New Licensed Asbestos Operative Training

This unit has twenty-two learning outcomes.

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
1. Recognise the types, uses and risks of asbestos containing materials	a) Describe the types of asbestos fibres including characteristics, uses, identification methods, nature and levels of risk for different groups of asbestos containing materials b) Outline history of import, manufacture and installation of different asbestos containing materials c) Explain the types of products that may contain asbestos and their likely locations d) Describe previous treatment methods covering old asbestos applications e) Describe asbestos containing materials friability, the conditions when they will release fibres and the need for control f) Outline the risks of emergency and remedial work
2. Recognise the health hazards of asbestos	a) Describe how fibres cause disease b) Explain the types of asbestos-related diseases and how related to exposure c) Explain the requirements for medicals under CAR d) Describe the need for dust / fibre suppression to control exposure e) Explain the need for correct use / maintenance of RPE f) Describe the health effects of smoking and risks of taking home asbestos-contaminated equipment / clothing

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
3. Demonstrate a knowledge of Asbestos Related Legislation	a) Describe the duties of the individual b) Identify the key duties of the employer c) Outline the licensing framework d) Describe the control of exposure e) Outline the Control of Asbestos Regulations f) Outline the requirements of the ACOP and associated guidance g) Outline the Waste Regulations and Environmental Protection Act

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
4. Understand the requirements of site set up, maintenance and dismantling	a) Explain the requirements for Site Set Up to include: I. Describe the need for pre-cleaning and the use of H-type vacuum cleaners II. Outline site layout including the citing of hygiene unit as close to enclosure as possible III. Describe the optimal positioning of air / baglocks and negative pressure unit and an explanation of how they work and the significance of the voltmeter and pressure gauges and what changes in the gauge readings mean IV. Identify when pre-filters should be changed V. Outline the strategy for calculating air changes VI. Describe the connection and testing of hygiene unit VII. Describe the construction of enclosures, air / baglocks including possible weather protection VIII. Explain the positioning of clear viewing panels IX. Explain the positioning and wording for warning notices and barriers X. Describe how to delineate work areas and transit routes XI. Explain smoke testing and need for witnessing

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
	a) Explain the requirements for Site Maintenance: I. Explain the need for daily inspections of enclosure (start, middle and end of shift) and immediate rectification of defects II. Explain the strategy for negative pressure units to be kept running after stripping finishes for the day b) Explain the requirements for Site Dismantling: I. Describe actions once clearance achieved, spraying enclosure with sealant, bag and seal vacuum cleaners, bag other equipment, dismantle polythene and dispose of as asbestos waste II. Describe the final inspection of area once enclosure and all associated equipment have been removed

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
5. Understand the requirements of controlled stripping techniques	a) Describe the principles of fibre suppression and control of exposure b) Explain the use, maintenance and cleaning of equipment c) Explain the use of wet injection and spraying techniques d) Explain the use of wrap and cut e) Explain the use of glove bags f) Explain the use of direct vacuuming g) Explain the use of LEV (shadow vacuuming) h) Explain the use of vacuum transfer i) Explain the use of air management j) Describe preparation time and testing of controls before removal k) Describe wetting agent selection, preparation and use l) Outline COSHH requirements m) Explain anticipated and desired fibre levels and comparison with RPE maximum exposure levels n) Describe personal assessment monitoring (principles) and access to personal assessment information

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
6. Understand the requirements of respiratory protective equipment	a) Describe the circumstances when respiratory protective equipment must be worn b) Explain how to inspect, test and wear respirator c) Describe the need for quantitative face-fit test, a good face seal and the need to be clean shaven d) Explain correct storage, battery charging and keeping clean e) Explain the strategy for changing pre-filters and main filters
7. Understand the requirements of personal protective equipment and clothing	a) Describe the use of the appropriate personal protective equipment including: overalls, headgear, footwear and gloves b) State the employer requirements to provide appropriate personal protective equipment and employees' obligations to use it c) Explain the requirement for care, wearing, cleaning, decontamination and / or disposal of personal protective equipment and not taking contaminated personal protective equipment home d) Explain the use transit overalls; e) Describe when and where personal protective equipment should be worn f) Explain the correct use and maintenance of personal protective equipment

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
8. Understand the requirements of transit procedures and decontamination	a) Explain personal decontamination procedures for directly connected and remote (transit) decontamination units and airlocks including: personal protective equipment changing and disposal, showering, colour coding of coveralls, respiratory protective equipment decontamination, cleaning, charging and storage b) Explain the use of towels c) Explain the changing and disposal of pre and main respiratory protective equipment filters d) Describe decontamination procedures where no enclosure or DCU is required (open sites) e) Outline common problems with decontamination f) Describe cleaning of airlocks and DCUs g) Explain emergency decontamination in case of evacuation or accident h) State what should be in the DCU

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
9. Understand the requirements of cleaning and clearance air testing	a) Explain the cleaning and clearance requirements, including the need for the four-stage clearance process and associated certificate of reoccupation b) Describe visual cleanliness and air testing requirements c) State the methods of cleaning for enclosures, hygiene facilities and equipment d) Explain the requirement for re-cleaning in event of air test failure e) Explain the requirement for cleaning after enclosure dismantling f) Explain the requirement for cleaning in the event of an emergency or enclosure/equipment damage
10. Understand the requirements of plant and equipment	a) Describe equipment components b) Explain equipment use and maintenance including: negative pressure units, Type H vacuums and injection equipment
11. Understand the requirements of waste management and disposal	a) Explain the requirements of bagging, sealing and cleaning b) Explain transportation through baglock and airlock c) Describe the requirements for storage of asbestos waste d) Describe the correct loading of skip / van

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
12. Understand the requirements of emergency procedures	a) Describe what to do in the event of major and minor injuries or illnesses occurring inside 'live' enclosures b) Describe what to do in the event of fire, or some other hazardous release such as toxic gas or radioactive dust occurring inside or outside enclosure c) Describe what to do a if leak of asbestos is found outside the enclosure d) Describe what to do if power on power-assisted respirator fails while inside a 'live' enclosure e) Describe what to do if the NPUs stop working f) Describe what to do if there is complete loss of electrical power g) Describe what to do if loss of water supply to hygiene unit
13. Recognise potential non-asbestos hazards associated with asbestos removal	a) Explain the requirements of site safety procedures b) Describe permit-to-work systems c) Explain entry and exit procedures in case of fire d) Describe the location of possible site hazards e) Explain emergency procedures in case of fire, electric shock, burns, hazardous substances, solvents etc f) Describe the care of an injured casualty g) Identify potential hazards such as manual handling, noise, vibration and falling object protection, slips, trips and falls

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
14. Recognise common faults associated with asbestos removal	a) Describe how to spot problems with the wetting of asbestos containing materials, respiratory protective equipment, airlocks, enclosures and hygiene unit
15. Understand the roles and responsibilities within an asbestos removal company	a) Explain the requirement of adhering to the principles of their training b) Explain the requirement to work to the risk assessment and plan of work c) Describe when work should be halted because it does not match the plan of work d) Explain the requirement to work safely and not to put others at risk from their acts or omissions e) Explain the requirement for wearing personal protective equipment and respiratory protective equipment correctly and to report any defects f) Explain why they should not take short cuts g) Explain the importance of treating all site visitors with professionalism and respect including information on site based aggression and de-escalation techniques h) Explain the importance of ensuring that all accidents, incidents, near misses and reports of unsafe situations are reported i) Explain the importance of the enclosure being ready for inspection by the analyst and the importance of the handover form j) Explain the responsibilities of contractors with reference to enclosure cleanliness and welfare of visitors to site (including the analyst) etc

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The learner should be able to:	**The learner can:**
	k) Understand the obligations of the analyst and how this affects works e.g. the right to issue failed certificates at any stage, the limitations on how much cleaning an analyst is allowed to do, the estimated times for visual inspections etc
16. Recognise the need for site inspections and record-keeping	a) Explain the purpose of site inspections, site auditing and record keeping b) Describe the role of inspectors / auditors c) Explain the responsibilities of operatives d) Explain the requirement of reporting faults and other problems

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
17. Understand the requirement for management systems and monitoring	a) Explain the requirement for the maintenance and monitoring of control measures b) Describe the requirement for controlling exposure to asbestos c) Explain the requirement for ensuring that equipment functions correctly d) Explain the requirement for pre-start setting-up e) Explain the requirement for barriers and signs f) Explain the requirement for the construction and testing of enclosures and airlocks g) Outline the requirements of site monitoring h) Explain the use / testing of negative pressure equipment and ventilation and air management systems i) Describe the correct maintenance of all site equipment, following manufacturers' operating instructions, including the correct maintenance and monitoring of the following control measures: enclosures, external services, negative pressure systems, wet strip units, mobile generators, water supply, heating appliances, personal protective equipment, respiratory protective equipment, any dust suppression equipment, tools and DCUs

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
18. Understand the requirements for risk assessments and plans of work	a) Outline risk assessments, describing the main points and stating the right to see significant findings b) Describe the requirements to follow risk assessments and the risks / penalties if they are not followed c) Explain the meaning of the control limits
19. Understand correct decontamination and transit procedures	a) Explain the design, connection and citing of a decontamination unit b) Demonstrate preliminary and full decontamination procedures and the se of personal protective equipment and respiratory protective equipment in a hygiene unit that is plumbed in and fully operational and mock airlock / enclosure
20. Understand use & maintenance of respiratory protective equipment	a) Explain how to ensure the respiratory protective equipment is suitable for the user b) Demonstrate how to fit respiratory protective equipment on site c) Demonstrate how to check faulty respiratory protective equipment and explain what to do if a fault is found d) Identify the components of each type of respiratory protective equipment e) Explain the requirements of certification and documentation; f) Explain the requirements of suitable storage g) Explain the requirements of daily and monthly inspections

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner should be able to:	**The learner can:**
21. Understand the construction of enclosures and airlocks	a) Demonstrate the construction of an enclosure on a pre-erected 50 mm x 50 mm timber framework using 1000 gauge polythene sheeting, adhesive tape and staples b) Demonstrate the construction of a three-stage airlock system on a pre-erected 50 mm x 50 mm timber framework using 1000 gauge polythene sheeting and adhesive tape c) Demonstrate the construction of a three-stage airlock system using metal and / or plastic framework d) Demonstrate the construction of a proprietary airlock system e) Explain the use and location of viewing panels f) Explain the use and location of warning signs g) Demonstrate smoke testing to determine integrity h) Explain the construction and location of baglocks
22. Understand the use of controlled stripping techniques	a) Demonstrate the connection and use of an injection system to wet pipe insulation determining that needles are the only effective way to wet insulation b) Demonstrate shadow or trace vacuuming through the removal of a tile or duct panel using this technique

Outline of Course Content

This course provides the necessary knowledge, understanding and skills required of asbestos removal projects. Successful completion of the course will allow candidates to undertake asbestos licensed works in accordance with the Control of Asbestos regulations 2012 and all associated Codes of practice

Training is in accordance with Regulation 10 of Work with materials containing asbestos, Control of Asbestos Regulations 2012, Approved Code of Practice and guidance (L143) and Chapter 4 of Asbestos: The licensed contractors' guide (HSG247)

Outline of Proposed Learning Activities / Approach to Delivery

The training will cover the topics in appropriate detail, by means of both written and oral presentation, and by demonstration as necessary.

Practical Training

The term practical in this context means hands-on training where delegates practice going through procedures, usually in a simulated environment. For example:

- carrying out decontamination procedures by showering etc using a powered, live hygiene unit (uncontaminated);
- trying out RPE to ensure a good face-fit and knowing how to carry out maintenance checks;
- the simulated use of controlled wet stripping techniques, such as multi-needle injection systems;
- construction of enclosures and airlocks;
- maintenance of plant and equipment.

Outline of Resources / Bibliography (as appropriate)

- Control of Asbestos Regulations 2012
- Asbestos: The licensed contractors' guide (HSG247)
- Asbestos: The survey guide (HSG264)
- Asbestos: The analysts' guide (HSG248)

Assessment Methods / Tasks	Assessment Evidence
A question and answer session will be held at the end of each module to ensure each learner has reached the necessary level of understanding. Tutor assessment of learner performance during practical sessions with continual oral feedback. A timed, invigilated, closed-book written examination will be individually completed by each learner at the end of the course, with 80% being the pass mark. The end of course written paper will draw at least 25 short answer and multiple-choice questions from a module-based question bank, to include no less than one questions from each module. Completed exam papers are retained by the course provider	Written Assessment covering LO1-LO22
	Grade Descriptors
	80% pass mark (pass / fail)
	Learner : Trainer Ratio
	Maximum of 6:1
	Course Length
	Face to face course must take a minimum of 3 days (18 hours excluding breaks) to complete.