

The logo for BOHS (British Occupational Hygiene Society) features the letters 'BOHS' in a bold, white, sans-serif font. The letter 'O' is stylized with a white circle inside it, set against a dark blue background.

British Occupational
Hygiene Society

The Chartered
Society for Worker
Health Protection

P404 Proficiency Qualification

Clearance Testing & the Requirements of a Certificate for Reoccupation

Course Syllabus

P404 Proficiency Module Syllabus

Clearance Testing & the Requirements of a Certificate for Reoccupation

Teaching Aims

To provide candidates with the theoretical knowledge and practical ability to undertake all four stages of the clearance test including that of the decontamination unit (DCU) and the issuing of a certificate for reoccupation and a DCU clearance certificate.

Prior Knowledge and Understanding

Candidates for this course are expected to be aware of HSG 248 Asbestos: The Analysts' Guide (July 2021), and in particular Chapter 6: Site clearance and certification. Candidates will also be expected to have prior experience of undertaking clearance testing including air sampling, fibre counting and issuing certificates for reoccupation.

In addition, candidates are expected to have had training to cover the core competencies outlined within the foundation material detailed within Table A9.1 of HSG248 Asbestos: The Analysts' Guide (July 2021). This may be achieved by In-house learning or through the P400 foundation module.

This course also has a pre-requisite that all candidates must have taken the BOHS P403 module - Air Sampling and Fibre Counting (PCM) (P403 and P404 courses with their examinations either run concurrently or as a combined course can be deemed as meeting this requirement).

Learning Outcomes

On completion of this module, the candidate will be able to demonstrate the correct method for:

- Understanding and accurately assessing all four stages of the clearance process
- Identifying when faults are present and provide direction to the licensed contractor to rectify them
- Understanding and utilisation of all safety controls including use of RPE/PPE and personal decontamination
- Collecting and recording suitable and sufficient contextual information and photographs and provide comprehensive certificates for reoccupation and clearance certificates for DCUs.

Content

The syllabus is structured into eight sections:

	Time Allocation
1 Role of the Analyst	10%
2 Stage One	15%
3 Stage Two	25%

4	Stage Three	15%
5	Stage Four	5%
6	Certificates and reporting results	10%
7	DCU clearance testing	15%
8	Quality control	5%

Note:

Reference is made in this syllabus to HSE guidance and other documentation. This list may not include the most up-to-date relevant publications from HSE and other sources and is intended as guidance for candidates only.

1 Role of the Analyst in Clearance Testing (10%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate understands the personal qualities of resilience and integrity required to ensure the standards of clearance testing are maintained.

This section will also provide suitable training and review of relevant documentation to ensure that the candidate understands the legal framework, legislation, and guidance pertinent to clearance testing.

Training should ensure that candidates understand the purpose of their role and the importance of accurate and comprehensive reporting.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 1.0.1 Appropriate detailed knowledge of HSG248 (1), CAR 2012 (2) and L143 ACOP (3) with emphasis on the responsibilities and legal duties of all roles involved and to understand their individual duties under Health and Safety at Work Act to carry out their work diligently so as not to create danger to others.
- 1.0.2 To understand the different stages which comprise of the clearance testing process and to demonstrate an understanding of how to deal with failings of any stage.
- 1.0.3 To be able to stand firm and justify their professional judgement against foreseeable pressures, and the need to ensure adequate time and resources are available.
- 1.0.4 To explain the concepts of clearance work in and beyond enclosures, limiting contamination, transit routes etc.
- 1.0.5 To understand the contextual and other information to be gathered during the four-stage clearance.
- 1.0.6 To understand current standards/practices and be able to inspect both licensed and non-licensed work for clearances and be able to recognise compliance and non-compliance in licensed contractor work.

2 Stage One (15%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is capable of identifying all the checks required as part of clearance testing stage one. In addition, the conditions necessary for successful completion of the stage and actions required to rectify any faults found.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 2.0.1 The practical implications of CAR along with the requirements for and use of plans of work (POW), method statements, health and safety files, supervision.
- 2.0.2 Understanding the analyst's role in relation to CDM 2015 (second contractor triggers health and safety file requirements – integrate with POW etc).
- 2.0.3 To be able to make effective use of the licensed contractors' POW and method statements etc. for preparing own POW and scoping the four stage clearance.
- 2.0.4 A detailed knowledge of enclosure construction, air flow and ventilation, and in particular be able to identify faults in enclosures and DCUs.
- 2.0.5 To understand the use of CCTV and viewing panels to assess conditions before entry along with removal work equipment, and that required for assisting with the clearance.
- 2.0.6 To understand and know the circumstances for using PPE/RPE, the use of own clothing, transit arrangements, primary and full decontamination, and the use of DCUs.

3 Stage Two (25%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is capable of identifying all the checks required as part of clearance testing stage two and in addition, the conditions necessary for successful completion of the stage and actions required to rectify any faults found.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 3.0.1 To be able to decide when to proceed/continue with a visual inspection of a licensed work area.
- 3.0.2 To understand visual cleanliness standards and be able to assess them.
- 3.0.3 To understand the analyst's role and tasks (distinct from a contractor's supervisor in relation to cleaning and decontamination).
- 3.0.4 To understand the need for appropriate comfort and anti-fatigue measures along with the breaks required associated with the different types of RPE.

- 3.0.5 To understand the need to work safely and to decontaminate oneself and equipment after exit from contaminated areas.
- 3.0.6 Understand the importance of recording detailed contextual information.

4 Stage Three (15%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is capable of identifying all the checks required as part of clearance testing stage three and in addition, the conditions necessary for successful completion of the stage and actions required to rectify any faults found.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 4.0.1 Be able to set up an air sampling kit for fibre monitoring for clearance certification.
- 4.0.2 To understand the problems and challenges presented by the methods prescribed for air sampling and fibre counting.
- 4.0.3 To be able to demonstrate the ability to carry out the following tasks:
- Correct use of sampling heads/cowls/filters/rotameters and sampling pumps
 - Calibration of sampling rate
 - Use of flowmeters(s), flow rate correction
 - Appropriate locations for samples to be taken
 - Dust disturbance techniques and locations
- 4.0.4 To prepare microscope slides following sampling.
- 4.0.5 To be able to set up a phase contrast light microscope and demonstrate the required checks before use.
- 4.0.6 To demonstrate an understanding of the airborne clearance limit, especially how to deal with a failing of this stage and quality control tasks such as counting field blanks.
- 4.0.7 To understand and be able to apply the fibre counting rules consistently, in practice, to RICE and WHO standards.
- 4.0.8 To understand how to calculate fibre concentrations, fibre densities, limit of quantification, and results for pooled samples.

5 Stage Four (5%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is capable of identifying all the checks required as part of stage four clearance testing and in addition, the conditions necessary for

successful completion of the stage and actions required to rectify any faults found.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 5.0.1 A detailed knowledge of the areas to be inspected after dismantling of the enclosure and conditions which need to be satisfied.
- 5.0.2 To understand and know the circumstances for using PPE/RPE.
- 5.0.3 To understand and know the circumstances where remediation is required and the need for additional enclosures etc.

6 Certificates and Reporting Results (10%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is competent and capable of producing a certificate for reoccupation and then communicating the results appropriately.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 6.0.1 The requirements if ISO 17025 (4) for the production of test reports to ensure that all required information is included.
- 6.0.2 The importance and significance of producing accurate and adequate information within certificates.
- 6.0.3 The importance of recording detailed contextual information when completing each stage of the clearance and taking suitable and sufficient number of photographs.
- 6.0.4 Understand how to communicate results to an uninformed and informed client and what the results mean for them.
- 6.0.5 To be able to appreciate the requirements and report to a range of client types both in writing and verbally and explain what the results mean to them.

To be able to complete a CFR and DCU clearance report as in the templates in Appendix A6.1 and A6.2 of HSG 248 (1) including all the relevant contextual information.

- 6.0.6 Be aware of the non-licensed work certificate of cleanliness (ACOP L143 paragraphs 464–467).

7 DCU Clearance Testing (15%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate is capable of identifying all the necessary checks and procedures to be followed to undertake DCU clearance testing and in addition, the

appropriate timing of when this testing can be carried out along with the information required to produce the relevant certificate.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 7.0.1 To understand the areas to be inspected, the conditions required, the visual cleanliness standards and be able to assess them.
- 7.0.2 To understand the access and egress arrangements as part of the inspection process.
- 7.0.3 To understand and demonstrate the correct use of PPE, the need to work safely and appropriate locations to decontaminate oneself and equipment.
- 7.0.4 Understand the importance of recording detailed information and use of photographs for reporting.
- 7.0.5 To understand and be able to apply the fibre counting rules consistently, in practice, to RICE and WHO standards.
- 7.0.6 To understand how to calculate fibre concentrations, fibre densities, limit of quantification, and results for pooled samples.

8 Quality Control (5%)

This section will provide suitable theoretical knowledge and practical training to ensure that the candidate has an understanding of quality control requirements.

In order to achieve this the candidate must be able to demonstrate both their knowledge and practical ability in the following:

- 8.0.1 To be able to outline the difficulties of result consistency and the part played by UK and international schemes such as RICE and accreditation by UKAS to ISO 17025 (4) and other similar standards.
- 8.0.2 To understand the importance of internal and external audits and quality systems for reliability and accuracy and their own role in the system.
- 8.0.3 To be able to inspect and prepare/mount filters and plan for post-sampling handling and quality control tasks such as counting blank filters.
- 8.0.4 To understand the limitations on the numbers of samples which can be analysed and the requirements for additional quality control measures.

References and Further Reading

- 1) HSG248 (July 2021) Asbestos: The Analysts' Guide, HSE
- 2) Control of Asbestos Regulations (CAR) 2012
- 3) L143 (2013) Managing and working with asbestos. Control of Asbestos Regulations 2012, Approved Code of Practice and Guidance, HSE
- 4) ISO 17025 (2017) General requirements for the competence of testing and calibration laboratories

- 5) HSG247 (2006) Asbestos: The licensed contractor's guide, HSE
- 6) Guidance Note HSG210 (2012) Asbestos Essentials, HSE
- 7) HSG53 (2013) Respiratory protective equipment at work: A practical guide, HSE

Course Length

This course will require at least **11** hours of study time, of which at least **9** hours will be taught (teaching and practical assessments) and **2** hours will be independent (in the candidates' own time).

Examinations and Assessment

Candidates are required to pass all of the following parts (A, B and C below) to be awarded this qualification.

A The Practical Assessment

The practical assessment must be carried out by the Tutor during the relevant part of the course for all candidates. This is to ensure that every candidate can demonstrate their individual ability and correct method for thoroughly reviewing an enclosure, locating, and taking air samples and the correct use of PPE and RPE.

The practical assessment includes:

- Full procedure for taking air samples
- Use of PPE and RPE and personal decontamination
- All four stages of the clearance procedure and issuing of a certificate for reoccupation

Further information about the practical assessment is published in the P404 Practical Assessment Guidance document.

B Written Examination 1

This is an open-book examination comprising of approximately 35 (140 marks) short-answer questions illustrated by photographs and diagrams as appropriate to be answered in 120 minutes.

The examination covers sections 1, 2 and 3 of the syllabus with achievable marks in proportion to the time allocation given on the front page of the syllabus and is overseen by a BOHS invigilator.

The overall pass mark is 55% with a requirement to reach at least 45% of the available marks in each section of the syllabus.

Further information is available in the P404 Examination Guidance document.

C Written Examination 2

This is an open-book examination comprising of approximately 35 (140 marks) short-answer questions illustrated by photographs and diagrams as appropriate to be answered in 120 minutes.

The examination covers sections 4, 5, 6, 7 and 8 of the syllabus with achievable marks in proportion to the time allocation given on the front page of the syllabus and is overseen by a BOHS invigilator.

The overall pass mark is 55% with a requirement to reach at least 45% of the available marks in each section of the syllabus.

Further information is available in the P404 Examination Guidance document.

Certification

Candidates who pass all the parts (A, B and C) within 12 months will be awarded a:

(P404) Proficiency Certificate in Clearance Testing and Requirements of a Certificate for Reoccupation

Related Courses

Further courses which would be beneficial to candidates following this career path:

- P404 Clearance Testing and the Requirements of a Certificate for Reoccupation Refresher at appropriate intervals
- P401 Identification of Asbestos in Bulk Samples (PLM)
- P402 Surveying and Sampling Strategies for Asbestos in Buildings
- P402RPT Report Writing for Asbestos Surveys
- P403 Air Sampling and Fibre Counting (PCM)
- P405 Management of Asbestos in Buildings