[T.D. 72-163]

PART 10—ARTICLES CONDITIONALLY FREE, SUBJECT TO A REDUCED RATE, ETC.

Free Withdrawal of Supplies and Equipment for Aircraft

In accordance with section 309(d), Tariff Act of 1930, as amended (19 U.S.C. 1309(d)), the Department of Commerce has found and under date of April 25, 1972, has advised the Treasury Department that Poland allows privileges to aircraft registered in the United States and engaged in foreign trade substantially reciprocal to those provided for in sections 309 and 317 of the Tariff Act of 1930, as amended (19 U.S.C. 1309, 1317). The same privileges are therefore hereby extended to aircraft registered in Poland and engaged in foreign trade effective as of the date of such notification.

Accordingly, paragraph (f) of § 10.59, customs regulations, is amended by the insertion of Poland in appropriate alphabetical order and the number of this Treasury decision in the opposite column headed "Treasury Decision(s)" in the list of nations in that paragraph.

(Secs. 309, 317, 624, 46 Stat. 690, as amended, 696, as amended, 759; 19 U.S.C. 1309, 1317, 1624)

[SEAL] EDWIN F. RAINS,
Acting Commissioner of Customs.

Approved: May 23, 1972.

EUGENE T. ROSSIDES,
Assistant Secretary of the Treasury.

[FR Doc.72-8678 Filed 6-6-72;8:50 am]

Title 29—LABOR

Chapter XVII—Occupational Safety and Health Administration, Department of Labor

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS

Standard for Exposure to Asbestos Dust

On December 7, 1971, an emergency temporary standard concerning exposure to asbestos fibers was published in the FEDERAL REGISTER (36 F.R. 23207). In accordance with section [redacted] hams-Steiger Occup[redacted] Health Act of 1970, [redacted] rulemaking regar[redacted] standard for expo[redacted] was published in the [redacted] January 12, 1972 ([redacted] tice invited interes[redacted] both orally and in w[redacted] data, views, and arguments concerning the proposal.

On or about January 24, 1972, the Advisory Committee on Asbestos Dust was established and requested to make written recommendations with regard to the proposed standard on asbestos. On or about February 1, 1972, the Department of Health, Education, and Welfare transmitted to the Secretary of Labor a criteria document containing Recommendations for an Occupational Exposure Standard for Asbestos by the National Institute for Occupational Safety and Health (NIOSH). Public notice was given of the receipt of the recommendations and their availability for inspection and copying. On or about February 25, 1972, the Advisory Committee on Asbestos Dust submitted its written recommendations to the Assistant Secretary of Labor for Occupational Safety and Health.

Pursuant to the notice of rule making, a hearing was held on March 14 through 17, 1972, for the purpose of receiving oral data, views, and arguments concerning the proposed standard. On or about March 31, 1972, the presiding hearing examiner certified to the Assistant Secretary of Labor for Occupational Safety and Health the record of the proceeding. The record includes prehearing written comments, a transcript of the oral presentations made at the hearing, and numerous exhibits received during the course of the hearing or within the period allowed after the close of the hearing.

The proposed standard dealt with (1) permissible concentrations of asbestos fibers; (2) methods of compliance; (3) warning signs; (4) monitoring; (5) medical examinations; and (6) recordkeeping. Each of these major proposals elicited comments, arguments, objections, and counterproposals. They all have been examined and considered.

1. *Acceptable concentrations of asbestos dust.* The proposed standard would limit occupational exposure to 8-hour time-weighted average (TWA) airborne concentrations of asbestos dust not exceeding five fibers longer than five micrometers per milliliter. Concentrations above five fibers but not to exceed 10 fibers (ceiling concentration) would be permitted up to 15 minutes in an hour, but for not more than 5 hours in any one 8-hour day.

NIOSH in effect has recommended that the five-fiber TWA and 10-fiber peak concentrations be permitted only for 2 years; thereafter, TWA concentrations should be not more than 2 fibers per cubic centimeter (cm.³) of air, and peak concentrations should not exceed 10 fibers/cm.³, with no time restriction. Numerous objections and counterproposals have been made, with regard to both the limits of asbestos fiber concentrations and the time periods to comply with them. Some, for example, have recommended return to a 12-fiber standard of an earlier day; i.e., a level adopted under the Walsh-Healey Public Contracts Act in 1939. Others have recommended a two-fiber standard to become effective in 6 months, then a one-fiber standard for 2 years, and finally a zero-fiber standard after 3 years. These recommendations give a fair indication of the wide spread of the counterproposals.

No one has disputed that exposure to asbestos of high enough intensity and long enough duration is causally related to asbestosis and cancers. The dispute is as to the determination of a specific level below which exposure is safe. Various studies attempting to establish quantitative relations between specific levels of exposure to asbestos fibers and the appearance of adverse biological manifestations, such as asbestosis, lung cancers, and mesothelioma, have given rise to controversy as to the validity of the measuring techniques used and the reliability of the relations attempted to be established. Because of the long lapse of time between onset of exposure and biological manifestations, we have now evidence of the consequences of exposure, but we do not have, in general, accurate measures of the levels of exposure occurring 20 or 30 years ago, which have given rise to these consequences. There are also controversies concerning the relative toxicity of the various kinds of asbestos, and varying hazards in different workplaces.

It is fair to say that the controversy has centered in the area between a two-fiber TWA concentration and five-fiber TWA concentration, with variations on the time needed for compliance. Many employers support a five-fiber TWA. Most medical opinion is divided between a two-fiber standard and a five-fiber standard.

In view of the undisputed grave consequences from exposure to asbestos fibers, it is essential that the exposure be regulated now, on the basis of the best evidence available now, even though it may not be as good as scientifically desirable. An asbestos standard can be re-evaluated in the light of the results of ongoing studies, and future studies, but cannot wait for them. Lives of employees are at stake.

It is concluded that there should be one minimum standard of exposure to asbestos applicable to all workplaces exposed to any kind, or mixture of kinds, of asbestos. Reasons of practical administration preclude a variety of standards for different kinds of asbestos and of workplaces. Also, while the evidence tends to show that crocidolite, for instance, is more harmful than chrysotile, the evidence is not sufficient to establish separate standards for varieties of asbestos.

Because there must be one standard governing exposure to all varieties of asbestos, and in workplaces apparently more hazardous than others; because some present employees with regular exposure to asbestos have probably already accumulated great doses of asbestos fibers, due to higher levels of exposure in the past; because it appears that levels of exposure which may be safe with regard to asbestosis are not safe with regard to mesothelioma; because the statute requires the protection of every employee, even of one who may have regular exposure to asbestos during a working life which may reach, or even exceed, 40 years; and because of several other considerations which have been urged and are reflected in the record of the proceeding, the conflict in the medical evidence is resolved in favor of the health of employees. As of July 1, 1976, TWA concentrations of asbestos fibers longer than 5 micrometers will not be allowed to exceed two fibers/cc., with a ceiling value of 10 fibers/cc. The current TWA concentrations of five fibers, and

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ceiling concentrations of 10 fibers/cc. will be permitted until July 1, 1976, during what will be a transitional period deemed necessary to allow employers to make the needed changes for coming into compliance with the more stringent standard.

The record shows that the many work operations subject to the single asbestos standard (textile, manufacturing, industrial, and marine installation, etc.) will meet varying degrees of difficulty in complying with the standard. In some plants, extensive redesign and relocation of equipment may be needed. It appears, however, the delay in the effective date of the two-fiber standard will provide all employers a reasonable time to comply. At the same time, so long as the ceiling limit is complied with, no harm is reasonably expected to result from exposures during the transitional period.

2. *Methods of compliance.* It has been pointed out by many persons, that protection against asbestos fibers is best obtained by controlling the generation of fibers first, and secondly, by controlling the dispersion of released fibers into the ambient air of the workplaces. Therefore, the standard requires feasible technological controls and appropriate work practices as the primary means of compliance. Rotation of employees as a way of meeting the TWA concentration requirement is allowed only in stated exceptional circumstances, because, as a general rule, it would be difficult to implement. Personal protective equipment, such as respirators, cannot be relied upon because, among other reasons, they may be so uncomfortable as to be burdensome, except for short periods of time. Therefore, it is expected that respirators and shift rotation will be used during the period necessary to install engineering controls and to train employees in sound work practices, but, after technological compliance has been achieved, their use must be limited to special work situations and emergencies. Where both are practicable, shift rotation is required.

3. *Labeling.* The proposed standard stopped short of requiring labeling asbestos and asbestos-containing products. The proposed standard would have required only warning signs at locations where asbestos hazards are present. However, labeling, rather than warning signs, has proved [redacted] troversy. Both [redacted] the Advisory Committee on [redacted] Dust recommended labels [redacted] products and containers, and [redacted] recommendations became very com[redacted] in the course of the proceeding [redacted] many counterproposals have been made as to the language of the warning as well as to the products to be subject to the labeling requirements. Employers, in general, strongly contend that (1) finished products which effectively entrap asbestos fibers, so that these would not be released in the normal use of the products, should not be required to be labeled; and (2) words such as "danger" and "cancer" are unwarrantedly alarming.

Both contentions have merit, and the standard has been changed accordingly.

4. *Monitoring.* The proposed standard would have required personal monitoring and environmental monitoring. Many issues have been raised concerning the availability and reliability of measuring instruments, frequency of monitoring, and conditions in which monitoring should be required. The adopted standard takes the objections into consideration. It requires periodic monitoring at intervals no longer than 6 months, thus allowing considerable time and discretion, and prescribes the use of the membrane filter method, which is an acceptable method for determination of asbestos fibers.

It has also been recommended that employees or their representatives should have an opportunity to observe the monitoring. The recommendation has been accepted.

5. *Medical examinations.* The proposed standard would only require an appropriate medical examination on a periodic basis. The generality of the proposal has attracted many objections and also many helpful comments. The recommendations of NIOSH and of the Advisory Committee on Asbestos Dust were much more specific with respect to both frequency and type of medical examinations to be required. The comments vary as to the class of employees to be examined and as to the frequency of the examinations.

The adopted standard requires medical examinations both at the beginning and the termination of employments exposed to concentrations of asbestos fibers, and also requires annual medical examinations of every employee exposed to airborne concentrations of asbestos. It has been pointed out that in certain industries, such as construction, an employee may work for several employers during the same year. Accordingly, the standard does not require either preemployment, or termination, or periodic examinaton of any employee who has been examined in accordance with the standard within the past year.

One question which has been raised goes to whether the employer or the employee should be allowed to choose the examining physician. The standard gives the option to the employer. Since some employers already have a medical examination program in operation, and, also, have medical departments with some expertise in the diagnosis of asbestos-related diseases, it seems more reasonable to permit them to utilize the present programs and expertise, than to permit an employee to choose a private general practitioner.

6. *Records.* The standard, as proposed and as adopted, requires maintenance of records of monitoring and of medical examinations. Most of the controversy in this area has revolved around the question whether an employer should be allowed to have access to the results of the required medical examinations. The apprehension of those who have argued against employer access is based on the expectation that some employers will use the medical examinations as a means of screening employment applicants, and worse, as grounds for discharging current employees, who show signs of being affected by exposure to asbestos. Since the purpose of the medical examinations is to monitor the health of employees exposed to the hazards of abestos, employees cannot in reason be granted the privilege of refusing to disclose to their employers results of occupational exposure. It does not make sense to require employers to provide medical examinations if they cannot know and use the results of the examinations. For these reasons the standard provides that employers may have a restricted access to some medical information.

On the other hand, there is no intention to allow employers to abuse medical information obtained pursuant to the Act, to the detriment of employees. Therefore, the administration of the medical records requirement will be closely watched, and, in cases of abuse, appropriate action will be considered.

The issues discussed above are believed to be the major ones. Numerous other issues have been raised in the rulemaking proceedings. Some have been referred to incidentally. Many recommendations, for instance, about work practices, are so obviously meritorious that their adoption needs no exposition here. Other recommendations and many objections have not been adopted for a variety of reasons which should be manifest. Several, for instance, have recommended the use of respirators only pursuant to a variance, or in cases of emergency and occasional short-term exposures. The recommendation with respect to variances undoubtedly has many merits, but is considered administratively impractical.

Accordingly, after consideration of the whole record of the proceeding, and pursuant to sections 6 (b) and (c) and 8(g) of the Williams-Steiger Occupational Safety and Health Act of 1970 (84 Stat. 1593, 1596, 1599; 29 U.S.C. 655, 657), 29 CFR 1910.4, and to Secretary of Labor's Order No. 12-71 (36 F.R. 8754), Part 1910 of Title 29 of the Code of Federal Regulations is amended as set forth below.

(1) Section 1910.93 is amended by revising Table G-3 to read as follows:

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§ 1910.93 Air contaminants.

* * * * *

TABLE G-3—MINERAL DUSTS

Substance	Mppcf[1]	Mg/M3
Silica:		
Crystalline:		
Quartz (respirable)	250[2] / %SiO2+5	10 mg/M3 [*] / %SiO2+2
Quartz (total dust)		30 mg/M3 / %SiO2+2
Cristobalite: Use ½ the value calculated from the count or mass formulae for quartz.		
Tridymite: Use ½ the value calculated from the formulae for quartz.		
Amorphous, including natural diatomaceous earth	20	80 mg/M3 / %SiO2
Silicates (less than 1% crystalline silica):		
Mica	20	
Soapstone	20	
Talc	20	
Portland cement	50	
Graphite (natural)	15	
Coal dust (respirable fraction less than 5% SiO2)		2.4 mg/M3 or
For more than 5% SiO2		10 mg/M3 / %SiO2+2
Inert or Nuisance Dust:		
Respirable fraction	15	5 mg/M3
Total dust	50	15 mg/M3

NOTE: Conversion factors—
mppcf×35.3=million particles per cubic meter
=particles per c.c.

[1] Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.

[2] The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.

[3] As determined by the membrane filter method at 430 X phase contrast magnification.

[*] Both concentration and percent quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics:

Aerodynamic diameter (unit density sphere)	Percent passing selector
2	90
2.5	75
3.5	50
5.0	25
10	0

The measurements under this note refer to the use of an AEC instrument. If the respirable fraction of coal dust is determined with a MRE the figure corresponding to that of 2.4 Mg/M3 in the table for coal dust is 4.5 Mg/M3.

2. A new § 1910.93a is added to Part 1910, reading as follows:

§ 1910.93a Asbestos.

(a) *Definitions.* For the purpose of this section, (1) "Asbestos" includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, and [redacted]

(2) "Asbestos [redacted] fibers longer than 5 [redacted]

(b) *Permissible* [redacted] *concentrations of* [redacted] *Standard effective* [redacted] The 8-hour time-weigh[redacted] concentrations of [redacted] which any employee [redacted] shall not exceed five fibers, longer than 5 micrometers, per cubic centimeter of air, as determined by the method prescribed in paragraph (e) of this section.

(2) *Standard effective July 1, 1976.* The 8-hour time-weighted average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed two fibers, longer than 5 micrometers, per cubic centimeter of air, as determined by the method prescribed in paragraph (e) of this section.

(3) *Ceiling concentration.* No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of 10 fibers, longer than 5 micrometers, per cubic centimeter of air, as determined by the method prescribed in paragraph (e) of this section.

(c) *Methods of compliance*—(1) *Engineering methods.* (i) *Engineering controls.* Engineering controls, such as, but not limited to, isolation, enclosure, exhaust ventilation, and dust collection, shall be used to meet the exposure limits prescribed in paragraph (b) of this section.

(ii) *Local exhaust ventilation.* (a) Local exhaust ventilation and dust collection systems shall be designed, constructed, installed, and maintained in accordance with the American National Standard Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI Z9.2–1971, which is incorporated by reference herein.

(b) See § 1910.6 concerning the availability of ANSI Z9.2–1971, and the maintenance of a historic file in connection therewith. The address of the American National Standards Institute is given in § 1910.100.

(iii) *Particular tools.* All hand-operated and power-operated tools which may produce or release asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section, such as, but not limited to, saws, scorers, abrasive wheels, and drills, shall be provided with local exhaust ventilation systems in accordance with subdivision (ii) of this subparagraph.

(2) *Work practices*—(i) *Wet methods.* Insofar as practicable, asbestos shall be handled, mixed, applied, removed, cut, scored, or otherwise worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the exposure limits prescribed in paragraph (b) of this section, unless the usefulness of the product would be diminished thereby.

(ii) *Particular products and operations.* No asbestos cement, mortar, coating, grout, plaster, or similar material containing asbestos shall be removed from bags, cartons, or other containers in which they are shipped, without being either wetted, or enclosed, or ventilated so as to prevent effectively the release of airborne asbestos fibers in excess of the limits prescribed in paragraph (b) of this section.

(iii) *Spraying, demolition, or removal.* Employees engaged in the spraying of asbestos, the removal, or demolition of pipes, structures, or equipment covered or insulated with asbestos, and in the removal or demolition of asbestos insulation or coverings shall be provided with respiratory equipment in accordance with paragraph (d)(2)(iii) of this section and with special clothing in accordance with paragraph (d)(3) of this section.

(d) *Personal protective equipment*—(1) Compliance with the exposure limits prescribed by paragraph (b) of this section may not be achieved by the use of respirators or shift rotation of employees, except:

(i) During the time period necessary to install the engineering controls and to institute the work practices required by paragraph (c) of this section;

(ii) In work situations in which the methods prescribed in paragraph (c) of this section are either technically not feasible or feasible to an extent insufficient to reduce the airborne concentrations of asbestos fibers below the limits prescribed by paragraph (b) of this section; or

(iii) In emergencies.

(iv) Where both respirators and personnel rotation are allowed by subdivisions (i), (ii), or (iii) of this subparagraph, and both are practicable, personnel rotation shall be preferred and used.

(2) Where a respirator is permitted by subparagraph (1) of this paragraph, it shall be selected from among those approved by the Bureau of Mines, Department of the Interior, or the National Institute for Occupational Safety and Health, Department of Health, Education, and Welfare, under the provisions of 30 CFR Part 11 (37 F.R. 6244, Mar. 25, 1972), and shall be used in accordance with subdivisions (i), (ii), (iii), and (iv) of this subparagraph.

(i) *Air purifying respirators.* A reusable or single use air purifying respirator, or a respirator described in subdivision (ii) or (iii) of this subparagraph, shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average airborne concentrations of asbestos fibers are reasonably expected to exceed no more than 10 times those limits.

(ii) *Powered air purifying respirators.* A full facepiece powered air purifying respirator, or a powered air purifying respirator, or a respirator described in subdivision (iii) of this subparagraph, shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average concentrations of asbestos fibers are reasonably expected to exceed 10 times, but not 100 times, those limits.

(iii) *Type "C" supplied-air respirators, continuous flow or pressure-demand class.* A type "C" continuous flow or pressure-demand, supplied-air respirator shall be used to reduce the concentrations of airborne asbestos fibers in the respirator below the exposure limits prescribed in paragraph (b) of this section, when the ceiling or the 8-hour time-weighted average airborne concentrations of asbestos fibers are reasonably expected to exceed 100 times those limits.

(iv) *Establishment of a respirator program.* (a) The employer shall establish a respirator program in accordance with the requirements of the American National Standards Practices for Respiratory Protection, ANSI Z88.2–1969, which is incorporated by reference herein.

b. See § 1910.6 concerning the availability of ANSI Z88.2–1969 and the maintenance of an historic file in connection therewith. The address of the American National Standards Institute is given in § 1910.100.

(c) No employee shall be assigned to tasks requiring the use of respirators if, based upon his most recent examination, an examining physician determines that the employee will be unable to function normally wearing a respirator, or that the safety or health of the employee or other employees will be impaired by his use of a respirator. Such employee shall be rotated to another job or given the opportunity to transfer to a different position whose duties he is able to perform with the same employer, in the same geographical area and with the same seniority, status, and rate of pay he had just prior to such transfer, if such a different position is available.

(3) Special clothing: The employer shall provide, and require the use of, special clothing, such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos fibers, which exceed the ceiling level prescribed in paragraph (b) of this section.

(4) Change rooms: (i) At any fixed place of employment exposed to airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section, the employer shall provide change rooms for employees working regularly at the place.

(ii) Clothes lockers: The employer shall provide two separate lockers or containers for each employee, so separated or isolated as to prevent contamination of the employee's street clothes from his work clothes.

(iii) Laundering: (a) Laundering of asbestos contaminated clothing shall be done so as to prevent the release of airborne asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section.

(b) Any employer who gives asbestos-contaminated clothing to another person for laundering shall inform such person of the requirement in (a) of this subdivision to affect[redacted] the release of airborne [redacted] of the exposure [redacted] paragraph (b) of [redacted]

(c) Cont[redacted] shall be transported i[redacted] permeable bags, or other clos[redacted] containers, and labeled i[redacted] with paragraph (g) of this section.

(e) *Method of measurement.* All determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method at 400–450 × (magnification) (4 millimeter objective) with phase contrast illumination.

(f) *Monitoring*—(1) *Initial determinations.* Within 6 months of the publication of this section, every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine whether every employee's exposure to asbestos fibers is below the limits prescribed in paragraph (b) of this section. If the limits are exceeded, the employer shall immediately undertake a compliance program in accordance with paragraph (c) of this section.

(2) *Personal monitoring*—(i) Samples shall be collected from within the breathing zone of the employees, on membrane filters of 0.8 micrometer porosity mounted in an open-face filter holder. Samples shall be taken for the determination of the 8-hour time-weighted average airborne concentrations and of the ceiling concentrations of asbestos fibers.

(ii) Sampling frequency and patterns. After the initial determinations required by subparagraph (1) of this paragraph, samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of employees. In no case shall the sampling be done at intervals greater than 6 months for employees whose exposure to asbestos may reasonably be foreseen to exceed the limits prescribed by paragraph (b) of this section.

(3) *Environmental monitoring*—(i) samples shall be collected from areas of a work environment which are representative of the airborne concentrations of asbestos fibers which may reach the breathing zone of employees. Samples shall be collected on a membrane filter of 0.8 micrometer porosity mounted in an open-face filter holder. Samples shall be taken for the determination of the 8-hour time-weighted average airborne concentrations and of the ceiling concentrations of asbestos fibers.

(ii) *Sampling frequency and patterns.* After the initial determinations required by subparagraph (1) of this paragraph, samples shall be of such frequency and pattern as to represent with reasonable accuracy the levels of exposure of the employees. In no case shall sampling be at intervals greater than 6 months for employees whose exposures to asbestos may reasonably be foreseen to exceed the exposure limits prescribed in paragraph (b) of this section.

(4) *Employee observation of monitoring.* Affected employees, or their representatives, shall be given a reasonable opportunity to observe any monitoring required by this paragraph and shall have access to the records thereof.

(g) *Caution signs and labels.* (1) *Caution signs.* (i) *Posting.* Caution signs shall be provided and displayed at each location where airborne concentrations of asbestos fibers may be in excess of the exposure limits prescribed in paragraph (b) of this section. Signs shall be posted at such a distance from such a location so that an employee may read the signs and take necessary protective steps before entering the area marked by the signs. Signs shall be posted at all approaches to areas containing excessive concentrations of airborne asbestos fibers.

(ii) *Sign specifications.* The warning signs required by subdivision (i) of this subparagraph shall conform to the requirements of 20" x 14" vertical format signs specified in § 1910.145(d)(4), and to this subdivision. The signs shall display the following legend in the lower panel, with letter sizes and styles of a visibility at least equal to that specified in this subdivision.

Legend	Notation
Asbestos	1" Sans Serif, Gothic or Block.
Dust Hazard	¾" Sans Serif, Gothic or Block.
Avoid Breathing Dust	¼" Gothic.
Wear Assigned Protective Equipment.	¼" Gothic.
Do Not Remain In Area Unless Your Work Requires It.	¼" Gothic.
Breathing Asbestos Dust May Be Hazardous To Your Health.	14 point Gothic.

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

(2) *Caution labels*—(i) *Labeling.* Caution labels shall be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers, except that no label is required where asbestos fibers have been modified by a bonding agent, coating, binder, or other material so that during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section will be released.

(ii) *Label specifications.* The caution labels required by subdivision (i) of this subparagraph shall be printed in letters of sufficient size and contrast as to be readily visible and legible. The label shall state:

CAUTION

Contains Asbestos Fibers

Avoid Creating Dust

Breathing Asbestos Dust May Cause Serious Bodily Harm

(h) *Housekeeping*—(1) *Cleaning.* All external surfaces in any place of employment shall be maintained free of accumulations of asbestos fibers if, with their dispersion, there would be an excessive concentration.

(2) *Waste disposal.* Asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing, consigned for disposal, which may produce in any reasonably foreseeable use, handling, storage, processing, disposal, or transportation airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in paragraph (b) of this section shall be collected and disposed of in sealed impermeable bags, or other closed, impermeable containers.

(i) *Recordkeeping*—(1) *Exposure records.* Every employer shall maintain records of any personal or environmental monitoring required by this section. Records shall be maintained for a period of at least 3 years and shall be made available upon request to the Assistant Secretary of Labor for Occupational Safety and Health, the Director of the National

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Institute for Occupational Safety and Health, and to authorized representatives of either.

(2) *Employee access.* Every employee and former employee shall have reasonable access to any record required to be maintained by subparagraph (1) of this paragraph, which indicates the employee's own exposure to asbestos fibers.

(3) *Employee notification.* Any employee found to have been exposed at any time to airborne concentrations of asbestos fibers in excess of the limits prescribed in paragraph (b) of this section shall be notified in writing of the exposure as soon as practicable but not later than 5 days of the finding. The employee shall also be timely notified of the corrective action being taken.

(j) *Medical examinations*—(1) *General.* The employer shall provide or make available at his cost, medical examinations relative to exposure to asbestos required by this paragraph.

(2) *Preplacement.* The employer shall provide or make available to each of his employees, within 30 calendar days following his first employment in an occupation exposed to airborne concentrations of asbestos fibers, a comprehensive medical examination, which shall include, as a minimum, a chest roentgenogram (posterior-anterior 14 x 17 inches), a history to elicit symptomatology of respiratory disease, and pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at 1 second ($FEV_{1.0}$).

(3) *Annual examinations.* On or before January 31, 1973, and at least annually thereafter, every employer shall provide, or make available, comprehensive medical examinations to each of his employees engaged in occupations exposed to airborne concentrations of asbestos fibers. Such annual examination shall include, as a minimum, a chest roentgenogram (posterior-anterior 14 x 17 inches), a history to elicit symptomatology of respiratory disease, and pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at 1 second ($FEV_{1.0}$).

(4) *Termination of employment.* The employer shall provide, or make available, within 30 calendar days before or after the termination of employment of any employee engaged in an occupation exposed to airborne concentrations of asbestos fibers, a comprehensive medical examination which shall [illegible] minimum, a chest roent[illegible] (posterior-anterior 14 x 17 [illegible] to elicit symptomatolo[illegible] disease, and pulmo[illegible] tests to include forced vital[illegible] (FVC) and forced expiratory v[illegible] ($FEV_{1.0}$).

(5) *Recent examinations.* No medical examination is required of any employee, if adequate records show that the employee has been examined in accordance with this paragraph within the past 1-year period.

(6) *Medical records*—(i) *Maintenance.* Employers of employees examined pursuant to this paragraph shall cause to be maintained complete and accurate records of all such medical examinations. Records shall be retained by employers for at least 20 years.

(ii) *Access.* The contents of the records of the medical examinations required by this paragraph shall be made available, for inspection and copying, to the Assistant Secretary of Labor for Occupational Safety and Health, the Director of NIOSH, to authorized physicians and medical consultants of either of them, and, upon the request of an employee or former employee, to his physician. Any physician who conducts a medical examination required by this paragraph shall furnish to the employer of the examined employee all the information specifically required by this paragraph, and any other medical information related to occupational exposure to asbestos fibers.

3. A new § 1910.19 is added to Subpart B of Part 1910, reading as follows:

§ 1910.19 Asbestos dust.

Section 1910.93a shall apply to the exposure of every employee to asbestos dust in every employment and place of employment covered by § 1910.12, § 1910.13, § 1910.14, § 1910.15, or § 1910.16, in lieu of any different standard on exposure to asbestos dust which would otherwise be applicable by virtue of any of those sections.

Effective date. Paragraph (b)(2) of § 1910.93a shall become effective July 1, 1976. All other provisions of §§ 1910.93a, 1910.93, and 1910.19 shall become effective July 7, 1972. The current emergency temporary standard remains in effect until July 7, 1972.

(Secs. 6, 8, 84 Stat. 1593, 1599; 29 U.S.C. 655, 657; 29 CFR 1910.4; Secretary of Labor's Order No. 12-71, 36 F.R. 8754)

Signed at Washington, D.C., this 2d day of June 1972.

G. C. Guenther,
Assistant Secretary of Labor.

[FR Doc.72-8874 Filed 6-6-72;8:48 am]

Title 41—PUBLIC CONTRACTS AND PROPERTY MANAGEMENT

Chapter 9—Atomic Energy Commission

PART 9-1—GENERAL

Subpart 9-1.1—Procurement Regulations

MISCELLANEOUS AMENDMENTS

The changes made in AECPR Subpart 9-1.1, Procurement Regulations, have been made in order to establish the AECPR Temporary Regulations, which are a part of the AEC Procurement Regulations and the Federal Procurement Regulations System. The AECPR Temporary Regulations implement and supplement the FPR Temporary Regulations. They also contain policies and procedures initiated by the AEC which are to be effective for a period of 6 months or less. The AEC Procurement Instruction section has been revised accordingly. Minor editorial changes have also been made.

1. Section 9-1.101 *Scope of subpart*, is revised to read as follows:

§ 9-1.101 Scope of subpart.

This subpart describes the Atomic Energy Commission Procurement Regulations and the AECPR Temporary Regulations. It also describes exclusions from the AECPR as contained in the AEC Procurement Instructions.

2. Section 9-1.102 *Establishment of AEC Procurement Regulations*, is revised to read as follows:

§ 9-1.102 Establishment of the AEC Procurement Regulations and the AECPR Temporary Regulations.

§ 9-1.102-1 AEC Procurement Regulations.

(a) The AEC Procurement Regulations (AECPR) are hereby established.

(b) These regulations implement and supplement the Federal Procurement Regulations (FPR) and are a part of the Federal Procurement Regulations System.

(c) The effective date of FPR issuances throughout AEC will be the date indicated in the respective issuances unless otherwise provided in the AEC Procurement Regulations.

(d) The effective date of AECPR issuances throughout AEC will be the date indicated in the respective issuances.

§ 9-1.102-2 AECPR Temporary Regulations.

(a) The AECPR Temporary Regulations are hereby established.

(b) These regulations implement and supplement the Federal Procurement Regulations Temporary Regulations. They also contain policies and procedures initiated by the AEC which are expected to be effective for a period of 6 months or less.

(c) The effective date of the FPR Temporary Regulations issuances throughout AEC will be the date indicated in the respective issuances unless otherwise provided in the AECPR Temporary Regulations.

(d) The effective date of the AECPR Temporary Regulations issuances throughout AEC will be the date indicated in the respective issuances.

(e) The AECPR Temporary Regulations are a part of the AEC Procurement Regulations and the Federal Procurement Regulations System. All references to the AEC Procurement Regulations or AECPR in §§ 9-1.103 through 9-1.1[illegible] of this subpart shall be deemed to include the AECPR temporary regulations.

3. Section 9-1.103 *Authority*, is revised to read as follows:

§ 9-1.103 Authority.

The AEC Procurement Regulations are prescribed by the General Manager, Assistant General Manager for Administration, or the Director, Division of Contracts of the AEC, pursuant to the authority of the Atomic Energy Act of 1954, and the Federal Property and Administrative Services Act of 1949.

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4. Section 9-1.108 Exclusions. is revised to read as follows:

§ 9-1.108 Exclusions.

Certain policies and procedures which come within the scope of this chapter nevertheless may be excluded from AEC PR. These exclusions are contained in the AEC Procurement Instructions (AEC PI) and include the following categories:

(a) Classified subject matter.

(b) Subject matter which is "Official Use Only" or is of a purely internal nature.

(c) Instructional material that explains more fully and in discursive fashion matters covered in FPR's and AECPR's.

(Sec. 161, Atomic Energy Act of 1954, as amended, 68 Stat. 948, 42 U.S.C. 2201; sec. 205, Federal Property and Administrative Services Act of 1949, as amended, 63 Stat. 390, 40 U.S.C. 486.)

Effective date. These amendments are effective upon publication in the FEDERAL REGISTER (6-7-72).

Dated at Germantown, Md., this 31st day of May 1972.

For the U.S. Atomic Energy Commission.

JOSEPH L. SMITH,
Director, Division of Contracts.

[FR Doc.72-8666 Filed 6-6-72;8:49 am]

Chapter 101—Federal Property Management Regulations

SUBCHAPTER D—PUBLIC BUILDINGS AND SPACE

CONSIDERATION OF SOCIOECONOMIC IMPACT WHEN SELECTING LOCATIONS FOR FEDERAL BUILDINGS

A proposal was published in the FEDERAL REGISTER, November 2, 1971, 36 F.R. 21050 to amend 41 CFR 101-17—Construction and Alteration of Public Building, 41 CFR 101-18—Acquisition of Real Property, and 41 CFR 101-20—Assignment and Utilization of Space, to establish agency policy for applying socioeconomic considerations to selecting locations for Federal buildings. The regulations have been revised as set forth below and are effective upon publication in the FEDERAL REGISTER.

Comments were received from the Department of Agriculture, the Department of Health, [redacted] ments, as well as [redacted] received by GSA, were referred to that Department for appropriate action. The HUD procedures were developed and are also published.

There were a number of comments to the effect that GSA should not be permitted to select a site which HUD has reported inadequate with respect to the accessibility of the location to low and moderate income housing on a nondiscriminatory basis. This criticism must be rejected, since by statute and Executive order, GSA has the authority and responsibility for making final location determinations with respect to the construction of Federal buildings and the acquisition of leased space, and must take into account factors other than those which are the subject of the Memorandum of Understanding.

Comments were received recommending that transportation considerations be included, and these considerations are now contained in the HUD and GSA procedures.

Several of the comments suggested that the procedures provide for more assurance that an Affirmative Action Plan will be carried out. The provisions relating to the Affirmative Action Plan have been revised to provide that all agreements that constitute the Plan will be signed not only by the appropriate representatives of HUD, GSA, and the Federal agency involved, but also by community bodies and agencies and other interests whose cooperation and/or participation will be necessary to fulfill the requirements of the Plan.

Several other comments criticized the regulations for failing to require that there be nondiscrimination in the sale and rental of housing in addition to the requirement for an adequate supply of low and moderate income housing on a nondiscriminatory basis. Such requirement is now contained in the regulations and procedures.

There were many comments indicating the need for more detailed working procedures; these comments were made before the GSA and HUD proposed procedures had been published for comment. The new regulations and HUD and GSA procedures now published in this issue of the FEDERAL REGISTER provide for this additional detail.

This amendment provides for: (1) Inclusion of new legislative and Executive order citations to the authorities being implemented in Parts 101-17, 101-18, and 101-20; (2) revision of the policy statements in §§ 101-17.102, 101-18.102, and 101-20.002 to include considerations required by the cited Acts and orders in the planning for new public buildings, in the acquisition of space by lease, and in the assignment and utilization of space; (3) implementation of these policies in providing buildings and space for Federal agencies in accordance with existing authority in a manner designed to exert a positive economic and social influence on the development or redevelopment of the areas in which such facilities will be located; and (4) minor editorial corrections.

PART 101-17—CONSTRUCTION AND ALTERATION OF PUBLIC BUILDINGS

The table of contents for Part 101-17 is amended by adding the following new entries:

Sec.
101-17.104 Application of socioeconomic considerations.
101-17.104-1 Location of buildings.
101-17.104-2 Agreement with Secretary of Housing and Urban Development.
101-17.104-3 Consultation with HUD.
101-17.104-4 Affirmative action plan.
101-17.104-5 Agency compliance.

Subparts 101-17.2—101-17.47 [Reserved]

Subpart 101-17.48—Exhibits

101-17.4800 Scope of subpart.
101-17.4801 Memorandum of Understanding between the Department of Housing and Urban Development and the General Services Administration concerning low and moderate income housing.

Section 101-17.001 is revised to read as follows:

§ 101-17.001 Authority.

This Part 101-17 implements the applicable provisions of the Federal Property and Administrative Services Act of 1949, 63 Stat. 377, as amended; the Public Buildings Act of 1959 (40 U.S.C. 601-615); Public Law 90-480, approved August 12, 1968, 82 Stat. 718 (42 U.S.C. 4151-4156); the Clean Air Act (42 U.S.C. 1857-1858); the Federal Water Pollution Control Act (33 U.S.C. 1151-1175); the Intergovernmental Cooperation Act of 1968 (42 U.S.C. 4201-4244; 40 U.S.C. 531-535); the Agricultural Act of 1970, 84 Stat. 1358; Executive Order 11507 of February 4, 1970 (35 F.R. 2573); Executive Order 11508 of February 10, 1970 (35 F.R. 2855); Executive Order 11512 of February 27, 1970 (35 F.R. 3979); and title VIII of the Civil Rights Act of 1968 (42 U.S.C. 3601).

Subpart 101-17.1—General

1. Section 101-17.102 is revised to read as follows:

§ 101-17.102 Basic policy.

(a) In the process of developing building projects, the following policies will be observed:

(1) Material consideration will be given to the efficient performance of the missions and programs of the executive agencies and the nature and function of the facilities involved with due regard for the convenience of the public served and the maintenance and improvement of safe and healthful working conditions for employees;

(2) Consideration will be given in the delineation of areas and the selection of sites for the development of Federal facilities to the need for development and redevelopment of areas and the development of new communities and the impact a selection will have on improving social and economic conditions in the area. In determining these conditions, the Administrator of General Services will consult with and receive advice from the Secretary of Housing and Urban Development, the Secretary of Health, Education, and Welfare, the Secretary of Commerce, and others, as appropriate;

(3) Maximum use will be made of existing Government-owned permanent

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buildings which are adequate or economically adaptable to the space needs of executive agencies;

(4) Suitable privately owned space will be acquired only when satisfactory Government-owned space is not available and only at rental charges which are consistent with prevailing rates in the community for comparable facilities;

(5) Space planning and assignments will take into account the objective of consolidating agencies and constituent parts thereof in common or adjacent space for the purpose of improving management and administration;

(6) Availability of low and moderate income housing for employees without discrimination because of race, color, religion, or national origin; nondiscrimination in the sale and rental of housing; adequate access from other areas of the urban center; and adequacy of parking will be considered; and

(7) Proposed developments will be, to the greatest extent practicable, consistent with State, regional, and local plans and programs; and Governors, local elected officials, and regional comprehensive planning agencies will be consulted in the planning of such developments.

(b) In accordance with the provisions of section 901(b) of the Agricultural Act of 1970 (84 Stat. 1338), insofar as practicable, new offices and other facilities will be located in areas or communities of low population density in preference to areas or communities of high population density, due consideration being given to the provisions of section 7(a) of the Public Buildings Act of 1959 (40 U.S.C. 606(a)), and Executive Order 11512 of February 27, 1970 (35 F.R. 3979).

(c) GSA will plan the construction and alteration of Federal facilities at a rate that will reduce the total amount of rental space, provide for Federal operations to be housed in Government-owned space, and replace Government-owned facilities becoming obsolete with modern functional structures that meet present-day requirements for efficient and economical operation.

(d) GSA will provide technical services and guidance to other Federal agencies in the formulation and development of their programs for construction and alteration of special facilities.

(e) Excess properties transferred to GSA will be renovated and altered whenever practical to meet Government space needs.

(f) In selecting [redacted] ings, consideration [redacted]

(1) Maximum utili[redacted] ment-owned land (inc[redacted]) whenever it is adeq[redacted] adaptable to requirem[redacted] located, where such use is consistent with the provisions of Executive Order 11508 of February 10, 1970, and Subpart 101-47.8;

(2) A site adjacent to or in the proximity of an existing Federal building which is well located and is to be retained for long-term occupancy; and

(3) Suitable sites in established civic or redevelopment centers which are well planned and properly financed with development initiated and insured.

(g) The design of new buildings shall provide requisite and adequate facilities in an architectural style and form which is distinguished and reflects the dignity, enterprise, vigor, and stability of the U.S. Government. Major emphasis shall be placed on designs that embody the finest contemporary American architectural thought. Specific attention shall be paid to the possibilities of incorporating into such designs qualities which reflect the regional architectural traditions of the part of the Nation in which the buildings will be located.

(h) In the alteration of existing buildings, GSA will maintain architectural integrity and compatibility with existing structures.

(i) In the design of new public buildings, and to the extent feasible in the alteration of existing public buildings, GSA will (1) insure that such buildings and attendant facilities will be accessible to and usable by the physically handicapped (42 U.S.C. 4151-4156) and (2) utilize, to the maximum extent, modern methods and techniques for the control of air and water pollution (Clean Air Act 42 U.S.C. 1857-1858; Federal Water Pollution Control Act, 33 U.S.C. 1151-1175).

(j) In the siting and locating of buildings on selected sites, GSA representatives will work directly with local officials in seeking to conform as closely as possible to local zoning regulations.

(k) In the design of new public buildings and alterations to public buildings, locally approved and/or nationally recognized building and performance codes, standards, and specifications will be followed as minimum requirements.

(l) Parking for Government-owned, visitors', and employees' vehicles will be provided in the planning of public buildings with due regard to the needs of the Federal agencies to be housed in each building, local zoning and parking regulations, availability of public transportation, and availability of planned and existing public and privately owned parking facilities in the locality.

(m) Fine arts, as appropriate, will be incorporated in the design of selected new public buildings. Fine arts, including painting, sculpture, and artistic work in other mediums, will reflect the national cultural heritage and emphasize

2. Section 101-17.104 is added as follows:

§ 101-17.104 Application of socioeconomic considerations.

The purpose of this section is to provide an effective systematic arrangement to insure the availability of low and moderate income housing for Federal employees without discrimination because of race, color, religion, or national origin and to influence the improvement in social and economic conditions in the area of Federal buildings.

§ 101-17.104-1 Location of buildings.

(a) GSA, in all its determinations with respect to the location of federally constructed buildings and the acquisition of leased buildings, will consider to the maximum possible extent the availability of low and moderate income housing for employees without discrimination because of race, color, religion, or national origin and will affirmatively further the purposes of title VIII of the Civil Rights Act of 1968.

(b) Final decisions of the Administrator of General Services will be based on the determination that such decisions will improve the management and administration of governmental activities and services and will foster the programs and policies of the Federal Government.

§ 101-17.104-2 Agreement with Secretary of Housing and Urban Development.

(a) The Administrator of General Services has entered into an agreement with the Secretary of Housing and Urban Development to utilize the Department of Housing and Urban Development (HUD) to investigate, determine, and report to GSA findings on the availability of low and moderate income housing on a nondiscriminatory basis with respect to proposed locations for a federally constructed building or major lease action having a significant socioeconomic impact on a community.

(b) HUD shall advise GSA and other Federal agencies with respect to actions which would increase the availability of low and moderate income housing on a nondiscriminatory basis, after a site has been selected for a federally constructed building or a lease executed for space and shall assist in increasing the availability of such housing through its own programs.

(c) The text of the HUD-GSA agreement is located at § 101-17.4801.

§ 101-17.104-3 Consultation with HUD.

(a) In the initial selection of a city or delineation of a general area for location of public buildings or leased buildings, GSA will provide the earliest possible notice to HUD of information with respect to such decisions. Regional offices of HUD, as identified by the Secretary of Housing and Urban Development, and local planning and housing authorities will be consulted concerning the present and planned availability of low and moderate income housing on a non discriminatory basis in the area where the project is to be located during the project development investigation.

(b) Regional office representatives of HUD, as designated by the Secretary of Housing and Urban Development, will participate in site investigations for the purpose of providing a report to GSA on the availability of low and moderate income housing on a nondiscriminatory basis in the area of the investigation.

(c) The HUD Regional Administrator will transmit to the Regional Director, PBS, his evaluation of the sites being considered. In any case in which a proposed site is deemed inadequate on one or more grounds; i.e., supply of low and moderate income housing on a nondiscriminatory basis, nondiscrimination in the sale and rental of housing on the basis of race, color, religion, or national origin, or

INTEROFFICE CORRESPONDENCE
Corporation

JUN 8 1972

June 8, 1972

Mr. J. G. Hall cc See Attached List

Paul I. Weiner

OSHA STANDARD FOR EXPOSURE TO ASBESTOS DUST

I have just received, by messenger, the above final Regulation and am pleased to report, based upon a preliminary review, that said Standard has been significantly modified from its original form. It seems the Secretary of Labor has truly listened to GAF and the Building Products Industry. The Regulation and decision is attached for detailed review and is briefly outlined as follows:

Fiber Limit. Five fibers per c. c. will remain in effect until July 1, 1976. Thereafter, the two fiber Standard will take effect.

Warning Label. No warning label is required on all products that contain locked-in or bound asbestos. This would include all major GAF asbestos products, except for possibly millboard and raw asbestos. The label on all non locked-in products reads as follows:

CAUTION
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
BREATHING ASBESTOS DUST MAY CAUSE
SERIOUS BODILY HARM

[illegible] Warning signs posted at the plant will only be requ[illegible] in which air borne asbestos is above the prescrib[illegible]

Special Clothing. Work clothing shall be provided for all employees who work in areas where asbestos is above the limit. Wherever clothing is required, separate lockers and change rooms are necessary.

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Monitoring. Within six months, the work place shall be monitored and thereafter at least at six month intervals. An employee found to be exposed to asbestos above the limit, shall be notified in writing within five (5) days after the finding, and the corrective measures being taken.

Medical Examinations. The employer is required to provide medical examinations to employees in asbestos exposure areas within thirty (30) days of hire, termination and by January 31, 1973 and annually thereafter.

Medical Records. Employers shall maintain medical records and provide access to authorized physicians, the Department of Labor and HEW.

Respirators. Suitable respirators are listed for work areas in which asbestos dust is from ten (10) to over one hundred (100) times the limit. If an employee cannot wear a respirator due to poor health, he shall be rotated to a different job

Effective Date. July 7, 1972 (except two (2) fiber limit).

In conclusion, we have made a substantial impact on these regulations through prepared testimony and other contacts with the Labor Department and Congress, especially in the areas of labeling, work practices, waste, work clothing, record keeping, and warning signs. It is interesting to note that our recommendations in our testimony relating to the foregoing subjects, are similar to the final Regulations.

As to the two (2) fiber limit, it seems the Secretary of Labor was convinced of its need due to the possible relationship of asbestos to certain types of cancer such as Mesothelioma. However, the four (4) year period was a[illegible]dition because of the extreme pressure placed upon the De[illegible]ing the last few weeks. I would recommend, however, a re[illegible] the cost and engineering feasibility of meeting this Stand[illegible] (4) years.

I have been requested by the S[illegible] office [illegible] to pass any interpretation and drafting problems we might have [illegible] the Regulations. Under OSHA rules, they can make [illegible] changes for clarification purposes. I shall be reviewing the Regulations [illegible] and if there are any comments or questions do not hesitate to [illegible] me.

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