

General Requirements for Asbestos Remediation Works

Issue	Date	Status
1	Feb 2015	Final
2		
3		
4		

Contents

Health, Safety & Environment	4
General Requirements	5
1.0.0 Pre-Commencement Survey Notification of Existing Defects	5
1.1.0 Licensed Asbestos Removal Contractors	5
1.2.0 Plan of Work/Method Statement	5
1.3.0 Respiratory Protective Equipment (RPE)	6
1.4.0 Protective Clothing	6
1.5.0 Removal and Encapsulation of Asbestos	6
1.6.0 Abrasive Blasting Systems	7
1.7.0 Control of Asbestos Waste	7
1.8.0 Carriage of Waste	7
1.9.0 Disposal of Asbestos	7
1.10.0 Waste Consignment Notes	8
1.11.0 Entry and Work in Confined Spaces	8
1.12.0 Information to the Public and Occupants	8
1.13.0 Liaison with Occupiers of Buildings	8
1.14.0 Instructions by the Employer's Analyst	8
1.15.0 Scaffolding and Access Equipment	8
1.16.0 Lighting	9
1.17.0 Temporary Support Protection	9
1.18.0 Disposal of Contaminated Items	9
1.19.0 Moveable Items in Work Zone	9
1.20.0 Pre-Commencement Check List	9
1.21.0 Pre-Cleaning of the Work Area	9
1.22.0 Operatives Engaged in Pre-Cleaning	9
1.23.0 Damage	9
1.24.0 Handover & Completion	10
1.25.0 Additional Analytical Monitoring	10
1.26.0 Asbestos Material Outside the Scope of the Work	10
Licensed Work (ASB5)	11
1.27.0 Enclosures	11
1.28.0 Three stage air locks	12
1.29.0 Hygiene Facility	12
1.30.0 Negative Pressure Equipment	12
1.31.0 Smoke Test of Enclosure	13
1.32.0 Transit Procedures	14
1.33.0 Communication with Operatives	14
1.34.0 Asbestos Removal	14

1.36.0	Sub LARC Attendance.....	15
1.37.0	Air Monitoring	15
1.38.0	Air Monitoring Records	15
1.39.0	Air Monitoring Failure Procedure	15
1.40.0	Standard of Cleanliness	15
1.41.0	Re-Cleaning of Work Area.....	16
1.42.0	Application of PVA Sealant.....	16
1.43.0	Removal of the Enclosure	16
	Notifiable Non Licensed work.....	17
1.44.0	Requirements for Notification.....	17
1.45.0	Designating areas	17
1.46.0	Medical surveillance	17
1.47.0	Record keeping	17
1.48.0	Air Monitoring	17
1.49.0	Statement of Cleanliness	18
1.50.0	Asbestos Removal	18
	Non Licensed work	19
1.51.0	Air Monitoring	19
1.52.0	Statement of Cleanliness	19
1.53.0	Asbestos Removal	19

Health, Safety & Environment

- 0.1.0 The LARC and any sub-contractors shall comply with all current Health & Safety Legislative requirements for the duration of the work.
- 0.1.1 All work procedures and activities, including roles, responsibilities and communications regarding the works are to be included within the LARC's site specific plan of work/method statement.
- 0.1.2 The requirements stipulated within the tender documentation, which are relevant to the proposed works, shall be incorporated within the LARC's site-specific plan of work/method statements.
- 0.1.3 The LARC's employees shall undergo site induction training prior to working on the site.
- 0.1.4 The LARC shall include in their Plan of Work suitable emergency arrangements, including a fire risk assessment and ensure there is close liaison with client over the temporary arrangements required.
- 0.1.5 The LARC shall ensure that all welfare and safety measures required under current relevant regulations, associated legislation and approved codes of practice are complied with.

General Requirements

1.0.0 Pre-Commencement Survey Notification of Existing Defects

- 1.0.1 Prior to the commencement of any works the LARC shall carry out a survey of the work zone, transit route, waste storage area and any other areas of control defined as the project works areas (e.g. mess/canteen facilities) to locate any defective equipment, materials, fixtures and fittings.
- 1.0.2 Any such defects shall be brought to the attention of the Project Manager prior to commencement of work.

1.1.0 Licensed Asbestos Removal Contractors

- 1.1.1 Removal and encapsulation of all asbestos containing materials shall be carried out by Asbestos Removal Contractors who are currently licensed, for the type of work to be undertaken under the Control of Asbestos Regulations 2012.
- 1.1.2 A copy of the Asbestos Removal Contractor's license shall be kept on the site and be available for inspection at all times.

1.2.0 Plan of Work/Method Statement

- 1.2.1 The Licensed Asbestos Removal Contractor (LARC) shall provide a written Plan of Work (Method Statement) specific to this contract and a written risk assessment of the works in accordance with the Control of Asbestos Regulations 2012.
- 1.2.2 Acceptance of the working method and assessment will not release the LARC from any responsibilities under the Contract or specific requirement of the Enforcing Authority. Any additional requirements stipulated by the Enforcing Authority shall be complied with at the LARC's expense.
- 1.2.3 The Plan of Work shall name the LARC's supervisor on site. This person shall be properly qualified and responsible for ensuring that only duly authorised persons enter the work area and shall keep a record of all entry and exits into those areas.
- 1.2.4 The supervisor shall be responsible for the correct keeping of any documentation required on site by regulations or the provisions of this Contract and shall include:
 - a) The size, capacity and proposed position of the hygiene unit (where applicable).
 - b) The LARC's nominated waste tip (under the control of relevant Local Authority).
 - c) The proposed work areas and transit routes in detail (where applicable).
 - d) The systems in use to keep persons out of the transit route who are not suitably equipped (where applicable).
- 1.2.5 The LARC shall provide the following supporting information:
 - a) Proposals for the organisation and execution of the works
 - b) Commencement and completion dates and relationship between various activities
 - c) Listings of manpower, materials and plant requirements
 - d) Emergency Procedures
- 1.2.6 On award of the Contract, the LARC shall submit a copy of the Plan of Work and Risk Assessment, along with a programme to WYG. The LARC shall keep a further copy on site.

1.3.0 Respiratory Protective Equipment (RPE)

- 1.3.1 The LARC shall provide respiratory protective equipment for all operatives engaged in pre-cleaning work or working in designated asbestos areas and transit zones. This equipment should be fitted with the appropriate P3 filter.
- 1.3.2 It is the LARC's responsibility to ensure that all respiratory equipment is adequately maintained and cleaned and maintenance records are kept for all equipment.
- 1.3.3 The equipment shall fit the wearer correctly, and shall not be shared with other wearers, unless adequately checked, cleaned and disinfected beforehand.
- 1.3.4 The results of any face-fit test (FFT) for RPE provided for work with asbestos should be retained for inspection on site.
- 1.3.5 Upon the completion of each shift the LARC shall dispose of each used RPE filter as hazardous waste.

1.4.0 Protective Clothing

- 1.4.1 The LARC shall provide protective clothing for all persons who are liable to be exposed to contamination including the client's representative and the site supervisor and shall be of a material that does not retain asbestos fibres.
- 1.4.2 Where disposable overalls are used, they should be Type 5 (under BS EN ISO 13982-1:2004+A1:2010).
- 1.4.3 Overall head coverings should be close-fitting and cover the parts of the head and neck not covered by the face piece of the respirator. They should be connected to the main overall. The head straps of RPE should be worn under the head covering.
- 1.4.4 Wellington boots are preferable to any other form of footwear because they are easier to clean. Lace-up footwear will trap asbestos fibres between the laces and should not be worn.
- 1.4.5 On the completion of each shift the LARC shall dispose of all contaminated used overalls as hazardous waste.

1.5.0 Removal and encapsulation of Asbestos

- 1.5.1 Asbestos materials shall be removed or encapsulated by methods creating the minimum practicable fibre release. Fibre release within work areas should be reduced to the lowest practical level. The LARC shall include for the provision and use of approved fibre suppressants.
- 1.5.2 The asbestos shall be removed or encapsulated in controlled methods by persons (over the age of eighteen years) who have been trained in correct working procedures, wearing the correct respirator type and protective clothing and who are maintaining all safeguards necessary for the safe removal of the asbestos.
- 1.5.3 The working area shall be clear of all asbestos waste at the end of each shift.
- 1.5.4 PVA or any other sealants shall not be applied until authorised by the Asbestos Consultant's site representative.
- 1.5.5 Encapsulation shall be done by the application of two coats of Bostik Idenden ET150. Each coat of paint has to be applied uniformly to a minimum depth of 0.5mm and in accordance with the manufacturer's current guidance. A suitable period of drying time must be allocated as per the manufacturer's instructions.

1.6.0 Abrasive Blasting Systems

- 1.6.1 The use of any abrasive blasting system must be fully justified and all risks addressed. The client should also be involved in this decision and its justification for use.
- 1.6.2 This method of removal should only be considered as a secondary technique where stubborn/residual asbestos materials are involved and the time, effort and risks of using other methods are not reasonably practicable.
- 1.6.3 Abrasive blasting methods should only be used where the circumstances justify it. Therefore, the LARC must justify the use of such a method. Inappropriate or unjustified use of abrasive blasting methods must be avoided.

1.7.0 Control of Asbestos Waste

- 1.7.1 All materials covered by this specification shall be disposed of as asbestos contaminated waste.
- 1.7.2 Bagged/sealed waste shall be thoroughly vacuumed and cleaned down and placed in a second bag, sealed again and clearly marked "Asbestos Waste". The first bag shall be red, the second bag shall be clear. Both bags shall be appropriately labelled.
- 1.7.3 The double-bagged waste shall then be transferred to a suitable fully enclosed lockable steel waste skip and kept locked at all times it is unattended. The waste shall be subsequently transported in the manner specified below.
- 1.7.4 Any accidental spillage of asbestos waste shall be vacuumed immediately using class 'H' vacuum cleaner (BS 8520-3:2009 "Operation, cleaning and maintenance of class H vacuum cleaners. Code of practice") and split bags further double bagged, sealed and marked.

1.8.0 Carriage of Waste

- 1.8.1 Bagged waste shall be carefully transferred by vehicles provided by the LARC or nominated sub-contractor for transport to a waste transfer station and/or landfill site managed under an Environmental Permit.
- 1.8.2 The transfer of asbestos waste from site should be in accordance with the requirements of the waste carriers license held by the consignor consignment note procedure laid down in the Waste (England & Wales) Regulations 2011 and the Hazardous Waste (England & Wales) Regulations 2005, (as amended)
- 1.8.3 Transport of waste within LARCs vehicles requires a sealed bulkhead to be provided to separate passengers from waste materials. Tools and other equipment should also be segregated to prevent bags etc being ruptured during transit;
- 1.8.4 The LARC shall provide a copy of the waste carriers registration certificate prior to any waste being removed from site.

1.9.0 Disposal of Asbestos

- 1.9.1. Disposal of all asbestos waste shall be in accordance with the Environmental Protection Act 1990, Waste (England & Wales) Regulations 2011, Environmental Permitting (England & Wales) Regulations 2010 and the Hazardous Waste (England & Wales) Regulations 2005 (As amended) and associated statutory requirements in Scotland and Northern Ireland.
- 1.9.2 All asbestos shall be disposed of at a landfill site holding a suitable permit to receive asbestos waste and the LARC shall include for all charges connected therewith in his tender and for transport to the site.
- 1.9.3 The LARC shall provide a copy of a valid Waste Carriers Registration Certificate and the

Transfer station and or landfill Environmental Permit prior to any waste being removed from site.

- 1.9.4 In England and Wales, premises that generate >500 kg of hazardous waste in a 12 month period have to be registered with the EA or NRW.

1.10.0 Waste Consignment Notes

- 1.10.1 The LARC shall be responsible for ensuring that the waste consignment Notes are completed. No final account payment or interim shall be passed without receipt of the completed documentation.
- 1.10.2 All relevant paperwork, including Enclosure Integrity certificate and Waste consignment notes shall be forwarded to the Asbestos Consultant within 5 days of completion of the removal works.

1.11.0 Entry and Work in Confined Spaces

- 1.11.1 The LARC shall not allow individual operatives to work unaccompanied on site in:
- a. Areas subject to negative pressure.
 - b. Unoccupied/derelict areas.
 - c. All areas as defined in HSE Guidance Note "Safe Working in Confined Spaces" L101

1.12.0 Information to the Public and Occupants

- 1.12.1 Publicity and information regarding the relative hazards of asbestos appropriateness of precautions are the responsibility of the client. The LARC and his employees shall refrain from passing any comments.

1.13.0 Liaison with Occupiers of Buildings

- 1.13.1 Where asbestos removal works are to take place on occupied buildings the LARC shall maintain access to the occupied sections of the building and shall keep the building custodian/person in charge of the building informed of any essential restrictions on their use of the property.
- 1.13.2 The LARC shall not liaise directly with the building tenants and shall only liaise with the Asbestos Consultant.
- 1.13.3 The LARC shall not transit, or remove waste, through tenanted areas during normal office hours, unless previously agreed with the Asbestos Consultant.

1.14.0 Instructions by the Employer's Analyst

- 1.14.1 The analyst has no authority to give instructions to amend, alter or extend the works within this specification. This is the sole responsibility of Asbestos Consultant or nominated personnel.

1.15.0 Scaffolding and Access Equipment

- 1.15.1. If required, scaffolding or high level access equipment shall be provided by the LARC as needed. Boilers and other plant shall not be used as working platforms.

1.16.0 Lighting

- 1.16.1 The LARC shall provide maintain and remove on completion all necessary temporary lighting to complete the work described both for his own works and that of the AC.

1.17.0 Temporary Support Protection

- 1.17.1 The LARC shall include for providing all necessary temporary support to pipe work, fittings and equipment to prevent damage or disruption.
- 1.17.2 As necessary a temporary works design will be provided for any significant structures used for access or support during the works.

1.18.0 Disposal of Contaminated Items

- 1.18.1 The LARC shall confirm to the Project Manager a written inventory of all items disposed of as contaminated waste prior to disposal.

1.19.0 Moveable Items in Work Zone

- 1.19.1 When specified on the description of works the LARC shall clean and remove contaminated items stored in the work zone by an agreed method to control the spread of any asbestos.
- 1.19.2 This work shall be carried out before any work involving the disturbance of asbestos materials is commenced.

1.20.0 Pre-Commencement Check List

- 1.20.1 Prior to any disturbance work commencing, normally following a successful smoke test, the Project Manager and/or his appointed representative shall complete the pro-forma pre commencement check list.
- 1.20.2 A copy of the Specification, Description of Works, and assessment shall be kept on site throughout the contract by the LARC's on-site supervisor. The LARC shall ensure the supervisor is fully conversant with legislation, the Specification and extent of the works.

1.21.0 Pre-Cleaning of the Work Area

- 1.21.1 The LARC may clean surfaces and fittings in areas covered by the Description of Works before any work involving the disturbance of asbestos materials commences. After cleaning, items such as boiler units (with covers removed), electric meter and switchgear shall be sealed, by the use of polythene sheet and adhesive tape, to prevent ingress of asbestos fibres.

1.22.0 Operatives Engaged in Pre-Cleaning

- 1.22.1 All LARC's operatives engaged on this cleaning work shall wear protective clothing and respirators of an approved type and go through the hygiene unit and procedures as previously described at the end of work/shift.

1.23.0 Damage

- 1.23.1 If proven to be responsible for any damage to the fabric or fixtures within the building, the cost of repairs/replacements will be recoverable from the LARC.

1.24.0 Handover & Completion

- 1.24.1 The LARC shall inform the Asbestos Consultant directly when the work is completed before leaving site.

1.25.0 Additional Analytical Monitoring

- 1.25.1 Additional monitoring costs outside the times specified and/or submitted with the Asbestos LARC's working hours on the Form of Tender/Quotation shall be borne by the LARC unless the works are covered by an agreed variation.

1.26.0 Asbestos Material Outside the Scope of the Work

- 1.26.1 Should the LARC locate any suspected asbestos containing material/debris during the course of the works which in his opinion at that time is not covered by the specification, all work liable to disturb such material shall cease and the Asbestos Consultant notified for further action and discussion with the Client.
- 1.26.2 The LARC shall include for all costs in protecting, sealing and encapsulating asbestos materials to be found outside the "scope of works", which may be affected by the "works".

Licensed Work (ASB5)

In addition to the details of the “General requirements” section

1.27.0 Enclosures

- 1.27.1 The LARC shall engage suitable controls and arrangements (e.g. permit to work system) ensuring only authorised persons wearing protective equipment/clothing may enter the general work area.
- 1.27.2 All operatives involved in the remediation of asbestos materials will be provided with and wear appropriate PPE and RPE.
- 1.27.3 The LARC shall keep a record of all persons who have entered the enclosure.
- 1.27.4 The asbestos work zone shall be totally enclosed. The asbestos work zone shall be of a minimum practicable size and consideration should be given to segmenting areas to achieve this. Refer to HSG 247.
- 1.27.5 The LARC shall isolate the work zone from surrounding areas usually by the use of minimum 1000 gauge polythene which shall be supported by a rigid framework where required.
- 1.27.6 In certain circumstances by virtue of quantity or location i.e. fire escape routes, public areas etc., flame retardant polythene will be necessary and included for. The isolation of the work zone shall be completed by the use of other appropriate sealing methods.
- 1.27.7 The enclosure shall not impede the means of escape in case of fire. Polythene, adhesive tape and sealant used to form the enclosure shall be treated and disposed of as contaminated hazardous waste.
- 1.27.8 The LARC shall be responsible for adopting where existing and/or providing, maintaining, amending and removing temporary screens and enclosures during the full period of the contract and at the commencement of each phase for the purposes of preventing asbestos migration.
- 1.27.9 The LARC shall be responsible where necessary for providing and maintaining all temporary means of escape from enclosures to the requirements of the responsible person for fire precautions on the site.
- 1.27.10 The enclosure shall include vision panels. The panels are to allow visual inspection of the whole enclosure from outside the work area and meet the minimum dimensions as defined by the HSE guidance document HSG247.
- 1.27.11 The LARC shall decontaminate all surfaces of fibrous materials, dust and debris from within the enclosure including walls, floors, ceilings and fixtures etc.
- 1.27.12 It's appreciated that whilst damage may occur to finishes as a result of enclosure sealant coming into contact with certain wall, floor and ceiling finishes, the LARC shall however, use reasonable judgement and endeavour to minimise any such damage. All damage to the fabric of the building shall be made good by the LARC, at their own cost, on completion of the works.
- 1.27.13 Any externally sited enclosure and associated controls (Airlocks, Bag-locks, NPU, etc) must have adequate weather protection and due consideration to any temporary works design should be made in relation to the structure and any loading imposed by wind, etc.
- 1.27.14 Where expanding hard setting flame retardant foam has been used to seal gaps in walls and spaces between walls and pipes etc., this shall be non-combustible and either removed or finished flush with surrounding surfaces and coated with "Firecheck" as manufactured by Liquid Plastics.

1.27.15 Warning notices shall be erected by the LARC stating:

- a) Asbestos removal work is in progress
- b) Entry beyond the point of notice is restricted to authorised personnel wearing suitable respiratory and protective equipment.
- c) Access is restricted to authorised persons.
- d) Contact names and telephone numbers in the event of an emergency.

1.28.0 Three stage air locks

1.28.1 At the entrance to the work zone the LARC shall construct a three-chamber air-lock in accordance with HSG 247. The sides, top and bottom of each chamber shall be completely sealed. The ends shall be covered by weighted sheeting flaps fixed to a rigid frame that may be pushed aside on entry. The chamber shall provide sufficient space to accommodate cleaning equipment and for operatives to change from work zone overalls into transit zone overalls. Airlocks shall be constructed to a commensurate standard with the standard of enclosure previously stated.

1.29.0 Hygiene Facility

- 1.29.1 The LARC shall provide on-site, a hygiene unit either mobile or modular for the use of all persons who shall enter the work or transit zone and/or are engaged in asbestos disturbance works. The hygiene or modular facilities shall be of a design in accordance with HSG 247 and meet with the satisfaction of the local enforcement authority.
- 1.29.2 The LARC shall be responsible for all parking arrangements including agreement with the local authority highways department and any traffic management notices or permits required.
- 1.29.3 The hygiene facilities shall be maintained as close to site as possible throughout the duration of the works and be of the appropriate size to provide the necessary showers, washing and storage facilities to meet the requirements of the works.
- 1.29.4 The position of the hygiene unit shall be agreed with the site staff of each site. Consideration should be made to minimise the distance between the work area and the hygiene unit.
- 1.29.5 All suitable services shall be provided and connected by the LARC at his own expense.
- 1.29.6 The hygiene facility shall have hot and cold water supplies and filtered waste water outlets connected to a suitable point of drainage (i.e. Foul sewer, not surface water).
- 1.29.7 Soap, nail brushes, dry towels, hangers, storage lockers for RPE and protective clothing and personal lockers shall all be provided in adequate quantities in the clean side of the hygiene unit. A mirror for fitting respirators shall be positioned on outer chambers.
- 1.29.8 The hygiene facility shall be locked at all times when not in use.

1.30.0 Negative Pressure Equipment

- 1.30.1 Sufficient negative pressure units meeting BS 8520-2:2009 "Negative pressure units. Specification" shall be used in order to maintain a constant negative pressure throughout the Work. These shall have a viable means of indicating the pressure drop across the filter. The LARC shall provide calculations to indicate the number of air changes provided by this system which shall meet the requirement of HSE ACOP L143.
- 1.30.2 The negative pressure units will be checked by the LARC daily. If found to be operating at less than an adequate efficiency to provide the required negative pressure the LARC shall rectify the situation by either changing or increasing the number of units at the LARC's own expense.

The LARC shall include for all costs and additional equipment necessary in overcoming the building design or environmental conditions which may effect the specified provision of criteria in relation to negative pressure and air movement.

- 1.30.3 Unless exceptional circumstances dictate, the negative pressure units should be vented to outside the building. Air tests will be taken periodically on the outlet of negative pressure equipment and if found to be in excess of 0.010 cm³ remedial action shall be taken.
- 1.30.4 If it is found that any piece of equipment fails to meet this standard or is found to be unacceptable in any other aspect of its performance then the AC will require its removal from site and its replacement by a suitable unit.
- 1.30.5 The equipment shall be checked daily and if found to be operating below the minimum required to maintain adequate negative pressure must be changed. It is the LARC's responsibility to ensure that the negative pressure equipment filters are regularly checked and changed as required.
- 1.30.6 The discharge of the ventilation system shall be subject to "absolute filtration". The filtration system shall be as a "HEPA" filter assembly to BS EN 1822.
- 1.30.7 Consideration and inclusion shall be given to securing the proposed outlet positions against intruders.
- 1.30.8 On works lasting longer than one day the air mover/negative pressure unit shall remain in continuous operation and shall be adequately maintained unless otherwise approved in writing by the Asbestos Consultant.
- 1.30.9 Where exhaust ventilation system units are sited externally the LARC shall provide necessary insulation to minimise/reduce noise emission to acceptable levels.
- 1.30.10 All extension hoses used in conjunction with the above equipment shall be constructed of purpose made extendable rigid coil with UPVC coating. They should be positioned to reduce any trip or safety hazards.

1.31.0 Smoke Test of Enclosure

- 1.31.1 Prior to any removal works commencing a smoke test shall be carried out by the LARC in the enclosure to confirm the effectiveness of the sealing system and the efficiency of the ventilation system in effecting.
- 1.31.2 An airflow of at least 8 air changes per hour for enclosures greater than 120 m³ in size or an airflow of at least 1000 m³ per hour for enclosures less than 120 m³ in size. See ACOP L143 for more details.
- 1.31.3 Consideration shall be given to the size and position of the ventilation system and the segmenting of enclosures in order to achieve this. In certain circumstances it may not be practical to smoke test the enclosure. In such cases the Asbestos Consultant's approval (confirmed in writing) to commence must be obtained.
- 1.31.4 The smoke test shall be witnessed by the Asbestos Consultant or their representative and a record made of the test.
- 1.31.5 The LARC shall ensure all smoke detection equipment within the demise of the property which may be affected by the smoke test is arranged to be isolated before such tests are carried out.
- 1.31.6 The LARC shall liaise with both the Asbestos Consultant and on site Security with regards to specific times and dates. The LARC shall give reasonable notice with regard smoke and clearance testing.

1.32.0 Transit Procedures

1.32.1 The LARC shall satisfy the Asbestos Consultant that they have initiated a safe procedure for transiting between the airlocks and the decontamination unit, which does not endanger the health, safety and welfare of:

- (i) His own personnel
- (ii) Others on the site or on adjacent sites.

Clear distinction must be possible between protective clothing used for the purpose of asbestos abatement and transiting and the following colour coding could be adopted:-

Work zone	-	Red overalls
Other areas	-	Blue overalls

1.32.2 In addition to the LARC's own inspections, tests, both visual and analytical will be carried out on the transit route by the appointed analyst to make sure it has not become contaminated with asbestos fibres. If this is found to be the case then the LARC shall clean this area to the satisfaction of the Asbestos Consultant, or their representative, at the LARC's own expense.

1.32.3 Protective clothing worn in the working and "dirty" areas shall be of a different colour to clothing worn in transit between the "dirty" area and decontamination unit.

1.32.4 No street clothes or footwear shall be worn in the "dirty" area (i.e. transit side of the showers).

1.32.5 No transit clothing or footwear shall be worn in the clean area (i.e. street side of the showers).

1.33.0 Communication with Operatives

1.33.1 Where the LARC does not deploy an operative outside the enclosure at all times during disturbance works the LARC shall provide an electrical or mechanical system of communication between the inside and outside of the enclosure.

1.34.0 Asbestos Remediation

1.34.1 Asbestos materials shall be removed adopting controlled wet stripping methods using approved fibre suppressant agents.

Equipment used in the controlled wetting of asbestos-containing materials (BS 8520-1:2009) "Controlled wetting equipment Specification". Removal by "High Pressure Water Jets" or power tools will not be permitted.

1.34.2 It is the sole responsibility of the LARC to ensure all materials and work covered by the Specification and Description of Works are satisfactorily completed. Monitoring and clearance by the appointed analyst shall not be taken by the LARC as necessarily indicating an acceptable standard of work.

1.34.3 This specification is part of a developed strategy for controlling asbestos removal during the majority of asbestos work. It is anticipated that in certain circumstances for practical reasons a different strategy of asbestos works will be required.

1.34.4 Any working method or variation from this specification shall be agreed with the Project Manager/Asbestos Consultant.

1.34.5 Where any such agreement is made the LARC shall confirm the method in writing to the Project Manager and Asbestos Consultant.

1.35.0 Solid Floors, Walls & Ceiling Surfaces Decontamination

1.35.1 All non-asbestos wall/ceiling surfaces within all areas covered by the Contract are to have

loose or flaking materials scraped or wire brushed down to a firm base. All such work to be done inside the enclosure.

1.36.0 Sub LARC Attendance

- 1.36.1 The LARC shall engage the services of electrical, mechanical engineers and general building trade LARC's who are suitably trained and equipped to effect repairs etc, within a designated asbestos work enclosures who shall be available on a 24-hour call out basis with a maximum 4-hour response.

1.37.0 Air Monitoring

- 1.37.1 Asbestos air monitoring as appointed by the clients asbestos consultants, shall be undertaken by a UKAS accredited asbestos analyst to HSG 248 standards.
- 1.37.2 Prior to works commencing, background air tests will be undertaken to ascertain ambient fibre levels. Air monitoring shall usually commence within the first hour after commencement of removal work and thereafter at the discretion of the AC.
- 1.37.3 Leak air monitoring will be required adjacent to the enclosure during the initial asbestos removal works, in accordance with HSG 248. During works, personal air monitoring will be applied on a selective basis to assess whether control measure are being appropriately applied. On completion of the asbestos removal works each enclosure will be subjected to a visual inspection by the appointed analyst. Once a satisfactory visual inspection has been achieved the area will undergo clearance air testing in accordance with four stage site re-occupation.

1.38.0 Air Monitoring Records

- 1.38.1 The appointed Analyst shall keep records of all air monitoring carried out. During the work these records shall be retained on site with the analyst for inspection by the LARC or other authorised persons.

1.39.0 Air Monitoring Failure Procedure

- 1.39.1 If any air sample taken outside the work area has a fibre concentration in excess of 0.010 cm^3 the LARC shall stop asbestos abatement work and take all practicable steps to check and improve his decontamination procedures. The LARC shall not recommence asbestos abatement work until further air samples confirm that the fibre concentration level does not exceed 0.010 cm^3 . The cost of these further samples shall be borne by the LARC.
- 1.39.2 All areas adjacent asbestos work zone that record an air test in excess of 0.01 cm^3 the LARC shall sign post that room/area as a Respirator Zone until further air tests indicate levels not exceeding 0.01 cm^3 .

1.40.0 Standard of Cleanliness

- 1.40.1 Where the construction of an enclosure is required the LARC shall clean enclosures so that:-
- i) Exposed surfaces are visually free from dust and fibres.
 - ii) Clearance Air measurements taken with dust disturbance on completion of the works do not have fibre concentrations in excess of 0.010 cm^3 .
- 1.40.2 All other areas will be subject to a visual inspection by the analyst and client representative. Control measures may only cease once removal has been completed to an agreed satisfactory standard.

1.41.0 Re-Cleaning of Work Area

- 1.41.1 If any of these criteria are not met the LARC shall re-clean the work area. The cost of this re-cleaning, together with the analytical companies charges for further inspection and testing shall be borne by the LARC.

1.42.0 Application of PVA Sealant

- 1.42.1 Following satisfactory air clearance tests and prior to dismantling the enclosure, the LARC shall spray the whole of the interior face of the polythene under the direction of the analyst.

1.43.0 Removal of the Enclosure

- 1.43.1 The LARC shall not remove the enclosures to the work zone or transit zone until the Analyst has confirmed in writing that a satisfactory visual inspection and disturbance clearance air test have been completed.

Notifiable Non Licensed work

In addition to the details of the “General requirements” section

1.44.0 Requirements for Notification

- 1.44.1 All notifiable non-licensed work with asbestos needs to be carried out with the appropriate controls in place, and those carrying out the work must have had the correct level of information, instruction and training, to protect themselves (and others in the area) from the risks to health that exposure to asbestos causes.
- 1.44.2 LARCs are required to notify the relevant enforcing authority of any NNLW with asbestos via the [online form](#) which is the only method of notification. The notice is required before the work starts (there is no minimum notice period) without a need to wait for permission from the enforcing authority.
- 1.44.1 For projects with multiple NNLW jobs the LARC can notify once for the whole project

1.45.0 Designating areas

- 1.45.1 All areas where there is NNLW is taking place must be designated and marked with a suitable warning notice. These areas must be restricted to those carrying out the work. See details set out in the general requirements section of this specification.

1.46.0 Medical surveillance

- 1.46.1 By 30 April 2015, all workers carrying out NNLW will need to have had a medical examination. Examinations will then need to be repeated **at least every 3 years**, as long as the worker continues to do NNLW. After April 2015, workers carrying out NNLW for the first time will have to have an examination before they can start such work.
- 1.46.2 Those workers already under surveillance via a licensed contractor and in possession of a valid certificate do not need to have the NNLW medical.

1.47.0 Record keeping

- 1.47.1 LARCs must keep a register (health record) of NNLW with asbestos for each employee exposed to asbestos:

This must include:

- the nature and duration of work with asbestos and estimated exposure for each individual worker
- dates of the worker's medical examinations

- 1.47.2 A record of workers on the job shall be maintained by the LARC.

1.48.0 Air Monitoring

- 1.48.1 Asbestos air monitoring as appointed by the clients asbestos consultants, shall be undertaken by a UKAS accredited asbestos analyst to HSG 248 standards.
- 1.48.2 Prior to works commencing, background air tests will be undertaken to ascertain ambient fibre levels. Air monitoring shall usually commence within the first hour after commencement of removal work and thereafter at the discretion of the AC.
- 1.48.3 During works, personal air monitoring will be applied on a selective basis to assess whether control measure are being appropriately applied.

- 1.48.4 On completion of the asbestos removal works each designated area will be subjected to a visual inspection by the appointed analyst. Once a satisfactory visual inspection has been achieved the area will undergo reassurance air testing.

1.49.0 Statement of Cleanliness

- 1.49.1 Upon completion of the thorough visual inspection and air test by the analyst a certificate / statement will be issued to the client to confirm the material has been removed and this will be confirmed by the LARC supervisor countersigning the document where necessary.

1.50.0 Asbestos Remediation

- 1.50.1 Asbestos materials shall be removed adopting controlled wet stripping methods using approved fibre suppressant agents.
- 1.50.2 The methods specified by the HSE in [HSG210](#) "Asbestos Essentials – Task Manual for building, maintenance and allied trades" will generally provide a good starting point for a risk assessment and plan of works for the works.
- 1.50.3 It is the sole responsibility of the LARC to ensure all materials and work covered by the Specification and description of works are satisfactorily completed. Monitoring and visual inspection by the appointed analyst shall not be taken by the LARC as necessarily indicating an acceptable standard of work.
- 1.50.4 Any working method or variation from this specification shall be agreed with the Project Manager/Asbestos Consultant.
- 1.50.5 Where any such agreement is made the LARC shall confirm the method in writing to the Project Manager and Asbestos Consultant.

Non Licensed work

In addition to the details of the “General requirements” section

1.51.0 Air Monitoring

- 1.51.1 Asbestos air monitoring as appointed by the clients asbestos consultants, shall be undertaken by a UKAS accredited asbestos analyst to HSG 248 standards.
- 1.51.2 Prior to works commencing, background air tests will be undertaken to ascertain ambient fibre levels. Air monitoring shall usually commence within the first hour after commencement of removal work and thereafter at the discretion of the AC.
- 1.51.3 During works, personal air monitoring will be applied on a selective basis to assess whether control measure are being appropriately applied.
- 1.51.4 On completion of the asbestos removal works each designated area will be subjected to a visual inspection by the appointed analyst. Once a satisfactory visual inspection has been achieved the area will undergo reassurance air testing.

1.52.0 Statement of Cleanliness

- 1.52.1 Upon completion of the thorough visual inspection and air test by the analyst a certificate / statement will be issued to the client to confirm the material has been removed and this will be confirmed by the LARC supervisor countersigning the document where necessary.

1.53.0 Asbestos Remediation

- 1.53.1 Asbestos materials shall be removed adopting controlled wet stripping methods using approved fibre suppressant agents.
- 1.53.2 The methods specified by the HSE in [HSG210](#) “Asbestos Essentials – Task Manual for building, maintenance and allied trades” will generally provide a good starting point for a risk assessment and plan of works for the works.
- 1.53.3 It is the sole responsibility of the LARC to ensure all materials and work covered by the Specification and description of works are satisfactorily completed. Monitoring and visual inspection by the appointed analyst shall not be taken by the LARC as necessarily indicating an acceptable standard of work.
- 1.53.4 Any working method or variation from this specification shall be agreed with the Project Manager/Asbestos Consultant.
- 1.53.5 Where any such agreement is made the LARC shall confirm the method in writing to the Project Manager and Asbestos Consultant.