

The logo for BOHS (British Occupational Hygiene Society) features the letters 'BOHS' in a stylized, bold, white font. The 'O' is a solid white circle. The letters are set against a dark teal background that is part of a rounded rectangular box.

British Occupational
Hygiene Society

The Chartered
Society for Worker
Health Protection

IP601 International Proficiency
Qualification:

**Thorough Examination and
Testing of Local Exhaust
Ventilation Systems**

Report Submission Guidance

www.bohs.org

Issue 2 | February 2018

Overview

In order to complete the IP601 qualification, candidates must demonstrate that they have satisfactorily carried out Thorough Examination and Testing (TEt) of two different local exhaust ventilation systems. Candidates must compile and submit two workplace reports, detailing the appraisal, thorough examination and testing of each of these systems.

The reports must include:

- 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.
- Recommended actions.

The reports must show that the candidate is competent in testing and examining LEV systems in line with industry standards.

Authorship requirements

The submitted reports must be the candidate's own work, although the LEV testing 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. The candidate must also make the exact circumstances of the supervisor's involvement clear, either in the report itself or in a covering letter.

Measurement studies and LEV testing carried out by a team will only be acceptable if the candidate alone can claim authorship of the submitted reports. Where two or more IP601 candidates plan to write their report(s) on the same LEV system, they must ask BOHS for permission in writing first before they write the report.

If BOHS approves this request, the candidates must then make the exact circumstances clear, either in the report itself or in a covering letter. If BOHS rejects this request, the candidates will be required to assess a different LEV system.

Failure to comply with the above authorship requirements will result in reports being automatically rejected.

How to compile the reports

Before starting this assessment, candidate must have attended the IP601 training course and passed both written examinations. This is so that the candidate can apply their learning from the course to the assessment. Candidates must submit both reports to BOHS within three months of the date they passed the IP601 Written Theory and Written Practical examinations.

Each report must refer to a different local exhaust ventilation system, and include a thorough inspection and test of the system fan, treatment system (where fitted) and discharge. Without these items, the work carried out will not be considered to be a thorough examination and test of the LEV system.

Where there are parts of the LEV system that cannot be safely accessed, there should still be a comment made on their performance as part of a statutory thorough examination and test. An example is given below:

Unable to access discharge stacks and fans, which are located in the roof space. Restricted access area due to leakage and contamination risk. Visual assessment made instead from ground level - discharge stacks appear to be working effectively, as shown in the photograph below.



Report structure and content

The report should be a comprehensive document, typed on A4 paper and presented in size 12 Arial font with double line spacing. There are no restrictions on the maximum or minimum number of pages for the report, but it should include all of the items listed above.

Each report must contain the content listed in the checklist table below. Marks are given for each item listed, so it is recommended that candidates use this document as a checklist when writing each report, to ensure that all relevant areas have been considered before submission.

Overall report	Report 1	Report 2
The reports submitted must be a sufficient <u>thorough</u> examination and test of a local exhaust ventilation system.	<input type="checkbox"/>	<input type="checkbox"/>
For computer-generated generic reports, additional information must be included about the system being evaluated.	<input type="checkbox"/>	<input type="checkbox"/>
For supervised field assessments, two additional documents should be submitted: <ul style="list-style-type: none"> • 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. 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
The reports should be presented as two separate documents, with a unique report number for each report.	<input type="checkbox"/>	<input type="checkbox"/>

Any legislation, Approved Codes of Practice or guidance documents referred to in the report must be up-to-date.	<input type="checkbox"/>	<input type="checkbox"/>
Report content	Report 1	Report 2
Title page, including a report title and report number by which the report can be identified.	<input type="checkbox"/>	<input type="checkbox"/>
Contents page	<input type="checkbox"/>	<input type="checkbox"/>
Executive summary, including: <ul style="list-style-type: none"> • The scope, type and extent of LEV system. • The location and purpose(s) of LEV system. • The hazards that the system has been installed to control. • 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: <ul style="list-style-type: none"> • Description of premises – age and nature of the building(s). • Description of LEV systems to be examined and tested. • The scope of the work required. • The purpose, aims and objectives of the system. • The name of employer responsible for LEV system. • Date of the examination and test, and date of the previous examination and test (if known). 	<input type="checkbox"/>	<input type="checkbox"/>
A simple labelled diagram of the LEV system layout and location, including test/measurement points and discharge arrangement (with photographs where appropriate).	<input type="checkbox"/>	<input type="checkbox"/>
Description of the work and processes, including: <ul style="list-style-type: none"> ☒ The process hazard and/or hazardous substance(s) the LEV 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 testing sequence. ☒ Your own site-based risk assessments and safety procedures carried out prior to testing. ☒ Existence of any maintenance records and/or LEV log book kept on site. Where possible, this should include details of commissioning or system design data and any criteria of performance compliance. 	<input type="checkbox"/>	<input type="checkbox"/>
Test methods used to make a judgement of performance, including details of: <ul style="list-style-type: none"> • 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 	<input type="checkbox"/>	<input type="checkbox"/>

(e.g. airflow/face velocities/duct transport velocities/pressure measurements, volume flows for ducts etc.)		
<ul style="list-style-type: none"> • Calculations and 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. 		
<p>Results and findings, including:</p> <ul style="list-style-type: none"> • 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 repair 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. 	<input type="checkbox"/>	<input type="checkbox"/>
<p>Conclusions of system performance, including:</p> <ul style="list-style-type: none"> • Whether the LEV system is capable of adequately controlling the hazardous substance(s). • Compliance findings comparison with commissioning and/or design performance data. • Details of any dangerous conditions, 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. 	<input type="checkbox"/>	<input type="checkbox"/>
Copy of field notes.	<input type="checkbox"/>	<input type="checkbox"/>
Copy of risk assessment report.		
Copies of calibration certificates for test instruments.	<input type="checkbox"/>	<input type="checkbox"/>
Part 1 of Report submission form completed and enclosed.	<input type="checkbox"/>	<input type="checkbox"/>

Common errors and reasons for report re-submissions

The list below gives some common examples of why candidates may fail a report and be required to re-submit.

- ✗ The executive summary section is often missing.
- ✗ The report does not include a description of, or performance assessment of the fan and/or filtration system, or inspection of system filters.
- ✗ No indication of the location and condition of the system discharge is included.
- ✗ 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, or

- conclusions drawn are inconsistent or incorrect.
- ✗ Mathematical errors in calculations (e.g. 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 for the scale of the system.
 - ✗ Lack of detail given in recommendations.
 - ✗ The report indicates that a dangerous condition exists, but there is no evidence given that the tester has communicated to the employer/client.
 - ✗ References to legislation and other documentation are out of date.
 - ✗ No site-based risk assessment or handwritten field notes included with the report.
 - ✗ There is no evidence that the report is actually the work of the candidate.
 - ✗ The reports also often do not include plans or sketches.
 - ✗ No duct transport velocity measurements taken.
 - ✗ No feedback about discharge arrangement or compliance.
 - ✗ No mention of client system log book.
 - ✗ Faults have correctly identified, but no recommendations included of how to fix them.

How to submit the reports

Candidates are required to complete Part 1 of the Report Submission Form (one per report), which can be downloaded from the BOHS website at: www.bohs.org/qualifications-training/bohs-qualifications/lev-qualifications underneath the IP601 header. This is to certify that the report is the candidate's own work, and written by them alone. Any reports submitted without a Report Submission Form will be automatically rejected.

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

All documents relating to a report (including the Report Submission Form) must be saved and submitted as one document, for ease of submission and marking. If your report is split into separate files, it will not be accepted for marking. The files should be saved with acceptable file names, with the candidate's name, report title and submission date, as shown below:

- Bob Smith IP601 LEV Report 1 Welding Bay 01 01 2018
- Bob Smith IP601 LEV Report 2 Fume Cupboard 01 01 2018

Both reports must be submitted to BOHS at the same time for marking and assessment. Candidates can submit their reports through one of the following options:

- **Option 1:** For files **less than 10MB** in size, email directly to levreports@bohs.org
- **Option 2:** For files **more than 10MB** in size, request a Dropbox link by emailing levreports@bohs.org
- **Option 3:** For printed documents, 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 posted reports are sent by recorded/special delivery or via a courier service.

We also recommend that candidates keep an additional copy of their report submissions, in case they wish to refer to it in the future. We may also request an additional copy to be submitted in the event of an unforeseen circumstance, such as loss or damage through a technical or external issue.

Marking and results

Candidates will receive their result either in writing or by email from BOHS. If the candidate has passed the assessment, a results letter and a qualification certificate will be sent in the post.

If one or both of the candidate's reports has not passed, the Report Submission Form will be sent back to the candidate, with details 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, is not a thorough examination and test, or there is information missing (e.g. measurement results).

For re-submissions, candidates should note on the Report Submission Form which sections they have changed and the amendments made. They should then re-submit the reports to BOHS using the same method as previously (if the re-submitted files are more than 10MB in size, please email levreports@bohs.org to request a Dropbox link).

A report marker will then review the report to confirm if it has now passed. If the report still requires further work, the marker will provide additional feedback.

Candidates are allowed up to two re-submission attempts. If a candidate has not passed after two re-submissions, they will need to start the assessment again, testing two different LEV systems. Candidates will also be required to demonstrate further learning before they can attempt the assessment again; this could be through evidence of sitting the IP601 training course again or a one-to-one training session with a course tutor.

Both reports must have passed within twelve months of the IP601 examination date. If a candidate has not passed both reports within 12 months, they will be required to re-take the full qualification, including the examinations.

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 three months of taking the Written Theory and Written Practical examination, they will be required to re-sit the whole IP601 training course. However, time extensions will be considered in exceptional circumstances, such as:

- Serious medical condition.
- 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 a written statement from the candidate's employer to support this.

Data protection and retention of report documentation

BOHS will ensure that all documentation received is kept private and confidential, and is not shared with anyone outside of BOHS employment. Report documentation will be stored safely until either a candidate has passed the qualification, or a candidate has run out of time. At this point, documents will be shredded and securely disposed of.