

FORT RUCKER

Environmental Document

ENV-AS002: Asbestos Abatement Procedures (1 October 2017)

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1.0 PURPOSE

This procedure defines the requirements for submitting abatement plans and close-out documents for asbestos projects on Fort Rucker.

Control of environmental procedures is addressed in procedure ENV-P002, *Document Control*.

2.0 SCOPE

This procedure applies to all projects on Fort Rucker that require asbestos abatement. The requirements of this procedure are applicable to all military, civilian and contract personnel at Fort Rucker.

The following list summarizes requirements above and beyond State of Alabama rules:

- a. Containment is required on all involving external structures where feasible (to include around glove bag areas); exceptions must be approved in advance.
- b. Remove all asbestos prior to whole building demolition projects (regardless of amount or type).
- c. Personnel not involved in the abatement will not occupy the facility whenever possible while abatement activities are occurring.
- d. The ADEM Form 496 (10 work day notice) will be submitted regardless of amount or type of asbestos to be removed.
- e. The abatement contractor will be certified by the State of Alabama regardless of amount or type of asbestos to be removed.
- f. Final clearance samples will be required for all abatement projects, to include glove bag or external structure abatements.
- g. Waivers are not accepted for personnel air monitoring – the abatement contractor personnel will wear respirators regardless of exposure amounts and type of abatement project.
- h. The contractor will have a current ADEM Form 300 regardless of friable or non-friable asbestos waste (the form is good for two years and does not have to be project specific as long as the waste profile sheet indicates waste was generated on Fort Rucker).
- i. A decontamination area will be set up for every abatement, to include floor tile projects.
- j. A view port will be installed where feasible for non-respirator wearing individuals to observe abatement activities.

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3.0 DEFINITIONS

Term	Definition
ADEM	Alabama Department of Environmental Management
AHERA	Asbestos Hazard Emergency Response Act
AMT	Asbestos Management Team
AMCO	Asbestos Management Control Officer
COR	Contracting Officer's Representative
DPW-ENRD	Directorate of Public Works, Environmental and Natural Resources Division, located in Building 1121; Phone: 334-255-1656 or 334-255-2080
External Structure	Structure that is outside of a building, including, but not limited to, siding, piping, and storage tanks.
NVLAP	National Voluntary Laboratory Accreditation Program
PE	Project Engineer (Government Employee, Corps of Engineers); A government representative who performs oversight of contract work, including asbestos abatement, being performed on the installation. All PE personnel who provide oversight for asbestos abatement projects must be trained asbestos supervisors or accompanied by a trained asbestos supervisor.
PPE	Personal Protective Equipment
QAE	Quality Assurance Evaluator (Government Employee): A government representative who performs oversight of contract work, including asbestos abatement, being performed on the installation. All QAE personnel who provide oversight for asbestos abatement projects must be trained asbestos supervisors or accompanied by a trained asbestos supervisor.
QC	Quality Control (Prime Contractor Employee): A prime contractor representative who performs oversight of contract work, including asbestos abatement, being performed on the installation.
Independent Party Oversight (Air Monitoring)	A company or person who performs independent oversight of air quality monitoring during asbestos abatement work. Independent oversight means the party has no economic, political, or other polarized interest in the performance of the entity being overseen. The independent party must have successfully passed a NIOSH 582 training course.
USAACE	United States Army Aviation Center of Excellence

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4.0 RESPONSIBILITIES

It is the responsibility of the military, civilian or contract personnel conducting asbestos abatement operations to follow these procedures regardless of the amount or type of asbestos to be removed. If suspected asbestos containing material that was not previously identified is discovered during the course of a renovation project, the renovation work will stop until the material is sampled and a determination on the appropriate action to be taken is made.

5.0 PROCEDURE

5.1 Asbestos Surveys/Sampling

- 5.1.1 All asbestos surveys must be conducted by either AHERA-certified, state-accredited, in-house personnel or the project may be undertaken on a contract basis with a qualified firm that employs a state-accredited asbestos inspector. Project specific National Environmental Policy Act (NEPA) documentation will identify who will be responsible for the survey depending on the scope of the project. All surveys will be conducted in accordance with the requirements in the Asbestos Management Plan and coordinated with DPW-ENRD.
- 5.1.2 All sampling required for asbestos projects, including clearance sampling (unless being performed on-site by an individual with a valid certificate of completion of a NIOSH 582 course), must be analyzed by a NVLAP certified lab that has a current certification. A copy of this certification must be provided as part of the submittal.

5.2 Pre-work

- 5.2.1 An Asbestos Abatement Work Plan will be developed in accordance with the USAACE Form 2739, *Asbestos Abatement Work Plan*, for each project prior to being allowed to begin work as specified in the Fort Rucker Asbestos Management Plan. Notification to the State of Alabama utilizing ADEM Form 496 will NOT occur until the AMT and COR have provided WRITTEN APPROVAL of the asbestos abatement plan.
- 5.2.2 The Asbestos Abatement Work Plan will include the following, and will be submitted as two hard copies and one electronic copy to the AMT and COR:
 - 5.2.2.1 Current certificates for the asbestos abatement company and personnel to include (ensure social security numbers or other sensitive items are blacked out on the submittal):

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- 5.2.2.1.1 Current certificate that authorizes the company to remove asbestos containing materials as issued by ADEM
- 5.2.2.1.2 State Licensing Board for General Contractors Certificate issued by the State of Alabama indicating that the company can perform abatement
- 5.2.2.1.3 Current training certificate from an Alabama Safe State approved training provider (list of approved training providers can be found at <http://alabamasafestate.ua.edu/environmental-accreditation/documents/2017-2018approvedasbestostrainingproviders.pdf> for EACH individual that will participate in the abatement (Asbestos Abatement Supervisor/ Worker/ Inspector)
- 5.2.2.1.4 Current Alabama Safe State Certificate of Accreditation for EACH individual that will participate in the abatement
- 5.2.2.1.5 5Current physician's statement for each individual that will be involved in the asbestos abatement project that states that the worker is able to work around asbestos and wear a respirator in accordance with 29 CFR 1926.1101(M)(2)
- 5.2.2.1.6 Current credentials for the qualified independent party that will perform air monitoring as outlined in 5.2.2.6
- 5.2.2.1.7 Current waste certification letter from ADEM authorizing contractor to dispose asbestos containing material at a specific permitted landfill (provided from ADEM after submittal of an ADEM Form 300, *Solid Waste Profile Sheet*)
- 5.2.2.1.8 Current certification and/or accreditation for personnel conducting asbestos survey (if not completed by Fort Rucker personnel)
- 5.2.2.2 Detailed description of the location of the abatement and the amount and type of asbestos that is planned for the abatement, including a diagram
- 5.2.2.3 Detailed description of the work practices that will be implemented during the abatement activities (the plan should ONLY include those practices that will be used in the particular project, not a list of every practice available)
- 5.2.2.4 Description of PPE, including respirators, that will be used during the abatement operations as well as decontamination procedures that will be implemented

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- 5.2.2.5 Description of all equipment to be utilized during the abatement and decontamination procedures that will be implemented to clean equipment. All abatement projects that will remove friable asbestos must have a shower onsite as part of the decontamination area. The shower must be equipped with less than or equal to 5 micron filter. The filter will be disposed of as asbestos containing waste and the filtered water will be sent to the sanitary sewer after notification to the DPW Utilities Branch.
- 5.2.2.6 Air Monitoring Plan (to be conducted by a qualified independent party who has successfully passed a NIOSH 582 training course), including at a minimum:
 - 5.2.2.6.1 Details of monitoring for personnel during abatement operations; waivers for personnel monitoring will not be accepted
 - 5.2.2.6.2 Procedure for clearance samples after the job is complete taken by an independent party; the independent party must not be an employee of the abatement contractor.
 - 5.2.2.6.3 Provisions for submitting copies of air monitoring results to the AMT and COR
- 5.2.2.7 Waste collection and shipment procedures, including:
 - 5.2.2.7.1 Manifesting waste using USAACE Form 2736, *Waste Shipment Record* (available at <https://www.fortrucker-env.com/>) - the ORIGINAL manifest with all required signatures will be submitted to the AMT and COR within 10 days of the disposal action
 - 5.2.2.7.2 Information on the landfill that will be used for waste disposal (to include the permit for the abatement company to dispose of asbestos containing material which is obtained by submitting an ADEM Form 300)
 - 5.2.2.7.3 Provisions for providing copies of landfill weigh tickets to the AMT and COR
- 5.2.2.8 Procedures that will be implemented upon completion of the removal activities to ensure the work area is appropriately cleaned prior to receiving approval that the project is complete
- 5.2.2.9 ADEM Form 496, *Notice of Demolition and/or Asbestos Removal*, that the contractor is PROPOSING to submit to ADEM (DO NOT SUBMIT UNTIL PLAN IS APPROVED)

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- 5.2.2.10 Procedures for responding to an emergency medical situation or fire and for maintaining site security
- 5.2.3 After receiving written approval from the AMT and COR of the completed USAACE Form 2739, *Asbestos Abatement Work Plan*, the abatement company will submit ADEM Form 496 to the State of Alabama no later than 10 work days (does not include weekends or holidays) prior to the start of work. The company will list a representative from the AMT and the COR on the email traffic if the form is delivered to ADEM electronically. In the event that the form is mailed, provide the AMT and the COR a copy of the certified mail receipt. If it is faxed, provide a copy of the fax delivery confirmation to the AMT and the COR. In the event that a revision to this form is required, the abatement company will ensure that the AMT and the COR receives a copy of the revision. **Note: The abatement company is required to notify the State of Alabama utilizing ADEM Form 496 regardless of the AMOUNT or TYPE of asbestos that is being removed. The AMT will provide the ADEM Form 496 with pertinent installation information pre-filled out.**
- 5.2.4 Fort Rucker requires the removal of ALL known asbestos containing material prior to whole building demolition, regardless of if it is friable or Category I or Category II non-friable material.

5.3 During Abatement

- 5.3.1 Schedule the request for the air handler to be turned off by contacting the COR; the COR will forward the request for turning off the air handler to the appropriate entity for execution. The request must be received when the approved ADEM Form 496 is sent to ADEM as outlined in 5.2.3 above; for those projects in areas where the facility manager has control over the air handlers, this action will be done internally, but a notification will be made to the AMT and COR for the project when the shut off is scheduled.
- 5.3.2 A copy of the complete approved asbestos abatement plan with all current certificates/accreditations/licenses will be at the job site at all times and available for review upon request.
- 5.3.3 Set up the area to be abated in accordance with the approved plan, to include utilizing appropriate signage and containment, to include the dumpster; containment will be constructed of at least 6 mil clear polyethylene sheeting. The contractor will ensure that a view port exists that looks into the containment wherever feasible for QAE/QC/PE personnel to observe work without having to don PPE and respirators. A shower facility with wastewater collection/filtration MUST be provided by the abatement contractor when working with friable asbestos.

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- 5.3.4 Take photographs documenting the areas that will be abated (to be done by the prime or abatement contractor under the supervision of the QAE or PE).
- 5.3.5 Independent Party Air Monitoring
 - 5.3.5.1 The independent party air monitoring contractor/company will be provided with a copy of the abatement specifications and the relevant inspection report prior to the abatement commencing
 - 5.3.5.2 Conduct personnel and area air monitoring. Any deficiencies will be communicated to the COR. The COR will have the abatement contractor correct the deficiencies. Air monitoring results will be posted at the project site daily for review by workers and all government representatives.
- 5.3.6 QAE/PE and QC Oversight
 - 5.3.5.3 During demolition (not renovation) projects, the QAE or PE along with QC personnel (recommended to be accompanied by a AHERA-certified, state-accredited asbestos inspector) will observe conditions periodically on-site during demolition and will complete the following tasks:
 - 5.3.5.3.1 Complete an asbestos abatement compliance review during the abatement process
 - 5.3.5.3.2 Perform a walk through survey of the building prior to demolition to assure the identified ACM has been removed
 - 5.3.5.3.3 Observe the building demolition process for previously unidentified ACM
 - 5.3.5.3.4 If previously unidentified ACM is observed during the demolition process, stop the demolition process and take appropriate action to assist in preventing visible emissions
 - 5.3.5.3.5 Report the discovery of previously unidentified ACM to the AMT, COR and the Environmental Coordinator; this material must then be removed prior to the building demolition
 - 5.3.5.3.6 Issue a report to the AMT and COR on observations and events noted during demolition
 - 5.3.5.3.7 A copy of all project review documentation generated by QAE/PE and QC personnel will be sent to the COR who will forward a copy to the AMT

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5.4 Project Clearance

5.4.1 Inspection

- 5.4.1.1 A post abatement clearance will be conducted by a QAE/PE inspector who is a trained asbestos supervisor or accompanied by a trained asbestos supervisor at the direction of the COR along with the QC;
- 5.4.1.2 The QAE/PE and the QC inspector will each perform a visual inspection of the abatement site to ensure all ACM has been removed and will complete USAACE Form 2738, *Asbestos Abatement Compliance Checklist*. A copy of these checklists will be provided to the AMT and the COR.
- 5.4.1.3 After a review of the post abatement inspection and air sampling data, the AMCO or AMT-designated trained asbestos supervisor will issue a clearance letter to the project proponent and COR. Air monitoring data not within regulatory limits will be referred to the Industrial Hygienist for consultation with the AMT and the COR.
- 5.4.1.4 Once the area has been cleared, the contractor will contact the COR to forward the request to turn on the air handler to the appropriate entity. For those projects in areas where the facility manager has control over the air handlers, this action will be done internally, but a notification will be made to the AMT and COR for the project when this is scheduled.
- 5.4.1.5 At the recommendation of the QAE/PE inspector, the COR will release the building for renovation/demolition or other use
- 5.4.1.6 If the project is not under direct control of the Directorate of Public Works (DPW), the responsible party (Corps of Engineers, Army Medical Command, etc.) will request to be accompanied by a trained asbestos supervisor from DPW or provide their own accredited asbestos supervisor to perform the steps outlined above while accompanied by the responsible party's Quality Assurance representative or Project Manager (government employee)

5.4.2 Waste Disposal

- 5.4.2.1 The abatement contractor must notify the AMT or COR 24 hours prior to the transport of the waste. All waste transportation must be documented on USAACE Form 2736, *Waste Shipment Record*, prior to transport. For weekend abatement projects, the waste will not leave the installation


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until Monday morning. No waste shipments will be made on the weekend without prior approval.

- 5.4.2.2 The AMCO or other designated government employee (DPW-ENRD or DPW QAE only) will sign USAACE Form 2736, *Waste Shipment Record*. The abatement contractor and transportation firm will also sign USAACE Form 2736.
- 5.4.2.3 Asbestos waste will be transported in enclosed trailers or dumpsters. Trailers or dumpsters will be lined with a minimum of 6-mil poly sheeting.
- 5.4.2.4 Ensure all bags/containers are labeled in accordance with the following label example (this applies only to the bags or containers, NOT the trailer or dumpster after it leaves the job site):

GENERATOR: _____ _____ CITY: _____ STATE: _____ DATE: _____
DANGER
Contains Asbestos Fibers. Avoid Breathing Dust. Cancer and Lung Disease Hazard.
RQ – ASBESTOS 9 – NA2212 – PG III

MEETS TDH REQUIREMENTS FOR ASBESTOS REMOVAL

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- 5.4.2.5 Each project will have its own dumpster. Asbestos waste will be removed from Fort Rucker after each abatement project is finished. In the event of a multi-phased project, the dumpster can remain on site as long as it is secured, labeled, and covered appropriately to eliminate individuals from accessing the dumpster. If friable and non-friable asbestos are co-mingled, the entire dumpster must be disposed as friable asbestos in an appropriate ADEM permitted landfill as outlined in 5.4.2.6 below.
- 5.4.2.6 ACM may be disposed of in any permitted landfill in Alabama with written approval from ADEM, following the special waste provisions found in ADEM regulations at ADEM Administrative Code 335-13-4-.26(2). Approval is obtained by the contractor by submitting an ADEM Form 300 for processing. The type of asbestos to be disposed (friable or non-friable) must match the ADEM Form 300 that the contractor is utilizing for waste disposal as there are greater landfill restrictions for friable asbestos.
- 5.4.2.7 The landfill operator must also sign USAACE Form 2736, *Waste Shipment Record*.
- 5.4.3 Required Closeout Documents to be turned in to the AMT and COR (with the exception of 5.4.3.1, all other documentation may be submitted electronically):
 - 5.4.3.1 The ORIGINAL hard copy USAACE Form 2736 containing all required signatures within 10 work days of disposal
 - 5.4.3.2 Any weigh tickets provided by the landfill
 - 5.4.3.3 Copy of the daily log for the abatement project and any reports generated by independent party oversight
 - 5.4.3.4 Air Monitoring report for both personnel and area, to include the clearance sample results and applicable chain of custody forms; and manometer read outs showing that the appropriate negative pressure was maintained during the abatement operation
 - 5.4.3.5 Copy of the completed USAACE Form 2738, *Asbestos Abatement Compliance Checklist*
 - 5.4.3.6 Before and after color photographs of areas that were abated (to be done by the prime or abatement contractor under the supervision of the QAE or PE)
 - 5.4.3.7 Building drawings denoting areas that have been abated

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6.0 FORMS AND RECORDS

USAACE Form 2736, *Waste Shipment Record*

USAACE Form 2738, *Asbestos Abatement Compliance Checklist*

USAACE Form 2739, *Asbestos Abatement Work Plan*

ADEM Form 300, *Solid Waste Profile Sheet*

ADEM Form 496, *Notification of Demolition and/or Asbestos Removal*

7.0 REFERENCES

Fort Rucker Asbestos Management Plan

ENV-P002, *Document Control*