

Guide Plant design and item registration for mines and petroleum sites

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1. Introduction

1.1. Purpose

This guide provides step-by-step guidance and information for those responsible for registering plant for use in mines. It includes information on a simplified plant registration process introduced by the Resources Regulator in 2022, and replaces the following fact sheets:

- Plant design registration applicants
- Plant design registration designers
- Plant design registration design verifiers
- Inspection of plant item registration.

1.2. Legislation

Part 5.3 of the Work Health and Safety Regulation 2017 sets out the key requirements for applying to register plant, including information an applicant must provide as part of their application.

Section 187(1) and (2) of the Work Health and Safety (Mines and Petroleum Sites) Regulation 2022 lists the types of plant used in mining that require design registration. Section 187(3) lists the plant requiring item registration.

1.3. More information

The Regulator website contains further information on plant registration, including information on:

- design orders
- application forms and fee schedules, and
- technical reference guides.

Alternatively, you may wish to discuss any questions you may have with the Mining Authorisation Unit by email at mca@regional.nsw.gov.au or by calling 1300 814 609 (option 2).

2. Design and item registration

2.1. Overview

The work, health and safety laws in NSW require that certain types of plant used in workplaces need to be registered before they can be put into service in the workplace.

Certain types of high-risk plant used in mining need to have their designs registered before items of plant built according to those designs can be put into service. Once a design is registered, any number of items built according to that design can be made.

Item registration is a separate requirement for certain types of plant where ongoing maintenance and inspection is necessary to help ensure safety. Where item registration applies, each item of plant needs to be registered.

2.2. What is design registration?

Plant design registration helps ensure the safety of plant made according to a design. Registering a design demonstrates that a formal design and verification process has been followed. In preparing an application, the plant designer must follow the technical standards (published in design orders in the NSW Government Gazette), or in some circumstances, meet an equivalent level of safety. An independent verifier must confirm that the design meets these technical standards or equivalence.

Design registration requirements do not extend to the environment into which the plant is put into service. The plant user must satisfy themselves that an item of plant is appropriate or adequate for the specific environment in which it is deployed.

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The following plant must be design registered in underground coal mines:

- diesel engine systems,
- booster fans,
- braking systems on plant used in underground transport,
- canopies on continuous miners,
- electrically powered hand-held plant used to determine or monitor the presence of gas
- electrically powered fixed installations and installations on mobile plant used to determine or monitor the presence of gas, but not tube bundle systems where the analyser is installed at the surface breathing apparatus to assist escape (including self-rescuers),
- shotfiring apparatus (including exploders and circuit testers),
- detonators,
- explosive-powered tools, and
- conveyor belting.

Winding systems that carry people must be design registered in any mine they are deployed, except for small gemstone mines.

Note: under Schedule 5 of the WHS Regulation, a mine operator may require design or item registration for other types of plant used at a mine that are not specific to mining and that require design or item registration.

2.3. Item registration

Section 42 of the *Work Health and Safety Act 2011* establishes that certain types of plant must be item registered before they can be used.

For plant used in mining applications, these are:

- winding systems that are used in mines,
- diesel engine systems used in underground coal mines,
- booster fans used in underground coal mines

Each serially produced item of the above-mentioned plant requires item registration.

These types of plant typically require ongoing inspection and maintenance to help ensure safe operation. Before a plant item can be registered it must be inspected and deemed safe to operate by a competent person.

Item registration expires after 5 years.

3. Applying for plant design registration

3.1. General

The WHS Regulation prescribes who can apply for design registration, application requirements, and the grounds upon which the Regulator must grant or refuse an application.

3.2. Preparing to make an application

In preparing an application for design registration, an applicant must complete, analyse, document, verify and (where necessary) test the design.

Before committing to undertake a design, a designer should familiarise themselves with their duties under the WHS Act. Designers are required to declare compliance with this duty as part of an application.

Similarly, the designer should engage a verifier early in the design process. The verifier will need to meet eligibility requirements. They must also have enough information about the design to form an opinion and provide a statement that the design standards have been met. More information on duties of designers and verifiers is provided later in this guide. ng to make an application

3.3. Eligibility requirements for applications

3.3.1. Who can apply?

Any of the following are eligible to apply for a new or altered plant design registration:

- a person conducting a business or undertaking that designs an item of plant, or
- a person with management or control of an item of plant, or
- an existing design registration holder in the case of an altered design.

3.3.2. Individuals and body corporates

In the absence of any reasonable justification for being outside of NSW, applicants (individuals or body corporates) must reside or have their registered office in NSW. If the applicant resides or is located outside of NSW, the applicant must show that circumstances exist that justify the granting of registration, including by ensuring that they can comply with any conditions applied to the registration.

3.3.3. Designs registered in another jurisdiction

Under clause 247 of the WHS Regulation, a design that has been registered in another state or territory under equivalent WHS law is recognised in NSW and cannot be registered separately.

3.4. Information to be included in an application

Applicants should use the relevant form when applying for plant design registration, available on the Regulator's website. The Regulator only accepts complete applications.

Requirements for applications are laid out in clause 250 of the WHS Regulation, and include:

- information that identifies the applicant,
- a statement signed by all designers of the item of plant (see Section 4. Designers),
- a design verification statement and documentation showing the process the design verifier has undertaken,
- a declaration the design has not been registered in a corresponding Australian jurisdiction, and
- representational drawings of the design.

3.5. The Regulator may request additional information

The Regulator may request additional information if an application does not contain enough information to support a decision to grant the registration. The Regulator may make more than one request for additional information if required to obtain enough information to make the decision.

3.6. Refusing to grant plant design registration

The Regulator may refuse to grant a plant design registration if the applicant fails to provide any material information that should have been provided in the application. This includes all information listed in section 3.4 above and any additional information requested by the Regulator (see section 3.5 above).

The Regulator may also refuse to grant registration if the Regulator believes an application includes false or misleading information.

4. Designers

4.1. Designers' duty of care

Section 22 of the WHS Act imposes a duty of care on a plant designer. Plant designers are defined as persons conducting a business or undertaking that design plant, substances or structures.

A designer has a duty to ensure that designs are without risks to the health and safety of persons in the vicinity of the plant, and workers who manufacture, assemble or use the plant. Using plant includes carrying out activities such as inspection, operation, cleaning, maintenance, and repair.

Under this duty, designers must also give each person who is provided with the design (for the purpose of giving effect to it) adequate information on:

- the purpose for which the plant was designed,
- the results of any calculations, analysis, testing or examination that may be necessary to ensure the plant is safe and without risks to health and safety, and
- conditions or limitations of the plant.

Designers must also provide ongoing current relevant information on request.

4.2. Records and information

Clause 228 of the WHS Regulation sets out the records that a designer of plant must make when designing plant that requires registration. These are:

- the method used to determine the control measures for the plant and the control measures that result from that determination,
- a copy of the information provided to a manufacturer pursuant to section 22 of the WHS Act in relation to that plant (see section 4.1 above), and
- a copy of the information provided to a manufacturer under clauses 187 or 188 of the WHS Regulation in relation to that plant (see sections 4.2.1 and 4.2.2 below).

4.2.1. Provision of information to the manufacturer

Clause 188 of the WHS Regulation requires a plant designer to give the manufacturer of that plant information to enable the plant to be manufactured in accordance with its design specifications. If applicable, the designer must also provide information on:

- the installation, commissioning, decommissioning, use, handling, storage and, if the plant is capable of being dismantled, dismantling of the plant,
- the hazards and risks associated with the use of the plant that the designer has identified,
- testing or inspections to be carried out on the plant,
- the systems of work and competency of operators that are necessary for the safe use of the plant,
- the emergency procedures (if any) that are required to be implemented if there is a malfunction of the plant, and
- any additional information required because of a hazard identified by the manufacturer (see below).

4.2.2. Hazards identified in design during manufacture

Clause 229 of the WHS Regulation requires that where a manufacturer of plant informs the designer that there is a hazard in the design for which the designer has not provided a control measure, the designer must revise the information originally provided to the manufacturer to ensure that:

- the risk is eliminated or minimised so far as is reasonably practicable, or
- notify the manufacturer, in writing, that the designer is of the opinion that it is not necessary to revise the information originally supplied to the manufacturer to ensure compliance with this Part.

4.2.3. Record of standards or engineering principles used

Clause 230 of the WHS Regulation requires the designer to record any published technical standard, including any part of a published technical standard, that is used to design the plant to be registered. If the designer has not used published technical standards to design the plant, the designer must record any engineering principles used.

4.2.4. Records to be available for inspection

Under the WHS Act, a designer of plant must ensure that any records required under clauses 229-230 of the WHS Regulation are available for inspection. A designer of plant must keep the records made for the design life of the plant. A designer must also ensure that these records are made available for inspection by the design verifier of the plant design.

4.3. Compliance with design orders and equivalent levels of safety

Some design orders allow for an equivalent level of safety for designs that do not comply with a prescribed risk control specified by the design order. Where this is the case, the designer must specify the published technical standards or engineering principles used to identify controls, in the order of the hierarchy of risk controls incorporated in the design to achieve at least an equivalent level of safety as the requirement.

Where achieving equivalent levels of safety requires other life-cycle management actions beyond the control of designers (such as maintenance or operational procedures), the designer must identify these actions and demonstrate how they are an effective control to provide an equivalent level of safety.

4.4. Requirements for a designer's statement

A designer's statement must:

- state that the designer has complied with the designer's obligations under section 22 of the WHS Act in relation to the design,
- specify the published technical standards and engineering principles used in the design, and
- identify that the proposed design meets all requirements of the relevant design order.

Note: there are penalties for providing false or misleading information in a designer's statement (see section 268 of the WHS Act).

4.5. Design assessments

For the Regulator to grant plant design registration, a designer must provide the Regulator with material information to support the application. To enable this, a designer should understand all the requirements of a relevant design, and relevant standards called by the design order to ensure compliance with that design order.

In assessing a standard required by a design order, the designer should complete a line-by-line assessment of the standard that presents how the design complies with design requirements, or how compliance is achieved by an equivalent level of safety.

In addition, in making an assessment, the designer:

- should be able to present a summary of successful testing results that refers to detailed results,
- must make a concise assessment of the design with enough material information to support their position, and

- if demonstrating an equivalent level of safety, must identify controls in accordance with the hierarchy of risk controls listed under clause 36 of the WHS Regulation.
- If a requirement of a standard is assessed to be not applicable, the designer should provide a concise account of the reason.

Once complete, a designer should provide these design compliance assessments to the design verifier.

4.6. Testing and analysis for registration

Testing and analysis requirements for plant are specified in relevant design orders. Alternative standards cannot be nominated by the designer unless the design order makes provision for alternative testing or analysis.

Design orders may specify requirements regarding test facilities. If they do not, test house, installation or factory testing, or analysis may be used to test or analyse the design.

Designers must present testing and analysis in sufficient form and detail to satisfy the design verifier that the testing and analysis complies with the requirements of the design order.

4.7. Inspection and test plan

The designer should establish a comprehensive inspection and test plan for use at the time of installation and commissioning. The ITP should include all information from installation to commissioning to enable the designer to issue a Certificate of Compliance. Where applicable, the designer should complete the ITP for the process of item registration to confirm that the design functions, controls, operation, performance, components and safety functions meet the parameters specified by the design. The ITP should specify the desired result and acceptable tolerance.

Note: a plant item registration application must be supported by a completed ITP.

4.8. Installation commissioning

The installation and commissioning of new or altered design-registered fixed plant such as a Powered Winding System or Booster Fan in an underground mine, is a high risk activity under the WHS Regulation.

For high risk activities, a High Risk Activity (HRA) notification must be made to the Regulator prior to the commissioning process. The designer must provide information to the installer for construction and commissioning to control risks associated with installation, construction and commissioning.

4.9. Item registration

Controllers of plant should engage designers for the purpose of item registration. The designer should inspect the equipment as installed, confirm the findings of the ITP, and assess compliance with the design.

A certificate of compliance should be issued by the designer that:

- identifies the design,
- specifies the published technical standards and engineering principles used in the design,
- identifies the purpose of the design,
- identifies calculations, analysis, testing and examination documents and reports, and
- specifies the application and limitations of use of the design.

Once complete, the designer should provide the certificate of compliance to the person making inspection of an item of plant for the purpose of Item registration.

4.10. Assisting the design registration process

4.10.1. Representational drawings

To assist the process of design registration the designer should provide representation drawings of the design that:

- represent the complete design for registration,
- identify key parameters for the plant or apparatus,
- identify key safety functions and control systems,
- references other relevant drawings or documents, and
- represent the design to the satisfaction of the designer and be signed by the designer.

Information for design verifiers

To assist registration, the designer should provide the design verifier with detailed design, testing and analysis information (engineering design principles, test reports, assessments, protection techniques and controls etc) and give the verifier opportunity to conduct in person inspections and witness testing.

4.10.2. Compliance with design principles and standards

To assist registration, the designer should ensure that the parameters specified in design orders are engineered, using design principles and standards as applicable – for example, a payload rating specified for a braking system should not exceed the payload capacity that may be set by stability.

5. Design verification

5.1. Who can be a design verifier?

A plant design registration application must include an independent verification of the design by a person who is eligible to be a design verifier. A person is eligible to be the design verifier for the design of an item of plant if:

- they are a competent person, and
- they were not involved in the production of the design.

For design registration verification, a competent person is a person who has the skills, qualification, competence and experience to design the plant or verify the design.

The design verifier must clearly establish their separation from the production of the design and declare any actual or perceived conflicts of interest.

5.2. Design verification statement

An application for a design registration must be supported by a design verification statement. Clause 251 of the WHS Regulation sets out the requirements of a statement.

Where a design does not comply, in full or part, some design orders may include a provision for the designer to specify technical standards and principles, used within the hierarchy of risk controls, incorporated in the design to achieve an equivalent level of safety to the design requirements.

To ensure compliance with the relevant design order, the design verifier must assess the plant design, including material information provided by the designer. This assessment must include any standards called up in the design order and controls deemed an equivalent level of safety by the designer.

A design verification statement must:

- be written and signed by an eligible person (see 5.1 above),
- state that the design was produced in accordance with the requirements of the design order including any published technical standards or engineering principles specified,
- include the name, business address and qualifications (if applicable) of the design verifier, and
- include the name and business address of the organisation for which the design verifier works (if applicable).

Note: Clause 254 of the WHS Regulation sets out the applicable penalties if a design verification statement is made by a person not eligible to be the design verifier, or that person has not carried out the verification of that design.

5.3. Design verification process

A design verifier must document the design verification process and the results of that process. This is typically documented in a design verifier's report. The design verifier's report is normally provided with an application for design registration, to support a design verifier's statement.

A design verification report should:

- establish that the design verifier is eligible to verify the design (see 5.1 above),
- present a brief overview of the design with reference to representational drawings, key parameters and controls,
- review the scope of the intended application and review the limitations of use of the design established by the designer that is, establish the operational parameters and controls for safe use,
- document the review of design requirements called on by the design order. This review should include the results of the review the designer's documentation, such as design information, controls, drawings, test reports, analysis and specifically assess the design's compliance against the relevant design order,
- document the review of any technical reference guides (TRGs), mines design guidelines (MDGs) or standards (AS/NZS/IEC or ISO) called on by the design order. This review should include a concise line-by-line assessment of any standard called on by the design order,
- where a design does not comply in full or in part, review the designer's documentation of the technical standards and principles used within the hierarchy of risk controls, incorporated in the design to achieve an equivalent level of safety to the design requirements,
- document the checks undertaken on any calculations, analysis, testing or examination that may be considered necessary to verify the design performance,
- document the review of testing and performance requirements called on by the design order. This review should include the results from factory acceptance testing, laboratory testing and site commissioning where relevant, and
- make a material particular statement regarding the compliance of the design to the design order.

5.3.1. Assessment guidance

The design verifier should make a concise assessment of the design with enough material information to support their position.

If the design verifier forms an opinion that supports the establishment of an equivalent level of safety (ELOS), the verifier should provide specific information relating to the design, supported by a written statement.

In demonstrating an ELOS, the verifier should identify controls in accordance with the hierarchy of risk controls in Part 3.1 of the WHS Regulation. Where applicable, the verifier should identify other life cycle management actions beyond the control of designers, such as maintenance or operational procedures, and consider whether they are an effective control. The requirement to establish an ELOS only applies to design requirements and not performance or testing criteria.

The design verifier should also:

- assess the designer's inspection and test plan (ITP) and confirm the nominated inspections, tests and result tolerance,
- if the design has changed during the verification process, assess the final design, and
- include references that are relevant and specific to support the verification position. Where a large report is referred to, specific parts of the report should be included in the reference.

6. Changes to registered plant designs

6.1. General

Once a plant design has been registered, any alteration in the materials, design or construction of the registered plant design that may affect health and safety will require a registration for the altered design.

The WHS Regulation sets out three types of changes to registration documents and designs:

- changes to information (minor corrections or changes to conditions),
- alterations to plant designs that may affect health and safety, and
- alterations to plant designs that do not affect health and safety.

6.2. Changes to information

Registration holders must notify the Regulator of changes to information within 14 days of becoming aware of the change. Notification must be made via an amendment of design registration form.

Under clause 282 of the WHS Regulation, changes to information capture any variation in information relevant to the plant registration from that provided with the original registration application, or any additional information requested by the Regulator, that was required to grant the original registration. These generally include:

- the details of the registration holder,
- plant ownership,
- relocation of the plant (applicable to fixed plant only),
- request to change a condition of registration, and
- minor corrections to the registration document.

The Regulator may request evidence to support some requests for changes of information, such as transfer documents or statutory declarations from an authorised person for changes in ownership or intellectual property.

The design registration holder may request an existing registration to be amended or the Regulator may, on its own initiative, amend a registration document. An amendment to a registration replaces the existing registration document.

6.3. Design alterations

6.3.1. Alterations that may affect health and safety

Clause 244 of the WHS Regulation requires an alteration to a registered plant design that may affect health and safety to be registered. This new registration exists concurrently with the original plant design registration. It does not affect the original plant design registration or items of plant manufactured to the original design. Both registrations remain current for an unlimited duration unless cancelled. All altered plant designs are issued a new registration number.

These design changes generally include hardware or software alterations to the design registered plant which result in a variation in plant performance or function and require the introduction of new, or the modification of, existing control measures.

If the design alteration only affects a part of the registered design, then the registration holder has two options to consider when registering the altered plant design:

- the whole plant design is assessed for compliance to, and performance-tested against the requirements of the latest design order, or
- only the altered parts of the design are assessed for compliance to, and performance-tested against, the requirements of the latest design order. This option is only available where specified in the relevant design order.

Where only the altered parts of the design are to be assessed, the designer must undertake and document this assessment.

The assessment must also determine the impact that the design alteration has on unaltered parts of the plant design.

Where this assessment shows that there has been a reduction in effectiveness of existing control measures of any other part of the plant design (that is, there has been a detrimental effect on health and safety caused by the alteration), then all affected parts of the design must be designed to comply with the design requirements of the latest design order.

Any parts of the plant design which are not affected by the alteration must continue to comply with the design requirements of the design order that was in effect on the date that the original design registration was granted.

All design alterations that may affect health and safety must be independently verified by an eligible person to ensure that the alterations comply with the design requirements.

A registration holder should notify the Regulator of an alteration to a plant design that may affect health and safety via the relevant plant design registration form. The information required in this notification is the same as that required to register a new plant design.

An altered plant design must be registered prior to any corresponding plant returning to normal service.

6.3.2. Alterations that do not affect health and safety (amendments)

These design changes generally include the alteration of a component part of the registered plant design, often by substitution for an equivalent product, which has the same fit, form and function and does not impact on other controls associated with the original registered design.

All design alterations that are deemed to not affect health and safety should be independently verified by an eligible person. The assessment by the design verifier should consider the alteration's effect on:

- any conditions of the existing registration, and
- compliance to the design requirements specified at the time of registration.

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The assessment by the design verifier should also consider:

- the engineering process utilised to deem that the design alteration does not impact health and safety i.e., the design verifier should be satisfied that there has not been any variation in plant performance, function or require the introduction of new or the modification of existing control measures, to those covered by the original registered design, and
- representational drawings or other documentation provided with the initial design registration application
- any technical standards and principles, used within the hierarchy of risk controls, which have been incorporated in the design to achieve an equivalent level of safety to the design requirements.

If the independent verification proves that there is no effect on health and safety, then these alterations can be undertaken and commissioned without affecting the validity of the existing plant registration.

The registration-holder should consider whether the alteration impacts the existing registration documents and information, such as registration details, referenced documents or drawings, and amend that information accordingly (see section 6.2 – changes to information).

All altered plant designs that are proven to not affect health and safety retain the existing registration number but acknowledge the date scope of the amendment.

Note: An altered plant design that does not affect health and safety but varies from material information previously provided with the design registration application, must be sent to the Regulator within 14 days of the registration holder becoming aware of the change. This notification is commonly submitted via an amendment of design registration form.

7. Item registration

7.1. Overview

As mentioned in section 2.3, mining specific items of plant that require item registration are:

- diesel engine systems (DES) used at underground coal mines,
- booster fans used at underground coal mines,
- powered winding systems used at a mine, and

Note: An item of plant is not required to be registered under this part if the plant is registered under a corresponding WHS law.

There are two distinct application forms of item registration. These are:

- application for registration, and
- application for renewal.

7.1.1. Timing

An application for renewal can only be made prior to the expiry of the current registration. If an applicant fails to apply for renewal prior to the expiry date, the applicant must complete an application for registration which includes the relevant information required by the application form.

Where an applicant applies for renewal of registration prior to the expiry date, the registration continues until the renewal application is decided. If granted, a new certificate is provided with a new expiry date.

7.1.2. Item registration documents

Once item registration has been applied for and granted, the Regulator will issue a registration document containing details of the plant, such as the make, model and serial numbers, as well as important specifications and conditions that the owner and person in control of the plant must

comply with. The registration document contains the date granted and the expiry date and is sent electronically to the applicant identified on the application form.

7.2. Application for item registration

7.2.1. Application forms

An application for item registration must be in the manner and form required by the Regulator. The applicant must complete the application form with the required information and submit the form by email.

In summary, an application for item registration must:

- be made by the person with management or control of the plant or another person authorised in writing to apply on their behalf,
- identify the applicant and business or undertaking,
- include sufficient information to clearly identify the item of plant, such as the plant identification number or serial number,
- include the plant design registration number (MDR),
- include the date the registered plant was first commissioned,

Note: For DES this refers to the date the engine system was commissioned not the vehicle.

- include a statement that the plant has been inspected by a competent person and assessed by that person as being safe to operate,
- include payment of any relevant application fee, and
- include any additional material information required by the application form. This could be copies of inspection or test reports, certificates of conformity, overhaul certificates or other material information as part of the manner and form.

7.2.2. Decision on application

The decision-making process to grant or refuse an application is detailed in clause 269 of the WHS Regulation.

To grant item registration, the Regulator must be satisfied about the matters referred to in clause 269(2).

This includes an administrative review and technical review of the application form and material information. This review considers:

- all details requested on the form have been provided,
- the applicant identified is an eligible applicant,
- the plant is not registered under corresponding WHS laws,
- the plant is in NSW or circumstances exist which justify it being outside NSW,
- the applicant can comply with any conditions,
- material information such as inspection and test reports, certificates of conformity, etc, and
- information provided is not false or misleading.

Where an application does not contain enough information for the Regulator to make a decision, the Regulator may ask the applicant to provide additional information.

Following technical review, the Regulator makes a decision to either grant or refuse the application.

General information about inspections and plant type specific inspections is provided below.

7.3. Application for renewal

7.3.1. Application forms

An application for renewal must be in the manner and form required by the Regulator. The applicant must complete the application form with the required information and submit the form electronically via an email.

In summary, an application for renewal must include:

- the applicant's name or another person authorised in writing to apply on their behalf,
- any evidence of identity required by the Regulator,
- the name of the business or undertaking (where applicable),
- the item registration number of the plant,
- a declaration that the item has been maintained, inspected and tested in accordance with WHSR cl 213 (renewal applications),
- payment of any relevant application fee, and
- any additional material information required by the application form. This could be copies of inspection or test reports, certificates of conformity, overhaul certificates or other material information as part of the manner and form.

7.3.2. Decision on application

The decision-making process to grant or refuse an application is detailed in clause 279 of the WHS Regulation.

To grant an item registration, the Regulator must be satisfied about the matters referred to in cl279(1). This includes an administrative review and technical review of the application form and material information. This review considers whether:

- all details requested on the form have been provided,
- the applicant identified is an eligible applicant,
- the application was received prior to the expiry of the existing registration,
- material information demonstrating that the plant has been maintained, inspected and tested in accordance with clause 213 (see inspection reports below), and
- information provided is not false or misleading.

Where an application does not contain enough information to enable the Regulator to make a decision, the Regulator may ask the applicant to provide additional information.

Following technical review, the Regulator makes a decision to either grant or refuse the renewal of registration.

7.4. Material information

7.4.1. Item registration applications

Consistent with the purpose of plant item registration, applicants must provide a report that provides evidence of an inspection.

The purpose of the report is to demonstrate:

- an inspection has in fact taken place,
- the inspection was undertaken by a competent person, and
- the assessment by the competent person is that the plant is safe to operate.

Inspection reports should include sufficient information to demonstrate the above criteria have been met.

7.4.2. Renewal applications

The purpose of item registration renewal is to ensure the plant has been maintained, inspected, and tested in accordance with clause 213 of the WHS Regulation.

Under this clause, the person with management or control of plant at a workplace must ensure that the maintenance, inspection and, if necessary, testing of the plant is carried out by competent workers. The maintenance, inspection and testing must be carried out:

- in accordance with the manufacturer's recommendations, if any, or
- if there are no manufacturer's recommendations, in accordance with the recommendations of a competent person, or
- annually in relation to inspection, if it is not reasonably practicable to comply with either of the above two points.

Applicants are required to provide material information such as a report to confirm that the plant has been maintained in this way.

The report would be typically completed within three months prior to the application. The report should be based on a review of:

- inspection of the item of plant,
- inspection results and the frequency of inspections,
- testing results and the frequency of testing,
- maintenance work order compliance,
- identified defects and the status of known defects,
- discard criteria and replacement strategies,
- fault, trip and condition logs, and
- competency of persons undertaking maintenance activities.

This report should conclude and state that the item of plant has been maintained, inspected and tested in accordance with clause 213 of the WHS Regulation.

The report should consist of a summary of what has been inspected or reviewed and the results of that review. It is not sufficient for an applicant to merely provide copies of service reports.

Supplying previously completed maintenance service sheets is not considered providing an inspection report for item registration renewal.

Further guidance on preparing reports is provided below.

7.5. Inspection reports for item registration (specific plant)

7.5.1. Diesel engine systems

7.5.1.1. New diesel engine system

An inspection report for the purpose of item registration of a new DES may include review and reference of:

- Certificate of compliance/conformity issued by the manufacturer, and
- Inspection and test plan (commissioning) results from the manufacturer.
- Review of an exhaust emission baseline test that was performed by a licenced laboratory on the new engine system as installed in the plant, and

- emissions levels are within MDG29 (table 4) tolerance of type testing (without exceedance)
- considers published information such as bell curve data to confirm that the emissions are as low as reasonably practicable, and that the engine is operating in the expected range of emissions.

Note: Where the baseline test was completed more than three months prior to lodging the application, an additional gas test is to be completed at time of application verifying compliance with the baseline test. A report within three months of the registration application can be considered to be contemporary or are shown to be valid by the competent persons assessment.

7.5.1.2. New or reconditioned diesel engine installed

An inspection report for the purpose of registration of a DES that has a new or reconditioned diesel engine installed to an existing engine system may include review and reference to:

- Inspection and test plan such as AS/NZS 3584.3:2012 Code D Inspection report of the DES in the vehicle (contemporary). A reference to a specific report that is issued by a recognised service facility (RSF) is suitable. The code D report should identify any caveats or omissions and must nominate clearly if the engine has been changed or reconditioned (or both).
- Identification of the previous item registration number MIR and MDR.
- Review of an exhaust emission baseline test that was performed by a licenced laboratory on the new engine system as installed in the plant, and
 - $\circ~$ emissions levels are within MDG29 (table 4) tolerance of type testing (without exceedance)
 - considers published information such as bell curve data to confirm that the emissions are as low as reasonably practicable, and that the engine is operating in the expected range of emissions.

Note: Where the baseline test was completed more than three months prior to lodging the application, an additional gas test is to be completed at time of application verifying compliance with the baseline test. A report within three months of the registration application can be considered as contemporary or are shown to be valid by the competent persons assessment.

Note: When the registration has been changed (e.g. from DES-1 to DES-2) only the holder of the new design registration (e.g. holder of the DES-2 registration) can issue a statement of conformance to a changed design registration.

7.5.1.3. Not new diesel engine

A registration of a DES that is not new may be required when an item registration has expired or when a used machine enters service in NSW. An inspection report for this purpose should include:

- Certificate of compliance/conformity issued by the manufacturer, and
- Inspection and test plan such as AS/NZS 3584.3:2012 Code C Inspection of the engine system in the vehicle (contemporary). A reference to a specific report that is issued by a licenced ExDES RSF is suitable, and
- Inspection and test plan such as AS/NZS 3584.3:2012 Code D Inspection of the DES in the vehicle (within two years or as per hours-based guidance from OEM). A reference to a specific report that is issued by a RSF is suitable. Where the Code D occurred more than 18 months prior to application, details should be provided as to the intention of performing this work.
- Review of an exhaust emission test:
 - that was completed by a licenced laboratory,
 - $\circ~$ emissions levels are within MDG29 (table 4) tolerance of type testing (without exceedance), and

- considers published information such as bell curve data to confirm that the emissions are as low as reasonably practicable, and that the engine is operating in the expected range of emissions.
- Where the emission test was completed more than three months prior to lodging the application, an additional gas test must be completed at time of application verifying compliance with the baseline test or are shown to be valid by the competent persons assessment.

7.5.2. Booster fans

An inspection report for item registration of a booster fan should include, as a minimum, a review of:

- inspection of the equipment as installed,
- assessment of compliance with design registration parameters and conditions,
- a completed Inspection and Test Plan as specified by the design registration holder, and
- any other installation commissioning results that show:
 - $\,\circ\,$ safety critical controls are installed and operating as intended,
 - $\circ\,$ power shut off controls are installed and operating as intended.

7.5.3. Powered winding system

An inspection report for item registration of a powered winding system should include, as a minimum, a review of:

- inspection of the equipment as installed,
- a completed Inspection and Test Plan as specified by the design registration holder,
- the Certificate of Compliance issued by the design registration holder, and
- assessment of compliance with design registration parameters and conditions.
- Any other inspections or testing to demonstrate that safety critical control systems and components are installed and operating as intended. Examples may include those associated with ropes, brakes, conveyances and controls.

7.5.4. Changes to information of item registration

The registration holder must notify the Regulator of changes to information within 14 days of becoming aware of a change by submitting an Amendment of Design Registration Form. Pursuant to the WHS Regulation, any variation in information provided by the registration holder in the original item registration application is considered a change to information. This includes any additional information requested by the Regulator to support the original application.

Changes to plant item information generally include:

- the details of the registration holder,
- plant ownership,
- relocation of the plant (applicable to fixed plant only),
- request to change a condition of registration, or
- minor corrections to the registration document.

The Regulator may request evidence to support some requests for changes of information, such as transfer documents or statutory declarations from an authorised person for changes in ownership or intellectual property.

The registration holder may request an existing registration to be amended or the Regulator may, on its own initiative, amend a registration document. An amendment to a registration replaces the existing registration document.

Guide: Plant design and item registration for mines and petroleum sites

8. References

SafeWork NSW Managing risks of plant