



THE DOW CHEMICAL COMPANY

MIDLAND, MICHIGAN 48574

August 29, 1989

I. M. Arnold, Sarnia
F. D. Axe, Pittsburg
D. Bosatra, Horgen
J. A. Castledine, Altona
S. G. Cole, Plaquemine
R. Cordellini, Brazil
J. Dawson, Greenville
R. D. Egedahl, Sarnia
G. Fonseca, Brazil
J. M. Lanham, 1803 Building

J. E. LeBeau, 1803 Building
W. E. Ledford, Plaquemine
G. L. Meier, Strongsville
S. K. Norwood, 1803 Building
J. W. Oldner, 2020 WHDC
L. W. Rampy, 1803 Building
~~██████████, 1803 Building~~
A. W. Schaffer, 1803 Building
K. C. Wong, Fort Saskatchewan
I. H. Staff, 1803 Building

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UPDATE OF OCCUPATIONAL HEALTH PLANT PROGRAM REVIEW, TEXAS OPERATIONS

Tracy Parsons at Texas Operations has furnished me the attached copy of the updated "Occupational Health Plant Program Review" document used in Texas Operations. This document is used in Texas Operations as part of the consolidated plant audit program. All functions that perform plant audits, including the technology centers, do their auditing during a designated week; about every two years under this approach. The occupational health plant program is a part of this review process and the updated format has attempted to make the responsibilities and presentation formats more consistent. The attached document is being reviewed and compared with the safety and environmental plant program reviews to eliminate duplication.

The Occupational Health Plant Program Review document may be useful as you look at opportunities to enhance the review program in your locations.

G. W. Engdahl
Industrial Hygiene
1803 Building
(517) 636-3205

dlg

Attachment

OCCUPATIONAL HEALTH

PLANT PROGRAM REVIEW

TEXAS OPERATIONS

DOW CHEMICAL USA

DRAFT

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PLANT _____

BUILDING _____

PLANNED REVIEW DATE _____

OCCUPATIONAL HEALTH AUDIT TEAM:

INDUSTRIAL HYGIENE SUPERVISOR _____

INDUSTRIAL HYGIENIST _____

SUPERINTENDENT _____

IH PLANT CONTACT _____

SAFETY DIRECTOR _____

PHYSICIAN _____

OEH NURSE _____

TECH CENTER _____

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INTRODUCTION

Your active participation in this plant program evaluation is vitally necessary. The objective of the review is to assure that employee health is being adequately protected in your plant/area. This review will focus on the efforts by your facility to anticipate, recognize, evaluate and control occupational health hazards. This will be accomplished by evaluating all areas which are affected or impacted by occupational health considerations, Texas Operations programs and safety standards, and government regulations.

FORMAT

There are three phases for the plant program evaluation.

1. Preparation and Questionnaire Distribution

The plant Industrial Hygiene contact and the Industrial Hygienist are responsible for reviewing the plant and Industrial Hygiene original data files and completing the attached questionnaire. The questionnaire is a worksheet to prepare for the audit and does not need to be used at the time of the audit except as reference material. The completed questionnaire should be reviewed with the Plant Superintendent.

The completed questionnaire should be mailed approximately 7 working days in advance to the Occupational Health Audit Team:

Industrial Hygienist Supervisor (chairperson),
Superintendent,
Area Safety Director,
Industrial Hygienist,
Industrial Hygiene Contact,
Physician,
Nurse,
Tech Center, and
Any other plant personnel involved with the audit.

The questionnaire is used to identify program strengths and weaknesses for phase 2 of the review.

2. Formal Program Review

At the time of the formal audit (usually the Wednesday of AuditFest), the plant Industrial Hygiene Contact and Industrial Hygienist will present a synopsis of the strengths and weaknesses from each program area e.g. respiratory protection, hazard communication, etc. The length and detail of each presentation should be based on the particular subject but generally should be no longer than 10 minutes.

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2. Formal Program Review (Cont'd)

The plant industrial hygiene contact and the Industrial Hygienist are expected to lead the formal review of the program. The Agenda is presented in the following pages. At the end of each main section of the questionnaire is an example of the pertinent points to be considered for the formal presentation to the audit team.

A walk-through of the facility will also be conducted. During the walk-through, several questions regarding the Industrial Hygiene program may be asked of plant personnel. Typical questions are presented in Appendix A of this document. The walk-through team will review all areas of the plant related to occupational health concerns. The following areas should be reviewed as part of the walk-through:

- IH Manual location
- employee bulletin boards
- control room
- lunch room
- laboratory
- process areas
 - plant labeling
 - unloading/loading stations
 - drumming stations
 - bagging/boxing stations
 - process sample points
 - noise areas greater than 90 dBA
 - radioactive sources
 - OSHA regulated areas
 - other potential exposure locations or job tasks
- shop/maintenance areas
 - welding areas
 - solvent handling
- protective equipment
 - employee change rooms
 - protective equipment storage areas
 - protective equipment decontamination areas
 - respirator storage areas
 - respirator cleaning stations
 - breathing air sources (bottles or compressors)

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3. Documentation Follow-Up

Within seven working days after completion of the review, the Industrial Hygienist will summarize the evaluation findings in a letter report to the Plant Superintendent. Recommendations for program improvements will be included in the report.

Within one month after receipt of the summary report, the Plant Superintendent should send an implementation plan to the Industrial Hygienist. The plan should address the recommendations identified in the summary report. Long term implementation activities (i.e. greater than six months to complete) will be included in the Industrial Hygiene Protocol where appropriate.

It is the Plant Superintendent's responsibility to ensure that all recommendations are completed.

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negative-pressure enclosure. Subsequently, in a different case Judge Barkley came to precisely the opposite conclusion. Reviewing the express terms of the standard, the standard's purpose, and the Secretary's "graduated response" strategy, Judge Barkley concluded that the Secretary must prove that it is at least reasonable to expect overexposures. Under the facts of that case, he found that the Secretary had proven that overexposures were reasonable to expect. Expert Environmental Control, Inc. ("EEC"), 14 BNA OSHC 1666 (No. 88-1956, May 10, 1990). The Commission should endorse Judge Barkley's resolution of the issue.

By its own terms, the construction industry standard for asbestos limits the application of the negative-pressure enclosure requirement, paragraph (e)(6)(i), to those asbestos removal, demolition, and renovation operations for which airborne concentrations exceed or can reasonably be expected to exceed the PEL. Paragraph (b) defines "regulated area" to include a negative-pressure enclosure and states that a regulated area, whether of a traditional nature or a negative-pressure enclosure, is an area established "to demarcate areas where airborne concentrations of asbestos . . . exceed or can reasonably be expected to exceed the [PEL]". Similarly, paragraph (e)(1), entitled "General", repeats that limitation on the scope of the "regulated area" requirement.

If the Secretary believes that the negative-pressure enclosure requirement should say something it does not now say,

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she should amend the standard through rulemaking. She has just proposed to do exactly that. The Commission should not interfere in this belated effort to effect a policy change through the appropriate mechanism, rulemaking, rather than through interpretation in an enforcement proceeding.

The Secretary's interpretation in this case is not entitled to deference. It is the Commission's interpretation, not that of the Secretary, to which deference is due. Even if the Secretary's interpretation of OSHA regulations were generally entitled to deference, however, deference is not appropriate in this case. Here the Secretary's interpretation is inconsistent with the text of the standard and with prior authoritative interpretations. It would require use of a negative-pressure enclosure even in the absence of significant risk. The interpretation is unsupported by reasoning, and it was not thoroughly considered.

Construing the negative-pressure enclosure requirement in accordance with the language of the standard would be consistent with the purpose of the requirement, to protect employees from overexposure to asbestos. It is perfectly consistent with that purpose to limit the application of the requirement to situations where overexposure is at least reasonably likely.

ARGUMENT

- I. The Standard Expressly Limits the Negative-Pressure Enclosure Requirement to Situations in Which Airborne Concentrations Above the PEL Are at Least Reasonably Likely.

A. Overview of the Negative-Pressure Enclosure Requirement

Like employers, the Secretary is bound by the terms of the asbestos standard for construction as it is written. Those terms are unambiguous, because in two separate places they limit the negative-pressure enclosure requirement to situations in which it is at least reasonably likely that airborne concentrations above the PEL will occur.

In his decision, Judge Salyers deferred to the Secretary's interpretation as reasonable without rigorously considering whether in fact it is reasonable. The Judge noted the employer's arguments based upon the language of the standard, but relied upon the Secretary's quotations from the preamble and the compliance directive. In sharp contrast, Judge Barkley scrutinized the text of the standard, quoting key provisions at length. Then he stated:

I find that the requirement of a negative-pressure enclosure is not applicable until the Secretary establishes evidence of actual overexposure, or that overexposure can reasonably be expected from the cited activity.

EEC, slip op. at 7.

In another case involving the appropriate interpretation of a regulated area provision, the Commission has stated the criteria to be applied in resolving questions of regulatory construction:

In construing the standard, we are mindful of several principles. We must look first to the language of the standard. See Bunge Corp., 86 OSAHRC __/__, 12 BNA OSHC 1785, 1789, 1986 CCH OSHD ¶27,565 p. 35,804 (No. 77-1622, 1986), and cases cited. Second, although legislative history and other extrinsic aids to interpretation may be

used to determine the intent of the drafter, standards should be construed in a way that does not deprive employers of fair notice of the requirements of the law. See id., 12 BNA OSHC at 1790-91, 1986 CCH OSHD at p. 35,806, and cases cited. See also Usery v. Kennecott Copper Corp., 577 F.2d 1113, 1119 [6 OSHC 1197, 1200] (10th Cir. 1977); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161-62 [6 OSHC 1440, 1443-44] (3d Cir. 1978); Diamond Roofing Co. v. OSHRC, 528 F.2d 645, 650 [4 OSHC 1001, 1005] (5th Cir. 1976); Lisbon Contractors, Inc., 84 OSAHRC 19/A2, 11 BNA OSHC 1971, 1973-74, 1984 CCH OSHD ¶26,924, p. 34,500 (No. 80-97, 1984).

CF&I Steel Corp., 12 BNA OSHC 2067, 2073 (No. 79-4786, 1986), affirmed sub nom. Dole v. OSHRC (CF&I Steel Corp.), 891 F.2d 1495, 14 BNA OSHC 1388 (10th Cir. 1989), petition for cert. granted, 58 U.S.L.W. 3811 (U.S. June 25, 1990). Both criteria must be applied to resolving this issue, as Judge Barkley found. EEC, slip op. at 9-10.

As amended in 1988, the construction industry asbestos standard establishes two permissible exposure limits: an 8-hour time-weighted average ("TWA") of 0.2 fibers per cubic centimeter of air ("f/cc"), and an excursion limit of 1 f/cc averaged over 30 minutes. 29 C.F.R. § 1926.58(c). The action level is 0.1 f/cc (8-hour TWA). Id. § 1926.58(b). Another provision requires establishment of regulated areas "where airborne concentrations of asbestos . . . exceed or can reasonably be expected to exceed the TWA and/or excursion limit prescribed by paragraph (c) of this section." Id. § 1926.58(e)(1). A species of regulated area, the negative-pressure enclosure requirement appears in paragraph (e)(6)(i). It has no counterpart in the general industry standard for asbestos, 29 C.F.R. § 1910.1001.

Paragraph (e)(6)(i) provides:

Wherever feasible, the employer shall establish negative-pressure enclosures before commencing removal, demolition, and renovation operations.

A negative-pressure enclosure is essentially a large bag built over an asbestos abatement work area. It is typically constructed of 6-mil polyethylene plastic sheet, sealing tape, air locks, and negative-pressure systems. See 29 C.F.R.

§ 1926.58, Appendix F. OSHA provides the following explanation:

The negative pressure enclosures contemplated by the 1986 standard are area enclosures in which abatement and renovation employees work. The enclosures are required to be placed under negative pressure (a partial vacuum) so that asbestos fibers remain inside even if a leak develops in the enclosure shell. OSHA believes that negative pressure enclosures reduce employee risk primarily by reducing leakage and containing the asbestos material being disturbed. Thus areas outside the work area are not contaminated and bystander employees are protected from exposure.

54 Fed. Reg. 52024, 52026 (Dec. 20, 1989). Where the negative-pressure enclosure requirement is triggered, employers must also meet special requirements for supervision by a competent person, paragraph (e)(6)(ii); monitoring, paragraph (f)(3); protective clothing, paragraph (i)(4); and use of hygiene facilities and practices, paragraph (j)(2). There is an exemption from the negative-pressure enclosure requirement for small-scale, short-duration operations. 29 C.F.R.

§ 1926.58(e)(6)(iv) and Appendix G.

OSHA has proposed to amend the negative-pressure enclosure requirement to impose an explicit provision that the requirement is triggered not by the actual or reasonably likely

exposure level, but by the nature of the work involved. The proposal would also cut the 8-hour TWA PEL in half, from 0.2 f/cc to 0.1 f/cc. 55 Fed. Reg. 29712 (July 20, 1990).

B. The Text of the Standard

It is undisputed that a negative-pressure enclosure is a kind of regulated area. The negative-pressure enclosure requirement appears in paragraph (e), captioned "Regulated areas". Paragraph (b) defines the term "regulated area" as follows:

"Regulated area" means an area established by the employer to demarcate areas where airborne concentrations of asbestos, tremolite, anthophyllite, actinolite, or a combination of these minerals exceed or can reasonably be expected to exceed the permissible exposure limit. The regulated area may take the form of (1) a temporary enclosure, as required by paragraph (e)(6) of this section, or (2) an area demarcated in any manner that minimizes the number of employees exposed to asbestos, tremolite, anthophyllite, or actinolite.

(Emphasis added.) Thus, this definition explicitly couples the negative-pressure enclosure requirement to actual excursions beyond the PELs or the reasonable likelihood of such excursions.

Further confirmation of this coupling appears in paragraph (e)(1), captioned "General". It provides:

The employer shall establish a regulated area in work areas where airborne concentrations of asbestos, tremolite, anthophyllite, actinolite, or a combination of these minerals exceed or can reasonably be expected to exceed the permissible exposure limit prescribed in paragraph (c) of this section.

(Emphasis added.) Since paragraph (b) classifies a negative-pressure enclosure as a regulated area, and since the requirement for negative-pressure enclosures appears in

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paragraph (e), captioned "Regulated areas", the negative-pressure enclosure requirement is subject to the provisions of this "general" limitation on the requirement to establish regulated areas.

Where, as here, the language of a standard or statute is clear, that language controls, and no resort may be had to legislative or regulatory history or agency interpretations to construe the requirement contrary to its plain meaning. See, e.g., UAW v General Dynamics Land Systems Div., 815 F.2d 1570, 1575, 13 BNA OSHC 1201, 1205 (D.C. Cir.), cert. denied, 484 U.S. 976 (1987); Honeywell Inc. v. United States, 661 F.2d 182, 186 (Ct. Cl. 1981) ("legislative history is, in any event, unnecessary when the language and purpose of the regulation is plain"). In his opinion below, Judge Salyers did not carefully consider the language of the provisions set forth above. He quoted a portion of the definition of "regulated area", but made no comment on it, and he made no reference to paragraph (e)(1). AACC, slip op. at 7. In contrast, Judge Barkley quoted the complete text of the paragraph (b) definition, paragraph (e)(1), and paragraph (e)(6)(i). He then concluded:

It seems clear to this Judge the standard requires a regulated area only if there is a showing of actual overexposure or that overexposure can be reasonably expected. The requirement of a regulated area is not triggered simply by engaging in asbestos removal. To read the standard as the Secretary suggests would require an employer to construct a negative-pressure area any time he was engaged in asbestos removal without consideration to whether there was a reasonable expectation of a hazard. I find this interpretation to be inconsistent with the language of the standard. If the employer is to be required to establish a negative-pressure area with the

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attendant requirements of respirators, hygiene facilities, employee training and medical surveillance, there must be at a minimum a reasonable expectation of overexposure.

EEC, slip op. at 8-9.

C. Employers Have a Right to Have the Standard Enforced as It Is Written.

To depart from the terms of the standard as written, as the Secretary advocates, would be to deprive employers of notice of the conduct required of them. With penal sanctions imposed for violations of the standard, this would be an intolerable situation.

Employers could reasonably determine that airborne concentrations would not be reasonably likely to exceed the PEL during particular removal, demolition, or renovation operations. In the preamble to the construction industry asbestos standard, OSHA found that in many instances employers may use glove bags, wet methods, and other techniques to keep airborne concentrations of asbestos below the action level. 51 Fed. Reg. 22612, 22706 (June 20, 1986). It even predicted that:

most employers engaged in maintenance and renovation projects in environments that do not lend themselves to the construction of negative-pressure enclosures will elect to use glove bags, wet methods, and other control measures to ensure that their employees' exposures to asbestos remain below the standard's action level.

Id. at 22711. In its recent notice of proposed rulemaking on the negative-pressure enclosure requirement, OSHA published estimates of current exposure levels during various asbestos removal, demolition, and renovation operations which showed none of them more than 50% of the current PEL. Most were one

or two orders of magnitude lower than the PEL. 55 Fed. Reg. 29712, 29735 (July 20, 1990). Indeed, the facts of this case, where monitored levels were two orders of magnitude below the PEL, show that in some operations it is reasonable to conclude that exposures are not reasonably likely to exceed the PEL. AACC, slip op. at 7. Thus, employers engaged in removal, demolition, or renovation operations who use these methods so as to eliminate any reasonable likelihood of airborne concentrations above the PELs may rely on the language of the standard to conclude that the negative-pressure enclosure requirement does not apply. Under OSHA's interpretation, however, they would be in violation of the standard, notwithstanding that reliance.

Such a situation deprives employers of their due process rights to notice. As Judge Barkley wrote:

While this may not be the result the Secretary intended, it is well settled that "regulations cannot be construed to mean what an agency intended but did not adequately express." L.R. Wilkinson & Sons, Inc. v. Donovan, 685 F.2d 664, 675 (D.C. Cir. 1982). To hold otherwise would be to deny the employer fair warning of the conduct required. Diamond Roofing v. Occupational Safety and Health Review Commission, 528 F.2d 645 @ 649 (5th Cir. 1976).

EEC, slip op. at 9-10. Dravo Corp. v. OSHRC, 613 F.2d 1227, 1231-32, 7 BNA OSHC 2089, 2092 (3d Cir. 1980) ("Because we deal with a penal sanction, we begin with a recognition that the coverage of an agency regulation should be no broader than what is encompassed within its terms."); Usery v. Kennecott Copper Corp., 577 F.2d 1113, 1119, 6 BNA OSHC 1197, 1200 (10th Cir. 1977) (an employer is "not required to assume the burden of

guessing what the Secretary intended plain and unambiguous words employed in the safety regulation to mean. This is especially true when violation of a regulation subjects one to criminal or civil sanctions. A regulation cannot be construed to mean what an agency intended but did not adequately express."); Brennan v. OSHRC (Ron M. Fiegen, Inc.), 513 F.2d 713, 716, 3 BNA OSHC 1001, 1003 (8th Cir. 1975) ("Where, as here, the interpretation derives little support from the language of the regulation, it would be fundamentally unfair to impose on the employer civil penalties for its violation. To do so would subject him to liability without warning that his conduct is prohibited."); Brennan v. OSHRC (Pearl Steel Erection Co.), 488 F.2d 337, 339, 1 BNA OSHC 1429, 1430 (5th Cir. 1973) ("The fault lies in the wording of the regulation.").

The Secretary may argue that OSHA regulations are to be liberally construed in order to effectuate better the remedial purpose of the Occupational Safety and Health Act of 1970 ("Act"). But that remedial purpose "does not give the Commission license to ignore the standard's plain meaning." Lisbon Contractors, Inc., 11 BNA OSHC 1971, 1973 (No. 80-97, 1984). See Marshall v. Anaconda Co., 596 F.2d 370, 377 n.6, 7 BNA OSHC 1382, 1387 n.6 (9th Cir. 1979) ("Nor can mere citation to OSHA's remedial purpose . . . substitute for analysis of the problem at hand.").

If in fact the asbestos standard does not say what OSHA intended it to say, then rather than attempt to amend it through interpretation, the Secretary should do so through

notice-and-comment rulemaking. See Fluor Constructors, Inc. v. OSHRC, 861 F.2d 936, 939, 13 BNA OSHC 1956, 1957 (D.C. Cir. 1988) ("An agency is bound by the regulations it promulgates and may not attempt to circumvent the amendment process through changes in interpretation unsupported by the language of the regulation."); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161-62, 6 BNA OSHC 1440, 1443 (3d Cir. 1978) ("The responsibility to promulgate clear and unambiguous standards is upon the Secretary. The test is not what he might possibly have intended, but what he said. If the language is faulty, the Secretary has the means and the obligation to amend.").

Ironically, OSHA has just proposed to amend paragraphs (e)(1) and (e)(6) of the construction industry asbestos standard to impose an explicit requirement to use negative-pressure enclosures in certain operations, regardless of the exposure levels. 55 Fed. Reg. 29712 (July 20, 1990). Although OSHA claims that the proposed amendments are simply "clarifying revisions", *id.* at 29715, it is clear that new requirements would be imposed. For example, whereas currently paragraph (e)(6) applies only to removal, demolition, and renovation operations, under the proposal the paragraph would also apply to maintenance activities. Inexplicably, OSHA does not propose to amend the definition of "regulated area" in paragraph (b) to delete the current linkage between negative-pressure enclosures and actual or reasonably likely airborne concentrations above the PEL.

Although years late, a rulemaking is particularly appropriate since OSHA has never previously published a proposed negative-pressure enclosure requirement for public comment. The proposed rule which preceded the construction industry asbestos standard did not even propose a separate standard for construction. Instead, it proposed only a general industry standard similar to the then-existing standard but for the PEL and a few other provisions, and solicited comments on the advisability of a separate construction industry standard and what provisions such a standard should have. 49 Fed. Reg. 14116 (Apr. 10, 1984). Thus, to date OSHA has never had the benefit of public comment on the appropriate scope of a negative-pressure enclosure requirement.

At a time when OSHA is engaged in rulemaking to revise the negative-pressure enclosure requirement to read as it argues here that it should be read, it would be wholly inappropriate for the Commission, in effect, to declare that action unnecessary because employers can be required to divine OSHA's current intent from the contrary words of the existing standard.

II. The Secretary's Interpretation Is Not Entitled to Deference.

Judge Salyers ruled as he did below because of the deference that he believed was required to be accorded to the Secretary's interpretation. AACC, slip op. at 10. But deference to the Secretary's interpretation was not appropriate.

**A. Deference Is Due to Interpretations of the Commission,
Not to Interpretations of the Secretary**

It is the Commission's interpretations of OSHA standards, not those of the Secretary, which are entitled to deference. That position is explained in Dole v. OSHRC (CF&I Steel Corp.), 891 F.3d 1495, 14 BNA OSHC 1388 (10th Cir. 1989), petition for cert. granted, 58 U.S.L.W. 3811 (U.S. June 25, 1990). In that case the Tenth Circuit deferred to the Commission's interpretation of another regulated area provision and refused to defer to the Secretary's contrary interpretation, following the majority rule.

The Supreme Court has agreed to resolve a split in the circuits on this issue by reviewing the Tenth Circuit's decision. Unless and until the Supreme Court reverses that decision, the Commission should follow the majority rule and decline to accord the Secretary's interpretation any deference. Under that majority rule, it was inappropriate for Judge Salyers to have accorded the Secretary's interpretation deference.

**B. Alternatively, the Secretary's Interpretation Is Not
Entitled to Deference Because It Is Unreasonable and
Inconsistently Applied.**

Even if the Supreme Court were to reverse the Tenth Circuit's decision in CF&I, however, deference to the Secretary's interpretation would not be appropriate here. Deference to any agency's interpretation of its regulations is appropriate only if the interpretation is reasonable and consistently applied. See Northern Indiana Public Service Co.

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v. Porter County Chapter of the Izaak Walton League of America, Inc., 423 U.S. 12, 15 (1975). Deference does not mean that an agency has the authority to rewrite its regulations through interpretations; on the contrary, the degree of deference is measured by the extent that the agency's interpretation does not strain the plain meaning of the words, or imply language that does not exist. Bonessa v. U.S. Steel Corp., 884 F.2d 726, 732 (3d Cir. 1989); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161, 6 BNA OSHC 1440, 1443 (3d Cir. 1978). It is also measured by the consistency of the agency's interpretation over time. Ehlert v. United States, 402 U.S. 99, 105 (1971). Here the Secretary's interpretation fails on each of these grounds.

1. The Secretary's Interpretation Is Inconsistent With the Standard.

The Secretary has made no creditable attempt to reconcile her interpretation with the language of the standard, as discussed above. That alone is enough to prove that her interpretation is unreasonable. See, e.g., Fluor Constructors, Inc. v. OSHRC, 861 F.2d 936, 939, 13 BNA OSHC 1956, 1957 (6th Cir. 1988) ("An agency's interpretation of a regulation is valid, however, only if that interpretation complies with the actual language of the regulation."); Union of Concerned Scientists v. NRC, 711 F.2d 370, 381 (D.C. Cir. 1983) ("When an agency's interpretation of its own rules flies in the face of the language of the rules themselves, it is owed no deference."); Miller v. Bond, 641 F.2d 997, 1002 (D.C. Cir. 1981).

This case may be usefully contrasted with the situation in GAF Corp. v. OSHRC, 561 F.2d 913, 916, 5 BNA OSHC 1555, 1556 (D.C. Cir. 1977). There the court supported the Secretary's interpretation that the medical surveillance provision of the general industry asbestos standard was not triggered by exposures above the PEL. The language of the standard contained no such quantitative trigger, and the court refused to imply one. Here, however, the situation is far different. Instead of silence about a quantitative trigger, the standard has not one but two explicit quantitative triggers for the negative-pressure enclosure requirement: paragraph (b)'s definition of the term "regulated area", and paragraph (e)(1). Both tie the scope of the requirement to airborne concentrations above the PEL, or to the reasonable likelihood of such concentrations.

2. The Secretary's Interpretation Directly Contradicts Earlier Authoritative Interpretations.

The deference due an agency's interpretation of its own regulations is dependent upon the consistency or inconsistency in its interpretations of those regulations over time. See, e.g., United States v. Paddock, 825 F.2d 504, 512 (D.C. Cir. 1987) ("We do not normally defer to a vacillating agency position"); National Fuel Gas Supply Corp. v. FERC, 811 F.2d 1563, 1571 (D.C. Cir. 1987) ("If the agency's interpretation of a contract has vacillated, deference might give the agency license to act arbitrarily by making inconsistent decisions without justification."); Kent Nowlin Construction Co. v.

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OSHC, 593 F.2d 368, 371, 7 BNA OSHC 1105, 1107 (10th Cir. 1979) ("The petitioner should not be penalized for deviation from a standard the interpretation of which . . . cannot be agreed upon by those who are responsible for compelling compliance with it and with oversight of the procedures for its enforcement."). Here OSHA has repeatedly espoused the precise opposite of the interpretation now advocated by the Secretary. Thus, no deference is due to the Secretary's current interpretation. If anything, deference is due to OSHA's contemporaneous interpretation. See United Transportation Union v. Dole, 797 F.2d 823, 829 (10th Cir. 1986) ("Interpretations published by the [agency] at the time the regulation was promulgated are entitled to greater weight than the interpretations the agency now espouses.").

As recently as 1988, OSHA formally interpreted the negative-pressure enclosure requirement to mean precisely the opposite of what the Secretary now asserts that it means. In a Federal Register notice signed by Assistant Secretary Pendergrass, who also signed the 1986 asbestos standard, OSHA stated:

Paragraph (e) of the construction standard now requires employers to establish regulated areas whenever the PELs are exceeded. Regulated areas required by the standard can take two forms. For most employers who perform asbestos removal, demolition, or renovation operations (other than small-scale short-duration), the regulated area must consist of a negative-pressure enclosure that will confine the asbestos fibers being generated to the area within the enclosure and will thus protect other employees and bystanders on the site from exposure to excessive levels of

asbestos. For small-scale, short-duration removal, demolition and renovation operations and for asbestos work operations that do not involve asbestos removal, demolition, or renovation, the employer may simply demarcate the regulated area by posted signs that limit the number of employees entering the area.

Regulated areas do not have to be established where engineering and work practice controls reduce employee exposures to asbestos to levels below the standard's TWA and excursion permissible limits.

53 Fed. Reg. 35610, 35622-23 (Sept. 14, 1988).

Furthermore, OSHA's contemporaneous interpretations of the negative-pressure enclosure requirement, interpretations by the very individuals responsible for its promulgation, were directly contrary to the Secretary's current interpretation. Assistant Secretary of Labor Pendergrass, who signed the asbestos standard on June 12, 1986 (51 Fed. Reg. at 22733), just six months later expressly interpreted the negative-pressure enclosure requirement to be triggered by the reasonable likelihood of exposures above the PEL:

The intent of 1926.58(e) is to require a negative pressure enclosure only where a regulated area is required. Regulated areas are established only where asbestos concentrations exceed the permissible exposure limit

Depending on the nature and extent of exposure, the requirement for a negative pressure enclosure may not be applicable in your case.

Letter of October 30, 1986 from John A. Pendergrass to Thomas R. Kupfer (Attachment 1).

Similarly, Charles Adkins, then OSHA's Acting Director of Health Standards Programs, wrote about the same time:

The intent of 1926.58(e) is to require a negative pressure

enclosure and "competent person" only where a regulated area is established Regulated areas are established only where concentrations exceed the PEL. Your second issue dealt with the type of operations that could qualify for exemption from the requirements of paragraph (e)(6). It should be noted that any operation can qualify for exemption provided airborne levels of asbestos are kept at or below 0.2 f/cc. This can best be accomplished by means of engineering controls used in conjunction with appropriate work practices since these two methods, when used either singly or in combination can be employed effectively to reduce asbestos exposures to below 0.2 f/cc.

Letter of Oct. 10, 1986 from Charles A. Adkins to Daniel Hoffman, National Steel Corporation (Attachment 2).

In his decision below, Judge Salyers relied heavily upon OSHA's interpretation expressed in the compliance directive for the standard, OSHA Instruction CPL 2-2.40 (Sept. 1, 1987). AACC, slip op. at 8-9. As an initial matter, that directive cannot be said to be controlling. Amici are aware of no evidence in the record that it reflects the intent of the drafters of the standard. It was issued over a year after the standard was published, June 20, 1986. There is no evidence in the record of which amici are aware that the drafters of the directive were also the drafters of the standard or that they consulted with the standard's drafters. See CF&I Steel Corp., supra, 12 BNA OSHC at 2074.

More importantly, the directive supports the precise opposite of the Secretary's interpretation. Appendix D of the directive is the only portion which explicitly classifies provisions of the standard as triggered by airborne concentrations above the PEL, triggered by airborne concentrations above the action level, or triggered regardless

of level of airborne concentrations. It classifies all of paragraph (e) among the requirements triggered by the PEL. The only requirements identified as being triggered regardless of level are paragraph (k) (labels) and (l) (housekeeping). (Paragraph (k)(3) is classified as being triggered by the action level.) Thus, the directive itself is unambiguous in limiting the negative-pressure enclosure requirement, along with almost all of the rest of the standard, to situations where the PEL is exceeded or is reasonably likely to be exceeded.

The provisions of the directive quoted by Judge Salyers do not support the Secretary's interpretation either. They acknowledge that paragraph (e) requires two distinctly different types of regulated areas to be established, but it does not explicitly state that paragraph (e)(1), with its linkage to potential exposure above the PEL, is inapplicable to paragraph (e)(6).

This is not to say that from time to time OSHA officials have not also expressed the Secretary's current interpretation in informal statements; they have. Among others, the current rulemaking proposal asserts that the proposed amendments to paragraphs (e)(1) and (e)(6) are simply clarifications. The Commission should give no weight to that assertion. See Collier-Keyworth Co., 13 BNA OSHC 1208, 1222-23 (No. 80-2048, 1987).

ST0281068

It should be obvious that OSHA's interpretations of paragraph (e)(6)(i) shortly after issuing the standard and its formal interpretations since then have construed the standard contrary to how the Secretary now argues that it should be read. In light of this vacillation, the Secretary's interpretation is entitled to no deference.

3. **The Secretary's Interpretation Would Apply the Requirement in the Absence of Significant Risk.**

The Secretary may regulate exposure to toxic materials, such as asbestos, only where a significant risk is present and can be eliminated or lessened by a change in practices. Industrial Union Dep't. AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 8 BNA OSHC 1586 (1980). But the Secretary interprets paragraph (e)(6)(i) to apply even where there is no significant risk. Accordingly, her interpretation is unreasonable.

Under the Secretary's interpretation, the complete absence of asbestos fibers would nevertheless trigger the full negative-pressure enclosure requirement if removal, demolition, or renovation operations were involved. Yet clearly in that situation no significant risk would exist, nor would use of an enclosure lessen any risk. This interpretation thus fails to meet the significant risk requirement. If endorsed by the Commission, it would make paragraph (e)(6)(i) invalid. Such an interpretation is to be avoided.

This dilemma is not averted by citing OSHA's conclusion that significant risk continues to exist at airborne concentrations below the PEL. While significant risk may exist at some levels below the PEL, there is some concentration below which it does not exist. Yet the Secretary's interpretation would apply paragraph (e)(6)(i) even where it does not exist.

OSHA effectively concedes this point in the current rulemaking, where it discusses its finding that significant risk exists even below the PEL:

Most importantly, as noted above and by the Court, significant risk exists at levels below the PEL. Therefore requiring that the spread of asbestos be contained where it is likely, even if not certain, that the PEL would be exceeded is both appropriate and necessary to reduce still significant risk to bystander employees.

55 Fed. Reg. 29712, 29716 (July 20, 1990). That conclusion is consistent with the interpretation that paragraph (e)(6)(i) is currently triggered by the reasonable likelihood of exposure above the PEL. Significantly, OSHA did not state that to address residual significant risk below the PEL it was necessary to impose the negative-pressure requirement even where exposure above the PEL is not reasonably likely.

This situation differs from the medical surveillance provision at issue in GAF Corp. v. OSHRC, 561 F.2d 913, 5 BNA OSHC 1555 (D.C. Cir. 1977). OSHA may properly adopt "backstop" provisions, such as initial monitoring or medical surveillance requirements, which are not triggered by exposures above the PEL or action level. See Industrial Union Dept., AFL-CIO v.

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American Petroleum Institute, 448 U.S. 607, 656-58, 8 BNA OSHC 1586, 1604 (1980). But such "backstop" provisions differ sharply in nature from control provisions such as requirements for PELs and negative-pressure enclosures. Those must eliminate or lessen a significant risk. Id. Where the regulation is interpreted to apply in the absence of significant risk, the significant risk requirement is not met.

4. The Secretary's Interpretation Is Unsupported by Reasoning.

The Secretary's interpretation is also unreasonable because the proffered justifications for it do not withstand scrutiny.

First, the Secretary suggests that her interpretation is appropriate because:

The removal or encapsulation of asbestos-containing products . . . are typically associated with the highest asbestos exposures occurring in construction

51 Fed. Reg. at 22706. But an association with high exposures in some instances, even many instances, would not explain the necessity for a negative-pressure enclosure where that association is demonstrably absent, i.e., where it can be demonstrated that airborne concentrations above the PEL are not even reasonably likely.

Secondly, the Secretary cites a tiering approach to the hazards of asbestos, with the strictest controls reserved for operations with the highest exposure potential. As discussed in Part III below, that tiering approach of adjusting the degree of control to the degree of risk is inconsistent with an interpretation that controls are required even where there is

no reasonable likelihood of risk. On the contrary, triggering a negative-pressure enclosure requirement with the reasonable likelihood of high exposure would appear to advance the Secretary's avowed purpose far better than would her own interpretation.

5. **The Secretary's Interpretation Was Not Thoroughly Considered.**

As further support for the conclusion that the Secretary's interpretation is unreasonable, it is noteworthy that she has shown little indication that her interpretation was thoroughly considered. The evidence is to the contrary, since the issue was not specifically proposed for public comment, and within the last few weeks OSHA has found it necessary to request public comments on the appropriate scope of the provision.

Preceding adoption of the construction industry asbestos standard, OSHA published two proposed rules, neither of which contained a negative-pressure enclosure provision. The first was an emergency temporary standard, 48 Fed. Reg. 51085 (Nov. 4, 1983), which was later invalidated by a court. Asbestos Information Association/North America v. OSHA, 727 F.2d 415, 11 BNA OSHC 1817 (5th Cir. 1984). The second solicited comments on whether a separate construction industry standard should be adopted, and, if so, what its provisions should include, but it proposed only amendments to the general industry standard. 49 Fed. Reg. 14116 (Apr. 10, 1984). In response to the preamble to the proposed rule, some commentators suggested adoption of a negative-pressure enclosure requirement, but of necessity there

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was no thorough discussion of what its provisions should be. 51 Fed. Reg. 22612, 22710-11 (June 20, 1986). Thus, the Secretary cannot maintain that her interpretation is solidly based upon thorough public discussion of the issue.

In effect, OSHA has acknowledged its lack of thorough consideration of the appropriate scope of the negative-pressure enclosure requirement by belatedly, years after adoption, specifically requesting public comment on its appropriate scope. 55 Fed. Reg. 29712 (July 20, 1990). The recent proposal stated:

In 1986, OSHA believed, based on limited reports of experience using such enclosures for asbestos work, that the full enclosure, which encloses the work and the workers and limits access, would be effective in containing asbestos

OSHA seeks comment on applying the requirements for negative pressure enclosure for all removal, demolition and renovation jobs which involve asbestos.

Id. at 29715, 29716. Whatever the outcome of the present rulemaking, it presumably will be well considered, based upon a full record. In contrast, the Secretary's interpretation of the current standard was not thoroughly considered.

III. Interpreting the Negative-Pressure Enclosure Requirement as Limited to Situations in Which Overexposures Are at Least Reasonably Likely Is Consistent With the Purposes of the Requirement.

In construing the meaning of paragraph (e)(6)(i), the Commission should keep in mind the purposes of that provision. The main purpose is a limited one, preventing overexposures. Thus, it is perfectly consistent to interpret the requirement's

application as limited to situations in which overexposures are at least reasonably to be expected.

A. Preventing Overexposure

The preamble to the 1986 construction industry asbestos standard recognized that "employees engaged in asbestos removal, demolition, and renovation operations generally have the highest asbestos exposures of all construction workers." 51 Fed. Reg. at 22706. Accordingly, OSHA adopted several provisions applicable only to those operations, including paragraph (e)(6)(i). But to say that some removal, demolition, and renovation operations are associated with high airborne concentrations is not to say that all or even most of those operations are so associated. On the contrary, as discussed in Part I.C. above, OSHA explicitly found that many removal, demolition, or renovation operations do not involve high potential exposures when certain techniques are followed, such as use of glove bags or wet methods.

In the preamble OSHA explained the purpose of the negative-pressure enclosure requirement as follows:

The regulated area requirement in paragraph (e)(6) of the revised construction standard requires employers who perform asbestos removal, demolition, or renovation operations to establish regulated areas that consist of negative-pressure enclosures that will confine the asbestos fibers being generated to the area within the enclosure and will thus protect other employees and bystanders on the site from exposure to excessive levels of asbestos.

51 Fed. Reg. at 22710 (emphasis added). Thus, the purpose of the requirement is to protect employees outside the work area from overexposure. For some kinds of removal, demolition, or

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renovation operations, the risk of overexposure of those employees may be substantial. But OSHA has recognized that for others kinds of those operations, use of certain techniques is sufficient to avoid even the reasonable likelihood of overexposures. Interpreting the requirement to be triggered by the reasonable likelihood of exposures above the PELs rationally relates the obligation to provide protective measures for bystanders to the need for such measures.

B. Graduated Response

Limiting the application of the negative-pressure enclosure requirement is also consistent with the tiering approach espoused in the preamble. There OSHA explained:

Accordingly, the final standard applies to all occupational exposures to asbestos in the construction industry, but is tiered to apply increasingly stringent requirements to those work operations associated with the highest exposures OSHA believes that this tiering approach will simultaneously ensure maximum employee protection while scaling the burden of compliance with the standard to the degree of hazard associated with particular operations

OSHA notes that the final standard has been carefully structured by the Agency to relate the stringency of the requirements to the extent and duration of employee exposures. OSHA therefore believes that no compliance burden will be placed on construction employers . . . who maintain asbestos exposures in their workplaces to levels below the action level of 0.1 fiber/cc.

Id. at 22706, 22707. If the degree of risk is very low because airborne concentrations are not reasonably likely to exceed the PEL, then under this approach the lesser risk should have less stringent requirements. Conversely, where the risk of airborne concentrations above the PELs is at least reasonably likely, more stringent requirements are appropriate.

In the passages quoted above, OSHA recognized the need to correlate the "compliance burden" placed upon construction employers with the degree of risk involved. That recognition is compelled by Section 3(8) of the Act, 29 U.S.C. § 652(8), which requires that OSHA standards be "reasonably necessary or appropriate to provide safe or healthful employment and places of employment." While the Act may not require explicit balancing of costs and benefits for health standards, the provisions of Section 3(8) apply even to those standards. See American Textile Mfrs. Ass'n v. Donovan, 452 U.S. 490, 514 n.32, 9 BNA OSHC 1913, 1922 n.32 (1981) (OSHA could not insist on a feasible requirement for use of five respirators if use of one respirator would achieve the same reduction in health risk). Accordingly, the Secretary must be able to establish that the negative-pressure enclosure requirement is "reasonably necessary or appropriate". That burden cannot be sustained when the requirement is interpreted to apply where airborne concentrations above the PEL are not at least reasonably likely.

Judge Barkley found that linking the negative-pressure enclosure requirement to the reasonable likelihood of overexposure was consistent with this tiering approach:

Reading the standard to require a reasonable expectation of overexposure does not harm the Secretary's "graduated response" mentioned in the preamble to the standard. If there is a reasonable expectation of overexposure and the employer is engaged in asbestos removal, the employer is prohibited from utilizing the less restrictive regulated area, the demarcated area, but instead must utilize a negative pressure area, which in turn without any further showing imposes such requirements as respiratory protection, hygiene facilities, employee training and medical surveillance.

EEC, slip op. at 9.

Ironically, the Secretary's interpretation departs from this tiering scheme. It ignores the reasonable likelihood of airborne concentrations above the PEL, or the lack of such a likelihood, and instead lumps together all removal, demolition, and renovation operations. The only exceptions are for small-scale, short-duration operations, and where the use of negative-pressure enclosures is infeasible. For all others, it ignores OSHA's findings that in some cases there is no reasonable likelihood of overexposures and treats them all as though they uniformly pose a high degree of risk. OSHA's own tiering scheme can only be furthered by linking the negative-pressure enclosure requirement to the reasonable likelihood of overexposure.

C. Enforcement Burden

Although nowhere articulated by the Secretary, a sub silentio purpose underlying her interpretation may be the perception that enforcement of the negative-pressure enclosure requirement would be hampered by a linkage to the reasonable likelihood of overexposure. Certainly, if every removal, demolition, or renovation operation were subject to the requirements of paragraph (e)(6)(i), OSHA inspectors could cite employers for failure to comply with that provision simply based upon the objective fact of whether or not a negative-pressure enclosure was used. But linking the requirement to the reasonable likelihood of overexposure is not a significant obstacle to OSHA's enforcement of the provision.

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Significantly, OSHA has no need to prove actual exposures above the PELs. If that were the case, OSHA would have a difficult burden of proof where the employer has not conducted monitoring. But OSHA needs only to prove a reasonable likelihood of airborne concentrations above the PELs. That can be established after the fact, even without monitoring results. Judge Barkley's decision in EEC, which the employer chose not to appeal to the Commission, illustrates this point.

CONCLUSION

The Commission should endorse the views of Judge Barkley in EEC rather than the views of Judge Salyers in this case on the issue of what triggers the provisions of 29 C.F.R. § 1926.58(e)(6)(i). Judge Barkley carefully considered both the language of the construction industry asbestos standard and the purposes of the negative-pressure enclosure requirement in concluding that the Secretary's interpretation was unreasonable and not entitled to deference. In addition, the Commission should consider OSHA's history of interpreting the requirement as Judge Barkley concluded that it should be interpreted, rather than how the Secretary now argues that it should be interpreted.

The Secretary's position is contrary to the language of the standard, and it works against the tiering approach endorsed in the preamble. The Secretary has an immediate opportunity to revise the standard to read as she feels it should read. Yet

sound policy reasons, as well as the current text of the standard, support retaining the standard's linkage of the negative-pressure enclosure requirement to the reasonable likelihood of airborne concentrations above the PEL.

For the foregoing reasons, Judge Salyers' decision on the issue of what triggers 29 C.F.R. § 1926.58(e)(6)(i) should be REVERSED.

Respectfully submitted,

Of Counsel:

Toby Alaska Threet
The Dow Chemical Company
Legal Department
2030 Willard H. Dow Center
Midland, MI 48674

Mark N. Duvall
Health and Safety Counsel
Attorney
Union Carbide Plastics
Plastics Company Inc.
Danbury, CT 06817-0001

Date: August 9, 1990

ST0281079

ST0281080

ATTACHMENT 1

The respirators cost in the area of \$450 to \$500 each. If I "provide at no cost to the employee" one unit, am I permitted to request a "deposit" to insure the respirators return? The deposit would be returned if and when the employee finds other employment.

.78

An official interpretation on this issue would be greatly appreciated.

Thank you very much for your help in this matter.

Very truly yours,

NATIONAL ASBESTOS
TRAINING INSTITUTE

W. Scot Keyes
Director

MSK/mw

***END OF DOCUMENT REACHED**

ITEM 46-

STANDARD NUMBER: 1926.56(f)(j)
INFORMATION DATE: 8/6/80
SOURCE DESCRPT.: Letter to Mr. Thomas R. Kufferer
STATUS: Current

OCT 30 1986

Mr. Thomas R. Kufferer
2231 Remington Drive
Haverhill, Illinois 60565

Dear Mr. Kufferer:

This is in response to your letter of October 2 concerning regulatory provisions contained in the new standard for exposure to asbestos, tremolite, anthophyllite and actinolite in the construction industry.

Your first area of concern was the provision that requires daily monitoring within a regulated area. You stated that conscientious employers will establish a regulated area for every asbestos removal job, regardless of duration, and that this would result in a multitude of samples that essentially would be meaningless because employees will be wearing respirators.

The intent of 1926.56(f)(j) is to require daily monitoring only where airborne levels exceed 0.2 fiber/cd. When it is necessary to establish a regulated area, as required by the standard, daily monitoring not only verifies the adequacy of the respiratory protective devices worn, but serves as a check to ensure that engineering controls are functioning properly and the specified work practices are being carried out. It should be noted that where daily monitoring reveals that employee exposures (as indicated by statistically reliable measurements) are below the action level, the employer may discontinue monitoring for those employees whose exposures are represented by those samples. In addition, daily monitoring is not required in a regulated area where all employees are equipped with supplied air respirators operated in the positive pressure mode.

Your second issue dealt with the establishment of a negative pressure enclosure for asbestos removal, demolition and renovation operations. The intent of 1926.56(e) is to require a negative pressure enclosure only where a regulated area is required. Regulated areas are established only where asbestos concentrations exceed the permissible exposure limit.

The requirement for setting up a negative pressure enclosure closely parallels the Environmental Protection Agency's requirement for proper work area containment. Without such containment measures, asbestos containing materials would be dispersed outside the area and a significant exposure hazard could result for plant or building occupants. The use of negative pressure systems, together with high efficiency particulate (HEPA) filtration to move air from within the work area to outside the regulated area, will provide added protection. A harmful level of contaminants would not, as a rule, build up in a regulated area, as negative pressure is required during work activities.

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ST0281081.A

perimeter of removal operations conducted at your company are not in excess of the action level. However, there is no mention of air concentrations found in the breathing zone of employees actually performing asbestos removal work. Depending on the nature and extent of exposure, the requirement for a negative pressure enclosure may not be applicable in your case.

Efforts are currently under way to correct the contradictory statements, such as those highlighted in your letter, which appear in the Federal Register notice will be published in the Federal Register in the near future.

I hope this information will be helpful to you.

Sincerely,

John A. Pendergrass
Assistant Secretary

OH:Mainless:10/16/86:aect:10/17/86
Room N3671 x3711
Control: 38861 Due Date 10/24/86

cc: CCU File, OH File, C.Adkins, Pendergrass, F.White,
Mainless, Williams, Strctfers, WPC File#86-324, Document#0059

October 2, 1986

John A. Pendergrass
Assistant Secretary of Labor
For Occupational Safety and Health
200 Constitution Ave. N.W.
Washington, D.C. 20210

Dear Mr. Pendergrass:

I am writing to you today, as a fellow professional industrial hygienist, to express my concern for damage being done to our profession by the recently promulgated OSHA standard regulating asbestos in construction activities. I regard this standard to be so poorly conceived and executed as to be a major embarrassment to those of us in the profession who now have been hanced the job of trying to implement it. Many of the provisions call for mere activity which will contribute nothing to worker protection. Others will, in some cases, actually create more serious hazards than the standard intends to correct. Some are actually contradicted within the regulation itself. All of these could have been prevented if OSHA had simply submitted the construction standard to peer review in the same manner as they did the far superior asbestos standard for general industry.

As an example of the provisions which add nothing to the worker's protection, I call your attention to the section which requires daily monitoring representative of each worker when a regulated area exists. Since conscientious employers will establish a regulated area for every asbestos removal job, whether it will last 5 minutes or 5 months, this will result in a multitude of samples. These samples will be essentially meaningless, however, since, by the standard, all these workers will be wearing respirators. It is unnecessary to do this much monitoring to simply verify the adequacy of our respiratory protection choices. Nevertheless, industrial hygienists must insist that our employers and clients perform sampling which we know is not justified, which certainly does nothing to enhance the image of our profession as a profession. Instead we just parrot regulations, take pumps, and file away reams of expensive, meaningless data.

An example of the presently dangerous activities prescribed by the standard is its insistence on building enclosures around removal operations. My company has frequently performed area samples at the perimeter of removal operations of various sorts, and we have never found levels in excess of the new action level. In fact, we usually don't find anything above background levels. The new standard would appear to now require us, in most cases, to create what amounts to a confined space, with all its hazards, and require our people to work within it. This will result in greater heat stress, and the possibility of trapping dangerous concentrations of toxic or flammable gases in their work environment. We will thus increase the risk to the health and safety of these persons in order to eliminate a non-existent exposure hazard to what is generally unoccupied surroundings. It will also require a lot of work just to construct the enclosures, with all the well documented risks of general construction work.

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ST0281082. A

As an example of contradictory statements within the standard, notice that the paragraph on fit testing requires that, "The employers shall ensure that the respirator issued to the employee exhibits the least possible facepiece leakage..." The note that Appendix C, on fit testing procedures requires that the employee be allowed to choose the most comfortable respirator passing a fit test, not the one providing the best seal. Also note that Appendix C states that when performing fit tests by the irritant smoke protocol the respirator wearer should be instructed to keep his eyes closed during the test. Shortly afterwards it has us instruct him to read the 'rainbow passage.'

The above are only a very few examples of the major problems in this seriously flawed standard. I ask you to carefully review the onerous provisions of this standard, drawing on your own considerable practical experience, and direct reconsideration to develop a more flexible, performance oriented document. I ask this as one individual professional to another, not as a representative of any employer or association. The provisions of the construction standard, as written, show a serious lack of appreciation for the true scope of the work it is written to cover, and for the nature of the hazards it tries to control. It will result in a tremendous amount of activity, but little, if any, increase in worker protection. In fact, what it will serve to do more than anything else will be to divert this country's already strained industrial hygiene resources away from more productive activity where far greater contributions to worker health would be made.

I have spent a tremendous amount of my time over the last three to four years trying where ever I could to contribute something to the development of a meaningful and effective asbestos standard. Upon reading the construction industry asbestos standard, I feel the effort was totally wasted.

Sincerely,

Thomas E. Kupferer, CIH

END OF DOCUMENT REACHED

ITEM 47

STANDARD NUMBER 1910.1001(r)(1)(vii), 1926.58(s)(2)(III)
INFORMATION DATE 040814
SOURCE DESCRIPT. Letter to Mr. Robert J. Bettacchi
COMPANY Construction Products Division
STATUS Current

AUG 14 1986

Mr. Robert J. Bettacchi
Vice President
Construction Products Division
W. R. Grace & Company
62 Whittemore Avenue
Cambridge, Massachusetts 02140

Dear Mr. Bettacchi:

This is in response to your letter of June 23 seeking interpretation of certain regulatory provisions contained in the standards for occupational exposure to asbestos, tremolite, anthophyllite and actinolite issued June 20 (51 FR 22612). Specifically, your concern is that certain provisions of the new standards may apply to many activities that pose no asbestos risk to worker health and that were not intended by the Occupational Safety Health Administration (OSHA) to be covered by the new standards.

Your letter raised interpretive issues about three provisions. The first provision states that: "Materials containing asbestos, tremolite, anthophyllite, or actinolite shall not be applied by spray methods" (1910.1001(r)(1)(vii) and 1926.58(s)(2)(iii)). As you pointed out, other government agencies which have restricted the application of asbestos materials by prohibiting spraying that, since the OSHA provisions do not contain an exclusion, the OSHA regulation will inappropriately apply to a wide variety of sprayer products that contain trace amounts of naturally occurring levels of asbestos which you term "de-minimis."

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ST0281083.4

ATTACHMENT 2

ST0281084

Directorate of Health Standards Program
Room N-3718
200 Constitution Avenue N.W.
Washington, D.C. 20210

Dear Mr. Wainless:

In confirmation of our phone conversation dated 08-13-86 it is my understanding that the following interpretations of 1926.58 are true and correct.

1. Sec. (h) (ii)

- A. Fit tests are only required for half face negative pressure respirators. Either qualitative or quantitative methods may be used.
- B. Fit testing for full face negative pressure respirators is not required, however, if desired, only quantitative methods will be accepted.
- C. Fit testing for half and full face positive pressure, powered, powered air purifying respirators is not required.

2. Appendix A. to 1926.58 (O.R.M.), (1st paragraph)

- A. The present verbiage is not meant to imply that all sampling for asbestos fibers/fibers be conducted by an analytical laboratory, merely that those laboratories analyzing such samples use the O.R.M.

My thanks again for your invaluable assistance. 1926.58 will, I'm sure, be great a boon to the abatement industry.

Respectfully,

James T. Hewes
Health and Safety Director

cc

cc: Richard A. Clark
Richard Ehrlich

END OF DOCUMENT REACHED

ITEM 49

STANDARD NUMBER	1926.58(e)(6), 1926.58(j)(2), 1926.58(e)
INFORMATION DATE	06/01/86
SOURCE DESCRIPT.	Letter to Mr. Daniel E. Hoffman
COMPANY	National Steel Corporation
STATUS	Current

OCT 10 1986

Mr. Daniel E. Hoffman
Granite City Division
National Steel Corporation
20th & State Streets
Granite City, Illinois 62040

Dear Mr. Hoffman:

This is in response to your letter of August 28 to Ira Wainless seeking interpretation of certain regulatory provisions contained in the new standard for exposure to asbestos, tremolite arthropyllite and actinolite in the construction industry.

Your first area of concern was whether 1926.58(e)(6), which imposes requirements for negative pressure enclosures and the designation of a "competent person," and 1926.58(j)(2), which requires the establishment of a decontamination area, apply to all asbestos removal, demolition, and renovation operations, or only those where airborne concentrations of asbestos exceed or can reasonably be expected to exceed, the PEL of 0.2 f/cc. The intent of 1926.58(e) is to require a negative pressure enclosure and "competent person" only where a regulated area is established. Similarly, 1926.58(j)(2) requires the establishment of a decontamination area when a regulated area is required. Regulated areas are established only where concentrations exceed the PEL.

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Your second issue dealt with the type of operations that could qualify for exemption from the requirements of paragraph (e)(6). It should be noted that any operation can qualify for exemption provided airborne levels of asbestos are kept at or below 0.2 f/cc. This can best be accomplished by means of engineering controls used in conjunction with appropriate work practices since these two methods, when used either singly or in combination can be employed effectively to reduce asbestos exposures to below 0.2 f/cc. The exemption from paragraph (e)(6), therefore, does not depend on the length of time it takes to complete a job or the magnitude of the job.

Your interest in occupational health is appreciated.

Sincerely,

Charles E. Adkins
Acting Director
Health Standards Programs

OH:Wainless:ac:9/30/86:kec
Room N3671 X7111

cc: OH File, Wainless, Adkins, WPC, File#86-298, Document#0060a

ST0281086

Mr. Ira Marinello
Industrial Hygienist
U.S. Dept. of Labor/OSHA
Health Standards Branch
Room N-3178
200 Constitution Avenue N.W.
Washington, D.C. 20210

88A

Mr. Marinello:

Thank you for your prompt response to questions I recently posed to you by telephone regarding the new OSHA Asbestos Standards published June 20, 1986 in the Federal Register.

I am writing in request of written confirmation of OSHA's position concerning several of the issues we discussed by telephone. Specifically, if a company such as ours is engaged in a project involving the removal of asbestos insulation from duct work or wiring, etc. at one of our facilities, would we be required to meet the requirements of 29 CFR, Section 1926.58(e)(6) regardless of the employee asbestos exposure levels? My understanding from your verbal response is that Section 1926.58(e)(6), "Regulated areas", only applies to situations in which the P.E.L. of 0.2 f/cc is exceeded. That is, if the use of wet methods or other methods are utilized and are successful in maintaining exposures at or below 0.2 f/cc, then negative pressure enclosures, hygiene facilities (decontamination rooms) and the use of "competent persons" (as defined in the standard) are not required. We feel this is an important point and is in need of clarification.

Also, please provide clarification as to what type of operations would qualify for the exception provisions contained in Section 1926.58(e)(6)(IV). My recollection is that you indicated that for jobs which are relatively short duration, i.e., eight hours or less, the exception would apply.

Please respond at your earliest possible convenience.

Very truly yours,

Daniel E. Hoffman
Manager, Environmental Health

DEH/01.44:sc

END OF DOCUMENT REACHED

ITEM 50

STANDARD NUMBER	1910.1001(j)(4)(ii), (j)(2) and (j)(3)
INFORMATION DATE	861016
SOURCE DESCRIPT.	Letter to Mr. Peter T. Barnes
COMPANY	Barnis Inc.
STATUS	Current

Mr. Peter T. Barnes
Barnis Inc.
P.O. Box 260
Waterdown, Ontario L0R 2H0
Canada

ST0281087

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of August, 1990, I mailed one copy of Motion for Leave to File Brief as Amici Curiae and Brief of Amici Curiae Union Carbide Chemicals and Plastics Company Inc. and The Dow Chemical Company to the following by first class, postage-paid mail:

Tony Gil, Esq.
Office of the Solicitor
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Robert W. Thomson, Esq.
Meyer, Darragh, Buckler, Bebenek, Eck & Hall
2000 Frick Building
Pittsburgh, PA 15219

Mark N. Duvall
Health and Safety Counsel
Union Carbide Chemicals and
Plastics Company Inc.

Date: August 9, 1990

ST0281088

OSHA
ASBESTOS

UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

No. 88-2268

RECEIVED
AUG 1 1990
LEGAL DEPT.

ELIZABETH DOLE, SECRETARY OF LABOR,
Complainant,
AMERICAN ASBESTOS CONTROL CO.,
Respondent.

BRIEF OF AMICI CURIAE
UNION CARBIDE CHEMICALS AND PLASTICS COMPANY INC.
AND
THE DOW CHEMICAL COMPANY

Toby -
Phase call with comments.
Mark

MARK N. DUVALL
HEALTH AND SAFETY COUNSEL
UNION CARBIDE CHEMICALS AND PLASTICS COMPANY INC.

Mark N. Duvall
Health and Safety Counsel
UNION CARBIDE CHEMICALS AND
PLASTICS COMPANY INC.
39 Old Ridgebury Road, E3
Danbury, CT 06817-0001

88 OLD RIDGEBURY ROAD
DANBURY, CT. 06817-0001
800-784-8817

335 MADISON AVENUE
NEW YORK, N.Y. 10017
212-678-6511

Toby Alaska Threet
Attorney
THE DOW CHEMICAL COMPANY
Legal Department
2030 Willard H. Dow Center
Midland, MI 48674

Date: August 9, 1990

ST0281089

ELIZABETH DOLE, SECRETARY OF LABOR,)
)
 Complainant,)
)
 v.)
)
 AMERICAN ASBESTOS CONTROL CO.,)
 Respondent.)

Attorney for Amicus Curiae
Union Carbide Chemicals and Plastics
Company Inc.

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49 Fed. Reg. 14116 (Apr. 10, 1984)
51 Fed. Reg. 22612 (June 20, 1986)
53 Fed. Reg. 35610 (Sept. 14, 1988)
54 Fed. Reg. 52024 (Dec. 20, 1989)
55 Fed. Reg. 29712 (July 20, 1990)

MISCELLANEOUS:

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UNITED STATES OF AMERICA
OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION

ELIZABETH DOLE, SECRETARY OF LABOR,	)	
	)	
Complainant,	)	
	)	
v.	)	OSHRC Docket
	)	No. 88-2268
	)	
AMERICAN ASBESTOS CONTROL CO.,	)	
Respondent.	)	
	)	
	)	

BRIEF OF AMICI CURIAE
UNION CARBIDE CHEMICALS AND PLASTICS COMPANY INC.
AND THE DOW CHEMICAL COMPANY

STATEMENT OF INTEREST

Amici Curiae Union Carbide Chemicals and Plastics Company Inc. ("Union Carbide") and The Dow Chemical Company ("Dow") are major chemical manufacturers with facilities throughout much of the United States. Many of those facilities contain asbestos. From time to time Union Carbide, Dow, and/or contractors engage in asbestos removal, demolition, or renovation operations. As determined by industrial hygiene monitoring, many of those operations are conducted with airborne concentrations of asbestos well below the permissible exposure limits ("PEL") of OSHA's construction industry asbestos standard, due to the use of wet methods and other techniques.

The interest of Union Carbide and Dow in this case concerns a single issue raised, argued, and decided in the proceedings below: whether 29 C.F.R. § 1926.58(e)(6)(i) limits the use of negative-pressure enclosures to where airborne concentrations of asbestos exceed or reasonably can be expected to exceed the PEL prescribed in 29 C.F.R. § 1926.58(c). Amici believe that the requirement is so limited. The Secretary argued, and Judge Salyers held, that that requirement applies regardless of the potential for overexposure. Amici urge the Commission to reverse the Administrative Law Judge's decision on this point.

PROCEEDINGS BELOW

Respondent American Asbestos Control Company ("AACC") was issued several citations. The item of interest here is the

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citation for an alleged willful violation of 29 C.F.R. § 1926.58(e)(6)(i) stating:

29 CFR 1926.58(e)(6)(i): The employer did not establish negative pressure enclosures where feasible, before commencing removal, demolition and renovation operations:

(a) On August 11, 1988, employees [sic] removed asbestos containing material from the interior of pot A at door 661 at Armco, Inc.'s Middletown Works and a negative pressure enclosure was not constructed around the removal operation.

AACC timely contested the citation.

On September 18, 1989 Judge Salyers issued a decision and order affirming this item as a serious violation and assessed a penalty of \$1,000. The decision noted that:

The Secretary does not challenge the results obtained in the air sampling performed by respondent during the removal procedures at "pot A" which reflect a range (.003 to .004 fibers per cubic centimeter) well below the PEL.

American Asbestos Control Co. ("AACC"), 1989 CCH OSHD ¶ 28,704 (No. 88-2268, 1989), slip op. at 7. But the Judge deferred to the Secretary's interpretation that 29 C.F.R. § 1926.58(e)(6)(i) requires use of negative-pressure enclosures where feasible in asbestos removal, demolition, and renovation operations, regardless of the level of airborne concentration of asbestos.

Respondent timely filed a petition for discretionary review with the Commission. Acting Chairman Arey granted the petition on October 25, 1989 with respect to four issues. The second issue stated:

Did the Judge err in concluding that the Secretary did not have the burden of proving that the Respondent's employees were working in "an area . . . where airborne concentrations of asbestos . . . exceed or can reasonably be expected to exceed the permissible exposure limit"?

SUMMARY OF ARGUMENT

The Commission has the opportunity to resolve a conflict between Administrative Law Judges concerning an important issue arising under the asbestos standard for construction: whether the Secretary must prove that it is at least reasonable to expect that airborne concentrations of asbestos will exceed the PEL before requiring employers engaging in asbestos removal, demolition, and renovation operations to implement negative-

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pressure enclosures and related procedures. Judge Salyers decided below that the Secretary has no obligation to prove reasonable likelihood of overexposure before requiring a negative-pressure enclosure. Subsequently, in a different case Judge Barkley came to precisely the opposite conclusion. Reviewing the express terms of the standard, the standard's purpose, and the Secretary's "graduated response" strategy, Judge Barkley concluded that the Secretary must prove that it is at least reasonable to expect overexposures. Under the facts of that case, he found that the Secretary had proven that overexposures were reasonable to expect. Expert Environmental Control, Inc. ("EEC"), 14 BNA OSHC 1666 (No. 88-1956, May 10, 1990). The Commission should endorse Judge Barkley's resolution of the issue.

By its own terms, the construction industry standard for asbestos limits the application of the negative-pressure enclosure requirement, paragraph (e)(6)(i), to those asbestos removal, demolition, and renovation operations for which airborne concentrations exceed or can reasonably be expected to exceed the PEL. Paragraph (b) defines "regulated area" to include a negative-pressure enclosure and states that a regulated area, whether of a traditional nature or a negative-pressure enclosure, is an area established "to demarcate areas where airborne concentrations of asbestos . . . exceed or can reasonably be expected to exceed the [PEL]". Similarly, paragraph (e)(1), entitled "General", repeats that limitation on the scope of the "regulated area" requirement.

If the Secretary believes that the negative-pressure enclosure requirement should say something it does not now say, she should amend the standard through rulemaking. She has just proposed to do exactly that. The Commission should not interfere in this belated effort to effect a policy change through the appropriate mechanism, rulemaking, rather than through interpretation in an enforcement proceeding.

The Secretary's interpretation in this case is not entitled to deference. It was not thoroughly considered; it is unreasonable; and it is directly contrary to previous OSHA interpretations of the provision in the compliance directive for the standard, in interpretations by top officials of OSHA contemporaneous with issuance of the standard, and a Federal Register notice which explicitly discusses the issue. The Secretary has provided no basis for departing from these interpretations so directly contrary to the interpretation she now advocates.

Construing the negative-pressure enclosure requirement in accordance with the language of the standard would be consistent with the purpose of the requirement. That purpose is to protect employees from overexposure to asbestos. It is

perfectly consistent with that purpose to limit the application of the requirement to situations where overexposure is at least reasonably likely.

ARGUMENT

I. The Standard Expressly Limits the Negative-Pressure Enclosure Requirement to Situations in Which Airborne Concentrations Above the PEL Are at Least Reasonably Likely.

A. Overview of the Negative-Pressure Enclosure Requirement

Like employers, the Secretary is bound by the terms of the asbestos standard for construction as it is written. Those terms are unambiguous, because in two separate places they limit the negative-pressure enclosure requirement to situations in which it is at least reasonably likely that airborne concentrations above the PEL will occur. Those provisions are consistent with other important provisions of the standard which are also triggered by potential exposure levels above the PEL.

In his decision, Judge Salyers deferred to the Secretary's interpretation as reasonable without rigorously considering whether in fact it is reasonable. The Judge noted the employer's arguments based on the language of the standard, but relied upon the Secretary's quotations from the preamble and the compliance directive. In sharp contrast, Judge Barkley scrutinized the terms of the standard, quoting key provisions at length. Then, referring to the Secretary's interpretation, he stated:

I find that the requirement of a negative-pressure enclosure is not applicable until the Secretary establishes evidence of actual overexposure, or that overexposure can reasonably be expected from the cited activity.

EEC, slip op. at 7.

In another case involving the appropriate interpretation of a regulated area provision, the Commission has stated the criteria to be applied in resolving questions of regulatory construction:

In construing the standard, we are mindful of several principles. We must look first to the language of the standard. See Bunge Corp., 86 OSAHRC __/__, 12 BNA OSHC 1785, 1789, 1986 CCH OSHD ¶27,565 p. 35,804 (No. 77-1622, 1986), and cases cited. Second, although legislative history and other extrinsic aids to interpretation may be used to determine the intent of

the drafter, standards should be construed in a way that does not deprive employers of fair notice of the requirements of the law. See id., 12 BNA OSHC at 1790-91, 1986 CCH OSHD at p. 35,806, and cases cited. See also Usery v. Kennecott Copper Corp., 577 F.2d 1113, 1119 [6 OSHC 1197, 1200] (10th Cir. 1977); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161-62 [6 OSHC 1440, 1443-44] (3d Cir. 1978); Diamond Roofing Co. v. OSHRC, 528 F.2d 645, 650 [4 OSHC 1001, 1005] (5th Cir. 1976); Lisbon Contractors, Inc., 84 OSAHRC 19/A2, 11 BNA OSHC 1971, 1973-74, 1984 CCH OSHD ¶26,924, p. 34,500 (No. 80-97, 1984).

CF&I Steel Corp., 12 BNA OSHC 2067, 2073 (No. 79-4786, 1986), affirmed sub nom. Dole v. OSHRC (CF&I Steel Corp.), 891 F.2d 1495, 14 BNA OSHC 1388 (10th Cir. 1989), petition for cert. granted, 58 U.S.L.W. 3811 (U.S. June 25, 1990). Both criteria must be applied to resolving this issue, as Judge Barkley found. EEC at 9-10.

As amended in 1988, the construction industry asbestos standard establishes two permissible exposure limits: an 8-hour time-weighted average ("TWA") of 0.2 fibers per cubic centimeter of air ("f/cc"), and an excursion limit ("EL") of 1 f/cc averaged over 30 minutes. 29 C.F.R. § 1926.58(c). The action level is 0.1 f/cc (8-hour TWA). Id. § 1926.58(b). A subsidiary provision requires establishment of regulated areas "where airborne concentrations of asbestos . . . exceed or can reasonably be expected to exceed the TWA and/or excursion limit prescribed by paragraph (c) of this section." Id. § 1926.58(e)(1). A species of regulated area, the negative-pressure enclosure requirement appears in paragraph (e)(6)(i). It has no counterpart in the general industry standard for asbestos, 29 C.F.R. § 1910.1001.

Paragraph (e)(6)(i) provides:

Wherever feasible, the employer shall establish negative-pressure enclosures before commencing removal, demolition, and renovation operations.

A negative-pressure enclosure is essentially a large bag built over an asbestos abatement work area. It is typically constructed of 6-mil polyethylene plastic sheet, sealing tape, air locks, and negative-pressure systems. See 29 C.F.R. § 1926.58, Appendix F. OSHA provides the following explanation:

The negative pressure enclosures contemplated by the 1986 standard are area enclosures in which abatement and renovation employees work. The enclosures are required to be placed under negative pressure (a partial vacuum) so that asbestos fibers remain inside

even if a leak develops in the enclosure shell. OSHA believes that negative pressure enclosures reduce employee risk primarily by reducing leakage and containing the asbestos material being disturbed. Thus areas outside the work area are not contaminated and bystander employees are protected from exposure.

54 Fed. Reg. 52024, 52026 (Dec. 20, 1989). Where the negative-pressure enclosure requirement is triggered, employers must also meet special requirements for supervision by a competent person, paragraph (e)(6)(ii); monitoring, paragraph (f)(3); protective clothing, paragraph (i)(4); and use of hygiene facilities and practices, paragraph (j)(2). There is an exemption from the negative-pressure enclosure requirement for small-scale, short-duration operations. 29 C.F.R. § 1926.58(e)(6)(iv) and Appendix G.

OSHA has proposed to amend the negative-pressure enclosure requirement to impose an explicit provision that the requirement is triggered not by the actual or reasonably likely exposure level, but by the nature of the work involved. The proposal would also cut the 8-hour TWA PEL in half, from 0.2 f/cc to 0.1 f/cc. 55 Fed. Reg. 29712 (July 20, 1990).

B. The Text of the Standard

It is undisputed that a negative-pressure enclosure is a kind of regulated area. The negative-pressure enclosure requirement appears in paragraph (e), captioned "Regulated areas". Paragraph (b) defines the term "regulated area" as follows:

"Regulated area" means an area established by the employer to demarcate areas where airborne concentrations of asbestos, tremolite, anthophyllite, actinolite, or a combination of these minerals exceed or can reasonably be expected to exceed the permissible exposure limit. The regulated area may take the form of (1) a temporary enclosure, as required by paragraph (e)(6) of this section, or (2) an area demarcated in any manner that minimizes the number of employees exposed to asbestos, tremolite, anthophyllite, or actinolite.

(Emphasis added.) Thus, this definition explicitly couples the negative-pressure enclosure requirement to actual excursions beyond the PELs or the reasonable likelihood of such excursions.

Further confirmation of this coupling appears in paragraph (e)(1), captioned "General". It provides:

The employer shall establish a regulated area in work

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areas where airborne concentrations of asbestos, tremolite, anthophyllite, actinolite, or a combination of these minerals exceed or can reasonably be expected to exceed the permissible exposure limit prescribed in paragraph (c) of this section.

(Emphasis added.) Since paragraph (b) classifies a negative-pressure enclosure as a regulated area, and since the requirement for negative-pressure enclosures appears in paragraph (e), captioned "Regulated areas", the negative-pressure enclosure requirement is subject to the provisions of this "general" limitation on the requirement to establish regulated areas.

Where, as here, the language of a standard or statute is clear, that language controls, and no resort may be had to legislative or regulatory history or agency interpretations to construe the requirement contrary to its plain meaning. See, e.g., UAW v General Dynamics Land Systems Div., 815 F.2d 1570, 13 BNA OSHC 1201 (D.C. Cir.), cert. denied, 484 U.S. 976 (1987); Honeywell Inc. v. United States, 661 F.2d 182, 186 (Ct. Cl. 1981) ("legislative history is, in any event, unnecessary when the language and purpose of the regulation is plain"). In his opinion below, Judge Salyers did not carefully consider the language of the provisions quoted above. He quoted a portion of the definition of "regulated area", but made no comment on it, and he made no reference to paragraph (e)(1). AACC, slip op. at 7. In contrast, Judge Barkley quoted the complete text of the paragraph (b) definition, paragraph (e)(1), and paragraph (e)(6)(i). He then concluded:

It seems clear to this Judge the standard requires a regulated area only if there is a showing of actual overexposure or that overexposure can be reasonably expected. The requirement of a regulated area is not triggered simply by engaging in asbestos removal.

To read the standard as the Secretary suggests would require an employer to construct a negative-pressure area any time he was engaged in asbestos removal without consideration to whether there was a reasonable expectation of a hazard. I find this interpretation to be inconsistent with the language of the standard. If the employer is to be required to establish a negative-pressure area with the attendant requirements of respirators, hygiene facilities, employee training and medical surveillance, there must be at a minimum a reasonable expectation of overexposure.

EEC, slip op. at 8-9.

C. Employers Have a Right to Have the Standard Enforced as It Is Written.

To depart from the terms of the standard as written, as the Secretary advocates, would be to deprive employers of notice of the conduct required of them. With penal sanctions imposed for violations of the standard, this would be an intolerable situation.

Employers could reasonably determine that airborne concentrations would not be reasonably likely to exceed the PEL during particular removal, demolition, or renovation operations. In the preamble to the construction industry asbestos standard, OSHA found that in many instances employers may use glove bags, wet methods, and other techniques to keep airborne concentrations of asbestos below the action level. 51 Fed. Reg. 22612, 22706 (June 20, 1986). It even predicted that:

most employers engaged in maintenance and renovation projects in environments that do not lend themselves to the construction of negative-pressure enclosures will elect to use glove bags, wet methods, and other control measures to ensure that their employees' exposures to asbestos remain below the standard's action level.

Id. at 22711. In its recent notice of proposed rulemaking on the negative-pressure enclosure requirement, OSHA published estimates of current exposure levels during various asbestos removal, demolition, and renovation operations which showed none of them more than 50% of the current PEL. Most were one or two orders of magnitude lower than the PEL. 55 Fed. Reg. 29712, 29735 (July 20, 1990). Indeed, the facts of this case, where monitored levels were two orders of magnitude below the PEL, show that in some operations it is reasonable to conclude that exposures are not reasonably likely to exceed the PEL. Decision at 7. Thus, employers engaged in removal, demolition, or renovation operations who use these methods so as to eliminate any reasonable likelihood of airborne concentrations above the PELs may rely on the language of the standard to conclude that the negative-pressure enclosure requirement does not apply. Under OSHA's interpretation, however, they would be in violation of the standard, notwithstanding that reliance.

Such a situation deprives employers of their due process rights to notice. As Judge Barkley wrote:

While this may not be the result the Secretary intended, it is well settled that "regulations cannot be construed to mean what an agency intended but did not adequately express." L.R. Wilkinson & Sons, Inc. v. Donovan, 685 F.2d 664, 675 (D.C. Cir. 1982). To

hold otherwise would be to deny the employer fair warning of the conduct required. Diamond Roofing v. Occupational Safety and Health Review Commission, 528 F.2d 645 @ 649 (5th Cir. 1976).

EEC, slip op. at 9-10. See Brennan v. OSHRC (Pearl Steel Erection Co.), 488 F.2d 337, 339, 1 BNA OSHC 1429, ___ (5th Cir. 1973) ("The fault lies in the wording of the regulation."); Dravo Corp. v. OSHRC, 613 F.2d 1227, 1231-32, 7 BNA OSHC 2089, ___ (3d Cir. 1980) ("Because we deal with a penal sanction, we begin with a recognition that the coverage of an agency regulation should be no broader than its terms."); Usery v. Kennecott Copper Corp., 577 F.2d 1113, ___, 6 BNA OSHC 1197, ___ (10th Cir. 1977) (an employer is "not required to assume the burden of guessing what the Secretary intended plain and unambiguous words employed in the safety regulation to be. This is especially true when violation of a regulation subjects one to criminal or civil sanctions. A regulation cannot be construed to mean what an agency intended but did not adequately express."); Brennan v. OSHRC (Ron M. Fiegen, Inc.), 513 F.2d 713, 716, 3 BNA OSHC 1001, ___ (8th Cir. 1975) ("Where, as here, the interpretation derives little support from the language of the regulation, it would be fundamentally unfair to impose on the employer civil penalties for its violation. To do so would subject him to liability without warning that his conduct is prohibited.").

If in fact the asbestos standard does not say what OSHA intended it to say, then rather than attempt to amend it through interpretation, the Secretary should do so through notice-and-comment rulemaking. See Fluor Constructors, Inc. v. OSHRC, 861 F.2d 936, 939, 13 BNA OSHC 1956 (D.C. Cir. 1988) ("An agency is bound by the regulations it promulgates and may not attempt to circumvent the amendment process through changes in interpretation unsupported by the language of the regulation."); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161-62, 6 BNA OSHC 1440, ___ (3d Cir. 1978) ("The responsibility to promulgate clear and unambiguous standards is upon the Secretary. The test is not what he might possibly have intended, but what he said. If the language is faulty, the Secretary has the means and the obligation to amend.").

Ironically, OSHA has just proposed to amend paragraphs (e)(1) and (e)(6) of the asbestos standard for construction to impose an explicit requirement to use negative-pressure enclosures in certain operations, regardless of the exposure levels. 55 Fed. Reg. 29712 (July 20, 1990). Although OSHA claims that the proposed amendments are simply "clarifying revisions", *id.* at 29715, it is clear that new requirements would be imposed. For example, whereas currently paragraph (e)(6) applies only to removal, demolition, and renovation operations, under the proposal the paragraph would also apply

to maintenance activities. Inexplicably, OSHA does not propose to amend the definition of "regulated area" in paragraph (b) to delete the current linkage between negative-pressure enclosures and actual or reasonably likely airborne concentrations above the PEL. OSHA also conveys its misunderstanding of the effect of its own proposals on negative-pressure enclosures by stating in the preamble:

Therefore requiring that the spread of asbestos be contained where it is likely, even if not certain, that the PEL would be exceeded is both appropriate and necessary to reduce still significant risk to bystander employees.

Id. at 29716. All parties agree that the current standard triggers the negative-pressure enclosure requirement "where it is likely, even if not certain, that the PEL would be exceeded"; the proposal would make that requirement apply even where it is not likely that the PEL would be exceeded.

Although years late, a rulemaking is particularly appropriate since OSHA has never previously published a proposed negative-pressure enclosure requirement for public comment. The proposed rule which preceded the construction industry asbestos standard did not even propose a separate standard for construction. Instead, it proposed only a general industry standard similar to the then-existing standard but for the PEL and a few other provisions, and solicited comments on the advisability of a separate construction industry standard and what provisions such a standard should have. 49 Fed. Reg. 14116 (Apr. 10, 1984). Thus, to date OSHA has never had the benefit of public comment on the appropriate scope of a negative-pressure enclosure requirement.

At a time when OSHA is engaged in rulemaking to revise the negative-pressure enclosure requirement to read as it argues here that it should be read, it would be wholly inappropriate for the Commission, in effect, to declare that action unnecessary because employers can be required to divine OSHA's intent from the contrary words of the current standard.

II. The Secretary's Interpretation Is Not Entitled to Deference Under the Circumstances Presented Here.

Normally, the Secretary's interpretation of OSHA standards are entitled to deference. Judge Salyers ruled as he did below because of the deference to be extended to the Secretary's interpretation. AACC, slip op. at 10. But deference is not appropriate in this case.

The general rule is that the administrative interpretation of a regulation becomes of controlling weight unless it is plainly erroneous or inconsistent with the regulation. See,

e.g., United States v. Larionoff, 431 U.S. 864, 872 (1977); Bowles v. Seminole Rock Co., 325 U.S. 410, 414 (1945). In the context of the Commission's review of OSHA enforcement cases, there is substantial precedent for the assertion that it is the regulatory interpretation of the Commission, instead of that of the Secretary, which is entitled to this deference. See Dole v. OSHRC (CF&I Steel Corp.), 891 F.2d 1495, 14 BNA OSHC 1388 (10th Cir. 1989), petition for cert. granted, 58 U.S.L.W. 3811 (U.S. June 25, 1990). The Supreme Court has agreed to decide this very issue in the CF&I case. Under the CF&I case and the cases it cites, it was inappropriate for Judge Salyers to defer to the Secretary's interpretation.

Even if it is the Secretary's interpretation which is generally entitled to deference, however, deference is not appropriate here. Deference does not mean that an agency has the authority to rewrite its regulations through interpretations; on the contrary, the degree of deference is measured by the extent that the agency's interpretation does not strain the plain meaning of the words, or imply language that does not exist. Bonessa v. U.S. Steel Corp., 884 F.2d 726, 732 (3d Cir. 1989); Bethlehem Steel Corp. v. OSHRC, 573 F.2d 157, 161 (3d Cir. 1978). It is also measured by the consistency of the agency's interpretation over time. (citation) Here the Secretary's interpretation fails on each of these grounds.

A. The Secretary's Interpretation Is Plainly Erroneous and Inconsistent With the Standard.

The Secretary has made no creditable attempt to reconcile her interpretation with the language of the standard, as discussed above. That alone is enough to prove that her interpretation is unreasonable. See, e.g., Fluor Constructors, Inc. v. OSHRC, 861 F.2d 936, 939, 13 BNA OSHC 1956, ___ (6th Cir. 1988) ("An agency's interpretation of a regulation is valid, however, only if that interpretation complies with the actual language of the regulation."); Union of Concerned Scientists v. NRC, 711 F.2d 370, 381 (D.C. Cir. 1983) ("When an agency's interpretation of its own rules flies in the face of the language of the rules themselves, it is owed no deference."); Miller v. Bond, 641 F.2d 997, 1002 (D.C. Cir. 1981) (deference to an agency interpretation "is due only when the interpretation is 'reasonable and consistent with the regulation.'")

This case may be usefully contrasted with the situation in GAF Corp. v. OSHRC, 561 F.2d 913, 916, 5 BNA OSHC 1555, ___ (D.C. Cir. 1977). There the court supported the Secretary's interpretation that the medical surveillance provision of the general industry asbestos standard was not triggered by exposures above the PEL. The language of the standard

contained no such quantitative trigger, and the court refused to imply one. Here, however, the situation is far different. Instead of silence about a quantitative trigger, the standard has not one but two explicit quantitative triggers for the negative-pressure enclosure requirement: paragraph (b)'s definition of the term "regulated area", and paragraph (e)(1). Both tie the scope of the requirement to airborne concentrations above the PEL, or to the reasonable likelihood of such concentrations.

In addition to its conflict with the language of the standard, the Secretary's interpretation is unreasonable because the proffered justifications for it do not withstand scrutiny. First, the Secretary suggests that her interpretation is appropriate because:

The removal or encapsulation of asbestos-containing products . . . are typically associated with the highest asbestos exposures occurring in construction

51 Fed. Reg. at 22706. But an association with high exposures in some instances, even many instances, would not explain the necessity for a negative-pressure enclosure where that association is demonstrably absent, *i.e.*, where it can be demonstrated that airborne concentrations above the PEL are not even reasonably likely.

Secondly, the Secretary cites a tiering approach to the hazards of asbestos, with the strictest controls reserved for operations with the highest exposure potential. As discussed below, that tiering approach of adjusting the degree of control to the degree of risk is inconsistent with an interpretation that controls are required even where there is no reasonable likelihood of risk. On the contrary, triggering a negative-pressure enclosure requirement with the reasonable likelihood of high exposure would appear to advance the Secretary's avowed purpose far better than would her own interpretation.

Sometimes OSHA properly adopts "backstop" provisions, such as initial monitoring or medical surveillance requirements, which are not triggered by exposures above the PEL or action level. See Industrial Union Dept., AFL-CIO v. American Petroleum Institute, 448 U.S. 607, 656-58, 8 BNA OSHC 1586, ____ (1980). But such "backstop" provisions differ sharply in nature from control provisions such as requirements for PELs and negative-pressure enclosures. Those must tend to reduce a significant risk. *Id.* Where there is no reasonable likelihood of exposure above the PEL, there is no reduction of a significant risk.

OSHA effectively concedes this point in the current rulemaking, where it discusses its finding that significant risk exists even below the PEL:

Most importantly, as noted above and by the Court, significant risk exists at levels below the PEL. Therefore requiring that the spread of asbestos be contained where it is likely, even if not certain, that the PEL would be exceeded is both appropriate and necessary to reduce still significant risk to bystander employees.

55 Fed. Reg. 29712, 29716 (July 20, 1990). That conclusion is consistent with the interpretation that paragraph (e)(6)(i) is currently triggered by the reasonable likelihood of exposure above the PEL. Significantly, OSHA did not state that to address residual significant risk below the PEL that it was necessary to impose the negative-pressure requirement even where exposure above the PEL is not reasonably likely.

B. The Secretary's Interpretation Was Not Thoroughly Considered.

As support for the conclusion that the Secretary's interpretation is plainly erroneous, it is noteworthy that she has shown little indication that her interpretation was thoroughly considered. The evidence is to the contrary, since the issue was not specifically proposed for public comment, and within the last few weeks OSHA has found it necessary to request public comments on the appropriate scope of the provision.

Preceding adoption of the construction industry asbestos standard, OSHA published two proposed rules, neither of which contained a negative-pressure enclosure provision. The first was a temporary emergency standard, 48 Fed. Reg. 51085 (Nov. 4, 1983), which was later invalidated by a court. Asbestos Information Association/North America v. OSHA, 727 F.2d 415, 11 BNA OSHC 1817 (5th Cir. 1984). The second solicited comments on whether a separate construction industry standard should be adopted, and, if so, what its provisions should include, but it proposed only amendments to the general industry standard. 49 Fed. Reg. 14116 (Apr. 10, 1984). In response to the preamble to the proposed rule, some commentators suggested adoption of a negative-pressure enclosure requirement, but of necessity there was no thorough discussion of what its provisions should be. 51 Fed. Reg. 22612, 22710-11 (June 20, 1986). Thus, the Secretary cannot maintain that her interpretation is solidly based upon thorough public discussion of the issue.

In effect, OSHA has acknowledged its lack of thorough consideration of the appropriate scope of the negative-pressure enclosure requirement by belatedly, years after adoption,

specifically requesting public comment on its appropriate scope. 55 Fed. Reg. 29712 (July 20, 1990). The recent proposal stated:

In 1986, OSHA believed, based on limited reports of experience using such enclosures for asbestos work, that the full enclosure, which enclosed the work and the workers and limits access, would be effective in containing asbestos

OSHA seeks comment on applying the requirements for negative pressure enclosure for all removal, demolition and renovation jobs which involve asbestos.

Id. at 29715, 29716. Whatever the outcome of the present rulemaking, it presumably will be well considered, based upon a full record. In contrast, the Secretary's interpretation of the current standard is not thoroughly considered.

C. OSHA Has Interpreted the Negative-Pressure Enclosure Requirement Inconsistently.

The deference due an agency's interpretation of its own regulations is dependent upon the consistency or inconsistency in its interpretations of those regulations over time. See, e.g., United States v. Paddock, 825 F.2d 504, 512 (D.C. Cir. 1987) ("We do not normally defer to a vacillating agency position"); National Fuel Gas Supply Corp. v. FERC, 811 F.2d 1563, 1571 (D.C. Cir. 1987) ("If the agency's interpretation of a contract has vacillated, deference might give the agency license to act arbitrarily by making inconsistent decisions without justification."); Kent Nowlin Construction Co. v. OSHRC, 593 F.2d 368, 371, 7 BNA OSHC 1105, ____ (10th Cir. 1979) ("The petitioner should not be penalized for deviation from a standard the interpretation of which . . . cannot be agreed upon by those who are responsible for compelling compliance with it and with oversight of the procedures for its enforcement."). Here OSHA has repeatedly espoused the precise opposite of the interpretation now advocated by the Secretary. Thus, no deference is due to the Secretary's interpretation.

In his decision below, Judge Salyers relied heavily on OSHA's interpretation expressed in the compliance directive for the standard, OSHA Instruction CPL 2-2.40 (Sept. 1, 1987). Decision at 8-9. As an initial matter, that directive cannot be said to be controlling. Union Carbide is aware of no evidence in the record that it reflects the intent of the drafters of the standard. It was issued over a year after the standard was published (June 20, 1986). There is no evidence in the record of which Union Carbide is aware that the drafters of the directive were also the drafters of the standard or that they consulted with the standard's drafters. See CF&I Steel Corp., supra, 12 BNA OSHC at 2074.

More importantly, the directive supports the precise opposite of the Secretary's interpretation. Appendix D of the directive is the only portion which explicitly classifies provisions of the standard as triggered by airborne concentrations above the PEL, triggered by airborne concentrations above the action level, or triggered regardless of level of airborne concentrations. It classifies all of paragraph (e) among the requirements triggered by the PEL. The only requirements identified as being triggered regardless of level are paragraph (k) (labels) and (l) (housekeeping). (Paragraph (k)(3) is classified as being triggered by the action level.) Thus, the directive itself is unambiguous in limiting the negative-pressure enclosure requirement, along with almost all of the rest of the standard, to situations where the PEL is exceeded or is reasonably likely to be exceeded.

The provisions of the directive quoted by Judge Salyers do not support the Secretary's interpretation either. They acknowledge that paragraph (e) requires two distinctly different types of regulated areas to be established, but it does not explicitly state that paragraph (e)(1), with its linkage to potential exposure above the PEL, is inapplicable to paragraph (e)(6).

In contrast, Assistant Secretary of Labor Pendergrass, who signed the asbestos standard on June 12, 1986 (51 Fed. Reg. at 22733), just six months later expressly interpreted the negative-pressure enclosure requirement to be triggered by the reasonable likelihood of exposures above the PEL:

The intent of 1926.58(e) is to require a negative pressure enclosure only where a regulated area is required. Regulated areas are established only where asbestos concentrations exceed the permissible exposure limit

Depending on the nature and extent of exposure, the requirement for a negative pressure enclosure may not be applicable in your case.

Letter of October 30, 1986 from John A. Pendergrass to Thomas R. Kupfer (Attachment 1).

Similarly, Charles Adkins, then OSHA's Acting Director of Health Standards Programs, wrote about the same time:

The intent of 1926.58(e) is to require a negative pressure enclosure and "competent person" only where a regulated area is established Regulated areas are established only where concentrations exceed the PEL.

Your second issue dealt with the type of operations that could qualify for exemption from the requirements of paragraph (e)(6). It should be noted that any operation can qualify for exemption provided airborne levels of asbestos are kept at or below 0.2 f/cc. This can best be accomplished by means of engineering controls used in conjunction with appropriate work practices since these two methods, when used either singly or in combination can be employed effectively to reduce asbestos exposures to below 0.2 f/cc.

Letter of Oct. 10, 1986 from Charles A. Adkins to Daniel Hoffman, National Steel Corporation (Attachment 2).

In addition to these informal interpretations (albeit by senior OSHA officials charged with responsibility for promulgating the asbestos standard), OSHA formally made the same interpretation in a 1988 Federal Register notice also signed by Assistant Secretary Pendergrass:

Paragraph (e) of the construction standard now requires employers to establish regulated areas whenever the PELs are exceeded. Regulated areas required by the standard can take two forms. For most employers who perform asbestos removal, demolition, or renovation operations (other than small-scale short-duration), the regulated area must consist of a negative-pressure enclosure that will confine the asbestos fibers being generated to the area within the enclosure and will thus protect other employees and bystanders on the site from exposure to excessive levels of asbestos. For small-scale, short-duration removal, demolition and renovation operations and for asbestos work operations that do not involve asbestos removal, demolition, or renovation, the employer may simply demarcate the regulated area by posted signs that limit the number of employees entering the area.

Regulated areas do not have to be established where engineering and work practice controls reduce employee exposures to asbestos to levels below the standard's TWA and excursion permissible limits.

53 Fed. Reg. 35610, 35622-23 (Sept. 14, 1988).

This is not to say that from time to time OSHA officials have not also expressed the Secretary's current interpretation in informal statements; they have. The current rulemaking proposal asserts that the proposed amendments to paragraphs (e)(1) and (e)(6) are simply clarifications. But it should be clear that OSHA's interpretations of paragraph (e)(6)(i)

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shortly after issuing the standard and its formal interpretations since then have interpreted the standard contrary to how the Secretary now argues that it should be interpreted.

In light of this vacillation, the Secretary's interpretation is entitled to no deference.

III. Interpreting the Negative-Pressure Enclosure Requirement as Limited to Situations in Which Overexposures Are at Least Reasonably Likely Is Consistent With the Purpose of the Requirement.

In construing the meaning of paragraph (e)(6)(i), the Commission should keep in mind the purpose of that provision. That purpose is a limited one, preventing overexposures. Thus, it is perfectly consistent to interpret the requirement's application as limited to situations in which overexposures are at least reasonably to be expected.

The preamble to the construction industry asbestos standard recognizes that "employees engaged in asbestos removal, demolition, and renovation operations generally have the highest asbestos exposures of all construction workers." 51 Fed. Reg. at 22706. Accordingly, OSHA adopted several provisions applicable only to those operations, including paragraph (e)(6)(i). But to say that some removal, demolition, and renovation operations are associated with high airborne concentrations is not to say that all or even most of those operations are so associated. On the contrary, as noted above, OSHA explicitly found that many removal, demolition, or renovation operations do not involve high potential exposures when certain techniques are followed, such as use of glove bags or wet methods.

In the preamble OSHA explained the purpose of the negative-pressure enclosure requirement as follows:

The regulated area requirement in paragraph (e)(6) of the revised construction standard requires employers who perform asbestos removal, demolition, or renovation operations to establish regulated areas that consist of negative-pressure enclosures that will confine the asbestos fibers being generated to the area within the enclosure and will thus protect other employees and bystanders on the site from exposure to excessive levels of asbestos.

51 Fed. Reg. at 22710 (emphasis added). Thus, the purpose of the requirement is to protect employees outside the work area from overexposure. For some kinds of removal, demolition, or renovation operations, the risk of overexposure of those employees may be substantial. But OSHA has recognized that for

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others kinds of those operations, use of certain techniques is sufficient to avoid even the reasonable likelihood of overexposures. Interpreting the requirement to be triggered by the reasonable likelihood of exposures above the PELs rationally related the obligation to provide protective measures for bystanders to the need for such measures.

Limiting the application of the negative-pressure enclosure requirement is also consistent with the tiering approach espoused in the preamble. There OSHA explained:

Accordingly, the final standard applies to all occupational exposures to asbestos in the construction industry, but is tiered to apply increasingly stringent requirements to those work operations associated with the highest exposures OSHA believes that this tiering approach will simultaneously ensure maximum employee protection while scaling the burden of compliance with the standard to the degree of hazard associated with particular operations

OSHA notes that the final standard has been carefully structured by the Agency to relate the stringency of the requirements to the extent and duration of employee exposures. OSHA therefore believes that no compliance burden will be placed on construction employers . . . who maintain asbestos exposures in their workplaces to levels below the action level of 0.1 fiber/cc.

Id. at 22706, 22707. If the degree of hazard is very low because airborne concentrations are not reasonably likely to exceed the PELs, then under this approach the lesser risk should have less stringent requirements. Conversely, where the risk of airborne concentrations above the PELs is at least reasonably likely, more stringent requirements are appropriate.

In the passages quoted above, OSHA recognized the need to correlate the "compliance burden" placed upon construction employers with the degree of risk involved. That recognition is compelled by Section 3(8) of the Occupational Safety and Health Act of 1970 ("OSH Act"), 29 U.S.C. § 652(8), which requires that OSHA standards be:

reasonably necessary or appropriate to provide safe or healthful employment and places of employment.

While the OSH Act may not require explicit balancing of costs and benefits for health standards, the provisions of Section 3(8) apply even to those standards. See American Textile Mfrs. Ass'n v. Donovan, 452 U.S. 490, 514 n.32, 9 BNA OSHC 1913, —

(1981) (OSHA could not insist on a feasible requirement for use of five respirators if use of one respirator would achieve the same reduction in health risk). Accordingly, the Secretary must be able to establish that the negative-pressure enclosure requirement is "reasonably necessary or appropriate". That burden cannot be sustained when the requirement is interpreted to apply even when airborne concentrations above the PEL are not at least reasonably likely.

Judge Barkley found that linking the negative-pressure enclosure requirement to the reasonable likelihood of overexposure was consistent with this tiering approach:

Reading the standard to require a reasonable expectation of overexposure does not harm the Secretary's "graduated response" mentioned in the preamble to the standard. If there is a reasonable expectation of overexposure and the employer is engaged in asbestos removal, the employer is prohibited from utilizing the less restrictive regulated area, the demarcated area, but instead must utilize a negative pressure area, which in turn without any further showing imposes such requirements as respiratory protection, hygiene facilities, employee training and medical surveillance.

EEC, slip op. at 9.

Ironically, the Secretary's interpretation departs from this tiering scheme. It ignores the reasonable likelihood of airborne concentrations above the PELs, or the lack of such a likelihood, and instead lumps together all removal, demolition, and renovation operations together. The only exceptions are for small-scale, short-duration operations, and where the use of negative-pressure enclosures is infeasible. For all others, it ignores OSHA's findings that with the use of wet methods and/or other techniques there is no reasonable likelihood of overexposures and treats them all as though they uniformly pose a high degree of hazard. OSHA's own tiering scheme can only be furthered by linking the negative-pressure enclosure requirement to the reasonable likelihood of overexposure.

Although nowhere articulated by the Secretary, a sub silentio purpose underlying her interpretation may be the perception that enforcement of the negative-pressure enclosure requirement would be hampered by a linkage to the reasonable likelihood of overexposure. Certainly, if every removal, demolition, or renovation operation were subject to the requirements of paragraph (e)(6)(i), OSHA inspectors could cite employers for failure to comply with that provision simply based upon the objective fact of whether or not a negative-pressure enclosure was used. But linking the requirement to the reasonable likelihood of overexposure is not a significant obstacle to OSHA's enforcement of the provision.

Significantly, OSHA has no need to prove actual exposures above the PELs. If that were the case, OSHA would have a difficult burden of proof where the employer has not conducted monitoring. But OSHA needs only to prove a reasonable likelihood of airborne concentrations above the PELs. That can be established after the fact, even without monitoring results, as illustrated by Judge Barkley's decision in EEC, which the employer chose not to appeal to the Commission.

CONCLUSION

The Commission should endorse the views of Judge Barkley in EEC rather than the views of Judge Salyers in this case on the issue of what triggers the provisions of 29 C.F.R. § 1926.58(e)(6)(i). Judge Barkley carefully considered both the language of the construction industry asbestos standard and the purpose of the negative-pressure enclosure requirement in concluding that the Secretary's interpretation was unreasonable and not entitled to deference. In addition, the Commission should consider OSHA's history of interpreting the requirement as Judge Barkley concluded that it should be interpreted, rather than how the Secretary now argues that it should be interpreted.

The Secretary's position is contrary to the language of the standard, and it works against the tiering approach endorsed in the preamble. The Secretary has an immediate opportunity to revise the standard to read as she feels it should read. Yet sound policy reasons as well as the current text of the standard support retaining the standard's linkage of the negative-pressure enclosure requirement to the reasonable likelihood of airborne concentrations above the PEL.

For the foregoing reasons, Judge Salyers' decision on the issue of what triggers 29 C.F.R. § 1926.58(e)(6)(i) should be REVERSED.

Mark N. Duvall
Health and Safety Counsel
Union Carbide Chemicals and
Plastics Company Inc.
39 Old Ridgebury Road, E3
Danbury, CT 06817-0001

Toby Alaska Threet
Attorney
The Dow Chemical Company
Legal Department
2030 Willard H. Dow Center
Midland, MI 48674

Date: August 9, 1990

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CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of August, 1990, I mailed one copy of Brief of Amici Curiae Union Carbide Chemicals and Plastics Company Inc. and The Dow Chemical Company to the following by first class, postage-paid mail:

Tony Gil, Esq.
U.S. Department of Labor
881 Federal Office Building
1240 East Ninth Street
Cleveland, OH 44199

Robert W. Thomson, Esq.
Meyer, Darragh, Buckler, Bebenek, Eck & Hall
2000 Frick Building
Pittsburgh, PA 15219

Mark N. Duvall
Counsel for Amicus Curiae
Union Carbide Chemicals and
Plastics Company Inc.

Date: August 9, 1990

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AGENDA FOR FORMAL PROGRAM REVIEW

I.	INTRODUCTION	AUDIT CHAIRMAN	5 MIN.
II.	REPORT OF WALK-THROUGH	AUDIT CHAIRMAN	5 MIN.
III.	REVIEW OF MEDICAL PROGRAMS	PLANT PHYSICIAN	10 MIN.
IV.	REVIEW OF PLANT PROGRAMS	PLANT INDUSTRIAL HYGIENE CONTACT INDUSTRIAL HYGIENIST	
	A. STATUS OF PREVIOUS AUDIT		5 MIN.
	B. HAZARD COMMUNICATION		5-10 MIN.
	C. INDUSTRIAL HYGIENE SURVEILLANCE		5-10 MIN.
	D. RESPIRATORY PROTECTION		5-10 MIN.
	E. RADIATION SAFETY		5-10 MIN.
	F. HEARING CONSERVATION		5-10 MIN.
	G. VENTILATION		5-10 MIN.
	H. PERSONAL PROTECTIVE EQUIPMENT		5-10 MIN.
	I. HEAT STRESS		5-10 MIN.
	J. ERGONOMICS		5-10 MIN.
	K. SPECIAL REGULATED MATERIALS		
	1. ASBESTOS		5-10 MIN.
	2. FORMALDEHYDE		5-10 MIN.
	3. ACRYLONITRILE		5-10 MIN.
	4. ETHYLENE OXIDE		5-10 MIN.
	5. VINYL CHLORIDE		5-10 MIN.
	6. BENZENE		5-10 MIN.
V.	TOP INDUSTRIAL HYGIENE PRIORITIES FOR NEXT 2 YEARS	PLANT SUPERINTENDENT	10 MIN.
VI.	SUMMARY	AUDIT CHAIRMAN	5 MIN.

ST0007633

5. Other Training

- a. Protective equipment
- b. Hearing conservation
- c. Heat stress
- d. Radiation
- e. Formaldehyde
- f. Benzene
- g. Acrylonitrile
- h. Vinyl chloride
- i. Ethylene oxide

6. Plant Postings on Employee Bulletin Boards

- a. "Access to Occupational Health Information" (2/88)
- b. Radiation sign: TRCR Form 21-1

ST0037635

PREVIOUS PROGRAM REVIEW

1. When was the industrial hygiene program previously evaluated?
2. What is the status of the recommendations made in the previous audit summary report?
3. Have there been any major changes or additions to the plant since the last evaluation?
4. Are there any specific concerns that you feel should be addressed in this audit?

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PREVIOUS PROGRAM REVIEW
(for presentation to audit team)

- Status of recommendations from previous audit.

Last major changes since last audit.

List any other previously unrecognized health hazards.

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HAZARD COMMUNICATION

1. Is there a plant specific Industrial Hygiene orientation program for:

a. employees new to the plant or Dow?	Y	N
b. long term contractors?	Y	N
c. short term contractors?	Y	N
d. short term Dow employees?	Y	N
e. visitors or transport personnel?	Y	N

 2. Are the following elements included in the orientation program?

a. location and contents of the Industrial Hygiene Manual.	Y	N
b. major chemical and physical stresses for the plant/area.	Y	N
c. resource sheets (MSDS, TIME, etc).	Y	N
d. protective equipment policies.	Y	N

 3. How is the orientation documented? Was documentation forwarded to Industrial Hygiene?

a. new employees to the plant.	Y	N
b. long term contractors.	Y	N
c. short term contractors.	Y	N
d. short term Dow employees.	Y	N
e. visitors or transport personnel.	Y	N

 4. Is the Hazard Communication Program written, in the Industrial Hygiene Manual and made available to all employees throughout each work shift?

	Y	N
--	---	---

 5. Regarding the Chemical and Physical Agent Inventory (CPAI)

a. does a CPAI exist for each job classification	Y	N
b. have all CPAIs been updated within the previous 12 months	Y	N
c. does the CPAI include intermediates (isolated and non-isolated), lab chemicals, shop/maintenance materials which are not "consumer-type" products	Y	N

 6. Are resource sheets (MSDS, TIME, etc.) available for each material listed on the CPAI?

	Y	N
--	---	---
- Have all CPAIs and resource sheets available in the Industrial Hygiene Manual for inspection during the walk-through.

ST0037639

7. Have all employees received Hazard Communication training which included the following elements: overview of the standard, hazards of routine and non-routine jobs, use and location of MSDS, explanation of labels, health hazard information and protective equipment requirements?

Y N

8. Have all long term contractors received the required Hazard Communication training which included the following elements: overview of the standard, hazards of routine and non-routine jobs, use and location of MSDSs, explanation of labels, health hazard information and protective equipment requirements?

Y N NA

9. When was this training (6 & 7) last completed?

10. Are exposure monitoring results and control strategies (if applicable) communicated to employees both individually and in group meetings?

Y N NA

Provide training records generated since the last audit.

11. Are exposure monitoring results and control strategies (if applicable) communicated to contractors?

Y N NA

Provide training records generated since the last audit.

12. Was the documentation in questions 10 & 11 forwarded to Industrial Hygiene?

Y N

13. If an employee misses an Industrial Hygiene meeting (e.g. Hazcom, exposure monitoring, etc.), what methods are used to do follow-up training?
- _____
- _____
- _____

14. a. Have any new or replacement chemicals been added to the plant CPAI since the last audit?

Y N

- b. If yes, were employees trained on potential health effects?

Y N

Provide training records generated since the last audit.

ST00037610

15. How many materials on the CPAI do not have an exposure guideline?

1

Are any of these materials handled in large quantities?

Y N

List _____

Is there a toxicity concern for these materials?

Y N

List _____

Are there real or potential personal exposures to these materials?

Y N

List _____

16. Do you have any PMN chemicals regulated by a 5(e) order?

Y N

Describe _____

Was monitoring, methods development, or protective equipment testing required?

Y N

HAZARD COMMUNICATION PROGRAM
(For presentation to audit team)

Describe the orientation program

Training documentation

Describe "new chemicals" training program

Describe plans to develop an IHG

Program strength

Areas for improvement

ST00037641

INDUSTRIAL HYGIENE SURVEILLANCE

1. Is the Occupational Health Protocol current i.e. less than 2 years old? Y N
2. Have all chemical and physical stresses with a Priority Rating of 1, 2 or 3 been evaluated? Y N

Approximately how many industrial hygiene samples were taken within the past year? _____ three years? _____

3. List past chemical monitoring data:

Chemical	TWA or Job Task	Range	Avg.	n

4. Has all monitoring been documented in an Industrial Hygiene report? Y N
5. Were report recommendations implemented? Has this been adequately documented in the Industrial Hygiene original data files? Y N
6. Are exposure monitoring samples analyzed 'in-plant' using the plant lab? Y N
- Does the plant lab participate in the analytical round robins? Y N
7. What chemical or physical agents of concern cannot be monitored due to inadequate monitoring methods? Are there any method development plans? _____

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8. Is the quality assurance program adequate i.e. spikes, blanks, records, chain of custody, storage, etc.?

Y N

9. What are the future industrial hygiene monitoring plans for this facility?

10. Are continuous air monitors in use?

Y N

What kind of analysis system is used? _____

Chemical/conditions monitored _____

What is the purpose?

___ Leak detection

___ Area

___ Fence Line

___ Other _____

How are the monitors calibrated?

ST0037643

INDUSTRIAL HYGIENE MONITORING
(For presentation to audit team)

Review past monitoring data - 8 hour TWA

- Job Task
- Wipe Testing

Review future monitoring plans

Review need for methods development

Program strengths _____

Areas for improvement _____

ST0037644

RESPIRATORY PROTECTION

1. Is there a written respiratory program which has been updated within the past 12 months?

Y N

2. What types of respirators are issued for the following uses?

Escape only: _____

Routine use: _____

Emergency use: _____

3. Has training been conducted for all users? (Annual for routine users and biennial for escape-only users?)

Y N

Describe the training program (who conducts, methods, tests, etc.)

4. Has fit testing been conducted within the past 2 years for all routine users?

Y N

5. Have any employees been medically restricted for use of certain types of respirators?

Y N

6. If air line systems are used, what is the source of the breathing air? _____

If an air compressor is used for breathing air, describe the maintenance program for filters, CO alarms, etc.

Is the compressor located in a clean area?

Y N

Is the compressor used during plant emergencies?

Y N

7. Describe the plant programs for:

cleaning, _____

storage, and _____

maintenance. _____

ST0037615

8. What routine jobs require the use of respirators? _____

Have exposure levels been assessed during these jobs?

Y N

9. Are air purifying respirators being used with materials having poor warning properties?

Y N

Describe _____

If yes, have cartridges been tested for breakthrough?

Y N

10. Who has plant responsibility for implementing the respirator program?

11. What special provisions are made for those employees wearing eyeglasses?

12. How are breathing air line tap-ins identified? _____

Are only Hansen BK and HK series fittings used?

Y N

13. What is the respiratory protection program for visitors and non-Dow employees? _____

RESPIRATORY PROTECTION
(for presentation to audit team)

ST0037647

Describe types of respirators used in plant

Training Program

Practice, for cleaning, storage, maintenance

Fit Testing Program

Cartridge breakthrough testing program

Program strengths _____

Areas for improvement _____

RADIATION SAFETY

1. How many sources are in the plant? _____

IF NONE, SKIP THE REMAINDER OF THIS SECTION.

- | | | |
|--|---|---|
| 2. Are all radiation devices registered with Radiation Safety, B-101? | Y | N |
| 3. Who is responsible for the radiation program? _____ | | |
| Has this person been trained? | Y | N |
| 4. Has radiation safety training been conducted for the plant personnel? | Y | N |
| 5. Are there any radiation devices which are no longer needed? | Y | N |
| 6. Have all plant radiation meters been calibrated within the past year? | Y | N |

RADIATION PROGRAM
(for presentation to audit team)

ST0037649

Describe radiation program.

Training and Documentation.

Calibration program of sources, detectors and meters

Program strengths _____

Areas for improvement _____

ST0137650

HEARING CONSERVATION

1. a. Is any job classification exposed to noise levels greater than 85 dBA as an 8 hour time-weighted average (TWA) or 82 dBA as a 12 hour TWA? Y N

List these job classifications.

- b. Are there any plant areas with sound levels in excess of 90 dBA? Y N

List these areas of the plant. _____

If the answer to 1a and 1b is NO, skip the remainder of this section.

2. If employees are exposed to greater than 85 dBA as an 8 hour TWA or 82 dBA as a 12 hour TWA, are they provided the following. NA or

a. annual training Y N

b. annual audiograms Y N

c. hearing protectors Y N

3. If employees are exposed to area noise levels in excess of 90 dBA, have they been trained in the proper use of hearing protectors? Y N NA

4. Has a personal and area monitoring survey been conducted within the past three years? Y N

5. Are there guidelines which outline where hearing protectors are stored and the brand (type) to be used for specific job tasks or areas? Y N

6. Does the Industrial Hygiene noise report: 1) identify the types of hearing protectors used by the plant personnel, and 2) verify that the attenuation is adequate? Y N

- | | | | |
|-------|---|---|------|
| 7. a. | Are there any employees who have experienced a Standard Threshold Shift (STS)? | Y | N |
| b. | If yes, have these employees been fitted and trained in hearing protectors by Occupational Medicine? | Y | N |
| c. | Have these employees been rechecked by Occupational Medicine within 30 days of the original audiogram? | Y | N |
| 8. | Have all plant areas in excess of 90 dBA been posted with the 'caution noise' sign? | Y | N NA |
| 9. | Have all plant areas in excess of 105 dBA been posted with the 'danger noise' sign? | Y | N NA |
| 10. | Are there any other areas that should be evaluated for noise levels or engineering controls to reduce the levels? | Y | N |

If yes (list) _____

What engineering controls have you instituted to reduce noise levels throughout the plant? _____

What future plans do you have to reduce noise levels throughout the plant? Timetable? _____

ST0037651

HEARING CONSERVATION
(for presentation to audit team)

Review past noise monitoring data.

Review types of hearing protection issued.

Review high noise areas.

Review plans to control noise.

Review STS history.

Program Strengths _____

Areas for Improvement _____

ST0007002

VENTILATION

1. a. Are there any laboratory type exhaust hoods in use? Y N
 - b. Are there any other local exhaust ventilation systems in use for operations such as drumming, bagging, welding, spray painting, solvent/degreasing tanks, etc.? Y N
 - c. Are there any laboratory exhaust hoods which do not meet the requirements established in Safety Reference No. 7? Y N
- If the answer to 1a and 1b are both NO, skip the remainder of this section.
2. a. Are the fume hoods equipped with manometers? Y N
 - b. If Yes, has an airflow survey been conducted within the past 3 years? Y N
 - c. Is there a quarterly check program for the manometer reading? Y N
 - d. If 2a is No, has an airflow survey been conducted within the past 1 year? Y N
 3. Are all laboratory and local exhaust ventilation systems included in the Industrial Hygiene Preventative Maintenance Program? Y N
 - a. Are all scrubbers, filters, and other cleaning devices associated with the ventilation systems included in the preventative maintenance program? Y N
 - b. Are there written job procedures for the cleaning and maintenance of ventilation systems? Y N
 4. Are the air intakes for the building located near any of the exhaust points for the fume hoods or local exhaust ventilation devices? Y N
 5. Is there alternate clean air intake for the control room and major offices in case of a gas release? Y N
 6. What type of ventilation is provided for operations such as drumming, bagging, welding, spray painting, solvent/degreasing tanks, etc? Please list each operation and the type of ventilation currently being used. _____
 _____ Y N
 7. Are there any specific operations that need to be evaluated to determine if ventilation is needed or required? _____

VENTILATION
(for presentation to audit team)

Review hood survey programs

Describe local exhaust systems

Review bag filter (etc.) maintenance procedures

Program strengths _____

Areas for Improvement _____

ST0087654

PERSONAL PROTECTIVE EQUIPMENT

1. Is there a written protective equipment policy addressing selection, use and limitations, decontamination, maintenance and storage?

Y N NA

SELECTION

2. What types of chemical protective clothing (CPC) on work clothing is provided?

Gloves
Boots
Suits
Clothing
Other

ST0037655

3. Have all job tasks that pose significant exposure potential to physical and/or chemical agents been identified in your plant?

Y N

Is this information specified in a table, job procedures or other (describe)?

Y N

4. Are the industrial hygienist and safety director contacted when new PPE is considered for use in your plant?

Y N

5. Is all the PPE used in this plant approved by the Protective Equipment Team (PET)?

Y N

6. Is there adequate documentation of breakthrough time and permeation rate on the chemical protective clothing (CPC) used in this plant? (especially CPC that is reused)

Y N

USE & MAINTENANCE

7. Are all PPE items (e.g. chemical protective coveralls, gloves, boots, goggles, etc.) inspected for defects prior to use?

Y N

8. Do personnel that are required to wear PPE properly don and doff their equipment?

Y N

9. Is repair of PPE done by a fully competent person that can certify that the condition of the PPE is equal to or superior to the manufacturer's original specification?

Y N NA

DECONTAMINATION, REUSE AND STORAGE

- | | | | | |
|-----|--|---|---|----|
| 10. | Is contaminated chemical protective clothing (CPC) decontaminated before removal? | Y | N | |
| 11. | After removal, is further decontamination required? | Y | N | |
| 12. | If the CPC is decontaminated, how is it done? (describe below) | | | |
| | - water based? | | | |
| | - aeration? | | | |
| | - other? _____ | | | |
| 13. | If the CPC is not decontaminated, is it discarded? | Y | N | |
| 14. | Are clean room/shower room/dirty room areas designated? | Y | N | NA |
| 15. | Do personnel have to cross through control rooms or hallways to attain access to these facilities? | Y | N | NA |
| 16. | Are street clothes stored separate from work uniforms and PPE? | Y | N | NA |
| 17. | Is there a disposal frequency for reused items? | Y | N | NA |

LAUNDERING

- | | | | | |
|-----|---|---|---|----|
| 18. | Is CPC (e.g. chemical protective gloves, coveralls, boots, etc.) laundered off-site? | Y | N | |
| 19. | Is general purpose clothing (e.g. cotton gloves, coveralls, uniforms, etc.) cleaned off-site? | Y | N | |
| 20. | Is there a potential for the general purpose clothing to contain contaminants with high molecular weight, low volatility, low water solubility and with skin absorption or tracking potential (e.g. hexachlorobenzene, 4,4-methylene dianiline, toluene diamine, etc.)? | Y | N | |
| 21. | For off-site cleaning, has the laundry been notified of the potential contaminants via a MSDS or equivalent data sheet? | Y | N | NA |

TRAINING

22. Have all employees required to wear PPE been trained upon initial assignment, biennially and after major job or process changes?

Y N

23. When was training last conducted? _____

ST0037657

PERSONAL PROTECTIVE EQUIPMENT
(for presentation to audit team)

Describe the types of CPC issued

Describe training program

Practices for cleaning, storage, maintenance

CPC testing program

Laundry practices

Program Strength _____

Areas for Improvement _____

ST0007658

HEAT STRESS

1. Are there any heat stress areas (hot equipment or work conditions) within the plant/area? Y N
If yes,
2. Are employees trained annually in heat stress recognition, treatment and procedures? Y N
If no, when was training last conducted? _____
3. Do written job procedures or safe work permits address how to avoid heat stress on jobs where heat stress may be a concern? Y N

ERGONOMICS

1. Have you ever had an ergonomic evaluation in your workplace for:

Lifting practices Y N

Office Y N

Machinery Y N

Tools Y N
2. List and describe any manual lifting jobs in your plant.

3. Describe the types of injuries experienced by employees during the past 2 years.

ST0037660

- A. Have your employees experienced any type of musculoskeletal problems in the past 2 years?

Y N

If yes, could these be caused by or related to the work environment?

Y N

4. Are there jobs present that require employees to perform repetitive motion movements?

Y N

5. Are the tools correctly designed to fit the job?

Y N

6. Have hand and power tools been selected which

- A. Encourage correct hand position

Y N

- B. Minimize vibration

Y N

- C. Are well-balanced and easy to hold

Y N

- D. Give support to the guiding hand

Y N

- E. Are designed to eliminate sharp edges or ridges which might impair circulation of exert pressure on the nerves

Y N

- F. Decrease the excessive grip force to maintain the tool in a stable position

Y N

HEAT STRESS
(for presentation to audit team)

List hot areas within the plant.

List jobs lasting >30 minutes requiring chemical protective suits.

Describe plant programs to prevent heat stress.

ST0037661

ERGONOMICS
(for presentation to audit team)

Describe manual lifting jobs

Review back or other injuries which could be work related

Program strengths _____

Areas for improvement _____

ST0037662

ASBESTOS

1. Is there any asbestos (insulation, gaskets, transite, etc.) in the plant? Y N
- IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.
2. Has all asbestos material been identified and labeled? Y N
3. Are permanent records (inventory) available showing the location of asbestos materials? Y N
4. Are asbestos containing materials inspected every 6 months for signs of deterioration? Y N
5. Are plant specific job procedures available for work involving asbestos materials? Y N
6. Has initial health hazard training been completed for all employees who work with asbestos? Y N
7. Has monitoring of personal exposures to asbestos been conducted? Y N
8.
 - a. Were any job classifications potentially exposed to greater than 0.1 f/cc as an 8-hour TWA? Y N
 - b. If yes, is health hazard training conducted annually for these affected job classifications? Y N
 - c. Were the potential exposures greater than 0.1f/cc for more than 30 days per year? Y N
 - d. Were potential exposures greater than 0.2 f/cc as an 8-hour TWA? Y N
 - e. Were there potential exposures greater than 1.0 f/cc for 30 minute excursions? Y N
 - f. If 8c, 8d or 8e were answered yes, were employees in these job classifications placed on the annual Medical Surveillance Requirements (MSR) for asbestos? Y N
9. Has a respiratory protection program been implemented? Y N NA
 - a. Have all affected employees received initial fit testing? Y N
 - b. If 8d was answered yes, are employees fit tested every 6 months? Y N

- | | | | |
|-----|---|---|---|
| 10. | Is there a current copy of the OSHA asbestos regulation or the Texas Operations Asbestos Handbook in the Industrial Hygiene Manual? | Y | N |
| 11. | Is there a current program to remove and/or replace asbestos materials by 1991 or 1992? | Y | N |

ST0037661

REGULATED MATERIALS
(asbestos, benzene, etc.)
(for presentation to audit team)

Review usage inplant

Review employee training

Review monitoring data

Review control methods - resp. CPC, engineering, etc.

Program strengths _____

Areas for improvement _____

ST0037655

ST0037665

FORMALDEHYDE

1. Is formaldehyde (liquid or gas) used in the plant/area in concentrations greater than 0.1%? Y N

IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.

2. Has initial exposure monitoring been completed to identify formaldehyde exposures for all affected job classifications? Y N
3. a. Were any job classifications potentially exposed to greater than 0.5 ppm as an 8 hour TWA (the action level)? Y N
- b. If yes, was repeat followup monitoring conducted each 6 months? Y N
4. Were any job classifications potentially exposed to greater than 1 ppm as an 8 hour TWA (the PEL)? Y N
5. a. Were any job classifications potentially exposed to greater than 2 ppm as a 15 minute TWA (the STEL) during job tasks? Y N
- b. If yes, was repeat followup monitoring conducted each 12 months? Y N
6. Were employees notified within 15 days after the exposure monitoring results became available? Y N
7. a. Are any employees exposed to concentrations greater than the action level or STEL? Y N
- b. If yes, have these employees been placed on the annual formaldehyde MSR (Medical Surveillance Requirement) program? Y N

IF 4A OR 5A WERE ANSWERED YES, ANSWER THE FOLLOWING QUESTIONS; OTHERWISE SKIP TO QUESTION 13.

8. Is there a written plan to reduce employee exposures to below the PEL? Y N
- Have available the plan for inspection by the audit team.
9. Are regulated areas (>PEL or STEL) identified with the correct sign which states "Danger-Formaldehyde Irritant and Potential Cancer Hazard-Authorized Personnel Only"? Y N
10. Has a respiratory protection program been implemented? Y N

- | | | |
|---|---|---|
| 11. Are employees who use negative pressure respirators fit tested annually? | Y | N |
| 12. Have the cartridge/canister replacement frequencies been specified in the area's written respirator program? | Y | N |
| 13. Has initial health hazard training been completed for all employees who work with formaldehyde? | Y | N |
| 14. Is health hazard training conducted annually? | Y | N |
| 15. Is a change room available for those who must remove street clothes and change into formaldehyde protective clothing? | Y | N |
| 16. Is the chemical protective clothing impervious to formaldehyde liquids? | Y | N |
| 17. Is full body protection used in areas where airborne concentrations exceed 100 ppm, including emergency reentry operations? | Y | N |
| 18. Is the CPC decontaminated before it is placed back in storage? | Y | N |
| 19. Is there a formaldehyde spill and leak detection program? | Y | N |
| briefly describe _____ | | |
| _____ | | |
| _____ | | |
| 20. Is there a current copy of the OSHA formaldehyde standard in the Industrial Hygiene Manual? | Y | N |
| 21. Are all formaldehyde containers (temporary and permanent storage) labeled with the proper Hazard Communication sign which includes the information "Potential Cancer Hazard"? | Y | N |

ACRYLONITRILE

1. Is acrylonitrile used in the plant/area in concentrations greater than 0.1%? Y N
- IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.
2. Has monitoring been done? Y N
3. a. Were any job classifications potentially exposed to 1-2 ppm as an 8-hour TWA (the action level)? Y N
- b. If yes, was repeat followup monitoring conducted each 3 months? Y N
- c. Have these employees been placed on the annual Acrylonitrile MSR (Medical Surveillance Requirement) program? Y N
4. a. Were any job classifications potentially exposed to greater than 2 ppm as an 8 hour TWA (the PEL)? Y N
- b. If yes, was repeat followup monitoring conducted each month? Y N
- c. Have these employees been placed on the annual Acrylonitrile MSR (Medical Surveillance Requirement) program? Y N
5. Were any job classifications potentially exposed to greater than 10 ppm as a 15 minute TWA (the STEL) during job tasks? Y N
6. Were employees notified within 5 days of the exposure monitoring results? Y N
7. Are there any other job tasks or job classifications which should be monitored? When was monitoring last conducted?

If 3a, 4a or 5 were answered Yes, answer the following questions; otherwise, skip to question 12.

8. Is there a written plan to reduce employee exposures to below the PEL or STEL? Y N
9. Are regulated areas (>PEL or STEL) identified with signs which state "Danger-Acrylonitrile (AN)-Cancer Hazard-Authorized Personnel Only-Respirators May Be Required"? Y N

ST0037669

10. Has a respiratory protection program been implemented? Y N
11. Are employees who use respirators fit tested semi-annually? Y N NA
12. Have the cartridge/canister replacement frequencies been specified in the area's written respirator program? Y N NA
13. Has initial health hazard training been completed for all employees who work with acrylonitrile? Y N
14. Is health hazard training conducted annually? Y N
15. Is a change room available for those who must remove street clothes and change into acrylonitrile protective clothing? Y N
16. Is the chemical protective clothing impermeable to acrylonitrile? Y N
17. Is the CPC decontaminated before it is placed back in storage? Y N
18. Do employees shower at the end of the shift (or before) after using CPC for protection from liquid acrylonitrile? Y N
19. Is there an acrylonitrile spill and leak detection program? Y N
- briefly describe _____
-
20. Is there a current copy of the OSHA acrylonitrile standard in the Industrial Hygiene Manual? Y N
21. Are all acrylonitrile containers (temporary and permanent storage) labeled with sign stating "Danger-Contains Acrylonitrile-Cancer Hazard"? Y N

ST00027670

ETHYLENE OXIDE

1. Is ethylene oxide (EO) used in the plant/area in concentrations greater than 0.1%?

Y N

IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.

2. Has initial exposure monitoring been completed to identify EO exposures for all affected job classifications?

Y N

3. a. Were any job classifications potentially exposed to 0.5-1 ppm as an 8 hour TWA (the action level)?

Y N

- b. If yes, was repeat followup monitoring conducted each 6 months?

Y N

4. a. Were any job classifications potentially exposed to greater than 1 ppm as an 8 hour TWA (the PEL)?

Y N

- b. If yes, was repeat followup monitoring conducted each 3 months?

Y N

5. Were employees notified within 15 days after the exposure monitoring results became available?

Y N

6. a. Are any employees exposed to concentrations greater than the action level for more than 30 days per year?

Y N

- b. If yes, have these employees been placed on the annual EO MSR (Medical Surveillance Requirement) program?

Y N

IF 3a OR 4a WERE ANSWERED YES, ANSWER THE FOLLOWING QUESTIONS; OTHERWISE, SKIP TO QUESTION 10.

7. Is there a written plan to reduce employee exposures to below the PEL?

Y N

8. Are regulated areas (>1 ppm) identified with the correct signs which state "Danger-Ethylene Oxide-Cancer and Reproductive Hazard-Authorized Personnel Only-Respirator and Protective Equipment may be required to be worn in this area"?

Y N

9. Has a respiratory protection program been implemented?

Y N

10. Has initial health hazard training been completed for all employees who work with EO?

Y N

11. Is health hazard training conducted annually?

Y N

ST0037671

12. Is Chemical Protective Clothing (CPC) provided to employees? Y N
- a. If yes, is this done to prevent skin contact with liquid EO? Y N
- b. Is a change room available for those who must remove street clothes and change into EO protective clothing? Y N
- c. Is the CPC decontaminated before it is placed back in storage? Y N
- d. Are storage containers of contaminated CPC labeled? Y N
13. Is there an EO spill and leak detection program? Y N
- briefly describe _____
- _____
14. Is there a current copy of the OSHA EO standard in the Industrial Hygiene Manual? Y N
15. Are all EO containers (temporary and permanent storage) labeled with a sign stating "Danger-Contains Ethylene Oxide-Cancer and Reproductive Hazard"? Y N
16. Is there a written Emergency Plan? Have available this document for inspection. Y N

ST00037672

VINYL CHLORIDE

1. Is vinyl chloride used in the plant/area in concentrations greater than 0.1%? Y N

IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.

2. Has initial exposure monitoring been completed to identify vinyl chloride exposures for all affected job classifications? Y N
3. a. Were any job classifications potentially exposed to 0.5-1 ppm as an 8-hour TWA (the action level)? Y N
- b. If yes, was repeat followup monitoring conducted each 3 months? Y N
- c. Have these employees been placed on the annual vinyl chloride MSR (Medical Surveillance Requirement) program? Y N
4. a. Were any job classifications potentially exposed to greater than 1 ppm as an 8 hour TWA (the PEL)? Y N
- b. If yes, was repeat followup monitoring conducted each month? Y N
- c. Have these employees been placed on the annual vinyl chloride MSR (Medical Surveillance Requirement) program? Y N
5. Were any job classifications potentially exposed to greater than 5 ppm as a 15 minute TWA (the STEL) during job tasks? Y N

If 3a, 4a or 5 were answered YES, answer the following questions; otherwise, skip to question 12.

6. Is there a written plan to reduce employee exposures to below the PEL or STEL? Y N
- Have available the plan for inspection by the audit team.
7. Are regulated areas (>PEL or STEL) identified with signs which state "Cancer Suspect Area-Authorized Personnel Only"? Y N
8. Has a respiratory protection program been implemented? Y N

ST00037673

- | | | | | |
|-----|--|---|---|----|
| 9. | If air purifying respirators are used, is there a continuous monitor and alarm system to warn of excessive concentrations? | Y | N | NA |
| 10. | Have the cartridge/canister replacement frequencies been specified in the area's written respirator program? | Y | N | NA |
| | Have available the records for inspection by the audit team. | | | |
| 11. | Has initial health hazard training been completed for all employees who work with vinyl chloride? | Y | N | |
| | Have available the records for inspection by the audit team. | | | |
| 12. | Is health hazard training conducted annually? | Y | N | |
| | Have available the records for inspection by the audit team. | | | |
| 13. | Is a change room available for those who must remove street clothes and change into vinyl chloride protective clothing? | Y | N | |
| 14. | Is a change room available for those who must remove street clothes and change into vinyl chloride protective equipment? | Y | N | |
| 15. | Is there a current copy of the OSHA vinyl chloride standard in the Industrial Hygiene Manual? | Y | N | |
| 16. | Are all vinyl chloride containers (temporary and permanent storage) labeled with a sign stating "Cancer Suspect Agent"? | Y | N | |

BENZENE

1. Is benzene used in the plant/area in concentrations greater than 0.1%? Y N

IF THE ANSWER IS NO, SKIP THE REMAINDER OF THIS SECTION.

2. Has initial exposure monitoring been completed to identify benzene exposures for all affected job classifications? Y N
3. a. Were any job classifications potentially exposed to 0.5-1 ppm as an 8 hour TWA (the action level)? Y N
- b. If yes, was repeat followup monitoring conducted each 12 months? Y N
4. a. Were any job classifications potentially exposed to greater than 1 ppm as an 8 hour TWA (the PEL)? Y N
- b. If yes, was repeat followup monitoring conducted each 6 months? Y N
5. Were any job classifications potentially exposed to greater than 5 ppm as a 15 minute TWA (the STEL) during job tasks? Y N
6. Were employees notified within 15 days after the exposure monitoring results became available? Y N
7. a. Are any employees exposed to concentrations greater than the action level for more than 30 days per year of greater than the PEL or STEL for more than 10 days per year? Y N
- b. If yes, have these employees been placed on the annual Benzene MSR (Medical Surveillance Requirement program)? Y N

IF 4a OR 5 WERE ANSWERED YES, ANSWER THE FOLLOWING QUESTIONS; OTHERWISE, SKIP TO QUESTION 13.

8. Is there a written plan to reduce employee exposures to below the PEL? Y N

Have available the plan for inspection by the audit team.

ST0037675

9. Are regulated areas (>1 ppm) identified with the correct signs which state "Danger-Benzene-Authorized Personnel Only-Respirator Required"? Y N
10. Has a respiratory protection program been implemented? Y N
11. Are employees who use negative pressure respirators fit tested annually? Y N NA
12. Have the cartridge/canister replacement frequencies been specified in the area's written respirator program? Y N NA
- Have available the records for inspection by the audit team.
13. Has initial health hazard training been completed for all employees who work with benzene? Y N
- Have available the records for inspection by the audit team.
14. Is health hazard training conducted annually? Y N
- Have available the records for inspection by the audit team.
15. Is a change room available for those who must remove street clothes and change into benzene protective clothing? Y N
16. Is the chemical protective clothing impervious to benzene? Y N
17. Is the CPC decontaminated before it is placed back in storage? Y N
18. Is there a benzene spill and leak detection program? Y N
- briefly describe _____
-
20. Is there a current copy of the OSHA benzene standard in the Industrial Hygiene Manual? Y N
21. Are all benzene containers (temporary and permanent storage) labeled with a sign stating "Danger-Contains Benzene-Cancer Hazard"? Y N

APPENDIX A

Typical questions which may be asked of plant personnel at the time of the plant visit.

1. Where is your industrial hygiene manual located?
2. What is in your industrial hygiene manual?
3. What is an MSDS?
4. What are the main chemicals you work with and their hazards?
5. Are you required to wear a respirator?
6. What jobs require the use of this respirator?
7. When were you last trained on the use and maintenance of your respirator?
8. Do you have to wear hearing protection?
9. What jobs require the use of hearing protection?
10. What other P.P.E. is required for your job?
11. Have you been trained on this equipment? When?
12. Do you have any health concerns by working in this plant?
13. How effective is your plant's Industrial Hygiene program?
14. What do you think we can do to help improve your work area?

ST0037677



Copy
Staff

5/17/89

Attached is a copy of
a good audit format to
use for your plant
audits.

Stan

STAN GORGACZ
FROM: Michigan Division Industrial Hygiene Services
258 Building
(517) 636-0609

APPENDIX D - PLANT SPECIFIC ASSESSMENT QUESTIONNAIRE

INDUSTRIAL HYGIENE ASSESSMENT CHECK LIST

This questionnaire should be distributed to the specific plants selected for participation as part of the site assessment of the Industrial Hygiene program. This questionnaire should be completed by the plant industrial hygiene contact and site hygienist for that plant and copies available the week before the site assessment.

The emphasis of the assessment is to review Industrial Hygiene programs but also to ensure that documentation is complete. Please have written programs, documentation of training meetings, etc. readily available for the assessment team. This will help to speed the assessment along.

ST00037678

SECTION I. EDUCATION AND TRAINING (Ref. OSHA HAZCOM 29CFR1910.1200)

1. Current date of written HAZCOM program _____.

Show assessment team written HAZCOM program.

2. a. New and transferred employee orientation program.
b. How effective is training when employee transfers from one department to another?

Show assessors examples of records.

3. Current date of Chemical and Physical Agent Inventory _____.
4. Are all the Data Sheets (MSDS and/or TIME) current? (Current dates are on the CPAI Index.)

Has a list of chemicals without the most current date been prepared for the purpose of getting updates?

5. Where is the location of chemical hazard data sheets?
6. Show assessors documentation records (sign-up sheets) of the employee annual hazard communication program.

Explain the techniques used to communicate this information to employees.

7. How are health bulletins (bulletins transmitting recently discovered health effects) handled, and the information disseminated to employees?
8. Inspect work areas for proper labeling on containers.
9. What is the orientation and education program for "short term" contractors and "long term" contractors?

ST6937679

SECTION II. RESPIRATORS (Ref. Safety Std. and OSHA Std. 29CF 1910.134)

1. Attach copy of the written Respirator Program.
Where is it kept?
2. Explain how users are instructed and trained in the proper use of respirators and their limitations for the chemicals handled.

How often repeated? Show documentation records to assessors.

3. Is qualitative (or quantitative) fit testing provided? How often repeated?

Show documentation records to assessors.

4. How is documentation of medical approval done for those who must wear respiratory protection?
5. Inspect respirator storage area for compliance with cartridge change frequency, cleaning, storage, and monthly inspection records.
6. Are respirators used by non-Dow employees?
If yes, how does the Respirator Program for non-Dow employees differ from Dow employees?

SECTION III. VENTILATION

1. What operations have local exhaust ventilation provided to capture air contaminants?
2. What is the regular inspection and maintenance schedule for ventilation systems?
3. What ventilation is provided for welding operations? Does it appear to be adequate or are improved methods of controlling exposure indicated?

SECTION IV. HEARING CONSERVATION (Ref. Dow Safety Std., IHG and OSHA Std. 29CFR1910.95)

1. Attach copy of the written Hearing Conservation Program.

ST0637680

2. Are there any areas that exceed 90 dBA?

If so, are they posted and demarcated as high noise areas?

Is there an area floor plan or an area diagram with noise levels documented?

3. Are employees who are exposed to peak exposures above 90 dBA or to a TWA of 85 dBA or greater furnished properly fitted hearing protection, and trained in its proper use?

- a. Yes
- b. No

4. Are employees informed of the hazards of excessive exposure to noise annually?

- a. Show documentation records?
- b. No

5. What noisy areas should be evaluated for possible noise level reduction engineering controls?

6. Are employees exposed to a TWA of 85 dBA (or greater) given base line and subsequent annual audiograms?

- a. Yes
- b. No

7. Where and by whom are audiograms done?

ST00037601

8. How many employees have experienced a "standard threshold shift" in hearing acuity?
- a. Retested to verify the change?
 - 1) Yes
 - 2) No
 - b. Referred to a qualified physician for a medical evaluation of the change?
 - 1) Yes
 - 2) No
 - c. Retrained and required to wear hearing protection?
 - 1) Yes
 - 2) No
 - d. Identified to unit supervision?
 - 1) Yes
 - 2) No

STC037682

SECTION V. PROTECTIVE EQUIPMENT/WORK CLOTHING

- 1. Is there a written Protective Equipment Policy?
 - a. Yes
 - b. No
- 2. Is company-furnished work clothing provided?
 - a. Yes
 - b. No
- 3. Is company-furnished work clothing worn off site?
 - a. Yes. If so, are there potential contaminants that could be transported in the clothing?
 - 1. Yes. If so, what is the contaminant?
 - 2. No.
 - b. No

4. Where is company furnished clothing laundered?
 - a. On site
 - b. Off site - commercial laundry
 - c. Off site - employee's home
5. Are there proper storage areas or cabinets for clean gloves, "rubber" suites, etc?
 - a. Yes. Are they used?
 - 1) Yes
 - 2) No
 - b. No
6. Who makes the decisions concerning the type of protective equipment supplied? Is Industrial Hygiene involved with these decisions?
7. Are exposure data available to support the protective equipment practices?
 - a. Yes
 - b. No

SECTION VI. DATA GENERATION AND MONITORING

1. Is monitoring done according to a protocol?
 - a. Yes
 - b. No
2. How often are standards, filed spikes, blanks, and knowns prepared and used? Where are they prepared? By whom?
3. If the out analytical work is done at this location (plant): (If not, go to question 4.)
 - a. What analytical methods are used?

S10037603

- b. Are sampling efficiency and recovery data recorded?
 - c. Have results been corrected for sampling recovery and efficiency?
 - d. Does the laboratory participate in round robins?
 - e. What is the frequency of calibration of analytical equipment?
 - f. What is the concentration range over which the method is validated?
 - g. What is done with analytical reports?
4. Show assessors monitoring survey report documentation (original data) (before/after instrument calibrations, sample description, etc.).
5. What is done with original data? How and where is it stored?
- 6 a. Is a CAM (continuous area monitor) in use?
- b. Is the maintenance and calibration (Quality Assurance Program) of the CAM done according to a written procedure?
Show documentation to assessors.
 - c. What is being done with data generated by the CAM?

SECTION VII. ASBESTOS (Ref. OSHA 29CFR1926.58)

1. Is asbestos (insulation, etc.) present in this operation?
 - a. Yes
 - b. No (Go to next Section)
2. Do you have a "map" of the location of asbestos containing materials?
Show assessor the documentation,
3. Is there asbestos "Danger" sign(s) posted in areas to alert employees of hazards?
4. Is the site "Competent Person" involved with all asbestos removal jobs?
5. Do Dow employees remove asbestos containing materials?
If so, show assessor written operating procedures.

SECTION VIII. GENERALDow Employees

1. Where do employees store their lunch?
2. Where do employees eat or drink?
3. Is food tobacco carried into process areas, laboratories, or other areas where chemicals are present?
 - a. Yes
 - b. No

4. Are toilet, showers, and change rooms adequate and clean?
 - a. Yes. For women employed also?
 - b. No
5. How is the housekeeping?
6. Are there any specific problems which could be eliminated by additional engineering control?

If so, what are they?
7. Which work practices or procedures should be changed in order to reduce or eliminate exposures to stresses?
8. Is dermatitis a problem at this location?
9. Are solvents used for degreasing and cleaning being used with proper precaution?
 - a. Yes
 - b. No

SECTION IX. MEDICAL

1. What percentage of employees participate in the Medical Surveillance Program?

ST0037686

Items to be covered in IH program audit/review:

ST0037687

ref.
audit
for
com-
KRA req.
compliance

1) Hazard Communication Manual

2) Hazard Com. training

(a) context

(b) documentation

respirators

3) Written respirator policy

(a) fit test / med approval documentation

(b) training documentation

4) SCBA maintenance documentation

Radiation

5) Radiation Sealed Source documentation

(letter, certif. of respons.)

Ventilation

6) Laboratory fume hood evaluations

7) Applicable OSHA, MIOSHA standards for specific chemicals

8) CAM policy, documentation

data
generation
& monitoring

9) Monitoring IH monitoring reports, protocols (noise, chemical, biomonitoring, other)

10) Protective equipment policy

11) TSCA 5(e) Consent Order Requirements & Documentation

12) Hearing Conservation Policy

reg. compliance

asbestos

chem. specific

TSCA 5(e) for PMN's

also include

"general"

2 documents very similar

Modify to bring from "site" level down to plant

delete medical, employee interviews?

ST 0037687A