NYSDOH/USEPA
Asbestos Project Monitor Certification
Training Course Schedule

Presented By:
Environmental Education Associates, Inc.
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DAY 1 **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
15 Minutes	**Registration/Introduction**		
60 Minutes	**Roles and Responsibilities of the Project Monitor: (Lecture)** • Regulatory/specification compliance monitoring; • Air monitoring; • Conducting visual inspections; • Final clearance air sampling	Manual Section 15	
30 Minutes	**History of Use: (Lecture)**	Manual Section 1, Video: *Asbestos: A Matter of Time* (U.S. Bureau of Mines, 1959)	
30 Minutes	**Identification of Asbestos: (Lecture)** • Types and physical characteristics of asbestos including fiber size, aerodynamic characteristics and appearance; • Common uses and applications for asbestos containing products	Manual Section 2, PowerPoint Presentation	
15 Minutes	**Break**		
90 Minutes	**Health Effects of Asbestos Exposure: (Lecture)** • Factors affecting disease development including: properties of asbestos; exposure pathways; concentration and duration of exposure and natural defenses; • Clinical signs of exposure based on visible changes in x-rays e.g.: pleural plaques and fibrosis; • Asbestos-related diseases including definitions and concepts of risk, latency, symptoms, diagnosis and treatment; • Health risks to family members of asbestos workers; • Synergism between smoking and asbestos exposure and lack of safe exposure level	Manual Section 3, PowerPoint Presentation	
60 Minutes	**Lunch**		
120 Minutes	**Current Federal, State and Local Regulations: (Lecture)** • OSHA (29 CFR 1926.1101, 29 CFR 1910.134, 29 CFR 1910.1001, 29 CFR 1910.1200, 29 CFR 1910.146) • EPA (AHERA, NESHAP)	Manual Section 4, Handouts: Referenced Regulations, PowerPoint Presentation	

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DAY 1 (Cont.) **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
	• New York State (12 NYCRR Part 56)		
15 Minutes	**Break**		
45 Minutes	**Summary of Abatement Control Options: (Lecture)** • Removal, encapsulation, enclosure, repair and an operations and maintenance program	PowerPoint Presentation	

DAY 2 **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
45 Minutes	**Medical Monitoring:(Lecture)** • Requirements for physicals including medical history, pulmonary function test and chest x-ray; • Frequency of exams/medical surveillance; • Employee access to records	Manual Section 3, PowerPoint Presentation	
60 Minutes	**Employee PPE - Respirators: (Lecture)** • Classes and characteristics of respirator types; • Limitations of respirators and their proper selection, inspection, donning, maintenance and storage • Methods for positive and negative user seal checks; • Qualitative and quantitative fit testing; • Variability between field and laboratory protection factors that alter respirator fit e.g.: facial hair • Components of a proper respiratory protection program; • Requirements regarding personal protective equipment; • Use of rotometer to perform air flow check of a powered air purifying respirator • Breathing air systems including high pressure vs. low pressure, testing for Grade D air and determining proper backup air volumes	Manual Section 5, PowerPoint Presentation	
15 Minutes	**Break**		
45 Minutes	**Employee PPE - Protective Clothing: (Lecture)** • Selection, use and handling of personal protective clothing: including disposable and non-disposable clothing, purpose, donning, removal, storage, handling and disposal; • Uses and limitations of PPE e.g.: eye protection, hard hats, hoods, gloves, boots and booties	Manual Section 5, PowerPoint Presentation	
45 Minutes	**Understanding Building Construction and Building Systems: (Lecture)** • Building construction basics and physical layout plan; • Understanding building systems (plumbing, heat, ventilation and air conditioning (HVAC), electrical, etc.);	Manual Section 16, PowerPoint Presentation	

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DAY 2 (Cont.) **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
	• Layout and organization; • Where ACM is likely to be found on building systems; • Renovations and the effect of abatement on building systems		
60 Minutes	**Lunch**		
45 Minutes	**Understanding Building Construction and Building Systems: (Lecture) Cont.**	Manual Section 16, PowerPoint Presentation	
45 Minutes	**Asbestos Abatement Contracts, Specifications and Drawings: (Lecture)** • Basic contract provisions; • Relationships between principle parties; • Establishing chain of command; • Types of specifications including prescriptive, performance, proprietary and non-proprietary; • Reading and interpreting records and abatement drawings; • Discussion of addenda and change orders; • Common enforcement responsibilities and authority of the project monitor	Manual Section 14, PowerPoint Presentation	
15 Minutes	**Break**		
45 Minutes	**Asbestos Abatement Contracts, Specifications and Drawings: (Lecture) Cont.**	Manual Section 14, PowerPoint Presentation	
60 Minutes	**Response Actions and Abatement Practices: (Lecture)** • Review of asbestos abatement and control techniques; • Pre-work inspections; • Pre-work considerations including pre-cleaning of the work area, removal of furniture and covering fixtures and equipment; • Shutdown/modification of building systems; • Construction and maintenance of containment barriers and proper work area demarcation; • Work area entry/exit and hygiene practices; • Determining effectiveness of air filtration equipment; • Techniques for minimizing fiber release including wet methods and continual cleaning; • Abatement methods other than removal; • Work area clean-up procedures; • Contingency planning for emergency response; • Waste transport and disposal requirements	Manual Sections 6-10, PowerPoint Presentations	

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DAY 3 **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
120 Minutes	**Response Actions and Abatement Practices: (Lecture) Cont.**	Manual Sections 6-10, PowerPoint Presentations	
15 Minutes	**Break**		
75 Minutes	**Asbestos Abatement Equipment: (Lecture)** • Typical equipment found on an abatement project including air filtration devices and vacuum systems; • Negative pressure differential monitoring including: HEPA filtration, theory of filtration, design/construction of HEPA filtration units, qualitative and quantitative performance of HEPA filtration units, sizing the ventilation requirements, location of HEPA filtration units and qualitative and quantitative tests of containment barrier integrity; • Best available technology	Manual Section 9, PowerPoint Presentation	
60 Minutes	**Lunch**		
120 Minutes	**Air Monitoring Strategies: (Lecture)** • Sampling equipment including: sampling pumps (low vs. high volume), flow regulating devices (critical and limiting orifices) and use of fibrous aerosol monitors on abatement projects; • Sampling media including: types of filters, types of cassettes, filter orientation and storage and shipment of filters; • Calibration techniques such as: primary calibration standards, secondary calibration standards, temperature/pressure effects, frequency of calibration, recordkeeping, field work documentation and calculations; • Air sample analysis, techniques available and limitations on their use including: transmission electron microscopy (background to sample preparation and analysis, air sample conditions which prohibit analysis, recommended technique for analysis of final clearance air samples), phase contrast microscopy (background to sample preparation and limits on the use of phase contrast microscopy), and what each technique measures; • Analytical methodologies; • Sampling strategies for air monitoring including: types of air samples (personal breathing zone vs. stationary area), sampling location and objectives (pre-abatement, daily, and clearance monitoring),	Manual Section 12, PowerPoint Presentation	

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DAY 3 (Cont.) **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
	number of samples to be collected, minimum and maximum air volumes; • Clearance monitoring including: post-visual inspection, number of samples required, selection of sampling locations, period of sampling, aggressive sampling, interpretation of sampling results, calculations and quality assurance; • Special sampling problems such as crawl spaces, acceptable samples for laboratory analysis and sampling in occupied buildings (barrier monitoring)		
15 Minutes	**Break**		
75 Minutes	**Air Monitoring Strategies: (Lecture) Cont.**	Manual Section 12, PowerPoint Presentation	

DAY 4 **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
90 Minutes	**Conducting Visual Inspections: (Lecture)** • Inspections during abatement and visual inspections; • Conducting inspections for completeness of removal; • Discussion of "how clean is clean"	Discussion, Handout: ASTM E-1368	
15 Minutes	**Break**		
60 Minutes	**Employee Personal Protective Equipment and Clothing: (Hands-on)** • Students will practice selecting, donning, doffing, handling, storing and disposing of protective clothing; • Practice selecting, donning, doffing, handling, maintaining and storing respirators; • Perform positive and negative user seal checks; • Use a rotometer to perform an air flow check of a PAPR; • Instructor will provide various types of respirators for demonstration	Hands-on	
60 Minutes	**Air Monitoring Strategies/Asbestos Abatement Equipment Workshop: (Hands-on)** • Workshop shall consist of simulated abatement sites for which sampling strategies will need to be developed (e.g.: occupied buildings, industrial settings); • Through demonstrations and exhibitions, the students will be able to gain a better understanding of the function of various equipment used on abatement projects (air filtration units, water filtration units, manometers,	Hands-on	

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DAY 4 (Cont.) **Date:**

	sampling pumps, calibration devices, etc.)		
60 Minutes	**Lunch**		
60 Minutes	**Air Monitoring Strategies/Asbestos Abatement Equipment Workshop: (Hands-on) Cont.**	Hands-on	
60 Minutes	**Other Safety Hazards: (Lecture)** • Electrical Hazards including placement of cords to reduce tripping hazards; • Heat related conditions; • Other air contaminants; • Fire and explosion hazards; Gasoline engines; • Scaffold and ladder hazards and proper use; • Slips, trips and falls; • Confined spaces and entry/exit procedures; • Noise hazards; • Emergency procedures in the event of fire/medical emergencies and failure of containment barriers; • Hazardous material on abatement projects	Manual Section 11, PowerPoint Presentation	
15 Minutes	**Break**		
60 Minutes	**Recordkeeping and Report Writing: (Lecture)** • Developing project logs/daily logs (what should be documented, who has access to them); • Final report preparation; • Recordkeeping	Manual Section 21, PowerPoint Presentation	

DAY 5 **Date:**

Time Allotment	Topic	Method(s) of Instruction	Instructor(s)
120 Minutes	**Conducting Visual Inspections Workshop (Hands-on)** • Workshop shall consist of a simulated asbestos abatement work area which is intentionally constructed to contain a minimum of five violations of state and federal requirements • Each student will inspect the work area and be asked to identify and document the violations and make recommendations to correct them • Non-asbestos debris shall be strategically placed in the work area for the purposes of visual inspection and each student will be asked to locate and document the exact locations of the debris; at the conclusion of the workshop, students will be asked questions designed to stimulate the student's recall of the area	Hands-on	
15 Minutes	**Break**		

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DAY 5 (Cont.) **Date:**

60 Minutes	**Contracts, Specifications and Drawings Workshop: (Hands-on)** • Workshop shall consist of each student being issued a set of contract documents including a sample contract, specifications and drawings, then being asked to answer questions and make recommendations to a project architect, engineer or the building owner based on given conditions and the documents	Hands-on	
45 Minutes	**Legal Responsibilities and Liabilities of Project Monitors: (Lecture)** • Regulatory enforcement and specification enforcement capabilities; • Licensing; • Authority/responsibilities delegated to project monitors through contract documents	Manual Section 14, PowerPoint Presentation	
60 Minutes	**Lunch**		
30 Minutes	**Legal Responsibilities and Liabilities of Project Monitors: (Lecture) Cont.**	Manual Section 14, Discussion	
45 Minutes	**Course Review**	Handout: Asbestos Review Questions, Student Q&A	
15 Minutes	**Break**		
90 Minutes	**Course Exam**		