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**BOHS** British Occupational Hygiene Society

Certificate of Operational Competence in Occupational Hygiene

and

International Certificate in Occupational Hygiene Qualification Guide

PQC-POL003 Version 1.0

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## **1.** Qualification Overview

## 1.1 Qualification Introduction

The Certificate of Operational Competence in Occupational Hygiene and the International Certificate in Occupational Hygiene are the entry level professional qualifications. Award of either of these certificates qualifies the holder to become a Licentiate Member of the Faculty of Occupational Hygiene, and demonstrates knowledge and competence in the broad principles and practice of occupation hygiene.

### 1.2 Entry Requirements and Pathways

There are two routes to this qualification, depending on a candidate's previous qualifications and experience. For all three pathways, candidates are expected to have;

- At least 3 years of comprehensive occupational hygiene practice
- Strong science, mathematics or engineering education background at degree level or equivalent.

Pathway 1 is for those candidates who hold six occupational hygiene modules. Candidates must have completed the four compulsory modules, along with a further two optional modules:

Compulsory Occupational Hygiene Modules	Optional Occupational Hygiene Modules
W501 Measurement of Hazardous	W502 Thermal Environment
Substances	W504 Asbestos and other Fibres
W503 Noise and its effects	W506 Ergonomics Essentials
W505 Control of Hazardous Substances	(including Manual Handling and DSE)
W507 Health Effects of Hazardous Substances	

Exemptions apply for candidates who hold other qualifications – see appendix 2 for further details.

Candidates taking this pathway need to complete two components in order to achieve the qualification: a Personal Learning Portfolio and a Professional Discussion.

Pathway 2 is for those candidates who hold a BSc or postgraduate degree in occupational hygiene that is accredited by BOHS. Candidates taking this pathway need to complete two components in order to achieve the qualification: a Personal Learning Portfolio and an Professional Discussion.

This pathway is not available to candidates outside of the UK.

### Additional Option

A further option is available for candidates holding a non-accredited degree or a different set of qualifications. Candidates wishing to use this option will be asked to sit the core written examination (see further details of the exam in appendix 1).

### 1.3 Completing the qualification

The allowed timeframe for this qualification is 18 months from the point of acceptance, and candidates are advised to check the BOHS website for information to help them with planning their time effectively.

Applicants should note that some of the components of this qualification are assessed online, and therefore access to a computer and the internet is essential.

#### 1.4 Application

Applicants may request to enter for this qualification by submitting a completed application form. The form is located on the BOHS website. Applicants should follow the instructions for completion carefully. Applications are considered on an academic and relevant educational background along with their experience to ensure that entry requirements have been fully met, using all the information provided. Candidates will be sent an email to inform them of the outcome of their application and the relevant pathway to complete the qualification.

There is no charge for the application. Successful applicants are liable to pay fees for each component as they progress through their qualification pathway. A full list of current fees is available on the BOHS website.

## 1.5 Using the Online System

Candidates will create their own account for the <u>www.bohs-hub.org</u> website which will then give them access to;

- Pay for each qualification component
- Access templates for the compilation of the PLP
- Submit the Personal Learning Portfolio (if applicable)
- View feedback comments and assessment results
- Book their professional discussion appointment

## 2. Personal Learning Portfolio

The Personal Learning Portfolio is a structured record of the candidate's workplace learning, practical experience and skills development.

## 2.1 Preparing a PLP

## 2.1.1 Objective of the PLP

To prepare a portfolio (a collection of evidence) that demonstrates the breadth and depth of practical occupational hygiene experience.

## 2.1.2 Contents of the PLP

The content of the PLP should show and address core competencies of the

qualification The PLP should comprise of:

- Experience Records. An example is included in appendix 3
- > Additional Learning records. An example is included in appendix 4.

For both the Experience Records and the Additional Learning Records, candidates should include a minimum of five and a maximum of ten items.

- Candidates should provide a total of 3 reports. One must cover assessment and control of exposure to hazardous substances (eg. subject material included in the international modules, W501, 505 and 507 or equivalent technical qualifications) and one, the assessment and control of exposure to noise in the workplace (eg. W503).
- The third report may cover any <u>other</u> topic listed in the Certificate Core Competencies (see Appendix 1).
- Certificate of authorship for each Report. The template for this can be downloaded from\_ www.bohs-hub.org to be completed and added to the submission.

### 2.1.3 Examples of Items to Include

Candidates can utilise a variety of different types of item as evidence within the portfolio. The following list sets out examples of what these might be.

- A Diary of relevant experience of practical application in all of the relevant subject areas. This will include records of personal input into surveys, reports etc. An example of a record sheet for recording this information is given in appendix 3.
- Evidence of any relevant additional learning such as meetings and training courses attended, further reading in subject areas etc. An example of a record sheet for recording this information is given in appendix 4.
- Copies of three relevant reports produced by the candidate. The reports must cover three different areas of occupational hygiene practice (see 2.1.2 above). Each report must demonstrate an all-round competence in Occupational Hygiene, covering recognition of the hazard to health, evaluation of the risk and control. This should include some form of measurement or other assessment to a defined standard and interpretation of the results including discussion of any influencing factors.
- These reports will be assessed as an integral part of the PLP and candidates may be given feedback concerning the extent to which core competencies (see Appendix 1) are demonstrated.

## 2.1.4 Format

The PLP should be compiled in an electronic format, into either a Microsoft Word or a PDF document. The online submission facility allows either one document or a collection of individual documents to be submitted. The submission system allows a maximum of 1mb per document; candidates wishing to submit any documents larger than this should break the contents in separate documents and number them accordingly.

## 2.2 Submitting a PLP

Having completed the PLP, candidates will submit this for marking through www.bohs-hub.org. Instructions on how to create an account and how to make a submission is included in the qualification acceptance email.

The PLP must be submitted in either Microsoft Word or a PDF format and use the candidate's name and as the filename – e.g. smithj1.pdf, smithj2.pdf The PLP may be submitted as a series of documents (see section 2.1.4) labelled with sequential numbers following the candidate's name e.g. smithj1.pdf, smithj2.pdf etc.

Full details of how to submit the PLP files is on the PLP submission faculty on the <u>www.bohs-hub.org</u> website.

### 2.3 Assessment and Results

The PLP is allocated to an assessor who will review the submission.

The assessment of the PLP considers the quality of the individual items and evidence of the application of the core competencies at a practical level.

If the PLP is assessed as acceptable, the candidate will be notified through email that they have passed this component. The email will contain information about the next stage of the qualification which will be a professional discussion.

If the PLP is assessed as unacceptable in terms of content or quality, or if the assessor requires further information to evaluate the PLP, the candidate will be contacted directly through the <u>www.bohs-hub.org</u> website and asked to upgrade the submission. Candidates will be expected to correct any technical errors that the assessor identifies in their reports and to amend any sections where the text is not clear. Candidates are given the opportunity for two further re-submissions (constrained by the overall 18-month timescale of the qualification) before the application will lapse and the PLP submission and assessment fee will be forfeited.

PLP assessments may be shared with professional discussion panels and may inform the discussion the examiners have with the candidate during the discussion.

### 2.4 The Next Step

Once a candidate has successfully completed this component, they will move on to book for a professional discussion. Instructions on how to do this will be sent by BOHS through email.

## 3. Professional Discussion

The final component required to achieve this qualification is the professional discussion. This section explains how to book your professional discussion, how to prepare for it and what to expect on the day.

Candidates should be mindful of the fact that the total timeframe for completing this qualification is 18 months from the date of acceptance, and therefore they should plan their time carefully to ensure that they complete the professional discussion within this timeframe.

### 3.1 Booking your Professional Discussion

Once a candidate has received a successful assessment of their Personal Learning Portfolio, they receive notification from BOHS advising them to proceed onwards to book the professional discussion.

Candidates book the professional discussion through the <u>www.bohs-hub.org</u> website, which they have used previously in this qualification to make assessment submissions. Full instructions on how to do this will be included in the notification email from BOHS.

The professional discussion is conducted online, through a video conference facility. BOHS will provide candidates with the appropriate links to set this up on their computer. Candidates will need to have access to a computer with a microphone or headset (which is preferable) and a camera (either built in or as a peripheral device), a good internet connection and a private room or office in which to conduct the professional discussion.

Once the appointment has been booked, the candidates receive an automatic confirmation email.

## 3.2 The Professional Discussion

### 3.2.1 Overview

For candidates of the Certificate on Operational Competence in Occupational Hygiene, the professional discussion will take about 60 min and will include reference to UK legislation as appropriate. For candidates of the International Certificate in Occupational Hygiene, the professional discussion will also take about 60 minutes and will include reference to International exposure limits and regulations as appropriate.

### 3.2.2 Purpose

The purpose of the professional discussion is to:

 assess whether the candidate has the necessary practical skills to apply that knowledge in real-life practical situations and by doing so can provide competent occupational hygiene advice

The purpose of the professional discussion is NOT to;

- retest technical knowledge
- assess how the candidate is performing in his/her current job

### 3.2.3 The Examiners

Examiners are appointed by BOHS based on their professional background. The examiners are all qualified Occupational Hygienists with a wide range of experience and hold the Diploma of Professional Competence in Occupational Hygiene.

Wherever possible the oral examination panel is made up of three members, but exceptional circumstances may dictate that only two panel members are present. In all cases there is a nominated Chair of the panel.

### 3.2.4 Exam Duration

The oral examination takes approximately 60 minutes in total.

## **3.2.5** Questions within the Professional Discussion

Candidates should expect to be questioned on the four compulsory topics and at least two of the optional topics (see table on page 3). In each of the subject areas, the questioning may, where relevant, test the candidate's ability to:

- Analyse the problem and recognise hazards that may exist
- Carry out practical assessments of risks, including appropriate equipment selection
- Where appropriate carry out necessary hygiene measurements and select and operate any sampling or measurement equipment correctly
- Calculate and interpret measurement results as appropriate
- Understand the basics of control (hierarchy) and be able to assess existing controls (LEV systems/RPE/PPE)

Questions will be generally based around real life situations. The scenarios will cover a broad spectrum of hazards and are designed to test the underpinning knowledge and practical ability of the candidate.

### 3.3 Results

Results are issued to the candidates via email within two weeks of attending the professional discussion. If the candidate has passed the professional discussion, they receive notification by email followed by the certificate of successful completion of the qualification by post.

If the candidate has not passed the professional discussion, they will receive information from BOHS by email detailing how to rebook the professional discussion. In this case, feedback is given in order to help the candidate prepare for a further attempt. Candidates will be allowed to retake the professional discussion for a two further attempts (at the current fee for an oral examination) provided that they remain within the 18-month allowable timeframe for the qualification. If candidates exceed the 18-month allowable timeframe, or are unsuccessful after their third attempt at the professional discussion, then the candidate will be required to reapply for the qualification.

### 3.4 Progression to the Diploma

Candidates holding either the BOHS Certificate of Operational Competence in Occupational Hygiene or the International Certificate in Occupational Hygiene may progress professionally to the Diploma of Professional Competence in Occupational Hygiene. More information about the pathways to this qualification can be found at <u>www.bohs.org</u>

### Appendix 1: Core Competencies of the Cert OH and ICert OH Qualification

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At Certificate level, candidates are required to demonstrate knowledge across the full breadth of occupational hygiene practice. This includes, but is not confined to, subject areas covered in the W500 series of International Occupational Hygiene modules. Within the core topics of hazardous substances and workplace noise, candidates are expected to be able to recognise hazards, carry out on-site environmental monitoring, interpret exposure data, assess health risks and propose appropriate and viable control strategies. In other occupational hygiene topic areas, candidates are expected to demonstrate an understanding of hazards, health risk assessment (including measurement methods if appropriate) and risk reduction principles. In addition to technical skills, candidates should be able to demonstrate their ability to manage health and safety risks in the workplace, to communicate effectively via technical reports and other means, and to understand the principles of ethical behaviour in occupational hygiene. The table in the following pages presents an overview of the knowledge and skills required of holders of the Certificate of Operational Competence in Occupational Hygiene.

Торіс	Competency area	Required competency	Further information
Hazardous	Knowledge of Health	Understand principles of toxicology	Provide definitions of commonly used
substances	Effects		toxicological terms
		Describe the main routes by which	Identify factors which influence the absorption,
		hazardous substances can enter the	distribution, storage and elimination of
		body	hazardous substances in the body
		Be aware of the main sources of information	Provide examples of information sources
		on	
		hazardous substances and processes	
		Describe the main features of the principal	Identify factors which influence the degree of
		target	harm to target organs
		organs affected by hazardous substances at	
		work	
		Describe the main routes of exposure and	Give examples for commonly
		toxic and health effects for hazardous	encountered hazardous substances
		substances	
		commonly encountered in the workplace	

	Be aware of the relevance of epidemiology to	Carry out basic interpretation of the results
	occupational hygiene	from
		epidemiological studies.

Торіс	Competency area	Required competency	Further information
	Practical	Select appropriate equipment to measure	Relate to validated sampling methods
	skills:	specific	
	Measuremen	airborne contaminants	
	t	Understand the analytical laboratory	Give examples of specific sampling methods
		requirements for collected air samples	and
			related analytical requirements
		Appreciate the nature of sampling errors and	Describe quality assurance processes to
		how	minimise
		to minimise these	error in measurement procedures
		Devise suitable sampling strategies for	Be aware of non-inhalation routes (including
		specific exposure scenarios	ingestion) and methods for measuring surface
			contamination, dermal exposure
	Technical	Describe how airborne contaminants are	Give relevant examples of specific
	knowledge: Risk	generated by industrial processes, how this	processes and contaminants
	Assessment and	impacts on the control strategy, and how	
	Control	control	
		solutions can thereby be optimised	
		Recognise the range of approaches to risk	Be able to apply the hierarchy of control to a
		reduction embodied in the hierarchy of control	given
			exposure scenario
		Describe the meaning of "adequate control",	Relate to UK regulatory requirements (and
		particularly in relation to personal exposures	local/national legislation for ICertOH)
		Understand the importance of design (and	Give example of processes where risk
		human factors) considerations in terms of	can be reduced by good design and/or
		the workplace, process, and plant, as a	ergonomics considerations
		means of reducing	
		occupational exposures;	

Describe the principal elements of a local exhaust ventilation system and give examples of typical installations.	Know how to carry out the necessary measurements to assess whether a local exhaust ventilation system is effective and operating to
Understand principles of LEV system design (hoods, ducting, fans, filters, exhaust discharge)	the design specification Recognise design defects in local exhaust ventilation systems and understand how these
Describe the main features of personal protective equipment for hazardous substances	may be overcome Describe how PPE programmes can be used in an effective manner to control risks

Topic	Competency area	Required competency	Further information
		Recognise the impact that control measures	Understand the need to take a holistic
		may	approach
		have on other workplace hazards.	to the design of control solutions.
Noise	Knowledge: Health	Describe the consequences to health and	Differentiate between NIHL and effects such
	Effects	wellbeing of excessive exposure to noise	as
		5 1	TTS and tinnitus
	Knowledge: Physics	Understand nature of sound	Define key acoustic terms and
	of Sound		understand relationships between
			parameters of sound
			pressure, intensity and frequency
		Understand how sound propagates in	Describe different sources of noise and effects
		workplaces	of
			source/receiver distance on noise level
	Practical	Describe instrumentation used to measure	Describe key features of sound level meters
	skills:	workplace noise and exposures	and
	Measuremen		personal dosimeters
	t	Describe how measurement instrumentation	Describe a noise survey for a typical
		can	workplace,
		be used to assess workplace noise risks	ideally involving use of both SLMs and
		Understand surrant workplass poiss exposure	Be able to correctly quote expectine extien
		of deriver and current workplace horse exposure	and limit values and describe their
		stanuarus	
		Understand the presses for evoluating	assessing risks
			etandarda
		environmental noise nuisance	statuatus
	Technical	Understand the principles of poise reduction at	Cive examples of how poice can be reduced at
	recinical		ove examples of now noise can be reduced at
		source	source in common industrial processes

knowledge: Risk	Describe options for controlling noise	Give examples of good enclosure design,
Control	between the source and the receiver	use of damping, vibration isolation,
		reduction of reverberant noise, acoustic
		treatment and
		refuges, etc
	Describe how ear protection can reduce	Describe selection process for ear protection
	workplace noise risks	and
		key features of different ear protector types
	Describe principal features of an effective	Describe processes for managing noise risks
	hearing conservation programme	in the workplace via quiet purchasing policies
		survey data, equipment modification and
		maintenance
		and use of audiometry

Торіс	Competency area	Required competency	Further information
Vibration	Hazard recognition	Describe typical sources of hand-arm	Give examples of occupations with an
		vibration (HAV) hazard in the workplace	elevated HAV exposure risk. Describe typical
		and the health	symptoms of
		effects of HAV exposure	HAVS and Raynaud's phenomenon
		Describe typical sources of whole-body	Give examples of occupations with an
		vibration (WBV) hazard in the workplace	elevated WBV risk. Describe known health
		and the health	effects of
		effects of WBV exposure	excessive WBV exposure
	Risk assessment	Describe techniques for measuring HAV levels	Include risk assessment techniques that do
		in	not
		the workplace and estimating HAV exposure	involve direct measurement of HAV
		Describe techniques for measuring WBV levels	Include risk assessment techniques that do
		in	not
		the workplace and estimating WBV exposure	involve direct measurement of WBV
	Risk reduction	Identify practical measures for reducing risks	Include risk reduction via adaptation to plant
		from HAV and WBV exposure	and equipment, alternative work processes,
			management of exposure and role of PPE
Asbestos	Hazard recognition	Understand the main health hazards	Describe the nature of respiratory diseases
		associated with asbestos	associated with asbestos exposure. Describe
			other health effects linked to asbestos
		Describe the properties of asbestos	Identify the main commercial asbestos types,
		and its historical uses	their different mineral backgrounds and the
			uses to
			which asbestos has been put
		Describe typical applications for asbestos and	Give examples of where ACMs can be found in
		asbestos-containing materials (ACMs) in buildings	buildings

Risk assessment	Understand the rationale and practice of	Describe in general terms how an asbestos
	building asbestos surveys	survey
		can be carried out whilst minimising risks
		to the surveyor and building occupants
	Identify factors that affect the risk of fibre	Contrast the fibre release risk for various types
	release from ACMs	of ACM, from asbestos cement (low) to
		sprayed asbestos coatings (high) and give a
		rational
		explanation for differences

Торіс	Competency area	Required competency	Further information
		Identify options for managing risks from ACMs	Describe non-removal options to manage
			risks from ACMS, including encapsulation
			and
			condition monitoring
	Risk control	Be aware of current good practice for the safe	Describe features of a typical asbestos
		removal of ACMs and remediation of areas	removal operation and measures required to
		from	minimise
		which ACMs have been removed	risks to operators and building occupants
		Understand principles of airborne asbestos	Describe how to collect airborne fibre samples
		fibre measurement and clearance testing	and how to evaluate samples by phase
			contrast microscopy
Ergonomics	Hazard recognition	Understand the main sources of ergonomics	Describe the anatomical, physiological and
		risks in the workplace	psychological factors that determine the 'fit' of
			the work environment and work equipment to
			the human operator. Describe effects of
			mismatches
			on health and task performance.
		Understand the causes of upper limb and	Give examples of typical tasks with an
		other musculoskeletal disorders	elevated
			risk of musculoskeletal injury and outline the
			risk factors involved
	Risk assessment	Describe the principles of risk assessment	Identify the main considerations within a
		as applied to manual handling activities and	manual handling risk assessment (task,
		DSE work	individual, load, environment) and how these
			can apply in a risk assessment. Identify the
			main considerations in a
			DSE risk assessment.

Risk reduction	Understand the principles of good workstation design	Give examples of practical application of good ergonomic design in the workplace – e.g at DSE workstations, control rooms, vehicle cabs etc.
	Identify the key options for reducing	Give examples of reducing manual handling
	manual nanuling injury risks	environmental changes and risk
		management
		measures.

Торіс	Competency area	Required competency	Further information
		Understand the importance of environmental	Give examples of how changes to noise,
		factors in reducing ergonomics risks in the	lighting, thermal and other environmental
		workplace	parameters can
			reduce ergonomics risks.
Thermal	Hazard recognition	Understand the nature of thermal strain on the	Describe the body's physiological and
environment		body	behavioural responses to extremes of hot
			and cold, and examples of health effects
			caused by exposure to
			extreme thermal environments
		Identify sources of thermal stress in the	Describe the main sources of heat stress
		workplace	(radiant heat, warm and/or humid air, hot
			surfaces, sunlight, confined spaces, heavy
			work schedules etc) and cold stress (low
			temperatures, high air velocity, water
			immersion etc). Understand the contribution
			of metabolic heat and clothing
			insulation to thermal stress.
		Understand the concept of thermal comfort in	Identify the main factors causing thermal
		the	discomfort in indoor workplaces
		workplace	
	Risk assessment	Understand the principles of thermal	Describe instrumentation to measure air
		environment measurement techniques	temperature, humidity, radiant heat and air
			movement and explain how they are used
		Describe the derivation and use of thermal	Define WBGT, Required Sweat Rate and other
		indices	commonly used indices of heat stress (eg.,
			Effective Temperature, Heat Stress Index).
			Define Wind Chill Index or other indices of
			cold stress.
			Give practical examples of how thermal indices

	can be applied in real situations.
Understand the principles of using thermal	Outline the content of ISO 7243 or ISO 7933 as
indices to assess risk	a means of estimating heat stress. Include
	reference to the individual's metabolic rate and
	clothing regime.

Торіс	Competency area	Required competency	Further information
		Describe principles of assessing environments	Outline the content of ISO 7730 and use of
		in terms of thermal comfort/ discomfort	PMV and PPD indices to assess the
			likelihood of an environment being assessed
			as thermally
			comfortable.
	Risk reduction	Describe typical measures that can be used to	Identify engineering and administrative
		reduce risks from heat stress	controls that can be used to mitigate risks
			from heat
			stress. Identify appropriate PPE and its
			limitations.
		Describe typical measures that can be used to	Identify engineering and administrative
		reduce risks from cold stress	controls that can be used to mitigate risks
			from cold stress. Identify appropriate PPE
			(clothing insulation) and
			its limitations.
		Describe typical measures that can be used to	Identify practical measures that can be used to
		reduce the likelihood of thermal discomfort in	adjust thermal parameters in moderate
		а	environments
		workplace	
Lighting	Hazard recognition	Understand the effects of workplace lighting	Identify health effects (eyestrain, migraines
		on health and work efficiency	etc) and discomfort issues (glare, etc) linked
			to poor workplace lighting. Identify adverse
			effects on work efficiency linked to poor
			lighting (accidents,
			distraction, reduced productivity etc)
	Risk assessment	Describe the methodology for workplace	Describe features of a light meter and outline
		lighting investigations	how
			this can be used to monitor lighting levels
			in a workplace.

		Interpret workplace illuminance data in terms of risks to health and work efficiency	Indicate information sources for acceptable illuminance values for workplaces
	Risk reduction	Describe measures to optimise the lighting environment	Indicate principle of good lighting practice in workplaces
Biological hazards	Hazard recognition	Understand the health effects from exposure to hazardous biological agents in the workplace	Explain the health effects associated with legionella spp., blood borne pathogens, moulds and fungi, animal-related allergens and zoonoses

Торіс	Competency area	Required competency	Further information
		Identify environments and workplaces	Identify areas where legionella spp., blood
		where hazardous biological agents may	borne pathogens, moulds and fungi, animal-
		be present	related allergens and zoonoses can present
			an exposure
			risk
	Risk assessment	Describe the principles of assessing risks from	Identify typical sources of legionella infection
		exposure to legionella spp.	in water systems, risk factors and the rationale
			for
			assessing risks
		Describe the principles of assessing risk from	Identify typical workplaces where blood borne
		exposure to other workplace biological agents	pathogens, moulds and fungi, animal-related
			allergens and zoonoses may present a risk and
			explain the rationale for assessing these risks
	Risk reduction	Identify risk reduction measures for legionella	Describe typical legionella risk management
		spp.	measures for domestic and industrial hot and
			cold
			water systems and other specific risk areas
		Identify risk reduction measures for other	Describe typical risk management measures
		workplace biological agents	for
			blood borne pathogens, moulds and fungi,
			animal- related allergens and zoonoses
Non-ionising	Hazard recognition	Describe the electromagnetic spectrum and	Identify the common characteristics of
radiation		identify the relative positions of various NIR	electromagnetic radiation types and rank
(NIR)		types within it	their position on the electromagnetic
			spectrum in
			terms of frequency or wavelength

Understand the health effects of various types	Describe the relationship between energy and
of NIR	frequency or wavelength and how this affects
	health hazard potential for the main NIR types.
	Identify the most significant health effects
	from exposure to ultraviolet, infrared,
	microwave and radiofrequency radiation. Refer
	to health effects from exposure to high levels
	of visible light (e.g.
	via lasers).

Торіс	Competency area	Required competency	Further information
	Risk assessment	Describe the principles of assessing risk from	Identify sources of information on
		exposure to NIR	exposure standards for various NIR
			types. Identify
			measurement instrumentation, if appropriate.
	Risk reduction	Identify risk reduction measures for NIR types	Describe typical risk management measures
			for NIR including engineering and
			administrative
			controls and use of PPE
lonising radiation	Hazard recognition	Describe the nature and sources of ionising	Identify typical workplace sources of $\alpha$ - and $\beta$ -
		radiation in the workplace	radiation, X-rays etc
		Understand the health effects of	Explain the fundamental difference between
		exposure to ionising radiation	ionising and non-ionising radiation in terms of
			potential effects on human health. Outline the
			main health effects from exposure to IR
	Risk assessment	Describe the principles of assessing risk	Outline instrumentation types for IR
		from exposure to ionising radiation	(contamination meters, dose badges etc) and
			how these are used in practice.
	Risk reduction	Identify the principles of risk reduction for	Describe typical risk management measures
		ionising radiation	for IR
			including engineering and administrative
Managamant akilla	Dianning and	Describe how to plan and execute	controls and use of PPE
widnagement skills		Describe now to plan and execute	busiens investigations and conduct of current
	resource	occupational hygiene fieldwork in an	nygiene investigations and conduct of survey
	management	efficient and cost- effective manner	work. Explain now decisions on sampling
			regime, number of samples, groups to be
			sampled and sample locations and duration
			are arrived at.
			Refer to statistical and economic
			considerations governing sampling

		frequency. Identify potential sources of error in fieldwork and how these can be minimised.
Team-working	Understand the benefits of team work and interaction with fellow professionals in occupational health and safety	Describe typical interactions with health and safety, occupational health and/or ergonomics

Торіс	Competency area	Required competency	Further information
			professionals and other occupational
			hygienists in
			the course of occupational hygiene
			investigations.
	Communication	Ability to prepare technical reports that	Prepare reports that are grammatically
	and interpersonal	are accurate and comprehensible to	correct, technically accurate and as concise
	skills	the client	as practicable. Take account of the report
			recipient(s) in arriving
			at the style and content of the report.
		Ability to communicate (orally and in	Indicate how details of technical
		writing) technical information on	occupational hygiene information can be
		occupational hygiene issues to all levels	communicated effectively to
		of personnel	stakeholders, including management,
			workforce, employee
			representatives etc.
	Ethics	Recognise situations in professional	Be aware of ethical issues in
		practice where ethical decisions need to	relation to competence, integrity of
		be made	behaviour,
			confidentiality and conflicts of interest
		Understand the imperative of working within	Be aware of the content of the Faculty Code of
		the BOHS Faculty of Occupational Hygiene	Ethics
		Code of Ethics (or equivalent national or	
		IOHA code for	
		ICertOH)	

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Paper 1		Paper 2	
Part 1A – 65 short answer questions to be answered in approximately in 2 hours 15 minutes.	3 hours in total	Part 2A – 65 short answer questions to be answered in approximately in 2 hours 15 minutes.	3 hours in total
Part 1B – 5 micro essay questions (from a choice of 8) to be answered in approximately 45 minutes		Part 2B – 5 micro essay questions (from a choice of 8) to be answered in approximately 45 minutes.	
The short answer questions in these two papers are based on the syllabi for the above modules.			
Short-answer questions can gain up to 4 points for a correct answer and 0 points for an incorrect answer or no answer. Micro essay questions can score up to 20 points each.			

# **4.** Appendix 2: Further Information about the Certificate Core Examination

To achieve a pass, it is necessary to obtain an average of at least 50% in each paper (70% or above in each paper for a credit)

### Appendix 3: Explanation of Exemptions to Entry Requirements

- 1.0 Holders of CoC Measurement of Hazardous Substances are exempt from the core module W501 and the associated section of their PLP.
- 2.0 Holders of CoC Noise are exempt from the core module W503 and the associated section of the PLP.
- 3.0 Holders of CoC in Control of hazardous substances are exempt from the core module W505 and one non-core module and their respective sections of their PLP
- 4.0 Holders of CoC in Health Effects of Hazardous Substances are exempt from the core module W507 and the associated section of their PLP.
- 5.0 Holders of CoC in Thermal Environment are exempt from the optional module W502 and the associated section of their PLP.
- 6.0 Holders of CoC Asbestos are exempt from the optional module W504 and the associated section of their PLP.
- 7.0 Holders of CoC in Ergonomics are exempt from the optional module W506 and the associated section of the PLP
- 8.0 Holders of CoC Legionella are exempt from an optional module and the associated section of the PLP

## Appendix 4: PLP Experience Record Example

Field	Sample
Current role/position	
Title of survey/project*	Heat stress survey in Copper Smelter
Date of survey/project	
Type of survey/project	Walk-through survey
Scope of survey/project	Identify potential heat exposure areas for future monitoring program
Personal involvement	Assisted the site hygienist during walk- through, prepared initial draft report
To which course module(s) does the survey/project relate	Thermal Environment, Asbestos
Limitations with the survey/project	Survey only conducted on one day. The ambient temperature was low for the time of year so may not have identified all critical areas. Senior foreman was on sick leave so we were not able to discuss the process with him.
Problems encountered/learnings	Exposed asbestos lagging identified during walkthrough. Immediate control action instigated. Site hygienist made significant changes to my draft report and discussed these with me. It was brutal but enlightening!!
Verification that work performed as stated	
Manager Name	Joe Bloggs
Manager signature	
Date	20/05/10

\*This could be a monitoring survey, walk-through survey, talk to operators/management, and development of a sampling strategy or safe operating procedure.

## Appendix 5: PLP Additional Learning Record Example

Field	Sample answers
Meeting / course name	Managing asbestos in premises
Date	19 <sup>th</sup> May 2010
Location	Cardiff
Learning outcomes/technical content	Covered the new HSE guidance – Managing Asbestos in Buildings that has replaced the existing MHDS100 surveyors guide. Speakers provided an overview of the new guidance, issues relating to reports, and surveys, litigation and insurance, management issues, the role of the CDM coordinator and the role of both UKAS and ABICS. Programme attached.
Duration	09.30 - 17.00
Key speakers	Ken Hill, Collette Willoughby and Martin Stear
Verification of attendance	
Manager Name	Joe Blogs
Manager signature	
Date	20/05/10