



The Chartered
Society for Worker
Health Protection

P604 Proficiency Qualification:

**Performance Evaluation,
Commissioning and
Management of Local Exhaust
Ventilation Systems**

Report Submission Guidance

Overview

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 and full assessment 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 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.

Authorship requirements

The submitted report must be the candidate's own work, although the system assessment can be carried out under supervision. Where work is carried out under supervision, the supervisor must sign a statement confirming that the candidate has written their report independently, and the candidate must make the exact circumstances clear either in the report itself or in a covering letter.

A commissioning study and report carried out by a team will only be acceptable if ownership of the report can only be claimed by the candidate submitting the report. The candidate must make the exact circumstances clear either in the report itself or in a covering letter.

Criteria for report

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. Only in exceptional circumstances will reports for studies carried out at the same premises and on the same system be accepted.

Candidates should note that a commissioning, inspection and/or test of the system fan, treatment system (where fitted) and discharge **must** be included in the report. Without these items it does not fulfil the appropriate basis for commissioning and subsequent thorough examination and test of the system. Where these parts of the system cannot be safely accessed, then commissioning or re-commissioning cannot be regarded as complete.

The report must have been written **recently**; therefore candidates should not have compiled their report before taking the P604 written examination.

Report content

All items listed below should be included in the report. Section headings will vary depending on the system being commissioned or re-commissioned.

- Title page.
- Contents page.
- Executive summary.
- Introduction/background section.
- Diagram of the LEV layout system and location, including test points.
- Description of the work and processes.
- Details of test methods used to make a judgement of performance.
- Details of test equipment and types of measurements taken.
- Personal site-based health and safety risk assessment.
- Results and findings.
- Conclusions and recommended actions.
- Supporting documentation.

The report should be a comprehensive report, typed on A4 paper. A minimum of six A4 pages is expected; there is no maximum length for the report. If the report is submitted electronically to the Qualifications inbox, it should be saved in an easily accessible format, such as a Microsoft Word (.doc) file or a PDF (.pdf) file.

Where reference is made in the report to legislation, approved codes of practice or other guidance, this must be current and not refer to any out-of-date documentation.

When writing the report, candidates should check their work against the **Checklist of report requirements** on pages 6-8. This directly relates to the criteria that the report assessor will mark against. It is also recommended that candidates read the **Common errors and reasons for report re-submission** list on page 9 before submission, to ensure they do not miss any sections out of their reports.

The report submitted for this Advanced Proficiency module is expected to be of a higher professional standard than those submitted for the P601 module, and thus will be marked accordingly.

How to submit the report:

Candidates will be required to complete a Certificate of Authorship form for the submitted report, to certify that the report is their own work and written by themselves (except where they have acknowledged the use of the works of other people or organisations). The Certificate of Authorship section is part of the Report Submission Form, which can be downloaded from the BOHS website at:

www.bohs.org/qualifications-training/bohs-qualifications/lev-qualifications underneath P604.

For the purposes of confidentiality, reports may be edited to delete the name of the commissioning individual or client. However, both the report and Certificate of Authorship must include the separate report number and the address of the premises where the assessment was carried out.

Candidates must submit their report to BOHS within **six months** of the date they sit the P604 written examination. Any reports submitted without a Certificate of Authorship form included will be automatically rejected.

Candidates can send their reports either by email to **qualifications@bohs.org**, or by post to: **Reports Section, BOHS, 5-6 Melbourne Business Court, Millennium Way, Derby DE24 8LZ**. BOHS cannot accept liability for non-receipt of posted reports, so we recommend that reports are sent by recorded/special delivery or via a courier service.

Marking and results

BOHS will contact candidates within two weeks of the report submission date, to confirm receipt of the report and an anticipated time estimate for marking. After it has been processed, candidates will receive their result in writing from BOHS. The result is given on the letter as a pass or fail.

If a report has not passed, the Report Submission Form will be returned to the candidate with details under Part 2 of why it has failed and any further information that is required. A report will generally be rejected when it contains misleading, inaccurate or inconsistent information, or there is information missing.

For re-submissions, candidates should fill in Part 3 of the Report Submission Form, to summarise which sections they have changed and the specific amendments made. The marker will then review the report to confirm if it is now complete. If it is still incomplete, the marker will provide further feedback in Part 2 of the Report Submission Form.

Reports may only be re-submitted twice; after this time, a new report must be submitted with an additional fee of £35. The commissioning report must be successfully passed and completed within twelve months of the P604 examination date.

Misleading documentation and plagiarism

BOHS has the right to refuse to accept reports where misleading documentation or evidence of plagiarism has been submitted. This includes using unacknowledged text or prepared material from the Internet and other sources. Where there is evidence that a candidate has fraudulently submitted a report or documentation, BOHS may bar any further submissions from that candidate.

If evidence of plagiarism or the submission of misleading documents is found after the award of a certificate, BOHS has the right to withdraw the qualification. Candidates may appeal in writing against report rejections or certificate withdrawal through the general appeals procedure.

Time extensions

Where candidates have not submitted their reports within six months of taking the P604 written examination, they will be required to re-sit the whole course. However, time extensions will be considered in exceptional circumstances, such as:

- Serious illness.
- Severe disability.
- Involuntary unemployment.

Candidates should submit a request in writing in order to be considered for a time extension, outlining the reasons they require more time. In the cases of illness or disability, a brief description of the illness/disability and an estimate of the expected duration (if known) should be included. In the case of involuntary unemployment, an indication of the expected duration of the unemployment should be included. All requests will be treated in the strictest confidence.

A three month time extension can also be considered in situations when candidates have been based offshore with work since the date of the training course. We would require proof from the candidate's employer of this through a written statement.

Checklist of report requirements

Your report will be marked against the criteria below. It is recommended that you use this document as a checklist when writing your report, to ensure that you have considered all relevant areas before submission.

Section A: Overall report

- The reports submitted must be a sufficient **commissioning, performance evaluation and thorough examination and test** of a local exhaust ventilation system.
- For **supervised assessments**, two additional documents should be submitted:
 - A signed statement from the supervisor, confirming that the report is the candidates' own work.
 - A covering letter or statement from the candidate, outlining the circumstances in which the report was carried out.
- Any **legislation, Approved Codes of Practice or guidance documents** referred to in the report must be up-to-date.
- Report Submission Form** included with Part 1: Certificate of Authorship section completed.

Section B: Report content

Your report should include:

- Title page**, including a report title, report number and name of employer responsible for LEV system.
- Contents page**
- Executive summary**, including:
 - The scope, type and extent of LEV system.
 - Address of premises where commissioning was carried out.
 - The location and purpose(s) of LEV system.
 - The hazardous substances and associated health risks which the LEV system controls.
 - Clear statement of whether or not the LEV system adequately controls these health risks.
 - Clear statement of whether the system adequately controls the hazard(s) or not.
 - Clear statement on any required action(s) and their priorities.
- Introduction and background section**, including:
 - Description of premises – age and nature of the building(s) and surroundings.
 - Description of LEV system to be commissioned, examined and tested.
 - The scope of the work required.
 - The purpose, aims and objectives of the system.
 - The date of commissioning or re-commissioning, examination and test of the LEV system, and the date of the previous commissioning (if relevant).
 - A simple labelled diagram of the LEV system layout and location, including test/measurement points and discharge arrangement (with photographs)

where appropriate).

Description of the work and processes, including:

- Identification and location of the LEV system, and the process at which it is installed.
- The hazardous substance(s) and health risks associated with the process that the LEV system is designed to control.
- The general condition of the LEV system, including hood serial numbers and photographs of relevant parts of the system.
- The conditions at the time of the test, and whether this was normal production or special conditions for test purposes for the whole or part of the commissioning/testing sequence.
- Your own site-based risk assessment and safety procedures carried out prior to testing.

Test methods used to make a judgement of performance, including details of:

- The test equipment used (e.g. manometers, smoke generators, dust lamps etc.)
- How the visual inspection and assessment was carried out – where the system was examined and where measurements were taken.
- The types of measurements taken to measure LEV system parameters (e.g. airflow/face velocities/duct transport velocities/static and total pressure measurements/velocity pressures/volume flows for ducts etc.)
- Calculations and actual measurement values used.
- Test methods to check the condition and effectiveness of the fans and filtration system, and the effectiveness of the disposal control of any associated collected dusts.
- Details of any minor adjustments carried out in the course of the commissioning to improve performance.

Results and findings, including:

- A comparison between the LEV design specification performance and the actual commissioning results.
- The results of any air sampling relevant to LEV system performance.
- Comments on the way operators used the LEV, and whether there are any appropriate instructions on system use available to them.
- Comments on system wear and tear, and whether components may need repairing or replacement before next thorough examination and test.
- Whether any treatment systems equipped with fire/explosion venting or control are properly designated and observed (if relevant).
- A qualitative/quantitative assessment on the cleanliness of any re-circulating filtered discharge air.
- Observation of whether an LEV logbook exists for the system.

Conclusions of system performance, including:

- Statement on whether the LEV system is capable of adequately controlling risk from the hazardous substance(s).
- Confirmation regarding compliance between commissioning and design performance data.
- Details of any dangerous conditions (such as fragile roof access and

unguarded machinery parts), and how and when this has been reported to the employer.

- Details of recommended actions that are required to be taken by the employer to improve performance.
- The candidate's name, job title and signature.
- Details of any minor adjustments or repairs carried out to make the LEV system effective.

Section C: Supporting documentation

The following documents should also be submitted alongside your commissioning report:

- LEV system logbook** - Part of commissioning will be to create an appropriate recordkeeping scheme for periodic checks of the LEV system. A copy of the LEV system logbook page should be provided, showing commissioning data and acceptable values, along with details of commissioning or system design data and any criteria of performance compliance. There should also be a **routine check log sheet** showing ranges for acceptable results (i.e. Magnahelic gauge values).
Where the LEV system was previously undocumented and is being re-commissioned properly, the records should be a suitable basis for starting a system logbook.
- Maintenance records** - Maintenance records need to be created, showing the relevant checks and their frequency. A **maintenance log sheet example** should be submitted, which where possible includes details of commissioning or system design data and any criteria of performance compliance.
- System user guide (if not previously available to workers)** should be supplied as an appendix to the report.
- Health and safety risk assessment** related to candidate's visit to the test site.
- Calibration certificates** for test instruments.

Common errors and reasons for report re-submission

The list below gives some common examples of why candidates may need to re-submit their reports. It is recommended that you consider the list below before submitting your report.

- ✗ The commissioning inspection is not considered to be a thorough assessment of an LEV system, because not all parts of the LEV system were commissioned and tested.
- ✗ The executive summary, the system description and purpose are missing from the report.
- ✗ Description or performance assessment of the fan and/or filtration system is missing.
- ✗ No indication is given of the location and condition of the system discharge.
- ✗ No comment is made on the design of the LEV system and whether this is appropriate for its intended purpose.
- ✗ No clear conclusion is made on whether or not the LEV system is fit for purpose.
- ✗ There are mathematical errors (e.g. in the calculation of volume flow rates). The conflicts between analysis results and report conclusions are often due to calculation errors.
- ✗ Insufficient detail on the LEV system itself and the process it serves.
- ✗ Insufficient test data or appropriate number of actual measurements taken for the scale of the system.
- ✗ Incorrect or inconsistent conclusions drawn from test data.
- ✗ Lack of detail in recommendations.
- ✗ Report indicates that a dangerous condition exists, but there is no evidence that this was communicated to the employer/client.
- ✗ References to legislation and other documentation are not up-to-date.
- ✗ Risk assessment for carrying out the required task not included.
- ✗ No evidence that the report is actually the work of the candidate.
- ✗ No plans or sketches, user guides, system checklist or maintenance log book page included.