



# National Highways Sector Schemes for Quality Management in Highway Works

4

**SECTOR SCHEME DOCUMENT**

**FOR**

**PRESERVATIVE TREATMENT OF TIMBER**

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Timber Sector Scheme Advisory Committee  
(NCDTSSAC)**

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It is the Committee's policy that the issue of any revision to this document shall be an issue of the full document rather than individual pages. The following data gives information where changes to the technical content of the document have been made in this edition. These and minor changes to the text are highlighted by sidelining.

The changes between the previous revision 4 (UKAS Issue 5) and this revision 5 (UKAS Issue 6) are documented below.

### Revisions

Page No.	Revision No.	Issue Date	Comments
2	5	November 2007	Record of changes
6	5	November 2007	Reference to WPA's QGN 2.
7	5	November 2007	Changes BWPDA to WPA
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28 - 31	6	November 2008	Appendix G1 added

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# **COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE, EXCLUSION OF LIABILITY, SELECTION OF CERTIFICATION BODY AND IMPLEMENTATION OF ISSUE UKAS 6**

## **COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE**

Wood Protection Association (WPA)  
Certification Bodies Group  
Building Research Establishment Ltd. (BRE)  
County Surveyors Society (CSS)  
DfT – Highways Agency  
United Kingdom Forest Products Association (UKFPA)  
Fencing Contractors Association (FCA)  
Environmental Noise Barrier Association  
Chair of Sector Scheme 2A  
Chair of Sector Scheme 2C

## **EXCLUSION OF LIABILITY**

The Advisory Committee

- I have and accept no liability whatsoever for any failure of any system or systems assessed under this document or for the quality, fitness for purpose, or safety of any product or service which is subject of such assessment,
- II do not provide any representation or warranty as to any aspect of any such system, product or service, and
- III hereby expressly exclude all and any liability or responsibility (however alleged to arise) for or in connection with the provision of any service or product or any use of any product, all and any such, liability or responsibility attaching exclusively to the producer (or user as the case may be) thereof.

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## **SELECTION OF CERTIFICATION BODY**

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme only certification bodies accredited by UKAS under the guidance of the Technical Expert appointed by the Sector Schemes Technical Committee are permitted to certificate companies to this scheme, as described in Appendix G.

Prospective companies seeking registration under this scheme should ensure that they engage a certification body specifically accredited to assess against the requirements of this SSD. Specifiers, consultants, engineers etc. that require confirmation of compliance with the contract specification in respect of the supply of products/materials should confirm the current status of the quality assurance certificate issuer and that specific reference is made to this Sector Scheme.

## **IMPLEMENTATION OF ISSUE 4**

This issue of the SSD can be implemented immediately for assessments in accordance with BS EN ISO 9001:2000 or BS EN ISO 9001:2008.

## INTRODUCTION

This Sector Scheme Document (SSD) relates to the quality management system requirements for the preservative treatment of timber.

Those using this Sector Scheme should use best practice of specifying any other relevant highway Sector Scheme as appropriate to the nature of the work being undertaken, e.g. Sector Scheme 2A The Design and/or Supply, Installation and Repair of Fences. Furthermore where there is a Sector Scheme in place it must be used.

It is acknowledged that a number of accredited certification bodies have obtained the technical competence to be able to provide quality management system certification for this construction activity and it was realised that there was a necessity for these bodies to agree to the same interpretation of BS EN ISO 9001:2000 or BS EN ISO 9001:2008 standard for this scheme. Under the Chairmanship of the C.S.S., the Natural and Conferred Durability of Timber Sector Scheme Advisory Committee (NCDTSSAC) was set up in August 1996 to establish a UK Sector Scheme which would be used by the United Kingdom Accreditation Service (UKAS) as part of its assessment for certification bodies wishing to be accredited in the timber preservation field. This committee acts as an advisory committee to UKAS.

Much of the detail in this SSD builds on or makes direct reference to the WPA's Quality Guidance Note QGN 2.

The document is a live document with the technical committee meeting at least once per year to develop it as appropriate. Those using the SSD should always ensure that they have the current version of the document by contacting any of the certification bodies listed on Page 4 or UKAS at the address below.

Any observations or complaints relating to this document should be addressed to the relevant certification body listed in Appendix F or to:

The Chairman  
The Natural & Conferred Durability of Timber Sector Scheme Advisory Committee  
c/o UKAS  
21-47 High Street  
Feltham  
Middlesex  
TW13 4UN  
Tel: 0208 917 8400  
Fax: 0208 917 8500

# INTERPRETATION OF BS EN ISO 9001:2000 (or 2008)

## 1. SCOPE

This document describes the quality system requirements to be established by the Organizations responsible for the PRESERVATIVE TREATMENT OF TIMBER. It interprets the requirements of British Standard BS EN ISO 9001:2000 or BS EN ISO 9001:2008 and should be read in conjunction with that standard and, where appropriate, the Wood Protection Association (WPA) Quality Guidance Note (QGN) 2.

The scheme is applicable to Organizations carrying out the treatment and supply of preserved timber. Organizations that achieve successful certification to the requirements of this Sector Scheme should register this fact with UKAS within three months of certification. Details will be published in the QA Directory published by the Stationary Office. The SSD shall be referenced in the Certificate of Registration.

References as listed in Appendix B have been utilised in the preparation of this document.

## 2. NORMATIVE REFERENCE

The following normative documents contain provisions which constitute provisions of BS EN ISO 9001 : 2000 (or 2008)

BS EN ISO 9000 : 2000 Quality Management Systems - Fundamentals and Vocabulary

BS EN ISO 9004 : 2000 Quality Management Systems - Guidelines for Performance

## 3. TERMS AND DEFINITIONS

For the purpose this Sector Scheme Document the following definitions shall apply.

### Definitions

Client	The company/person/authority/body for which the work is being carried out.
Certificate of Registration	A certificate issued by a UKAS accredited Certification Body certifying that the holder operates a Quality Management System complying with BS EN ISO 9001:2000 or BS EN ISO 9001:2008 and this Sector Scheme Document.
Contract Specification	<ul style="list-style-type: none"><li>i) As specifically required in the contract documents, e.g. Manual of Contract Documents for Highway Works: Volume 1 Specification for Highway Works (Highways Agency)</li><li>ii) Contract specific appendices.</li><li>iii) The contract drawings.</li></ul>

Customer	The company/person/authority/body engaging the Organization for the purpose of the work described in this document. (The main contractor where the Organization is a sub-contractor)
Quality Plan	The document setting out the specific quality practices, resources and sequence of activities relevant to the project (see Appendix A).
Quality System	The Organization's structure, responsibilities, procedures, processes and resources for implementing Quality Management to BS EN ISO 9001:2000 or BS EN ISO 9001:2008.
Organization	The Organization responsible for the preservative treatment of timber.
*Organization's Manager	The person named in the Organization's Quality Plan as having managerial responsibility for the supply of preservative treated timber.
Shall	Used to indicate a requirement strictly to be followed in order to conform to the standard and from which no deviation is permitted. (See ISO Directives Part 3 : 1997, Annex E; reference 'Guidance on terminology used in ISO 9001:2000 or BS EN ISO 9001:2008 and ISO 9004 : 2000'.)
*Technical Manager	The person named in the Organization's Quality Plan responsible for the technical interpretation and implementation of the requirements of the Contract Specification.
*Treatment Plant Operator	The certified operative named in the Organization's Quality Plan as having the responsibility, training and experience to establish and control the treatment operation to meet the requirements of the Contract Specification. This is to include initial selection of timber for acceptable species, limiting characteristics and moisture content.

\* For smaller operations, some roles may be combined.

### Abbreviations

BRE	Building Research Establishment Ltd.
CSS	Formally 'County Surveyor's Society'
DfT	Department for Transport

NCDTSSAC	The Natural & Conferred Durability of Timber Sector Scheme Advisory Committee
NHSS	National Highways Sector Scheme
SSD	Sector Scheme Document
UKAS	United Kingdom Accreditation Service
UKFPA	United Kingdom Forest Products Association
WPA	Wood Protection Association

## 4. QUALITY MANAGEMENT SYSTEM REQUIREMENTS

Paragraph numbers refer to the relevant paragraph numbers in BS EN ISO 9001:2000 or BS EN ISO 9001:2008. Where no reference is included in this Sector Scheme Document the requirements are as stated in BS EN ISO 9001:2000 or BS EN ISO 9001:2008 without further qualification.

### 4.1 General requirements

The organization shall notify Lantra Awards (Lantra House, NAC, Stoneleigh Park, Coventry CV8 2LG) and secretary of the sector scheme of their registration to this scheme immediately following confirmation from the certification body and thereafter annually by provision of the copy of the appropriate certificate. In addition the organization shall provide details of a contact point for the organization. Lantra Awards will make a nominal charge for entry on to the register.

### 4.2 Documentation requirements

- (i) The Organization shall submit a Quality Plan or alternative document as defined in the contract specification for acceptance or approval by the Client, as appropriate, prior to commencement of work.
- (ii) All contract specific documents shall be controlled, this will include, but not be limited to, as applicable:
  - a) Correspondence
  - b) Delivery notes and certification where required (e.g. timber species)
  - c) Records of rejected material
  - d) Contract documentation and Customer order
  - e) Customer drawings and records
  - f) Instructions to Treatment Plant Operators
  - g) Calibration and maintenance records for hydrometers, pressure gauges, moisture meters, thermometers, process chart records and other inspection, test and measuring equipment.
  - h) Methods to ensure the Organization obtains any amendments to the documents listed in Appendix B where appropriate to the scope of registration.
  - i) Test results for determination of specific requirements.

#### (iii) Control of Records

In addition to the Organization's own quality records, specific contracts may require additional records including the following:

- 1) Contract Specification.
- 2) Review records.
- 3) Quality Plan.
- 4) Instructions to Operatives.
- 5) Certification of supply of materials.
- 6) Purchase orders.
- 7) Calibration and verification records.

- 8) Production records.
- 9) Complaints.
- 10) Results of all tests undertaken which should be made available to the Client on request.
- 11) Plant Operator NVQ Level 2 certificate.

The Organization shall keep all records for a minimum period of 6 years or until the end of the maintenance or defects period whichever is greater. Record disposition after this period shall be defined in the Quality Plan.

## **5 Management responsibility**

### **5.1 Management commitment**

Not specifically referred to.

### **5.2 Customer focus**

The organization's quality policy statement shall include a statement of commitment to this Sector Scheme.

### **5.3 Quality policy**

Not specifically referred to.

### **5.4 Planning**

Not specifically referred to.

### **5.5 Responsibility, authority and communication**

Not specifically referred to.

### **5.6 Management review**

The Organization shall review the quality management system to ensure its continuing suitability and effectiveness at least once a year. Records of the review shall be kept.

## **6 Resource management**

### **6.1 Provision of resources**

Not specifically referred to.

### **6.2 Human resources**

#### **6.2.1 General**

Not specifically referred to.

#### **6.2.2 Competence, awareness and training**

- (i) Timber treatment plant owners/managers have a statutory duty to ensure that those using wood preservatives are competent to do so and have received the necessary training, instruction and information. The WPA Guidance Note: "Standards of Training in Safe and Effective Wood Preservation" provides an approved basis for training.

- (ii) Treatment Plant Operators shall hold the National Vocational Qualification (NVQ) 'Wood Preserving – Industrial Pre-treatment (Construction) Level 2' (Q1053749) awarded by CITB/City & Guilds. Plant Operators holding the NVQ are eligible to be and shall be listed in The Wood Protection Association (WPA) Register. Registration is valid for 5 years and is renewable on submission of satisfactory evidence of refresher training (details from WPA).
- (iii) Trainee plant operators shall at all times be supervised by a qualified (NVQ) operator.
- (iv) Records of training must be kept for each operator in accordance with statutory duties. Key quality tasks, e.g. moisture measurement shall be suitably identified in those records.
- (v) The Organization shall ensure that all Treatment Plant Operators have a working knowledge of the relevant parts of the documents listed in Appendix B.

### **6.3 Infrastructure**

Not specifically referred to.

### **6.4 Work environment**

Not specifically referred to.

## **7 Product realization**

### **7.1 Planning of product realisation**

The Organization shall determine and document how the requirements for quality will be met. The Quality Plan shall as a minimum address the topics listed in Appendix A.

### **7.2 Customer-related processes**

#### **7.2.1 Determination of requirements related to the product**

Not specifically referred to.

#### **7.2.2 Review of requirements related to the product**

Not specifically referred to.

#### **7.2.3 Customer communication**

The Organization shall determine and implement arrangements to demonstrate that timber comes from sustainable sources when required. This

shall include provision of third party certification to the Client if so required.

### **7.3 Design and development**

Not specifically referred to.

### **7.4 Purchasing**

The Organization shall establish procedures to ensure that all materials conform to the Contract Specification. All copies of certification to verify this shall upon request be passed to the Client.

#### **7.4.1 Purchasing Process**

The purchasing process shall include systems to establish timber sources, this shall apply to supplier selection, evaluation and re-evaluation processes.

#### **7.4.2 Purchasing information**

Not specifically referred to.

#### **7.4.3 Verification of purchased product**

Not specifically referred to.

### **7.5 Production and service provision**

- (i) The Organization shall produce method statement(s) for the selection and treatment of timber.
- (ii) The Organization shall obtain copies of documents listed in Appendix B appropriate to the contract together with the Contract Specification.
- (iii) When a contract is signed and before treatment work commences, the Organization shall ensure that the following is documented and issued to the Treatment Plant Operator. A copy shall be retained for record purposes.
  - 1. Any special instructions relating to the programme of work.
  - 2. The timber species specifically required for the contract.
  - 3. Any additional instructions.
- (iv) This document requires compliance with inspection and testing procedures defined in QGN 2.
- (v) Inspection and testing shall be undertaken to demonstrate adherence to the specification. The methods and frequency of testing shall be defined in the Quality Plan (see Appendix A). The contract requirements shall be reviewed to establish whether any additional Client specified testing and inspection regime is to be adopted. Additional requirements will usually be included in contract specifications, e.g. Appendices 0/2 and 3/1 of the Specification for Highway Works.
- (vi) When appropriate the contract storage arrangements for all materials shall be stated in the Quality Plan.
- (vii) Systems shall be in place to ensure goods returned to stock are placed at the correct location in the material storage area.

(viii) Procedures shall be in place to ensure compliance with conditions of consent relating to the approval of preservatives under the Control of Pesticides Regulations currently in force as well as any other statutory duties relating to health and safety.

(ix) Customer Property

The Quality System shall include a procedure to be applied where the Customer or Client supplies material if this is identified in the Contract Specification.

#### **7.5.1 Control of production and service provision**

Not specifically referred to.

#### **7.5.2 Validation of processes for production and service provision**

Not specifically referred to.

#### **7.5.3 Identification and traceability**

The timber shall be controlled and records made to allow for the timber source to be identified. When required this shall be used to demonstrate that sustainable sources have been used.

#### **7.5.4 Customer property**

Not specifically referred to.

#### **7.5.5 Preservation of product**

Not specifically referred to.

#### **7.6 Control of monitoring and measuring devices**

- (i) Any inspection, measuring and test equipment in use shall be checked for accuracy at intervals not exceeding twelve months and records kept. All equipment must operate within a tolerance that shall be stated in the Quality Plan. Daily checks shall be carried out on site and records kept to confirm that control equipment is indeed working and is not damaged. Equipment used for calibration checks shall not be used for any other purpose. These shall initially be re-calibrated with direct traceability to National Standards at intervals not exceeding one year from the date of the first calibration. Thereafter at intervals not exceeding five years.
- (ii) Moisture measuring equipment shall be checked prior to each days use using a calibrated electrical resistance check box or other validated method, e.g., moisture contents derived from oven drying samples. The equipment shall be checked over at least three representative points over its working range and the maximum allowable error at any point shall be  $\pm 1.0\%$  moisture content at that measuring point, e.g. for a true reading of 28% the meter shall indicate a moisture content in the range 27.0% to 29.0%.
- (iii) Equipment used for calibration checks shall be re-calibrated traceable to National Standards at intervals not exceeding one year, this equipment shall

not be used for any other purpose. Equipment calibration errors or deviation from the actual value must not be known and taken into account. Records of all equipment in use, their calibration status and verification checks undertaken shall be established and maintained. Calibration requirements are set out in Appendix E of this document.

## **8 Measurement, analysis and improvement**

### **8.1 General**

Not specifically referred to.

### **8.2 Monitoring and measurement**

#### **8.2.1 Customer satisfaction**

Not specifically referred to.

#### **8.2.2 Internal audit**

- (i) A programme shall be initiated to ensure internal audits are undertaken which fully cover within each twelve-month period all aspects of the quality management system as applied to the preservative treatment of timber.
- (ii) Internal audit frequency should be in accordance with the level of discrepancies detected, i.e., significant or repetitive non-conformities noted during audit or highlighted following customer complaints may require further investigation by carrying out an additional internal quality audit.
- (iii) Guidance is given in BS EN ISO 19011 Guidelines for quality and or environmental systems auditing.

#### **8.2.3 Monitoring and measurement of processes**

Not specifically referred to.

#### **8.2.4 Monitoring and measurement of product**

Not specifically referred to.

### **8.3 Control of nonconforming product**

Any materials identified as not conforming to the specification must be formally accepted under concession in writing by the Client, the material is otherwise to be considered as rejected. Batch labelling and delivery documentation shall clearly identify any such reclassification.

### **8.4 Analysis of data**

Not specifically referred to.

### **8.5 Improvement**

Not specifically referred to.

## APPENDIX A: REQUIREMENTS FOR QUALITY PLANS

1. The Quality Plan shall address:
  - a) Definitions of the product to be provided.
  - b) The Organization's structure describing the line of command and stating the names of the Organization's Manager responsible for the contracted work, the Technical Manager and Treatment Plant Operator and their training. Where it is proposed to use a sub-contractor, this should be stated and details provided. All sub-contractors shall also comply with all the requirements of this Sector Scheme. The Client is deemed to have the right to review non-conformities arising from the review of the contract.
  - c) Identification of the relevant parts of the Organization's Quality Manual relevant to the product or service being provided.

Note: Copies of the Organization's general procedures covering these items shall be made available for examination by the Client's representative and copies provided if requested.

- d) The Customer's nominated quality manager, project manager and/or other representatives through whom communication is to be made throughout the contract. An Organization's representative who can be contacted at all times when works are being undertaken must be identified.
- e) Arrangements for the storage of contract documentation.
- f) Details of disposition of records after 6 years.
- g) The inspection and testing regime to be adopted covering frequency, methods of test, responsibility for testing and acceptance criteria.

Unless otherwise specified, the following are minimum inspection and testing requirements for determining the outcome of preservative treatment:

*i) Treatment in accordance with a process specification.*

Compliance with the process requirements shall be demonstrated by a confirmatory record of the treatment process from a calibrated automatic recording device, e.g. chart recorder or computer print-out; together with details of preservative formulation used (e.g. unambiguous commercial name but including, where determined by the treater, concentrations of active ingredients) and, where relevant, the moisture content of the wood before treatment.

*ii) Treatment in accordance with a penetration and retention specification or where the specification includes penetration and/or retention requirements.*

Compliance shall be demonstrated by testing individual pieces (units) taken at random from the treated batch. The number of units shall be as specified by BS 6001-1 (ISO 2859-1 is also acceptable) for inspection level II and AQLs of 10% for permeable timbers and 25% for all other timbers. The procedures for selecting units and determining penetration and retention are detailed in BS EN 351-1.

Guidance on taking samples for analysis from selected units is given in BS EN 351-2. This standard includes an explanatory annex (Annex A) on the use of inspection levels and AQLs in selecting the number of units for examination. The AQL is the maximum number of units per hundred that can sub-standard as a process average without the batch produced by that process being rejected.

2. Specific contracts may require statements for the following:
- a) Inspection and testing regime to be adopted covering frequency, methods of test, responsibility for testing and acceptance criteria (where different from Clause 1.g) above).
  - b) Details and disposition of quality records after 6 years or at the end of the maintenance or defects period if longer.
  - c) Control of non-conforming product.
  - d) Name and address of Customer
  - e) Locations of sites for the contract.
  - f) Specification and/or Contract Drawings.
  - g) Quality of timber for the works and the commencement and completion dates for the contract.
  - h) Type(s) of timber and preservative treatment applied.
  - i) Any requirements additional to or modifying those in the Standard.
  - j) Any Client specified testing requirements and responsibility for testing including supply of test equipment.

k) Timber source information, including third party certification.

Note: Where certain aspects of this information cannot be obtained, or is not provided, this fact shall be noted in the Quality Plan against the appropriate section. Specific contracts may require that reference also be made to additional supporting documentation, e.g. Sample Appendix 1/24 in Volume 2 of the Manual of Contract Documents for Highway Works, Notes for Guidance on the Specification for Highway Works.

## APPENDIX B: REFERENCE DOCUMENTS

Reference documents relevant to this Sector Scheme at the date of issue.

This listing is not comprehensive; other documents may be required to fulfil the requirements of the contract. Organizations shall ensure that they hold copies of all the documents including amendments unless stated otherwise in the specification.

### 1. British Standards

The edition referred to is the latest version unless specifically dated below.

- a) BS 8417: Preservation of timber - Recommendations
- b) BS EN ISO 9001:2000 or BS EN ISO 9001:2008: Quality Management Systems – Requirements.
- c) BS EN 13991: Derivatives from coal pyrolysis. Coal tar based oils. Creosotes. Specifications and test methods
- d) BS EN 351-1: Durability of wood and wood-based products. Preservative-treated solid wood. Classification of preservative penetration and retention.
- e) BS EN 351-2: Durability of wood and wood-based products. Preservative-treated solid wood. Classification guidance on sampling for the analysis of preservative-treated wood.
- f) BS 6000: was republished in 2005 and consists of 3 parts.
- g) BS 6001: Part 1: Sampling procedures for inspection by attributes. Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
- h) BS 1722: Fences (note: relevant part as called up in specific contracts).
- i) BS EN 19011 Guidelines for quality and environmental systems auditing

2. WPA Quality Guidance Note QGN 2. The controlled preservation of timber and wood-based materials to improve their durability. Issue 3 August 2004.

3. Wood Protection Association Guidance Note: Standards of Training in Safe and Effective Wood Preservation.

4. WPA Manual: Industrial Wood Preservation: Specification and Practice

5. Manual of Contract Documents for Highway Works – Volume 2 Notes for Guidance on the Specification for Highway Works, and amendments\*, in particular:

Series NG000	Introduction
Series NG100	Preliminaries

Series NG300            Fencing  
Series NG2500        Environmental Barriers.

\*Note: Volumes 1 and 2 of the Manual of Contract Documents for Highway Works are normally amended on an annual basis. Organizations shall ensure that they have up to date copies of the latest amendments, information can be obtained from the Highways Agency Information Line on 08457 50 40 30.

6.    Manual of Contract Documents for Highway Works – Volume 3 Highway Construction Details. Series H Drawings.
7.    Other product and application specifications and Regulations issued by Government Departments, statutory and Local Authorities, WPA or any other specifications as appropriate and agreed between the Organization, Customer and Client.

## **APPENDIX C: TRAINING AND HEALTH AND SAFETY**

Organizations are reminded of the legal requirements to provide health and safety training in accordance with the relevant legislation.

Refer to section 4 Quality Management System Requirements paragraph 6.2 'Competence, Awareness and Training' of this document for training requirements.

Details can be obtained from the Wood Protection Association (WPA) at the following address:

WPA  
5 Flemming Court  
Castleford  
West Yorkshire  
WF10 5HW

Tel/Fax 01977 558274  
Email: [info@ wood-protection.org](mailto:info@wood-protection.org)

## APPENDIX D: REGISTER OF DESIGNATED TREATMENT PLANT OPERATIVES

Each Organization shall maintain a register of designated Treatment Plant Operators. An example of one form of register is shown below.

NAME OF COMPANY:

QA CERTIFICATION BODY:  
REGISTRATION NUMBER:

Full name of Operative	NVQ Certificate Number	Date of NVQ Certificate	WPA Register Number	Expiry Date of WPA Registration	Name & Signature of Suppliers Manager

## APPENDIX E: CALIBRATION REQUIREMENTS

All calibrations shall be carried out at least once per year. Different periods between calibrations may be required/permitted if experience suggests that this period is inappropriate or excessive. Guidance is given in BS EN 30012-1 "Quality assurance requirements for measuring equipment Part 1. Metrological confirmation system for measuring equipment".

Device	Reference Standard*	Permissible Deviation
Process recording devices		As per individual devices
Thermometers	BS593:1989	$\pm 2^{\circ}\text{C}$
Pressure gauges	BS EN 837-1:1998	$\pm 1$ Bar
Vacuum gauges	BS EN 837-1:1998	$\pm 0.1$ Bar
Electrical resistance moisture meters		$\pm 1\%$ moisture content
Hydrometers	BS 718: 1991	$\pm 5\%$
Time clocks		$\pm 2$ minutes in any one hour period

\*Organizations wishing to use devices not in accordance with a recognised British or European Standard shall provide evidence of equivalent accuracy.

## APPENDIX F: LIST OF CERTIFICATION BODIES

<b>Certification Body</b>	<b>Telephone Number</b>
BM TRADA Certification	01494 565484
B.S.I. Quality Services Europe	0208 996 9001
SGS United Kingdom Ltd	0151 350 6666

Information on Certification Bodies accredited against this scheme can be obtained by emailing UKAS:

[info@ukas.com](mailto:info@ukas.com)

## APPENDIX G: THE ROLE OF THE CERTIFICATION BODY

### Scope

This appendix provides specific requirements relating to the necessary expertise and experience that Certification Bodies and their evaluation team shall have in order to operate and administer the scheme in addition to the normal requirements of United Kingdom Accreditation Service (UKAS) for accreditation.

#### **A Qualifications of Certification Body**

1. The Certification Body shall be accredited by UKAS to the requirements of BS EN 45012 to issue certificates for quality management systems in accordance with BS EN ISO 9001:2000 or BS EN ISO 9001:2008 and this SSD.
2. The Certification Body must be able to demonstrate to UKAS and the Advisory Committee that it possesses and can maintain the necessary in-house expertise and experience within its Organization for the assessment of timber preservation operations.

#### **B Evaluation**

1. The Certification Body is responsible for ensuring that the evaluation team which carries out the audit for the Quality System Certificate, possess a demonstrable expertise of the timber preservation industry. Assessment of the Certification Body's ability to co-ordinate a competent team will be made by UKAS during surveillance visits of the Certification Body. Typical knowledge and skills expected by the assessment team are as follows:
  - a) IRCA Registered Lead Auditor of quality management systems or equivalent.
  - b) Knowledge of timber species, timber limiting characteristics, and timber preservation methods and techniques sufficient to understand the process employed and the controls necessary to ensure delivery of conforming product. Typically this would include knowledge of moisture measurement, treatment plant operation, identification of common timber species and methods of quantifying the impregnation of preservative into treated timber. (Conveyance of this knowledge to assessment staff will be determined by the Certification Body and will be audited by UKAS).
  - c) Have a demonstrable ability to understand specifications and drawings, including an awareness of all of the relevant specifications, e.g. Specification for Highway Works.

2. The Certification Body shall provide to the NCDTSSAC details of newly registered companies deemed competent to undertake timber preservation within 14 days of registration of such companies. Additionally certification bodies shall immediately notify the NCDTSSAC when companies have been de-registered.
3. The quality system certificate, which shall include reference to this SSD, will be issued to a model that conforms to the requirements of UKAS and indicates competence under this SSD. The certificate shall include the type (and subtype if appropriate) of timber preservation for which the registered company has been assessed.
4. The Certification Bodies involved in certification to this scheme shall provide feedback on the effectiveness of the scheme to NCDTSSAC as part of the annual scheme review.

## APPENDIX G1: GUIDANCE TO CERTIFICATION BODY ASSESSORS AND INTERNAL AUDITORS

An auditor or assessor (first, second or third party) should be aware of the following when completing an audit:

- A General background to the scheme,
- i) The reasons for development of the National Highway Sector Schemes (NHSS) and this scheme in particular, and for CB assessors examples of where its absence has caused concern/problems  
  
This is normally contained in the introduction to the scheme, in this instance the scheme (NHSS 4) was initially developed with those bodies listed at the front of this document.
  - ii) To whom the scheme applies  
  
See Scope in relevant NHSS document ie NHSS 4
  - iii) Contact details of those that can offer scheme specific assistance  
  
Should be contained in the Organization's quality manual/NHSS documents.
  - iv) An overview of the highway infrastructure that the scheme applies to
  - v) The range of contracts that the scheme can apply to  
  
See Scope in relevant NHSS document ie NHSS 4 (section 1)
  - vi) Specific types of works that the scheme applies to  
  
See Scope (section 1) in relevant NHSS document and also Appendix L in NHSS 4 in this instance applies to natural and conferred durability of timber.
  - vii) Definitions and terminology that are particular to the scheme  
  
See section 3 of the NHSS
  - viii) Diagram of routes to competency of management, supervisors and operatives etc delivering the scheme services  
  
Information/guidance is contained in Appendix C of the document, however the organization's training administrator should have this information available (assessors should also be aware of training and competency assessment requirements available from bodies such as The Wood Protection Association who should be able to assist).

- ix) Overview of important reference documentation applicable to the scheme

Section 2 and Appendix B of the document provides some information.

Knowledge of relevant European and British Standards for the natural & conferred durability of timber (timber protection/preservation) in particular those relating to product conformity, type testing and their requirements. Familiarity with SHW especially Series 300 and notes for guidance, including when these are updated.

Relationship with other NHSS and its applicability to this scheme.

NHSS 4 is mandatory for all timber used within NHSS 2A & NHSS 2C

**B Summary of where the scheme introduces the interpretation of ISO 9000**

4. Quality Management System	Interpretation Y/N	Comment
4.1	Y	
4.2	Y	
4.2.1	Y	
4.2.2	Y	
4.2.3	Y	
4.2.4	Y	
5. Management Responsibility		
5.1	N	
5.2	Y	
5.3	N	
5.4	N	
5.5	N	
5.6	Y	
6. Resource Management		
6.1	N	
6.2		
6.2.1	N	
6.2.2	Y	See Appendices C, and D
6.3	N	
6.4	N	

7. Planning and Product Realization		
7.1	Y	See Appendix A
7.2		
7.2.1	N	
7.2.2	N	
7.2.3	Y	
7.3	N	
7.4	Y	
7.4.1	Y	
7.4.2	N	
7.4.3	N	
7.5	Y	Important & product critical requirements
7.5.1	N	
7.5.2	N	
7.5.3	Y	Timber sources & sustainability.
7.5.4	N	
7.5.5	N	
7.6	y	See Appendix D
8. Measurement, Analysis and Improvement		
8.1	N	
8.2		
8.2.1	N	
8.2.2	Y	
8.2.3	N	
8.2.4	N	
8.3	Y	
8.4	N	
8.5	N	

## C Overview of wood preservation

- 1 safe working practices
- 2 operative/supervisor training and qualifications
- 3 maintain equipment
- 4 public protection

### C1 – Safe Working Practices (see 6.2.2)

Correct Personal Protective Equipment Worn

Equipment approved and suitable for use

Technicians/operatives to be fully aware of their H&S obligations

- must be able to read and understand their job sheet, risk assessment etc; understand English
- Method Statements/work procedures
- Risk Assessment
- Induction card/skills card

Vehicles/loads are inspected and drivers are qualified  
Site visit including assessment of installation (if possible) and techniques verified.

Awareness of relevant H&S legislation as applicable to wood preservation.

Delivery vehicle drivers are aware of current best practice including traffic management measures (including site arrangements).

## C2 Training and Qualifications

- Have achieved appropriate training and competency modules and the WPA Guidance Note: "Standards of Training in Safe and Effective Wood Preservation"
- Treatment Plant Operators shall hold the National Vocational Qualification (NVQ) 'Wood Preserving – Industrial Pre-treatment (Construction) Level 2' (Q1053749) awarded by CITB/City & Guilds
- Plant Operators shall be listed in The Wood Protection Association (WPA) Register. This registration is valid for 5 years and must be renewed on submission of satisfactory evidence of refresher training.
- Been inducted on specific equipment (by employer) or if appropriate (ie under training) is supervised by a qualified person
- Aware of and understand the relevant requirements of this NHSS
- Aware of and understand the provisions for implementation of training in NHSS 4
- Been inducted on site specific H&S issues (daily if necessary)

Hold relevant skills card

## C3 Maintain Equipment

- Operative/supervisor is aware of LOLER and PUWER requirements
- Maintenance checklists are available and have been completed on a daily basis

## C4 Public Protection

- Operative/supervisor/delivery driver is aware of need to protect public during transport & offloading operations
- Operative/supervisor has been trained to carry out a visual site risk assessment to ensure that the public will not be put at risk during transport & offloading operations

- Operatives/supervisors have identification
- The Organization(company) has a complaints procedure in place

## **APPENDIX H: ORGANIZATION ACCEPTANCE AND GUIDELINES FOR NEW ENTRANTS**

### **1 Organization Acceptance**

- a) For work carried out on roads managed by the Highways Agency, The Scottish Executive Development Department, The Welsh Assembly Government and The Department for Regional Development, Northern Ireland or their agents, only those Organizations holding a valid Certificate of Registration for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the Specification for Highway Works.
- b) For work carried out on roads managed by other highway authorities, acceptance of the Organization will depend on the requirements of the contract.

It will be the responsibility of the Certificated organisation to inform the compilers of the Schedule of Suppliers (currently LANTRA Awards) that it has received certification against the Scheme within 14 calendar days of confirmation of certification - this shall be a requirement for newly certificated organisations and those renewing certification. Organisations shall additionally inform the Secretary of the Advisory Committee to the Scheme of when they receive first certification and/or have certification renewed.

Certification Bodies shall notify the Secretary of the Advisory Committee to the Scheme and the compiler of the Schedule of Suppliers when an organisation is de-certificated. This will enable an accurate and extant database of certificated organisations to be maintained for public information and reference (<http://www.lantra-awards.co.uk/highways.htm>).

### **2 Guidelines for New Entrants – Requirements**

In October 1999 the advisory committee considered whether there was any need for guidelines for entry to this scheme. The committee unanimously agreed that it was unnecessary to provide advice other than to apply to any relevant UKAS accredited Certification Body which has been accredited to undertake assessments against this Sector Scheme Document.

## **APPENDIX J1: FEEDBACK**

Any observations or complaints relating to this document or the process described herein should be addressed to the Committee Secretary

The Natural & Conferred Durability of Timber Sector Scheme Advisory Committee  
c/o UKAS  
21 – 43 High Street  
Feltham  
Middlesex  
TW13 4UN  
Tel: 0208 917 8400  
Fax: 0208 917 8500

Problem Identified:

Suggested Action:

Name:

Organization:

Address:

Contact details:

Date:

## **APPENDIX J2: COMPLAINTS TO CERTIFICATION BODIES**

Complaints relating to certification matters in respect of alleged deficiencies in the product provided under this scheme should in the first instance be taken up with the Organization. In the event that the matter cannot be satisfactory resolved written complaints should be made to the Organization's certification body, detailing the problem identified. Contact numbers are given in Appendix F.

Problem Identified:

Organization's Details:

Name:

Address:

Complaints

Name:

Organization:

Address:

Date:

Signed:

## **APPENDIX K: The Interpretation of Certificates Issued by Certification Bodies**

The certification bodies issue a variety of styles of Certificates of Registration, which may or may not include the scope of the registration and the location of premises that are covered by the certificate of registration.

The full scope of registration may be included on the certificate or in an Appendix, it may be a text list or described as a schedule. Other Appendices or addendum may also be used to list the Organization's premises included in the certification.

In order for the registration to be valid with respect to this and other Sector Schemes the scope of registration must include specific reference to the Sector Scheme. A list of work activities appropriate to the Specification for Highway Works is not sufficient to indicate compliance. The words 'National Highway Sector Schemes' must be included along with the scheme number. Where possible the scheme title should also be included, e.g. '4 – Sector Scheme for Preservative Treatment of Timber'.

Many organizations operate from several locations eg regional offices, asphalt plants, service depots etc. It is important that each and every location covered by the certificate of registration is identified by the certification body and included with the certificate as an essential part of the registration process. This may be achieved by the attachment of an addendum or appendix that is referred to on the certificate of registration. The Addendum or Appendix shall include sufficient information that will identify the scope of registration at each location and where applicable the relevant category of work that can be undertaken at that location.

The following are example models for the certification.

Figure 1 shows the scope of registration on the certificate and

Figure 2 shows an example of an Appendix for scope of registration. The italic text in square brackets indicates where specific text would need to be included. Where appropriate the information on location and their respective scopes may be included on the Appendix for scope of registration.

Figure 1 Example Model Certificate of Registration.

*[Certification Body Name / Logo]*

C E R T I F I C A T E   O F   R E G I S T R A T I O N

*[ORGANIZATION NAME]*

*[Organization Address]*  
*[Town]*  
*[County]*  
*[Post Code]*

*[Certification Body Name]* issues this certificate to the above named company after assessing the company's quality management system and finding it in compliance with **BS EN ISO 9001:2000 or BS EN ISO 9001:2008 AND THE FOLLOWING NATIONAL HIGHWAY SECTOR SCHEMES**

For the following scope of registration  
*[List of appropriate highways related works].*  
National Highways Sector Schemes  
**[Sector Scheme number and Title]**  
**[Sector Scheme number and Title]**  
*[Sector Scheme number and Title]*

*[(Appendix ... details the full scope of registration and Appendix ... details the locations covered by this registration)]*

Certificate Number:                      *[Certificate Number]*  
Issue Date                                      *[date]*  
Renewal Date                                      *[date]*

Signature

*[Name & Title of Certification Body Official]*

***[Certification Body standard footer: Name / Logo / UKAS Logo /NHSS Logo etc.]***

Figure 2 Example Model Appendix

***[Certification Body Name / Logo]***

**APPENDIX**

To Certificate Number *[Certificate Number]* Appendix No. *[1]* Page 1 of *[1]*

This Appendix declares the scope of registration of the certificate granted to:

***[ORGANIZATION NAME]***

*[Organization Address]*  
*[Town]*  
*[County]*  
*[Post Code]*

**Scope of Registration**

*[List of appropriate highways related activities]*  
 National Highway Sector Schemes  
*[Sector Scheme Number and Title]*  
*[Sector Scheme Number and Title]*  
*[Sector Scheme Number and Title]*

<b><i>Depot, Regional Office etc</i></b>	<b><i>Applicable Sector Scheme(s)</i></b>	<b><i>Scope of Registration</i></b>
<b><i>[Depot 1]</i></b> <i>New road, Newtown]</i>	<i>[Sector Scheme Number and title]</i>	<i>[Detailed scope]</i>
<b><i>[Depot 2]</i></b> <i>Old Road, Oldtown]</i>	<b><i>Scheme Number and title]</i></b>	<i>[Detailed scope]</i>

***[Certification Body standard footer: Name/ Logo/ UKAS Logo/NHSS Logo]***

## **APPENDIX L: Schedule of Suppliers**

Lantra Awards have established and manage a schedule of registered companies that have been registered to National Highways Sector Schemes; free access to the schedule is obtained by logging on to the Lantra Awards website:

[www.scheduleofsuppliers.com](http://www.scheduleofsuppliers.com)

However, it should be noted that only those Organisations that pay for entry onto the schedule are listed. The list of all registered installers registered is available by email at:

NHSSscheduleofsuppliers@lantra.co.uk