary control device(s) for each hazardous pollutant.

(ii) Secondary control device(s) for each hazardous pollutant.

(iii) Estimated control efficiency (percent) for each control device.

(7) A statement by the owner or operator of the source as to whether he can comply with the standards prescribed in this part within 90 days of the effective date.

(b) The owner or operator of an existing source unable to operate in compliance with any standard prescribed under this part may request a waiver of compliance with such standard for a period not exceeding 2 years from the effective date. Any request shall be in writing and shall include the following information:

(1) A description of the controls to be installed to comply with the standard.

(2) A compliance schedule, including the date each step toward compliance will be reached. Such list shall include as a minimum the following dates:

(i) Date by which contracts for emission control systems or process modifications will be awarded, or date by which orders will be issued for the purchase of component parts to accomplish emission control or process modification;

(ii) Date of initiation of onsite construction or installation of emission control equipment or process change;

(iii) Date by which onsite construction or installation of emission control equipment or process modification is to be completed; and

(iv) Date by which final compliance is to be achieved.

(3) A description of interim emission control steps which will be taken during the waiver period.

(c) Changes in the information provided under paragraph (a) of this section shall be provided to the Administrator within 30 days after such change, except that if changes will result from modification of the source, as defined in § 61.02 (j), the provisions of § 61.07 and § 61.08 are applicable.

(d) The format for reporting under this section is included as appendix A of this part. Advice on reporting the status of compliance may be obtained from the Administrator.

§ 61.11 Waiver of compliance.

(a) Based on the information provided in any request under § 61.10, or other information, the Administrator may grant a waiver of compliance with a standard for a period not exceeding 2 years from the effective date of such standard.

(b) Such waiver will be in writing and will:

(1) Identify the stationary source covered.

(2) Specify the termination date of the waiver. The waiver may be terminated at an earlier date if the conditions specified under paragraph (b) (3) of this section are not met.

(3) Specify dates by which steps toward compliance are to be taken; and impose such additional conditions as the Administrator determines to be necessary to assure installation of the necessary controls within the waiver period, and to assure protection of the health of persons during the waiver period.

(c) Prior to denying any request for a waiver pursuant to this section, the Administrator will notify the owner or operator making such request of the Administrator's intention to issue such denial, together with:

(1) Notice of the information and findings on which such intended denial is based, and

(2) Notice of opportunity for such owner or operator to present, within such time limit as the Administrator specifies, additional information or arguments to the Administrator prior to final action on such request.

(d) A final determination to deny any request for a waiver will be in writing and will set forth the specific grounds on which such denial is based. Such final determination will be made within 60 days after presentation of additional information or arguments, or 60 days after the final date specified for such presentation, if no presentation is made.

(e) The granting of a waiver under this section shall not abrogate the Administrator's authority under section 114 of the act.

§ 61.12 Emission tests and monitoring.

(a) Emission tests and monitoring shall be conducted and reported as set forth in this part and appendix B to this part.

(b) The owner or operator of a new source subject to this part, and at the request of the Administrator, the owner or operator of an existing source subject to this part, shall provide or cause to be provided, emission testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

§ 61.13 Waiver of emission tests.

(a) Emission tests may be waived upon written application to the Administrator if, in his judgment, the source is meeting the standard, or if the source is operating under a waiver of compliance or has requested a waiver of compliance.

(b) If application for waiver of the emission test is made, such application shall accompany the information required by § 61.10. The appropriate form is contained in appendix A to this part.

(c) Approval of any waiver granted pursuant to this section shall not abrogate the Administrator's authority under the act or in any way prohibit the Administrator from later canceling such waiver. Such cancellation will be made only after notice is given to the owner or operator of the source.

§ 61.14 Source test and analytical methods.

(a) Methods 101, 102, and 104 in appendix B to this part shall be used for all source tests required under this part, unless an equivalent method or an alternative method has been approved by the Administrator.

(b) Method 103 in appendix B to this part is hereby approved by the Administrator as an alternative method for sources subject to § 61.32(a) and § 61.42 (b).

(c) The Administrator may, after notice to the owner or operator, withdraw approval of an alternative method granted under paragraphs (a), (b) or (d) of this section. Where the test results using an alternative method do not adequately indicate whether a source is in compliance with a standard, the Administrator may require the use of the reference method or its equivalent.

(d) Method 105 in Appendix B to this part is hereby approved by the Administrator as an alternative method for sources subject to § 61.52(b).

[40 FR 48292, October 14, 1975]

§ 61.15 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by Part 2 of this chapter.

[41 FR 36918, September 1, 1976]

§ 61.16 State authority.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(1) Adopting and enforcing any emission limiting regulation applicable to a stationary source, provided that such emission limiting regulation is not less stringent than the standards prescribed under this part.

(2) Requiring the owner or operator of a stationary source, other than a stationary source owned or operated by the United States, to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such source.

§ 61.17 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would

otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

[40 FR 48292, October 14, 1975]

Subpart B—National Emission Standard for Asbestos

§ 61.20 Applicability.

The provisions of this subpart are applicable to those sources specified in § 61.22.

§ 61.21 Definitions.

Terms used in this subpart are defined in the act, in subpart A of this part, or in this section as follows:

(a) "Asbestos" means actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite.

(b) "Asbestos material" means asbestos or any material containing asbestos.

(c) "Particulate asbestos material" means finely divided particles of asbestos material.

(d) "Asbestos tailings" means any solid waste product of asbestos mining or milling operations which contains asbestos.

(e) "Outside air" means the air outside buildings and structures.

(f) "Visible emissions" means any emissions which are visually detectable without the aid of instruments and which contain particulate asbestos material.

(g) "Asbestos mill" means any facility engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos. Outside storage of asbestos materials is not considered a part of such facility.

(h) "Commercial asbestos" means any variety of asbestos which is produced by extracting asbestos from asbestos ore.

(i) "Manufacturing" means the combining of commercial asbestos, or in the case of woven friction products the combining of textiles containing commercial asbestos, with any other material(s), including commercial asbestos, and the processing of this combination into a product as specified in § 61.22(c)

(j) "Demolition" means the wrecking or taking out of any load-supporting structural member and any related removing or stripping of friable asbestos materials.

(k) "Friable asbestos material" means any material that contains more than 1 percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder, when dry, by hand pressure.

(l) "Control device asbestos waste" means any asbestos-containing waste material that is collected in a pollution control device.

(m) "Renovation" means the removing or stripping of friable asbestos material used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member. Operations in which load-supporting structural members are wrecked or taken out are excluded.

(n) "Planned renovation" means a renovation operation, or a number of such operations, in which the amount of friable asbestos material that will be removed or stripped within a given period of time can be predicted. Operations that are individually non-scheduled are included, provided a number of such operations can be predicted to occur during a given period of time based on operating experience.

(o) "Emergency renovation" means a renovation operation that results from a sudden, unexpected event, and is not a planned renovation. Operations necessitated by non-routine failures of equipment are included.

(p) "Adequately wetted" means sufficiently mixed or coated with water or an aqueous solution to prevent dust emissions.

(q) "Removing" means taking out friable asbestos materials used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member from any building, structure, facility, or installation.

(r) "Stripping" means taking off friable asbestos materials used for insulation or fireproofing from any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member.

(s) "Fabricating" means any processing of a manufactured product containing commercial asbestos, with the exception of processing at temporary sites for the construction or restoration of buildings, structures, facilities or installations.

(t) "Inactive waste disposal site" means any disposal site or portion thereof where additional asbestos-containing waste material will not be deposited and where the surface is not disturbed by vehicular traffic.

(u) "Active waste disposal site" means any disposal site other than an inactive site.

(v) "Roadways" means surfaces on which motor vehicles travel including, but not limited to, highways, roads, streets, parking areas, and driveways.

(w) "Asbestos-containing waste material" means any waste which contains commercial asbestos and is generated by a source subject to the provisions of this subpart, including asbestos mill tailings, control device asbestos waste, friable asbestos waste material, and bags or containers that previously contained commercial asbestos.

[40 FR 48292, October 14, 1975]

§ 61.22 Emission standard.

(a) Asbestos mills: There shall be no visible emissions to the outside air from any asbestos mill except as provided in paragraph (f) of this section.

[39 FR 15936, May 3, 1974]

(b) Roadways: The surfacing of roadways with asbestos tailings or with asbestos-containing waste that is generated by any source subject to paragraphs (c), (d), (e) or (h), of this section is prohibited, except for temporary roadways on an area of asbestos ore deposits. The deposition of asbestos tailings or asbestos-containing waste on roadways covered with snow or ice is considered "surfacing."

(c) Manufacturing: There shall be no visible emissions to the outside air, except as provided in paragraph (f) of this section, from any of the following operations if they use commercial asbestos or from any building or structure in which such operations are conducted.

[40 FR 48292, October 14, 1975]

(1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.

(2) The manufacture of cement products.

(3) The manufacture of fireproofing and insulating materials.

(4) The manufacture of friction products.

(5) The manufacture of paper, millboard, and felt.

(6) The manufacture of floor tile.

(7) The manufacture of paints, coatings, caulks, adhesives, sealants.

(8) The manufacture of plastics and rubber materials.

(9) The manufacture of chlorine.

(10) The manufacture of shotgun shells.

(11) The manufacture of asphalt concrete.

(d) Demolition and renovation: The requirements of this paragraph shall apply to any owner or operator of a demolition or renovation operation who intends to demolish any institutional, commercial, or industrial building (including apartment buildings having more than four dwelling units), structure, facility, installation, or portion thereof which contains any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member that is insulated or fireproofed with friable asbestos material, except as provided in paragraph (d)(1) of this section; or who intends to renovate any institutional, commercial, or industrial building, structure, facility, installation, or portion thereof where more than 80 meters (ca. 260 feet) of pipe insulated or fireproofed with friable asbestos material are stripped or removed, or more than 15 square meters (ca. 160 square feet) of friable asbestos material used to insulate or fireproof any duct, boiler, tank, reactor, turbine, furnace, or structural member are stripped or removed.

(1)(i) The owner or operator of a demolition operation is exempted from the requirements of this paragraph provided, (1) the amount of friable asbestos material in the building or portion thereof to be demolished is less than 80 meters (ca. 260 feet) used to insulate pipes, and less than 15 square meters (ca. 160 square feet) used to insulate or fireproof any duct, boiler, tank, reactor, turbine, furnace, or structural member, and (2) the notification requirements of paragraph (d)(1)(ii) are met.

(ii) Written notification shall be postmarked or delivered to the Administrator at least 20 days prior to commencement of demolition and shall include the information required by paragraph (d)(2)

of this section, with the exception of the information required by paragraphs (d)(2)(iii), (vi), (vii), (viii), and (ix), and shall state the measured or estimated amount of friable asbestos material used for insulation and fireproofing which is present. Techniques of estimation shall be explained.

(2) Written notice of intention to demolish or renovate shall be provided to the Administrator by the owner or operator of the demolition or renovation operation. Such notice shall be postmarked or delivered to the Administrator at least 10 days prior to commencement of demolition, or as early as possible prior to commencement of emergency demolition subject to paragraph (d)(6) of this section, and as early as possible prior to commencement of renovation. Such notice shall include the following information:

(i) Name of owner or operator.

(ii) Address of owner or operator.

(iii) Description of the building, structure, facility, or installation to be demolished or renovated, including the size, age, and prior use of the structure, and the approximate amount of friable asbestos material used for insulation and fireproofing.

(iv) Address or location of the building, structure, facility, or installation.

(v) Scheduled starting and completion dates of demolition or renovation.

(vi) Nature of planned demolition or renovation and method(s) to be employed.

(vii) Procedures to be employed to meet the requirements of this paragraph and paragraph (j) of this section.

(viii) The name and address or location of the waste disposal site where the friable asbestos waste will be deposited.

(ix) Name, title, and authority of the State or local governmental representative who has ordered a demolition which is subject to paragraph (d)(6) of this section.

(3)(i) For purposes of determining whether a planned renovating operation constitutes a renovation within the meaning of this paragraph, the amount of friable asbestos material to be removed or stripped shall be:

(A) For planned renovating operations involving individually non-scheduled operations, the additive amount of friable asbestos material that can be predicted will be removed or stripped at a source over the maximum period of time for which a prediction can be made. The period shall be not less than 30 days and not longer than one year.

(B) For each planned renovating operation not covered by paragraph (d)(3)(i)(A), the total amount of friable asbestos material that can be predicted will be removed or stripped at a source.

(ii) For purposes of determining whether an emergency renovating operation constitutes a renovation within the meaning of this paragraph, the amount of friable asbestos material to be removed or stripped shall be the total amount of friable asbestos material that will be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(4) The following procedures shall be used to prevent emissions of particulate asbestos material to outside air:

(i) Friable asbestos materials, used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member, shall be removed from any building, structure, facility or installation subject to this paragraph. Such removal shall occur before wrecking or dismantling of any portion of such building, structure, facility, or installation that would break up the friable asbestos materials and before wrecking or dismantling of any other portion of such building, structure, facility, or installation that would preclude access to such materials for subsequent removal. Removal of friable asbestos materials used for insulation or fireproofing of any pipe, duct, or structural member which are encased in concrete or other similar structural material is not required prior to demolition, but such material shall be adequately wetted whenever exposed during demolition.

(ii) Friable asbestos materials used to insulate or fireproof pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural members shall be adequately wetted during stripping, except as provided in paragraphs (d)(4)(iv), (d)(4)(vi) or (d)(4)(vii) of this section.

(iii) Pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural members that are insulated or fireproofed with friable asbestos materials may be taken out of any building, structure, facility, or installation subject to this paragraph as units or in sections provided the friable asbestos materials exposed during cutting or disjointing are adequately wetted during the cutting or disjointing operation. Such units shall not be dropped or thrown to the ground, but shall be carefully lowered to ground level.

(iv) The stripping of friable asbestos materials used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member that has been removed as a unit or in sections as provided in paragraph (d)(4)(iii) of this section shall be performed in accordance with paragraph (d)(4)(ii) of this section. Rather than comply with the wetting requirement, a local exhaust ventilation and collection system may be used to prevent emissions to the outside air. Such local exhaust ventilation systems shall be designed and operated to capture the asbestos particulate matter produced by the stripping of friable asbestos material. There shall be no visible emissions to the outside air from such local exhaust ventilation and collection systems except as provided in paragraph (f) of this section.

(v) All friable asbestos materials that have been removed or stripped shall be adequately wetted to ensure that such materials remain wet during all remaining stages of demolition or renovation and related handling operations. Such materials shall not be dropped or thrown to the ground or a lower floor. Such materials that have been removed or stripped more than 50 feet above ground level, except those materials removed as units or in sections, shall be transported to the ground via dust-tight chutes or containers.

(vi) Except as specified below, the wetting requirements of this paragraph are suspended when the temperature at the point of wetting is below 0°C (32°F). When friable asbestos materials are not wetted due to freezing temperatures, such materials on pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural members shall, to the maximum extent possible, be removed as units or in sections prior to wrecking. In no case shall the requirements of paragraphs (d)(4)(iv) or (d)(4)(v) be suspended due to freezing temperatures.

(vii) For renovation operations, local exhaust ventilation and collection systems may be used, instead of wetting as specified in paragraph (d)(4)(ii), to prevent emissions of particulate asbestos material to outside air when damage to equipment resulting from the wetting would be unavoidable. Upon request and supply of adequate information, the Administrator will determine whether damage to equipment resulting from wetting to comply with the provisions of this paragraph would be unavoidable. Such local exhaust ventilation systems shall be designed and operated to capture the asbestos particulate matter produced by the stripping and removal of friable asbestos material. There shall be no visible emissions to the outside air from such local exhaust ventilation and collection systems, except as provided in paragraph (f) of this section.

(5) Sources subject to this paragraph are exempt from the requirements of §§ 61.05(a), 61.07, and 61.09.

(6) The demolition of a building, structure, facility, or installation, pursuant to an order of an authorized representative of a State or local governmental agency, issued because that building is structurally unsound and in danger of imminent collapse is exempt from all but the following requirements of paragraph (d) of this section:

(i) The notification requirements specified by paragraph (d)(2) of this section;

(ii) The requirements on stripping of friable asbestos materials from previously removed units or sections as specified in paragraph (d)(4)(iv) of this section;

(iii) The wetting, as specified by paragraph (d)(4)(v) of this section, of friable asbestos materials that have been removed or stripped;

(iv) The portion of the structure being demolished that contains friable asbestos materials shall be adequately wetted during the wrecking operation.

[39 FR 15936, May 3, 1974; 40 FR 48292, October 14, 1975]

(e) Spraying: There shall be no visible emissions to the outside air from the spray-on application of materials containing more than 1 percent asbestos, on a dry weight basis, used to insulate or fireproof equipment and machinery, except as provided in paragraph (f) of this section. Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits shall contain less

than 1 percent asbestos on a dry weight basis.

(1) Sources subject to this paragraph are exempt from the requirements of § 61.05(a), § 61.07, and § 61.09.

(2) Any owner or operator who intends to spray asbestos materials which contain more than 1 percent asbestos on a dry weight basis to insulate or fireproof equipment and machinery shall report such intention to the Administrator at least 20 days prior to the commencement of the spraying operation. Such report shall include the following information:

[40 FR 48292, October 14, 1975]

(i) Name of owner or operator.

(ii) Address of owner or operator.

(iii) Location of spraying operation.

(iv) Procedures to be followed to meet the requirements of this paragraph.

(f) Rather than meet the no-visible-emission requirements as specified by paragraphs (a), (c), (d), (e), (h), (j), and (k) of this section, an owner or operator may elect to use the methods specified by § 61.23 to clean emissions containing particulate asbestos material before such emissions escape to, or are vented to, the outside air.

(g) Where the presence of uncombined water is the sole reason for failure to meet the no-visible-emission requirement of paragraphs (a), (c), (d), (e), (h), (j), or (k) of this section, such failure shall not be a violation of such emission requirements.

(h) Fabricating: There shall be no visible emissions to the outside air, except as provided in paragraph (f) of this section, from any of the following operations if they use commercial asbestos or from any building or structure in which such operations are conducted.

(1) The fabrication of cement building products.

(2) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.

(3) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture; bulkheads, partitions and ceilings for marine construction; and flow control devices for the molten metal industry.

(i) Insulating: Molded insulating materials which are friable and wet-applied insulating materials which are friable after drying, installed after the effective date of these regulations, shall contain no commercial asbestos. The provisions of this paragraph do not apply to insulating materials which are spray applied; such materials are regulated under § 61.22(e).

(j) Waste disposal for manufacturing, fabricating, demolition, renovation and spraying operations: The owner or operator of any source covered under the provisions of paragraphs (c), (d), (e), or (h) of this section shall meet the following standards:

(1) There shall be no visible emissions to the outside air, except as provided in paragraph (j)(3) of this section, during the collection; processing, including incineration; packaging; transporting; or deposition of any asbestos-containing waste material which is generated by such source.

(2) All asbestos-containing waste material shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(3) Rather than meet the requirement of paragraph (j)(1) of this section, an owner or operator may elect to use either of the disposal methods specified under (j)(3)(i) and (ii) of this section, or an alternative disposal method which has received prior approval by the Administrator:

(i) Treatment of asbestos-containing waste material with water:

(A) Control device asbestos waste shall be thoroughly mixed with water into a slurry and other asbestos-containing waste material shall be adequately wetted. There shall be no visible emissions to the outside air from the collection, mixing and wetting operations, except as provided in paragraph (f) of this section.

(B) After wetting, all asbestos-containing waste material shall be sealed into leak-tight containers while wet, and such containers shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(C) The containers specified under paragraph (j)(3)(i)(B) of this section shall be labeled with a warning label that states:

CAUTION

Contains Asbestos
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous to Your Health

Alternatively, warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.-93a(g)(2)(ii) may be used.

(ii) Processing of asbestos-containing waste material into non-friable forms:

(A) All asbestos-containing waste material shall be formed into non-friable pellets or other shapes and deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(B) There shall be no visible emissions to the outside air from the collection and processing of asbestos-containing waste material, except as specified in paragraph (f) of this section.

(4) For the purposes of this paragraph (j), the term all asbestos-containing waste material as applied to demolition and renovation operations covered by paragraph (d) of this section includes only friable asbestos waste and control device asbestos waste.

(k) Waste disposal for asbestos mills: The owner or operator of any source covered under the provisions of paragraph (a) of this section shall meet the following standard:

(1) There shall be no visible emissions to the outside air, except as provided in paragraph (k)(3) of this section, during the collection, processing, packaging, transporting or deposition of any asbestos-containing waste material which is generated by such source.

(2) All asbestos-containing waste material shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(3) Rather than meet the requirement of paragraph (k)(1) of this section, an owner or operator may elect to meet the following requirements in paragraphs (k)(3)(i) and (ii), or use an alternative disposal method which has received prior approval by the Administrator:

(i) There shall be no visible emissions to the outside air from the transfer of control device asbestos waste to the tailings conveyor, except as provided in paragraph (f) of this section. Such waste shall be subsequently processed either as specified in paragraph (k)(3)(ii) of this section or as specified in paragraph (j)(3) of this section.

(ii) All asbestos-containing waste material shall be adequately mixed, with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, prior to deposition at a waste disposal site. Such agent shall be used as recommended for the particular dust by the manufacturer of the agent. There shall be no discharge of visible emissions to the outside air from the wetting operation except as specified in paragraph (f) of this section. Wetting may be suspended when the ambient temperature at the waste disposal site is less than −9.5°C (ca. 15°F). The ambient air temperature shall be determined by an appropriate measurement method with an accuracy of ±1°C (±2°F) and recorded at least at hourly intervals during the period that the operation of the wetting system is suspended. Records of such temperature measurements shall be retained at the source for a minimum of two years and made available for inspection by the Administrator.

(l) The owner of any inactive waste disposal site, which was operated by sources covered under § 61.22 (a), (c) or (h) and where asbestos-containing waste material produced by such sources was deposited, shall meet the following standards:

(1) There shall be no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph, except as provided in paragraph (l)(5) of this section.

(2) Warning signs shall be displayed at all entrances, and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited, at intervals of 100 m (ca. 330 ft) or less, except as specified in paragraph (l)(4) of this section. Signs shall be posted in such a manner and location that a person may easily read the legend. The warning signs required by this paragraph shall conform to the requirements of 20" x 14" upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph. The signs shall display the following legend in the lower panel, with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

LEGEND

ASBESTOS WASTE DISPOSAL SITE

Do Not Create Dust

Breathing Asbestos is Hazardous to Your Health

Notation

1" Sans Serif, Gothic or Block

¼" Sans Serif, Gothic or Block

14 Point Gothic

Spacing between lines shall be at least equal to the height of the upper of the two lines.

(3) The perimeter of the site shall be fenced in a manner adequate to deter access by the general public, except as specified in paragraph (l)(4) of this section.

(4) Warning signs and fencing are not required where the requirements of paragraphs (1)(5) (i) or (ii) of this section are met, or where a natural barrier adequately deters access by the general public. Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access to the general public.

(5) Rather than meet the requirement of paragraph (1)(1) of this section, an owner may elect to meet the requirements of this paragraph or may use an alternative control method for emissions from inactive waste disposal sites which has received prior approval by the Administrator.

(i) The asbestos-containing waste material shall be covered with at least 15 centimeters (ca. 6 inches) of compacted non-asbestos-containing material, and a cover of vegetation shall be grown and maintained on the area adequate to prevent exposure of the asbestos-containing waste material; or

(ii) The asbestos-containing waste material shall be covered with at least 60 centimeters (ca. 2 feet) of compacted non-asbestos-containing material and maintained to prevent exposure of the asbestos-containing waste; or

(iii) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent which effectively binds dust and controls wind erosion shall be applied. Such agent shall be used as recommended for the particular asbestos tailings by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, waste crankcase oil is not considered a dust suppression agent.

[40 FR 48292, October 14, 1975]

§ 61.23 Air-cleaning.

If air-cleaning is elected, as permitted by §§ 61.22(f) and 61.22(d)(4)(iv), the requirements of this section must be met.

[40 FR 48292, October 14, 1975]

(a) Fabric filter collection devices must be used, except as noted in paragraphs (b) and (c) of this section. Such devices must be operated at a pressure drop of no more than 4 inches water gage, as measured across the filter fabric. The airflow permeability, as determined by ASTM method D737-69, must not exceed 30 $ft^3/min/ft^2$ for woven fabrics or 35 $ft^3/min/ft^2$ for felted fabrics, except that 40 $ft^3/min/ft^2$ for woven and 45 $ft^3/min/ft^2$ for felted fabrics is allowed for filtering air from asbestos ore dryers. Each square yard of felted fabric must weigh at least 14 ounces and be at least one-sixteenth inch thick throughout. Synthetic fabrics must not contain fill yarn other than that which is spun.

(b) If the use of fabric filters creates a fire or explosion hazard, the administrator may authorize the use of wet collectors designed to operate with a unit contacting energy of at least 40 inches water gage pressure.

(c) The administrator may authorize the use of filtering equipment other than that described in paragraphs (a) and (b) of this section if the owner or operator demonstrates to the satisfaction of the administrator that the filtering of particulate asbestos material is equivalent to that of the described equipment.

(d) All air-cleaning equipment authorized by this section must be properly installed, used, operated, and maintained. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

§ 61.24 Reporting.

The owner or operator of any existing source to which this subpart is applicable shall, within 90 days after the effective date, provide the following information to the administrator:

(a) A description of the emission control equipment used for each process;

(b) If a fabric filter device is used to control emissions, the pressure drop across the fabric filter in inches water gage.

(1) If the fabric filter device utilizes a woven fabric, the airflow permeability in $ft^3/min/ft^2$; and, if the fabric is synthetic, indicate whether the fill yarn is spun or not spun.

(2) If the fabric filter device utilizes a felted fabric, the density in oz/yd^2, the minimum thickness in inches, and the airflow permeability in $ft^3/min/ft^2$.

(c) For sources subject to §§ 61.22(j) and 61.22(k):

(1) A brief description of each process that generates asbestos-containing waste material.

(2) The average weight of asbestos-containing waste material disposed of, measured in kg/day.

(3) The emission control methods used in all stages of waste disposal.

(4) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(d) For sources subject to § 61.22(l):

(1) A brief description of the site.

(2) The method or methods used to comply with the standard, or alternative procedures to be used.

(e) Such information shall accompany the information required by § 61.10. The information described in this section shall be reported using the format of Appendix A of this part.

[40 FR 48292, October 14, 1975]

§ 61.25 Waste disposal sites.

In order to be an acceptable site for disposal of asbestos-containing waste material under § 61.22 (j) and (k), an active waste disposal site shall meet the requirements of this section.

(a) There shall be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, except as provided in paragraph (e) of this section.

(b) Warning signs shall be displayed at all entrances, and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited, at intervals of 100 m (ca. 330 ft) or less except as specified in paragraph (d) of this section. Signs shall be posted in such a manner and location that a person may easily read the legend. The warning signs required by this paragraph shall conform to the requirements of 20" x 14" upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph. The signs shall display the following legend in the lower panel, with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

LEGEND

ASBESTOS WASTE DISPOSAL SITE

Do Not Create Dust

Breathing Asbestos is Hazardous to Your Health

Notation

1" Sans Serif, Gothic or Block

¼" Sans Serif, Gothic or Block

14 Point Gothic

Spacing between lines shall be at least equal to the height of the upper of the two lines.

(c) The perimeter of the disposal site shall be fenced in order to adequately deter access to the general public except as specified in paragraph (d) of this section.

(d) Warning signs and fencing are not required where the requirements of paragraph (e)(1) of this section are met, or where a natural barrier adequately deters access to the general public. Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access to the general public.

(e) Rather than meet the requirement of paragraph (a) of this section, an owner or operator may elect to meet the requirements of paragraph (e)(1) or (e)(2) of this section, or may use an alternative control method for emissions from active waste disposal sites which has received prior approval by the Administrator.

(1) At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous 24-hour period shall be covered with at least 15 centimeters (ca. 6 inches) of compacted non-asbestos-containing material.

(2) At the end of each operating day, or at least once every 24-hour period while the disposal site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous 24-hour period shall be covered with a resinous or petroleum-based dust suppression agent which effectively binds dust and controls wind erosion. Such agent shall be used as recommended for the particular dust by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, waste crankcase oil is not considered a dust suppression agent.

[40 FR 48292, October 14, 1975]

Subpart C—National Emission Standard for Beryllium

§ 61.30 Applicability.

The provisions of this subpart are applicable to the following stationary sources:

(a) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste.

(b) Machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight.

§ 61.31 Definitions.

Terms used in this subpart are defined in the act, in subpart A of this part, or in this section as follows:

(a) "Beryllium" means the element beryllium. Where weights or concentrations are specified, such weights or concentrations apply to beryllium only, excluding the weight or concentration of any associated elements.

(b) "Extraction plant" means a facility chemically processing beryllium ore to beryllium metal, alloy, or oxide, or performing any of the intermediate steps in these processes.

(c) "Beryllium ore" means any naturally occurring material mined or gathered for its beryllium content.

(d) "Machine shop" means a facility performing cutting, grinding, turning, honing, milling, deburring, lapping, electrochemical machining, etching, or other similar operations.

(e) "Ceramic plant" means a manufacturing plant producing ceramic items.

(f) "Foundry" means a facility engaged in the melting or casting of beryllium metal or alloy.

(g) "Beryllium-containing waste" means material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this subpart.

(h) "Incinerator" means any furnace used in the process of burning waste for the primary purpose of reducing the volume of the waste by removing combustible matter.

(i) "Propellant" means a fuel and oxidizer physically or chemically combined which undergoes combustion to provide rocket propulsion.

(j) "Beryllium alloy" means any metal to which beryllium has been added in order to increase its beryllium content and which contains more than 0.1 percent beryllium by weight.

(k) "Propellant plant" means any facility engaged in the mixing, casting, or machining of propellant.

§ 61.32 Emission standard.

(a) Emissions to the atmosphere from stationary sources subject to the provisions of this subpart shall not exceed 10 grams of beryllium over a 24-hour period, except as provided in paragraph (b) of this section.

(b) Rather than meet the requirement of paragraph (a) of this section, an owner or operator may request approval from the Administrator to meet an ambient concentration limit on beryllium in the vicinity of the stationary source of 0.01 $\mu g/m^3$, averaged over a 30-day period.

(1) Approval of such requests may be granted by the Administrator provided that:

(i) At least 3 years of data is available which in the judgment of the Administrator demonstrates that the future ambient concentrations of beryllium in the vicinity of the stationary source will not exceed 0.01 $\mu g/m^3$, averaged over a 30-day period. Such 3-year period shall be the 3 years ending 30 days before the effective date of this standard.

(ii) The owner or operator requests such approval in writing within 30 days after the effective date of this standard.

(iii) The owner or operator submits a report to the Administrator within 45 days after the effective date of this standard which report includes the following information:

(a) Description of sampling method including the method and frequency of calibration.

(b) Method of sample analysis.

(c) Averaging technique for determining 30-day average concentrations.

(d) Number, identity, and location (address, coordinates, or distance and heading from plant) of sampling sites.

(e) Ground elevations and height above ground of sampling inlets.

(f) Plant and sampling area plots showing emission points and sampling sites. Topographic features significantly affecting dispersion including plant building heights and locations shall be included.

(g) Information necessary for estimating dispersion including stack height, inside diameter, exit gas temperature, exit velocity or flow rate, and beryllium concentration.

(h) A description of data and procedures (methods or models) used to design the air sampling network (i.e., number and location of sampling sites).

(i) Air sampling data indicating beryllium concentrations in the vicinity of the stationary source for the 3-year period specified in paragraph (b)(1) of this section. This data shall be presented chronologically and include the beryllium concentration and location of each individual sample taken by the network and the corresponding 30-day average beryllium concentrations.

(2) Within 60 days after receiving such report, the Administrator will notify the owner or operator in writing whether approval is granted or denied. Prior to denying approval to comply with the provisions of paragraph (b) of this section, the Administrator will consult with representatives of the stationary source for which the demonstration report was submitted.

(c) The burning of beryllium and/or beryllium-containing waste, except propellants, is prohibited except in incinerators, emissions from which must comply with the standard.

§ 61.33 Stack sampling.

(a) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator required to comply with § 61.32(a) shall test emissions from his source.

(1) Within 90 days of the effective date in the case of an existing source or a new source which has an initial startup date preceding the effective date; or

(2) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(b) The Administrator shall be notified at least 30 days prior to an emission test so that he may at his option observe the test.

(c) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. Where emissions depend upon the relative frequency of operation of different types of processes, operating hours, operating capacities, or other factors, the calculation of maximum 24-hour-period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until a new emission level has been estimated by calculation and the results reported to the Administrator.

(d) All samples shall be analyzed and beryllium emissions shall be determined within 30 days after the source test. All determinations shall be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination.

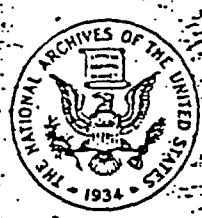
(e) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

§ 61.34 Air sampling.

(a) Stationary sources subject to § 61.32(b) shall locate air sampling sites in accordance with a plan approved by the Administrator. Such sites shall be located in such a manner as is calculated to detect maximum concentrations of beryllium in the ambient air.

(b) All monitoring sites shall be operated continuously except for a reasonable time allowance for instrument maintenance and calibration, for changing

THURSDAY, MARCH 16, 1978
PART V



FEDERAL REGISTER

ENVIRONMENTAL PROTECTION AGENCY

TOXIC SUBSTANCES CONTROL ACT

Statement of Interpretation and Enforcement Policy; Notification of Substantial Risk

[6560-01]

ENVIRONMENTAL PROTECTION AGENCY

[FRL 849-2]

TOXIC SUBSTANCES CONTROL ACT

Notification of Substantial Risk Under Section 8(e)

AGENCY: Environmental Protection Agency.

ACTION: Statement of interpretation and enforcement policy.

SUMMARY: This action states EPA's interpretation of, and enforcement policy concerning, section 8(e) of the Toxic Substances Control Act (TSCA) (90 Stat. 2029, 15 U.S.C. 2607). The provisions of that section went into effect on January 1, 1977.

Section 8(e) states that "any person who manufactures, processes, or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment shall immediately inform the Administrator of such information unless such person has actual knowledge that the Administrator has been adequately informed of such information."

DATES: The policy expressed in this document is in effect as of the date of publication.

FOR FURTHER INFORMATION CONTACT:

Frank D. Kover, Assessment Division, Office of Toxic Substances (WH-557), Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, 202-755-2110.

SUPPLEMENTARY INFORMATION: On September 9, 1977, the Agency proposed guidance (42 FR 45362) on its interpretation of and policy concerning the provisions of section 8(e). Although the proposed "guidance" was an interpretive rule and statement of policy exempt from the notice and public comment provisions of the Administrative Procedure Act (5 U.S.C. 553), the Agency solicited comments on several issues to make more informed decisions. On October 11, the comment period was extended from October 15 to October 31, 1977 (42 FR 54857). On November 4, 1977, a supplemental notice to the proposed guidance was published (42 FR 57744), deleting the November 15 date for reporting certain information obtained before 1977 and stating that a new date would be established in the final guidance.

In developing this policy statement, two meetings have been held (February 1, 1977, and October 26, 1977) with selected representatives of industry and environmental and other interested groups. Comments submitted pursuant to the February 1 meeting were addressed in the preamble to the September 9 proposal. Over 100 written comments have been submitted pursuant to the September 9 proposal from trade associations, businesses, environmental groups, labor unions, State and Federal agencies, and other interested parties. Appendix B describes significant issues raised in these comments and the Agency's response to them.

The major modifications to the September 9 proposal are summarized in points 1 through 7 below.

(1) Pursuant to some question over the definition and nature of "guidance," this document is now described more accurately as a "policy statement." It is exempt from the notice and public comment provisions of the Administrative Procedure Act, as well as provisions concerning delayed effective dates.

(2) Many commenters expressed the view that to apply these requirements to officers and employees of a business organization would result in ill-considered, premature reports and would unfairly subject employees to conflicting responsibilities as individual respondents and as corporate agents. Other commenters expressed support for the view that certain employees have a responsibility to report pertinent information, and felt that the phrase "capable of appreciating pertinent information" appropriately described those employees.

The September 9 proposal would have applied section 8(e) requirements to commercial establishments as well as to employees capable of appreciating pertinent information, but stipulated enforcement priorities intended to encourage corporate processing and centralized reporting of such information (42 FR 45363). The intent was to ensure that pertinent information obtained by employees is promptly and appropriately considered, while minimizing duplicative or ill-considered submissions.

The Agency now feels that these objectives would best be served by allowing commercial establishments—under certain conditions designed to ensure full disclosure—to assume exclusive responsibility for reporting to EPA any substantial-risk information obtained by individual officers or employees. Accordingly, this policy statement stipulates that individual officers and employees will have fully discharged their section 8(e) obligations once they have notified the designated responsible company supervisor or official of pertinent information, *provided*, that the employing company or firm has established, internally publicizes, and affirmatively implements procedures governing such notifications. These procedures, at a minimum, must: (1) Specify the information that must be reported; (2) indicate how the notifications are to be prepared and submitted; (3) note the Federal penalties for failing to report; and (4) provide a mechanism for promptly notifying officers and employees who have submitted reports of the company's disposition of those reports, including whether or not they were submitted to EPA (and if not, informing employees of their right to report to EPA, as protected by TSCA section 23). EPA believes these four criteria will ensure prompt and appropriate processing of pertinent information.

Establishment of such procedures notwithstanding, all officials responsible and having authority for the organization's execution of its section 8(e) obligations retain personal liability for ensuring that substantial-risk information is reported to EPA.

(3) The September 9 proposal stated, in Part III, that a person obtains information when he is aware that it "may suggest" substantial risk. Numerous commenters questioned the Administrator's authority to compel the reporting of information which "may suggest" substantial risk. The Administrator agrees that section 8(e) addresses information that "reasonably supports the conclusion" of substantial risk and has deleted the "may suggest" provision, but emphasizes that "reasonably supports the conclusion" of substantial risk is not identical to a conclusive demonstration of substantial risk. The former typically occurs, and must be reported, at an earlier stage. Part VI in this policy statement provides Agency interpretation of the types of information that "reasonably support" such a conclusion.

(4) Numerous commenters requested clarification of different aspects of Part V of the September 9 proposal ("Information Which Reasonably Supports a Conclusion of Substantial Risk"), particularly concerning environmental effects, and suggested different interpretations of what constitutes a "substantial risk". The Agency continues to focus in this policy statement on the effects set forth in the September 9 proposal, but clarifies that the substantiality of a risk is a function of both the seriousness of the effect and the probability of its occurrence (see Part V).

(5) Numerous commenters maintained that section 8(e) only applies prospectively to information obtained after January 1, 1977. The Agency disagrees, as explained in the preamble to the September 9 proposal. This policy statement continues to apply section 8(e) to information obtained before 1977 of which a person has

been aware since January 1, 1977. In response to requests for clarification, the statement defines what constitutes such awareness. In this manner, EPA intends to limit the need for searches of historical records and files.

(6) This policy statement now provides that any information published in scientific literature, in any language, is exempt if it is referred to in abstracts published by specified abstracting services.

(7) This policy statement describes in a new Part X how to submit claims of confidentiality.

Accordingly, the Administrator's interpretation of and policy towards section 8(e) is set forth below.

Dated: February 24, 1978.

DOUGLAS COSTLE
Administrator.

I. DEFINITIONS

The definitions set forth in TSCA section 3 apply to these requirements. In addition, the following definitions are provided for purposes of this policy statement:

The term "manufacture or process 'for commercial purposes' " means to manufacture or process: (1) For distribution in commerce, including for test marketing purposes, (2) for use as a catalyst or an intermediate, (3) for the exclusive use by the manufacturer or processor, or (4) for product research and development.

The term "person" includes any natural person, corporation, firm, company, joint-venture, partnership, sole proprietorship, association, or any other business entity, any State or political subdivision thereof, any municipality, any interstate body and any department, agency, or instrumentality of the Federal Government.

The term "substantial-risk information" means information which reasonably supports the conclusion that a chemical substance or mixture presents a substantial risk of injury to health or the environment.

II. PERSONS SUBJECT TO THE REQUIREMENT

Persons subject to section 8(e) requirements include both natural persons and business entities engaged in manufacturing, processing, or distributing in commerce a chemical substance or mixture. In the case of business entities, the president, chief executive officer, and any other officers responsible and having authority for the organization's execution of its section 8(e) obligations must ensure that the organization reports substantial-risk information to EPA. The business organization is considered to have obtained any information which any officer or employee capable of appreciating the significance of that information has obtained. It is therefore incumbent upon business organizations to establish procedures for expeditiously processing pertinent information in order to comply with the schedule set forth in Part IV.

Those officers and employees of business organizations who are capable of appreciating the significance of pertinent information are also subject to these reporting requirements. An employing organization may relieve its individual officers and employees of any responsibility for reporting substantial-risk information directly to EPA by establishing, internally publicizing, and affirmatively implementing procedures for employee submission and corporate processing of pertinent information. These procedures, at a minimum, must: (1) Specify the information that officers and employees must submit; (2) indicate how such submissions are to be prepared and the company official to whom they are to be submitted; (3) note the Federal penalties for failing to report; and (4) provide a mechanism for promptly advising officers and employees in writing of the company's disposition of the report, including whether or not the report was submitted to EPA (and if not, informing employees of their right to report to EPA, as protected by TSCA section 23). An employee of any company that has established and publicized such procedures, who has internally submitted pertinent information in accordance with them, shall have discharged his section 8(e) obligation. Establishment of such procedures notwithstanding, all officials responsible and having authority for the organization's execution of its section 8(e) obligations retain personal liability for ensuring that the appropriate substantial-risk information is reported to EPA.

Business organizations that do not establish such procedures cannot relieve their individual officers and employees of the responsiblity for ensuring that substantial-risk information they obtain is reported to EPA. While officers and employees of such organizations may also elect to submit substantial-risk information to their superiors for corporate processing and reporting, rather than to EPA directly, they have not discharged their individual section 8(e) obligation until EPA has received the information.

NOTE.—Irrespective of a business organization's decision to establish and publicize the procedures described above, it is responsible for becoming cognizant of any substantial-risk information obtained by its officers and employees, and for ensuring that such information is reported to EPA within 15 working days.

III. WHEN A PERSON WILL BE REGARDED AS HAVING OBTAINED INFORMATION

A person obtains substantial-risk information at the time he first comes into possession of or knows of such information.

NOTE.—This includes information of which a prudent person similarly situated could reasonably be expected to possess or have knowledge.

An establishment obtains information at the time any officer or employee capable of appreciating the significance of such information obtains it.

IV. REQUIREMENT THAT A PERSON "IMMEDIATELY INFORM": THE ADMINISTRATOR

With the exception of information on emergency incidents of environmental contamination [see Part V(c)] a person has "immediately informed" the Administrator if information is received by EPA not later than the 15th working day after the date the person obtained such information. Supplementary information generated after a section 8(e) notification should, if appropriate, be immediately reported. For emergency incidents of environmental contamination, a person shall report the incident to the Administrator by telephone as soon as he has knowledge of the incident (see Part IX for appropriate telephone contacts). The report should contain as much of the information required by Part IX as possible. A written report in accordance with Part IX (a) through (f) is to be submitted within 15 days.

Information currently in the possession of a person who is subject to reporting must be reported within 60 days of publication of this policy statement.

V. WHAT CONSTITUTES SUBSTANTIAL RISKS

A "substantial risk of injury to health or the environment" is a risk of considerable concern because of (a) the seriousness of the effect [see Subparts (a), (b), and (c) below for an illustrative list of effects of concern], and (b) the fact or probability of its occurrence. (Economic or social benefits of use, or costs of restricting use, are not to be considered in determining whether a risk is "substantial".) These two criteria are differentially weighted for different types of effects. The human health effects listed in Subpart (a) below, for example, are so serious that relatively little weight is given to exposure; the mere fact the implicated chemical is in commerce constitutes sufficient evidence of exposure. In contrast, the remaining effects listed in Subparts (b) and (c) below must involve, or be accompanied by the potential for, significant levels of exposure (because of general production levels, persistence, typical uses, common means of disposal, or other pertinent factors).

Note that: (i) The effects outlined below should not be reported if the re-

spondent has actual knowledge that the Administrator is already informed of them.

(ii) Information respecting these effects can be obtained either directly, by observation of their occurrence, or inferred from designed studies as discussed in Part VI.

The Agency considers effects for which substantial-risk information must be reported to include the following:

(a) *Human health effects*—(1) Any instance of cancer, birth defects, mutagenicity, death, or serious or prolonged incapacitation, including the loss of or inability to use a normal bodily function with a consequent relatively serious impairment of normal activities, if one (or a few) chemical(s) is strongly implicated.

(2) Any pattern of effects or evidence which reasonably supports the conclusion that the chemical substance or mixture can produce cancer, mutation, birth defects or toxic effects resulting in death, or serious or prolonged incapacitation.

(b) *Environmental effects*—(1) Widespread and previously unsuspected distribution in environmental media, as indicated in studies (excluding materials contained within appropriate disposal facilities).

(2) Pronounced bioaccumulation. Measurements and indicators of pronounced bioaccumulation heretofore unknown to the Administrator (including bioaccumulation in fish beyond 5,000 times water concentration in a 30-day exposure or having an n-octanol/water partition coefficient greater than 25,000) should be reported when coupled with potential for widespread exposure and any non-trivial adverse effect.

(3) Any non-trivial adverse effect, heretofore unknown to the Administrator, associated with a chemical known to have bioaccumulated to a pronounced degree or to be widespread in environmental media.

(4) Ecologically significant changes in species' interrelationships; that is, changes in population behavior, growth, survival, etc. that in turn affect other species' behavior, growth, or survival.

Examples include: (i) Excessive stimulation of primary producers (algae, macrophytes) in aquatic ecosystems, e.g., resulting in nutrient enrichment, or eutrophication, of aquatic ecosystems.

(ii) Interference with critical biogeochemical cycles, such as the nitrogen cycle.

(5) Facile transformation or degradation to a chemical having an unacceptable risk as defined above.

(c) *Emergency incidents of environmental contamination*—Any environmental contamination by a chemical substance or mixture to which any of the above adverse effects has been ascribed and which because of the pattern, extent, and amount of contamination (1) seriously threatens humans with cancer, birth defects, mutation, death, or serious or prolonged incapacitation, or (2) seriously threatens non-human organisms with large-scale or ecologically significant population destruction.

VI. Nature and Sources of Information Which "Reasonably Supports the Conclusion" of Substantial Risk

Information attributing any of the effects described in Part V above to a chemical substance or mixture is to be reported if it is one of the types listed below and if it is not exempt from the reporting requirement by reason of Part VII of this policy statement. A person is not to delay reporting until he obtains conclusive information that a substantial risk exists, but is to immediately report any evidence which "reasonably supports" that conclusion. Such evidence will generally not be conclusive as to the substantiality of the risk; it should, however, reliably ascribe the effect to the chemical.

Information from the following sources concerning the effects described in Part V will often "reasonably support" a conclusion of substantial risk. Consideration of corroborative information before reporting can only occur where it is indicated below.

(1) *Designed, controlled studies.* In assessing the quality of information, the respondent is to consider whether it contains reliable evidence ascribing the effect to the chemical. Not only should final results from such studies be reported, but also preliminary results from incomplete studies where appropriate. Designed, controlled studies include:

(i) In vivo experiments and tests.

(ii) In vitro experiments and tests. Consideration may be given to the existence of corroborative information necessary to reasonably support the conclusion that a chemical presents a substantial risk.

(iii) Epidemiological studies.

(iv) Environmental monitoring studies.

(2) *Reports concerning and studies of undesigned, uncontrolled circumstances.* It is anticipated here that reportable effects will generally occur in a pattern, where a significant common feature is exposure to the chemical. However, a single instance of cancer, birth defects, mutation, death, or serious incapacitation in a human would be reportable if one (or a few) chemical(s) was strongly implicated. In addition, it is possible that effects less serious than those described in Part V(a) may be preliminary manifestations of the more serious effects and, together with another triggering piece of information, constitute reportable information; an example would be a group of exposed workers experiencing dizziness together with preliminary experimental results demonstrating neurological dysfunctions.

Reports and studies of undesigned circumstances include:

(i) Medical and health surveys.

(ii) Clinical studies.

(iii) Reports concerning and evidence of effects in consumers, workers, or the environment.

VII. Information Which Need Not Be Reported

Information need not be reported if it:

(a) Has been published by EPA in reports;

(b) Has been submitted in writing to EPA pursuant to mandatory reporting requirements under TSCA or any other authority administered by EPA (including the Federal Insecticide, Fungicide and Rodenticide Act, the Clean Air Act, the Federal Water Pollution Control Act, the Marine Protection, Research, and Sanctuaries Act, the Safe Drinking Water Act, and the Resource Conservation and Recovery Act), provided that the information: (1) Encompasses that required by Part IX (c) through (f); and (2) is from now on submitted within the time constraints set forth in Part IV and identified as a section 8(e) notice in accordance with Part IX(b);

(c) Has been published in the scientific literature and referenced by the following abstract services: (1) Agricola, (2) Biological Abstracts, (3) Chemical Abstracts, (4) Dissertation Abstracts, (5) Index Medicus, (6) National Technical Information Service.

(d) Is corroborative of well-established adverse effects already documented in the scientific literature and referenced as described in (c) above, unless such information concerns emergency incidents of environmental contamination as described in Part V(c), or

(e) Is contained in notification of spills under section 311(b)(5) of the Federal Water Pollution Control Act.

VIII. Information First Received by a Person Prior to the Effective Date of TSCA

Any substantial risk information possessed by a person prior to January 1, 1977, of which he is aware after that date shall be reported within 60 days of publication of this policy statement. The Agency considers that a person is "aware" of:

(a) Any information reviewed after January 1, 1977, including not only written reports, memoranda and other documents examined after January 1, 1977, but also information referred to in discussions and conferences in which the person participated after January 1, 1977;

(b) Any information the contents of which a person has been alerted to by date received after January 1, 1977, including any information concerning a chemical for which the person is presently assessing health and environmental effects;

(c) Any other information of which the person has actual knowledge.

IX. Reporting Requirements

Notices shall be delivered to the Document Control Officer, Chemical Information Division, Office of Toxic Substances (WH-557), Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460.

A notice should:

(a) Be sent by certified mail, or in any other way permitting verification of its receipt by the Agency,

(b) State that it is being submitted in accordance with section 8(e),

(c) Contain the job title, name, address, telephone number, and signature of the person reporting and the name and address of the manufacturing, processing, or distributing establishment with which he is associated,

(d) Identify the chemical substance or mixture (including, if known, the CAS Registry Number),

(e) Summarize the adverse effects being reported, describing the nature and the extent of the risk involved, and

(f) Contain the specific source of the information together with a summary and the source of any available supporting technical data.

For emergency incidents of environmental contamination (see Part V(c)), a person shall report the incident to the Administrator by telephone as soon as he has knowledge of the incident (see below for appropriate telephone contacts). The report should contain as much of the information required by instructions (b) through (f) above as possible. A written report, in accordance with instructions (a) through (f) above, is to be submitted within 15 days. Twenty-four hour emergency telephone numbers are:

Region I (Maine, Rhode Island, Connecticut, Vermont, Massachusetts, New Hampshire), 617-223-7265.
Region II (New York, New Jersey, Puerto Rico, Virgin Islands), 201-548-8730.
Region III (Pennsylvania, West Virginia, Virginia, Maryland, Delaware, District of Columbia), 215-597-9898.
Region IV (Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida), 404-881-4062.
Region V (Wisconsin, Illinois, Indiana, Michigan, Ohio, Minnesota), 312-353-2318.
Region VI (New Mexico, Texas, Oklahoma, Arkansas, Louisiana), 214-749-3840.
Region VII (Nebraska, Iowa, Missouri, Kansas), 816-374-3778.
Region VIII (Colorado, Utah, Wyoming, Montana, North Dakota, South Dakota), 303-837-3880.
Region IX (California, Nevada, Arizona, Hawaii, Guam), 415-556-6254.
Region X (Washington, Oregon, Idaho, Alaska), 206-442-1200.

X. Confidentiality Claims

(a) Any person submitting a notice to EPA under section 8(e) of TSCA may assert a business confidentiality claim covering all or part of the information contained in the notice. Any information covered by a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2 (41 FR 36902, September 1, 1976).

(b) If no claim accompanies the notice at the time it is submitted to EPA, the notice will be placed in an open file to be available to the public without further notice to the submitter.

(c) To assert a claim of confidentiality for information contained in a notice, the submitter must submit two copies of the notice.

(1) One copy must be complete. In that copy the submitter must indicate what information, if any, is claimed as confidential by marking the specified information on each page with a label such as "confidential," "proprietary," or "trade secret."

(2) If some information in the notice is claimed as confidential, the submitter must submit a second copy. The second copy must be complete except that all information claimed as confidential in the first copy must be deleted.

(3) The first copy of the notice will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2. The second copy will be placed in an open file to be available to the public.

(d) Any person submitting a notice containing information for which they are asserting a confidentiality claim should send the notice in a double envelope.

(1) The outside envelope should bear the same address outlined in section IX of this policy statement.

(2) The inside envelope should be clearly marked "To be opened only by the OTS Document Control Officer."

XI. Failure To Report Information

Section 15(3) of TSCA makes it unlawful for any person to fail or refuse to submit information required under section 8(e). Section 16 provides that a violation of section 15 renders a person liable to the United States for a civil penalty and possible criminal prosecution. Pursuant to section 17, the Government may seek judicial relief to compel submittal of section 8(e) information and to otherwise restrain any violation of section 8(e).

Appendix A—Quick Reference Summary for Emergency Incidents of Environmental Contamination

A. What Should Be Reported as an Emergency Incident

An emergency incident of environmental contamination is "any environmental contamination by a chemical substance or mixture . . . which, because of the pattern, extent and amount of contamination, (1) Seriously threatens humans with cancer, birth defects, mutation, death, or serious or prolonged incapacitation, or (2) seriously threatens non-human organisms with large scale or ecologically significant population destruction". (See Part V(c) for complete description.)

B. What Need Not Be Reported as an Emergency Incident

Information contained in notification of spills under section 311(b)(5) of the Federal Water Pollution Control Act (FWPCA). (For a complete list of exemptions to reporting, see Part VII.)

C. When and Where To Report Emergency Incidents

Emergency incidents of environmental contamination are to be reported immediately by telephone to the appropriate EPA Regional 24-hour telephone emergency line listed below.

Region I (Maine, Rhode Island, Connecticut, Vermont, Massachusetts, New Hampshire), 617-223-7265.
Region II (New York, New Jersey, Puerto Rico, Virgin Islands), 201-548-8730.
Region III (Pennsylvania, West Virginia, Virginia, Maryland, Delaware, District of Columbia), 215-597-9898.
Region IV (Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Florida), 404-881-4062.
Region V (Wisconsin, Illinois, Indiana, Michigan, Ohio, Minnesota), 312-353-2318.
Region VI (New Mexico, Texas, Oklahoma, Arkansas, Louisiana), 214-749-3840.
Region VII (Nebraska, Iowa, Missouri, Kansas), 816-374-3778.
Region VIII (Colorado, Utah, Wyoming, Montana, North Dakota, South Dakota), 303-837-3880.
Region IX (California, Nevada, Arizona, Hawaii, Guam), 415-556-6254.
Region X (Washington, Oregon, Idaho, Alaska), 206-442-1200.

In addition, a written report, in accordance with instructions (a) through (f) of Part IX, is to be submitted within 15 days to the Document Control Officer, Chemical Information Division, Office of Toxic Substances (WH-557), 401 M Street SW., Washington, D.C. 20460.

Appendix B—Significant Comments and Responses

A. Persons Subject to These Requirements

Comment 1: Employees cannot be held subject to these requirements, since: (a) They only have a partial role in the manufacture, processing, or distribution of chemicals, (b) in other sections of TSCA, the term "person who manufactures, processes, or distributes" chemicals clearly refers to business organizations; "persons" should be consistently defined, and (c) the application of criminal penalties mandates a strict interpretation of this word.

Response: The Agency considers that different sections of TSCA, having different purposes, are appropriately directed to different respondents. In the case of section 8(e), officers and employees who are capable of appreciating the significance of information have a legitimate responsibility to be alert to and report substantial-risk information. The guidance has been modified so that natural persons and business entities can fulfill their section 8(e) obligations in different ways. Most officers and employees can discharge their section 8(e) obligations by submitting pertinent information to corporate superiors, provided that the company has established the risk-evaluation procedures characterized in Part II. In the case of a business organization, its president, chief executive officer, and other officials responsible and having authority for the business organization's execution of its section 8(e) obligations must ensure that the organization reports substantial-risk information to EPA.

Comment 2: Even if employees can be held subject to these requirements, they should not be. To do so would force employees and employers into conflicting positions, inviting internal corporate dissension and over-reporting. Further, individuals often do not have the overview necessary to reach considered, well-supported decisions. Corporate reporting by designated officials will provide EPA with more reliable data.

Response: The Agency considers that employees have a legitimate role in risk reporting; it is imperative that risk information obtained by employees be appropriately considered. Officers and employees can fulfill their role in the reporting of substantial-risk information, without the disadvantages described above, by reporting information to superiors for corporate consideration, and, having done so, will have discharged their obligation to EPA. This is contingent upon the establishment by the business organization of certain procedures for risk-evaluation, thereby assuring the appropriate consideration of such reports. Those officers responsible and having authority for the organization's execution of its section 8(e) obligations must ensure that the organization reports substantial-risk information to EPA.

Comment 3: Clarify which employees are covered, and the extent of their obligation. Are employees "capable of appreciating pertinent information" by virtue of rank, or knowledge? Are rank and file employees subject to these requirements, or just supervisory and managerial personnel, company toxicologists, etc.? Is an employee absolved of further responsibility if he reports to his supervisor?

Response: The Agency considers that the phrase "capable of appreciating the significance of pertinent information" appropriately describes those officers and employees who have a responsibility to be alert to and report substantial-risk information, including not only relatively senior corporate officers but also many corporate employees. The policy statement modifies the September 9 proposal, in response to the concerns expressed in Comments 2 and 3, to permit most officers and employees to discharge their obligation by submitting information to corporate superiors, subject to the conditions described in Part II.

Comment 4: Consultants and independent labs should not be subject to these requirements.

Response: Contractors and independent labs are not responsible for reporting information they have obtained directly to EPA; rather, their client manufacturers, processors and distributors are responsible for reporting such information.

B. THE "OBTAINING" OF INFORMATION

Comment 5: The "may suggest" criterion in Part III of the proposal serves to compel further examination of information that by itself is not subject to section 8(e) requirements. The statutory language calling for "reasonable support" does not support this. Further, risk assessment often requires anywhere from months to several years of study after preliminary results "suggest" risk, far exceeding the 15-day compliance period.

Response: The Agency does not intend to compel under section 8(e) examination of information that by itself is not subject to section 8(e) requirements and has deleted the "may suggest" provision, providing its interpretation of what constitutes evidence that "reasonably supports the conclusion" of substantial risk in a new Part VI.

Comment 6: Section 8(e) obligations are incurred upon obtaining conclusory substantial-risk information.

Response: The Agency disagrees, and considers that "reasonable support" of a conclusion of substantial risk is not identical to the conclusion itself. The former typically occurs, and must be reported, at an earlier stage.

Comment 7: The statement, in Part III of the proposal that a person has obtained information if he ". . . should know of the existence of such information not in his possession but which would be delivered to him on request," tends to compel an active search for substantial-risk information rather than the reporting of substantial-risk information a person "obtains." This is of particular concern to importers with limited access to information possessed by their suppliers.

Response: The Agency considers that section 8(e) applies to information which a person possesses or of which he knows. It is not intended to compel searches for information or extraordinary efforts to acquire information. The Agency further considers, however, that "known" information includes information which a prudent person similarly situated could reasonably be expected to know. Negligence or intentional avoidance of information does not absolve a person of his section 8(e) obligation. Part III has been modified to express these intentions.

Comment 8: Circumstances can exist when coming "into possession" of risk information does not correspond to an understanding of the implications of the information; "obtains" should be defined in terms of possession of information and awareness of its import.

Response: The "obtaining" of information occurs via persons who are "capable of appreciating the significance of pertinent information." There will likely be circumstances in which the evaluation of information clarifies its full import; the establishment of corporate procedures for processing risk-information prescribed in Part II will expedite this.

C. TIME ALLOWED FOR COMPLIANCE

Comment 9: Fifteen calendar days is insufficient to determine whether information which "may suggest" substantial risk should be reported; it is even insufficient to accommodate normal procedural time constraints (corporate processing, mailing, holidays, etc.).

Response: The Agency has changed the compliance period to 15 business days. It is imperative that procedures be established to expedite the reporting of substantial-risk information, not that reporting conform to existing procedures.

Comment 10: Allow from 30 to 60 days for the second phase of reporting; alternatively, do not prescribe a time limit for additional reporting.

Response: Having deleted the "may suggest" criterion, the Agency sees no need to provide a second phase to the reporting period. Supplemental information that is generated after a section 8(e) notification should, if appropriate, be immediately reported.

Comment 11: Allow from 30 to 120 days to report pre-1977 information; this period should commence: (a) upon final publication, (b) January 1, 1978, (c) following the inventory reporting period since many of the same corporate personnel will be implementing both requirements.

Response: The policy statement prescribes a 60 day reporting period, commencing immediately upon publication. Section 8(e) has been in effect since January 1, 1977; postponement in reporting substantial-risk information is not warranted.

D. EFFECTS AND INFORMATION THAT MUST BE REPORTED

Comment 12: The reporting of "any instance" of cancer, birth defects, etc., in humans is too broad and such information will be of little use; chemical workers, like the general population, develop cancers and other ailments of uncertain etiology.

Response: This policy statement clarifies that the reporting of single occurrences of human cancer or other serious effects will depend upon evidence strongly implicating one (or a few) chemicals).

Comment 13: Dermal ailments and nausea are poorly chosen examples of precursor symptoms. Deleting these examples will avoid unduly emphasizing them when other symptoms may be more important, yet will not eliminate the obligation to report them if they are suspected precursors.

Response: The Agency agrees.

Comment 14: How are reportable data distinguished from routine tests including range tests such as LD_{50}'s?

Response: This policy statement directs the reporting of specified effects when unknown to the Administrator. Many routine tests are based on a knowledge of toxicity associated with a chemical; unknown effects occurring during such a range test may have to be reported if they are those of concern to the Agency and if the information meets the criteria set forth in Parts V and VI.

Comment 15: The most widespread "in vitro" test is the Ames test, which is subject to considerable debate. Clarify the circumstances under which positive results of in vitro tests must be reported.

Response: Part VI clarifies that the reporting of in vitro tests will depend upon the existence of corroborative information if necessary to reasonably support the conclusion of substantial risk.

Comment 16: The description of "extreme persistence" as a substantial risk is an example of the need to redefine Part V(c) ("Environmental Effects"). Persistence and bioaccumulation should be considered risks only when coupled with toxicity and significant exposure.

Response: Part V now clarifies those effects for which reporting depends upon a significant exposure potential. Persistence by itself is no longer itemized as a reportable effect but rather is considered to be a component of exposure potential; it may also underlie the measurements described in Part V(b)(1). Laboratory indicators of pronounced bioaccumulation are to be reported when coupled with potential for widespread exposure and any non-trivial adverse effect.

Comment 17: The n-octanol/water partition coefficient addresses a physico-chemical property, not biological effects, and is not alone an indicator of substantial risk; further, the values stated for the coefficient and the bioaccumulation factor in fish do not correspond.

Response: The Agency acknowledges the numerical error and has amended the values to correspond. This policy statement now directs the reporting of an experimental measurement of bioaccumulation when coupled with an adverse effect and potential for widespread exposure.

Comment 18: The requirement that information which "links" an effect to a chemical be reported is too broad and contradicts the statutory language of "reasonably supports".

Response: The Agency has provided in a new Part VI its interpretation of "reasonably supports".

Comment 19: A determination that information "reasonably supports the conclusion" of substantial risk cannot be made independently of considerations of use since the method and manner of using a chemical may influence the occurrence of an effect; in particular, the criteria should reflect a distinction between normal and abnormal uses of chemicals.

Response: The Agency considers that the appropriate components of a "substantial risk" with respect to a chemical are (a) the seriousness of the effect, and (b) total exposure potential. The method and manner of using a chemical is one of several factors determining its exposure potential. As described in Part V, the importance of exposure potential as a component of "substantial risk" depends upon the kind of effect of concern. Thus, the effects described in Part V(a) are so serious that relatively little weight is given to exposure; the effects described in Parts V (b) and (c) involve a significant exposure or exposure potential.

The Agency further considers that a definition of "normal" use for a particular chemical will often depend upon a knowledge of the risks associated with the chemical.

E. INFORMATION THAT NEED NOT BE REPORTED

Comment 20: Information published in scientific literature in languages other than English should be exempted if published in summary form by abstracting services. Can the accuracy of English language abstracts and commercial translations of foreign literature be assumed?

Response: This policy statement now provides that information published in scientific literature, whether in English or another language, is exempt from reporting if published in summary form by certain specified abstract services.

Comment 21: Information exchange systems with other Federal agencies should be immediately established so that respondents need not report to EPA information already reported to other Agencies, and vice versa. Such duplicative reports are unduly burdensome.

Response: EPA is coordinating this program with other agencies now. When this coordination is successfully completed, the policy statement will be amended to exempt from the reporting requirement information that has been submitted to other specified agencies. In the meantime, substantial-risk information must be reported directly to EPA; such a report does not discharge any reporting obligation to other agencies.

F. INFORMATION FIRST RECEIVED PRIOR TO THE EFFECTIVE DATE OF TSCA

Comment 22: The tense of the verb "obtains" reveals that section 8(e) was intended to be applied prospectively to information newly acquired after January 1, 1977. Utilize section 8(d) or other rules to acquire information obtained before then.

Response: As discussed in the preamble to the September 9 proposal, the Agency considers section 8(e) to apply to risk information possessed by or known to a person before, on, or after January 1, 1977. Concerning information first obtained before 1977, this policy statement continues to require reporting of information received if a person has been aware of it since January 1, 1977, for the reasons discussed in the September 9 preamble.

Comment 23: The term "aware" is too vague to be of any help in responding to these requirements. Since many corporate employees are potentially subject to these requirements, and given uncertainty over the extent to which they ought to be aware of pre-1977 information, this provision tends to compel the very file search it was intended to avoid. The term "aware" should be further defined, possibly in terms of actual knowledge.

Response: The Agency in Part VIII of this policy statement now defines the pre-1977 information of which a person is considered to be aware.

G. CONFIDENTIAL INFORMATION

Comment 24: EPA should delay guidance until procedures are published governing the treatment of confidential submissions.

Comment 25: EPA should treat all submissions as confidential until the information is verified.

Comment 26: EPA should automatically publish section 8(e) notices.

Response to Comments 24 through 26: EPA has included a new Part X which describes how to submit a claim of confidentiality and states that any or all of the information submitted may be claimed as confidential. Such information will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2.

H. MISCELLANEOUS

Comment 27: What is the statutory basis or need for guidance? What is its exact status under the Administrative Procedure Act?

Response: This policy statement sets forth EPA's interpretation of and policy concerning TSCA section 8(e). As an interpretive rule and statement of policy it is not subject to the comment period and delayed effective date provisions of the Administrative Procedure Act (5 U.S.C. 553). Although TSCA does not mandate a policy statement, the Agency of necessity must develop the criteria which will govern enforcement activities. Trade associations and businesses were among those who previously expressed interest in such a statement to guide their compliance.

quirements apply to chemicals previously but no longer manufactured, processed, or distributed in commerce by a person.

Response: Information obtained before 1977 must be reported if the person has been aware of it since January 1, 1977, as prescribed by Part VIII. Concerning chemicals which a person has discontinued manufacturing, processing, or distributing since January 1, 1977, information obtained before the time of discontinuation is subject to these requirements. It is expected that the acquisition of information after that time will be minimal; however, should additional information be acquired, it may trigger the reporting described in Part VIII.

Comment 29: Clarify the meaning of "substantial risk" relative to other risks addressed by TSCA.

Response: A substantial risk is defined in Part V(a) of this policy statement as a risk of considerable concern because of (a) the seriousness of the effect, and (b) the fact or probability of its occurrence. As opposed to other risks addressed by TSCA, economic or social benefits of use, or costs of restricting use, are not to be considered in determining whether a risk is "substantial".

Comment 30: To what extent are "users" of chemicals subject to these requirements?

Response: The Agency considers that many industrial uses of chemicals actually fall within the scope of "processing" chemicals. A manufacturer, processor, or distributor who obtains substantial-risk information concerning chemicals he handles should be alert to the possibility he may have to report it.

Comment 31: Are chemicals manufactured, processed and distributed in commerce in small quantities solely for purposes of research and development subject to these requirements?

Response: In general, the Agency considers that much manufacturing, processing, and distribution in commerce of chemicals in small quantities solely for purposes of research and development is conducted for "commercial purposes". Such purposes would include the sale and distribution of such materials, as well as their use by the manufacturer or processor in activities (for example, product research and development and studies assessing the feasibility and safety of using chemicals) preceding his or a client's commercial use of such materials or others on a larger scale.

As described in Part V, the Agency considers that "substantial risks" depend in part upon an exposure potential. Thus, the occurrence of the effects described in Part V(a) presuppose exposure to the chemical and must be reported; reporting of the other effects will depend upon a potential for significant levels of exposure.

Comment 32: Are raw materials, intermediates, and inert ingredients produced or used in the manufacture of a pesticide subject to TSCA?

Response: The Administrator considers that raw materials, intermediates and inert ingredients produced or used in the manufacture of a pesticide are substances or mixtures which can be regulated under TSCA.

In order to be considered a pesticide, a substance must be intended for use as a pesticide. Raw materials, intermediates, and inert ingredients produced or used in the manufacture of a pesticide are not themselves regulated under FIFRA (unless they happen to be pesticides themselves) and, therefore, are subject to TSCA. The pesti-

cide regulations at 40 CFR 162.4 are consistent with this view.

Comment 33: Are intermediates and catalysts intended solely for use in the production of a food, food additive, drug, cosmetic, or device subject to TSCA?

Response: The Administrator considers that intermediates and catalysts intended solely for use in the production of a food, food additive, drug, cosmetic, or device are excluded from regulation under TSCA. The definitions of the FFDCA provide that chemical substances which are intended for use as a component of a food, food additive, drug, cosmetic, or device are encompassed within the meaning of such terms, respectively. The FDA considers intermediates and catalysts to be such components. Therefore, they are subject to regulation under the FFDCA. Any such substance is excluded from regulation under TSCA insofar as it is actually manufactured, processed, or distributed in commerce solely for use in the production of a food, food additive, drug, cosmetic, or device.

Comment 34: Employees should have the option to submit reports anonymously.

Response: EPA considers that any person may report information to EPA under TSCA. Those who are required to do so under section 8(e) are persons who manufacture, process, or distribute in commerce chemical substances or mixtures, including not only business entities but also such employees as described in Part II. In order to establish that such persons have discharged their obligations, and in order to encourage responsible review of the quality of information and the substantiality of risks, EPA believes that notifiers should identify themselves. Section 23 will adequately protect employees from discrimination pursuant to notifications they have made under section 8(e).

[FR Doc. 78-7064 Filed 3-15-78; 8:45 am]

96TH CONGRESS
1ST SESSION

H. R. 1435

To establish a program for the inspection of schools for the presence of asbestos materials, to provide funds for the testing and evaluation of potential hazards, to create a loan program to assist in the containment or removal of imminent hazards to health and safety, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 24, 1979

Mr. PERKINS introduced the following bill; which was referred to the Committee on Education and Labor

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A BILL

To establish a program for the inspection of schools for the presence of asbestos materials, to provide funds for the testing and evaluation of potential hazards, to create a loan program to assist in the containment or removal of imminent hazards to health and safety, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Asbestos School Hazard Detection and Control Act of 1979".

FINDINGS AND PURPOSES

SEC. 2. (a) The Congress finds that—

(1) exposure to asbestos and materials containing asbestos has been identified over a long period of time and by reputable medical and scientific evidence as significantly increasing the incidence of cancer and other severe or fatal diseases, such as asbestosis;

(2) medical evidence has suggested that children may be particularly susceptible to environmentally induced cancers;

(3) medical science has not established any safe level of exposure to asbestos as a threshold above which the likelihood of developing illness occurs;

(4) substantial amounts of asbestos, particularly in sprayed form, were used in school buildings, especially during the period 1946–1972;

(5) partial surveys in some States have indicated that there exists in a number of schools asbestos materials which have become damaged or friable, from which asbestos is being or may be dislodged into the air;

(6) asbestos concentrations far exceeding the normal ambient air levels have been found in schools with damaged asbestos;

(7) the Department of Health, Education, and Welfare and the Environmental Protection Agency, as well as several States, have attempted to publicize the potential hazards to school children and employees from asbestos, but there does not exist any systematic or mandatory program for identifying hazardous conditions in schools, or for remedying them;

(8) there exists no health standard regulating the concentration of asbestos in the nonworking environment, such as a school;

(9) custodial workers, teachers, and other school employees may be exposed to hazardous concentrations of asbestos in school buildings; and

(10) without an improved program of information distribution, technical and scientific assistance, and financial support, many school districts and States will not be able to mitigate the potential asbestos hazards where they occur in their schools.

(b) It is the purpose of this Act to—

(1) direct the Secretary of Health, Education, and Welfare, in conjunction with other appropriate officials, to establish a task force to direct Federal efforts to ascertain the extent of the danger to the health of school-children and employees from asbestos materials in the schools;

(2) require States to prepare a plan which establishes a program for the systematic inspection of all school buildings in order to identify the presence of asbestos or asbestos materials in hazardous conditions;

(3) provide scientific and technical assistance to the States and local school boards in conducting the survey, related tests and evaluations;

(4) provide loans for the mitigation of serious asbestos hazards which constitute an imminent danger to the health and safety of school children and employees;

(5) assure that no employee of any school district, State or local government, or Federal agency, suffers any disciplinary action as a result of calling attention to potential asbestos hazards which may exist in schools.

TASK FORCE

SEC. 3. (a) Within thirty days after the enactment of this section, the Secretary shall designate the members of an Asbestos Hazards School Safety Task Force (hereinafter referred to as "Task Force"). The Task Force shall be composed of persons with knowledge of the scientific and medical problems associated with exposure to asbestos, and of persons with knowledge of procedures and programs for the containment or removal of asbestos from buildings. Membership on the Task Force shall include a representative of the Office

of Education, the National Cancer Institute, the Environmental Protection Agency, the National Institute of Environmental Health Sciences, the Occupational Safety and Health Administration, and representatives of the public organizations concerned with education and health. In selecting membership from other Federal agencies or departments, the Secretary shall accept the persons nominated by the Secretary or Administrator of that Department or Agency. The Secretary shall designate a chairman of the Task Force.

(b) Members of the Task Force who are not full-time employees of the Federal Government shall be reimbursed for actual expenses incurred in conjunction with their service on the Task Force, and shall receive a per diem compensation at a rate not to exceed the maximum rate prescribed for grade GS-16.

(c) The Task Force shall convene, no later than thirty days after the appointment of its members, at the call of the chairman.

(d) The duties of the Task Force shall include—

(1) the preparation of educational materials for distribution to the States and local school boards in conjunction with the plan required in section 4 of this Act;

(2) the compilation and dissemination of medical, scientific, technological, and other materials, reports,

instructions, and information to State and local governments and to local school boards explaining the health and safety hazards associated with asbestos materials, the means of identifying, sampling, and testing materials suspected of containing asbestos;

(3) the review and approval of State plans and applications for reimbursements and loans pursuant to sections 5 and 6 of this Act;

(4) the establishment of criteria concerning the levels of hazards posed by asbestos in advanced stages of disrepair which may constitute an imminent danger to the health and safety of school children and employees, for the purpose of determining eligibility for loans pursuant to section 6 of this Act;

(5) making recommendations to the Secretary on the awarding of grants for technical assistance pursuant to section 5(c) of this Act.

STATE PLAN

SEC. 4. (a) No later than September 1, 1979, each State which desires to enable its schools to participate in programs under this Act shall submit to the Secretary a plan for the notification of administrators of all schools within that State's jurisdiction of the health hazards associated with exposure to asbestos, and recommended methods for the safe, orderly, and expeditious containment or removal, as deemed

necessary by competent scientific or medical individuals, of asbestos materials which pose an imminent hazard to the health and safety of persons utilizing such school buildings. Such plan shall include—

(1) a timetable for the identification, not later than January 1, 1980, of imminent asbestos health hazards in all schools situated within such State;

(2) a description of the procedures which are to be utilized in locating and identifying such hazards, in accordance with safety rules promulgated by the Secretary in accordance with section 7 of this Act;

(3) a timetable for the expeditious containment or removal of asbestos hazards which have been identified pursuant to paragraph (1) of this subsection no later than September 1, 1980, unless an extension has been granted by the Secretary due to extraordinary circumstances;

(4) procedures for maintaining records on the presence of asbestos materials in schools and future containment or removal activities; and

(5) the identification of a State agency or other administrative unit with the responsibility for the preparation of the plan and the administration of the control program which it describes.

(b) The Secretary shall approve a plan which meets the requirements of subsection (a) of this section, provided that it has been reviewed and approved by the Task Force. The Secretary may not approve any plan which has been rejected by the Task Force.

ASBESTOS HAZARDS DETECTION

SEC. 5. (a)(1) Units of local government with the responsibility for the administration and safety of schools may apply to the Secretary for a reimbursement from funds available for purposes of this section for up to one-half of the costs of surveying and testing school buildings in order to determine whether hazardous concentrations of asbestos or asbestos products exist in schools of that jurisdiction. Such application shall contain, in addition to supplemental information which the Secretary may require—

(A) a description of the proposed survey, including testing techniques;

(B) an estimate of the total cost of the survey;

(C) the identification of any party which may be engaged to conduct the testing, including a description of the party's professional expertise for such testing.

Any testing facility selected under clause (C) shall meet competency standards established by the Secretary.

(2) The Secretary shall designate, in conjunction with the Task Force, those costs which are reimbursable under paragraph (1) of this subsection. Such costs shall include—

(A) administrative costs of preparing and supervising the survey;

(B) costs of conducting visual inspections of school buildings;

(C) sampling of building and insulation materials;

(D) appropriate tests to determine the level of asbestos content in suspected materials; and

(E) air sampling and testing, if deemed essential to determining the likelihood of imminent danger.

(b)(1) The Secretary shall make payments from funds available under this Act for purposes of this section for a period of three years following the date of enactment of this Act.

(2) The one-half cost restriction contained in subsection (a)(1) may be waived upon a determination by the Secretary that the fiscal resources of the locality are limited to the extent that imposition of such restriction would prevent participation in the program.

(c) The Secretary may allocate up to 20 per centum of the funds available for purposes of this section for use in education and technical assistance programs.

(d) Recipients of grants under this section shall file a report with the Secretary no later than one hundred and twenty days after receipt of the grant describing the detection and testing activities which were undertaken, the results, and the plan for mitigating any imminent hazards which had been detected. The report shall include a detailed accounting of funds received from all sources, and funds expended.

ASBESTOS HAZARDS CONTROL LOAN PROGRAM

SEC. 6. (a) There is hereby created an Asbestos Hazards Control Loan Program in the Department of Health, Education, and Welfare (hereinafter referred to as the Loan Program). The Loan Program shall be administered by the Secretary or his designee.

(b) Loans from the Loan Program shall be available only for the mitigation or removal of asbestos or asbestos materials which pose an imminent hazard to the health and safety of children or employees and which is situated in school buildings. Loans shall be limited to projects covering more than 2,500 square feet, in which the asbestos material is at a level specified by the Secretary.

(c)(1) Loans under this section shall be for a period not to exceed twenty years, shall be interest free, shall be used to provide not more than one-half the cost of the asbestos con-

tainment or removal, and shall be subject to terms and conditions established by the Secretary.

(2) The one-half cost restriction contained in paragraph (1) may be waived upon a determination by the Secretary that the fiscal resources of the locality are limited to the extent that imposition of such restriction would prevent participation in the program.

(d) Applicants for loans from the Loan Program shall submit an application which describes—

(1) the nature of the asbestos problem;

(2) the results of preliminary testing (conducted in accordance with professional scientific standards established by the Secretary, in consultation with the Task Force) which indicates the asbestos content of the affected material;

(3) the methods which will be used to contain or remove the asbestos materials, in accordance with section 7 of this Act.

(e) The Secretary shall establish a prevailing rate for containment or removal work performed with loan funds provided under this section, determined on the basis of prevailing wage rates in the location of such work.

(f) The Secretary is authorized to establish additional requirements or procedures which shall govern the loan application or award process.

(g) The Secretary shall make an annual report to the appropriate committees of the House of Representatives and the Senate which shall describe—

(1) the number of loans and the location of each applicant which have been made in the preceding year;

(2) the nature of the asbestos problem of each applicant;

(3) the type of containment or removal program which was undertaken;

(4) the estimated cost, and the actual cost of mitigation efforts;

(5) the number and description of applications which have been rejected.

SAFETY PROCEDURES

SEC. 7. (a) Within one hundred and twenty days after enactment of this section, the Secretary shall promulgate and distribute to the States safety standards and procedures for testing the level of asbestos in schools and for determining the likelihood of the leakage of asbestos into the school environment.

(b) All sealing, containment, or removal of asbestos materials pursuant to this Act, or future construction, modification, or demolition of schools which contain asbestos materials, shall be conducted in strict accordance with regulations and procedures established by the Occupational Safety and

Health Administration or procedures established by the Task Force. Any employee engaged in such activity must be notified in writing of the hazards of working with asbestos, and must utilize all safety procedures to minimize risk to his or her health.

(c) No child or school employee shall be permitted in the vicinity of any asbestos containment or removal activity, unless school authorities certify that there is no risk of exposure to the students or personnel.

NONDISCRIMINATION

SEC. 8. No employer who receives funds under this Act shall discharge or in any other way discriminate against or discipline any worker employed by him or her by reasons of the fact that such worker focuses public attention on the asbestos problem in his or her school district.

RETAINED RIGHTS

SEC. 9. Nothing in this Act shall in any way restrict the rights of any individual or group of individuals, or any public agency or government, to seek any legal redress in connection with the purchase or installation of asbestos materials in schools, or with regard to any claim of disability or death in connection with exposure to asbestos in a school setting. Nor shall this Act affect any litigation or petitions for administrative action under any statute existing prior to the enactment of this section. In the event that an action under section 6 of

the Toxic Substances Control Act of 1976 is successful and the obligation for mitigation and safety actions is deemed to be the total responsibility of the manufacturers, the Secretary is authorized and directed to seek to recover from such manufacturers any Federal funds, including administrative costs, expended for programs required by this Act.

DEFINITIONS

SEC. 10. As used in this Act, the term—

(1) "Secretary" means the Secretary of Health, Education, and Welfare, or his designee;

(2) "schools" means any building, structure, or facility which is primarily used as a school for children, either public or private;

(3) "asbestos or asbestos material" means any building materials, sprayed materials, insulation, or other substance which is composed entirely or in part of chrysotile, amosite, or crocidolite, and when they occur in fibrous habit, tremolite, anthophyllite, and actinolite;

(4) "imminent hazard to the health and safety" means, in regard to section 6, that the asbestos or asbestos material is, according to standards established by the Task Force and approved by the Secretary, friable or easily damaged, or within easy reach of students or otherwise susceptible to damage which could

result in the dispersal of asbestos fibers into the school environment (including damage from water or air circulation);

(5) "State" means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of the Northern Marianas, and the Trust Territory of the Pacific Islands.

AUTHORIZATIONS

SEC. 11. There are authorized to be appropriated for fiscal year 1980 and for each of the succeeding fiscal years for the purposes and programs established by this Act, such sums as are necessary.

O

96TH CONGRESS
1ST SESSION

H. R. 1524

To establish a program for the inspection of schools for the presence of hazardous asbestos materials, to create a fund for the testing and evaluation of potential hazards, to create a loan program to assist in the containment or removal of imminent hazards to health and safety, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 25, 1979

Mr. MILLER of California (for himself, Mr. WEISS, Mr. THOMPSON, Mr. CORRADA, Mr. MAGUIRE, Mr. PHILIP BURTON, Mr. SIMON, and Mr. RICHMOND) introduced the following bill; which was referred to the Committee on Education and Labor

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A BILL

To establish a program for the inspection of schools for the presence of hazardous asbestos materials, to create a fund for the testing and evaluation of potential hazards, to create a loan program to assist in the containment or removal of imminent hazards to health and safety, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. This Act may be cited as the "Asbestos School Hazard Detection and Control Act of 1979".

I—I●

SEC. 2. (a) FINDINGS.—The Congress finds that—

(1) exposure to asbestos and materials containing asbestos has been identified over a long period of time and by reputable medical and scientific evidence as significantly increasing the incidence of cancer and other severe or fatal diseases, such as asbestosis;

(2) medical evidence has suggested that children may be particularly susceptible to environmentally induced cancers;

(3) medical science has not established any safe level of exposure to asbestos as a threshold above which the likelihood of developing illness occurs;

(4) substantial amounts of asbestos, particularly in sprayed form, were used in school buildings, especially during the period 1946–1972;

(5) partial surveys in some States have indicated that there exists in a number of schools asbestos materials which have become damaged or friable, from which asbestos is being or may be dislodged into the air;

(6) asbestos concentrations far exceeding the normal ambient air levels have been found in schools with damaged asbestos;

(7) the Department of Health, Education, and Welfare and the Environmental Protection Agency, as

well as several States, have attempted to publicize the potential hazards to schoolchildren and employees from asbestos, but there does not exist any systematic or mandatory program for identifying hazardous conditions in schools, or for remedying them;

(8) there exists no health standard regulating the concentration of asbestos in the nonworking environment, such as a school;

(9) custodial workers, teachers, and other school employees may be exposed to hazardous concentrations of asbestos in school buildings;

(10) without an improved program of information distribution, technical and scientific assistance, and financial support, many school districts and States will not be able to mitigate the potential asbestos hazards where they occur in their schools.

(b) PURPOSES.—It is the purpose of this Act to—

(1) mandate the Secretary of Health, Education, and Welfare, in conjunction with other appropriate officials, to establish a task force to direct Federal efforts to ascertain the extent of the danger to the health of schoolchildren and employees from asbestos materials in the schools;

(2) require States to prepare a plan which establishes a program for the systematic inspection of all

school buildings in order to identify the presence of asbestos or asbestos materials in hazardous conditions;

(3) provide scientific and technical assistance to the States and local school boards in conducting the survey, related tests, and evaluations;

(4) establish an Asbestos Hazards Detection Fund from contributions provided by manufacturers of asbestos, from which will be provided the nonlocal share of moneys for inspection, sampling, and testing programs;

(5) provide loans for the mitigation of serious asbestos hazards which constitute an imminent danger to the health and safety of schoolchildren and employees;

(6) assure that no employee of any school district, State or local government, or Federal agency, suffers any disciplinary action as a result of calling attention to potential asbestos hazards which may exist in schools.

TASK FORCE

SEC. 3. (a) Within thirty days after the enactment of this section, the Secretary shall designate the members of an Asbestos Hazards School Safety Task Force (hereinafter referred to as "Task Force"). The Task Force shall be composed of persons knowledgeable of the scientific and medical problems associated with exposure to asbestos, and of persons knowledgeable of procedures and programs for the con-

tainment or removal of asbestos from buildings. Membership on the Task Force shall be composed of, but not limited to, a representative of the United States Office of Education, the National Cancer Institute, the Environmental Protection Agency, the National Institute of Environmental Health Sciences, the Occupational Safety and Health Administration, and representatives of the public organizations concerned with education and health. In selecting membership from other Federal agencies or departments, the Secretary shall accept the persons nominated by the Secretary or Administrator of that department or agency. The Secretary shall designate a Chairman of the Task Force.

(b) Non-Federal members of the Task Force shall be reimbursed for actual expenses incurred in conjunction with their service on the Task Force, and shall receive a per diem compensation at a rate not to exceed that of a GS-16.

(c) The Task Force shall convene no later than thirty days after the appointment of its members, at the call of the Chairman.

(d) The duties of the Task Force shall include—

(1) the preparation of educational materials for distribution to the States and local school boards in conjunction with the plan required in section 4 of this Act;

(2) the compilation and dissemination of medical, scientific, technological, and other materials, reports, instructions, and information to State and local governments and to local school boards explaining the health and safety hazards associated with asbestos materials, the means of identifying, sampling, and testing materials suspected of containing asbestos;

(3) the review and approval of State plans and applications for reimbursements and loans pursuant to sections 5 and 6 of this Act;

(4) the establishment of criteria concerning the levels of hazards posed by asbestos in advanced stages of disrepair which may constitute an imminent danger to the health and safety of schoolchildren and employees, upon which will be based eligibility for loans pursuant to section 6 of this Act;

(5) making recommendations to the Secretary on the awarding of grants for technical assistance pursuant to section 5 of this Act.

STATE PLAN

SEC. 4. (a) No later than September 1, 1979, each State shall submit to the Secretary a plan for the notification of administrators of all schools within that State's jurisdiction of the health hazards associated with exposure to asbestos, and recommended methods for the safe, orderly, and expedi-

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(5) the identification of a State agency or other administrative unit with the responsibility for the preparation of the plan and the administration of the control program which it describes.

(b) The Secretary shall approve a plan which meets the requirements of subsection (a) of this section: *Provided*, That it has been reviewed and approved by the Task Force. The Secretary may not approve any plan which has been rejected by the Task Force.

ASBESTOS HAZARDS DETECTION FUND

SEC. 5. (a) There is hereby created an Asbestos Hazards Detection Fund (hereinafter referred to as the "fund") in the Department of Health, Education, and Welfare. The fund shall be administered by the Secretary, or by his designee. All moneys accruing to the fund shall be deposited in the Treasury of the United States, together with all interest accruing thereon. Withdrawals from the fund shall be made only by the Secretary for purposes authorized under this Act.

(b) PAYMENTS INTO THE FUND.—(1) Any company which was engaged in the mining, manufacture, or importation of asbestos between the years 1946 and 1972 shall make payments into the fund. The total of contributions to the fund shall not exceed $30,000,000. Each company's financial obligation to the fund shall be a percentage equivalent to its

proportion of asbestos mining, manufacture, or importation during the period 1946–1972 (adjusted to 1979 value). Each company shall pay into the fund no less than one-third of its total obligation in each of the three years subsequent to the enactment of this Act.

(2) Each manufacturer of asbestos products shall make available to the Secretary an audit with an accurate accounting of (i) the amount of asbestos products it produced in the period 1946–1972; (ii) a description of the products and their use; and (iii) other pertinent data as the Secretary may require.

(3) The Secretary and the Attorney General of the United States are authorized and directed to subpena the records described in subsection (2) of this section, together with any and all supplemental data which either may deem necessary to assure than an accurate payment is made by each company into the fund. All information received by the Secretary under this Act from an asbestos manufacturer shall remain confidential with the Secretary.

(c) PAYMENTS FROM THE FUND.—(1) Units of local government with the responsibility for the administration and safety of schools may apply to the Secretary for a reimbursement from the fund for up to half of the costs of surveying and testing school buildings in order to determine whether hazardous concentrations of asbestos or asbestos products

exist in schools of that jurisdiction. Such application shall contain, in addition to supplemental information which the Secretary may require—

(i) a description of the proposed survey, including testing techniques;

(ii) an estimate of the total cost of the survey;

(iii) the identification of any party which may be engaged to conduct the testing, including a description of the party's professional expertise for such testing: *Provided*, That any testing facility shall meet competency standards established by the Secretary.

(2) The Secretary shall designate, in conjunction with the Task Force, those costs which are reimbursable under subsection (1) of this section. Such costs shall include—

(i) administrative costs of preparing and supervising the survey;

(ii) costs of conducting visual inspections of school buildings;

(iii) sampling of building and insulation materials;

(iv) appropriate tests to determine the level of asbestos content in suspected materials; and

(v) air sampling and testing, if deemed essential to determining the likelihood of imminent danger.

(3) The Secretary shall make reimbursements from the fund for a period of three years following the date of enact-

ment. Moneys remaining in the fund at that time shall be returned, on a proportional basis, to the contributing asbestos manufacturers.

(4) Subject to the approval of the Secretary, a contributor may provide asbestos testing and analysis services for school districts or other entities which require such testing, in lieu of a portion of its contribution, not to exceed 50 per centum of such contribution. Rates for such analysis and testing shall be established by the Secretary at a rate equal to the prevailing fee for such services.

(5) The Secretary may allocate up to 20 per centum of the moneys from the fund for use in the education and technical assistance programs authorized by this Act.

(6) Recipients of grants under this section shall file a report with the Secretary no later than one hundred and twenty days after receipt of the grant describing the detection and testing activities which were undertaken, the results, and the plan for mitigating any imminent hazards which had been detected. The report shall include a detailed accounting of funds received from all sources, and funds expended.

ASBESTOS HAZARDS CONTROL LOAN PROGRAM

SEC. 6. (a) There is hereby created an Asbestos Hazards Control Loan Program in the Department of Health, Education, and Welfare (hereinafter referred to as the "loan

program"). The loan program shall be administered by the Secretary or his designee.

(b) Loans from the loan program shall be available only for the mitigation or removal of asbestos or asbestos materials which pose an imminent hazard to the health and safety of children or employees and which is situated in school buildings. Loans shall be limited to projects covering more than two thousand and five hundred square feet, in which the asbestos material is at least per centum asbestos.

(c) Loans under this section shall be for a period not to exceed twenty years, and shall be interest free, under terms and conditions established by the Secretary.

(d) Applicants for loans from the loan program shall submit an application which describes—

(1) the nature of the asbestos problem;

(2) the results of preliminary testing which indicates the asbestos content of the affected material: *Provided*, That such testing shall meet professional scientific standards established by the Secretary and the Task Force;

(3) the methods which will be used to contain or remove the asbestos materials, in accordance with section 7 of this Act.

(e) The Secretary shall establish a prevailing rate for containment or removal work performed with loan funds pro-

vided under this section. The Secretary shall not award a loan for an amount in excess of the prevailing wage in any location.

(f) The Secretary is authorized to establish additional requirements or procedures which shall govern the loan application or award process.

(g) The Secretary shall make an annual report to the appropriate committees of the House of Representatives and the Senate which shall describe—

(1) the number of loans and the location of each applicant which have been made in the preceding year;

(2) the nature of the asbestos problem of each applicant;

(3) the type of containment or removal program which was undertaken;

(4) the estimated cost, and the actual cost of mitigation efforts;

(5) the number and description of applications which have been rejected.

(h)(1) Upon the making of any loan from the loan program under this section, and to the extent such loan remains outstanding, the United States shall be subrogated to any legal rights to recover such amount or assert a claim against any person or organization relating to the subject matter of a loan made from the loan program. Any recipient of a loan

from the loan program shall execute and deliver instruments and papers and take whatever steps are necessary to secure such rights in the United States in order to entitle the United States to the entry of a judgment by a court and payment under this Act. No loan shall be made unless and until such steps have been taken. Except as provided for herein, to the extent that the loan remains due and owing, any purported limitation on the right of the United States to act as assignee or to become subrogated to the rights of the recipient of a loan from the loan program shall be without any effect.

(2) If the United States recovers from any person or organization any amount by the exercise of rights subrogated or assigned in subsection (1), the recipient of the relevant loan shall be entitled to forgivenes of any loan amounts still due and owing, but only to the extent that such recovery exceeds the costs of obtaining recovery plus interest that would have been charged if the relevant loan had been made at prevailing commercial rates.

SAFETY PROCEDURES

SEC. 7. (a) Within one hundred and twenty days after enactment of this section, the Secretary shall promulgate and distribute to the States safety standards and procedures for testing the level of asbestos in schools and for determining the likelihood of the leakage of asbestos into the school environment.

(b) All sealing, containment, or removal of asbestos materials pursuant to this Act, or future construction, modification, or demolition of schools which contain asbestos materials, shall be conducted in strict accordance with regulations and procedures established by the Occupational Safety and Health Administration or procedures established by the Task Force. Any employee engaged in such activity must be notified in writing of the hazards of working with asbestos, and must utilize all safety procedures to minimize risk to his or her health.

(c) No child or school employee shall be permitted in the vicinity of any asbestos containment or removal activity, except if school authorities certify that there is no risk of exposure to the students or personnel.

NONDISCRIMINATION

SEC. 8. No employer shall discharge or in any other way discriminate against or discipline any worker employed by him or her by reasons of the fact that such worker focuses public attention on the asbestos problem in his or her school district.

RETAINED RIGHTS

SEC. 9. Nothing in this Act shall in any way restrict the rights of any individual or group of individuals, or any public agency or government, to seek legal redress under any State or Federal statute in connection with the purchase or instal-

lation of asbestos materials in schools, or with regard to any claim of disability or death in connection with exposure to asbestos in a school setting except as provided in section 6(h) of this Act. Nor shall this legislation affect any litigation or petitions for administrative action under any statute existing prior to the enactment of this section. In the event that an action under section 6 of the Toxic Substances Control Act of 1976 is successful and the obligation for mitigation and safety actions is deemed to be the total responsibility of the manufacturers, the Secretary is directed to seek to recover from such manufacturers any Federal funds, including administrative costs, expended for programs required by this Act.

DEFINITIONS

SEC. 10. As used in this Act, the term—

(a) "Secretary" means the Secretary of the Department of Health, Education, and Welfare, or this designee;

(b) "schools" means any building, structure, or facility which is primarily used as a school for children, either public or private;

(c) "asbestos or asbestos material" means any building materials, sprayed materials, insulation, or other substance which is composed entirely or in part of chrysotile, amosite, or crocidolite, and when they

occur in fibrous habit, tremolite, anthophyllite, and actinolite;

(d) "imminent hazard to the health and safety" means, in regard to section 6, that the asbestos or asbestos material is, according to standards established by the Task Force and approved by the Secretary, friable or easily damaged, or within easy reach of students or otherwise susceptible to damage which could result in the dispersal of asbestos fibers into the school environment (including damage from water or air circulation);

(e) "State" means each of the several States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Virgin Islands, the Commonwealth of the Northern Mariannas, and the Trust Territory of the Pacific Islands.

AUTHORIZATIONS

SEC. 11. There are authorized to be appropriated for the fiscal years 1980, 1981, and 1982, for the purposes and programs established in this Act, such sums as are necessary.

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B. Klonfas FROM M. O. WARNER

[4910-60-M]

Title 49—Transportation

CHAPTER I—RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Docket No. HM-160; Amdt. Nos. 172-47, 173-123, 174-33, 175-7, 176-6, 177-44]

TRANSPORTATION OF ASBESTOS

Miscellaneous Amendment

AGENCY: Materials Transportation Bureau, Research and Special Programs Administration, DOT.

ACTION: Final Rule.

SUMMARY: These amendments require shipments of commercial asbestos fibers to be packaged in rigid, airtight or dust and sift proof packagings. Except when the shipment is by private carrier, non-rigid packages, such as bags, must be palletized and unitized using shrink-wrapping or strapped fiberboard wrapping. These amendments represent minimum safety requirements and are intended to reduce the risks to the public health associated with the generation of airborne concentrations of asbestos that may result from the packaging and handling of asbestos fiber shipments in commercial transportation.

EFFECTIVE DATE: These regulations are effective April 30, 1979.

ADDRESS: All written comments received in this rulemaking action are available for examination during regular business hours in the Dockets Branch, Room 6500, Trans Point Building, 2100 Second Street SW., Washington, D.C.

FOR FURTHER INFORMATION CONTACT:

Douglas A. Crockett, Standards Division, Materials Transportation Bureau, Research and Special Programs Administration, 2100 Second Street SW., Washington, D.C. 20590, phone 202-426-2075.

SUPPLEMENTARY INFORMATION: On March 2, 1978, a notice of proposed rulemaking (HM-160; Notice 78-3) was published in the FEDERAL REGISTER (43 FR 8562) stating that the MTB was planning to exercise regulatory control over the transportation of asbestos. Specific regulatory requirements were proposed for the control of certain forms of asbestos (e.g., milled or crude asbestos fibers). No requirements were proposed for asbestos fibers which are immersed or fixed in a natural or artificial binder material, or for manufactured products containing asbestos. Interested persons were invited to participate in the rulemaking proceeding through submission of written comments on the proposal to the MTB. All submissions, including late submissions, that were received on the proposal were fully considered by the MTB in the development of this final rule.

NEED TO REGULATE THE TRANSPORTATION OF ASBESTOS

Several commenters felt that the MTB had failed to establish a need to regulate the transportation of asbestos. One of the commenters suggested that there was no need for the proposed regulatory control of asbestos in transportation because the "methods and procedures now in use for the packaging and transport of asbestos meet the requirements of Part 173. 24(A)(sic) of the Transportation Act, that is 'under conditions normally incident to transportation there will be no significant release of the hazardous materials to the environment' and 'the effectiveness of the packaging will not be substantially reduced * * * (t)he proposal contains no documentation to justify additional regulation." This commenter, while apparently believing that asbestos is a hazardous material, was incorrect in suggesting that asbestos is currently regulated by the MTB; or in suggesting that the purpose of Notice 78-3 was to justify the additional regulation by the MTB of asbestos in transportation. The transportation of asbestos is not now regulated by the MTB. It was precisely the purpose of Notice 78-3 that it should be. If, as the commenter suggests, the transportation of asbestos is now "in compliance with pertinent provisions of the Transportation Act," this rulemaking action will formalize and insure in a uniform and systematic manner that this is the case.

Another commenter stated that Notice 73-8 did "not establish a foundation for regulation, in that it does not document, or even allege for that matter, the actual release of fiber during the transportation of asbestos." As was pointed out in Notice 78-3, the MTB has "no detailed information on the amount of asbestos fibers released during transportation." The MTB does not now regulate asbestos, and has not therefore systematically collected accident data on the amounts of asbestos released in transportation or data on the frequency of such accidents. Most asbestos fiber, however, is currently shipped in bags, and it is undeniable that these bags can and do break, or can be and are being torn or punctured, with a consequent release of some or all of the bag contents. It can be speculated, moreover, that if all of the 750,000 tons of asbestos annually shipped in the United States were packaged in, as one commenter states, the "standard package" of a 100-pound bag; and if as little as one-tenth of one percent of these bags were damaged in transportation during the year (one out of a thousand) and if on the average 1 percent of the contents of the bags so damaged were released, the total amount of asbestos released per year would equal about 7.5 tons. These calculations give a general idea of the magnitude of asbestos fiber that would be released, given a 99.9 percent efficiency factor for "bag integrity" in transportation, and a 99.0 percent efficiency factor in minimizing the amount of asbestos released given a tear in the bag. The rather evident fact that asbestos has been accidentally released during transportation has not been contradicted by anything submitted to the public docket on this rulemaking action. One commenter, for example, in discussing the use of open-bed trailers with side racks and tarpaulins to transport asbestos stated that there is no evidence that the use of such trailers "has contributed to bag breakage and the release of airborne concentrations of asbestos fiber." The Asbestos Information Association, an incorporated nonprofit organization representing 51 firms in the United States and Canada engaged in the manufacture or processing of asbestos-containing products and the mining/milling of asbestos fibers, stated that with "the very large volume of asbestos shipped, occasional container damage may occur."

Although several commenters who discussed this matter do not contend that asbestos has not been released in transportation, they generally are of the view that the amounts that are being released are not significant or of a sufficient amount to pose an unreasonable risk to public health. The MTB does not agree; it believes that the amounts of asbestos fibers that are being released now, or would be released in the future, in the absence of these amendments, may pose an unreasonable risk to health.

Several commenters were concerned with the statement appearing in Notice 78-3 that "asbestos in its several commercial forms, poses serious health hazards to individuals subject to long term exposure to airborne asbestos concentrations." One commenter stated that "not all long-term exposures to airborne concentrations pose any health hazards * * *." Another commenter suggested that the statement needed "more explicit definition" and that "reference should have been made to unanswered questions within the scientific community concerning mineral type, fiber size and smoking in the asbestos-cancer relationship." One commenter stated that there is a dose-response relationship between exposure to asbestos and disease causation, and that this conclusion is supported by an OSHA statement from its June 7, 1972 preamble

to its standard for exposure to asbestos dust (37 FR 11318). The OSHA statement is that: "No one has disputed that exposure to asbestos of high enough *intensity and long enough* duration is causally related to asbestosis and cancers" (emphasis added). Although the MTB had also quoted this statement in Notice 78-3, the words underlined for emphasis had been inadvertently omitted. Under these circumstances, some commenters apparently felt that the MTB was asserting the view that because, according to some commenters, asbestos is ubiquitous, long term exposure to ambient levels of asbestos fibers poses serious health hazards to all people, without regard to their occupational or para-occupational status. It was not the intention of the MTB to assert this view. That there are or can be "undisputed grave consequences from exposure to asbestos" (37 FR 11318) does not depend on the questioned conclusiveness of the evidence reported by OSHA (40 FR 47652) regarding the potential health hazards posed by low-level, brief or intermittent exposure to asbestos. The MTB relies on the foregoing FEDERAL REGISTER references for the general view that exposure to asbestos may pose an unreasonable risk to the public.

SECTION 173.1090(a) AND (b)

Several commenters stated that there are certain mineral ores, ore concentrates and milled mineral products which may have trace amounts of asbestos, or minor amounts of asbestos occurring as contaminants. They suggested that these materials presented no risk to property and little, if any, risk to public health and safety in transportation. Moreover, since the packaging requirements proposed in Notice 78-3 applied to only certain kinds of asbestos, namely milled or crude asbestos fibers produced by an asbestos mill, they further suggested that only "commercial asbestos fibers" be defined as a hazardous material.

The MTB recognizes that there are certain mineral ores, ore concentrates and milled mineral products, as well as other products, that contain certain amounts of asbestos, and that the commercial value of these minerals or products is not dependent on their asbestos content. The specific requirements in these amendments for the control of asbestos fibers in transportation do not apply to such materials or products, nor do they apply to asbestos as a waste product[1] or as a contaminating trace element. The amendments apply only to asbestos *in its several commercial forms* since it is those forms of asbestos that have been firmly established as posing serious health hazards to individuals. A new paragraph has been added which would define commercial asbestos as any material or product containing asbestos that has commercial value because of its asbestos content, and appropriate modifications have been made in the amendments to reflect this clarification. This new paragraph is identified in this amendment as paragraph (b) (paragraphs (b) and (c) in the notice are now paragraphs (c) and (d), respectively).

One commenter recommended that the scope of Notice 78-3 be amended to include, in addition to asbestos fibers, "all mineral and man-made (fibers) which have been identified by U.S. Government agencies as being carcinogenic and which may pose serious health risk." On December 9, 1976, the MTB published an Advance Notice of Proposed Rulemaking (41 FR 53824) in Docket No. HM-145 entitled "Environmental and Health Effects Materials." In that Notice, the MTB announced that it was considering whether new or additional transportation controls are necessary for certain classes of materials which are not generally subject to the existing Hazardous Materials Regulations. The question of whether all mineral and man-made fibers, which have been identified by U.S. Government agencies as being carcinogenic and which pose an unreasonable risk to public health, should be controlled in transportation will be considered in terms of the further development and resolution of the issues associated with Docket HM-145. Notice 78-3 however, pointed out that a large number of comments were received in Docket HM-145, and that a considerable amount of staff evaluation of these comments was still required before it would be possible to issue a notice or notices of proposed rulemaking for environmental and health effects materials, either on a comprehensive or on a selective basis.

SECTION 173.1090(c)(1)

Several commenters objected to the reference made to metal or fiber drums to illustrate the rigid packaging alternative for asbestos fibers. These commenters stated that the asbestos industry has not developed the technology to use this type of packaging alternative; that available technology is not transferable to the use of metal or fiber drums; and that, among other things, the use of this alternative could generate far greater airborne concentrations of asbestos than packaging and shipping practices currently in effect. As one commenter pointed out:

> Commercial asbestos is fluffy. It is difficult to pack this material in a rigid container, and, because the fiber would gradually compact during shipment, it would be difficult to remove it for introduction into the manufacturing process. It would also be extremely cumbersome, if not impossible, to empty rigid containers effectively and rapidly into hoods designed for bags. Spillage would no doubt occur and workers would be unnecessarily exposed to fibers.

Another commenter recommended that a DOT Specification 56 portable tank be included in the amended rule as an acceptable package "for the transportation of asbestos-type products." This commenter stated that "with the use of equipment designed for the purpose, the D.O.T. 56 package can be readily filled or emptied without release of any product dust to the atmosphere or contact with the product by the operator." Another commenter insisted that only metal drums and not fiber drums were acceptable for the transportation of asbestos fibers. These commenters apparently lost sight of the fact that proposed § 173.1090(c)(1) does not "mandate," as one commenter suggested, or even encourage the use of rigid, airtight packaging such as metal or fiber drums or even portable tanks. It provides an alternative method of shipping commercial asbestos fibers. As was indicated in Notice 78-3, the MTB believes that its proposed non-specification packaging standards as applied to the transportation of commercial asbestos is an effective and efficient means of precluding potential problems associated with asbestos airborne emissions occurring during transportation; and that they are consistent with the standards of the EPA and the OSHA. Some of the commenters however were also apparently unaware that the transportation standards for the control of asbestos are designed to be comprehensive in nature such that, once the standards are promulgated, commercial asbestos cannot be packaged and transported in any matter not specified in the amendments. If under more advanced technology the use of rigid, airtight packaging would lessen the likelihood of airborne asbestos emissions associated with bag breakages under current industry wide non-uniform non-standardized packaging practices, then it is necessary that alternative transportation standards be available so as not to preclude the development and utilization of such technology. Although the public record on Notice 78-3 contains statements that the asbestos industry is seeking to improve the technology involved in the shipment and handling of commercial asbestos so as to minimize the possibility for the accidental release of such asbestos incident to

[1] Under Docket HM-145A (43 FR 27626, May 25, 1978), new standards and procedures were proposed for the transportation of hazardous waste materials. That proposal would include waste asbestos if so identified by EPA under Section 3001 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (Pub. L. 94-580).

transportation, it is by no means certain that the pace of such technological improvements is rapid enough or that the best, economically feasible technology is being considered. However, the classification of asbestos as an ORM-C will, for the first time, require the submission of incident reports to the MTB by carriers of any unintentional release of asbestos during transportation, and enable the MTB to monitor the safety performance record associated not only with the transportation alternatives available under current technology as provided for by these amendments, but also with any improvements in that technology.

For these reasons, the substance of proposed § 173.1090(c)(1) is being retained but modified to reflect an even broader range of permissible rigid, airtight packaging alternatives. This section now is identified in this amendment as § 173.1090(d)(1) because of the addition of new paragraph (b).

SECTION 173.1090(c)(2)

Proposed paragraph (c)(2) of Notice 78-3 covered the transportation alternative of shipping commercial asbestos in bags when in closed freight containers, motor vehicles, or rail cars that were loaded by the consignor and unloaded by the consignee. Several commenters noted that, unless reliance was placed on using the rigid, airtight packaging alternative provided in the proposal, this alternative would preclude the shipment of asbestos fibers by open-bed trailers. One commenter noted that there is "no evidence to indicate that the use of open-bed trailers with side racks and tarpaulins has contributed to bag breakage and the release of airborne concentrations of asbestos fiber." Another commenter noted that the type of bag permitted by proposed paragraph (c)(2) was not specified, and that the shipper could package asbestos in burlap bags, or very thin paper or polyethylene bags which could permit asbestos fibers to be easily released into the air during transit. Another commenter was concerned with "small volume users of asbestos and customers who, from time to time, require sample shipments for trial production runs of a few hundred pounds," and who under § 173.1090(c)(2) would be forced to acquire the exclusive use of a railcar or highway trailer, or rely on the alternative provided by § 173.1090(c)(1).

Given the lack of detailed data on the amount of asbestos fibers released in transportation and the circumstances and causes for such release, the MTB is in general agreement with the thrust of these comments; accordingly, a new paragraph (d)(2) recognizes less restrictive handling of bagged asbestos than was proposed.

SECTIONS 174.840, 175.640, 176.906, 177.844

In these Sections, Notice 78-3 had proposed that, incident to its transportation, asbestos must be loaded, handled, and any asbestos contamination removed, in a manner that will *prevent* occupational exposure to airborne asbestos particles (emphasis added).

Some commenters objected to the word "prevent," believing that this word was intended to mean completely precluding the possibility of an accident occurring in which asbestos fibers would be released; or completely isolating people involved in the transportation, loading and unloading of asbestos from exposure to asbestos fibers from whatever source such fibers were generated. One commenter pointed out that with "the very large volume of asbestos shipped, occasional container damage may occur." Another commenter pointed out, although in a somewhat contradictory fashion, that since "asbestos is ubiquitous," therefore "airborne levels of asbestos fibers can be present in any place of employment, regardless of whether or not asbestos or products containing known quantities of asbestos are handled" (emphasis added). The Asbestos Information Association in its comments stated that "asbestos is ubiquitous, and there are *no workplaces where there is zero occupational exposure to asbestos*" (original emphasis). If Notice 78-3 was not as clear as it might have been on this point, it is only necessary to say that the basic purpose of these amendments is to minimize the exposure to airborne asbestos particles accidentally released during or incident to transportation; and appropriate changes to Parts 174, 175, 176, and 177 have been made to reflect this purpose.

ORM-C CLASSIFICATION

Notice 78-3 proposed that the classification for "asbestos" would be as an ORM-C, (Other Regulated Material, Group C). Several commenters were uncertain and concerned about the marking requirements associated with ORM-C classifications. One commenter noted that the designation ORM-C would "carry no meaningful warning to the person handling or opening the package." Another noted that the present regulations of the Occupational Safety and Health Administration (OSHA) on labeling requirements for asbestos convey much more information than an ORM-C marking requirement. These commenters were apparently not completely familiar with the marking requirements associated with ORM-C designated materials. The ORM-C marking not only warns when a package contains hazardous material, but it is also a certification by the person *offering* the package for transportation that the material is properly described, classed, packaged, marked, and labeled (when appropriate) and in proper condition for transportation according to applicable regulations of the Department. Neither function precludes or preempts OSHA labeling requirements or creates "contradictory regulatory requirements for labeling" as one commenter suggested. For these reasons, no changes have been made with respect to any marking requirements for asbestos packages.

ECONOMIC/INFLATIONARY IMPACT

In reviewing the potential economic and inflationary impacts associated with the final rule, the MTB has determined that such impacts will be minimal. Based on the comments received, and the consequent modification of Notice 78-3, the only economic costs associated with final amendment pertain to the reporting requirements to be submitted to MTB on the accidental releases of commercial asbestos fibers during or incident to transportation. The absolute annual magnitude of these costs will be, of course, a function of the total number of incident reports that are submitted on accidental releases of asbestos fibers; but in view of the undisputed grave consequences from exposure to asbestos fibers, these reporting requirements will not impose an unnecessary burden on the economy, on individuals, or on public and private organizations.

In consideration of the foregoing, Title 49, Code of Federal Regulations, Parts 172, 173, 174, 175, 176, and 177 are amended as follows:

PART 172—HAZARDOUS MATERIALS TABLE AND HAZARDOUS MATERIALS COMMUNICATIONS REGULATIONS

1. In § 172.101 the Hazardous Materials Table is amended by adding a new entry, immediately following "Arsine," to read as follows:

[4910-60-C]

§ 172.101 Hazardous materials table.

(1)	(2)	(3)	(4)	(5)		Maximum net quantity in one package		(7)		
				Packaging				Water shipments		
*/ W/ A	Hazardous materials descriptions and proper shipping names	Hazard class	Labels(s) required (if not excepted)	(a) Exception	(b) Specific requirements	(a) Passenger carrying aircraft or railcar	(b) Cargo only aircraft	(a) Cargo vessel	(b) Passenger vessel	(c) Other requirement
✱	(Add)									
*	Asbestos	ORM-C	None	173.1090 (c)	173.1090 (d)	No Limit	No Limit	1, 2	1, 2	Stow and handle to avoid airborne particles.

PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

2. Section 173.1090 is added preceding Subpart N to read as follows:

§ 173.1090 Asbestos.

(a) Asbestos includes any of the following hydrated mineral silicates: chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, actinolite asbestos, and every product containing any of these minerals.

(b) Commercial asbestos is any material or product containing asbestos that has commercial value because of its asbestos content.

(c) Asbestos which is immersed or fixed in a natural or artificial binder material (such as cement, plastic, asphalt, resins or mineral ore) and manufactured products containing asbestos or any materials or products whose commercial value is not dependent on their asbestos content, are not subject to the requirements of this subchapter.

(d) Commercial asbestos must be offered for transportation and transported in—

(1) Rigid, airtight packagings such as metal or fiber drums, portable tanks, or

(2) Bags and other non-rigid packagings that are dust and sift proof. When transported by other than a private carrier by highway, bags and other non-rigid packagings containing asbestos must be palletized and unitized by methods such as shrink-wrapping in plastic film or wrapping in fiberboard secured by strapping.

PART 174—CARRIAGE BY RAIL

3. A Subpart M Heading is added immediately following § 174.812 to read as follows:

Subpart M—Detailed Requirements for Other Regulated Materials

4. Section 174.840 is added to read as follows:

§ 174.840 Special loading and handling requirements for asbestos.

Asbestos must be loaded, handled, and unloaded, and any asbestos contamination of rail cars removed, in a manner that will minimize occupational exposure to airborne asbestos particles released incident to transportation. (See § 173.1090 of this subchapter.)

PART 175—CARRIAGE BY AIRCRAFT

5. Section 175.640 is added to read as follows:

§ 175.640 Special requirements for other regulated materials.

Asbestos must be loaded, handled, and unloaded, and any asbestos contamination of aircraft removed, in a manner that will minimize occupational exposure to airborne asbestos particles released incident to transportation. (See § 173.1090 of this subchapter.)

PART 176—CARRIAGE BY VESSEL

6. Section 176.906 is added to read as follows:

§ 176.906 Stowage and handling of asbestos.

Asbestos must be stowed, handled, and unloaded, and any asbestos contamination of vessels removed, in a manner that will minimize occupational exposure to airborne asbestos particles released incident to transportation. (See § 173.1090 of this subchapter.)

PART 177—CARRIAGE BY PUBLIC HIGHWAY

7. Section 177.844 is added to read as follows:

§ 177.844 Other regulated materials.

Asbestos must be loaded, handled, and unloaded, and any asbestos contamination of transport vehicles removed, in a manner that will minimize occupational exposure to airborne asbestos particles released incident to transportation. (See § 173.1090 of this subchapter.)

(49 U.S.C. 1803, 1804, 1808; 49 CFR 1.53(e).)

NOTE.—The Materials Transportation Bureau has determined that these amendments do not require a regulatory analysis under the items of Executive Order 12044 and DOT implementing procedures (43 FR 9582). A regulatory evaluation is available for review in the docket.

Issued in Washington, D.C., on November 27, 1978.

L. D. SANTMAN,
Director, Materials Transportation Bureau.

[FR Doc. 78-33771 Filed 12-1-78; 8:45 am]

[4910-59-M]

CHAPTER V—NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Docket No. 78-17; Notice 1]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

New Pneumatic Tires—Passenger Cars

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Final rule.

SUMMARY: Pursuant to petitions by the Michelin Tire Corporation (Michelin) and by the Rubber Manufacturers Association (RMA), this notice amends Federal Motor Vehicle Safety Standard No. 109, *New Pneumatic Tires—Passenger Cars*, by adding four new tire size designations to Table I of Appendix A of the standard. The amendment permits the introduction into interstate commerce of the new tire sizes.

EFFECTIVE DATE: January 3, 1979, if objections are not received prior to that date.

ADDRESS: Comments should refer to the docket number and be submitted to Room 5108, Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT:

John Diehl, Office of Vehicle Safety Standards, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, D.C. 20590 (202-426-1714).

SUPPLEMENTARY INFORMATION: According to agency practice, the National Highway Traffic Safety Administration responds to petitions for adding new tire sizes to Table I of Appendix A of Standard No. 109 by quarterly issuing final rules under an abbreviated rulemaking procedure for expediting such routine amendments.

On July 13, 1978, Michelin petitioned for the addition of two new tire size designations requested to be located in a new table, I-QQ within Appendix A of Standard No. 109. On July 18, 1978, and August 3, 1978, the RMA petitioned for the addition of two new tire size designations to existing tables within Table I of Appendix A of the standard. The bases for accepting or denying requests to add new tire size designations are set forth in introductory guidelines to the appendix (October 5, 1968, 33 FR 14964, as amended May 4, 1971, 36 FR 8298; July 22, 1971, 36 FR 13601; and August 13, 1974, 39 FR 28980). The four new tire size designations requested to be added to