



RG 4

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Accreditation for the Inspection of Local Exhaust Ventilating (LEV) Plant

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CHANGES SINCE LAST EDITION

This publication has been updated in respect of the documents referred to in the text and appendices.

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1 INTRODUCTION

- 1.1 This publication has been produced by the United Kingdom Accreditation Service (UKAS) in conjunction with the UKAS Technical Advisory Committee for Engineering Inspection. It provides guidance to those requirements in BS EN ISO/IEC 17020 and E2 that need interpretation when applied by Inspection Bodies carrying out in-service inspection of local exhaust ventilating plant. It does not cover all of the requirements of BS EN ISO/IEC 17020 (General criteria for the operation of various types of bodies performing inspection) and E2 (UKAS Regulations to be met by Inspection Bodies); Inspection Bodies are reminded of the need to comply with all of the requirements in these publications. Cross-reference is made to relevant sections of BS EN ISO/IEC 17020 and E2. In cases of difference of interpretation, BS EN ISO/IEC 17020, (as applied by UKAS in accordance with IAF/ILAC-A4: 2004) and E2 are the authoritative publications, and UKAS, through the nominated member of the Technical staff, will in the first instance adjudicate on unresolved matters. Appeals concerning interpretation will be considered in accordance with the UKAS Appeals Procedure. Other UKAS publications may be referred to where relevant.
- 1.2 The field of inspection covered by this publication is local exhaust ventilating plant; the type of inspection is initial appraisal and thorough examination and testing.
- 1.3 The selection of an inspection body accredited against the requirements of BS EN ISO/IEC 17020 and this publication is intended to assist owners / operators of LEV plant in the selection of competent persons to perform inspections, ie, Examinations such as required by the Control of Substances Hazardous to Health Regulations 2002 (as amended).
- 1.4 For the purposes of this publication the term Inspection Body shall be taken to mean an accredited Inspection Body.

2 SCOPE - INSPECTION SERVICES COVERED BY RG4 (BS EN ISO/IEC 17020, CLAUSE 3.3)

- 2.1 This publication covers the in-service inspection of Local Exhaust Ventilating Plant.
- 2.2 The electrical inspection of devices, e.g. motors, control devices, etc, is excluded except insofar as their performance affects the correct functioning of the LEV plant.
- 2.3 Accreditation for the examination of electrical plant and equipment is covered in the RG100 series of documents.
- 2.4 The sampling of air exhausted from the LEV plant is not covered by this publication where that air is intentionally returned to the workplace and thereby might give rise to contamination. Note: The possibility of unintentional contamination and the possible need for sampling thereof would be a matter for additional investigation outside the scope of this document. However, inspection reports should indicate where such investigations are considered necessary.
- 2.5 Inspections of LEV plant are generally carried out in pursuance of Regulation 9 -(2)(a) of the Control of Substances Hazardous to Health Regulations 2002 and similar requirements in other Regulations (see Appendix 4). This publication may, however, be used when inspections are carried out for other purposes.

- 2.6 When an Inspection Body accredited under this publication provides inspection, the service may include the following:
- Initial appraisal of installed LEV plant to ascertain whether it meets the requirements of recognised national or international standards, Codes of Practice and other similar documents.
 - In-service inspection (thorough examination and testing) of LEV plant to determine whether it continues to meet the operating parameters that were originally specified and provides the required control of hazardous substances.
 - Reporting to the owner / operator of the LEV Plant actual or potential defects which are or may become a cause of danger to persons and to specify any action necessary to maintain the LEV plant in operational condition.

3 INDEPENDENCE, IMPARTIALITY AND INTEGRITY (BS EN ISO/IEC 17020. CLAUSE 4)

- 3.1 Inspection Bodies operating as Type A, B or C bodies as defined in BS EN ISO/IEC 17020 may be accredited for the inspection of LEV plant provided that they meet the requirements of BS EN ISO/IEC 17020 and other referenced publications.
- 3.2 The organisational structure of Type B and Type C Inspection Bodies shall be such that the Inspection Body's management shall not report directly to the operational management responsible for the day to day operation or maintenance of the LEV plant to be inspected.

4 ORGANISATION AND MANAGEMENT - SUPERVISION (BS EN ISO/IEC 17020. CLAUSE 6.4)

- 4.1 For the inspection of LEV plant the requirements for supervision shown in Table 1 of this publication shall be met.

5 INTERNAL AUDIT (BS EN ISO/IEC 17020, CLAUSE 7.7 AND 7.8)

- 5.1 The internal audit programme shall include provision to include the on-site witnessing of inspections. Sections 6.4d and 6.4e of IAF/ILAC-A4: 2004 refer.

6 PERSONNEL (BS EN ISO/IEC 17020, CLAUSE 8)

- 6.1 Inspection staff shall only undertake work according to their competence, experience, training and with appropriate supervision as detailed in Table 1. In addition to meeting the minimum requirements of Table 1 the inspection body shall employ or have defined access to personnel who are trained and experienced in relevant specialist areas such as the sampling and examination of exhaust air in the working environment.

Table 1

Qualification Category	Initial Appraisal	Thorough Examination & Testing
1	A/I	A/I
2	A/I	A/I
3	B/I	B/I
4	X	B/II
5/6	X	C/III

The qualification categories, levels of supervision and constraints on activity are defined in appendices 1, 2 and 3.

- 5.2 For initial appraisal and thorough examination and testing of LEV plant the Inspection Body shall have a sufficient number of permanent management personnel of Category 2 or above.

7 TRAINING (BS EN ISO/IEC 17020, CLAUSE 8.2)

- 7.1 The training provided by the Inspection Body shall provide a working knowledge of LEV plant including design, construction, operation, maintenance, significance of defects, typical problem areas and associated methods of rectification and the requirements of the relevant statutory provisions.
- 7.2 The training shall include the safe conduct of the inspection body staff in relation to safe working practices identified as a result of a risk assessment.

8 INSPECTION METHODS AND PROCEDURES (BS EN ISO/IEC 17020, CLAUSE 10.1 AND 10.2)

- 8.1 Where risk assessment techniques are used to recommend a frequency of inspections which differ from the minimum specified in ACOPs, the Inspection Body shall document the techniques used in procedures including a demonstrable justification for the techniques employed.
- 8.2 Reporting requirements, including statutory requirements for reporting, shall be detailed in procedures.
- 8.3 Codes, Standards and other technical literature applicable to the design, construction, operation, inspection and repair of LEV plant and their components within the accredited scope shall be maintained up to date and be readily available to the staff.
- 8.4 If the Inspection Body uses information supplied by any other party as part of in-service inspection of LEV plant it shall be able to demonstrate the measures taken to verify the integrity of such information.

9 REPORTING (BS EN ISO/IEC 17020, CLAUSE 13)

- 9.1 Where maintenance work is undertaken concurrently with inspection work, in particular with Type C inspection bodies, the associated reports shall clearly define the work associated with each activity in a manner of sufficient accuracy for meaningful audit trails.
- 9.2 The report of examination shall include a statement of the effectiveness of control of the substance(s) being controlled by the LEV plant (IAF/ILAC-A4: 2004 Appendix 3, item 15).

10 SUB-CONTRACTING (BS EN ISO/IEC 17020, CLAUSE 14.4 AND IAF/ILAC-A4:2004, CLAUSE 14)

- 10.1 Where the Inspection Body sub contracts certain specialised activities there must be identifiable member(s) of the management personnel sufficiently knowledgeable in those technical activities being subcontracted, to be able to:
- define the problem adequately to enable the sub contractor to offer appropriate services, personnel and equipment;
 - choose an appropriate sub contractor and to assess its technical competence (eg, methods, personnel and facilities);
 - interpret the results supplied by the sub contractor and relate those results properly to the service originally requested or problem originally defined.

Appendix 1

Qualification categories

- Category 1** At least Chartered Engineer or professionally qualified occupational hygienist, qualified to NVQ 5, or equivalent, with at least three years relevant experience able to make proper judgements on the full range of topics likely to arise.
- Category 2** At least Incorporated Engineer, (eg, HNC), or equivalently qualified occupational hygienist, qualified to NVQ 4, or equivalent with at least two years experience in a relevant inspection activity which includes supervised training in LEV inspection equivalent, normally, to a minimum period of three months; able to make professional judgements in areas of competency.
- Category 3** At least Engineering or occupational hygiene Technician, qualified to NVQ 3/4, or equivalent, (eg, ONC), with at least five years relevant experience which includes supervised training in LEV inspection equivalent, normally, to a minimum period of three months.
- Category 4** Person trained in a relevant discipline with a recognised and documented apprenticeship or equivalent formal training with a minimum of five years³ experience working in a relevant discipline and completion of a training course relevant to the inspection of LEV plant to a level typically equivalent to NVQ Level 3.
- Category 5** Person employed prior to the date of application for accreditation in the inspection of LEV plant with less than tradesman's apprenticeship but with a minimum of 5 years³ spent working with or within industry associated with LEV plant and having a general knowledge of LEV plant and their operating environment. Personnel shall be placed on appropriate training courses with appropriate documented tests in LEV plant inspection. The minimum age for this Category is 21 years.
- Category 6** Person trained and with a minimum of five years³ working experience in a relevant discipline and completion of training relevant to the inspection of LEV plant to a level typically equivalent to NVQ Level 2.

Notes

- 1) NVQ levels are given as guidance to the qualifications required. It is, however, recognised that NVQs are not yet in place for all levels and relevant activities.
- 2) Personnel employed prior to the date of the launch of the implementation of RG4 at a category level for which they cannot formally demonstrate compliance will be accepted as meeting that qualification category provided that it can be demonstrated that they are fulfilling the requirements of the category in a technically competent manner.
- 3) For some routine, well-monitored activities this period may not be necessary.

Appendix 2

Levels of Supervision

In the Levels described below, 'Supervisor' means a technical superior, however named. Direct Contact means on the job contact at the site of operation.

Level A: Occasional

Formal, direct contact to review work with Supervisor at least annually. More frequent direct contact with Supervisor may be necessary. Authoritative technical support from personnel qualified to Category 1 or 2 (not applicable for design verification) to be readily available.

Level B: In-frequent

Direct contact with Supervisor at least every 3 months. Access to supervision and technically authoritative support to be available as needed.

Level C: Frequent

Direct contact with Supervisor at least weekly. Authoritative technical support from personnel qualified to Category 1, 2 or 3.

Level D: Constant

Direct daily contact with Supervisor at site of operation. Authoritative technical support from personnel qualified to Category 1, 2, 3 or 4 to be readily available.

Note

The categories listed are given for completeness. Not all may be referred to in particular RG documents.

Appendix 3

Constraints on Inspection Activities

- Constraint I** All areas within their field of competence
- Constraint II** Specific areas of work as defined according to expertise and training.
- Constraint III** Specific inspection tasks as defined according to competence and experience acquired.

Note

The categories listed are given for completeness. Not all may be referred to in particular RG documents.

Appendix 4

REFERENCES

This appendix is not exhaustive but lists selected legislation, standards and other publications pertinent to this document:

LEGISLATION

SI 1974 No 1439, Health and Safety at Work etc, Act 1974.

SI 2002 No 2677, The Control of Substances Hazardous to Health Regulations 2002.

SI 2003 No 978, The Control of Substances Hazardous to Health (Amendment) Regulations 2003.

SI 2004 No 3386, The Control of Substances Hazardous to Health (Amendment) Regulations 2004.

SI 2002 No 2675, The Control of Asbestos at Work Regulations 2002.

SI 2002 No 2676, The Control of Lead at Work Regulations 2002.

SI 1998 No 2306, The Provision and Use of Work Equipment Regulations 1998.

SI 1997 No 1713, Confined Spaces Regulations 1997.

HSE Guidance

L5, Control of Substances Hazardous to Health Regulations 2002. Approved Code of Practice and Guidance (Periodically revised) - contains a list of references.

EH40, Occupational exposure limits (Periodically revised).

MDHS 82, The dust lamp: a simple tool for observing the presence of airborne particles.

INDG 136, COSHH a Brief Guide to the Regulations - contains a list of references.

L101, Safe Work in Confined Spaces. Confined Spaces Regulations 1997. Approved Code of Practice, Regulations and Guidance.

Quality Assurance Standards and Related Documents

BS EN ISO/IEC 17020, General Criteria for the Operation of Various Types of Bodies Performing Inspection.

IAF/ILAC-A4: 2004, Guidance on the Application of ISO/IEC 17020.