P604 Advanced Proficiency Qualification

Performance Evaluation, Commissioning and Management of Local Exhaust Ventilation Systems

Qualification Specification
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Section 1

About BOHS

BOHS - the Chartered Society for Worker Health Protection

BOHS is the Chartered Society for Worker Health Protection. Our vision is to create a healthy working environment for everyone by preventing exposure to hazardous substances in the workplace.

Founded in 1953, we have developed over the last 64 years into a highly respected and influential body on workplace health issues, working closely with organisations in the UK and overseas to promote our vision. We are a registered charity, professional society and a member of the International Occupational Hygiene Association which is recognised as a non-government organisation by the International Labour Organisation (ILO) and the World Health Organization (WHO).

We were awarded a Royal Charter in 2013 in recognition of our pre-eminent role in protecting worker health.

BOHS is a membership organisation, open to anyone who has an interest in workplace health issues, and we have over 1700 members in 60 countries.

BOHS qualifications – the quality choice

We are the leading awarding body in our field. Our UK courses and qualifications are recognised and respected by independent agencies such as the Health and Safety Executive (HSE) and the United Kingdom Accreditation Service (UKAS) and further afield by industry and employers worldwide. Over 50,000 people have taken one of our qualifications through our network of training providers which offer engaging, challenging and practical courses.

Our courses and qualifications are overseen by a team of highly experienced professionals who are dedicated to developing the competence and career opportunities for the many thousands of people who play a key role in protecting worker health, in diverse fields such as asbestos, legionella and control technologies.

Information about all our qualifications is available from our website: www.bohs.org/qualifications-training/bohs-qualifications/
Section 2

P604 at a glance

What is the objective?
To provide candidates with the knowledge and skills to commission new and existing LEV systems, to ensure that they are designed, installed and maintained to a standard where they effectively control airborne contaminants in the workplace.

Who is it for?
Anyone that is responsible for managing, commissioning and evaluating the performance of LEV systems. This could include commissioning engineers, maintenance managers and occupational hygienists.

What are the entry requirements?
Candidates must:
- Hold the qualification P601 - Thorough Examination and Testing of Local Exhaust Ventilation Systems.
- Have a detailed understanding of HSG258: Controlling Airborne Contaminants at Work.

What are the main subject areas?
- Hazardous substances and processes.
- Workplace control principles.
- Elements of ventilation systems.
- Performance evaluation and commissioning of ventilation systems.
- Evaluation of the assessment of control.
- Development of LEV management systems: installation and commissioning.

How long does it take?
Normally five days.

What level is it?
Level 5 in the BOHS qualifications framework.

How do candidates pass it?
Candidates must pass two parts within 12 months:
- Written examination.
- Commissioning report submission.
Section 3

Background to the qualification

BOHS aims to protect worker health through promoting the science and practice of occupational hygiene. By identifying and controlling health risks in the workplace, we can reduce the levels of occupational ill health.

Inhalable hazardous substances (e.g. wood dusts) are a big cause of ill health in the workplace, and if not controlled can lead to potentially fatal illnesses such as lung cancer. LEV systems are an effective method of drawing harmful contaminants out of the air, making it safer to breathe in and potentially saving many lives.

However, in order to work effectively an LEV system must be functioning properly. It is therefore important that an experienced professional carries out regular maintenance of LEV system equipment to ensure that it is working to its full potential.

BOHS’ LEV qualifications ensure that candidates have the skills and knowledge to design, test, commission and maintain LEV systems. P604 - Performance Evaluation, Commissioning and Management of Local Exhaust Ventilation Systems gives candidates the practical and theoretical understanding of how to fully commission or re-commission an LEV system, to ensure that it has been designed properly and can effectively control airborne contaminants in the workplace.
Section 4

Key features of the qualification

Objective
To provide candidates with the theoretical and practical knowledge to commission new and existing LEV systems, to a standard which reduces occupational ill health.

Target audience
This qualification is suitable for anyone that is responsible for managing, commissioning and evaluating the performance of LEV systems. This could include:

- Commissioning engineers.
- Maintenance managers.
- The assigned LEV lead in a company.
- LEV TExT engineers.
- Occupational hygienists.

It may also be suitable for those who wish to progress into these job roles.

Entry requirements
It is compulsory for candidates to have passed the qualification P601 - Thorough Examination and Testing of Local Exhaust Ventilation Systems before they can attend this course. This is because P604 expands on the knowledge learnt during P601; candidates must already have a good theoretical and practical understanding of how to thoroughly test, examine and maintain LEV systems before taking this advanced module.

It is also recommended that candidates hold the qualification P602 - Basic Design Principles of Local Exhaust Ventilation Systems, although this is not a compulsory pre-requisite.

Candidates must also have a good working knowledge of the contents of HSG258: Controlling Airborne Contaminants at Work.

Level
The level of a qualification indicates the relative complexity and depth of knowledge and skills required to attain the qualification.

This qualification is set at level 5 in the BOHS qualifications framework.
Fees
The examination fee for each candidate is published on the BOHS website: www.bohs.org/qualifications-training/examination-fees/
Section 5

Delivering the qualification

Teaching and learning time
The P604 course is normally conducted over five days, which comprises a minimum of 32 hours of learning time. This includes 24 hours teaching time and 8 hours independent study (in the candidate’s own time).

The course can be delivered more flexibly, such as one day per week, but should still include 24 hours of teaching time.

Tutors
The course should be taught by tutors who are experienced and qualified/certified LEV engineers or occupational hygienists. As a guide, tutors will typically have:

- At least three years’ current experience in commissioning and evaluating LEV systems;
- A recognised LEV qualification or a professional occupational hygiene qualification/certification such as:
  - BOHS Certificate of Competence (Control).
  - BOHS Certificate of Operational Competence (CertOH).
  - BOHS Diploma of Professional Competence (DipOH).

This list is not necessarily exhaustive or definitive.

Teaching resources
Training providers must have the following facilities and equipment:

- Example case studies of hazardous processes and their control options.

Support for teaching and learning
BOHS provides:

- Examination guidance for tutors, include sample examination questions.
- Report submission guidance for candidates and tutors.

Language
The examinations are provided in English only.
Section 6

Syllabus

The qualification is structured into seven sections, each with an indicative time allocation:

<table>
<thead>
<tr>
<th>Section</th>
<th>Syllabus section</th>
<th>Time allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hazardous substances and processes</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>Workplace control principles</td>
<td>5%</td>
</tr>
<tr>
<td>3</td>
<td>Elements of ventilation systems</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Evaluating the performance of ventilation systems</td>
<td>25%</td>
</tr>
<tr>
<td>5</td>
<td>Assessment of control</td>
<td>25%</td>
</tr>
<tr>
<td>6</td>
<td>Developing an LEV management system</td>
<td>25%</td>
</tr>
<tr>
<td>7</td>
<td>Practical work</td>
<td>5%</td>
</tr>
</tbody>
</table>

1 Hazardous substances and processes (5%)

Educational objectives
The student should expand their learning from P601 by looking at the properties of airborne contaminants and the hazards they present in greater detail.

1.0.1 Detailed information on the different properties of airborne contaminants (e.g. dusts, aerosols, vapours, gases) and the potential hazards they may present.

This upgrade in learning will be best achieved by using a series of short case studies to provide an overview of the health hazards and risks, and the sources and factors affecting emission of airborne contaminants. These should include processes such as the use of rotary tools (e.g. circular saws, rotary sanders on wood etc.), other directional processes (e.g. paint spraying), and fume yielding processes (e.g. welding and soldering).

These case studies should develop the student’s understanding of how to control exposure problems, and how to select appropriate control strategies. The principles of containment and control for a common process should be considered for a range of materials from low to high hazard (e.g. weighing and dispensing solids and liquids to and from containers).

2 Workplace control principles (5%)

Educational objectives
The student should expand on their learning from P601 by:

- Developing a full understanding of the complex nature of exposures in the workplace.
- Understanding the principles of workplace control and the type of approach that is required for successful implementation of a control programme.
- Understanding how to relate the outcome of a risk assessment to selection of control options.
2.1 **Hierarchy of Control**
2.1.1 Principles of identifying hazards and risks in the workplace.
2.1.2 Hierarchy of control and its underlying principles.
2.1.3 Work procedures, process engineering controls, ventilation and PPE.

2.2 **Achieving effective control**
2.2.1 The meaning of adequate control, including the COSHH principles of good practice, use of occupational exposure limits, and other published and in-house standards.
2.2.2 The role of assessment (by all routes):
   - To identify exposures, confirm compliance and achieve adequate control.
   - To identify risks at the design stage and in existing facilities.
   - To identify risks from normal operations and during non-routine or maintenance activities.
2.2.3 The practical application of the Hierarchy of Controls (e.g. using a combination of control measures in a stepwise approach).

2.3 **The role of assessment**
2.3.1 Identifying exposures, confirming compliance, achieving adequate control at the design stage and in existing facilities from normal operations, and during non-routine or maintenance activities.

3 **Elements of ventilation systems (10%)**

**Educational objectives**
The student should consolidate their learning from P601 by developing:
- A theoretical and practical understanding of the principles of system components, and the overall design of ventilation systems.
- An understanding of the differences in performance of the various component parts of LEV systems, and understanding the differences between general and local exhaust ventilation systems.

3.1 **Types of system**
3.1.1 The types of system in use: general ventilation and local exhaust ventilation and the range of hoods etc.

3.2 **Principles of ventilation systems and their components**
3.2.1 Basic design principles of the LEV system and its components.
3.2.2 Hood designs: enclosures, captor hoods, booths, including an understanding of other types of extract hood (i.e. partial enclosure and receptor hoods).
3.2.3 Understanding of special applications: push-pull systems, High Velocity Low Volume (HVLV) systems, down flow etc.
3.2.4 Application of hoods, slots and enclosures to industrial situations. This should include capture velocities, face velocity and the importance of uniform air distribution across the face of a large extract hood.
3.2.5 Ducts transport velocities (duct size, configuration and materials), including a full understanding of the behaviour of air flow at bends and junctions and with changes in velocity.
3.2.6 Fans: all types and their application, effects of direction of rotation.

3.2.7 Air cleaners, treatment systems and filtration standards: types and their performance (e.g. gravity and centrifugal collectors, dry fabric, electrostatic, wet methods, absorption, filtration etc.) The potential failure modes and weaknesses of air cleaning systems.

3.2.8 Facilities for maintenance, examination, testing and conditioning, including sampling and measurement points.

3.2.9 Balancing systems and use of dampers and valves. This should cover the provision of replacement air and its quality direction of flow (particularly if the workroom is either relatively small or relatively well sealed.)

3.2.10 Fletcher and Garrison methods of predicting air flows, velocity contours and effects of flanges.

3.2.11 The nature of flammable dusts and vapours, and explosion prevention, suppression and explosion relief in relation to LEV.

3.2.12 Discharge arrangements and the risk of re-circulation of contaminated air. This includes bad system designs and location of the discharge, and whether it can be drawn back into the building.

3.2.13 The filtration standard that is required if airborne contaminants are to be re-circulated into the workroom (i.e. HEPA to a minimum of EU13). Provision of appropriate detection or alarms.

3.2.14 The problems associated with gas and vapour accumulation in recycle systems.

3.3 General ventilation systems

3.3.1 Use of general ventilation systems as a means of reducing exposures.

3.3.2 Principles of natural ventilation and infiltration.

3.3.3 Mechanical ventilation, dilution or displacement, including methods of delivery and distribution.

3.3.4 How hot plumes and vapours heavier than air behave.

3.3.5 Determination and calculation of ventilation requirements.

3.3.6 Application and limitations of general ventilation.

4 Performance evaluation of ventilation systems (25%)

Educational objectives
The student should have the ability to:
- Carry out appropriate tests and measurements to check the effectiveness of the system.
- Diagnose defects in the system and identify likely remedial actions.
- Prepare full and detailed performance evaluation reports.
- Be able to identify when air sampling is required to supplement the performance evaluation of ventilation systems.

4.1 Qualitative and quantitative testing of LEV systems

4.1.1 Qualitative assessment of ventilation systems, including the visualisation of air flows and confirmation of their effective capture of the contaminant(s) into the ventilation system. This must include the use of dust lamps, smoke generators and smoke tubes.

4.1.2 Quantitative testing of ventilation systems, including the operation of pressure and
flow measurement instrumentation to provide full and detailed quantitative data on ventilation systems. This must include all appropriate locations in systems to take such measurements.

4.2 Performance evaluation

4.2.1 Full and detailed understanding of all calculations for volume flows from pressure and velocity measurements. The use of flow control systems (e.g. dampers and valves) to achieve a balanced system that applies appropriate control of the hazardous substance(s).

4.2.2 The requirements (including frequency) for maintenance examination and test: periodic checks and inspections, thorough examinations, statutory examinations and testing. A suitable reporting scheme for results is also required.

4.2.3 The detailed assessment of all hardware components of a ventilation system, especially where there has been no proper commissioning. The evaluation of performance requirements required for an existing system that does not have any suitable commissioning documentation.

4.2.4 A full understanding of all the essential elements required to define the specification of suitable performance criteria for an LEV system, and how a system should have the ability to achieve them.

4.2.5 A full understanding of test procedures and the standards required for treatment of contamination for air re-circulation systems.

4.2.6 An understanding of all of the requirements to prevent explosions in dust and vapour control systems, including control of potential ignition sources, suppression systems and the need for safe explosion venting facilities (where appropriate).

4.3 Failures and utilisation

4.3.1 Recognition and understanding of the symptoms of component failure. This includes the effects of partial or total blockages in a section of duct, the effects of filter blinding, holes in filters, air by-passing the filters etc.

4.3.2 A full understanding of the parameters which need to be considered to decide whether a system is capable of achieving adequate contaminant control, and its limitations in use.

5 Assessment of controls (25%)

Educational objectives

The student should be able to:

- Assess the performance of an LEV system in its effectiveness of controlling exposure to airborne contaminants.
- Identify whether the system should be modified or extended, and whether supplementary testing is required (e.g. exposure measurements, requirement to fully evaluate the system).
- Understand the differing types of monitoring that may be required to provide ongoing reassurance of performance of ventilations systems.

5.1 Evaluation of LEV measurements

5.1.1 Understand all requirements to monitor the performance of the system under normal operating conditions, so as to provide data that is meaningful, relevant and reliable.
5.1.2 Evaluation of potential risks associated with failure modes.
5.1.3 Understanding of potential exposure to the workforce, both for those involved in the
task and those in the vicinity.

5.2 Requirements for exposure measurement
5.2.1 Understanding the process hazards, to define when and where monitoring is
appropriate.
5.2.2 Understanding the methodology and the weaknesses associated with spot checks and
grab samples.
5.2.3 How to carry out and where to use personal dosimetry and area sampling, and the
meaningfulness of the data produced.
5.2.4 The application of real-time measurement to confirm whether control is effective. The
use of failure alarm systems to provide appropriate warnings.
5.2.5 Appropriate methods to compare measurement data with exposure standards in order
to determine effectiveness of control measures.

5.3 Assessment systems using tracer materials
5.3.1 The principles of fume cupboard performance testing using tracer gases.
5.3.2 The requirements and principles of performance testing of controlled and enclosed
processes using dummy materials (e.g. Lactose tracer testing in the pharmaceutical
industry.) (8)

6 Developing an LEV management system (25%)

Educational objectives
The student should understand:
• The needs for proper supervision during installation and commissioning.
• The requirements for producing proper commissioning documentation, which should
include:
  o All relevant parameters for the system.
  o Performance indicators for regular user checking in between thorough examination
    and testing periods.

6.1 Installation, commissioning and documentation
6.1.1 The requirements for the preparation of a system operating manual and a system log
book, including the requirements and frequency for maintenance, examination and test,
periodic checks and inspections, thorough examinations, statutory examinations and testing.
6.1.2 How to evaluate a system to produce suitable commissioning documentation from the
detailed assessment of all hardware components and their performance in controlling
exposure during utilisation. Emphasise the need to develop this for existing systems which
do not have the appropriate documentation in place.

6.2 User training
6.2.1 The essential requirements of task evaluation, in order to provide appropriate training
to end users of ventilation systems.
6.2.2 Management requirements for systems, including special requirements for
maintenance of control systems where handling toxic and flammable materials.
6.2.3 Permit to work systems and lock-out procedures.
6.2.4 Identifying the potential for a dust explosion or the ignition of flammable vapour. (6)
(10)
6.2.5 The mechanical and electrical safety issues associated with ventilation systems.
6.2.6 Ignition source control by earth bonding of equipment and filtration systems in
flammable material handling systems. Basic understanding of the use of fire suppression
systems for explosion.
6.2.7 The potential consequences of any actions taken to correct the performance of a
system [e.g. the effect of changing the positions of dampers in the system that could affect
other parts of the system).

7 Practical work (10%)

Educational objectives
The student should:
- Understand the principles behind the operation of ventilation systems.
- Be able to carry out practical measurements to assess the effectiveness of the system.
- Understand the limitations of this approach to control and of the crucial importance of the
design element at the interface with the worker.

7.1 Revision of physical observation and measurement techniques
The student should be able to carry out testing on a ventilation system using the following:
7.1.1 Appropriate techniques to visualise air flows as a means to test control.
7.1.2 Common pressure and velocity measuring instruments, demonstrating an understanding of
which test equipment to use for which measurements and where to undertake the
measurements in relation to each extract point (e.g. face velocity or capture velocity).
7.1.3 A Pitot tube: understanding how one works, how to undertake a Pitot tube traverse and
how to calculate an average transport velocity from a Pitot tube traverse.
7.1.4 Demonstrate an understanding of where to undertake duct measurements to get
meaningful results.
7.1.5 Demonstrate an understanding of the data generated by the tests, including:
   - An acceptable capture velocity for the application.
   - The duct velocity which would prevent dust deposition.
   - The likely causes of the static pressure going up or down to a significant degree
     compared to the previous test.
Section 7

References and further reading

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<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACGIH (2007), Industrial Ventilation: A Manual of Recommended Practice for Operation and Maintenance</td>
</tr>
<tr>
<td>5</td>
<td>HSG258 (2017), Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV) 3rd Edition, HSE</td>
</tr>
<tr>
<td>6</td>
<td>INDG370 (2013), Controlling fire and explosion risks in the workplace: A brief guide to the Dangerous Substances and Explosive Atmospheres Regulations, HSE</td>
</tr>
<tr>
<td>7</td>
<td>INDG408 (2008), Clearing the air: A simple guide to buying and using local exhaust ventilation (LEV), HSE</td>
</tr>
<tr>
<td>8</td>
<td>ISPE (2005), ISPE Good Practice Guide: Assessing the Particulate Containment Performance of Pharmaceutical Equipment</td>
</tr>
<tr>
<td>11</td>
<td>L143 (2013), Managing and working with asbestos - Control of Asbestos Regulations 2012. Approved Code of Practice and guidance, HSE</td>
</tr>
<tr>
<td>13</td>
<td>MDHS82/2 (2015), The dust lamp: A simple tool for observing the presence of airborne particles, HSE</td>
</tr>
</tbody>
</table>

HSE guidance is reviewed and revised periodically. Training providers should check that the publications listed above are the current versions.

**Useful websites**

All the Health and Safety Executive (HSE) publications listed above are available as free downloads from the HSE website: [www.hse.gov.uk/lev](http://www.hse.gov.uk/lev).
Section 8

Achieving the qualification

Candidates are required to pass two mandatory components to be awarded the qualification as follows:

- Written examination.
- Commissioning report submission.

Written examination

The written examination enables candidates to demonstrate that they have attained the breadth and depth of knowledge on commissioning and evaluating the performance of LEV systems to ensure that they are functioning properly, and that they can also apply this learning to real-life situations.

The examination comprises up to 35 short-answer questions, to be answered in 2 hours. Short-answer questions require candidates to give brief answers, sometimes as bullet points or calculations.

The questions are a mix of theory-based and practical ‘real life scenario’ questions. Some questions are based on photographs or diagrams.

Questions are worth a variety of marks, set between 1 and 10 marks. Candidates should attempt all questions as no marks are deducted for incorrect answers.

The pass mark is 55%. The examination covers sections 1 to 7 of the syllabus in proportion to the time allocation given for each section. This gives a mark allocation as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Number of marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hazardous substances and processes</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Workplace control principles</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Elements of ventilation systems</td>
<td>16</td>
</tr>
<tr>
<td>4</td>
<td>Evaluating the performance of ventilation systems</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>Assessment of control</td>
<td>40</td>
</tr>
<tr>
<td>6</td>
<td>Developing an LEV management system</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>Practical</td>
<td>8</td>
</tr>
</tbody>
</table>
The sections are clearly marked in the examination paper.

The written examination is an open-book examination, which means that candidates are permitted to have access to external materials and text books, but not electronic devices.

**Invigilation**

The written examination is carried out in controlled conditions, to help ensure that all candidates demonstrate their true level of attainment. BOHS will appoint an independent invigilator to oversee the examination.

**Marking and results**

All examination papers are marked by BOHS.

Candidates receive their results in writing from BOHS. The results are reported as pass or fail plus a percentage. Borderline fail results are automatically re-marked by a second marker.

Training providers are sent a list of results for all candidates on a course.

**Feedback**

Candidates receive feedback on their examination performance. For example, the feedback for a written examination in which a candidate scored 76% would be shown as follows:

<table>
<thead>
<tr>
<th>Syllabus area</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hazardous substances and processes</td>
<td>2/8 (25%)</td>
</tr>
<tr>
<td>2 Workplace control principles</td>
<td>6/8 (75%)</td>
</tr>
<tr>
<td>3 Elements of ventilation systems</td>
<td>10/16 (63%)</td>
</tr>
<tr>
<td>4 Evaluating the performance of ventilation systems</td>
<td>25/40 (63%)</td>
</tr>
<tr>
<td>5 Assessment of control</td>
<td>38/40 (95%)</td>
</tr>
<tr>
<td>6 Developing an LEV management system</td>
<td>32/40 (80%)</td>
</tr>
<tr>
<td>7 Practical work</td>
<td>8/8 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>121/160 (76%)</strong></td>
</tr>
</tbody>
</table>

Training providers receive feedback on the overall performance of all candidates. For example, the feedback for a course with six candidates would be as follows:

<table>
<thead>
<tr>
<th>Written Exam Performance against syllabus</th>
<th>Number of candidates in each scoring band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Exam 1. Hazardous substances and processes</td>
<td>0-49% 50-75% 76-100%</td>
</tr>
<tr>
<td>Written Exam 2. Workplace control principles</td>
<td>1 4 1</td>
</tr>
<tr>
<td>Written Exam 3. Elements of ventilation systems</td>
<td>0 3 3</td>
</tr>
<tr>
<td>Written Exam 4. Evaluating the performance of ventilation systems</td>
<td>1 4 1</td>
</tr>
</tbody>
</table>
4. Evaluating the performance of ventilation systems
5. Assessment of control
6. Developing an LEV management system
7. Practical work

**Resits**
Candidates may re-sit the examination, but must pass within 12 months of the original sitting date.

**Commissioning report submission**
In order to complete the P604 qualification, candidates must demonstrate that they have carried out a single study involving the commissioning, performance evaluation and thorough examination and test of a local exhaust ventilation system. They must compile a commissioning report which includes the following information:

- Measurements of system performance.
- Interpretation of results.
- An assessment of the functionality and adequacy of all components of the LEV system for its intended purpose.
- Examples of relevant commissioning documentation.
- Recommended actions.

The report must show that the candidate is competent to carry out commissioning and full performance evaluation of local exhaust ventilation systems. The report should ideally refer to either the first commissioning of a local exhaust ventilation system, or where the system is not new the re-commissioning of a system.

The length of the report should be a minimum of six typed A4 pages. There is no restriction on the maximum length of the report.

More detailed advice on writing and submitting reports is provided in the *P604 Report submission guidance* document, available on the BOHS website.

**Report submission, marking and results**
Candidates must submit their report to BOHS within six months of the date they sit the Written examination. Candidates also must complete the Certificate of Authorship section of the Report Submission Form, and submit it to BOHS along with the commissioning report. This can be downloaded from the BOHS website.

Candidates will receive their result in writing from BOHS. The result is given as a pass or fail. If a report has not passed, feedback is sent to the candidate with further information on the Report Submission Form (such as amend and re-submit report, provide new report, etc.)
Reports may only be re-submitted twice; after this time, a new report must be submitted with an additional fee of £35.

Certification
Candidates who pass both components within 12 months will be awarded an Advanced Proficiency Certificate in *P604 - Performance Evaluation, Commissioning and Management of Local Exhaust Ventilation Systems.*
Section 9

Quality assurance

Internal quality assurance
Training providers must operate an internal quality assurance system which evaluates and improves the delivery of the qualification.

External quality assurance
BOHS undertakes desk-based reviews of documents, including teaching materials, and conducts surveys of candidates. We also may inspect training providers.
Section 10

Offering the qualification

Approved training providers
Please complete and return the ‘Application to Offer Additional Qualifications’ form to qualifications@bohs.org. The form is available on the BOHS website.

New training providers
Please send an email to qualifications@bohs.org expressing your interest in offering the P604 qualification and we will advise you about the approvals process.
Section 11

Other courses and qualifications

Candidates who successfully complete this qualification may also wish to take:

**P602 - Basic Design Principles of Local Exhaust Ventilation Systems**

**Objective**
To provide candidates with the theoretical and practical knowledge for designing and evaluating the performance of local exhaust ventilation systems, to ensure that they effectively control airborne contaminants.

**Target audience**
P602 is aimed at anyone that is responsible for designing the components for an LEV system, and evaluating its performance. This could include LEV engineers (e.g. designers, specifiers, commissioning engineers), maintenance personnel and health and safety practitioners.

**P603 - Control of Hazardous Substances - Personal Protective Equipment**

**Objective**
To teach candidates about the different options available for controlling health hazards in the workplace, and how to develop, organise and implement a successful personal protective equipment programme to reduce worker exposure to these hazards.

**Target audience**
Anyone who is responsible for managing health risks in the workplace or maintaining local exhaust ventilation systems. This could include LEV engineers, health and safety practitioners and occupational hygienists.
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Information in this Qualification Specification is correct at the time of issue but may be subject to change.

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