

Presented By: Environmental Education Associates, Inc. www.environmentaleducation.com 888 436 8338

DAY 1		Date:	
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
15 Minutes	Registration/Introduction	•	1
35 Minutes	History of Use: (Lecture)	Manual Section 1, Video: Asbestos: A Matter of Time (U.S. Bureau of Mines, 1959)	
30 Minutes	<ul> <li>Identification of Asbestos: (Lecture)         <ul> <li>Types and physical characteristics of asbestos including fiber size, aerodynamic characteristics and appearance;</li> <li>Common uses and applications for asbestos containing products</li> </ul> </li> </ul>	Manual Section 2, PowerPoint Presentation	
70 Minutes	<ul> <li>Health Effects of Asbestos Exposure: (Lecture)</li> <li>Factors affecting disease development including: properties of asbestos; exposure pathways; concentration and duration of exposure and natural defenses;</li> <li>Clinical signs of exposure based on visible changes in x-rays e.g.: pleural plaques and fibrosis;</li> <li>Asbestos-related diseases including definitions and concepts of risk, latency, symptoms, diagnosis and treatment;</li> <li>Health risks to family members of asbestos workers;</li> <li>Synergism between smoking and asbestos exposure and lack of safe exposure level</li> </ul>	Manual Section 3, PowerPoint Presentation	
15 Minutes 15 Minutes	Break         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;         • Medical surveillance programs	Manual Section 3, PowerPoint Presentation	



DAY 1 (Cont.) Date:			
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
30 Minutes	<ul> <li>Personal Hygiene: (Lecture)</li> <li>Work area entry and exit procedures including</li> </ul>	Manual Section 7,	
	sequential steps workers take in clean room, shower room and equipment room;	PowerPoint Presentation	
	<ul><li>Use of showers;</li><li>Sanitation including avoidance of eating, drinking,</li></ul>		
	<ul> <li>smoking and chewing gum/tobacco in work area;</li> <li>Potential exposures to family and others</li> </ul>		
60 Minutes	Lunch		
60 Minutes	Current Federal, State and Local Regulations: (Lecture)	Manual Section 4,	
	<ul> <li>OSHA (29 CFR 1926.1101, 29 CFR 1910.134, 29 CFR 1910.1001, 29 CFR 1910.1200, 29 CFR</li> </ul>	Handouts: Referenced	
	1910.146) • EPA (AHERA, NESHAP)	Regulations, PowerPoint	
	New York State (12 NYCRR Part 56)	Presentation	
15 Minutes	Break		
90 Minutes	<ul> <li>Employee PPE - Respirators: (Lecture) <ul> <li>Classes and characteristics of respirator types;</li> <li>Limitations of respirators and their proper selection, inspection, donning, maintenance and storage</li> <li>Methods for positive and negative user seal checks;</li> <li>Qualitative and quantitative fit testing;</li> <li>Variability between field and laboratory protection factors that alter respirator fit e.g.: facial hair</li> <li>Components of a proper respiratory protection program;</li> <li>Requirements regarding personal protective equipment;</li> <li>Use of rotometer to perform air flow check of a powered air purifying respirator</li> <li>Breathing air systems including high pressure vs. low pressure, testing for Grade D air and determining proper backup air volumes</li> </ul> </li> </ul>	Manual Section 5, PowerPoint Presentation	
45 Minutes	<ul> <li>Employee PPE - Protective Clothing: (Lecture)</li> <li>Selection, use and handling of personal protective clothing: including disposable and non-disposable clothing, purpose, donning, removal, storage, handling and disposal;</li> <li>Uses and limitations of PPE e.g.: eye protection, hard hats, hoods, gloves, boots and booties</li> </ul>	Manual Section 5, PowerPoint Presentation	



DAY 2		Date:	
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
30 Minutes	Summary of Abatement Control Options:	PowerPoint	
	(Lecture)	Presentation	
	Removal, encapsulation, enclosure,		
	repair and an operations and		
	maintenance program		
75 Minutes	State-of-the-Art Work Practices: (Lecture)	Manual	
	<ul> <li>Proper work practices for asbestos</li> </ul>	Sections 6, 8,	
	abatement activities including	9 and 10,	
	descriptions of proper construction and	PowerPoint	
	maintenance of barriers and	Presentations	
	decontamination enclosure systems;		
	<ul> <li>Positioning of warning signs;</li> </ul>		
	Electrical and ventilation system		
	lockout;		
	Proper working techniques for		
	minimizing fiber release;		
	Use of wet methods;		
	<ul> <li>Use of negative pressure ventilation equipment;</li> </ul>		
	<ul> <li>Use of high efficiency particulate air (HEPA) vacuums;</li> </ul>		
	<ul> <li>Proper clean-up and disposal procedures;</li> </ul>		
	<ul> <li>Work practices for removal, encapsulation, enclosure and repair;</li> </ul>		
	<ul> <li>Emergency procedures for sudden releases;</li> </ul>		
	<ul> <li>Potential exposure situations;</li> </ul>		
	<ul> <li>Transport and disposal procedures and recommended and prohibited work</li> </ul>		
	<ul><li>practices;</li><li>Discussion of new abatement-related</li></ul>		
	techniques and methodologies;		
	<ul> <li>Proper techniques for initial cleaning;</li> </ul>		
	<ul> <li>Discussion of glove bag use;</li> </ul>		
	<ul> <li>Use of a shower water filtration system;</li> </ul>		
	<ul> <li>Post abatement clean-up procedures</li> </ul>		
	and sequence of activities; and		
	<ul> <li>Notification of building occupants</li> </ul>		
15 Minutes	Break	II	
90 Minutes	State-of-the-Art Work Practices: (Lecture)	Manual	
	Cont.	Sections 6, 8,	
		9 and 10,	
		PowerPoint	
		Presentations	



DAY 2 (Cont.) Date:			
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
60 Minutes	Lunch		
60 Minutes	<ul> <li>Air Monitoring: (Lecture)</li> <li>Proper collection of personal air samples;</li> <li>Procedures to determine airborne concentrations of asbestos fibers, including a description of aggressive sampling, sampling equipment and methods, reasons for air monitoring, types of samples and interpretation of results, specifically from analysis performed by PLM, PCM and TEM analyses;</li> </ul>	Manual Section 12, PowerPoint Presentation	
45 Minutes	<ul> <li>Other Safety Hazards: (Lecture) <ul> <li>Electrical Hazards including placement of cords to reduce tripping hazards;</li> <li>Heat related conditions;</li> <li>Other air contaminants;</li> <li>Fire and explosion hazards;</li> <li>Gasoline engines;</li> <li>Scaffold and ladder hazards and proper use;</li> <li>Slips, trips and falls;</li> <li>Confined spaces and entry/exit procedures;</li> <li>Noise hazards;</li> <li>Emergency procedures in the event of fire/medical emergencies and failure of containment barriers;</li> <li>Review of hazard assessment considerations</li> </ul> </li> </ul>	Manual Section 11, PowerPoint Presentation	
15 Minutes	Break	•	
45 Minutes	<ul> <li>Recordkeeping: (Lecture)</li> <li>Records required by Federal, State and Local agencies;</li> <li>Records recommended for legal and insurance purposes;</li> <li>Use of a daily logbook to document work area inspections and work activities</li> </ul>	Manual Section 13, PowerPoint Presentation	
45 Minutes	<ul> <li>Supervisory Techniques: (Lecture)</li> <li>Supervisory techniques to enforce and reinforce required work practices and discouragement of unsafe work practices;</li> <li>Use of smoke tubes to test the effectiveness of barriers and decon system under negative air ventilation and glove bag seal testing</li> </ul>	Manual Section 13, PowerPoint Presentation	



DAY 3		Date:	
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
90 Minutes	<ul> <li>Employee PPE - Respirators and Protective Clothing: (Demonstration and Hands-on)</li> <li>Practice selecting, donning, removing, handling, storing and disposing of protective clothing;</li> <li>Practice selecting, donning, removing, handling, maintaining and storing respirators;</li> <li>Perform positive and negative user seal checks;</li> <li>Use a rotometer to check air flow of a PAPR;</li> <li>Instructor will provide various types of respirators for demonstration</li> </ul>	Hands-on	
30 Minutes	<ul> <li>State -of-the-Art Work Practices &amp; Supervisory</li> <li>Techniques: (Hands-on) <ul> <li>Students will build a large project sized decon contiguous to the work area per current 12 NYCRR Part 56 specifications;</li> <li>Students will prepare a mock abatement work area following 12 NYCRR Part 56 requirements and procedures</li> <li>Use smoke tubes to test the effectiveness of the work area barriers and the decon;</li> <li>Remove non-asbestos surfacing material using proper working techniques to minimize fiber release;</li> <li>Set-up glove bag for use;</li> <li>Use smoke tubes to perform glove bag seal testing;</li> <li>Use glove bags to remove non-asbestos thermal system insulation from a horizontal pipe, vertical pipe and elbow</li> </ul> </li> </ul>	Hands-on	
15 Minutes	Break	-	1
90 Minutes	State-of-the-Art Work Practices & Supervisory Techniques: (Hands-on) Cont.	Hands-on	
60 Minutes	Lunch		
90 Minutes	State -of-the-Art Work Practices & Supervisory Techniques: (Hands-on) Cont.	Hands-on	
15 Minutes	Break	-	1
90 Minutes	State-of-the-Art Work Practices & Supervisory Techniques: (Hands-on) Cont.	Hands-on	



DAY 4	Y 4 Date:		
Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
90 Minutes	State -of-the-Art Work Practices & Supervisory	Hands-on	
	Techniques: (Hands-on) Cont.		
30 Minutes	Other Safety Hazards/Air	Hands-on	
	Monitoring/Recordkeeping/State-of-the-Art Work		
	Practices (Hands-on)		
	Students will run through other safety hazards that		
	may be found on the worksite and procedures to		
	eliminate them;		
	<ul> <li>Collection of personal air samples;</li> </ul>		
	<ul> <li>Area air sampling and aggressive sampling</li> </ul>		
	procedures;		
	<ul> <li>Use of daily logbook to document work area</li> </ul>		
	inspection and work practices		
	Post abatement clean-up and waste transport and		
	disposal procedures;		
	Recommended and prohibited work practices		
15 Minutes	Break	•	
90 Minutes	Other Safety Hazards/Air	Hands-on	
	Monitoring/Recordkeeping/State-of-the-Art Work		
	Practices (Hands-on) Cont.		
60 Minutes	Lunch		
90 Minutes	Other Safety Hazards/Air	Hands-on	
	Monitoring/Recordkeeping/State-of-the-Art Work		
	Practices: (Hands-on) Cont.		
15 Minutes	Break	•	•
90 Minutes	Other Safety Hazards/Air	Hands-on	
	Monitoring/Recordkeeping/State-of-the-Art Work		
	Practices: (Hands-on) Cont.		



#### DAY 5

Date:

Time Allotment	Торіс	Method(s) of Instruction	Instructor(s)
90 Minutes	Special Projects and Variances: (Lecture)	Hand-outs:	
	<ul> <li>Discussion of ICR-56-11 applicability and</li> </ul>	Referenced	
	requirements	Variances,	
	<ul> <li>Discussion of use and applicability of Applicable</li> </ul>	Class	
	Variances A-1 through A-4, and Fast Track	Discussion	
	Variances FTV-1 through FTV-10		
45 Minutes	Insurance and Legal Liability Issues: (Lecture)	Manual	
	<ul> <li>Contractor issues;</li> </ul>	Section 14,	
	<ul> <li>Worker's compensation coverage and exclusions;</li> </ul>	PowerPoint	
	<ul> <li>Insurance coverage and exclusions;</li> </ul>	Presentation	
	<ul> <li>Types of liability including third-party liability and</li> </ul>		
	defenses;		
	Bonding		
15 Minutes	Break		•
45 Minutes	Insurance and Legal Liability Issues (Lecture) Cont.	Manual	
		Section 14,	
		PowerPoint	
		Presentation	
60 Minutes	Lunch		
60 Minutes	Contract Specifications: (Lecture)	Manual	
	Discussion of key elements included in contract	Section 14,	
	specs;	PowerPoint	
	<ul> <li>Bidding process, submittals and contracts</li> </ul>	Presentation	
15 Minutes	Break		
60 Minutes	Course Review	Handout:	
		Asbestos	
		Review	
		Questions,	
		Student Q&A	
90 Minutes	Course Exam		

