Female Analyst Working Group

Risk Assessment

To ensure a safe, respectful, and compliant working environment, the Female Analysts Working Group have developed a suite of practical documents that provide essential guidance on workplace behaviours, risk assessment, and safety procedures within the asbestos analytical industry.

The **Risk Assessment** document provides a structured approach to identifying and mitigating risks on-site. The **Supplementary Guidance on Decontamination Requirements for Analysts' undertaking 4-Stage Clearance** outlines best practices for both decontamination and personal safety protocols. Complementing these technical guidelines, the **Workplace Behaviours** document sets expectations for professional conduct, addressing concerns such as bullying, harassment, and discrimination.

To reinforce our commitment to maintaining a positive work culture, we also introduce a **Respect Charter**, which all organisations are encouraged to sign, demonstrating their pledge to uphold these standards. Together, these documents create a comprehensive framework to protect both physical and mental well-being in the workplace.

Introduction

The Control of Asbestos Regulations (CAR) 2012 requires employers to complete a written risk assessment for all work with asbestos. For the four-stage clearance (4SC), a risk assessment should be completed by the employer prior to analytical staff attending site. The assessment should be site and job specific and will therefore require an advance copy of the licenced asbestos removal contractor's (LARC's) plan of work (PoW).

Further dynamic risk assessments should be undertaken on site by the analyst, both outside and within the enclosure. The analyst should be trained to assess any changes to the work which may affect their health and safety, where site conditions may differ from those assessed in the step 1 risk assessment.

The risk assessment should include consideration of dutyholder/client arrangements for the site, which may include (but not limited to) the dutyholder's control of site staff, policies on behaviours, near miss reporting, communication and induction arrangements and general site-specific hazards which may not be readily apparent in the LARC's PoW (i.e., workplace transport).

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Step 1 - Pre-site Risk Assessment (desk top assessment):

The step 1 desktop assessment should be completed by the analyst's employer, and consider the LARC's PoW, their own internal health and safety policies and any site-specific considerations and policies at the client / dutyholder site, including but not limited to:

1. Contractual arrangements; is the analyst employed by the client or LARC?
2. Who does the analyst report to on-site?
3. Locations of all site features of significance, i.e., fire muster points and alarms, first aid, site office, mobile laboratory location, good street lighting, within site compound.
4. Previous working relationship with LARC i.e., standard of site set up, scrupulously cleaned enclosure, polite well-mannered crew, several hours of further cleaning required.
5. Lone working risks: does the analyst have support on-site in decision making? Escalation procedure in place? Does the analyst and managers know their policy and procedure?
6. Fatigue management: night working, long shifts and driving to and from work and resting.
7. Site factors i.e., remote locations with limited signal (999 still operational in such locations), lone working, security of changing facilities (DCU), work at height within or accessing the enclosure, confined space works etc. Understanding the hazards on site to prepare the analyst and select the analyst with appropriate skills, experience, and training i.e. confined space, working at height.
8. Behavioural factors and risk of violence and aggression i.e., previous experience of intimidating or unwanted behaviour, known criminal convictions pertaining to violence / sexual violence, use of temporary staff.
9. Welfare facilities and staff site safety should be assessed in compliance with relevant legal provisions
10. Nature and size, and complexity of the work: e.g. bath panel, sprayed soffit over large area, all pipes, boilers etc in a small or large boiler house, crawl duct.
11. Approximate time to complete the job provided based on the PoW (considering any time pressures which may arise).
12. Factors affecting the possible/probable need for decontamination, i.e., type and extent of ACM, cleaning techniques, potential for breach of coveralls

The above will aid in the selection of the most appropriate person for the work and consideration of control measures for risks identified. The Analyst attending site should have all the above information available in writing, including the LARC's PoW.

Step 2 – Analyst's Dynamic Assessment: Outside of the Enclosure

The step 2 assessment should be completed by the analyst once they are on site. This will consider several factors, including but not limited to:

1. Site observations - site safety, security and housekeeping i.e., presence of obvious debris, trip hazards, enclosure integrity, observations of enclosure activities from the vision panel and or CCTV. Is there adequate access equipment for inspection of all surfaces?
2. Confirm exterior of the site follows PoW (including LARC's amendments) and the step 1 (desktop) risk assessment - ensure the relevant paperwork is in order, and the ABS5 allows sufficient time for the work, welfare is compliant /as per PoW.
3. Behaviour observations - any intimidating, coercive or aggressive behaviours, any job pressures (i.e., time pressures).
4. Personnel changes (differing from the PoW or step 1 risk assessment).
5. Upon receipt of the handover form following successful Stage 1 of 4SC – identify from the supervisor, any variations from PoW and any difficulties encountered. Handover sheet guidance https://www.coniac.org.uk/resources/asbestos-appendices
6. Decontamination requirements should be reassessed on site based upon observations, i.e., general cleanliness, difficulties identified by the LARC, cleaning methods, potential for breaches of coveralls in stage 2.

Step 3 - Analyst's Dynamic Assessment: Inside the Enclosure

If Stage 1 of 4SC is successful, the analyst can progress to stage 2.

The analyst's observations during the stage 2 inspection form part of the dynamic risk assessment process, to prevent them from being exposed to asbestos fibres from airborne or surface contamination.

Upon entering the enclosure, the analyst should begin their inspection with a broad sweep approach of the enclosure cleanliness. This approach aims to identify areas ("hot spots") which are common indicators of insufficient cleaning at an early stage. This acts as a procedural measure to safeguard the analyst, by preventing contamination, and excessive time in the enclosure where further cleaning is required by the LARC.

"Hot spot" areas include areas such as the back of pipes, above door frames, grooves in soffits, polythene covering potential contamination *(see Annex 1 photographs for guidance examples).*

Where cleaning is insufficient, photograph these areas and leave the enclosure. Do not proceed with any further inspection.

A "failed" 4SC certificate should be issued, and no further assessment inside the enclosure should occur until it has been re-cleaned and sufficiently vented, and another handover form is issued by the LARC supervisor once they are satisfied that the area is sufficiently clean and dry.

Relevant Legislation

The Control of Asbestos Regulations 2012
https://www.legislation.gov.uk/uksi/2012/632/contents

The Management of Health and Safety at Work Regulations 1999
https://www.legislation.gov.uk/uksi/1999/3242/contents

Construction Design Management (CDM) Regulations 2015
https://www.legislation.gov.uk/uksi/2015/51/contents

Workplace (Health, Safety and Welfare) Regulations 1992
https://www.legislation.gov.uk/uksi/1992/3004/contents

Useful Links

Handover Sheet Guidance
https://www.coniac.org.uk/resources/asbestos-appendices

HSE Managing Risks and Risk Assessment at Work
https://www.hse.gov.uk/simple-health-safety/risk/index.htm

Please send any feedback or comments about this document to the confidential email address: concerns@itsnotacceptable.co.uk

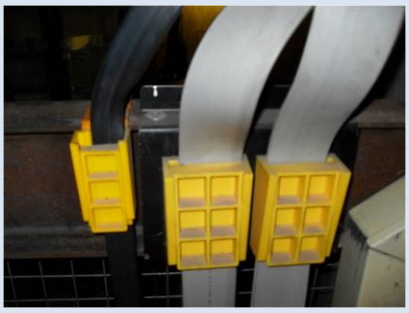
Annex 1 – Common "Hot Spot" Areas Indicative of Insufficient Cleaning

Areas within enclosure which can indicate insufficient cleaning and should be considered, where present, in this assessment, examples are as follows:

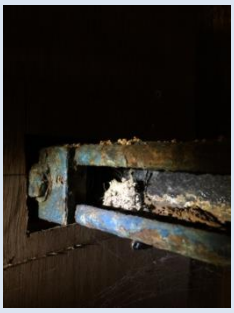
Timber batons where AIB has been attached

Beneath pipes especially where brackets or supports are present

To the rear of pipes especially adjacent to brackets or close to walls & ceilings



Intricate and difficult to clean surfaces where dust can collect



Within cavities and supporting brackets

Low level areas beneath plant and equipment

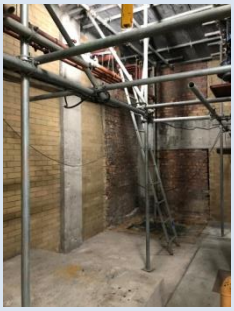
Equipment or tools used for cleaning

Blast media within cavities and edges adjacent to areas blasted

Within sumps and sunken or covered trenches

Ceiling supports or walls where ceilings were attached

Polythene sheeting including the airlock and baglock



Access equipment including scaffolding decks, poles, brackets, ladders etc.

Narrow gaps behind fixed equipment such as wall mounted radiators

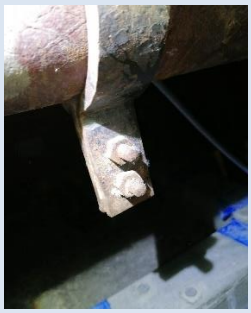
Scaffolding boards and gaps between them

Rough and porous materials where contamination can easily be missed

Difficult to clean surfaces like screw threaded bars

Small gaps between timber structures or finishing surfaces

Rough plant surfaces where insulation or cleaning materials can easily be snagged



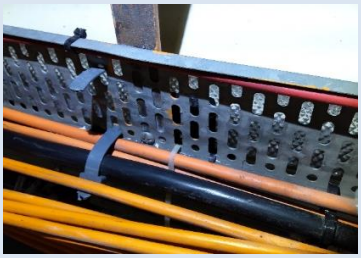
Difficult to clean surfaces like nuts and bolts

Any ledges where dust and debris can settle

Small openings in floors/ walls/ ceilings especially where services penetrate

Porous floor or wall surfaces where contamination can collect in the depressions

Conduits which have been unsealed or exposed to the removal environment



Cable trays, especially beneath unclipped cable bundles

Within fixed boxing which may have become contaminated during removal

Right into the edges and corners of all surfaces

Incomplete removal of encapsulants in difficult to reach alcoves / corners

		
Within intricate components of plant and equipment which are difficult to clean	*Oily or greasy surfaces where debris can become trapped*	*High level joists or upper ledges which are not easily visible*

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Annex 2 – Signposting Document: Welfare Standards

Welfare standards on site should comply with relevant legislation, including Schedule 2 of the Construction Design Management (CDM) Regulations 2015 and the Workplace (Health, Safety and Welfare) Regulations 1992. The employer of the Analyst should ensure that the LARC / Client has provided welfare to a compliant standard during the step 1 risk assessment process.

1. **Toilet Facilities –**
    - There should be enough toilets for the amount of people likely to use them (1: 5 ratio of toilets per person).
    - Toilets should be clean, orderly, adequately ventilated, and lit.
    - Separate facilities should be provided for men and women, or, with a door that is lockable from the inside.
    - Sanitary waste disposal facilities should be provided.
    - Toilets should be available all the time whilst workers are at site, and the distance to access them should be as short as possible from the furthest part of the site.
    - Analysts should be compelled to report poor and unacceptable facilities to their managers.

2. **Washing Facilities –**
    - Washing facilities should be provided in the immediate vicinity of toilets, (whether or not they are provided elsewhere).
    - There should be hot and cold, or warm running water provided so far as is reasonably practicable with soap and towels provided.
    - Sinks should allow you to wash up to your elbows where the work requires.
    - Showers should be provided for licenced asbestos work, and these should be clean, orderly, sufficiently ventilated, and lit.
    - Analysts should be compelled to report poor and unacceptable facilities to their managers.

3. **Drinking Water –**
    - There should be an adequate supply of drinking water provided.

4. **Changing Rooms –**
    - Should be provided for analysts to change (where decontamination procedures require), including seating and lockers for storing personal effects.

5. **Rest Facilities –**
    - Should be provided with tables and chairs, somewhere to prepare a meal, the means to boil water and should be kept to an appropriate temperature.

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Annex 3 - HSE Guidance on Risk Assessment for Compliance with Control of Asbestos Regulations 2012

Risk assessment

Before starting any work that is likely to disturb asbestos, a suitable and sufficient risk assessment must be prepared by the employer.

Whoever carries out the risk assessment must:

- be competent to do the risk assessment
- carry it out before work begins and allow enough time to put appropriate precautions in place
- make sure the assessment is job specific and considers all aspects of the work

Risk assessments are about identifying and controlling the risks:

- establish the potential risk (including general risk such as falls from height) and identify who may be affected
- identify the action to be taken to remove the risk, or if that is not possible, to reduce the risk to as low as possible
- record the findings of the risk assessment, and the action to be taken, and inform employees
- implement the actions to be taken
- review and update the risk assessment as required

Competency

Whoever carries out the risk assessment must have a sufficient level of knowledge, training and expertise. This is to make sure that they understand the risks from asbestos (and general risks) to enable them to make informed decisions about the risks and identify the appropriate action required to reduce them. They will also need to be able to estimate the expected level of exposure to help them decide whether or not the control limit is likely to be exceeded.

Content of the risk assessment

A suitable and sufficient risk assessment should include full details of the work to be undertaken and how long the work is expected to take. It should also include:

- details of the type and quantity of the asbestos
- details of the expected level of exposure
- details of the controls to be used to reduce exposure e.g. use of local exhaust ventilation, controlled wetting, adequate PPE / RPE, use of enclosures
- decontamination procedures for tools, equipment and PPE
- details on how asbestos waste will be managed
- emergency procedures

The significant findings of the assessment should be communicated to employees, and anybody else who could be affected. A copy of the risk assessment must be available on site.

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Supplementary Guidance on Decontamination Requirements for Analysts undertaking the 4-Stage Clearance Process

To ensure a safe, respectful, and compliant working environment, the Female Analysts Working Group have developed a suite of practical documents that provide essential guidance on workplace behaviours, risk assessment, and safety procedures within the asbestos analytical industry.

The **Risk Assessment** document provides a structured approach to identifying and mitigating risks on-site. The **Supplementary Guidance on Decontamination Requirements for Analysts' undertaking 4-Stage Clearance** outlines best practices for both decontamination and personal safety protocols. Complementing these technical guidelines, the **Workplace Behaviours** document sets expectations for professional conduct, addressing concerns such as bullying, harassment, and discrimination.

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The Female Analyst Working Group (FAWG) comprises of a cross-section of individuals with industry, accreditation and regulatory experience of clearance testing. This guidance document has been acknowledged and accepted by both HSE and UKAS as suitable for use as part of a risk assessment when establishing decontamination requirements as part of 4-stage clearance testing.

Introduction

Upon completion of licensed asbestos removal work, it is necessary to undertake 4-stage clearance procedure to allow a Certificate for Reoccupation to be issued. Guidance for undertaking this clearance testing is contained within the Health and Safety Executive (HSE) publication HSG248 Asbestos: The Analysts' Guide (2021).

All analysts who enter asbestos enclosures or designated work areas may become contaminated and need to decontaminate themselves. The purpose of decontamination is to make sure that PPE and RPE, as well as the individual, are cleaned to prevent further spread of asbestos. Decontamination should also be conducted safely to avoid secondary exposure for the analyst. Analysts should be instructed and trained on the conditions which will require full decontamination. The conditions should also be set out in company policy.

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Guidance on decontamination procedures is set out in Chapter 9 of HSG248 which acknowledges that in most instances the analyst should not need to undergo full decontamination and that preliminary decontamination would be sufficient. The level of decontamination undertaken is to be determined each time the analyst exits an enclosure. However, HSG248 does require that the analyst is always prepared for full decontamination and as a result, the analyst is not permitted to wear domestic clothing beneath their PPE coveralls.

In recent times it has been identified that many analysts, particularly females have, and continue to suffer unacceptable physical/sexual abuse and unwanted behaviour. This is primarily as a result of not being able to wear domestic clothing beneath their coveralls. This type of abuse can occur at various points whilst on site but predominantly occurs whilst using the decontamination unit (DCU) either for changing into, or out of, coveralls or when undergoing full decontamination such as showering.

This FAWG supplementary guidance is intended to provide alternative options and supporting technical evidence that considers both the risk of asbestos contamination and risk of sexual harassment. There will of course be times when full decontamination is required and the need to undress in the DCU to shower. Additional FAWG guidance has been written on assessing risk and implementing measures to prevent sexual harassment including when the analyst does need to complete full decontamination.

Historical Context & Technical Evidence Review

A large amount of clearance testing data has been collected from United Kingdom Accreditation Service (UKAS) Accredited organisations. This data has been reviewed to consider the likelihood and potential for analysts to be exposed to asbestos fibres during stages 2 and 3 of the 4-stage clearance (i.e. the times when enclosure entry is required). It was found that the airborne fibre levels at 4SC are indicative of low airborne contamination. The evidence review is provided at Annex A.

Factors to Consider When Assessing the Risk of Contamination

HSG248 (2021) acknowledges that the physical nature of the inspection can [but not always] lead to coverall damage, exposing and contaminating underclothes. All enclosures will need to be judged on their own merits with a documented risk assessment to determine the potential for contamination and exposure.

The potential does exist that asbestos may have been missed by the LARC. This potential is most likely to occur in larger or more complex enclosures including those which require access and crawling through confined spaces and ducts. This is also supported by the

personal monitoring results (detailed in Annex 1) where, in a small number of situations, higher concentrations were found in these types of enclosures.

Clearly it would be beneficial to determine in advance the likelihood of significant asbestos contamination during clearance as this would pinpoint/highlight the requirement of any additional measures e.g. additional analyst or chaperone. Factors to consider (list not exhaustive):

- The physical nature of the clearance inspection; does it involve crawling, kneeling, stretching and climbing, that could lead to coverall damage (e.g. ripping or tearing), exposing and contaminating underclothes?
- The size of the enclosure, any tight spaces where coveralls would be in direct contact with the walls etc.
- Presence of access equipment or anything else that could be a snagging point.
- Nature of removal work (likelihood of visible dust/debris contamination being present)

The table below provides examples of enclosure size and product type with suggested level of decontamination.

Asbestos Product	Enclosure Size	Level of Decontamination required (subject to site specific risk assessment)
AIB	Small (<10m^2)	Preliminary
AIB	Large (>10m^2)	Preliminary or Full
Thermal Insulation	Small (<10m^2)	Preliminary
Thermal Insulation	Large (>10m^2)	Full
Sprayed Coating	All sizes	Full

It is stressed that these are general scenarios and that the site conditions and decontamination requirements will still need to be assessed on an individual basis to justify the approach taken.

Procedural Controls to Minimise Likelihood of Significant Contamination

There are also some procedural controls that can be put in place to minimise the likelihood of significant contamination:

- Consideration needs to be given to any cleaning which may have been utilised prior to analyst entry. For example, if the LARC has undertaken significant amounts of cleaning using high disturbance techniques (e.g. wire brushing) particularly in small enclosures, time should be given for the enclosure to vent prior to the analyst entering.

- At the start of a thorough visual inspection, analysts should conduct a brief initial inspection, looking for gross or significant contamination in difficult to access/clean areas. The intention of this is to identify the extent of further cleaning at an early stage. This may result in an early suspension of the process, and recorded as a Stage 2 failure.

- In accordance with HSG248 where there is a Stage 2 failure, the analyst should leave the enclosure and undergo preliminary decontamination. Where full decontamination is deemed not to be necessary, RPE can be removed on exiting the airlock and the analyst can move around the site wearing the 'inner' coverall. However, RPE and a second coverall should be put on again to re-enter the enclosure. This can include the previously worn 'outer' coverall which was left in the airlock (providing it was not ripped etc. when last removed).

PPE and underclothing that ensures both protection from asbestos contamination and modesty in the enclosure and airlock.

HSG248 states that swimsuits or alternative washable or disposable items can be worn if desired and further acknowledges that there may be other options available to the analyst in terms of preparing to enter the enclosure. Some options are provided in the following section.

The term 'washable or disposable items' is not defined in guidance. However, in practical terms this could mean an **old or cheap t-shirt and leggings**. To **avoid the need to undress** in the DCU, **Analysts should arrive on site wearing clothing** that could be either washed or discarded if a full decontamination is required. As full decontamination could be necessary, It is advisable for the analyst to have a set of domestic clothing in the clean end of the DCU, and this should be placed in **a lockable container** (for security reasons). If only preliminary decontamination was deemed necessary then, they would simply just remove and discard the inner coverall and replace their footwear (or discard protective over boots).

Type 5/6 white coveralls made of SMS (a layer of melt blown polyethylene sandwiched between 2 outer layers of spunbonded polyethylene) are generally 'see through'. Type 5/6 coveralls made of polyethylene laminate are not 'see through'. **Where only SMS or 'see through' coveralls are available and the analyst chooses to wear swimwear only** (which may be the case if full decontamination is anticipated) – **a third set should be worn** so that they are not 'see through', i.e. two inner sets not removed following preliminary decontamination. **Alternatively, other colours such as blue may be less 'see through'**.

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Type 5/6 SMS coveralls offer better thermal comfort properties in warm environments, so this should also be factored in when selecting PPE particularly when working in warm or strenuous enclosures e.g. with scaffolds to ascend, tunnels to crawl through. However, they are also more likely to rip, which could lead to contamination of underclothes. **Where there is a risk of ripping, either a polyethylene laminate option outer coverall should be selected or wearing a third SMS coverall.** Note: This may vary between manufacturers.

PPE and underclothing that ensures modesty in the enclosure and airlock

Level of Decontamination	Clothing worn underneath PPE	PPE
Preliminary (inner enclosure and airlock)	Swimwear and/or washable or disposable items	Two or Three Type 5/6 coveralls one of which is removed at preliminary decontamination in airlock
Full (DCU entry following preliminary)	Swimwear and/or washable or disposable items	Two or Three Type 5/6 coverall one which is removed at preliminary decontamination in airlock

Relevant Legislation

The Control of Asbestos Regulations 2012
https://www.legislation.gov.uk/uksi/2012/632/contents

The Personal Protective Equipment at Work Regulations 1992
https://www.legislation.gov.uk/uksi/1992/2966/contents

Useful Links

Asbestos: The Analysts' Guide
https://www.hse.gov.uk/pubns/priced/hsg248.pdf

Asbestos: The Licensed Contractors' Guide
https://www.hse.gov.uk/pubns/priced/hsg247.pdf

Please send any feedback or comments about this document to the confidential email address: concerns@itsnotacceptable.co.uk

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Annex 1 Evidence Paper: Contamination Risk of Analysts undertaking 4SC Process

Background

The requirement to undertake checks following the removal of asbestos containing materials (ACMs) has been in place for many decades. Many years ago, this would have been undertaken by the Licensed Asbestos Removal Contractor (LARC) which then altered to being the role of the Independent Analyst working for a UKAS accredited organisation. One aspect which has never changed is with regards to who is responsible for the removal of the asbestos i.e., the LARC. The analyst is there to provide independent verification that the work has been completed to an agreed satisfactory standard.

As LARCs are the ones actively disturbing and removing ACMs they need to take appropriate precautions and be adequately protected to prevent or minimise contamination of themselves and others. This invariably requires the use of a variety of controls such as ventilated enclosures and dust suppression techniques. In addition, LARCs need to wear suitable personal protective equipment and also undergo decontamination and showering of themselves at the end of each work shift.

Over the years since the introduction of the licensing of high-risk ACM works (in 1983) the control and decontamination requirements for the LARC have remained fairly unchanged. However, over those years the types and associated risk of the ACMs being removed have arguably, on the whole, seen quite a change. In the 1980's and 1990's the vast majority of removal works involved original installations of thermal insulation and sprayed coatings with Asbestos Insulating Board (AIB) the latter being included towards the end of the 1980s. As we moved into the current century and more noticeably the more recent decade, we now tend to see licensed works being mainly involved with AIB removal and re-cleans of areas which had previously undergone removal of thermal insulation and sprayed coating. Indeed, current data from the Asbestos Licensing Unit shows a general trend of 75% of licensed jobs are AIB. In essence both the type of material worked on and the introduction of controlled wetting in the 1990s (Reference Figure 10 Post Implementation Review of the Control of Asbestos Regulations 2012 (publishing.service.gov.uk)) means that the exposure of LARCs nowadays should be significantly lower than the levels of the 1980's. Airborne concentrations seen within enclosures as part of personal monitoring regimes will now also support this.

The 4 Stage Clearance Analyst

Historical Context

In the 1980's and into the 1990's the guidance for the analyst comprised predominantly of the methods for air sampling and analysis. There was an operating code of practice produced by the Institute of Occupational Hygienists (IOH)[1] for clearance testing which provided information for the approach to be taken and what was required to certify an area as satisfactory. In the 1980's there

[1] Institute of Occupational Hygienists (1987) Operating Code of Practice for Asbestos Clearance Certification

was no prescriptive guidance with regards to the PPE to be used or decontamination methods. Those requirements were assessed based on risk, through company procedures and also staff training.

In order to establish the level of risk to analysts' a study[2] was undertaken in 1987/1988. This study recognised that at the time of enclosure entry the potential exposure of the analyst should be negligible. In addition, the analyst would be suitably trained to assess the risk and take the correct approach to protect themselves. An extract from the introduction section of the research report is shown below:

> *Consultants with adequate training will be knowledgeable about the purpose and methods of clearance certification. They will understand the risks involved and will know the protective measures required. Important elements of training are the recognition of asbestos materials and residue, and an awareness that contact with and disturbance of any asbestos residue observed should be minimized. Consultants should have the necessary experience to be able to make an initial assessment of the situation liable to be encountered within the work enclosure over the normal range of asbestos work activities.*

The study utilised personal sampling of analysts from 4 different consultancies. This sampling was undertaken for the duration of the visual inspection up to and including removal of overalls upon completion. The results were assessed using a 4-hour time weighted average (TWA) on the basis that it was unlikely that an analyst would undertake more than one clearance in that time period. The highest 4-hour TWA exposure was 0.1 f/ml with the mean of the entire data set being less than 0.01 f/ml. The conclusions[2] found that the analyst was not exposed to high levels and recorded *"87% of the TWA$_4$ personal results, were insignificantly low (i.e. at or below 0.01 fibre/ml)"*

It is also important to note that at the time of the study more than two thirds of the clearances included were of the removal of thermal insulation and sprayed coating. The products most likely to result in high airborne concentrations.

> *It is clear from the results of this investigation that properly conducted clearance certification, in accordance with the Operating Code mentioned above, is not associated with high personal exposure to airborne asbestos dust, relative to the Control Limits, and that long-term exposure would tend to be less than one-tenth of the Action Levels. Therefore, the statutory precautions triggered by the Action Levels are not applicable to clearance certification.*
>
> *In theory it would not be necessary to designate the asbestos working enclosure as a respirator zone at this stage, since control limits are not liable to be exceeded during clearance certification. However, exposure to all forms of airborne asbestos dust should be reduced to the minimum reasonably practicable. Precautions should be taken, having regard to the level of risk involved and the disadvantage of wearing an unnecessary amount of safety equipment.*

[2] Annals of Occupational Hygiene Vol 32 No.3 pp. 423-426 1988

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Current (2005 onwards)

The types of ACMs being removed have altered over the years, with the risk presented currently, arguably being reduced when compared to the majority of ACMs being removed in the 1980/90s. Considering this it would follow that exposure risk to the analyst would also be further reduced.

The table below identifies the changes in guidance since 1987 for analysts with regards to the use of PPE. Although the 1987 IOH study found that the analyst was not being unduly exposed the requirement for analysts to be prepared for full decontamination was introduced in 1992. This requirement was introduced on the basis that the possibility of becoming contaminated is always present if the enclosure is not clean.

The introduction of HSG248 (The Analysts' Guide) in 2005 continued to increase the PPE and decontamination requirements for analyst's by removing the ability to wear domestic clothing beneath coveralls. This was further updated in 2021 to permit the wearing of swimsuits and other disposable clothing beneath coveralls. This update was to acknowledge a potential modesty issue, particularly for female analyst's.

Guidance	**PPE (minimum)**	**Domestic Clothing permitted?**	**Full Decon in DCU**
IOH Code of Practice for Asbestos Clearance Certification (1987)	FFP2	Yes	No
CAR 1987 amended in 1992 (2nd Edition ACOP)	FFP3 2 coveralls	Yes	In situations where analyst may have become significantly contaminated
HSG248 (2005)	FFP3 2 coveralls	No	In situations where analyst may have become significantly contaminated
HSG248 (2021)	FFP3 2 coveralls An extra (i.e. third) coverall can be worn	No – disposable undergarments or, swimsuits (or alternative washable or disposable items).	In situations where analyst may have become significantly contaminated

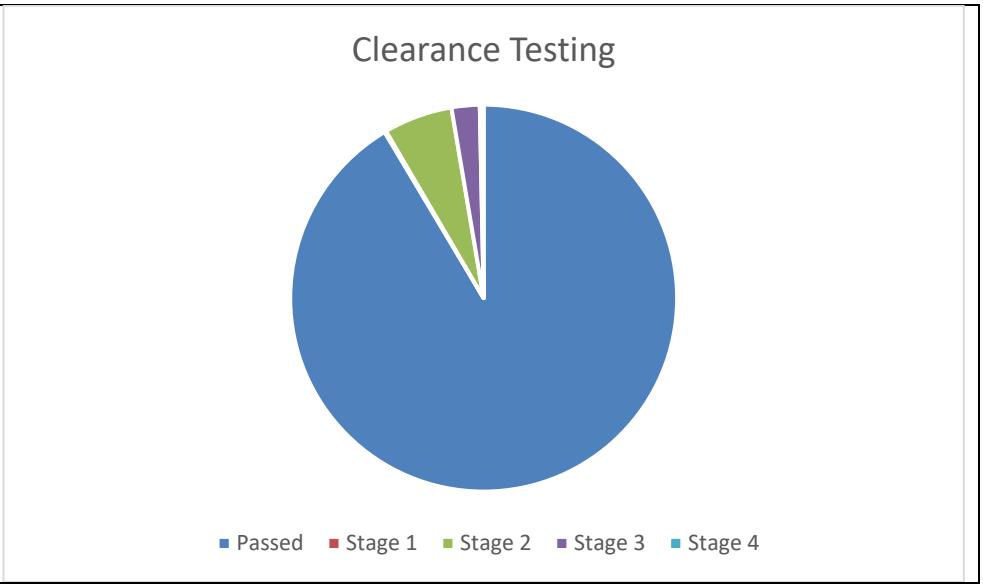
The increased PPE/decontamination requirements from 2005 did not consider the behaviours and actions of others which are additional risks that an analyst may be faced with on site. These arguably present a greater issue for the safety and wellbeing of all analysts and in particular female analysts.

In order to establish the current position regarding clearance testing of enclosures and potential exposure of analysts a request for information was sent out to members of NORAC (National Organisation of Asbestos Consultants) and ATaC (Asbestos Testing and Consultancy Association).

Information relating to over 32,000 clearance tests was provided and collated. This data found of the 32,000+ tests just over 8.5% (1883) failed.

Of the failures:

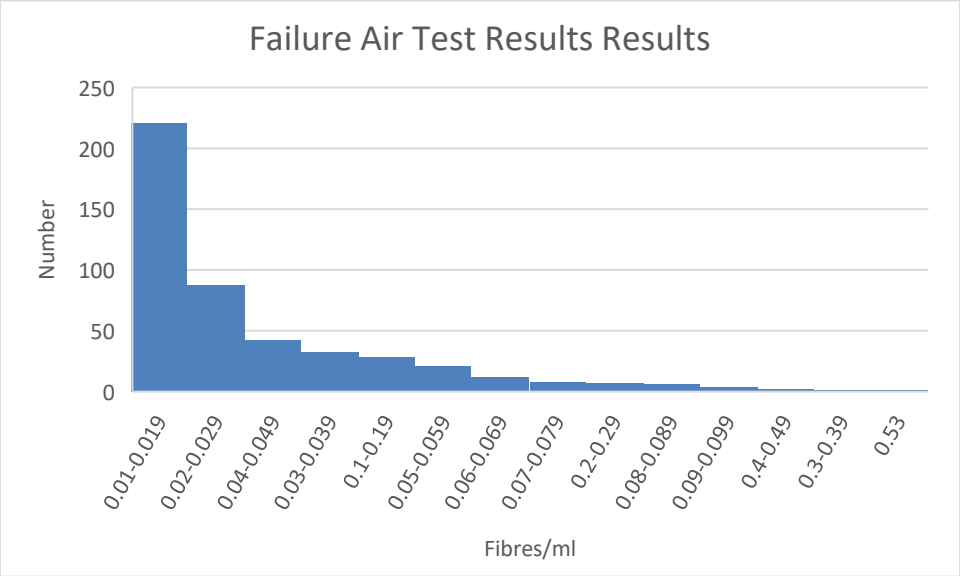
0.14% failed at Stage 1
5.75% failed at Stage 2
2.35% failed at Stage 3
0.32% failed at Stage 4



Of the data provided 476 clearance tests also included the air test results where a failure occurred at Stage 3. An evaluation of that data found that almost half (46.4%) recorded results between 0.01 f/ml and 0.019 f/ml with just under a fifth (18.5%) then lying between 0.02 and 0.029 f/ml. The percentages decreased significantly above 0.029 f/ml. The highest reported result of 0.53 f/ml was said to be in relation to large scale removal of thermal insulation.

The table and chart below provide the specific details of the air test failure results and the values obtained.

Result (f/ml)	No of Results	% of Results
0.01-0.019	221	46.4
0.02-0.029	88	18.5
0.03-0.039	33	6.9
0.04-0.049	43	9.0
0.05-0.059	21	4.4
0.06-0.069	12	2.5
0.07-0.079	8	1.7
0.08-0.089	6	1.3
0.09-0.099	4	0.8
0.1 - 0.19	29	6.1
0.2 - 0.29	7	1.5
0.3 - 0.39	1	0.2
0.4 - 0.49	2	0.4
0.53	1	0.2

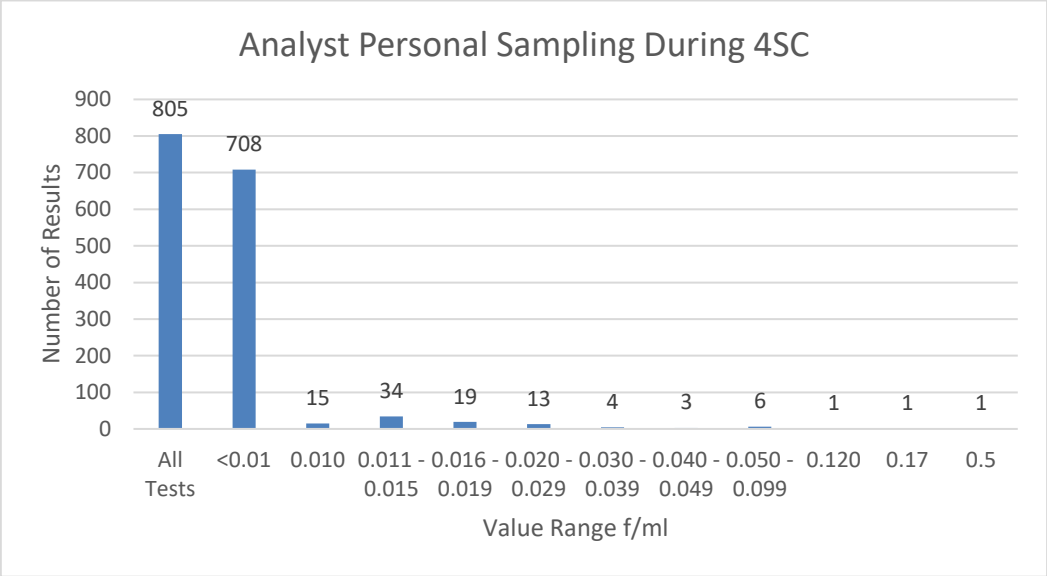


Personal Monitoring

In addition to the data on 4SC testing a further request was sent out to obtain information from the personal monitoring which analysts undertake on themselves. This monitoring related to entry into enclosures as part of the clearance testing process, typically at stage 2, the visual inspection. 805 results were reviewed of which 708 all produced results below 0.01 f/ml, i.e. less than a tenth of the current Control Limit. This equates to 88% of the tests carried out. The remaining 97 or 12% of the results have been split to demonstrate the range of concentrations obtained. These can be seen in the table below. The specific time spent within the enclosure is not known for all results however it is likely to be well below 4 hours. A 4-hour TWA is therefore likely to produce results below those seen within the table.

4SC Analyst Personal Sampling Results (data voluntarily provided from NORAC/ATAC member organisations)

Value f/ml	No results	% of results
All Tests	805	100
<0.01	708	88
0.010	15	1.9
0.011 - 0.015	34	4.2
0.016 - 0.019	19	2.4
0.020 - 0.029	13	1.6
0.030 - 0.039	4	0.5
0.040 - 0.049	3	0.4
0.050 - 0.099	6	0.7
0.12	1	0.1
0.17	1	0.1
0.50	1	0.1



The most likely risk of analyst contamination due to visible dust and debris which may be present is at Stage 2. The personal sampling results provide a true representation of the airborne exposure risk and a good indicator of potential contamination of analysts. These results support the previously obtained data and conclusions from earlier studies in that the potential exposure of analysts is negligible during clearance testing. The vast majority of results being more than 10 times lower than the current Control Limit of 0.1 f/ml.

In the circumstances where readings in excess of 0.05 f/ml were observed the type of removal was confirmed as large-scale removal of AIB, thermal insulation and sprayed coatings. Large scale being taken as enclosures greater than $10m^2$.

Female Analyst Working Group

Workplace Behaviours

To ensure a safe, respectful, and compliant working environment, the Female Analysts Working Group have developed a suite of practical documents that provide essential guidance on workplace behaviours, risk assessment, and safety procedures within the asbestos analytical industry.

The **Risk Assessment** document provides a structured approach to identifying and mitigating risks on-site. The **Supplementary Guidance on Decontamination Requirements for Analysts' undertaking 4-Stage Clearance** outlines best practices for both decontamination and personal safety protocols. Complementing these technical guidelines, the **Workplace Behaviours** document sets expectations for professional conduct, addressing concerns such as bullying, harassment, and discrimination.

To reinforce our commitment to maintaining a positive work culture, we also introduce a **Respect Charter**, which all organisations are encouraged to sign, demonstrating their pledge to uphold these standards. Together, these documents create a comprehensive framework to protect both physical and mental well-being in the workplace.

Introduction

It is well known that employers have a responsibility to ensure their employees safety while at work. Within the asbestos industry managing health and safety is well understood and is the cornerstone to most of the work undertaken but when it comes to the effects of poor workplace behaviour are the same standards applied?

Employee health and safety must also consider the impacts on an employee's mental health and wellbeing and the need to implement actions to prevent abusive or threatening behaviour. All individuals have a responsibility to behave in a manner which supports an inclusive and tolerant working environment.

With this in mind consider the following employer health & safety requirements -

- To identify what could cause harm and implement procedures to prevent this
- To explain how the risks will be assessed and controlled
- To give training and information to employees

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Classification

In some instances, inappropriate work-based behaviours can be easy to identify but others may be less obvious. The nature and extent of these behaviours can also be difficult to assess in terms of severity and implications for those involved. The following classifications aim to provide some guidance.

Unwanted Conduct or Behaviour

This can be difficult to define as the impact on the individual is what ultimately determines if a behaviour is unwanted. Examples of unwanted conduct or behaviours can include -

- Aggressive / abusive behaviours
- Spreading rumours
- Insulting people
- Rudeness
- Disrespect
- Humiliation or demeaning
- Obstructing performance

Bullying

The Advisory, Conciliation and Arbitration Service (ACAS) defines bullying as:

Offensive, intimidating, malicious or insulting behaviour, an abuse or misuse of power through means that undermine, humiliate, denigrate or injure the recipient.

There is no single piece of UK legislation that covers workplace bullying specifically, however indirectly this can be covered by numerous pieces of legislation including The Employment Rights Act, The Human Rights Act and the Health and Safety at Work Act.

Harassment

ACAS defines harassment as:

Unwanted conduct related to a relevant protected characteristic, which has the purpose or effect of violating an individual's dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment for that individual.

Protected characteristics include the following:

- Age
- Gender reassignment
- Race
- Sex
- Disability
- Religion of belief
- Sexual orientation

Harassment covering any of the above criteria is unlawful under the Equality Act. In addition, employers can be in breach of the Worker Protection Act if they do not take reasonable steps to prevent sexual harassment of their employees.

Discrimination

Discrimination means that an individual is treated less favourably than someone else because of a specific protected characteristic as listed below:

- Age
- Gender
- Race
- Sex
- Disability
- Religion of belief
- Sexual orientation
- Marriage & civil partnership
- Pregnancy & maternity

Discrimination can be either direct or indirect.

Direct discrimination is where someone is put at a disadvantage because of a protected characteristic. This may mean that they are excluded from opportunities, feel distress or their job may be harder to undertake because of their specific circumstances. There are three types of direct discrimination -

- Where the individual is discriminated against because of a protected characteristic they have,
- Where the individual is discriminated against because of an association they have with someone with a protected characteristic,
- Where the individual is thought to have a protected characteristic even if this is not true.

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Indirect discrimination where working practice, methodology, policy etc; is in place for all persons, is less fair to those with protected characteristics. Often indirect discrimination is less obvious to identify and, in many cases, there is no intent to cause harm or disadvantage.

Discrimination covering any of the above criteria is unlawful under the Discrimination and the Equality Act 2010.

Examples

Some examples of different mechanisms for inappropriate workplace behaviours are shown below. These could be classified as being unwanted conduct/ behaviour, bullying or harassment dependent upon the nature and extent.

Name Calling

Generic (not including protected characteristics) for example

- Being insulted about ability or intelligence - idiot / stupid / basic / pump jockey / jobsworth / anal-ist
- Being insulted about physical appearance – four eyes / weight or build / hair status

Specific to protected characteristic

- Being insulted about gender or sexual orientation
- Being insulted about race, colour, ethnic background, nationality
- Being insulted about religion or beliefs
- Being insulted about age
- Being insulted about being pregnant

Sending text messages or emails

- Where these include content which is insulting / derogatory / harassment etc.
- The act of sending them due to the timing or frequency could also be considered harassment e.g. frequent or incessant late night or weekend calls
- Emailing others with content, not the intended victim, behind their back

Leaving physical notes

- Notes left in site offices or on desks
- Shared on notice boards
- Written on enclosure walls or other graffiti

Being threatened physically

- Being grabbed or held
- Being backed into a corner by one or a group of persons
- Not being allowed to leave site, being blocked in the car park
- Having the use of weapons or tools being held against them

Being threatened psychologically

- All the above etc. being verbally discussed
- Being followed home
- Being excessively watched or stalked

Property Loss or Damage

- Hiding or stealing personal or work possessions
- Scratching vehicle paintwork or letting down tyres

Maliciousness

- False reporting to others on a person's abilities or behaviour
- Spreading rumours about a person with others
- Purposeful and unreasonable exclusion of an individual
- Misusing a position of power

Impact

For the individuals involved the impact of negative or illegal workplace behaviours can be significant. For the victims, these behaviours can negatively impact both their physical and mental health, their professional performance and development and their relationships both at work and at home.

The effects can also have significant impact on others and the company itself, for example

- Increased absenteeism
- Reduced employee performance

- Bad workforce morale
- Increased employee turnover
- Loss of productivity to investigate incidents / conduct disciplinaries
- Legal costs
- Loss of company reputation

The potential impact that poor workplace behaviours could have on an individual's performance whilst at work has significant ramifications from a quality and accreditation perspective.

Responsibilities

Vicarious liability is where an employer could be held responsible for the actions of one of their employees. This can include where their behaviour is found to be unlawful in terms of bullying, harassment & discrimination. To avoid vicarious liability employers must be able to demonstrate that they have taken reasonable steps to prevent inappropriate workplace behaviours.

Reasonable steps include the following:

- Having suitable policies and procedures in place
- Having reporting mechanisms
- Conducting training for employees & managers
- Investigating incidents
- Consequences for any individuals found to be at fault
- Committing to a Respect Charter

From 26th October 2024, employers have a legal duty to anticipate when sexual harassment may occur and take reasonable steps to prevent it under the Worker Protection Act 2023. If sexual harassment has taken place, an employer should take action to stop it from happening again. This sends a clear signal to all employers that they must take reasonable preventative steps against sexual harassment, encourage cultural change where necessary, and reduce the likelihood of sexual harassment occurring.

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Relevant Legislation

The Health and Safety at Work Act 1974
https://www.legislation.gov.uk/ukpga/1974/37/contents

The Human Rights Act 1998
https://www.legislation.gov.uk/ukpga/1998/42/contents

The Equality Act 2010
https://www.legislation.gov.uk/ukpga/2010/15/contents

The Worker Protection (Amendment of Equality Act 2010) Act 2023
https://www.legislation.gov.uk/ukpga/2023/51/contents

Useful Links

ACAS: The Advisory, Conciliation and Arbitration Service – Discrimination & Bullying
https://www.acas.org.uk/discrimination-and-bullying

EASS: The Equality Advisory and Support Service
https://www.equalityadvisoryservice.com/

The Equality & Human Rights Commission – Code of Practice
https://www.equalityhumanrights.com/equality/equality-act-2010/codes-practice/employment-code-practice-0

Please send any feedback or comments about this document to the confidential email address: concerns@itsnotacceptable.co.uk

Female Analyst Working Group

The Respect Charter

Recognise our right to a safe working environment

Every worker has the right to perform their duties in a safe and secure setting. We commit to upholding safety regulations, following best practices, and raising concerns when hazards arise. Prioritising health and safety protects not only for ourselves but also for our colleagues and the broader community.

Treat people fairly, with courtesy and respect

All interactions should be grounded in professionalism, fairness, and respect. Whether engaging with colleagues, clients, or external stakeholders, we foster a workplace culture where everyone feels valued and heard. Discrimination, harassment, and disrespectful behaviour have no place in our work.

Recognise that we will not always share the same point of view

Diverse perspectives enrich decision-making and problem-solving. While differences in opinion may arise, we commit to constructive dialogue, active listening, and mutual understanding. Disagreements should be handled professionally, ensuring a collaborative and inclusive working environment.

Acknowledge that our personal behaviour can affect others

Our actions and attitudes influence workplace morale, productivity, and safety. We take responsibility for our conduct, ensuring it contributes positively to everyone. This includes maintaining a professional demeanour, being mindful of language and tone, and addressing conflicts constructively.

Be supportive by working together and learning from each other

Collaboration strengthens our ability to deliver high-quality work. We embrace opportunities to share knowledge, mentor others, continuously learn, and to support everyone equally.

Work together to safeguard our working environment

Creating and maintaining a safe workplace is a shared responsibility. We remain vigilant about hazards, follow safety protocols, and support each other in fostering a culture where wellbeing is paramount. By working together, we protect not only ourselves but all others who may be affected by our actions.