



**ACCREDITATION  
OF  
INSPECTION AGENCIES  
FOR  
PERIODIC INSPECTIONS  
&  
REPAIRS (Where Applicable)**

*TSSA GUIDE FOR REVIEW TEAMS*

The Technical Standards and Safety Authority  
Boilers and Pressure Vessels Safety Division  
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## **INTRODUCTION**

This guide is prepared for the use of TSSA survey teams reviewing Quality Programs of applicants for TSSA Certificates of Authorization as Accredited Inspection Agencies to perform periodic inspections and repairs (where applicable).

In addition, to assist the TSSA survey team, this guide is provided to applicants for TSSA Certificates of Authorization for their use in verifying and identifying the paragraph(s) where their written Quality Program manual addresses all of the applicable TSSA requirements.

The guide is subject to revision based on changes made by TSSA from time to time.

A survey must cover a program and its implementation. It is recognized that the scope of the work, the program, and program implementation will vary from applicant to applicant. Therefore, TSSA survey teams are advised that all possible aspects of this guide may not apply and this guide may not outline all possible aspects of each survey. The written program need not follow the format of this guide.

Questions raised by the survey team requiring the possible need for interpretation shall be submitted to the Chief Inspector of TSSA for a response.

## **HOW TO USE THIS GUIDE**

TSSA requirements are reflected in the checklist. The Applicant should advise as to which parts are applicable by referencing in the appropriate columns and comment areas on the checklist.

Review each checklist item in the "Agency Survey Checklist" and note the program reference, which covers the subject addressed in the column, labelled "Manual Ref". Check one of the columns marked "Yes" (meets requirement), "No" (does not meet requirement) or "N/A" (Not Applicable). Any explanations required to support the references should be noted under the "Comments" column.

The original of this guide and one current uncontrolled copy of the Quality Program manual shall be provided to the TSSA Head Office address, to the attention of the Chief Inspector, at least one month prior to the implementation audit date.

Item	Section	Manual Ref.	Yes	No	N/A	Comments
1.0	<b>Facing Page</b>					
1.1	Company name and address.					
1.2	ASME Code Sections of equipment to be inspected, CSA B51 & B52.					
1.3	Approval/acceptance signatures, including dates.					
1.4	Controlled or uncontrolled copy.					
1.5	Issue number and date.					
2.0	<b>Table of Contents</b>					
2.1	Table of Contents to address the sections referenced on this checklist.					
3.0	<b>Manual Revision Control</b>					
3.1	Who is responsible for the control, preparation, revision, distribution and implementation of the Quality Control Manual.					
3.2	Who is responsible for reviewing CSA B51 and B52, including all ASME Codes, Addenda as well as changes to the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> as they occur and will make any required changes to the Manual within 6 months of the Addenda issued.					
3.3	Is the QA Manual revised by section or by page. <ul style="list-style-type: none"> <li>a. By section – when a revision occurs in a section, the complete section is reissued with the next revision number.</li> <li>b. By page – changes will be carried out by changing each affected page, indicating the new revision number on each page that is revised.</li> </ul>					
3.4	All proposed revisions shall be submitted to TSSA for acceptance prior to inclusion or implementation. This acceptance will be indicated by signing of the accepted revision shown on the Revision Control Record and/or Table of Contents.					
3.5	What are the controls in the event that the acknowledged has not been returned within 14 days.					
3.6	Describe the distribution log for Controlled Manuals. Who is responsible for keeping track of Manual Number and Issue?					
3.7	Explain the method for issuing uncontrolled copies of the Manual.					

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4.0	<b>Scope of Work</b>					
4.1	Indicate the scope of work. This should cover periodic inspections and when permitted repairs as agreed upon in the contract with an insurer, or insurers, authorized to write boiler and machinery insurance in the Province of Ontario.					
4.2	Should the contract be cancelled by the insurance carrier, TSSA must be informed in writing. Describe who is responsible for carrying out this procedure.					
5.0	<b>Organization Chart</b>					
5.1	Shall show titles of key department personnel within the company who perform functions that affect the requirements of the program.					
5.2	Chart shall show access of all Inspection Department staff to senior management.					
5.3	Titles of personnel shall be consistent with the text of QA Manual.					
6.0	<b>Statement of Authority</b>					
6.1	The statement shall appear on a dated company letterhead signed by an officer of the company providing the following.					
6.2	The Quality Assurance Manual shall describe the written policies, procedures and instructions which ensure that all personnel involved in the periodic inspection and repairs of boilers and pressure vessels are properly qualified and will perform their work in accordance with the <i>Ontario Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> .					
6.3	It shall contain the requirements deemed necessary by the company to inspect and repair boilers and pressure vessels in accordance with CSA B51, B52, Section I, IV, VIII, Division 1 and NBIC-NB23.					
6.4	It shall describe who has the authority and responsibility for enforcing the Quality Program described, the organizational freedom to identify QA problems, and to initiate, recommend and provide solutions, including the authority to reject and item when necessary.					
6.5	In the event of conflict between the Manager of the Inspection Department and other personnel it shall describe how the problems are resolved without negating the Act, Regulation, Codes and Standards and this program.					

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7.0	<b>The Inspection Agency</b>					
7.1	<p>The Agency shall provide qualified Inspectors to monitor repairs or perform periodic (in-service) inspections of boilers and pressure vessels in accordance with the Ontario <i>Boilers and Pressure Vessels Regulation</i> and applicable Codes and Standards.</p> <p>a. The Agency is responsible for maintaining authorization from at least one insurance company to carry out periodic inspections (and repairs when applicable) on the insurer's behalf.</p> <p>b. The Agency is responsible for obtaining and maintaining the following:</p> <ul style="list-style-type: none"> <li>i. Errors/omissions insurance</li> <li>ii. Liability insurance</li> </ul>					
7.2	The Agency shall define who is responsible for monitoring these items.					
7.3	Employ qualified supervisors to monitor the performance of inspectors and audit their activities during the performance of their duties according to audit procedures.					
7.4	State who is responsible for giving written notice to all inspectors of the name, office, and phone number of respective supervisors.					
7.5	<p>Assure proper execution of responsibilities. In particular the Agency shall:</p> <p>(a) Establish and implement an internal program, which shall provide assurance that those of its employees holding the position of Supervisor or Inspector perform work in accordance with the TSSA requirements.</p> <p>(b) The program shall be documented by written policies, procedures or instructions and shall be carried out throughout the term of accreditation by TSSA in accordance with the program.</p> <p>(c) The program shall provide for indoctrination and training of personnel performing such activities, as necessary, to assure that suitable proficiency is achieved and maintained.</p> <p>(d) Provide instructions in writing to Inspectors and their Supervisors specifying their respective duties and responsibilities.</p> <p>(e) Provide instructions in writing to Inspectors requiring them to immediately contact their Supervisor whenever the Inspector is unable to readily resolve any question concerning the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> or Code compliance, repair procedure, quality control provision or its implementation.</p> <p>(f) Instructions should be included as a</p>					

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	<p>reminder to the Inspector that he has the authority and the duty to refuse to sign any Repair Data Reports involving nonconformance with the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i>, Codes or standards.</p> <p>(g) Conduct annual planned audits of activities performed by Supervisors to verify compliance with the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> and applicable Codes and Standards. The audit shall be performed by appropriately trained personnel, in accordance with a written procedure or checklist. Audit results shall be documented and reviewed by management. Follow-up action, including re-audit of deficient areas shall be taken where indicated, to assure that necessary corrective action is completed.</p>					
7.6	<p>Provide certification for each Inspector and Supervisor to be performing work under the <i>Boilers and Pressure Vessels Regulation</i>. Ensuring that each inspector, as a minimum, has a valid TSSA Certificate of Competency prior to carrying out inspections.</p>					
7.7	<p>Ensure that each Inspector and Supervisor has acceptable vision in at least one eye, corrected or uncorrected, capable of reading Jaeger No.1 letters at a distance of not less than 12 inches. The test shall be performed annually and shall be documented and maintained on file by the Agency. Records shall be maintained for a minimum of five years.</p>					
7.8	<p>Have available the applicable ASME and National Board Inspection Codes and CSA Standards necessary to perform the work including a current copy of the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i>. The documents shall be made available to each Inspector for reference.</p>					
7.9	<p>Ensure that the Inspector is made aware of safety hazards that may occur during the course of performing inspections including such items as confined space entry, in accordance with applicable legislation.</p>					
7.10	<p>Describe who is responsible for reviewing and approving the inspection report submitted by the Inspector before it is mailed out.</p>					
7.11	<p>When a report contains information pertaining to violations of the <i>Ontario Boilers and Pressure Vessels Regulation</i>, describe who is responsible for mailing a copy to TSSA within 21 days of the inspection.</p>					

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7.12	When an inspection report identifying deficiencies is submitted to the insurer, what follow-up action (if any) is taken by the Agency.					
7.13	Describe responsibility for issuing inspection reports to insurers represented. Explain how this information is passed on to the insurer.					
7.14	Define responsibility for notifying TSSA of all new business and cancelled policies. All such notices must be processed within 24 hours if the policy is cancelled, or 21 days for new business.					
7.15	Issue of Certificates of Inspection after periodic or repair inspection, by or through the insurer. When certificates are to be issued directly by the Agency on behalf of an insurer, this is only permitted when the insurer has authorized this practice in writing to the Agency. All such authorization documents shall be available for review by TSSA at any time.					
8.0	<b>The Supervisor</b>					
8.1	<p>The Supervisor shall be selected and designated as such by his employer. He shall have the following qualifications</p> <p>(a) Shall have qualified as an Inspector and subsequently been engaged for at least two years in ASME Boiler and Pressure Vessel Code related work such as inspection under the provisions of the ASME Code, or administration of shop inspection service under the ASME Code; or the individual shall have at least two years experience performing jurisdictional periodic (in-service) or repair inspections.</p> <p>(b) The Supervisor shall have knowledge of the requirements of the Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation, as well as the applicable ASME Code Sections and CSA Standards.</p> <p>The Supervisor shall perform the following duties.</p>					
8.2	Maintain a record of locations visited and inspections performed by the Inspector(s) assigned to him.					
8.3	Maintain a record of Inspectors assigned.					
8.4	Assist in maintaining the competency of the Inspector to an acceptable level through periodic arrangement of panel discussions of work related topics. Written communication of unique problems and their solution, informal question and answer sessions and other means deemed suitable. The Supervisor shall maintain documentation of such activities.					

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8.5	The Supervisor shall be responsible for the technical performance of the Inspector(s) assigned to him. He shall report in writing to his management significant nonconforming activities that are reported to him or that he observed on the part of the Inspector, following full investigation of such activities.					
8.6	Audit and document the performance of each Inspector at least once each year at approximately twelve-month intervals, and at additional times as requested by the Inspector.					
8.7	The audit required shall be recorded in writing and shall contain a written comment regarding the status of each item audited.					
8.8	Confirm that corrective action has been verified by the Inspector to assure compliance with the Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation and applicable ASME Codes and CSA Standards at locations that have been assigned to the Supervisor.					
8.9	Ensure that Inspectors reporting to him have a current eye test on file prior to performing required inspections.					
9.0	<b>The Inspector</b>					
9.1	All Inspectors shall hold the necessary Certificates applicable to performing the work. For periodic (in-service) and repair inspections the Inspector is required to hold a current Certificate of Competency issued by TSSA, as a minimum.					
9.2	<p>An Inspector shall have the following characteristics.</p> <ul style="list-style-type: none"> <li>(a) Education and experience as defined in the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i>.</li> <li>(b) Demonstrated ability to perform inspections to the satisfaction of the Agency employing him.</li> <li>(c) Satisfactory degree of expertise, experience and background for the inspection of boilers and pressure vessels according to the complexity of the assignment.</li> <li>(d) Knowledge of the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> and applicable ASME and National Board Inspection Codes and CSA Standards.</li> <li>(e) Knowledge and ability to evaluate and monitor boiler and pressure vessel repair procedures and performance.</li> <li>(f) Knowledge of requirements for maintenance and submission of periodic (in-service) and repair inspection documents.</li> </ul>					



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9.3	<p>The Inspector shall perform all of the periodic or repair inspections required by the <i>Technical Standards and Safety Act, Boilers and Pressure Vessels Regulation</i> and applicable ASME and National Board rules insofar as they are applicable and in addition shall:</p> <ul style="list-style-type: none"> <li>(a) Perform a complete and thorough inspection on each boiler or pressure vessel.</li> <li>(b) Identify all areas of concern in sufficient detail so that they can be acted upon.</li> <li>(c) Verify that the boiler or vessel can continue to operate at its nameplate or stamped pressure.</li> <li>(d) Verify that all controls are maintained in good condition and are fully operational.</li> <li>(e) Verify that all overpressure protection devices are properly set and sealed at each inspection.</li> <li>(f) Immediately bring all deficiencies to the owner's attention before leaving an inspection site.</li> <li>(g) Immediately contact the supervisor for guidance if he finds equipment or work that he is not familiar with.</li> </ul>					
10.0	<p><b>Records</b></p> <p>Shall include as a minimum.</p> <ul style="list-style-type: none"> <li>(a) Copy of resume.</li> <li>(b) Copy of current Certificate of Competency for each Inspector.</li> <li>(c) Record of annual eye test.</li> <li>(d) Review sheet to show acceptance by supervisor upon completion of training.</li> <li>(e) Minutes of meeting between supervisor and inspector upon satisfactory training.</li> </ul>					
11.0	<p><b>Corrective Action</b></p> <p>The program shall include provisions for identification, resolution and disposition of conditions adverse to quality including:</p> <ul style="list-style-type: none"> <li>(a) Identification and documentation of the adverse conditions</li> <li>(b) Personnel involved with the resolution and disposition of the adverse condition</li> <li>(c) Measures taken to preclude repetition of the adverse condition</li> <li>(d) Report to management</li> </ul>					
12.0	<p><b>Audits</b></p> <p>Internal audits of the quality program assist in maintaining quality. The following shall be addressed:</p> <ul style="list-style-type: none"> <li>(a) schedule and perform internal audits annually</li> <li>(b) establishment of procedures and/or a checklist</li> <li>(c) a means of documenting internal audits</li> <li>(d) providing audit results to management for</li> </ul>					

Item	Section	Manual Ref.	Yes	No	N/A	Comments
13.0	<p>review and acknowledgement  (e) ensuring any required follow-up action is performed and documented  (f) maintaining all internal audit documentation for a minimum of 5 years</p> <p><b>Exhibits</b></p> <p>Should include for example:</p> <ul style="list-style-type: none"> <li>(a) Audit report/checklist for Inspector.</li> <li>(b) Audit report/checklist for Supervisor.</li> <li>(c) Corrective Action Form</li> <li>(d) Review sheet on the Inspector.</li> <li>(e) Transmittal form.</li> <li>(f) Periodic inspection reports to insurer.</li> <li>(g) Repair report (where applicable).</li> </ul>					