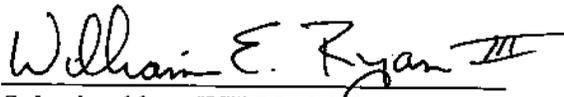
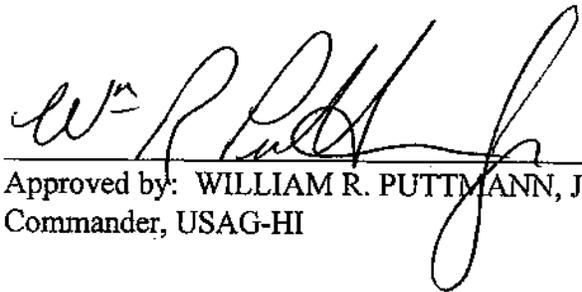


**U. S. ARMY GARRISON HAWAII**  
**ASBESTOS MANAGEMENT PLAN**

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Submitted by: WILLIAM E. RYAN III  
Colonel, EN, Director of Public Works



Approved by: WILLIAM R. PUTTMANN, JR.  
Commander, USAG-HI

## TABLE OF CONTENTS

### CHAPTER 1. INTRODUCTION

Paragraph	Page
1.1 Purpose.....	1
1.2 Background on Asbestos.....	1
1.3 Objective.....	2

### CHAPTER 2. THE ASBESTOS MANAGEMENT TEAM

2.1 General.....	3
2.2 Responsibilities.....	3

### CHAPTER 3. ASBESTOS MANAGEMENT PLAN.....

### CHAPTER 4. ASBESTOS SURVEY AND HANDLING (STANDARD OPERATING PROCEDURES)

4.1 Asbestos Survey and Hazard Assessment.....	11
4.2 Asbestos Containment and Abatement.....	11
4.3 Operations and Maintenance Plan.....	12
4.4 Design reviews.....	12
4.5 Building Asbestos Database.....	13
4.6 Recordkeeping.....	13
4.7 Notification Requirements.....	13

### CHAPTER 5. MONITORING AND INSPECTION

5.1 ACM Surveillance Program.....	15
5.2 Work Control/Permit System.....	15
5.3 Medical Program.....	15
5.4 Abatement Actions.....	16
5.5 Operations and Maintenance Program.....	16
5.6 Disposal of ACM.....	16
5.7 In-House Emergency Abatement Team.....	17
5.8 Resources Subplan.....	17
5.9 Public Information Subplan.....	17

### CHAPTER 6. TRAINING.....

### APPENDICES

Appendix A. References	
Appendix B. Army Survey and Assessment Guidance	
Appendix C. Operations and Maintenance Plan	
Appendix D. Acronyms	

## CHAPTER 1

### INTRODUCTION

#### 1.1. Purpose.

a. An installation asbestos management program has been established by the Directorate of Public Works (DPW) to ensure the health and safety of soldiers and civilians within United States Army Garrison, Hawaii (USAG-HI). This program covers areas of concern for asbestos hazards and includes an annually updated Asbestos Management Plan (AMP). This plan contains the USAG-HI Commander's Asbestos Policy, which delegates responsibilities for asbestos management and gives standard operating procedures for handling asbestos containing materials (ACM). This plan should be referred to whenever an asbestos problem is encountered or expected. Compliance with U.S. Army Regulation AR 200-1 and AR 420-70 is required.

b. The purpose of this plan is to establish management and organizational responsibilities and procedures in order to minimize asbestos exposure and releases to the utmost extent possible. The AMP will provide the foundation for maintaining a permanent record on the existence, extent, and condition of friable and non-friable asbestos-containing material (ACM) on USAG-HI installations. In addition, the AMP will address organizational roles and responsibilities, program development, data management, management actions and training.

c. Policy is to manage ACM in-place as long as practicable and prudent. However, if it has been determined that the ACM poses a threat to personnel or deemed necessary to comply with applicable regulations, appropriate measures shall be taken to immediately remediate the problem.

#### 1.2. Background on Asbestos.

a. The term "asbestos" describes six naturally occurring fibrous materials found in certain types of rock formations. Of that general group, the mineral chrysotile, amosite, and crocidolite have been most commonly used in building materials. Since the late 1800s, asbestos has been widely used to fireproof and insulate heat pipes, ducts, boilers, and other materials in buildings. Asbestos became a popular commercial product because it is strong, won't burn, resists corrosion, and insulates well.

b. Asbestos in building material is classified as either friable or non-friable. Friable asbestos materials are those that are crushable under hand pressure. These release asbestos fibers quite readily when they are disturbed. Examples of friable asbestos materials are sprayed-on fireproofing, insulation for pipes and boilers, decorative products, and ceiling tiles. Non-friable asbestos materials are those that are not crushable with hand pressure. They do not readily release asbestos fibers. Non-friable asbestos materials pose few health hazards when they are in good condition. Examples of non-friable asbestos materials are water and sewer pipes, wallboard sheets, gaskets, vinyl and asphalt flooring, and mastics used for adhesion.

c. The primary route of exposure for asbestos is through the air; therefore, the greatest concern is exposure through inhalation. Inhalation of asbestos fibers can cause certain types of respiratory diseases and can cause cancer of the lungs, esophagus, larynx, and oral cavity to develop. There has been no determination to date as to how much asbestos is safe to inhale; it would be wise to preclude that zero exposure is the best. Because of the small size of asbestos fibers, it is possible for the smallest fibers to remain airborne for weeks. The diseases attributed to asbestos take many years to manifest themselves, often exceeding 30 or more years. Each of the diseases are debilitating, with lung cancer often fatal, and mesothelioma always fatal.

d. There are basically two federal agencies delegated with the responsibility of enforcing asbestos regulations: the United States Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). They both define a material to be asbestos-containing if there is more than one percent by weight or area of the asbestos mineral in a constituent. EPA regulates ACM concerns to minimize building occupants' exposure to asbestos dust derived from building materials. Whereas, OSHA regulations address concerns with worker safety during specific tasks dealing with ACM.

**1.3. Objective.** The objective of this management plan is to provide information necessary to manage friable and non-friable ACM in on-post USAG-HI facilities. A further objective is to identify those procedures that will minimize the release of ACM into the air.

## CHAPTER 2

### THE ASBESTOS MANAGEMENT TEAM

#### 2.1. General.

a. The USAG-HI has established an Asbestos Management Team (AMT). This is an informal board chaired by the DPW Environmental Office. The AMT will meet periodically to discuss asbestos issues. Representatives from the following offices will make up the AMT board: Directorate of Public Works; DPW Environmental Division; Preventive Medicine; Installation Safety Office; Staff Judge Advocate; Public Affairs Office.

b. The AMT will work to solve problems regarding asbestos control, management, abatement, and disposal, as well as to provide the latest technical and administrative information to activities and persons involved in asbestos management.

#### 2.2. Responsibilities.

a. The USAG-HI Commander's Policy for Asbestos Management

The USAG-HI Commander shall:

(1) Ensure funding for asbestos abatement actions required because of an imminent health hazard.

(2) Close a facility in which asbestos cannot be abated because of budgetary constraints and provide an alternate working location for those affected by the asbestos at the closed facility.

(3) Appoint an Asbestos Management Control Officer (AMCO).

(4) Ensure that all community facilities are adequately surveyed for the presence of ACM.

(5) Develop abatement actions for all Priority I projects identified by the AMT.

(6) Provide training to inspectors who will supervise contractor performance and inspect housing units.

(7) Ensure that facilities being considered for leasing have been surveyed for the presence of ACM and that an abatement action plan exists if ACM is present in the facility.

(8) Update real property records to reflect the results of the asbestos surveys.

(9) Exclude all ACM from all procurement and uses where asbestos free substitutes exist.

(10) Write clauses in construction, renovation, demolition, and maintenance contracts directing contractors to comply with applicable requirements.

(11) State the presence or absence of ACM in the following documents (as applicable): DA Form 4283 (Facilities Engineering Work Request), DA Form 337 (Request for Approval or Disposal of Building and Improvements), Project Development Brochure, and real estate records of first time leases or renewals.

(12) Provide the Public Affairs Office with information, as appropriate, for publication in community newspapers to inform the readership of the status of the asbestos management program as it relates to members of the community.

b. Directorate of Public Works

The Directorate of Public Works (DPW) shall:

(1) Serve as the USAG-HI Commander's primary representative for implementation of the USAG-HI management program.

(2) Ensure that all community facilities have been surveyed for the presence of ACM.

(3) Ensure that USAG-HI asbestos requirements (surveys, plans, and abatements) are programmed in the annual budget.

(4) Ensure that an Indefinite Delivery Type Contract (IDIT) exists to provide air/bulk analysis for suspected ACM.

(5) Ensure that an IDIT exists for performing emergency asbestos abatement on an as-needed basis.

(6) Write technical specifications for contracted asbestos abatement in accordance with the applicable local, state, federal, and Army laws and regulations.

(7) Provide technical assistance, training, and guidance to USAG-HI personnel involved with ACM.

(8) Appoint an AMCO.

(9) Serve as a coordinator and member of the USAG-HI AMT.

c. DPW Environmental Division (APVG-GWV).

The APVG-GWV shall:

- (1) Serve as the AMCO who shall:
  - (a) Meet all federal, state, and local training requirements for the supervision of asbestos removal projects.
  - (b) Be responsible for the development and implementation of asbestos procedures and policies and
  - (c) Maintain on file the applicable policies and procedures that involve asbestos materials.
- (2) Review all construction-related work orders to determine whether there is a potential asbestos impact.
- (3) Be responsible for development and implementation of asbestos procedures and policies.
- (4) Maintain on file the applicable current policies, procedures and regulations that involve asbestos management.
- (5) Maintain and update, as required, the asbestos survey reports and database.
- (6) Implement procedures to receive timely notification of planned and large scale self-help AMC removal activities, to properly notify the Hawaii State Department of Health (SOHDOH), Clean Air Branch, prior to abatement and removal.
- (7) Provide technical support to asbestos inspection team who will perform asbestos surveys for renovation and demolition projects.
- (8) Inform the installation SJA of all on-post actions involving potential ACM violations.
- (9) Coordinate closely with DPW Real Property Planning Branch (APVG-GWE-M) and Work Management Branch (APVG-GWB-W) to ensure ACM locations are properly annotated in real property records. Consolidate and provide asbestos data as they become available to APVG-GWE-M.

d. Preventive Medicine (PREVMED).

The PREVMED shall:

(1) Institute a pre-placement and periodic medical surveillance program in conjunction with the USAG-HI Installation Safety Office for those USAG-HI employees routinely exposed to asbestos hazards (i.e. in-house abatement teams of contract inspectors).

(2) Conduct, in conjunction with Installation Safety Office, respirator-fit testing for all in-house personnel involved in asbestos projects.

(3) Select personal protective equipment (PPE) for in-house asbestos abatement projects.

(4) Evaluate government and in-house employees' capability for wearing a respirator.

(5) Conduct air monitoring for government and in-house workers to ensure that employee and worker protection standards are met.

(6) Be responsible for reviewing collected post-abatement clearance data and clearing the space for normal occupancy when clearance standard has been achieved.

(7) Serve as competent person (see definition in 29 CFR 1926.1101) for abatement work done with government and in-house personnel.

(8) Maintain all records outlined in DA PAM 40-503, Chapter 6.

(9) Serve as a member of the USAG-HI AMT.

e. Installation Safety Office (ISO).

The ISO shall:

(1) Implement the Respiratory Protection Program for USAG-HI.

(2) Upon notification by DPW of an abatement project by in-house team, ISO inspects the work site and verified that appropriate safety and OSHA warning signs and a list of emergency telephone numbers are posted. In addition, both the exterior work site and the construction area immediately outside the containment system are inspected daily.

(3) Ensure that supervisors refer all potentially exposed employees to PREVMED to enroll in the medical surveillance program.

(4) Monitor employee training programs and coordinate with the Civilian Personnel Office to ensure that employees are trained.

(5) When furnished by DPW will review construction/renovation designs for applicability to OSHA Regulations and local and state laws.

(6) Conduct investigations with PREVISED and the DPW Environmental Division of known or suspected facilities with asbestos exposure.

(7) Review safety briefing developed by DPW for Army personnel involved in the ACM related work.

(8) Recommend appropriate hazardous-duty pay/severity allowance for employees involved in asbestos abatement or maintenance projects.

(9) Serve as a member of the USAG-HI AMT.

f. Installation Environmental Staff Judge Advocate (SJA).

The SJA shall:

(1) Assist with legal questions that may arise in the asbestos management program.

(2) Serve as a member of the USAG-HI AMT.

g. Public Affairs Office (PAO).

The PAO shall:

(1) Inform the community members on the purposes and activities of the asbestos program.

(2) Release pertinent information to the public regarding the asbestos program.

(3) Serve as a member of the USAG-HI AMT.

h. DPW Support Divisions (APVG-GWS).

The APVG-GWS shall:

(1) Ensure that only certified asbestos personnel and USAG-HI emergency response people are allowed to perform maintenance work involving disturbance of ACMs.

(2) Ensure that proper equipment and training are provided to workers performing ACM related work.

(3) Store and dispose of properly, ACM generated from asbestos related activities.

(4) Not request or procure any ACM where asbestos free substitutes exist.

i. DPW Engineering Plans and Services Division (APVG-GWE).

The APVG-GWE shall:

(1) Provide adequate training to designers and contract inspectors so that they are competent in developing and reviewing ACM specifications and monitoring the ACM-related projects.

(2) Ensure that ACM surveys for all on-post non-family housing facilities (built before 1980) to be repaired, renovated or demolished are completed during the design phase. Prioritize asbestos surveys to be done by the APVG-GWE-D Environmental Team.

(3) Ensure that ACM abatement/removal specifications are current and in compliance with applicable regulations (EPA and OSHA).

(4) Ensure that asbestos use prohibition statements are incorporated in specifications. If project engineer suspect that ACM is used by contractors, inform APVG-GWV to perform asbestos testing on the suspect materials

(5) Monitor ACM-related contracts to ensure contractor's compliance. The project monitor shall ensure that required notifications to the SOHDOH and EPA were made prior to ACM removal or abatement projects.

(6) Ensure that asbestos removal contractor provides a summary and diagrams, which clearly indicated the amount ACM, removed and remaining.

(7) Provide as-builts or updated floor plans for the various USAG-HI facilities.

(8) DPW Real Property Planning Branch (APVG-GWE-M) shall:

(a) Maintain listing of USAG-HI facilities. Facility information such as physical description, number of square feet, present use, future plans, facility age, capital improvement information.

(b) Populate tables of real property records with asbestos data provided by APVG-GWV.

j. DPW Family Housing Division Facility Maintenance Office (APVG-GWZ-D)

The APVG-GWZ-D shall:

(1) Ensure that ACM surveys for all on-post military dependent housing unit (built before 1980) to be repaired, renovated or demolished are completed during the design phase.

(2) Conduct asbestos surveys that arise from internal audits, complaints or as requested by occupants of units. Prioritize asbestos surveys to be done for APVG-GWZ-D by the Family Housing funded asbestos inspection team.

(3) Disseminate information to residents as requested by occupants and advise them of the test results and any planned action if ACM are detected.

(4) Provide the Known-Asbestos Disclosure Package that includes the location of asbestos, and do's and don't dealing with asbestos to residents during the check-in process. Provide ACM test results from previous testing in the disclosure package if available.

(5) Brief the housing occupants that self-help activities that involve any disturbance of known ACM surfaces shall not be allowed.

i. Directorate of Logistics (DOL).

The DOL shall:

(1) Not procure any ACM where asbestos free substitutes exist. All bill of materials or purchase order shall be stamped with "Asbestos Containing Materials are prohibited".

2) Consult Material Safety Data Sheet first if materials are suspected to contain asbestos fibers. Seek advice from APVG-GWV if further assistance is needed.

## CHAPTER 3

### ASBESTOS MANAGEMENT PLAN

The AMT, under the direction of its AMCO (or the team leader), should initiate the steps required to create the Asbestos Management Plan (AMP). The AMP is a formal written document that must be prepared before individual asbestos abatement activities take place. The AMP should define the scope of the asbestos problem (the survey); pre-abatement steps taken to mitigate the potential exposures (the O&M plan); and the detailed asbestos abatement plan (if this option is selected).

USAG-HI Asbestos Management Team will review the draft AMP, and review comments incorporated into the final AMP. IAW AR 200-1 paragraph 8-3 the AMP as a minimum will include:

- a. A complete up-to-date inventory of all building and structures for USAG-HI.
- b. An installation-wide (excluding outgrants) survey of all USAG-HI structures.
- c. Determine, through the Garrison Commander, the short and long-range installation plans that may impact existing structures. That is, identify those building that are to be renovated, demolished, or sold.
- d. The amount, extent, and condition of ACM found through the installation asbestos survey should be coupled with anticipated plans for these structures to produce and asbestos abatement priority list.
- e. An interim or long-term O&M program is to be established for all installation buildings containing ACM.
- f. Incorporate the steps necessary to ensure that post-abatement clean-up, disposal, and submission of required documents are accomplished before certifying project completion or, in the case of an outside contractor, before final payment is approved.
- g. Incorporate provisions for developing and maintaining an asbestos inventory database.
- h. Incorporation of a National Environmental Policy Act (NEPA) environmental impact analysis for each facility as described in AR 200-2.

## CHAPTER 4

### ASBESTOS SURVEY AND HANDLING (STANDARD OPERATING PROCEDURE)

#### 4.1. Asbestos Survey and Hazard Assessment.

a. DPW Environmental Division will generate a listing of facilities, which do not have asbestos surveys. All materials that are suspected of containing asbestos shall be surveyed by U.S. EPA accredited inspectors. This survey shall supply USAG-HI with information on the type of asbestos material, kind of asbestos, percentage of asbestos, how much material contains asbestos, the condition of the material, amount of damage, amount of material, and how the material relates to the facility use. The survey information will be linked to the facilities GIS system.

b. Evaluation of the recommended management corrective actions for each respective homogeneous material is assessed according to the checklist and assessment valuations dictated by The Army Asbestos-Containing Material Checklist ranking in concert with the Determination of an Assessment Index and Decision Tree for Asbestos Removal, in Appendix B. The explanations and directions for use of the Army ACM checklist, Assessment Index, and Decision Tree are given in its entirety in Appendix B for use and explanation. Directions were referenced from "Public Works Technical Bulletin, 420-70-8, Installation Asbestos Management Program, Chapter 5, Appendix C and Appendix E," dated 23 March 1998, drafted by U.S. Army Center for Public Works.

Appendix B is divided into four parts.

(1) Part I addresses the extent of existing damage and the potential risk of damage to friable ACM.

(2) Part II addresses exposure potential and associated factors that contribute to health hazards in the occupied functional space being evaluated.

(3) Part III is the Determination of an Assessment Index to qualify the recommended management corrective actions.

(4) Part IV presents a Decision Tree for Asbestos Removal and addresses the design, execution and final clearances for asbestos removal projects.

c. Previous surveys are stored at DPW Environmental Division. Any previous surveys should be evaluated to determine whether the data is currently relevant, and it may be possible to build upon an existing survey to bring it up to date. Surveys for specific homogeneous materials should be revalidated by accredited EPA inspectors for each requirement.

**4.2. Asbestos Containment and Abatement.** Any material that is found to contain asbestos and is identified as a health hazard shall be contained by encapsulation or shall be removed. Consideration shall be given to the type of building, the building use, and whether the material is scheduled to be removed in the future by a renovation or construction project all abatements shall be performed per the abatement procedures presented in appendix C (operation and maintenance plan) of this program.

**4.3. Operations and Maintenance (O&M) Plan.** Depending upon their original Assessment Index Value, AR 200-1, and the USAG-HI Asbestos Management Plan require annual re-inspections of buildings containing asbestos. The annual re-inspection shall include a visual survey of the condition of the ACM and a recalculation of the Army Assessment Index. If during the re-inspection, the ACM has an index value different than the original, appropriate remediation shall be taken according to the Army's Recommended Management Corrective Actions (See Table 4.1). The specifics of the O&M Plan are found in Appendix C.

**Table 4.1 Army's Recommended Corrective Actions**

Assessment Index	Recommended Management Corrective Actions
A	<i>Immediate action</i> - Requires assessment by certified personnel (in-house or contractor) who are experienced in and qualified to conduct asbestos assessments. Initiate remedial actions immediately.
B	<i>Action as soon as possible</i> - Requires assessment by certified personnel (in-house or contractor) who are experienced in and qualified to conduct asbestos assessments. Initiate a special O&M program immediately.
C	<i>Planned action</i> - Requires assessment by certified personnel (in-house or contractor) who are experienced in and qualified to conduct asbestos assessments. Initiate a special O&M program.
D	<i>Repair</i> – Initiate special O&M using certified personnel.
E	<i>Monitoring</i> – Continue special O&M using certified personnel.
F	<i>Immediate action</i> – Continue special O&M using certified personnel until major renovation or demolition requires removal or until assessment factors change.

**4.4. Design Reviews.** All facilities planned for renovation, construction, or demolition shall be surveyed for ACM by either in-house personnel or contractors. Asbestos surveys previously completed are readily available at the DPW Environmental Division for reference prior to completing project design. Should there be no survey for a particular facility, the Environmental Division shall be contacted for further investigation or direction before project design commencement. Should the project involve disturbing any materials that contain asbestos, appropriate measures shall be taken to limit the asbestos exposure to the workers, or the material shall be abated prior to the project. At the 35% completion point of the project the Environmental Division shall be provided a copy of the design for review.

#### 4.5. Building Asbestos Database.

a. Hard copy AMC reports and records are maintained and kept at Environmental Division. The ACM information is filed by installation and facility identification. Project designers and shop personnel should consult Environmental Division prior to work commencement. Therefore, it is essential that asbestos inspectors and asbestos removal project engineer submit new ACM information to Environmental Division to update the building database in order to manage ACM in the building.

b. Environmental Division will consolidate and provide asbestos data to DPW Real Property Planning Branch and they will populate tables in the IFS.

**4.6. Recordkeeping.** According to 29 CFR 1926, records pertaining to the following issues shall be maintained for the time duration specified below.

a. Objective data (30 years). Documents or records showing that asbestos abatement processes with appropriate control methods did not generate airborne concentrations exceeding the permissible exposure limit.

b. Medical Surveillance (30 years). Documents include medical examinations, physician's written opinions, medical complaints related to exposure to asbestos.

c. Training Records (1 year beyond the employment). Training certification for asbestos related activities.

#### 4.7. Notification Requirements.

a. According to 40 CFR Part 61, Subpart M, notification is required whenever asbestos abatement operations are undertaken which involve demolition of a structure, 160 square feet or more surface of ACM, 260 or more linear feet of ACM covered pipe, or 35 cubic feet of debris of ACM. Notification will be given to authorized agencies (the State of Hawaii, Department of Health (SOHDOH) and EPA) at least ten workdays prior to the beginning of work.

##### b. In-house Notification Procedures

(1) Prior to demolition of a structure, a thorough inspection for ACM shall be conducted. Identified ACMs are required to be removed before demolition takes place.

**Demolition of a structure shall not be scheduled less than fifteen workdays unless it is structurally unsound and cause threat to the public.**

(2) Unsound Structure Demolition. The AMCO shall be immediately notified to process the emergency notification to the SOHDOH when the demolition is to be performed by in-house force.

(3) Regular Demolition. The support division shall coordinate with the AMCO upon the receipt of the confirmed demolition schedule.

c. Contractor Notification Procedures

(1) For projects completed by contract, compliance with asbestos laws and regulations is the responsibility of the Contractor. Contractors are responsible for providing notification and project information directly to the SOHDOH and EPA. Contractors are also responsible for the occupational health protection of contract personnel under 29 CFR 1926.1101 and for complete control to include air monitoring of asbestos fibers released during removal. The Contracting Officer will ensure that Contractors have notified the SOHDOH and EPA at least fifteen workdays prior to the commencement of ACM demolition or abatement.

(2) SOHDOH compliance inspectors may periodically check Contractor compliance. They will normally check in with the AMCO, who will contact the contract inspectors before arriving on site; however, this is usually done on very short notice.

## CHAPTER 5

### MONITORING AND INSPECTION

**5.1. Asbestos Containing Material Surveillance Program.** All surveyed ACM must be re-inspected (according to their index value) to assess their hazard. The following procedures must be used to perform the re-inspection:

- a. Locate all ACMs that were identified during the previous survey and note their locations.
- b. Note any changes to the materials from that recorded in the original survey.
- c. Use the Army Indices for classifying ACM hazards to occupants.
- d. Use the Indices to rate the ACM and depending upon the results, respond with appropriate actions.
- e. If necessary, schedule the ACM for abatement.

### **5.2. Work Control/Permit System.**

a. All work undertaken on ACMs needs to be performed by trained personnel with current certification. Asbestos related work by Army personnel is limited to emergency work or small-scale work (less than one glove bag or one waste bag) and to work that will not allow fibers to be released from material.

b. Any project that may involve disturbing asbestos needs to be approved by the DPW Environmental Division prior to commencement of the work. If asbestos will be disturbed, then an abatement design must be prepared by DPW Engineering, or by contract, and the project modified to reflect the asbestos abatement. Work Order reception personnel shall verify the presence or absence of ACM prior to issuing a work order.

c. If suspected ACM is uncovered unexpectedly during a project, the DPW Environmental Office shall be contacted for positive identification and for further instructions on how to handle the material. **No work shall continue until appropriate safety measures have been taken.**

### **5.3. Medical Program.**

a. PREVMED shall administer the asbestos medical surveillance program. Even though the DPW does not perform large-scale asbestos abatements, there may be people who come into contact with asbestos. Any persons who come into contact with asbestos should be monitored by a medical surveillance program for asbestos. Any persons who suspect that they may be in contact with asbestos should consult with the PREVMED to arrange for the program to be initiated.

b. If the Permissible Exposure Level (PEL) of 0.1 fibers per cubic centimeter (0.1 f/cc) based on an 8 hour time weighted average is met or exceeded, or if a worker performs Class I, II, or III asbestos work for 30 days or more per year, the worker must be placed on a medical surveillance program.

c. A medical surveillance program will also be provided for any employee prior to the assignment of the worker to an area where h/she will need to wear a negative pressure respirator.

#### **5.4. Abatement Actions.**

a. As previously mentioned in the description of asbestos, there are two types of ACM, friable and non-friable. The friable materials need much more care and containment while being abated because of the high possibility of fiber release. Friable asbestos will be the main emphasis of the abatement action. Non-friable asbestos will only be removed if it is badly damaged and if removal is cost effective.

b. The three types of abatement that may be performed within USAG-HI are enclosure, encapsulation, and removal. Removal is the preferred method of abatement. However, depending upon building use, future building use, and even future installation use, the other two types of abatement may be used if cost effective.

c. The required abatement requirements for the USAG-HI facilities will be identified after completion of surveys according to the Army Indices given in Appendix B.

**5.5. Operations and Maintenance (O&M) Program.** The O&M Program for USAG-HI is given in Appendix C. This program describes how and what shall be performed in the event of an asbestos fiber release, damage to materials that contain asbestos, or any other event that may release asbestos into the air. The O&M Program is the "working" section of this AMP and should always be referred to when something must be done to ACM.

#### **5.6. Disposal Of ACM.**

a. Disposal of ACM must be in accordance with local, State and Federal Laws. The contained material must be delivered to an asbestos approved landfill. The ACM waste must be delivered to the landfill in an approved vehicle and with the consent of the landfill operator. The delivery of the material shall be coordinated with the landfill operator to verify when the asbestos can be delivered. It is the responsibility of the company performing the abatement to dispose of the asbestos materials in accordance with local, State and Federal Laws.

b. Disposal of all ACM must be properly tracked. In-house personnel will submit the landfill receipts to the DPW Environmental Division, and contractors will include the disposal documentation in the final report for the project.

### **5.7. In-House Emergency Abatement Teams.**

- a. The In-House Emergency Abatement Team composed of personnel from DPW, shall perform only emergency or small-scale (one glove bag or waste bag) abatement projects. They will concentrate their efforts on repairing ACM and not on replacing ACM.
- b. The in-house team will be managed by the AMCO. The AMCO will coordinate the team and direct them as to where and when an abatement is required. Supplies will be programmed into the annual DPW budget and shall be procured as needed for the team to accomplish its small-scale abatements. The goal of the in-house abatement team is to be quick, simple, and effective.
- c. The AMCO will be responsible to keep track of team members and assure that adequate supplies are on-hand.

### **5.8. Resources Subplan.**

a. Funding for asbestos abatement shall receive high USAG-HI priority due to its potential health related problems. As previously mentioned, any material containing asbestos and receiving an Index Value of "A" needs to be abated. If the room is to be used before the abatement can be performed, the material needs to be temporarily encapsulated or sealed off from the room's occupants. The Project Priority Listing shall be updated annually and shall reflect the current condition of ACM that may need to be abated because of their value on the Index.

b. Each year, approximately \$270,000 shall be required to perform re-surveys of materials previously identified as ACM. The order of re-inspection shall be in accordance with the original Index Value. The highest valued materials shall be re-surveyed first; the lower assessed materials shall be re-surveyed later.

### **5.9. Public Information Subplan.**

a. This Public Information Subplan shall be used to keep the public informed of the asbestos program and any work that may involve asbestos. Articles shall be printed in the local newspaper explaining the program's activities and how it may affect the local residents.

b. If a building is to be surveyed or have an abatement performed, an informational letter shall be drafted and given to the building's occupants prior to any work being performed. This letter shall detail the dates of the work, the estimated duration of the work, and whether any changes need to be made in the occupant's use of the building.

c. The surveys for USAG-HI are on file with the DPW Environmental Division. From time to time, it will be necessary to inspect buildings, and rooms within surveyed buildings, for missed ACM. The DPW shall inform the occupants of the building to be surveyed or abated that work shall take place and when the work shall take place.

d. Results of the asbestos surveys shall be made available to the building occupants by the DPW. These results shall state the locations of samples, their condition, and the risk assessment associated with each sample.

e. It shall be necessary for the Public Affairs Office to keep the public informed about the asbestos program as the abatement and surveys take place. It is important to inform, not to scare, the public. In this context, a brochure shall be developed providing a basic overview of what asbestos is, where it is found, its health risks, and procedures being implemented by USAG-HI to preclude exposure. The brochure shall be included in the orientation package for new on-post personnel.

## CHAPTER 6

### TRAINING

Anyone responsible for managing, planning, designing, inspecting, treating, removing, or supervising the treatment or removal of ACM requires asbestos training. Shop foreman or supervisor must ensure that their personnel engaging in activities involving ACM must be properly trained and certified. Table 6.1 summarizes the type of asbestos training required for different asbestos related activities.

**Table 6.1 Asbestos Training Requirements**

<b>Asbestos Related Activities</b>	<b>Training For</b>	<b>Initial/ Annual Refresher Training</b>
Maintenance or custodial work with ACM	Asbestos Awareness	2 hours/2 hours
Repair and maintenance disturbing suspect ACM	Asbestos O&M Worker	16 hours/2 hours
Removal of abatement of ACM	Asbestos Abatement Worker	4 days/1 day
Supervision of asbestos abatement	Asbestos Abatement Supervisor	5 days/1 day
Inspection of asbestos presence	Asbestos Building Inspector	3 days/1/2 day
Management of buildings with ACM	Asbestos Building Planner	2 days/1 day
Design projects involving asbestos removal and abatement	Asbestos Project Designer	3 days/1 day

## **APPENDIX A**

### **References**

## **Code of Federal Regulations**

29 CFR 1910.134 Use of Respirators

29 CFR 1910.1001, Asbestos, General Industry Standard

29 CFR 1926.1101 Construction Industry Standards

40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants

40 CFR Part 763 Asbestos (Subpart E, F, G), Asbestos Model Accreditation Plan

## **Environmental Protection Agency**

EPA 530-SE-85-007, Asbestos Waste Management Guidance

EPA 560-5-85-024, Guidance for Controlling Asbestos-Containing Material in Buildings

EPA 560/5-85-018, Asbestos in Buildings: Guidance for Service and Maintenance Personnel

EPA 566-5-84-014, Asbestos-Containing Materials in School Buildings, Part 1 and Part 2

EPA Green Book, A Building Owner's Guide to O&M Programs for Asbestos Containing Materials

## **Army Regulations**

AR 200-1, Environmental Protection and Enhancement, 21 January 1997

AR 200-2, Environmental Effects of Army Actions, 7 January 1997

## **Army Technical Guidance**

PWTB 420-70-8, Draft Installation Asbestos Management Program, 23 March 1998

TB MED 513, Occupational and Environmental Health Guidelines for Evaluation and Control of Asbestos Exposure, 15 December 1986

## **Corps of Engineers Guide Specifications**

CEGS-13280 – Asbestos Abatement