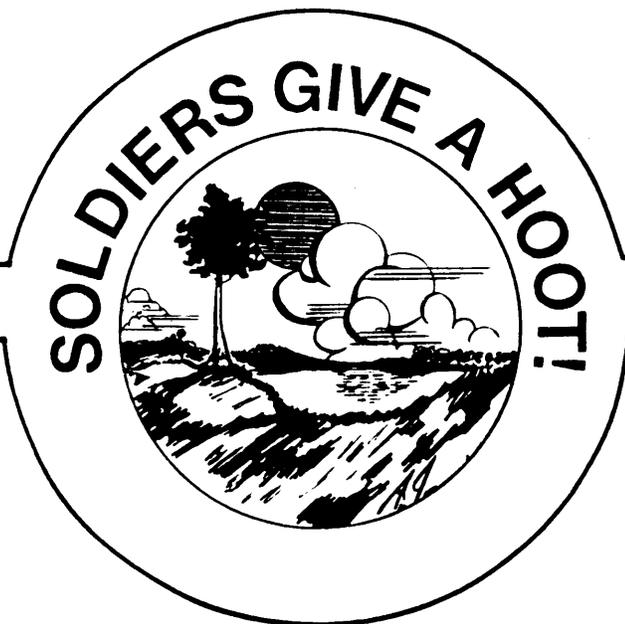


FH REG 200-11

ENVIRONMENTAL QUALITY

**ASBESTOS
CONTROL**



**HEADQUARTERS
III CORPS AND FORT HOOD**

21 AUGUST 1986

Environmental Quality
ASBESTOS CONTROL

SUPPLEMENTATION. Local supplementation of this regulation is prohibited except upon approval of AFZF-DE.

SUGGESTED IMPROVEMENTS. The proponent of this regulation is the Directorate of Engineering and Housing (DEH). Users are invited to send comments and suggested improvements to Commander, III Corps and Fort Hood, ATTN: AFZF-DE.

OVERVIEW

		1
Purpose	This regulation prescribes <ul style="list-style-type: none">● asbestos control policies● responsibilities for management of asbestos control● asbestos work procedures, and● administrative requirements to ensure compliance with lawful and regulatory obligations.	1a
Applicability	This regulation applies to <ul style="list-style-type: none">● Commanders and activity managers (including tenant organizations)● staff personnel whose duties include surveillance of safety, health, and environmental quality● staff personnel whose duties include any part of contract management for contracts related to asbestos work, and● leaders and workers whose duties may expose them to asbestos.	1b
References	See appendix A.	1c
Explanation of Terms	Abbreviations and technical terms are defined in the glossary.	1d

RESPONSIBILITIES

		2
Leaders	Commanders, activity managers, and supervisors <ul style="list-style-type: none">● report suspected asbestos contaminations to DEH, 287-8754● ensure only trained personnel accomplish asbestos work.	2a
G1	G1, Safety Branch <ul style="list-style-type: none">● assists DEH to execute and evaluate asbestos control measures● performs surveillances to evaluate the general compliance with this regulation● provides appropriate guidance and assistance to ensure acquisition of the correct safety equipment required for asbestos work, and● reports asbestos control violations to the asbestos control officer (ACO), 287-8754.	2b

*This regulation supersedes FH Regulation 385-10, 30 November 1984.

DEH

Appoints an ACO to manage the execution of asbestos control measures.

Maintains special resources to provide efficient response to asbestos incidents and work requirements.

Ensures asbestos workers are

- adequately trained to accomplish asbestos work safely
- required to wear the correct protective equipment while performing asbestos work
- aware of health hazards associated with asbestos
- given timely medical evaluations, according to paragraph 5c
- decontaminated before departing asbestos contaminated areas
- indoctrinated so their attitude towards asbestos control measures is responsible, and without negative misconceptions such as; "I've been working around asbestos for many years and never had any medical problems," and
- required to handle, remove, and dispose of asbestos safely and within the scope of legal and regulatory obligations.

Conducts and documents asbestos-containing materials (ACM) surveys according to EPA 560/5-85-024, to identify

- abatement requirements
- high risk areas
- removal priorities
- preventive maintenance, and
- other ACM controls as appropriate.

Prepares plans and specifications for in-house and contracted asbestos projects.

Provides contracting officer representatives (COR) to manage contracts which include asbestos work.

Obtains samples of suspected asbestos for

- field screening or
- laboratory analysis.

2c

Directorate of Contracting and Commercial Activities (DOC)

Assists DEH to implement open-ended ACM removal contracts.

Determines contractor qualifications listed in EPA 560/5-85-024, appendix K.

Ensures contract documents for asbestos work, specifically reference contractor's obligations according to State and Federal laws and regulatory provisions.

Implements appropriate action to deter contractors from violating State and Federal laws and regulatory provisions while performing asbestos work.

2d

Medical Department Activity (MEDDAC)

Assists DEH to execute and evaluate asbestos control measures.

Performs sampling, air-monitoring, and analysis to measure the severity of asbestos exposure or contamination.

Presents annual training for asbestos workers and leaders, using the guidance in appendix B.

Provides medical services for asbestos workers, including medical

- training
- examinations or evaluations

MEDDAC
(Continued)

- surveillances
- determinations associated with industrial hygiene, and
- records requirements of 29 CFR 1910.1001.

Prescribes selection of protective clothing and respiratory equipment.

2e

POLICIES

3

Elimination

Maximum elimination of ACM shall be implemented whenever conditions present the opportunity to remove ACM

- through normal attrition, and replacing the component or end-item with other materials
- as part of facility renovations
- using applicable open-ended contracts, and
- other opportunities funding and technology allow.

3a

Standing
Operating
Procedures
(SOP)

The Asbestos Control SOP for DEH shall consist of

- this regulation
- FH Reg 10-5
- DEH SOP's prescribing routine facilities engineering support procedures, and
- EPA 560/5-85-024.

To ensure adequate implementation and understanding of applicability of the SOP described above, supervisors shall conduct applicable training for their employees.

3b

BACKGROUND INFORMATION

4

Health
Hazards

Exposure to levels of airborne asbestos typical of the asbestos workplace prior to 1972, has been linked with

- asbestosis - a debilitating lung disease
- mesothelioma - a rare cancer of the chest and abdominal lining, and
- cancers of the lung, esophagus, stomach, colon, and other organs.

Estimates indicate that a small portion of people exposed to low levels of asbestos develops asbestos-related diseases. However, combining smoking with occupational exposure increases the lung cancer rate.

A latency period of many years between exposure to asbestos and recognition of disease usually occurs.

A prudent precaution is to avoid unnecessary exposure to asbestos.

4a

Asbestos-
Containing
Materials

Asbestos may be found in

- | | |
|-------------------------|----------------------------|
| ● cement products | ● vinyl floor tiles |
| ● acoustical plaster | ● insulation materials |
| ● fireproofing textiles | ● brake and clutch linings |
| ● wallboard | ● gasket material, and |
| ● ceiling tiles | ● others. |

4b

Asbestos
Work

Typical tasks involving asbestos hazards include

- fabrication, installation, repair or removal of asbestos such as pipe coverings, sprayed-on insulation, and hot water tanks.

Continued on next page

Asbestos Work (Continued)

- sawing or sanding wallboards, fireproofing materials, vinyl floor tiles, and other rigid forms of asbestos
- demolition or renovation of buildings
- maintenance of brake or clutch linings, and
- use of equipment having asbestos textile components as in
 - hot mitts and gloves
 - firefighter's proximity gear
 - electrical heating appliances, and
 - welding screens.

4c

Danger Recognition

Presence of asbestos in buildings or equipment is not a health hazard as long as ACM remains encapsulated or incapable of releasing airborne fibers. Danger can be expected when asbestos

- encapsulation linings and coatings are damaged or removed.
- materials (including textiles) become
 - frayed
 - torn
 - worn
 - water damaged
 - pulverized
 - crushed or broken.

The most common source of low level asbestos exposure at Fort Hood is asbestos insulation of hot water pipes. Often this insulation is damaged and its encapsulation is rendered inadequate. In many instances this danger is not obvious to building occupants.

The most harmful potentials for asbestos contamination at Fort Hood exist during maintenance, repair, or removal of ACM in buildings.

Unconspicuous incidents of asbestos exposure may occur as a result of inadequate

- safety precautions during asbestos removal in areas up-wind from unprotected personnel and
- final decontamination of asbestos worksites.

4d

PROCEDURES

5

Asbestos Contamination

Obvious or suspected asbestos contamination shall be reported to DEH, 287-8754, immediately.

Routinely, asbestos contaminations are managed according to appendix B.

5a

Training

Supervisors, work leaders, and workers whose duties include management or handling of asbestos, shall be adequately trained before assignment to such duties. Thereafter they shall receive an annual refresher.

MEDDAC, in cooperation with DEH and G1 Safety Branch, conducts asbestos control training as needed.

Typically, asbestos control training is presented according to appendix B. However, MEDDAC may modify the training according to specific training needs.

5b

Medical Surveillance

Personnel whose duties may expose them to asbestos hazards shall be placed in the Occupational Health Program to ensure they receive medical evaluations

- within 30 days following duty assignment
- annually on the employee's birthdate, and
- within 30 days before or after termination of assignment.

(Continued on next page)

Medical
Surveillance
(Continued)

Medical records 29 CFR 1910.1001 require are

- maintained at MEDDAC .
- available to evaluated employees, supervisors, and other authorized personnel upon request.

Supervisors shall coordinate with MEDDAC to schedule asbestos workers for medical evaluations even when the employee declines to participate in the Occupational Health Program.

5c

Permissible
Exposure

Personnel shall not be exposed to airborne asbestos concentrations in excess of permissible exposure (standard or ceiling) as directed in DOD.

MEDDAC determines air-monitoring requirements and implements the method of measurement.

When airborne asbestos concentrations exceed the permissible exposure, MEDDAC alerts the appropriate persons and recommends a course of action.

5d

Asbestos
Handling

Asbestos work shall be planned to ensure

- Personnel who are competent in asbestos control perform the work
- the appropriate respiratory equipment and protective clothing are available to employee and mandatory use is enforced
- access to the asbestos work site is efficiently controlled using guards, barriers, and warning signs. Access controls shall be in position before commencing the work and remain until the final decontamination is completed
- asbestos is disposed of according to legal and regulatory obligations. All coordinations for a disposal site shall be finalized before asbestos work starts
- acquisition or construction of an adequate decontamination facility for workers
- air is monitored to verify adequacy of the final decontamination of the work site
- asbestos work is performed without hazards to other personnel in adjacent areas
- asbestos work complies with applicable laws, regulations, and acceptable practices.

5e

ACM Survey

The ACM Survey Team performs surveys using EPA 560/5-84-024, chapter 2 as a guide, and documents the findings on FH Form 2947 (Asbestos Survey and Follow-up).

The ACO

- directs the ACM Survey Team
- stores ACM survey data for dissemination to employees and agencies having demand for specific ACM information
- reviews ACM survey findings to determine appropriate courses of action or recommendations
- coordinates with other agencies to obtain support or interaction as appropriate, and
- determines frequency of follow-up inspections.

5f

High Risk Areas	<p>Although ACM surveying is an intermittent task, its importance and urgency shall not be ignored.</p> <p>High risk areas are identified through incident reports and ACM surveys.</p> <p>When a high risk area is identified, the asbestos control office shall coordinate the performance of necessary work to achieve favorable conditions reasonably fast.</p> <p style="text-align: right;">5g</p>
Sampling Asbestos	<p>Qualified personnel shall perform collection of asbestos sample according to the guidance in EPA 560/5-85-024, appendix G.</p> <p>The size of an asbestos sample should not exceed one cubic inch.</p> <p>A label shall be affixed to the asbestos sample container providing</p> <ul style="list-style-type: none"> ● "for asbestos test" ● date sampled ● building number where sampled ● location in the building where sampled ● name of person who collected the sample. <p>Qualified personnel of MEDDAC collect air-samples to determine airborne asbestos concentrations.</p> <p style="text-align: right;">5h</p>
Testing	<p>DEH performs field screening of asbestos.</p> <p>MEDDAC performs laboratory test of asbestos.</p> <p>MEDDAC performs measurement of airborne asbestos concentrations.</p> <p style="text-align: right;">5i</p>
Asbestos Control Working Group	<p>The business of the Asbestos Control Working Group is accomplished at the quarterly Safety and Occupational Health Committee meeting. The safety director incorporates the required topics into the agenda.</p> <p>The ACO meets with the Asbestos Control Working Group at least semi-annually to</p> <ul style="list-style-type: none"> ● identify problems related to asbestos ● develop interaction for effective management of asbestos problems, and ● share information. <p style="text-align: right;">5j</p>
Protective Equipment	<p>DEH maintains an adequate stock of protective equipment for asbestos work. Protective equipment may be loaned through coordination with the ACO, 287-8754.</p> <p>Protective equipment in stock at DEH, Bldg 4468 includes</p> <ul style="list-style-type: none"> ● respirators ● clothing ● vacuum cleaner, and ● polyethylene. <p style="text-align: right;">5k</p>

FOR THE COMMANDER:



WILLIAM A. FITZGERALD, JR.
Brigadier General, USA
Chief of Staff

T. J. LEONARD
COL, AG
DOIM

- 3 Appendices
A. References
B. Guidance for Asbestos Control Training
C. Asbestos Incident-Control Procedure

DISTRIBUTION:
IAW FH Form 1853, C
Plus: G1 (10)
DEH (25)
MEDDAC (5)
IM-Pubs (100)
IM-AO (2)
IM-ARL (1)

APPENDIX A
REFERENCES

A-1. REQUIRED PUBLICATIONS. Users of this regulation shall maintain an adequate selection of reference publications. To make an appropriate selection, the user shall consider mission responsibilities and ability to understand this regulation.

AR 40-5	(Preventive Medicine)
AR 200-1	(Environmental Protection and Enhancement)
AR 385-10	(Army Safety Program)
TB MED 502	(Respiratory Protection Program)
TB MED 504	(Army Industrial Hygiene Manual) (to be published)
AEHA TG-148	(Occupational and Environmental Health Guidelines for Control of Asbestos Exposure)
DOD 4160.21-M	(Defense Utilization and Disposal Manual)
DPDS-M 6050.1	(Environmental Considerations in the DPDS Disposal Process)
29 CFR	(Labor)
40 CFR	(Protection of Environment)
Public Law 91-604	(Clean Air Act)
Public Law 94-580	(Resource Conservation and Recovery Act of 1976)
Executive Order 12196	(Occupational Safety and Health Program for Federal Employees)
CEL Technical Report R833	(Management Procedure for Assessment of Friable Asbestos Insulating Material)
EPA 560/5-85-024	(Guidance for Controlling Asbestos-Containing Materials in Buildings)
FH Reg 10-5	(III Corps and Fort Hood Organization and Functions)
FH Reg 700-14	(Procedures for Turn-in and Withdrawal from DRMO)
	(DEH Standing Operating Procedures)

APPENDIX B
GUIDANCE FOR ASBESTOS CONTROL TRAINING

B-1. Asbestos workers and their leaders shall receive annual training which includes the topics of the following outline:

1. INTRODUCTION.
 - A. Asbestos.
 - B. Health concerns.
 - C. Regulations related to asbestos.
2. IDENTIFYING THE ASBESTOS PROBLEM.
 - A. Assessment.
 - B. Condition.
 - C. Potential for disturbance.
 - D. Field screening and testing.
3. ABATEMENT METHODS.
 - A. Removal.
 - B. Encapsulation.
 1. Advantages.
 2. Disadvantages.
4. EQUIPMENT AND MATERIALS.
5. PERSONNEL PROTECTION.
 - A. Clothing.
 - B. Respirator fit testing and use.
 - C. Respiration Program.
 - D. Worker decontamination.
 - E. Pre-job briefing.
 - F. Health and exposure monitoring.
6. AIR TESTING.
7. WORK PERFORMANCE.
 - A. Layout and abatement.
 1. Job start-up.
 - a. Construction of a simple three room decon chamber.
 - b. Preparation of work area.
 - laying plastic
 - hanging plastic.
 - c. Negative air system and contained scaffold.
 2. Removal.
 - a. Saturation.
 - b. Removing pipe covering.

3. Encapsulation.

- a. The encapsulation process.
- b. Determining which encapsulant to use.
- c. Application of encapsulant.
- d. Coverage.

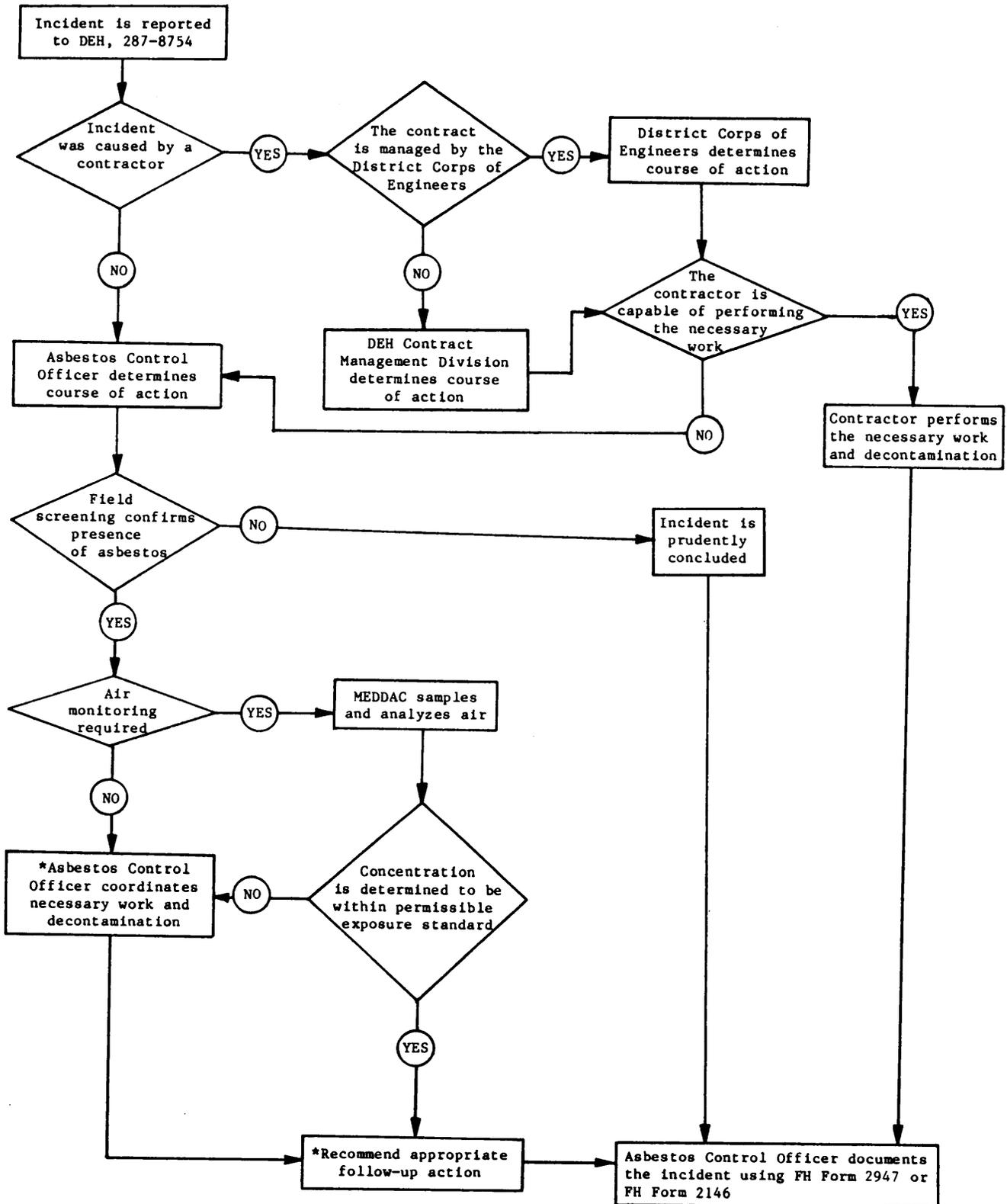
B. Cleanup, disposal, and final decontamination of work area.

- 1. Cleanup.
- 2. Final Decontamination of work area.
 - a. Visual inspection.
 - b. Air monitoring.
- 3. Disposal.
- 4. Building Restoration.

BID PREPARATION AND PRE-JOB CONSIDERATIONS FOR MANAGERS

- 1. Preparing the bid.
 - a. Laws and regulations.
 - b. On-site factors.
 - c. Off-site preparations.
 - d. Coordination.
- 2. Pre-job considerations.
 - a. Notifications and approvals.
 - b. Beginning the abatement process.
 - c. Post abatement cleanup.
 - d. Disposal.
 - e. Restore building to normal use.

APPENDIX C
ASBESTOS INCIDENT-CONTROL PROCEDURE



*ACM removal may be accomplished by open-ended contract.

GLOSSARY

ABBREVIATIONS

ACM	asbestos-containing materials
ACO	asbestos control officer
AJ	A-Jack
Bldg	building
COR	contracting officer representative
DOD	Department of Defense
DEH	Directorate of Engineering and Housing
DOC	Directorate of Contracting and Commercial Activities
EPA	Environmental Protection Agency
MEDDAC	Medical Department Activity
SOP	Standing Operating Procedure

TERMSASBESTOS

A group of naturally occurring minerals that separate into fibers. There are six asbestos minerals used commercially: Chrysotile, Amosite, Crocidolite, Anthophyllite, Tremolite, and Actinolite.

ENCAPSULATION

A sealant or impervious material applied over asbestos as a practical means of preventing release of asbestos fibers into the air.

HIGH RISK AREA

Facility where friable asbestos is present, and the permissible exposure (standard or ceiling) is or can be exceeded.

PERMISSIBLE EXPOSURE

The 8-hour time-weighted average airborne concentration of asbestos to which employees may be exposed to, is referred to as the standard. The airborne asbestos concentration to which no employee shall be exposed to is referred to as the ceiling. MEDDAC determines the permissible exposure according to 29 CFR 1910.1001 or as directed in DOD, whichever is more stringent.