ENVIRONMENTAL PROTECTION DEPARTMENT

REQUIREMENTS FOR REGISTRATION AS ASBESTOS SUPERVISOR

An applicant for registration as an asbestos supervisor must have:

(1) (a) (I) been educated to Form 5 or above; or

completed one of the following courses: (i) the Certificate for Safety and Health for Supervisors (Construction); or (ii) Technically Competent Person (TCP) T1; or (iii) Technically Competent Person T1 (Minor Works) Training Courses; or (iv) a Qualifications Framework Level 3 Course in the building construction field; and

- (II) not less than **12** months of recognized working experience in asbestos abatement work as listed in Part C and its Annex; **or**
- (b) been educated to Form 3 or Form 4 and not less than **48** months of recognized working experience in asbestos abatement works as listed in Part C and its Annex; **and**
- (2) completed a recognized course of training listed at Appendix, with syllabus listed in Part A: and
- (3) satisfied the Asbestos Administration Committee that he is competent to perform the duties and functions required of a registered asbestos supervisor, as listed in Part B.

Part A

Training Course

A recognized course of training for registration as asbestos supervisor shall have the following syllabus:

1. Nature and use of asbestos

Types of asbestos, amphibole and serpentine asbestos; properties of asbestos fibres; historical use of asbestos; typical use of asbestos in building fabrics, industry, manufacturing, home appliances, etc.; friable and non-friable asbestos containing materials; identification of asbestos containing materials; knowledge of hazards assessment.

2. Health effects related to asbestos exposure

Nature of asbestos-related diseases; routes of exposure; dose-response relationships and lack of safe exposure level; synergism between cigarette smoking and asbestos exposure; latency period for asbestos diseases.

3. Codes of practice on asbestos control work

Proper procedures for asbestos abatement works, site possession, segregation of work areas, electrical and ventilation system lock-out, preliminary decontamination, posting of warning labels, construction and maintenance of containment barrier and decontamination enclosure system, smoke test; proper working techniques for minimizing fibre release; entry and exit procedures for the work area; use of wet methods; use and maintenance of HEPA appliances, waste water filtration system and negative pressure monitor; proper clean-up and disposal of asbestos wastes: works practices for removal, encapsulation, enclosure and repair; use of glovebag and mini-containment for minor work; emergency procedures for sudden release; recommended and prohibited work practices.

4. Asbestos worker protective equipment

Classes and characteristics of respirator types, proper selection of respirators, inspection, donning, use, maintenance, and storage procedures; methods for field testing of facepiece-to-faceseal (positive and negative pressure fitting tests); qualitative and quantitative fit test procedures; variability between field and laboratory protection factors; factors that alter respirator fit; selection and use of personal protective clothing; use, handling and storage of non-disposable clothing; regulations governing personal protective equipment.

5. Personal hygiene

Enter and exit procedures for the work area; set up of a decontamination unit; use of showers; prohibition of eating, drinking and smoking in the work area; awareness of potential exposures such as family exposure.

6. Other safety hazards

Hazards encountered during asbestos abatement activities and how to deal with them - including working at height, slips, trips and falls; heat stress; electrical hazards; working in confined space; air contaminants other than asbestos; fire and explosion hazards.

7. Fibre aerodynamics and control

Aerodynamic characteristics of asbestos fibres; importance of proper containment barriers; settling time for different types of asbestos fibres; wet methods in asbestos abatement; aggressive air sampling following abatement; aggressive air movement and negative pressure exhaust ventilation as an effective air clean-up method.

8. Asbestos air and bulk sampling and analysis

Principles of optical microscopy for asbestos identification and fibre counting, phase contrast microscopy, polarized light microscopy; methods of bulk and air sampling; limitations of optical microscopy; principles of electronic microscopy, transmission electronic microscope, scanning electronic microscope; different types of air monitoring tests (leakage, work area, penultimate and final clearance, reassurance).

9. Medical monitoring

Requirements for a pulmonary function test, chest X-rays and medical history; respiratory protection programme and medical surveillance programme.

10. Local legislations and codes of practice on asbestos control

Air Pollution Control Ordinance, Air Pollution Control (Asbestos) (Administration) Regulation, Waste Disposal Ordinance, Codes of Practice, Factories and Industrial Undertakings (Asbestos) Regulation.

The course shall be taught in not less than 4 days, or 30 hours, and completed with a practical or workshop session on proper entry and exit procedures for work area and decontamination unit and set up of a full containment, and a course end examination.

Part B

Professional Competency

A registered asbestos supervisor should have demonstrated to the satisfaction of the Asbestos Administration Committee that he is competent to perform the following duties and functions:

- 1. supervise the carrying out of an asbestos abatement work to ensure that the work is carried out in accordance with relevant codes of practice and the asbestos abatement plan;
- 2. maintain good working practices and housekeeping at work site;
- 3. provide training to workers on safe work practices and personal hygiene;
- 4. maintain specialized equipment in good working condition, including HEPA air movers and vacuum cleaners, waste water filtration system, negative pressure monitor, personal respiratory protective equipment, smoke generating equipment;
- 5. handle, store, transport and dispose of asbestos wastes in accordance with the relevant code of practice and legislation;
- 6. conduct emergency clean-up and any remedial actions necessary in case of accidental release of asbestos occurs;
- 7. report work progress and any difficulties encountered on site.

Part C

Recognized Working Experience in Asbestos Abatement Work

Recognized working experience in asbestos abatement work means:

- 1. Involvement in working with a registered asbestos supervisor to oversee the conduct of asbestos abatement works; or
- 2. Involvement in planning, managing or overseeing asbestos abatement works on site (e.g. work experience of a site supervisor who involves overseeing demolition of a building that contains asbestos); or
- 3. Involvement in asbestos abatement works of government projects (e.g. work experience of a site supervisor who involves in the replacement of asbestos water mains or removal of asbestos containing materials from housing blocks); or
- 4. Work experience of a safety officer/supervisor who interacts closely with registered asbestos personnel for overseeing asbestos abatement works on site.

Checklist On Recognized Work Experience in Asbestos Abatement Work

Please check the box against the item of work experience acquired from the above asbestos abatement work.	Work experience acquired? (Yes/No)	Job reference as indicated in the application form [Note 1]
A. Site Preparation and Equipment		
Participated or involved in the checking or supervision of the following items:-		
1. Equipment for the construction of containment and HEPA-filtered appliance as well as the sufficiency of respiratory protective equipment and protective clothing.		
2. The use of personal protective equipment and the adoption of personal hygiene measures.		
3. Setting up of proposed work area.		
4. Construction of 3-chamber decontamination unit and the 2-chamber debris port.		
5. Preliminary decontamination of the work area.		
6. Construction of the containment.		
B. Negative Air Filtering System		
Participated or involved in the checking or supervision of the setting up of a negative air filtering system to maintain a static negative air pressure inside the containment across all faces.		
C. Testing and Maintenance of Containment		
Participated or involved in the checking or supervision of the assessment of air-tightness and integrity of containment before and during the asbestos abatement work.		
D. Air monitoring		
Participated or involved in the checking or supervision of air sampling and monitoring (including but not limited to background air test, leakage air test, penultimate air test, final clearance air test and reassurance test) conducted by a registered asbestos laboratory.		

Please check the box against the item of work experience acquired from the above asbestos abatement work.	Work experience acquired? (Yes/No)	Job reference as indicated in the application form [Note 1]
E. Asbestos Removal Participated or involved in the checking or supervision of the removal of asbestos containing materials by wet methods (wet spraying) and soaking method by injection and the subsequent packing and sealing of asbestos containing materials in suitable labeled containers.		
F. Final clean-up and acceptance of work		
1. Participated or involved in the checking or supervision of the final clean-up of the containment.		
2. Participated or involved in the checking or supervision of penultimate air test and final clearance air test and the subsequent dismantlement of decontamination facility.		
G. Decontamination of Tools and Equipment		
Participated or involved in the checking or supervision of the decontamination of tools and equipment.		

Note:

1. The applicant may accumulate the above items of work experience over several asbestos abatement works. The applicant is required to provide the job reference number (as indicated in the application form) from which he/she acquired the work experience.

Appendix

List of Recognized Course of Training for Registration as Asbestos Supervisor

- 1. Certificate of Competence in the Safe Handling of Asbestos; organized by the Occupation Safety and Health Council.
- 2. Courses, which are approved by the Environmental Protection Agency of the United States of America as satisfying the Asbestos Hazard Emergency Response Act (AHERA) accreditation requirements for Asbestos Contractors and Asbestos Supervisors.