CHAPTER 5: ASBESTOS

5.1 INTRODUCTION

This chapter contains standards on the control of threats to human health from asbestos. It covers the identification and abatement of asbestos containing material (ACM) when the asbestos poses a threat and during activities that may disturb asbestos, such as demolition or renovation. Policy requirements for a comprehensive occupational health and safety program are not covered in this chapter. To protect personnel from asbestos exposure, refer to DoDI 6055.01, DoD Safety and Occupational Health (SOH) Program and DoDI 6055.05, Occupational and Environmental Health (OEH).

5.2 PERSONNEL QUALIFICATION

Installations must ensure that:

5.2.1 The asbestos program manager, custodial staff, maintenance staff, and individuals involved in asbestos management are trained consistent with their responsibilities and DoDI 6055.01 and DoDI 6055.05.

5.2.2 Training includes, as appropriate:

5.2.2.1 Asbestos hazards and worker protection, to include the use of proper personal protective equipment.

5.2.2.2 Notifications.

5.2.2.3 Material identification.

5.2.2.4 Control procedures for removals including, at least, wetting, local exhaust ventilations, negative pressure enclosures, glove-bag procedures, and high-efficiency particulate air filters.

5.2.2.5 Waste disposal work practices and recordkeeping.

5.3 ASBESTOS CONTROL

Installations must:

5.3.1 Appoint an asbestos program manager to serve as the single point of contact for all asbestos-related activities.

5.3.2 Prepare and implement an Asbestos Management Plan. At a minimum, the plan must include:

5.3.2.1 A list of known and presumed ACM, by location, on the installation.

5.3.2.2 A notification and education program to inform all persons affected (e.g., workers, tenants, building occupants) where potentially friable ACM is located, and how and why to avoid disturbing the ACM.

5.3.2.3 Regular ACM surveillance to note, assess, and document any changes in the ACM's condition.

5.3.2.4 Work control or permit systems to control activities that might disturb ACM.

5.3.2.5 Operations and maintenance work practices to avoid or minimize fiber release during activities affecting ACM.

5.3.2.6 Recordkeeping to document operations and maintenance activities related to asbestos identification management and abatement.

5.3.2.7 Training for the asbestos program manager, custodial staff, maintenance staff, and those involved in asbestos management activities.

5.3.2.8 Procedures to assess and prioritize identified hazards for abatement.

5.3.2.9 Procedures to prevent the use of ACM in new construction.

5.4 ASBESTOS ABATEMENT

Installations must perform asbestos abatement in accordance with the standards of this paragraph.

5.4.1 Asbestos Determination. Before demolition or renovation of a facility, determine whether or not the activity will remove or disturb ACM, and record it on the project authorization document (e.g., work order).

5.4.2 Asbestos Assessment. When removing or disturbing friable ACM, prepare and display a written assessment of the action at the location to ensure affected personnel are aware of the potential hazards and the actions being undertaken.[53] A copy of the assessment must also be maintained on permanent file. The assessment must include:

5.4.2.1 Type of operation: demolition or renovation.

5.4.2.2 Description of the facility or affected part of the facility including the size, age, and present and past use of the facility.

5.4.2.3 Procedure, including analytical methods, used to detect the presence of ACM.

5.4.2.4 Estimated amount of:

5.4.2.4.1 ACM to be removed from the facility.

5.4.2.4.2 ACM in the affected part of the facility that will not be removed before demolition.

5.4.2.5 Location, street address, and building number (if applicable) of the facility being demolished or renovated.

[53] Commonly called an Asbestos Hazard Abatement Plan. Refer to UFGS-02 82 00 Unified Facilities Guide Specifications, Asbestos Remediation, Part 1.3.10.

5.4.2.6 Scheduled starting and completion dates of asbestos removal work, or any other activity such as site preparation, that would break up, dislodge, or similarly disturb asbestos material.

5.4.2.7 Scheduled starting and completion dates of demolition or renovation.

5.4.2.8 Description of planned demolition or renovation work and method(s) to be used, including a description of affected facility components.

5.4.2.9 Description of work practices and engineering controls, including asbestos removal and waste-handling emission control procedures.

5.4.2.10 Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

5.4.2.11 Description of procedures to follow if unexpected ACM is found or becomes crumbled, pulverized, or reduced to powder.

5.4.3 Asbestos Removal

5.4.3.1 Remove friable ACM when it poses a threat to release airborne asbestos fibers and can't be reliably repaired or isolated.

5.4.3.2 Before disturbing or demolishing a facility or part of a facility, remove all ACM in the area to be disturbed.

5.4.3.3 Remove ACM according to the following procedures:

5.4.3.3.1 Adequately wet all ACM exposed during cutting or disjoining operations.

5.4.3.3.2 Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the ACM.

5.4.3.3.3 When ACM is stripped from a facility component while it remains in place in the facility, adequately wet the ACM during the stripping operation.

5.4.3.3.4 Wetting is not required in renovation operations if the following emission control methods are used. Installations must document such situations.

5.4.3.3.4.1 A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air.

5.4.3.3.4.2 A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

5.4.3.3.4.3 Leak-tight wrapping to contain all ACM before dismantlement.

5.4.3.3.4.4 Other methods equivalent to wetting, when wetting would result in equipment damage or a safety hazard and the methods in Paragraphs 5.4.3.3.4.1 through 5.4.3.3.4.3 can't be used.

5.4.3.4 After ACM removal from the facility, ensure the ACM is stripped or contained in leak-tight wrapping, except for large facility components as identified in Paragraph 5.4.3.4.2.

5.4.3.4.1 If stripped, either:

5.4.3.4.1.1 Adequately wet the ACM during stripping, or

5.4.3.4.1.2 Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air.

5.4.3.4.2 For large facility components such as reactor vessels, large tanks, and steam generators (but not beams), the ACM is not required to be stripped if the component is removed, transported, stored, disposed of, or reused without disturbing or damaging the ACM and the component is encased in leak-tight wrapping. The leak-tight wrapping must be labeled during all loading and unloading operations as well as during storage and displayed in a manner that a person can easily read. Use the language, in English and Japanese, shown in Figure 5.1.

Figure 5.1: Leak-Tight Wrapping Label

DANGER
ASBESTOS DUST HAZARD
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

危険

アスベスト粉塵の危険性

癌および肺疾患の危険性

関係者以外立入禁止

5.4.3.4.3 For all ACM, including material that has been removed or stripped:

5.4.3.4.3.1 Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal.

5.4.3.4.3.2 Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.

5.4.3.4.3.3 Transport the material to the ground using leak-tight chutes or containers if it has been removed or stripped more than 15.24 meter [50 ft] above ground level and was not removed as units or in sections.

5.4.3.4.4 When the temperature at the point of wetting is below 0°C (32°F), the wetting provisions identified in Paragraphs 5.4.3.3.1 and 5.4.3.3.3 need not be followed.

5.4.3.4.5 If a facility component contains or is coated or covered with ACM, it must be removed as units or in sections, to the maximum extent possible.

5.4.3.4.6 If a facility will be demolished by intentional burning, all ACM must be removed before burning.

5.5 ASBESTOS DISPOSAL

Installations must dispose of asbestos waste in accordance with these standards.

5.5.1 Segregate all asbestos waste into Type I and Type II asbestos waste.

5.5.2 When disposing of asbestos waste, adequately wet and seal it (including any wastewater containing ACM) or solidify asbestos waste using cement. Seal each segregated type of asbestos waste in a double high-strength plastic bag.

5.5.3 Separately collect and transport asbestos waste using a method in which it will not be crushed in order to prevent it from comingling with any other kind of waste.[54]

5.5.4 Properly dispose each type of asbestos waste in a facility or landfill approved and licensed by the appropriate governmental authority. Installations may also melt, solidify, and dispose of Type I asbestos waste in a landfill designated by the appropriate governmental authority to receive treated asbestos waste.[55]

5.5.5 Label containers in English and Japanese, as shown in Figures 5.2 and 5.3, depending on whether it is a Type I or Type II asbestos waste. In addition, because Type I asbestos waste is a specified hazardous industrial waste (SHIW) in Japan,[56] installations will also label Type I asbestos waste as a hazardous waste per JEGS Appendix 16C.

5.5.6 Maintain permanent records documenting the disposal action and site.

5.6 DOD SCHOOL COMPLIANCE

Installations must ensure that DoD schools comply with applicable requirements of Title 15 United States Code (USC) Section 2643,[57] and implementing regulations Title 40 Code of Federal Regulations (CFR) Part 763,[58] replacing all references to 1.0 percent asbestos with 0.1 percent asbestos.

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[54] GOJ Order for Enforcement of the Waste Management and Public Cleansing Act, Articles 4-2, 6.
[55] GOJ Order for Enforcement of the Waste Management and Public Cleansing Act, Article 6-5; Methods Specified by the GOJ Minister of the Environment as Being Disposal or Recycling Methods of Specially Controlled Solid Waste and Specially Controlled Industrial Waste, GOJ Ministry of Health and Welfare Notification No. 194.
[56] GOJ Order for Enforcement of the Waste Management and Public Cleansing Act, Article 2-4.
[57] 15 USC Chapter 53, Subchapter II §2643: Commerce and Trade, Toxic Substances Control, Asbestos Hazard Emergency Response, EPA Regulations.
[58] 40 CFR §763 Subpart E: Asbestos, Asbestos-Containing Materials in Schools.

5.7 RECORDKEEPING

Installations must maintain records of asbestos operation and maintenance activities consistent with the asbestos management plan, including at a minimum, records of asbestos determinations and disposal.

Figure 5.2: Type I Asbestos Waste Label

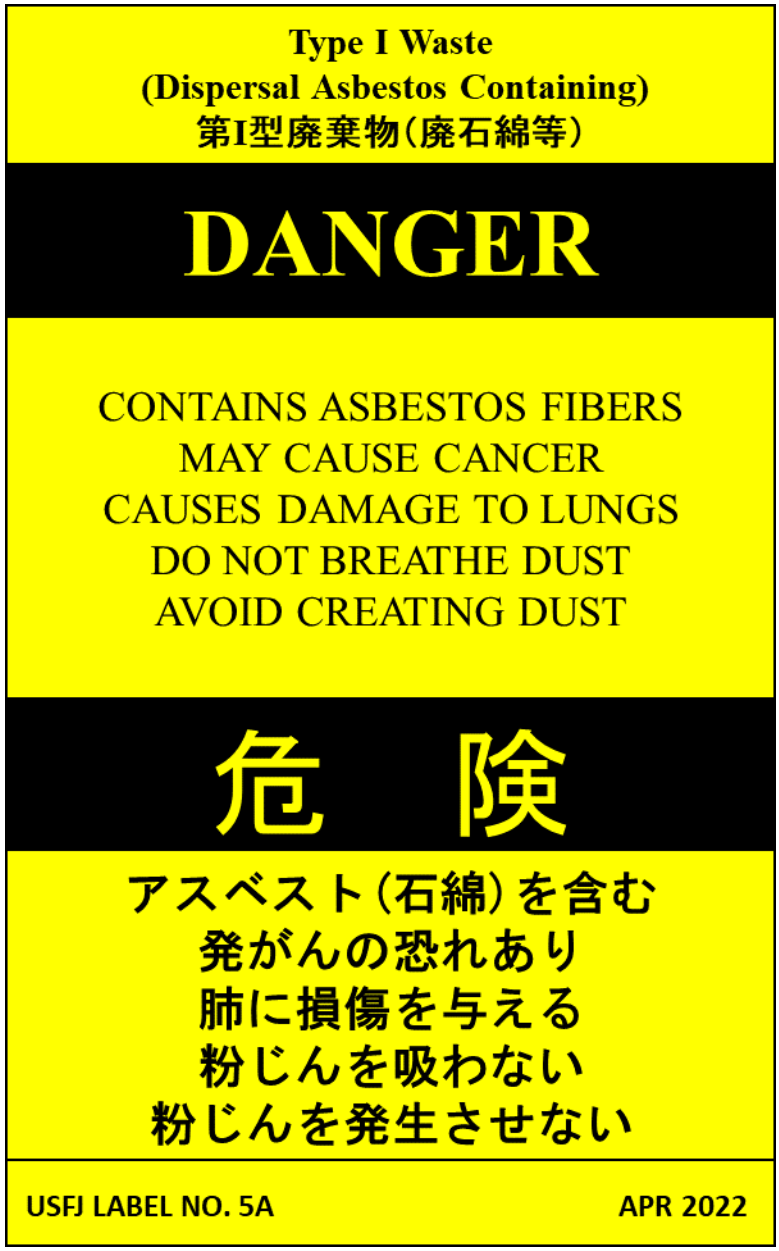

Figure 5.3: Type II Asbestos Waste Label