

# AEA Comparison Chart for Part 145 CASA Notice of Proposed Rule Making

## PROPOSED RULE

## CURRENT RULE

<p>Part 145 – Approved Maintenance Organisations</p>	<p>Civil Aviation Regulations 1988</p> <p><b>PART 4 AIRWORTHINESS REQUIREMENTS</b></p> <p>Division 3 Certificates of Approval, Aircraft Maintenance Engineer Licenses, Airworthiness Authorities and Aircraft Welding Authorities</p> <p>30 Certificates of approval</p>
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<p>Part 145 – Approved Maintenance Organisations</p> <p><b>5.1 Overview of the Part</b></p> <p>5.1.1 Part 145 is similar to that published in the previous NPRM 0407MS and is divided into sections to easily locate specific areas of the Part. This Part should be read in conjunction with Part 42.</p> <p>5.1.2 This Part includes:</p> <ul style="list-style-type: none"> <li>• Privileges and responsibilities of the maintenance organisation;</li> <li>• The requirement to authorise staff to perform and/or certify maintenance including special processes and tasks;</li> <li>• Public air transport operations using large aircraft must have maintenance performed by a Part 145 approved organisation;</li> <li>• Identification of facility requirements;</li> <li>• Identification of personnel requirements;</li> <li>• A process for preventative and corrective actions of maintenance errors;</li> <li>• A management system which is desirably integrated and will produce aviation safety and quality outcomes;</li> <li>• A maintenance organisation exposition containing elements on:             <ul style="list-style-type: none"> <li>- a management system including quality policy;</li> <li>- aviation safety policy;</li> </ul> </li> </ul>	
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<ul style="list-style-type: none"> <li>- maintenance procedures;</li> <li>- methods of certification for maintenance;</li> <li>- maintenance data to be held and controlled; and</li> <li>- equipment, tools and material control.</li> </ul> <ul style="list-style-type: none"> <li>• A staff training program;</li> </ul> <ul style="list-style-type: none"> <li>• Definition of the role of Category C licence holders who sign a Certificate of Release to Service after base maintenance; and</li> </ul> <ul style="list-style-type: none"> <li>• Alteration to the approval mechanism for specialised maintenance activities e.g. NDT and welding.</li> </ul>	
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<p><b>5.2 The proposed policy</b></p>	
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<p><b>5.2.1 The proposed policy description outlined below is intended to give the reader an understanding of the main policy outcomes which this Part aims to achieve.</b></p>	
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<p><b>5.2.2 Scope and terms of an approval</b></p> <ul style="list-style-type: none"> <li>• Includes requirements to be met to qualify, or continue to qualify, to maintain aircraft and components, in accordance with the policy and procedures contained in the organisation’s exposition.</li> </ul>	<p>(1) A person engaged, or intending to engage, in any stage of design, distribution or maintenance of aircraft, aircraft components or aircraft materials, or in the training of candidates for, or in the conducting of, the examinations referred to in paragraph 31 (4) (e) may apply to CASA for a certificate of approval in respect of those activities.</p>
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	<p>(2A) CASA must grant the applicant a certificate of approval covering the activities to which the application relates if CASA is satisfied that the applicant is able to carry out the activities in a satisfactory manner.</p> <p>(2B) In deciding whether it is satisfied as mentioned in subregulation (2A), CASA must have regard to:</p> <ul style="list-style-type: none"> <li>(a) the relevant qualifications and experience of the applicant and the applicant’s employees; and</li> <li>(b) the facilities and equipment available to the applicant for the carrying out of those activities; and</li> <li>(c) the arrangements made to ensure the applicant has, and will continue to receive, the information necessary for the carrying out of those activities; and</li> <li>(d) the applicant’s system of quality control; and</li> </ul>
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	(e) if the applicant is required by paragraph (2) (c) to have a procedures manual— the applicant’s procedures manual.
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<p><b>5.2.3 Applications</b></p> <ul style="list-style-type: none"> <li>• Contains details on the initial application for an approval, or for the amendment of an existing approval, as a maintenance organisation.</li> <li>• Applications to be made by the Accountable Manager.</li> <li>• Applications should include: <ul style="list-style-type: none"> <li>- a copy of the applicant’s exposition; and</li> <li>- detail the arrangements that the organisation has for access to facilities, equipment or data that the organisation does not own and proposes to use for the delivery of maintenance.</li> </ul> </li> </ul>	<p>(2) An application must be in writing and must:</p> <p>(a) set out the following:</p> <ul style="list-style-type: none"> <li>(i) a statement of the activities to be covered by the certificate;</li> <li>(ii) the address of the main place (if any) at which the applicant proposes to carry out those activities;</li> <li>(iii) the number of appropriately qualified or experienced persons employed by the applicant who will be involved in carrying out those activities; and</li> </ul> <p>(b) have with it evidence of:</p> <ul style="list-style-type: none"> <li>(i) the relevant qualifications and experience of the applicant and the applicant’s employees; and</li> <li>(ii) the facilities and equipment available to the applicant for the carrying out of the activities; and</li> <li>(iii) the arrangements made to ensure the applicant has, and will continue to receive, information necessary for the carrying out of those activities; and</li> <li>(iv) a system of quality control that satisfies the requirements of subregulation (2D); and</li> </ul> <p>(c) if maintenance of class A aircraft is an activity to be covered by the certificate—have with it a copy of the procedures manual, in which the system of quality control procedures must be set out, that the applicant proposes to use if the certificate of approval is granted.</p>
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<p><b>5.2.4 Facility requirements</b></p> <ul style="list-style-type: none"> <li>• Organisations must provide facilities appropriate for all planned work having regard to environmental conditions.</li> <li>• Specialised workshops are to be segregated as</li> </ul>	<p>(2C) A certificate of approval is subject to:</p> <p>(a) a condition that each activity the certificate covers must only be carried out at a place where the facilities and equipment necessary for the proper carrying out of the activity are available to the holder of the certificate;</p>
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<p>appropriate to avoid contamination.</p> <ul style="list-style-type: none"> <li>• Appropriate office accommodation should be provided for the management and certifying staff.</li> <li>• Working environment must be appropriate for the tasks carried out such that the effectiveness of the personnel is not impaired by temperature, dust contamination, lighting or noise. Specific conditions identified in the maintenance data must be observed and include provision of Personal Protective Equipment (PPE) where required. If environmental conditions deteriorate to an unacceptable level, tasks must be suspended until satisfactory conditions are re-established.</li> <li>• Secure storage for components, equipment, tools and material. Storage of parts and materials must be in accordance with the manufacturer's requirements to prevent damage and deterioration. Access to parts and materials storage areas are to be restricted to authorised personnel only.</li> </ul>	
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<p><b>5.2.5 Personnel requirements</b></p> <ul style="list-style-type: none"> <li>• The organisation must appoint an Accountable Manager with sufficient corporate authority to ensure adequate financial resources are available to support proposed or approved activities. The Accountable Manager must demonstrate a basic understanding of these Parts and ensure aviation safety, quality and compliance policies are established.</li> <li>• The organisation must appoint sufficient responsible managers including deputies with demonstrated knowledge, background and experience to ensure compliance with this Part.</li> <li>• The organisation must have the capability to plan maintenance man hours for any proposed maintenance activity.</li> <li>• The organisation must establish procedures to confirm the competence of personnel involved in maintenance and audits, with consideration given to job function, application of human factors and human performance issues.</li> <li>• The organisation must ensure personnel performing NDT/NDI and other specialised tasks are appropriately qualified in accordance with CASA-recognised standards. (e.g. AS/NZ or ISO).</li> </ul>	<p>(d) a condition that the holder of the certificate of approval must ensure that each person employed by, or working under an arrangement with, the holder receives adequate training in:</p> <ul style="list-style-type: none"> <li>(i) the work performed by the person for the purposes of the activities covered by the certificate; and</li> <li>(ii) the use of any equipment used in connection with that work.</li> </ul>
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<ul style="list-style-type: none"> <li>• Organisations maintaining large aircraft must have: <ul style="list-style-type: none"> <li>- For line maintenance, type rated B1 and B2 certifying staff. They may also use task authorised A licence holders for minor scheduled maintenance and simple defect rectification;</li> <li>- For base maintenance, type rated staff in category C with sufficient B1 and B2 certifying staff to support the category C staff. B1 and B2 staff must certify tasks or inspections have been carried out prior to the category C certification.</li> </ul> </li>   <li>• In the case of base maintenance of other than large aircraft, the organisation must have appropriate B1 and B2 licence holders.</li>   <li>• The organisation must maintain a register of authorised personnel.</li>   <li>• The category C certifying staff must ensure all work required by an operator is accomplished, or assess work not carried out for deferral to another specified check or time limit, with agreement of the operator.</li>   <li>• Where an organisation maintains an approved facility outside Australia, certifying staff may be qualified in accordance with the national aviation regulations of the state in which the organisation's facility is located, providing they meet equivalent standards to the appropriate CASR Part.</li>   <li>• An organisation may issue a limited authorisation for a repetitive pre-flight airworthiness directive, which allows flight technical crew to carry out the task where the authorisation is based on sufficient practical training.</li>   <li>• For aircraft operating away from a supported location, an organisation can issue flight crew with a limited certification authorisation for specific tasks following sufficient practical training in accordance with a procedure described in the exposition.</li>   <li>• Following unforeseen cases where an aircraft is grounded away from a supported base, under certain circumstances a certification authorisation may be issued to an appropriately licensed person for a single operation under appropriate procedures.</li> </ul>	
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	<p>(2C) A certificate of approval is subject to:</p> <p>(a) a condition that each activity the certificate covers must only be carried out at a place where the facilities and equipment necessary for the proper</p>
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	<p>carrying out of the activity are available to the holder of the certificate;</p> <p>(b) a condition that the activities the certificate covers must be carried out in accordance with a system of quality control that satisfies the requirements of subregulation (2D); and</p> <p>(c) if the certificate covers some or all of the following activities:</p> <ul style="list-style-type: none"> <li>(i) the design of aircraft;</li> <li>(ii) the design of aircraft components;</li> <li>(iii) the design of aircraft materials;</li> <li>(vii) the maintenance of aircraft;</li> <li>(viii) the maintenance of aircraft components;</li> <li>(ix) the maintenance of aircraft materials;</li> <li>(x) the training of candidates for the examinations referred to in paragraph 31 (4) (e);</li> <li>(xi) the conducting of the examinations referred to in paragraph 31 (4) (e); a condition that each of those activities that is covered by the certificate must be carried out under the control of a person appointed by the applicant to control the activities; and</li> </ul>
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<p><b>5.2.6 Certifying staff and category B1 and B2 support staff</b></p> <ul style="list-style-type: none"> <li>• An organisation must ensure certifying staff have an adequate understanding of the organisation procedures before the organisation issues or reissues an authorisation to its staff.</li> <li>• The organisation may issue an authorisation, in relation to a basic category, subcategory or type rating listed on an individual's Part 66 licence.</li> <li>• The minimum age for certifying staff is 21 years.</li> <li>• An organisation must ensure all certifying staff and B1 and B2 support staff are involved in actually carrying out maintenance and/or exercising certification privileges for at least 6 months in any</li> </ul>	
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<p>consecutive 2 year period.</p> <ul style="list-style-type: none"> <li>• An organisation must establish a continuation and refresher training program to ensure that staff receive sufficient training to have up to date knowledge of relevant technology, organisational procedures and human factors issues.</li> <li>• The organisation must issue a certification authorisation which clearly specifies its scope and limits and provide certifying staff with a copy of their certification authorisation.</li> <li>• The person responsible for the compliance management will issue certification authorisations to staff, in accordance with a procedure in the exposition.</li> <li>• The organisation must maintain records of all certifying staff containing: <ul style="list-style-type: none"> <li>- all training completed;</li> <li>- details of Part 66 licences;</li> <li>- the scope of each certification authorisation; and</li> <li>- particulars of additional staff with certification authorisations including limited or one-off authorisations.</li> </ul> </li> <li>• Records must be retained for 2 years after an authorised person ceases employment, or the authorisation has been withdrawn.</li> </ul>	
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	<p>(2D) A system of quality control must be in writing and must contain the following:</p> <p>(a) the procedures to be followed in connection with the carrying out of the activities covered by the certificate that, in particular, includes procedures for:</p> <ul style="list-style-type: none"> <li>(i) the control of the work carried out under the certificate; and</li> <li>(ii) the maintenance, control and calibration of equipment; and</li> <li>(iii) the control of stores;</li> </ul> <p>(b) a statement:</p> <ul style="list-style-type: none"> <li>(i) that sets out the places at which the activities covered by the certificate are, or will be, carried out and which activities are, or will be, carried out at each place; and</li> <li>(ii) that identifies any mobile facilities</li> </ul>
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	<p>available to the certificate of approval holder for the carrying out of the activities covered by the certificate and which activities are, or will be, carried out using each mobile facility;</p> <p>(c) in relation to each activity covered by the certificate that is required, by paragraph (2C) (c), to be carried out under the control of a person—the name of the position occupied by the person who controls the carrying out of the activity;</p> <p>(d) a description of the applicant’s organisational structure, the responsibilities of employees within the structure and the procedures to be followed by the employees in undertaking the activities covered by the certificate;</p> <p>(e) a description of the resources for implementing quality management;</p> <p>(f) a description of the audit system applying to the system of quality control;</p> <p>(g) if the quality control system is set out in a procedures manual required under paragraph (2) (c)—a statement of the procedures to be followed in relation to the amendment of the procedures manual.</p> <p>[Note Australian Standards AS3900 to AS3904 provide guidance for the content of a system of quality control.]</p>
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<p><b>5.2.7 Equipment tools and materials</b></p> <ul style="list-style-type: none"> <li>• The organisation must have available all necessary tools, equipment and materials to perform the approved scope of work. Infrequency of use may be a reason to not require permanent access, as detailed in the exposition.</li> <li>• Use the manufacturer specified tools, equipment and materials, or alternatives by a procedure detailed in the exposition.</li> <li>• The organisation must ensure control and calibration of tools or equipment in accordance with a CASA recognised standard and be supported by appropriate records.</li> </ul>	
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<p><b>5.2.8 Acceptance of components</b></p> <ul style="list-style-type: none"> <li>• All components will be classified and appropriately</li> </ul>	
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<p>segregated as serviceable, unserviceable, unsalvageable, standard parts or material (both raw and consumable).</p> <ul style="list-style-type: none"> <li>• The organisation must ensure components are eligible for fitment with reference to modification and AD status.</li> <li>• The organisation may fabricate certain parts used in the course of maintenance within its own facilities, provided appropriate procedures are identified in the exposition.</li> <li>• Components which have reached their life limit or are non-repairable must be classified as unsalvageable and their continued use prevented.</li> </ul>	
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<p><b>5.2.9 Maintenance data</b></p> <ul style="list-style-type: none"> <li>• The organisation must have access to and use applicable current maintenance data for all work undertaken. The organisation must establish a procedure to ensure the data it controls is kept up-to-date and is readily available for use when required by maintenance personnel.</li> <li>• For the purpose of Part 145, applicable maintenance data includes any CASA procedure, operational directive, airworthiness directive and instructions for continuing airworthiness issued by the type certificate holder or a standard recognised by CASA.</li> <li>• The organisation must establish a procedure to ensure any errors found in maintenance data are recorded and notified to the author of the data.</li> <li>• The organisation should not rely on data that it reasonably believes to be in error and should notify maintenance staff likely to utilise the data.</li> <li>• The organisation may modify maintenance instructions, excluding engineering design of repairs and modifications, in accordance with a procedure detailed in the exposition. Changes must demonstrate that an equivalent outcome is achieved, and the type certificate holder and the aircraft operator must be informed of such changes.</li> <li>• The organisation must provide a common work card or worksheet system with precise references to the maintenance data. Where an operator requires their work card or worksheet system to be used, the organisation must establish a procedure to ensure</li> </ul>	
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<p>correct completion of the operator's system.</p> <ul style="list-style-type: none"> <li>• Where work cards or worksheets are computer generated and held on an electronic database, it must be updated within 48 hours of work being carried out.</li> </ul>	
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<p><b>5.2.10 Production planning</b></p> <ul style="list-style-type: none"> <li>• The organisation must have a planning system appropriate to the amount and complexity of work undertaken to ensure the safe completion of maintenance work and must take into account human performance limitations.</li> <li>• When required to hand over maintenance tasks due to shift or personnel changeover, relevant information must be adequately communicated.</li> </ul>	
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<p><b>5.2.11 Certification of maintenance</b></p> <ul style="list-style-type: none"> <li>• A Certificate of Release to Service must be issued before flight when all maintenance has been carried out in accordance with the organisation's procedures, by appropriately authorised certifying staff on behalf of the organisation.</li> <li>• An Authorised Release Certificate must be issued at completion of maintenance on a component. Where an organisation maintains a component for its own use, an Authorised Release Certificate is not required, providing the organisation has an approved internal release procedure defined in the exposition.</li> <li>• When an organisation is unable to complete all maintenance, it must enter such fact in the aircraft certificate of release to service.</li> <li>• When an aircraft is grounded at other than a main line station or main base due to the unavailability of a certified component, a component may be fitted without an appropriate release certificate where its serviceability is established in compliance with all applicable maintenance and operational requirements. Use of the component is limited to a maximum of 30 flight hours or until the aircraft first returns to a main line station or main base.</li> </ul>	
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<p><b>5.2.12 Maintenance Records</b></p> <ul style="list-style-type: none"> <li>• The organisation must record all details of maintenance carried out. This must include records</li> </ul>	
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<p>supporting the issue of the Certificate of Release to Service, including subcontractor's release documents.</p> <ul style="list-style-type: none"> <li>• The organisation must provide a copy of each Certificate of Release to Service to the aircraft operator, together with any specific approved repair/modification data.</li> <li>• The organisation must retain a copy of detailed maintenance records and maintenance data for 2 years from the date the work was released.</li> <li>• Maintenance record storage must be designed to be safe from fire, flood and theft. Any computer back up disks or tapes must be kept at a different location and the organisation must ensure they remain in good condition.</li> <li>• Where an organisation terminates its operation, all records covering the last 2 years must be distributed to the aircraft owner or registered operator.</li> </ul>	
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<p><b>5.2.13 Occurrence reporting</b></p> <ul style="list-style-type: none"> <li>• The organisation must report to CASA, the state of registry, the aircraft operator and the organisation responsible for the design of the aircraft or component any condition that has resulted in or may result in a hazard that seriously affects flight safety.</li> <li>• The organisation must establish a procedure, detailed in its exposition, for the collection, evaluation, reporting, analysis and circulation of information as necessary.</li> </ul>	
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<p><b>5.2.14 Management System</b></p> <ul style="list-style-type: none"> <li>• The organisation must establish a management system to control aviation safety and compliance with this Part based on quality management.</li> <li>• The organisation must document procedures taking into account human factors and human performance, including: <ul style="list-style-type: none"> <li>- all aspects of maintenance activity covered by the approval;</li> <li>- minimising the risk of multiple errors and methods to capture errors on critical systems;</li> <li>- establishing a system that includes an audit program to monitor compliance and includes quality aspects; and</li> <li>- a management review process reporting to the</li> </ul> </li> </ul>	
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<p>Accountable Manager to ensure timely corrective action in response to audit findings.</p>	
<p><b>5.2.15 Maintenance Organisation Exposition document</b></p> <ul style="list-style-type: none"> <li>• The exposition is a document that specifies the scope of work approved and shows how the organisation intends to comply with this Part. The exposition must include: <ul style="list-style-type: none"> <li>- a statement signed by the Accountable Manager;</li> <li>- the organisation’s management system;</li> <li>- titles, duties and responsibilities of nominated post holders and authorised persons and their deputies;</li> <li>- a specification of approved activities;</li> <li>- a description of manpower resources including an organisation chart and notification procedures for organisational changes;</li> <li>o the maintenance procedures established by the organisation including the amendment procedure;</li> <li>o a description of facilities including line stations;</li> <li>and</li> <li>o a list of contracted and sub-contracted organisations.</li> </ul> </li> <li>• Amendments to the exposition must be approved by CASA except where the approved exposition includes a procedure for minor amendments.</li> </ul>	
<p><b>5.2.16 Privileges of the organisation</b></p> <ul style="list-style-type: none"> <li>• In accordance with its approved exposition, the organisation will be entitled to carry out aircraft or component maintenance at approved and identified locations capable of supporting that maintenance.</li> <li>• It may subcontract work to an organisation working under its quality system, providing such work does not include base maintenance, a complete workshop check, overhaul of an engine or engine module.</li> <li>• Organisational approvals may be perpetual or granted with a time-limit, subject to continued compliance.</li> </ul>	
<p><b>5.2.17 Administration and enforcement provisions</b></p> <ul style="list-style-type: none"> <li>• This Part will operate in accordance with the administrative and enforcement processes contemplated by CASR Parts 11 and 13.</li> </ul>	<p>(4) An authorised person may, at any time, for the purpose of ascertaining whether the activities to which a certificate of approval relates are being carried on in a satisfactory manner:</p> <p>(a) inspect any aircraft, aircraft component or aircraft material;</p>

	<p>(b) inspect any process or systems carried on by, any records maintained by or any documents in the possession of, the holder of the certificate of approval in connection with the activities to which the certificate of approval relates;</p> <p>(c) conduct any tests that the authorised person considers necessary; and</p> <p>(d) require the holder of the certificate of approval to furnish to the authorised person such evidence as the authorised person requires:</p> <ul style="list-style-type: none"> <li>(i) of the qualifications and competence of the holder or of the qualifications and competence of the employees of the holder; or</li> <li>(ii) of the facilities at the disposal of the holder.</li> </ul> <p>(4A) The holder of a certificate of approval must give to an authorized person the evidence required under paragraph (4) (d). Penalty: 5 penalty units.</p> <p>(4B) An offence against subregulation (4A) is an offence of strict liability. Note For strict liability, see section 6.1 of the Criminal Code.</p> <p>(5) An authorised person must produce his or her identity card for inspection while acting as an authorised person if asked to do so by:</p> <ul style="list-style-type: none"> <li>(a) the holder of the certificate of approval; or</li> <li>(b) a person: <ul style="list-style-type: none"> <li>(i) who has control over any subject matter or thing specified in subregulation (4); or</li> <li>(ii) who apparently has control over any subject matter or thing specified in subregulation (4).</li> </ul> </li> </ul> <p>(6) Where an authorised person:</p> <ul style="list-style-type: none"> <li>(a) is acting as an authorised person; and</li> <li>(b) under subregulation (4), seeks to carry out an inspection, conduct a test or require evidence to be furnished or is carrying out an inspection, conducting a test or requiring evidence to be furnished; and</li> <li>(c) fails to produce his or her identity card for inspection when asked to do so;</li> </ul> <p>that person:</p> <ul style="list-style-type: none"> <li>(d) is not authorised to carry out the inspection, conduct the test or require evidence to be furnished; and</li> <li>(e) if that person is carrying out one of those activities, must cease that activity immediately.</li> </ul>
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