



CERTIFICATION BOARD FOR INSPECTION PERSONNEL

DOCUMENT No CBIP – LPI – 1 - 2008

DRAFT

**Standard of Proficiency
for the Qualification and Certification
of
Liquid Penetrant Inspection Personnel**

Initial edition November 2008

**Issued under the Authority of the Certification Body for Inspection Personnel,
New Zealand**

Contents

Section 1 Scope and General

- 1.1 Scope
- 1.2 Objectives
- 1.3 Certification Levels
- 1.4 Definitions

Section 2 Pre-Examination Requirements

- 2.1 Physical and Vision
- 2.2 Formal Training,
- 2.3 Submission of Evidence

Section 3 Examination Procedures

- 3.1 Application
- 3.2 Closing Date
- 3.3 Examination Format
- 3.4 PT1
- 3.5 PT2
- 3.6 Date and Venue
- 3.7 Examination Materials
- 3.8 Fees
- 3.9 Examination Results
- 3.10 Successful Candidates
- 3.11 Un Successful

Section 4 Certification

- 4.1 Application
- 4.2 Experience
- 4.3 Submission of Evidence
- 4.4 Exemptions
- 4.5 Issue of Certificates
- 4.6 Certification Period
- 4.7 Renewal of Certification (5 year)
- 4.8 Recertification (10 year)
- 4.9 Non Renewal
- 4.10 Withdrawal or Suspension
- 4.11 Complaints and Appeals
- 4.12 Code of ethics
- 4.13 Register of Certificate Holders

Appendix A Knowledge Requirements

Appendix B Sample Examination Questions

Appendix C Grading of Practical Examination Results

Appendix D Code of Ethics

STANDARD OF PROFICIENCY FOR THE QUALIFICATION AND CERTIFICATION OF LIQUID PENETRANT INSPECTION PERSONNEL

Foreword

This Standard of Proficiency details the requirements for the qualification and certification of NDT personnel performing Liquid Penetrant Inspection (LPI) in New Zealand. The following requirements are designed to comply with ISO 9712 (qualification and certification of NDT personnel).

Certification under this standard will be the responsibility of the Certification Body for Inspection Personnel (CBIP) and will provide industry with evidence of the technical ability and general competence of personnel performing inspections.

While every endeavour has been made by the Certification Body to ensure this certification meets the needs of the New Zealand NDT industry, there may be areas of the Industrial and manufacturing industry that are not fully covered by this SOP. A certain responsibility lies with the candidate's employer to assess the suitability of this certification in relation to their customer and contractual requirements. Reference should be made to the wording in ISO 9712 Para 1 – Scope. The following requirements of this Standard of Proficiency, including appendix A, can be used to assist with this assessment.

1 SCOPE AND GENERAL

1.1 Scope

This Standard of Proficiency establishes a system for qualification and certification by a recognised Certification Body for personnel who perform Liquid Penetrant inspection in New Zealand.

1.2 Objectives

The objective of this Standard of Proficiency is to establish the general competency, including theoretical and practical knowledge, for personnel performing Liquid Penetrant inspections.

1.3 Certification Levels

Two (2) Levels of certification are currently defined by this standard, they are:

PT1 Liquid Penetrant Level 1 as defined by ISO 9712 Section 6

PT2 Liquid Penetrant Level 2 as defined by ISO 9712 Section 6

1.3.1 PT1

An individual certified to Level 1 shall have demonstrated competence to carry out Liquid Penetrant Inspections in accordance with written instructions. They may not work directly from general procedures or standards such as AS 2062 or ASTM E1417 as these require some interpretation. The level 1 shall work under the supervision, and be guided by a level 2 or 3 certified individual. Level 1 personnel may be authorised by their employer to perform the following

- Set up NDT equipment;
- Perform specific Liquid Penetrant Inspections;
- Report the results.

Level 1 certified personnel shall not be responsible for the choice of test method or technique to be used, nor for the interpretation of test results

1.3.2 PT2

An individual certified to Level 2 shall have demonstrated competence to perform Liquid Penetrant Inspections according to established procedures. Level 2 personnel may be authorized by their employer to perform the following

- Work directly from LPI standards and specifications such as AS 2062 and ASTM E1417
- Set up and verify equipment settings,
- Perform Liquid Penetrant Inspections,
- Interpret and evaluate results according to applicable codes, standards, specifications or procedures,
- Prepare and write LPI instructions
- Supervise, guide and train level 1 personnel
- Report the results of Liquid Penetrant tests.

1.4 Definitions

Except as modified below, all definitions used in ISO 9712 shall apply to this document

Certification Body – Certification Board for Inspection Personnel (CBIP).

2 PRE-EXAMINATION REQUIREMENTS

2.1 Physical and Vision

Prior to being accepted for examination the candidate shall provide evidence of the following

- Current eyesight test (within 12 months) proving that near vision, either corrected or uncorrected, satisfies the requirements of the latest edition of ISO 9712
- English to a level of Toefl 500

Note – It is expected that each candidate shall be able to perform the required practical tests and differentiate between colours used in the procedure. Any Medical or Physical disability, including vision colour deficiencies, that may prevent the candidate from performing the required tests should be discussed with the certification body prior to application

2.2 Formal Training

Applicants for examination shall have completed formal training to the required syllabus and for the required number of hours as specified below

2.2.1 Liquid Penetrant Level 1 (PT1)

Applicants for examination for level 1 shall:

- Have attended a theory course in Liquid Penetrant inspection acceptable to the Certification Body. The course shall total at least 16 hours.

2.2.2 Liquid Penetrant Level 2 (PT2)

Applicants for examination for level 2 shall:

- Have attended a **level 2** theory course in Liquid Penetrant inspection acceptable to the Certification Body. The course shall total at least 24 hours, exclusive of any level 1 training

2.3 Submission of Evidence

Candidates shall submit to the Certification Body documented evidence of completion of the required training relevant to the examination.

3 EXAMINATION PROCEDURES

3.1 Application

Application for each examination shall be accompanied by a completed application form and documented evidence supporting pre-examination requirements. An application form can be found at the end of this standard or downloaded from the CBIP website. No application will be considered until receipt of an accurately completed application form, examination fee, eye test certificate and qualifying training course attendance.

3.2 Closing Date

All applications and supporting documentation must be received at least 6 weeks prior to any advertised examination dates, or as otherwise specified by the Certification Body via its website.

3.3 Examination Format

Qualification for both PT1 (Level 1) and PT2 (Level 2) shall be by way of a three part examination consisting of two written examinations and a practical examination. The written exam papers shall comprise a general paper and a specific paper. The exams shall be carried out at a place nominated by CBIP.

Progress to the practical examination will be possible only after passing the required written examinations. However, due to exam venue limitations, the Certifying Body may accept simultaneous applications for all 3 exams

3.4 PT1

3.4.1 PT1 (Level 1) General Paper (Written)

- 40 multi choice questions covering the general theory of Liquid Penetrant Testing.
- 90 minutes duration, multiple choice questions in a closed book format.
- Refer to appendix for exam topics and sample questions
- Pass mark of 70% required

3.4.2 PT1 (Level 1): Specific Paper (Written)

- 20 multi choice and 10 short answer questions covering specific applications of the Liquid Penetrant Testing method. The questions may involve portable and stationary (Tank) equipment, and questions on standards, specifications and procedures. Some basic knowledge of inspection equipment is also required.
- Permitted reference material: AS 2062, ISO 9712 and this Standard of Proficiency
- 2.5 Hour duration,
- Refer to appendix for exam topics and sample questions
- Pass mark of 70% required

3.4.3 PT1 (Level 1) Practical examination

The practical examination shall comprise of inspection and reporting on at least 3 samples. The examination shall be carried out in accordance with a detailed written instruction supplied by the examiner and should comply with AS 2062. An examination observer will be present and will allocate marks (15%) in accordance with a check sheet supplied by the Certification Body. Written examination reports, including defect indications and datum, will be required to be presented to the examiner at the end of the test. A report pro-forma will be supplied to the candidate.

Time allowed will be 3 hours.

Pass mark of 70% required

3.5 PT2

3.5.1 PT2 (Level 2) General Paper (Written)

- 40 multi choice questions at level 2 covering the general theory of Liquid Penetrant Testing.
- 90 Minutes duration, multiple choice questions in a closed book format.
- Refer to appendix for exam topics and sample questions
- Pass mark of 70% required

3.5.2 PT Level 2: Specific Paper (Written)

- 20 multi choice and 10 short answer questions covering specific applications of the Liquid Penetrant Testing method. The questions may involve portable and stationary (Tank) equipment, and questions on standards, specifications and procedures. Knowledge of inspection equipment, calibration and use is also required. In addition, at level 2, knowledge of this proficiency Standard, ISO 9712 and the Certification Body's Code of Ethics is required. Due to this, the specific paper may contain questions relating to these documents
- Permitted reference material:, AS 2062, ISO 9712 and this Standard of Proficiency
- 2.5 Hour duration,
- Refer to appendix for exam topics and sample questions
- Pass mark of 70% required

3.5.3 PT Level 2 Practical Examination

The practical examination shall consist of two (2) parts

1) Practical Test

The practical test shall consist of an inspection and reporting on at least 3 samples. The examination shall be carried out in accordance with a Standard Practice or General Procedure such as AS 2062. This will require the level 2 applicant to interpret the document and determine the inspection procedure.

An examination observer will be present and will allocate marks (15%) in accordance with a check sheet supplied by the Certification Body. Written examination reports, including defect indications, datum and interpretation, will be required to be presented to the examiner at the end of the test. This report should conform to the requirements of the nominated General Procedure. No pro-forma worksheet will be supplied, but candidates may use their own company report sheets.

2) Written Instruction (Procedure)

The second part shall consist of producing a written Instruction for the inspection of a specific part nominated by the Certification Body. The instruction shall be such that it complies with the requirements of AS 2062 or ASTM E1417 and can be used by a level 1 with no interpretation required

Time allowed will be 4 hours including the written Instruction.

Pass mark of 70% required

3.6 Date and Venue:

Examination dates and venues will be at the discretion of the Certification Body and posted on the website in a timely manner

3.7 Examination Materials

All examination materials, including papers and test pieces, shall be controlled and remain the property of the Certification Body.

3.8 Fees:

The Certification Body shall set the examination fees for the certificate sought. All fees must be paid upon application.

3.9 Examination results:

All candidates whether successful or unsuccessful should, except in exceptional circumstances, be notified of the result in writing within six weeks of the date of the examinations.

3.10 Successful Candidates

Successful candidates who pass all examinations at level 1 or level 2 may apply to the Certification Body for certification as per section 4 below.

3.11 Unsuccessful Candidates (Not yet competent)

Candidates failing any one of the required examinations may apply to resit that exam within a period of two (2) years from the date of the failed examination. This can only be carried out up to a maximum of two (2) times.

Applications for re sitting examinations shall be accompanied by evidence of additional training and experience

Candidates failing the re-examination on the second attempt will be required to take all examinations in accordance with the established procedure for new candidates.

4 CERTIFICATION

4.1 Application

Application for certification shall be accompanied by a completed application form and documented evidence supporting completion of the following experience requirements. An application form can be found and downloaded from the CBIP website. Refer to the notes included in the application form detailing the application procedure.

No application will be considered until receipt of an accurately completed application form, successful examination results, and documented evidence of the required industrial experience.

4.2 Experience

Experience in months will be based on a nominal 40 hour week, provided the candidate is working full time in the Liquid Penetrant method.

Note - Candidates may be accepted for examination without the required experience, however the examination results only remain valid for a period of 24months from the date of passing the final examination. During this time the required experience may be obtained and documented evidence (confirmed by the employer) submitted to the Certification Body. An application for certification will then be considered by CBIP.

4.2.1 Liquid Penetrant Level 1 (PT1)

Applicants for level 1 shall:

- Have at least 1 month experience in the Liquid Penetrant Inspection method not including any organised theory or practical training courses. For the experience to be valid it should be gained under the direct supervision of a Level 2 or 3 certified person.

4.2.2 Liquid Penetrant Level 2 (PT2)

Applicants for level 2 shall:

- Have at least 3 months experience in the Liquid Penetrant Inspection method at **level 1**, not including any organised theory or practical training courses. For the experience to be valid it should be gained under the control of a Level 2 or 3 certified person.

4.2 Submission of Evidence

Candidates shall submit to the Certification Body, documented evidence of experience that is relevant to the certification being sought.

At least 50% of the submitted evidence detailing the number of hours shall be by way of Timesheets, Logbooks or Workbooks (or equivalent). CBIP reserves the right to reject any evidence that does not have enough (or appropriate) supporting documentation.

4.3 Exemptions

Exemptions may be given on application to the Certification Body for PT Level 1, and 2 for qualifications obtained in other national qualification schemes which are accredited to ISO 9712. Any certificate issue by the Certification Body shall only be valid for the remaining period of the original (overseas) certificate, and the Certification Body will charge a fee for any such issue. The CBIP certificate will only be issued for levels and categories where the examination and certification requirements of the original certificate clearly meet or exceed the requirements for the CBIP level or category.

In some cases the qualification requirements may be reduced where the candidate's presented qualifications are acceptable in part only, provided the evidence has been reviewed and found to be acceptable by the Certification Body.

The Certification Body may use a panel, made up of members of its choosing, to assess any request for examination exemptions.

Final certification and issue of certificates remains the sole responsibility of the Certification Body

4.5 Issue of Certificates

The Certification Body shall issue certificates to successful candidates.

The certificate shall contain at least:

- Level of certification
- Identity of the issuing Certification Body.
- Identity and signature of the person to whom the certificate applies.
- Date of issue and the expiry date.
- Title and unique number of the certificate.
- Signature and name of the person authorising the certificate.

The certificate shall remain the property of the Certification Body.

4.6 Certification Period

Certification will be valid for a period of five years from the date on the certificate

4.7 Renewal of Certification (5 year)

Prior to the completion of the first five (5) year period of validity, certification may be renewed by the certification body for a further five (5) years, provided the certificate holder supplies the following documented evidence:

- Current (within 12 months) Eyesight test conforming to the Pre Examination requirements of this standard
- Continued satisfactory work activity, relevant to the certification, without an interruption of 12 months or more.
Acceptable forms of supporting evidence should be by Logbook, Work Records/Reports and Employer statements.

If the criterion for renewal cannot be met, the individual shall follow the same rules as for recertification

4.8 Recertification (10 year)

Prior to completion of each second five (5) year period of validity, or at least every ten years, the certified individual shall be recertified by the Certification Body for a further five (5) years, provided the individual meets the criterion for renewal and meets the following:

- Successfully complete a practical examination similar to that required for initial certification

Renewal and Recertification shall be the responsibility of the certificate holder

Personnel seeking certification renewal / recertification shall apply at least 30 days before the expiry date given on their Certificate. Include a general written summary of work history and employment covering the five year certification period relevant to the certification

Where a person does not seek renewal or re-certification, their certification will automatically lapse or be withdrawn.

4.9 Non-Renewal

Where an applicant fails to be granted renewal or recertification, the Certification Body shall advise the applicant in writing, giving appropriate reasons.

The candidate's certification shall lapse at the expiry date, after which any future application for certification will be treated as a new application. Alternatively, the candidate may elect within one month to:

- Submit further evidence to the Certification Body and/or
- Re-sit the appropriate examination or examinations (only one resit will be permitted).

Alternatively the applicant may make a formal submission to the Certification Body for resolution in accordance with the Certification Body's appeals procedure

4.10 Withdrawal or Suspension of Certificates

4.9.1 Withdrawal:

The Certification Body may withdraw a certificate where an authenticated complaint of the person's proficiency and/or competence has been received and substantiated. The Certification Body may also withdraw a certificate where an authenticated complaint of a breach of the CBIP Code of Ethics has been received and substantiated. When the Certification Body substantiates a complaint the certificate shall not be renewed without further examination(s). Following a request by the Certification Body the certificate holder shall surrender and return his/her Certificate to the Certification Body.

4.9.2 Suspension:

If there is any break, or interruption of the certified individual exceeding 24 months from practical work in the category qualified, the certification shall be suspended until the Certification Body is satisfied by submission of written evidence that the applicant is competent for re-certification.

4.11 Complaints and Appeals

Appeals against withdrawn or suspended certificates may be made to the CBIP Board in accordance with the Certificate Body's appeals procedure. CBIP maintains a documented procedure for the resolution of complaints and appeals. All complaints and appeals shall be conducted in accordance with this procedure. (QPM 19 in the CBIP Quality Manual)

4.12 Code of Ethics

A certified individual shall be familiar with and recognise that precepts of personal integrity are fundamental, and shall meet the Code of Ethics of the Certification Body at all times. All applicants shall, as part of their application, sign a document stating that they have read, understood and agree to abide by the CBIP Code of Ethics.

4.13 Register of Certificate Holders

The Certification Body maintains a register of persons holding current certification that is available for public viewing.

APPENDIX A

LIQUID PENETRANT INSPECTION Knowledge requirements (General)

LIQUID PENETRANT INSPECTION	PT1	PT2
Introduction to basic Liquid Penetrant Inspection concepts	X	X
History of LPI	X	X
Capabilities and Limitations	X	X
PENETRANT PROPERTIES		
Capillary action	X	X
Contact angle, wet ability and surface tension		X
Flammability	X	X
Removability	X	X
Specific Gravity		X
Viscosity	X	X
PENETRANT CLASSIFICATION		
Type 1 and 2, Method A, B, C and D	X	X
Water washable and Post emulsifiable	X	X
Solvent removable	X	X
Mil Std 25135 including QPL		X
AMS 2644 including QPL		X
Visible	X	X
Fluorescent	X	X
Relative sensitivity	X	X
Water based penetrants		X
CLEANERS		
Solvents	X	X
Solvent and water based degreasers	X	X
Alkaline	X	X
Etching	X	X
EMULSIFIERS		
Lipophilic and Hydrophilic	X	X
DEVELOPERS		
Dry	X	X
Water soluble and water suspendible	X	X
Non aqueous	X	X
Special form		X
PRECLEANING		
Typical contaminants	X	X
Selecting of pre cleaning method	X	X
Paint and corrosion removal	X	X
Blasting, grinding and etching	X	X
De greasers	X	X

PENETRANT APPLICATION		
Dwell times and temperatures	X	X
Different ways to apply penetrant and penetrant selection	X	X
Dip and Drain technique	X	X
Defect and surface condition	X	X
Electrostatic spray		X
PENETRANT REMOVAL		
Water wash, temp, pressure and distance	X	X
Emulsifier application and times	X	X
Diffusion vs scrubbing action	X	X
Hydrophilic and lipophilic	X	X
Pre and post rinse	X	X
Solvent wipe	X	X
Psi vs kPa and Degrees C vs degrees F		X
DRYING		
Drying ovens	X	X
Temperature and times	X	X
DEVELOPER APPLICATION		
Dry powder, dust chambers and spray applications	X	X
Wet developer tanks	X	X
Non Aqueous spray	X	X
Development times	X	X
Action of developer	X	X
Coating thickness with Visible and Fluorescent	X	X
INSPECTION		
White and fluorescent light requirements	X	X
Ambient lighting and Dark adaption	X	X
Background	X	X
Use of glasses	X	X
Scanning technique	X	X
False, relevant and non relevant indications	X	X
Recording, reporting and retesting	X	X
INTERPRETATION		
Solvent wipe	X	X
Characterisation of indications, shapes and sizes	X	X
Length of time for indications to appear	X	X
Visual inspection using magnification	X	X
SPECIAL TECHNIQUES		
Filtered particle	X	X
Water based penetrants	X	X
Leak through method	X	X

EQUIPMENT		
Portable kits	X	X
Black capes	X	X
Stationary tank lines	X	X
Electrostatic spray		X
Extraction	X	X
White and Black (UV) lights	X	X
Pressure and temp indicators	X	X
Refractometers and Hydrometers		X
Binoculars and magnifiers	X	X
Timers	X	X
EQUIPMENT CHECKS		
Process sensitivity test, KDS and TAM panels	X	X
Contamination and concentration tests	X	X
Black and white light measurement, Lux and W/m ²	X	X
Developer contamination	X	X
Remover tests	X	X
BASIC MATERIALS		
Basic Metallurgy	X	X
Types of Materials – Carbon, Stainless Steel, Aluminium	X	X
Welding Processes – Common methods	X	X
Casting and forging	X	X

**LIQUID PENETRANT INSPECTION
Knowledge Requirements - Specific**

LPI PROCEDURES		
LPI procedures involving inspection of common welded parts such as Plate, Pipe and Nozzles and typical defects	X	X
Casting and forging defects	X	X
“In service” defects	X	X
LPI procedures involving Stationary and portable equipment	X	X
Interpretation and evaluation techniques	X	X
HAZ cracking and Lamellar tearing	X	X
Level 1 written instruction	X	X
CODES, STANDARDS and supporting documents		
This Standard of Proficiency and ISO 9712	X	X
CBIP Code of Ethics	X	X
AS 2062	X	X
ASTM E 1417		X
AMS 2644		X
Mil std 25135		X
Manufacturers MSDS sheets	X	X

Appendix B

LIQUID PENETRANT SAMPLE EXAMINATION QUESTIONS

PT1 LIQUID PENETRANT LEVEL 1 GENERAL PAPER (40 Multi Choice)

- 1 Which of the following materials would be most difficult to test using the liquid penetrant method?
 - A. Unglazed porous ceramic
 - B. Titanium
 - C. Forged Aluminium
 - D. Cast iron

- 2 Which of the following is NOT a characteristic that applies to liquid penetrant testing?
 - A. This method can accurately measure of the depth of a crack or discontinuity.
 - B. This method can be used for on-site testing of large parts.
 - C. This method can be used to find shallow surface discontinuities.
 - D. This method can be made more or less sensitive by using different penetrant materials?

- 3 The stage of the inspection process that removes excess surface penetrant from a test specimen is generally referred to as:
 - A. The washing or removal stage
 - B. The pre rinse step
 - C. The post rinse step
 - D. The washing dwell time

PT1 LIQUID PENETRANT LEVEL 1 SPECIFIC PAPER (20 Multi Choice and 10 short answer)

- 1 According to ISO 9712 and the CBIP Standard of Proficiency for Liquid Penetrant Inspection, Level 1 personnel may be authorised to perform which of the following.
 - A. Set NDT equipment
 - B. Perform specific PT inspections only
 - C. Report on the results of the inspection
 - D. All of the above

- 2 Describe the method for applying non aqueous developer during a portable inspection and state the developer thickness required for a visible penetrant.

PT2 LIQUID PENETRANT LEVEL 2 GENERAL PAPER (40 Multi Choice)

- 1 Capillary action is?
 - A. Required in order to carry out a successful penetrant inspection
 - B. Associated with the contact angle and surface tension of a fluid
 - C. Both A and B are correct
 - D. The property of a fluid which will affect it's resistance to flow

- 2 Method "A" Penetrants commonly refer to:
 - A. Magnetic Penetrants
 - B. Fluorescent penetrants
 - C. Chemical etch penetrants
 - D. Water Washable penetrants

- 3 When penetrant testing for shallow discontinuities using a post-emulsification penetrant, the emulsification times should be long enough to:
 - A. Mix the emulsifier with the surface penetrant only
 - B. Mix the emulsifier with all the penetrant
 - C. Mix the emulsifier with penetrant in the discontinuities
 - D. Allow the emulsifier to break down the surface tension of the penetrant

**PT2 LIQUID PENETRANT LEVEL 2 SPECIFIC PAPER
(20 Multi Choice and 10 short answer)**

- 1 A typical penetrant indication from a large area of lack of side wall fusion on a single run "V" butt weld would:
 - A. Appear very quickly
 - B. Appear at the toe of the weld
 - C. Be visible on the surface once the developer was removed
 - D. All of the above

- 2 What information, relative to the solvent you are using, would you expect to find on the manufacturers MSDS

Appendix C

PT1 and PT2 Practical examinations

The marks allocated for the Level 1 and 2 Practical examinations will be in accordance with a set of pre defined criteria

The following gives general information on how the marks are allocated at each level

PT1

Correct use of the equipment

Correct interpretation of the written instruction

Performance of the inspection

Finding all mandatory indications

Defect datum

Reporting

Note: A candidate failing to report a defect specified on the master report as 'mandatory shall be awarded zero marks in the Recording and Reporting part of the practical examination.

PT2

Selection and correct use of the equipment

Equipment control and checks

Correct interpretation of standard / Code

Performance of the inspection

Finding all mandatory indications

Defect datum

Reporting

Writing Level 1 Instruction 15%

Note: A candidate failing to report a defect specified on the master report as 'mandatory shall be awarded zero marks in the Recording and Reporting part of the practical examination.

Appendix D

CERTIFICATION BOARD FOR INSPECTION PERSONNEL

CODE OF ETHICS

AIM

To safeguard the public's health and well being and to maintain high standards of skills, practices and integrity in the profession of inspection and non destructive testing, the following requirements shall be binding on ANY person holding a current certificate of proficiency issued by CBIP.

INTEGRITY

CBIP certified persons are obliged to act with integrity in the pursuance of their occupation for each client, customer or employer and shall be honest and impartial.

RESPONSIBILITY TO THE PUBLIC

CBIP Certified persons shall in the pursuance of their occupational duties:

- (i) Undertake and perform inspections only when qualified by training, capability and experience.
- (ii) Be objective and factual in any verbal, written report, statement or testimony of any work performed.
- (iii) Sign only for work carried out by them or for work that they have personal knowledge of through direct technical control or have verified the authenticity of the work signed for.
- (iv) Neither associate with nor knowingly participate in a fraudulent or dishonest venture.

SOLICITATION AND INDUCEMENTS

CBIP certified person shall not in the pursuance of their employment:

- (i) Pay, Offer or Accept, directly or indirectly, any bribe or commission for professional employment except for the commission required by licensed employment agencies or duties performed.
- (ii) Falsify, exaggerate or permit misrepresentation of their academic and professional qualification.
- (iii) Function as an independent consultant in technical matters outside the capability of their CBIP certification.

CBIP certified persons shall perform and carry out inspections in a proper manner as required by contract, customer order, code of practice, standard or specification unless any deviation is noted in any written report, statement or testimony of the work performed.

PUBLIC STATEMENTS

CBIP Certified persons shall issue no statements, criticisms or arguments on inspection or non-destructive testing matters unless it is founded upon sound information of the facts in issue, upon a background of technical competence in the subject matter and upon honest conviction of the accuracy and propriety of the statements, criticism or argument.

CONFLICT OF INTEREST

CBIP Certified persons shall:

- (i) Conscientiously avoid conflict of interest with the employer or client, but when unavoidable shall forthwith disclose the circumstances to the employer or client.
- (ii) Promptly inform the employer or client of any business associations, interests or circumstances which could influence their judgement or the quality of services to the employer or client.
- (iii) Not accept payment, compensation, financial or otherwise from more than one party for services on the same project or from services pertaining to the same project or from services pertaining to the same project unless the circumstances are fully disclosed and agreed to, by all interested parties or their agents.

UNAUTHORISED PRACTICE

Any violation of this code shall be deemed to be an unauthorised practice and upon proper complaint, investigation and findings of the complaints committee, subject to appeal by the CBIP Board, sanctions may be applied to the individual(s) in violation.

END