



HAZARDOUS AREAS SCHEME GUIDE

THE POWER BEHIND YOUR BUSINESS



GUIDE TO CERTIFICATION REQUIREMENTS

Electrical work in potentially explosive atmospheres (hazardous areas) is not included within the scope of the Approved Contractor scheme. NICEIC certification to cover such work may be gained through a separate application and assessment process.

Purpose of this Guide

This Guide explains how NICEIC Approved Contractors can extend the scope of their certification to include electrical work in potentially explosive atmospheres. Its aim is to help you through the certification process. It covers the process step by step, including sections on how to complete your application for certification, how to prepare for your assessment, what happens once you are certificated and the requirements for your business. Certification is straightforward but if at any point you need some advice or assistance please contact our friendly team on 0333 015 6626 who will be happy to help.

Exceptions may be made for applicants requiring Approved Contractor Certification for electrical work in hazardous areas only.

Benefits of extending the Scope of Certification with NICEIC

In addition to the benefits already available to all Approved Contractors, the extension to certification will provide:

- An indication to clients, specifiers, licensing authorities and others that your business is reputable, reliable and works to the industry standards for electrical work in potentially explosive atmospheres
- Access to electrical installation work in hazardous areas from industrial, commercial and public sector organisations that will only employ contractors having recognised hazardous area capabilities
- An assurance to clients that electrical installation work in hazardous areas is covered by the NICEIC's Complaints Procedure and Platinum Promise
- Identification of recognised hazardous area capability on the NICEIC register, which is widely distributed and used by specifiers to select contractors to undertake electrical work

What is the Hazardous Areas Scheme?

NICEIC's Hazardous Areas Scheme is an extension to the NICEIC Approved Contractor scheme. NICEIC Approved Contractors who carry out Electrical work in potentially explosive atmospheres are able to apply for NICEIC Hazardous Area certification. Applicants will be assessed on their systems, procedures, documentation and relevant qualifications & experience of personnel, including their documented continuing professional development system for the scope(s) of hazardous area work undertaken.

Personnel

A business applying for the extension to certification must have an appointed Principal Duty Holder, and propose one or more Qualified Supervisors (Hazardous Areas) to take responsibility for the electrical work undertaken in potentially explosive atmospheres. In the case of a sole trader, the individual will be the Principal Duty Holder who should propose himself as the Qualified Supervisor (HA).



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CERTIFICATION REQUIREMENTS CHECKLIST

For an extension to NICEIC certification for hazardous area work, a business must:

- Be an NICEIC Approved Contractor
- Be directly engaged in electrical work in potentially explosive atmospheres (other than in mines, medical locations, locations relating to the manufacture and processing of explosives, and off-shore) and have sufficient electrical work, covering the range normally undertaken in hazardous areas, available for assessment. The work must have been carried out during the previous twelve months under the business' current trading title. The work should comply both with BS 7671 and with the relevant British Standards, Codes of Practice and guidance documents for hazardous area work.
- Be able to arrange access to a range of hazardous area work sufficient for assessment
- Have equipment appropriate to the range and scale of work undertaken in hazardous areas
- Have test instruments suitable for carrying out the range of tests required by BS 7671 and work in hazardous areas
- Have at least £2 million public liability insurance cover for the full range of electrical work undertaken in potentially explosive atmospheres
- Have professional indemnity insurance cover relevant to your business activities (at least £250k) is required if you carry out inspection of existing hazardous area installations
- Maintain a record of the accuracy and consistency of test instruments used for certification and reporting purposes
- Hold British Standards and other technical reference documents relevant to the range and scale of electrical work undertaken in potentially explosive atmospheres
- Have a system in place to ensure that appropriate prescribed forms of certification and reporting are issued for all completed electrical work in accordance with the appropriate technical reference documents
- Employ persons competent to undertake electrical work in hazardous areas, who are adequately and appropriately supervised
- Establish and maintain training and experience records for each person who may be assigned to undertake electrical work in potentially explosive atmospheres (except for persons who will be subject to constant supervision)
- Maintain a record of complaints received over the previous 6 years about the technical standard of electrical work carried out, together with the details of the remedial action taken, if any, to resolve the complaints
- Have an appointed Principal Duty Holder
- Nominate one or more suitable Qualified Supervisors (HA) who meet the requirements detailed in this Guide. A Principal Duty Holder may also be nominated as a Qualified Supervisor (HA)
- The business must be able to demonstrate that all electrical work undertaken in hazardous areas will be under the effective supervision of one or more Qualified Supervisors (HA)

KEY ROLES WITHIN YOUR BUSINESS

Principal Duty Holder

The Principal Duty Holder is the person appointed by the business with responsibility for the maintenance of the overall standard and quality of the electrical installation work undertaken. Principal Duty Holders are not subject to assessment by NICEIC. Principal Duty Holders also have a responsibility to ensure that employees are competent to carry out the range of work required of them. Although Principal Duty Holders will need to be present for the first part of the assessment and the closing meeting, they are not assessed on their technical ability.

An appointed Principal Duty Holder will:

- Have responsibility for all matters relating to certification and be the main point of contact
- Be a full-time manager or employee of the business
- Have responsibility for health and safety and other legal requirements relating to the range of electrical work the business undertakes
- Be responsible for the assignment of electrical work in hazardous areas to the Qualified Supervisor(s) (HA) and ensuring sufficient QS's are employed to effectively manage and supervise the work
- Be responsible for ensuring that there are systems in place so that all work is carried out by competent persons who are adequately and appropriately supervised
- Be responsible for the maintenance of adequate training and experience records for persons assigned to carry out electrical work in potentially explosive atmospheres
- Ensure there are systems in place whereby the appropriate documents, certificates and reports are issued for all completed electrical work
- Ensure that where a QS ceases to be employed in that capacity, the PDH will notify NICEIC within 30 days

Qualified Supervisor (Hazardous Areas)

A Qualified Supervisor (HA) is an electrically competent person with specific responsibility for the safety, technical standard and quality of electrical work under their supervision in hazardous areas.

A proposed Qualified Supervisor (HA) will:

- Be directly employed by the business on a full-time basis
- Have at least two consecutive years' supervisory or managerial responsibility for the technical standard of electrical work in hazardous areas. In the case of a sole trader, evidence of carrying out hazardous area work over a two-year trading period will satisfy this requirement if the required managerial or supervisory experience has not been gained elsewhere
- Satisfy the hazardous area training and qualification requirements set out in tables 1 or 2

- Understand the Electricity at Work Regulations, current edition of BS 7671, and the British Standards Codes of Practice and guidance documents relevant to the range of electrical work undertaken in hazardous areas. Knowledge of hazardous area classification is also needed
- Understand the inspection, testing, verification, certification and reporting procedures for the range of electrical work undertaken in hazardous areas

A Qualified Supervisor (HA) in addition to the above requirements is responsible for:

- Ensuring that the results of inspection and testing of electrical work in hazardous areas are recorded correctly on the appropriate certificates or reports
- Ensuring that the business premises, equipment, documentation and records are available for inspection when required
- Safeguarding all unused NICEIC certificates and report forms for work in hazardous areas against loss, theft and misuse



TRAINING REQUIREMENTS

NICEIC accept the IEC Ex Certificate of Personal Competence and/or CompEx qualifications as recognised formal qualifications.

Please see tables 1 or 2 for the specific hazardous area work you undertake.

Table 1 (Complex Units)

EX01	Preparation and installation of Ex 'd', 'e', 'n' and 'p' systems
EX02	Inspection and maintenance of Ex 'd', 'e', 'n' and 'p' systems
EX03	Preparation and installation of Ex 'i' systems
EX04	Inspection and maintenance of Ex 'i' systems
EX05	Preparation and installation of apparatus protected by enclosure for use in the presence of combustible dusts
EX06	Inspection and maintenance of apparatus protected by enclosure for use in the presence of combustible dusts
EX07	Preparation, installation and de-commissioning of electrical installations at filling stations
EX08	Inspection, testing and maintenance of electrical installations at filling stations
EX09	Preparation and installation of electrical installations within the water industry (Ex 'd', Ex 'e', Ex 'n', Ex 'p', Ex 'i' and dust)
EX10	Preparation and installation of electrical installations within the water industry (Ex 'd', Ex 'e', Ex 'n', Ex 'p', Ex 'i')
EX11	Preparation, installation, inspection and maintenance of mechanical installations in explosive atmospheres
EX12	Design of applications and systems for potentially explosive atmospheres

Notes:

1. Business's carrying out work on Filling Stations holding IEC EX Personal Competence. Units or Comp Ex 01-04 inclusive rather than Comp EX 07 & 08 will need to demonstrate relevant knowledge of the guidance & systems in the current edition of the APEA Design, construction, maintenance and decommissioning of filling stations.
2. Business's carrying out work in the Water Industry holding IEC EX Personal Competence Units or Comp Ex 01-04 rather than Comp Ex 09&10 will need to demonstrate relevant knowledge of the guidance & systems used in the water industry.
3. Satisfactory completion of the EX07 and EX08 units alone is unlikely to meet NICEIC training requirements for electrical installations in hazardous areas outside the scope of filling stations, due to the different explosion concepts likely to be involved.
4. Satisfactory completion of the EX09 and EX10 units alone is unlikely to meet NICEIC training requirements for electrical installations in hazardous areas outside the scope of the water industry, due to the different installation requirements.

Table 2 (IECX Personal Competence Units)

UNIT EX 001	Apply basic principles of protection in explosive atmospheres - Limitation: Not applicable
UNIT EX 002	Perform classification of hazardous areas - Limitation: 3
UNIT EX 003	Install explosion-protected equipment and wiring systems - Limitation: 1, 2, 3, 4
UNIT EX 004	Maintain equipment in explosive atmospheres - Limitation: 1, 2, 4
UNIT EX 005	Overhaul and repair of explosion-protected equipment - Limitation: 1, 2, 4
UNIT EX 006	Test electrical installations in or associated with explosive atmospheres - Limitation: 3, 4
UNIT EX 007	Perform visual and close inspection of electrical installations in or associated with explosive atmospheres - Limitation: 3, 4
UNIT EX 008	Perform detailed inspection of electrical installations in or associated with explosive atmospheres - Limitation: 3, 4
UNIT EX 009	Design electrical installations in or associated with explosive atmospheres - Limitation: 3, 4
UNIT EX 010	Perform audit inspection of electrical installations in or associated with explosive atmospheres - Limitation: 3, 4

Limitation by: 1. Explosion technique, 2. Product type, 3. Group, 4. Voltage

Scope Limitations

Where Scope Limitations apply you must not exclude any area where work is being performed. The scope limitation might exclude working on Ex p equipment (Pressurised). That is acceptable provided you do not work on EX p equipment.

Ongoing training commitment

As a minimum, all persons that may be engaged in electrical work in hazardous areas, other than those under constant supervision, will need to successfully complete the relevant training units as set out in tables 1 or 2 or an equivalent, every five years.

Persons other than Qualified Supervisors (HA) who have responsibility for inspecting and testing electrical installations in hazardous areas are required to:

- Have successfully completed, within the past five years, the training units set out in tables 1 or 2, as appropriate to the range of hazardous area work undertaken or
- Have successfully completed, within the past five years, the equivalent refresher courses for the training units set out in tables 1 or 2, as appropriate to the range of hazardous area work undertaken or
- Provide evidence of equivalent training, together with evidence of experience of electrical installations in hazardous areas gained over a minimum of three years. For this option, the business would need to demonstrate that you have an effective system of training to ensure that those persons undertaking inspection and testing have:
 - Successfully completed the training units set out in the tables, as appropriate to the range of hazardous area work undertaken, within one year of acceptance
 - An understanding of electrical standards and codes of practice relating to the selection, installation, maintenance and use of explosion protected apparatus
 - Knowledge of methods used to maintain electrical integrity and explosion protection concepts
 - Knowledge of inspection procedures which may be employed for hazardous areas

- Knowledge of any additional electrical inspection techniques which may be required for hazardous area protection concepts
- An understanding of drawings and manufacturer's literature relevant to the equipment to be inspected

Training, experience and continuing professional development (CPD) records

Businesses must be able to demonstrate, by means of documented training, experience and CPD records, that all persons engaged in work in hazardous areas, are competent to undertake the electrical work assigned to them. Such records will be subject to evaluation by the Assessor during both the application process and subsequent surveillance assessment.

Training and supervision requirements for operatives

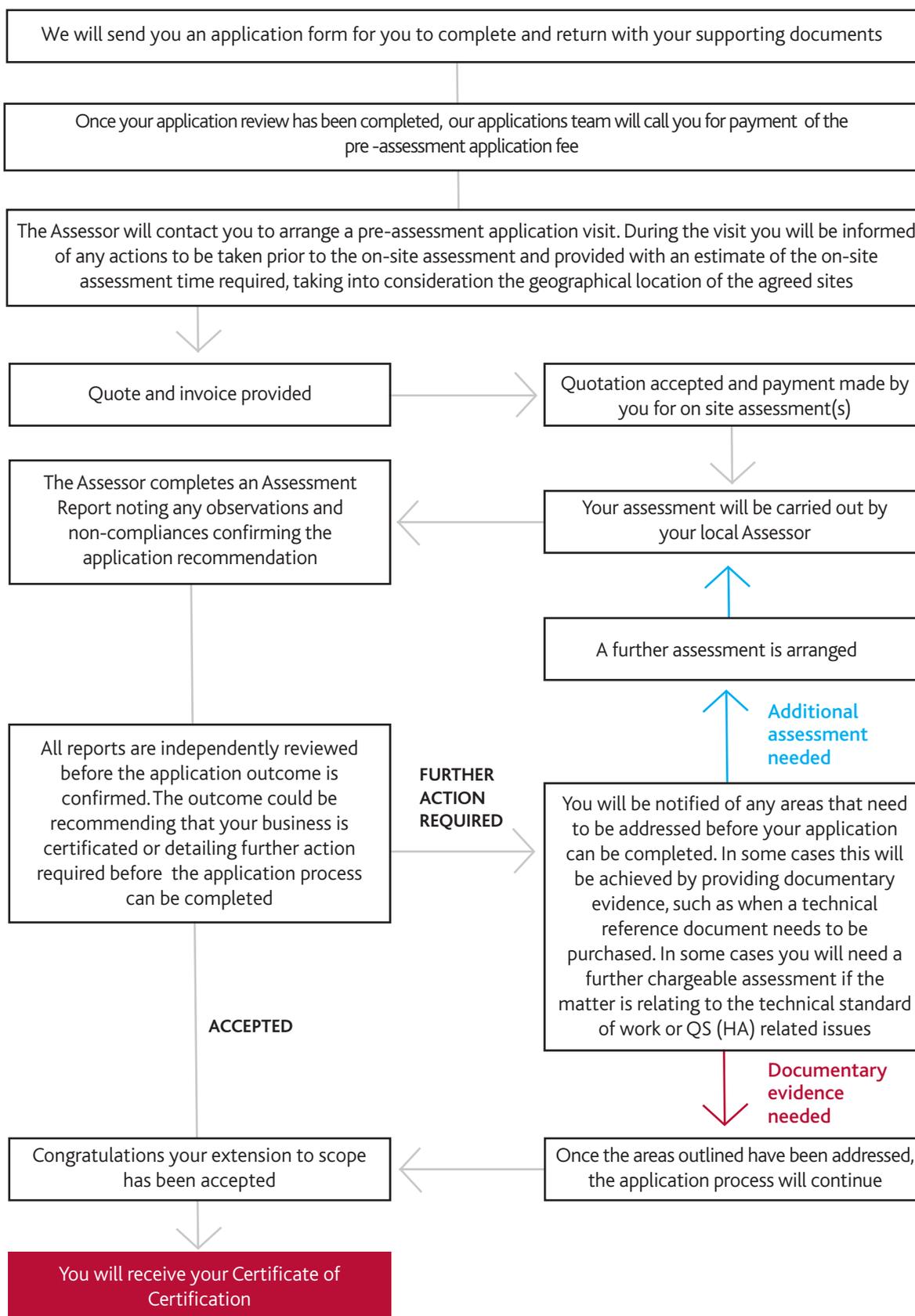
All persons undertaking electrical installation work in hazardous areas are required to:

- Have successfully completed, within the past five years, the training units set out in tables 1 or 2, as appropriate to the range of hazardous area work undertaken or
- Have successfully completed, within the past five years, the equivalent refresher courses for the training units set out in tables 1 or 2, as appropriate to the range of hazardous area work undertaken or
- Be kept under **constant supervision** by a Qualified Supervisor (HA) or another person who satisfies the requirements for persons responsible for inspection and testing of electrical work in hazardous areas. 'Constant supervision' means direct contact at the site of the work on a daily basis or
- Be kept under **frequent supervision** by a Qualified Supervisor (HA) or another person who satisfies the training requirements for those persons responsible for inspection and testing of electrical work in hazardous areas. 'Frequent supervision' means direct contact at the site of the work on a weekly basis

For the latter option, the business would need to demonstrate that they have an effective system of training to ensure that those operatives undertaking electrical work in hazardous areas have an understanding of precautions to be taken to reduce the risk of explosions and records confirming that the operatives have at least one year's experience of working in hazardous areas.

THE APPLICATION PROCESS

CALL US ON 0333 015 6626 TO APPLY



APPLICATION FOR EXTENSION

The following items need to be provided by the business to enable an application to be processed:

- A completed 'Extension to Certification Hazardous Areas Application' form
- A separate 'Qualified Supervisor (HA) Application' form for any additional proposed Qualified Supervisors (HA) for electrical work in potentially explosive atmospheres
- Payment covering the initial pre assessment application fee

Please note when completing your application:

- A separate application is required for each contracting office seeking to extend the scope of certification to cover hazardous area work
- On receipt of the completed application form(s) and the appropriate fee, we will arrange to undertake the pre-assessment Application visit

PRE ASSESSMENT VISIT

A pre-assessment visit normally lasts half a day. It will be conducted at the business' contracting office.

To get maximum value from a pre-assessment visit, both the Principal Duty Holder and the proposed Qualified Supervisor(s) (HA) must be present to discuss the application with the Assessor.

During a pre-assessment visit, the Assessor will review the extent to which the business and key personnel satisfy the requirements for the extension to certification and will:

- Explain the assessment criteria and process
- Explain the roles of the Principal Duty Holder and the Qualified Supervisor (HA)
- Review and confirm the range of hazardous area work undertaken by the business over the past 12 months, which will form the scope of the extension to certification
- Identify the range of work which will need to be evaluated on site, review the nature and locations of the possible sites to be visited, and discuss the accessibility of the work on those sites
- Discuss the programme and likely costs of the assessment process
- Review the training and experience of the proposed Qualified Supervisor(s) (HA)
- Review the system the business has in place to ensure the competence of all other persons that may be assigned to undertake electrical work in hazardous areas without constant supervision
- Discuss the requirement to provide appropriate standard certificates and reports to clients, and to give guidance where necessary on their completion

- Identify any significant likely non-compliances with the requirements for the extension to certification which the business will need to address prior to the assessment visit
- Provide any other general information and advice on the requirements for the extension to certification
- The proposed Qualified Supervisor (HA) responsible for the electrical work in HAs will be required to be present at the pre-assessment

The Assessor, subject to the time available, will then:

- Review the details of all the business' hazardous area work in progress and completed within the previous year
- Draw up a plan for the on-site assessment of a representative sample of the business' hazardous area work, taking into account the location of the sites to be visited and any known access restrictions
- Check possession of the relevant technical reference documents for the range and scale of hazardous area work undertaken
- Check that appropriate certificates and reports have been issued to clients
- Check the hazardous area training and experience of the proposed Qualified Supervisor (HA)
- Check the training, experience and CPD records of personnel assigned to hazardous area work
- Check the business' record of any complaints made by customers about the technical standard of the business' work in hazardous areas, together with the details of the remedial action taken to resolve them. (The record may be part of the complaints register maintained for the business' electrical work in non-hazardous areas)
- Check that risk assessments appropriate to undertaking electrical installation work in hazardous areas are available
- Check possession of adequate number of test instruments and test leads appropriate to the range and scale of electrical work undertaken
- Check records demonstrating that a system is in place to ensure the accuracy and consistency of test instruments used for certification and reporting purposes

The assessment will not cover matters relating to the basic electrical safety requirements of BS 7671, as the business' compliance with NICEIC Scheme Rules for electrical work in non-hazardous areas will have already been assessed under the NICEIC Approved Contractor assessment process.

At the end of the pre-assessment visit, the Assessor will complete a report identifying any non-compliances observed which require action to be taken before the onsite assessment takes place.

PREPARATION FOR SITE ASSESSMENT

To enable the business to gain the most benefit from the visit and to enable the assessment process to be successfully completed, it is important that each of the items listed below are ready for assessment prior to the Assessor's arrival.

Plant and equipment

The Assessor will need to establish that the business has plant, tools and materials appropriate to the range and scale of the electrical work undertaken in hazardous areas.

Technical reference documents

The Assessor will need to check that, as a minimum, the business holds the latest edition of all appropriate technical reference documents at its place of business:

For electrical work in hazardous areas where the risk is due to the presence of flammable gas or vapour:

- BS EN 60079 Electrical equipment for explosive gas, vapour, mist or dust
- Part 10 - Classification of hazardous areas
- Part 14 - Electrical installations in hazardous areas
- Part 17 - Inspection and maintenance of electrical installations
- EEMUA Practitioners Handbook (Publication No 186)

For electrical work in the hazardous areas of filling stations:

- IP/APEA Guidance for the design, construction, modification and maintenance and decommissioning of filling stations

Installation certificates and reports issued to clients

The Assessor will review a sample of certificates, reports and schedules issued during the previous year, including records of the results of initial and periodic inspections of installations.

The business is to ensure it has issued the appropriate documentation to the person(s) requesting the work. Documentation such as a Minor works certificate, Electrical Installation Certificate, an Electrical Installation Condition Report along with a schedule of inspections and a schedule of test results. These electrical certificates, reports and information should be accompanied by the appropriate hazardous area forms, as detailed in BS EN 60079-14+ or the IP/APEA Guide.

Training certificates - proposed Qualified Supervisor (HA)

The Assessor will need to check the originals of the hazardous training certificates of the proposed Qualified Supervisor (HA)

Competence of operatives

The Assessor will check the system (such as training, experience and CPD records) that the business uses to ensure that all operatives employed on electrical work in potentially explosive areas are either competent to undertake the work, or are placed under the supervision of a competent person whilst undertaking such work. 'Constant supervision' means direct contact at the site of the work on at least a daily basis.

Public liability insurance

Evidence of a minimum of £2 million cover must be provided to the Assessor for the range of work undertaken by the business in hazardous areas. Note that it is public liability insurance, not employers' liability insurance that needs to be checked.

Evidence of professional indemnity insurance (minimum of £250k cover) relevant to your business activities is required if you carry out inspection of existing hazardous area installations.

List of electrical work

A detailed list of all hazardous area work completed by the business during the previous year, and of all work in progress, must be made available (as discussed and requested at the pre-assessment visit), in advance, to enable the Assessor to select the samples of work to be assessed on-site.

The Assessor will select a suitable number of samples across the range of electrical work carried out to evaluate during the on-site assessments.

List of complaints about the technical standard of the business' work

A record of all complaints received over the previous 6 years relating to your work in hazardous areas, together with the details of the remedial action taken to resolve them, must be available for the Assessor to examine.

Preparation for the on-site assessment visit(s)

The proposed Qualified Supervisor(s) (HA) responsible for the work to be evaluated must be present throughout each onsite assessment.

Access arrangements

The proposed Qualified Supervisor(s) (HA) will be expected to make adequate arrangements for access to the electrical work at each of the sites selected. Suitable equipment for this purpose is required to be provided by the business. Although the Principal Duty Holder will need to be present for the first part of the assessment and the closing meeting, they do not need to be present during the on site assessment.

Where access restrictions prevent the completion of the assessment plan within the period of time allocated, a further chargeable visit or visits may be necessary to complete the assessment.

Competence of the proposed Qualified Supervisor (HA)

During the on-site assessments, the Assessor will expect the proposed Qualified Supervisor (HA) to demonstrate an in-depth appreciation of the requirements of the British Standards and Codes of Practice relevant to the range of hazardous area work undertaken by the business.

The proposed Qualified Supervisor (HA) must take to site the records of the initial inspection and/or periodic inspection of the installations selected for assessment.

These electrical certificates and reports should be accompanied by the appropriate hazardous area forms, as detailed in BS EN 60079 – 14+ or the IP/APEA Guide.

The proposed Qualified Supervisor (HA) will be expected to carry out a close inspection* of parts of electrical installations selected by the Assessor to demonstrate compliance with the relevant standards. Where circumstances permit, a detailed inspection* may be required.

If the proposed Qualified Supervisor (HA) is not fully conversant with the requirements of the relevant standards for the range of hazardous area work undertaken, further training may be recommended and a chargeable successful additional assessment will be required before an extension to certification can be granted.

Assessment reports

The Assessor will complete an Assessment Report at the end of each assessment. The report will indicate the level of the business' compliance with the Scheme requirements. Any observed non-compliances will be recorded for action by the business.

*'Close inspection' and 'detailed inspection' are defined in BS EN 60079-14+

OUTCOME OF ASSESSMENT

Once your assessment has been completed, you will be sent a copy of the report making one of the following recommendations. This report must be independently verified and a communication will be sent to you confirming of the following outcomes:

Pass - Certification will be recommended if the business is compliant with the scheme requirements.

Evidence required - Evidence must be provided to confirm that all non-compliances, as recorded on the report, have been remedied.

Reassessment required - One or more major non-compliances were recorded at the assessment. A reassessment is necessary to confirm that adequate procedures have been put in place to prevent non-compliances occurring and to check all non-compliances noted at the original assessment have been remedied.

Additional assessment required - Further assessment time required possibly due to range, scale and scope of works carried out or additional Qualified Supervisor assessment time. The majority of additional assessment outcomes are due to insufficient representative examples of work put forward for assessment.

AFTER YOU ARE CERTIFICATED

In order to give assurance that the business is continuing to comply with the scheme requirements, the business will require surveillance assessments, normally at annual intervals. Surveillance assessments are completed in a similar manner to the application assessment, usually involving a visit to the contracting office and a number of on-site assessment visits.

Training and experience records will be subject to evaluation during each surveillance.

An assessment report will be issued at the end of each assessment visit. If an assessment reveals non-compliances with the scheme requirements, the business will be required to take appropriate action to rectify them. If the non-compliances are significant, this may involve the Assessor requesting a further chargeable assessment to confirm that the necessary level of compliance has been achieved.

If the range, scale or geographical spread of the business' electrical work changes, the surveillance assessment plan may need to be amended.

Approved Contractors are not precluded from undertaking any type of electrical work within their competence and scope of certification.

A business must not imply that it is certificated to complete work beyond the scope set out in its 'Extension to Certification' certificate.

If a type of hazardous area work included within the scope of an Approved Contractor's extension to certification is not available for assessment on consecutive occasions the NICEIC may, at its discretion withdraw approval for that scope of work.

FOR MORE INFORMATION OR TO ACCESS ANY OF OUR SERVICES CONTACT US NOW:

Telephone 0333 015 6626 **Email** applications@niceic.com

Post Warwick House, Houghton Hall Park, Houghton Regis, Bedfordshire, LU5 5ZX

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