

- 1. A national governmental agency which sets standards and enforces laws relating to asbestos abatement is:**
 - a) Environmental Pollution Agency
 - b) U.S. Environmental Protection Agency
 - c) National Institute of Occupational Safety and Health
 - d) None of the above

- 2. Why was asbestos materials used for brake linings:**
 - a) Because it had excellent water resistance
 - b) Because of its high thermal conductivity
 - c) Because of its excellent heat resistance
 - d) None of the above

- 3. The sequence in which poly is installed to build containment for an asbestos abatement work area, for the removal of asbestos ceiling plaster, is as follows:**
 - a) Floor, wall, floor, wall
 - b) Wall, floor, wall, floor
 - c) Floor, floor, wall, wall
 - d) Wall, wall, floor, floor

- 4. Training for asbestos handlers should:**
 - a) Familiarize workers with the health problems resulting from asbestos exposure
 - b) Teach them to handle ACM safely
 - c) Explain how to interpret asbestos abatement work orders
 - d) All of the above

- 5. What does the term "HEPA" mean?**
 - a) High effective positive air
 - b) High efficiency particulate air
 - c) High effective particulate absolute
 - d) None of the above

- 6. The danger of asbestos exposure varies depending on:**
 - a) The intensity or number of asbestos fibers in the air (i.e., the dose)
 - b) The size of the asbestos fibers
 - c) Individual susceptibility
 - d) All of the above

- 7. 12 NYCRR 56 requires the following procedure when installing poly to contain a friable asbestos abatement work area:**
 - a) Each layer of wall poly only should overlap the floor poly by 18 inches
 - b) Each layer of floor poly only should overlap the wall poly by 12 inches
 - c) Each layer of wall poly should overlap the floor poly 12 inches
 - d) Overlapping of poly is not required

8. NYS Code Rule 56 In-Plant Operations permits the use of outside abatement contractors to remove non-friable organically bound materials:

- a) When less than 160 square feet of any asbestos material will be removed
- b) On friable ACM only
- c) When such asbestos material will not be rendered friable during abatement
- d) In-Plant does not permit use of outside contractors

9. A "large asbestos project" is defined as:

- a) 160 linear feet or more, or 260 linear feet or more
- b) 160 linear feet or more, 260 square feet or less
- c) 160 square feet or more, or 260 linear feet or more
- d) All of the above

10. Every person who works at an abatement project for a contractor removing asbestos must:

- a) Certify that he knows how to identify asbestos
- b) Be certified by the Department of Health and attend an approved training course
- c) Receive training from an approved course and be certified by the State Department of Labor as an asbestos handler or supervisor
- d) None of the above

11. Which is the proper arrangement of filters in a portable exhaust unit (from the air inlet side)?

- a) Pre-filter, HEPA, secondary filter
- b) Pre-filter, secondary filter, HEPA
- c) HEPA, secondary filter, pre-filter
- d) Secondary filter, pre-filter, HEPA

12. According to the NY State Code Rule 56, laboratories performing asbestos air sample analysis shall be accredited by:

- a) American Board of Industrial Hygiene
- b) NYSDOH Environmental Laboratory Approval Program (ELAP)
- c) National Institute for Occupational Safety and Health (NIOSH)
- d) American Conference of Governmental Industrial Hygienists (ACGIH)

13. The negative air exhaust unit should be:

- a) Started during the removal
- b) Started once Isolation and critical barriers have been established
- c) Turned off at the end of the work shift
- d) Turned off when removal operations temporarily stop

14. All asbestos waste must be removed from the worksite

- a) Within 10 calendar days after successful completion of Phase IIC for all regulated abatement work areas at the site
- b) Within 5 calendar days after successful completion of Phase IIC for all regulated abatement work areas at the site
- c) Immediately upon successful completion of Phase IIC for all regulated abatement work areas at the site
- d) At the discretion of the waste transporter

15. Which of the following is true of the OSHA regulations pertaining to asbestos:

- a) They only apply to the emergency cleanup of asbestos
- b) Continuous area air monitoring is always required
- c) They never apply to projects such as construction and repair, only removal and demolition
- d) They require the establishment of "Regulated Areas" when conducting all Class I, II and III asbestos work

16. According to Code Rule 56 which of the following is required?

- a) Seams between poly layers should be staggered 12 feet
- b) Reinforced poly must be used on the floor of the work area
- c) Seams in the same poly layer must be separated by a distance of 6 feet
- d) Fire retardant poly is required in the decon only

17. What is the benefit of using pre-filters in a negative air machine?

- a) To protect the HEPA filter by removing the smaller size particles
- b) Allowing larger particles to pass through to the HEPA filters
- c) To prolong the operating life of the HEPA filter by removing the larger size particles
- d) None of the above

18. Which of the following building materials might contain asbestos?

- a) Floor tile
- b) Acoustical Plaster
- c) Thermal pipe insulation
- d) All of the above

19. According to NYCRR 56, which is the proper sequence of events of an abatement project?

- a) Post barrier tape & signs, vacate work area, construct the decontamination unit
- b) Background air sampling, shut down electric power, vacate the work area
- c) Construct decontamination unit, pre-clean the work area, post barrier tape & signs
- d) Post occupancy notification, vacate the work area, construct decon.

20. When containment is required, hardwall isolation barriers are required when:

- a) There is an opening that is less than 32 square feet
- b) There is any window present
- c) There is an opening larger than 32 square feet, as long as no dimension is 1 foot or less
- d) None of the above

21. What is the benefit of armholes (gloves) and an inside pouch for tools while working with glove bags?

- a) To allow you to be exposed to asbestos fibers
- b) To allow you to remove insulation with exposure to asbestos fibers
- c) To allow you to remove insulation without exposure to asbestos fibers
- d) None of the above

22. NYS Code Rule 56-11.2, "Emergency Projects" does not apply to which of the following situations:

- a) Unforeseen discovery of asbestos materials during renovation activities
- b) Collapse of an asbestos containing plaster ceiling
- c) Unintentional disturbances of asbestos pipe insulation
- d) Planned asbestos maintenance activities

23. The State agency which makes and enforces rules about asbestos abatement is:

- a) New York State Department of Environmental Conservation
- b) New York State Department of Labor
- c) New York State Department of Health
- d) Occupational Safety and Health Administration (OSHA)

24. The term "permissible exposure limit" (PEL) describes:

- a) The amount of activity in and around asbestos containing materials
- b) The maximum concentration to which an employee can be exposed during in an 8-hour work day
- c) How much work has to be done
- d) All of the above

25. "Friable" is a term used to describe:

- a) Asbestos containing material which can be used for hot water
- b) Asbestos containing material which can be crushed to powder by hand pressure when dry
- c) Asbestos containing material which can be washed by amended water
- d) None of the above

26. Under the revised OSHA standards, which of the following is not an example of Class I asbestos abatement work?

- a) Removal of PACM
- b) Glovebag operations
- c) Surfacing material removal
- d) Removal of vinyl floor tile

27. What samples must be collected to meet OSHA requirements for exposure monitoring during an abatement activity?

- a) Area air samples at all critical barriers
- b) Clearance samples
- c) Breathing zone samples
- d) No sampling is required by OSHA

28. Which is an advantage of removal over other asbestos abatement methods?
- a) Removal eliminates the source of asbestos
 - b) Initial cost of removal may be lower for enclosure
 - c) Removal does not require replacement of materials
 - d) Removal increases asbestos fiber release from materials
29. Which of the following is not an approved engineering control or work practice in order to comply with OSHA permissible exposure levels for asbestos?
- a) Use of HEPA vacuum cleaners
 - b) Isolation of the ventilation system
 - c) Wet methods
 - d) Employee rotation
30. If the total volume of the work area of an abatement project is 135,000 ft³, how many portable exhaust units with a maximum rated capacity of 1500 cu.ft./min. are needed to accomplish the air changes only? (Assume one air change every 15 minutes and 75% efficiency of the units.)
- a) 4
 - b) 8
 - c) 3
 - d) 5
31. Which one of the following is not true about asbestos abatement projects?
- a) Floors must be HEPA vacuumed
 - b) A barrier system must connect to the building air plenum system
 - c) ACM must be wetted by amended water
 - d) Worker protection in accordance with OSHA regulations is required during the work
32. What must be the minimum efficiency of a HEPA filter?
- a) Not less than 99.92% when challenged with 0.3 μm test particles
 - b) Not less than 99.95% when challenged with 0.3 μm test particles
 - c) Not less than 99.97% when challenged with 0.3 μm test particles
 - d) Not less than 99.96% when challenged with 0.3 μm test particles
33. Which of the following method(s) are an acceptable approach to isolating the HVAC system?
- a) Positive pressurization
 - b) Local isolation
 - c) Complete shutdown
 - d) All of the above
34. When isolating an elevator which of the following is (are) true?
- a) Framing should be 32 inches on center with 3/8 inch sheathing
 - b) Framing should be 16 inches on center with 3/8 inch sheathing
 - c) Framing should be 32 inches on center with 5/8 inch sheathing
 - d) Framing should be 16 inches on center with 5/8 inch sheathing

35. Which of the following is the primary route of entry into the body for asbestos?

- a) Through the respiratory system
- b) Absorption through the skin
- c) Through the digestive tract
- d) None of the above

36. Which one of the following is not an abatement method?

- a) Removal
- b) Crushing
- c) Enclosure
- d) Encapsulation

37. During the cleaning phase of a large friable asbestos abatement project, which of the following is true?

- a) The first cleaning cannot be conducted until at least 12 hours have elapsed after gross cleanup
- b) The second sheet of poly cannot be removed until 12 hours have elapsed after the second cleaning
- c) You may remove all poly sheets at once
- d) None of the above

38. Which one of the following respirators has a higher protection factor?

- a) Half-face dual cartridge respirator
- b) Half face powered air purifying respirator
- c) Full face cartridge respirator
- d) Full face self contained breathing apparatus (SCBA) in positive pressure mode

39. Dry removal of ACM is not permitted because:

- a) It releases more asbestos fibers into the air
- b) It has a higher potential for worker exposure
- c) It has a higher potential for contamination outside the work area
- d) All of the above

40. Mesothelioma is:

- a) A fibrotic degeneration of lung tissue caused by asbestos
- b) Caused by cigarette smoking
- c) A cancer of the pleural lining of the chest cavity or abdominal cavity
- d) Another word to describe lung cancer

41. Which of the following is (are) true about glovebag operations?

- a) The operations must include the use of a HEPA vacuum to collapse the bag
- b) Glovebags should be smoke tested prior to removing any insulation
- c) Class I glovebag operations must be performed by two man teams
- d) All of the above

42. Which of the following techniques is used for analysis of bulk samples?

- a) Polarized contrast microscopy
- b) Phase contrast microscopy
- c) Phase contrast microscopy with dispersion staining
- d) Polarized light microscopy

43. If an asbestos contractor is asked by another trade to deviate from the specified scope of work detailed in the contract, he should:

- a) Obey the directions of another trade
- b) Continue with the established procedures until there is a written change order
- c) Obey the orders of the highest ranking union official at the job site
- d) All of the above

44. When conducting a pre-job walk through, which of the following is (are) important considerations?

- a) Who pays for the required utilities
- b) When will the job be conducted
- c) Will the building be occupied during the abatement
- d) All of the above

45. Relative to a containment, what is a negative pressure system?

- a) It is one in which air pressure inside the containment is higher than that outside the containment
- b) It is one in which air pressure outside the containment is lower than that inside the containment
- c) It is one in which air pressure outside the enclosure area is higher than that inside the containment
- d) It is one in which air pressure outside the containment is equal to that inside the containment

46. An effective encapsulant should be used to:

- a) Eliminate fiber dispersal by adhering to the fibers
- b) Add weight to the asbestos to make removal easier
- c) Mask incomplete removal
- d) Eliminate the need for personal protective equipment (PPE)

47. Asbestosis is characterized by:

- a) A scarring and thickening of the alveoli due to asbestos
- b) A cancerous tumor in the digestive tract
- c) A cancerous tumor in the lungs
- d) Fluid between the chest and lung

48. Which one of the following is the proper sequence for a decontamination area (Assume the airlocks are in the correct locations and you are leaving the work area)?

- a) Equipment room, shower room, clean room
- b) Clean room, equipment room, shower room
- c) Shower room, clean room, equipment room
- d) None of the above

49. Code Rule 56 requires a _____ settling period following the manual removal of floor tile

- a) 0 hour
- b) 2 hour
- c) 4 hour
- d) 12 hour

50. An unsafe condition is:

- a) A physical part of the work area that creates bad attitudes
- b) A physical part of the work area that creates a hazard
- c) A physical part of the work area that makes a job easy
- d) A physical part of the work area that decreases the odds of being injured

51. Which statement(s) is (are) true for abatement projects?

- a) Abatement shall stop immediately if electric power fails
- b) Abatement shall stop immediately if water is observed coming from the work area
- c) Abatement shall stop immediately if negative pressure equipment fails
- d) All of the above

52. Which of the following is true about lockout vs. tagout?

- a) Lockout physically prevents the operation of a device
- b) Tags may be damaged or fall off
- c) In lock-out, each worker must remove his/her lock before the system can be energized
- d) All of the above

53. Worker protection involves all of the following except:

- a) Wearing a respirator without fitting it properly
- b) Wearing the disposable coveralls, head covers and footwear
- c) Wearing a properly fitted respirator
- d) Wearing the appropriate hand protection to protect the skin from chemical exposure

54. Per Code Rule 56-7.3 a daily project log must be

- a) Maintained on site by the supervisor
- b) Prepared by the project designer in advance of the project and completed by the project monitor
- c) Maintained by the project monitor
- d) Prepared by the project monitor and maintained by the supervisor

55. An insurance policy covering only those situations for which a complaint is received when the policy is in existence and in force is called:

- a) An occurrence policy
- b) A claims made policy
- c) An excess insurance policy
- d) An umbrella insurance policy

56. An airlock is defined as:

- a) Part of a system permitting entrance and exit to the work area
- b) Part of a system which restricts air movement between contaminated and uncontaminated areas
- c) Two curtained doorways separated by a distance of at least 3 feet
- d) All of the above

57. A supervisor must:

- a) Know how to properly construct a work area
- b) Know how to perform qualitative fit testing
- c) Know how to perform area air sampling
- d) Know how to perform building inspections

58. A personal decontamination enclosure system consists of:

- a) A room with a shower
- b) One clean room and one equipment room separated by benches and lockers
- c) An area where up to 6 workers can undergo decontamination
- d) A clean room, shower room and equipment room separated by airlocks

59. Which of the following OSHA regulations covers the requirements for the respiratory training programs?

- a) 29 CFR 1910.134
- b) 29 CFR 1910.144
- c) 29 CFR 1910.146
- d) 29 CFR 1910.143

60. A supervisor:

- a) Must be in charge of several projects at the same time
- b) Must be present at all times work is in progress
- c) Must conduct air sampling
- d) Must have professional liability insurance

61. Which one of the following is not true about respirators?

- a) NIOSH must test and certify the respirators
- b) Qualitative and quantitative tests are different types of fit-test methods
- c) Half face air purifying respirators must be fit tested every 6 months by a quantitative method
- d) 29 CFR 1910.134 covers the requirements for the respirator protection program

62. An asbestos supervisor is the individual:

- a) Who supervises the asbestos abatement project
- b) Who supervises proper safety procedures at the abatement site
- c) Who shall have successfully completed a training course approved by the Department of Health
- d) All of the above

63. All Class I and Class II asbestos projects in New York State must have the following:

- a) A certified supervisor
- b) A HEPA vacuum and negative air machine
- c) A project notification
- d) All of the above

64. Which of the following is (are) an unsafe act(s)?

- a) Not following safe work rules
- b) Not wearing protective equipment
- c) Climbing on objects instead of using a ladder
- d) All of the above

65. What is the thickness in mil of the plastic used in asbestos abatement projects:

- a) 4
- b) 6
- c) 8
- d) None of the above

66. In a large project containment area, the

- a) Workers should inform the supervisor of leaks
- b) Supervisor must inspect for leaks
- c) Containment should be checked for leaks daily
- d) All of the above

67. The respirator must have a good fit to:

- a) Pinch your nose and slip around the face
- b) Give effective protection against breathing hazards
- c) Leave a gap to move your head and talk
- d) Seal over facial hair

68. One of the primary provisions of the New York Workers' Compensation Law is that:

- a) An employee may not sue any other party for injuries suffered on the job if he is collecting compensation
- b) An employee may not receive compensation if he was at fault for the accident
- c) An employee may not receive compensation if his employer was at fault for an accident
- d) An employee may be barred from suing his employer in court for injuries suffered on the job

69. When the work day is done the supervisor must:

- a) Make sure workers leave all their contaminated clothes in the equipment room of the decontamination area
- b) Make sure workers leave contaminated clothes in their lockers
- c) Make sure workers wash their contaminated clothes
- d) None of the above

70. At a containment site:

- a) All workers and visitors must be monitored for asbestos
- b) All workers and visitors must read the OSHA regulations
- c) All workers and visitors must know how to remove ACM
- d) None of the above

71. A "minor asbestos project" is defined as:

- a) Any job involving the abatement of 10 sq. ft. or 25 linear feet or less
- b) Only those jobs requiring sealing off work areas
- c) Any job involving the abatement of 10 sq. ft. or 25 linear feet or more
- d) All of the above

72. Abatement site conditions must comply with:

- a) USEPA standards for asbestos operations
- b) NIOSH respiratory protection
- c) OSHA standards
- d) All of the above

73. What is the permissible exposure limit for asbestos?

- a) 0.2 f/cc, 8 Hr. TWA
- b) 0.01 f/cc, 8 Hr. TWA
- c) 0.1 f/cc, 8Hr. TWA
- d) 1.0 f/cc, 8 Hr. TWA

74. Supervisors are responsible to :

- a) Inspect all electrical equipment for proper grounding
- b) Inspect all ladders for defects
- c) Ensure all asbestos handlers wear respirators correctly
- d) All of the above

75. Which of the following is a requirement for the respirator training program?

- a) The worker shall receive medical approval from a physician
- b) The worker shall be fitted properly before wearing the respirator
- c) The worker shall be trained to inspect and clean the respirator
- d) All of the above

76. Initial Exposure Assessment refers to:

- a) Bulk sampling for the presence of ACM
- b) Personal air sampling for employee exposure
- c) Chest x-rays during medical surveillance
- d) Area air sampling during removal

77. What is the optimum sampling flow that should be used for personal air sampling?

- a) 0.5 LPM
- b) 2.5 LPM
- c) 12 LPM
- d) 25 LPM

78. Which of the following filters would best meet OSHA specifications for personal asbestos air sampling?

- a) 0.8 μm , mixed cellulose ester, 25 mm
- b) 0.8 μm , mixed cellulose ester, 37 mm
- c) 0.8 μm , mixed magnesium silicate, 25 mm
- d) Binderless glass fiber filter, 25 mm

79. Manometer readings are taken and documented

- a) Twice per work shift by the project monitor
- b) Each hour by the air sampling technician
- c) Twice per work shift by the contractor supervisor
- d) Whenever negative pressure fails

80. Per 12 NYCRR 56 Phase IIC entails

- a) Work area preparation
- b) Gross removal
- c) Final cleaning
- d) Waste removal

81. Which one of the following is not a fit test or fit check?

- a) Positive pressure test
- b) Irritant smoke test
- c) Quantitative test
- d) Spray test

82. Power hand tools used to drill, cut into or disturb ACM shall be equipped with:

- a) Non-sparking instrumentation
- b) Ground-faulted switch gear
- c) HEPA filtered local exhaust ventilation
- d) Dual wet injections methodology

83. The containers used for storage or transportation of ACM shall be labeled in accordance with regulations from which Federal agency?

- a) NYSDOL
- b) NYSDOH
- c) USOSHA
- d) USEPA

84. What is the effect of having facial hair while wearing a respirator?

- a) Makes the respirator more comfortable
- b) Gives the respirator a better fit
- c) Leaves room to talk
- d) None of the above

85. The project monitor must complete a visual inspection

- a) To determine the completeness of abatement
- b) Of each glovebag/tent enclosure prior to removal
- c) On emergency projects only
- d) At the conclusion of each phase of an abatement project

86. NYS Code Rule 56 stipulates that:

- a) Glovebags are not acceptable for large removal project
- b) Abatement activities that include the use of more than one glovebag must be performed in a tent enclosure
- c) Ongoing abatement activities can take place in an occupied space
- d) Air monitoring is required during the removal of all ACM, regardless of project size

87. Under the OSHA standards, a regulated area is:

- a) The building where asbestos abatement occurs
- b) Any area where employees work
- c) A work area where airborne concentrations of asbestos may exceed the PEL
- d) Any renovation or demolition project where asbestos has been removed

88. Which one of the following respirators is not acceptable for working with ACM?

- a) Disposable dust mask
- b) Supplied air line (Type-C) respirator
- c) Air purifying respirator
- d) Self-contained breathing apparatus

89. What is the proper sequence for removal of ACM?

- a) Water spray ACM, isolate the area, remove ACM
- b) Isolate the area, remove ACM, water spray ACM
- c) Isolate the area, water spray ACM, remove ACM
- d) Water spray ACM, remove ACM, isolate the area

90. Which of the following is not considered grounds for potential legal negligence?

- a) Performance of work without due care
- b) Delegating authority to an unqualified or untrained employee
- c) One employee's assaulting another employee
- d) Lax supervision of employees at a work site

91. The reason for never using a standard vacuum for asbestos abatement work is because a standard vacuum

- a) Cleans up the ACM debris slower
- b) Is equipped with HEPA filtered exhaust system
- c) Prevents the spread of contamination into the air
- d) May cause release of asbestos contamination into the air

92. Amended water is better than plain water for removing ACM because amended water?

- a) Causes more slurry and costs more
- b) Penetrates through ACM faster
- c) Evaporates faster and causes release of more fibers
- d) Increases the amount of water needed

93. Per 12 NYCRR 56, who is responsible for notifying employers located in areas adjacent to a Phase II regulated abatement work area about the nature of the work.

- a) The building owner
- b) No one
- c) The project monitor
- d) The building owner and/or abatement contractor

94. Phase IIA work activities involve:

- a) Set up of a decontamination facility
- b) Wet cleaning of all ACM surfaces
- c) Replace negative exhaust system filters
- d) All of the above

95) According to Code Rule 56, the minimum distance between curtains in an airlock is:

- a) 1 foot
- b) 2 feet
- c) 3 feet
- d) 4 feet

Use the attached drawing and information provided to answer questions 95 - 100.

96. For this project, what is the minimum number of negative air filtration units, which must be on site to comply with Code Rule 56 (Assume one air change every 15 minutes and 75% efficiency of the units).

- a) 1
- b) 3
- c) 4
- d) 5

97. If the decontamination system is set up at door number 2, then the negative filtration unit(s) should be placed closest to window:

- a) 1
- b) 2
- c) 3
- d) 4

98. Off-shift air monitoring is required on all large abatement projects;

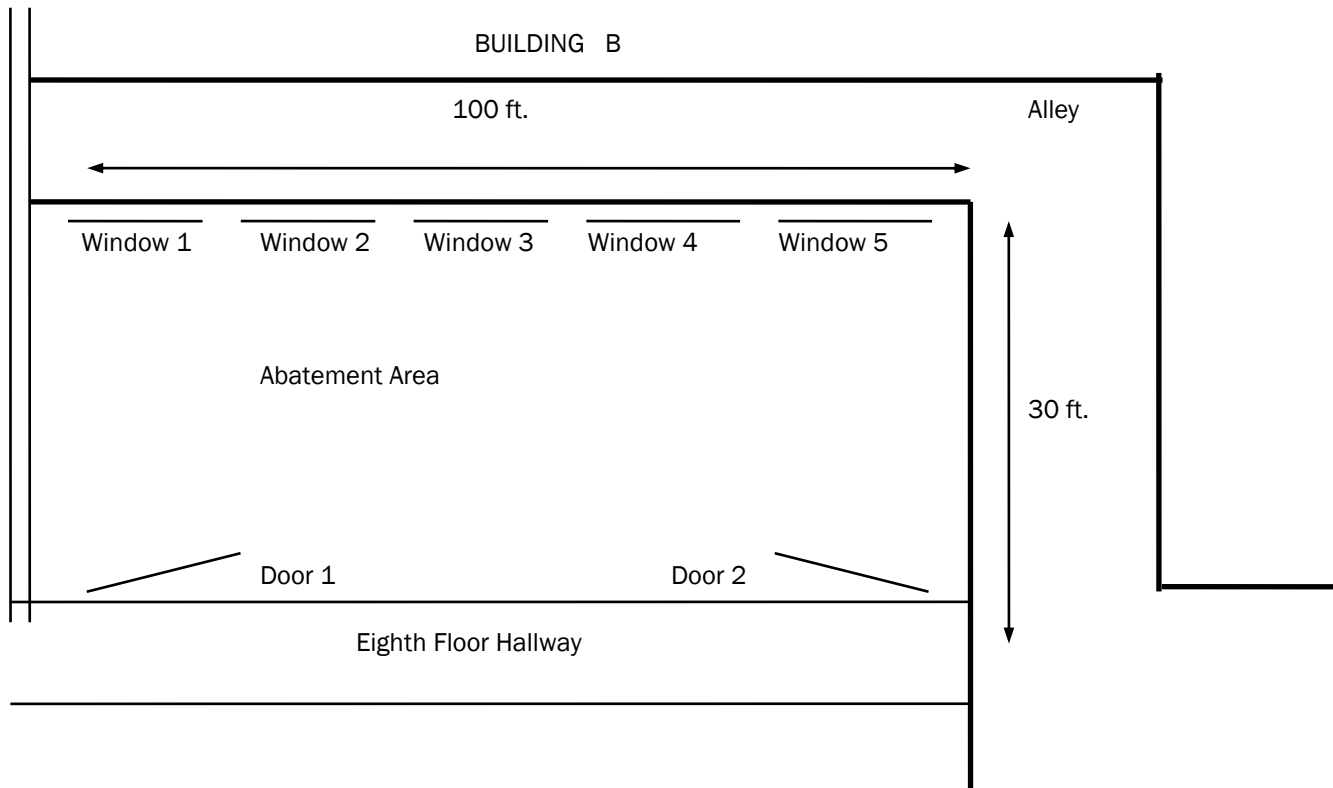
- a) During friable removal only
- b) During friable and non-friable removal
- c) Air monitoring is only required while abatement is in progress
- d) In-plant operations projects only

99. Building and occupant notifications should be posted:

- a) At the entrance to the work area
- b) Ten (10) calendar days prior to the commencement of Phase IIA work
- c) On the eighth floor only
- d) No occupant notification is required for this project

100. Calculate the square footage of the material to be removed and determine the size of the project.

- a) Minor project
- b) Small project
- c) Medium project
- d) Large project



The above sketch is of an office space that has a suspended ceiling tile system in place that has been determined to contain 10 percent amosite asbestos. The suspended ceiling is 8 feet above the floor and there is a 2-foot air space above to the ceiling deck. You have been hired to perform removal of all ceiling tile.

The eighth floor (location of the project) is approximately 90 feet from the ground level.

Building B, an L shaped building, is located across an alley-way 20 feet wide to the North which wraps around the building to the East as shown.

The negative air machines you have available each have a capacity of 1000 cubic feet per minute. You must use as many machines as necessary to provide the appropriate air changes.