

MAINTENANCE MANAGEMENT ACCREDITATION STANDARDS

Maintenance Management Systems

It is considered desirable to move heavy vehicle compliance strategies away from complete reliance on direct enforcement mechanisms to a system which allows demonstrably good operators, with existing auditable systems to benefit from their good record and avoid the delays and complexities inherent in a direct enforcement regime.

The Maintenance Management Standards reflect industry ‘good’ practice and will be used to assess the suitability of elements of an operator’s Maintenance Management System.

However, to be considered roadworthy, a heavy vehicle must comply with the national *Road Transport Reform (Vehicle Standards) Regulations* (the “Vehicle Standards”) and the relevant *Australian Design Rules* (“ADRs”). These contain mandatory requirements for the safe design, construction and maintenance of heavy vehicles.

The national *Vehicle Roadworthiness Guidelines* give practical information about wear, damage or change to the more important systems of a vehicle in-service to operators and managers, and enable consistent roadworthiness performance criteria to be applied in each State or Territory of Australia and provide a base standard for the Maintenance Management Module of the National Heavy Vehicle Accreditation Scheme.

The national *Vehicle Roadworthiness Guidelines* also cite the following relevant principles in the development of the maintenance system:

- Equipment required by the Heavy Vehicle Standards to be on a vehicle must be present and working properly.
- Equipment which is essential for the safe operation of a vehicle and for the control of its emissions, must be kept in good condition.
- Manufacturers’ recommendations relevant to the safety of particular parts or the control of emissions must be considered.

It is considered that vehicles maintained in accordance with systems that comply with the Maintenance Management Standards are likely to comply with the Vehicle Standards and the Vehicle Roadworthiness Guidelines.

Changes have been made to the standards to make the National Heavy Vehicle Accreditation Scheme a complying audited maintenance program for the purposes of attracting the Commonwealth fuel tax credit.

Current Version

This version is current as of January 2007.

1. Daily Check

Standard: The Maintenance Management System must include a Daily Check for each vehicle when it is in use.

Description: The Daily Check is a documented instruction of simple roadworthiness checks. The operator shall define when the inspection is carried out, by whom and how it is recorded. The individual completing the daily check shall acknowledge the vehicle to be roadworthy to limits of the inspection.

Criteria: An operator would need to demonstrate the following:

- a) That there is a documented instruction detailing when the check is carried out, who carries it out and how the check is recorded.
- b) The *Daily Check* covers as a minimum the inspection of:

1. Wheels and Tyres

- Tyres for pressure (visual check) and tread integrity.
- Wheels security.

2. Lights and Reflectors

- All lights, including clearance lights.
- All reflectors and lenses.

3. Windows, Mirrors and Wipers

- Windows and Mirrors for security, damage and grime.
- Wipers and windscreen washers ensuring clear forward vision.

4. Structure and Bodywork

- All panels and readily visible structural members secure
- Leaks of any fluid (oil, fuel, air, water, refrigerant/coolant, hydraulic fluid, brake fluid or other).

5. Brakes

Brake failure indicators.

- Pressure/vacuum gauges.
- Drain air tanks (full air and air-over-hydraulic systems only on rigids and articulated combinations. Buses and coaches excepted).

6. On-Road Vehicle Fault Report

- Any faults found during the Daily Check are to be recorded within the On-Road vehicle Fault Report.
- c) That the individual(s) who carried out the check understands that they are certifying that the vehicle is roadworthy to the limits of the inspection, when the vehicle leaves the yard or depot.

Note: Records for completion of the Daily Check may be retained in any format.

2. Fault Recording and Reporting

Standard: The Maintenance Management System must ensure that provision is made to record and report vehicle faults on both the hauling and trailing equipment.

Description: The driver should be able to record and report any recognisable fault occurring during the course of a journey so that it may be assessed and rectified.

Criteria: An operator would need to demonstrate the following:

- a) A means to record faults occurring during a journey that is retained in the vehicle and covers both trailing and hauling equipment. For operators using accreditation to gain a fuel tax credit, the recording of faults has to specifically include emission related faults as evidenced by fuel / oil consumption, engine power and visible smoke emissions.
- b) A documented instruction exists which details how a driver records faults occurring during a journey and how faults are reported to the maintenance provider, as soon as possible.
- c) A documented instruction exists that provides direction to fix major or serious faults as soon as possible, even if the vehicle is away from home base.
- d) A documented instruction exists which provides for faults occurring at any other time to be reported to the maintenance provider as soon as possible.

Note: Records for completion of the fault repair may be in any format acceptable.

3. Fault Repair

Standard: The Maintenance Management System provides for the identification, assessment and action on reported faults.

Description: The Maintenance Management System has a method of identifying, assessing and taking action on reported faults from any source (ie. driver, maintenance provider, manager, &c) and determine the priority placed on repair of the fault.

Criteria: An operator would need to demonstrate the following:

- a) That there is a method in place to identify and assess the nature of a fault and place priority on its repair. For operators using accreditation to gain a fuel tax credit, a specific method is required to identify and assess emission related faults, such as monitoring fuel / oil consumption, engine power and visible smoke emissions.
- b) Where the fault is deferred, the person making the decision must be identified on the record.
- c) Where a decision is made to monitor the condition of a fault, the decision to monitor is recorded. The system must also set the upper limits for when a fault is repaired (ie. every 100km, when parts are received etc).
- d) Where a decision is made to monitor the condition of a fault, the identity of the person who makes the decision is recorded.
- e) At the completion of the repair, records show the fault has been rectified and tested where appropriate.

4. Maintenance Schedules and Methods

Standard: The Maintenance Management System must include Periodic Maintenance Schedules with identified service periods that describe the tasks to be completed.

Description: Evidence that the vehicle is being systematically maintained. This will be through a series of work schedules pertinent to various vehicle and system components. Within the maintenance schedules, or available to the maintenance provider, will be a description of the tasks for the inspection, service, repair or replacement of components utilised within the vehicle.

Criteria: An operator's would need to demonstrate the following:

- a) Evidence that at the time of entry into the scheme, the nominated fleet has been certified roadworthy by a qualified person experienced in the inspection of heavy vehicles in accordance with the national Roadworthiness Guidelines (Vehicle Standards) and the Australian Design Rules (ADRs). The evidence cannot be more than 6 months old. A recent statement from the operator or designated responsible person, verifying that the nominated fleet is roadworthy.
- b) Maintenance schedules provide for the periodic maintenance of a vehicle at defined intervals of time, distance or hours of use. Schedules must include a description of the tasks to be completed during the service.
- c) Evidence that maintenance and repairs are only undertaken by persons having suitable qualifications or experience to competently complete any maintenance tasks or to do so under suitable supervision.
- d) That a table of tolerances and wear limits for major components exists and that it complies at least with the national Vehicle Standards.
- e) For operators using accreditation to gain a fuel tax credit, a manual or equivalent document setting out the maintenance requirements for emission related components of the vehicle. The manual is to identify the components that require maintenance, the type of maintenance required for each component (replace, rebuild, adjust, reset, clean, etc) and the maintenance intervals applicable to each component. The components to be included in the manual are oil and oil filters, air filters, fuel filters, injectors, injector pumps and valves. Where the appropriate manufacturer's specifications are not available for all or any of the components, or the engine is outside the time frame of manufacturer's specifications, the generic maintenance schedules specified under Criterion 4 of the DOTARS Guidelines are to be used. A copy of the Guidelines can be obtained from www.dotars.gov.au.

5. Records and Documentation

Standard: Documented evidence must be maintained to demonstrate the effective operation of the Maintenance Management Standards.

Description: Essential to the maintenance system is the keeping and preservation of pertinent records.

Criteria: An operator would need to demonstrate the following:

- a) Procedures to record details of accredited vehicles in each module, including vehicle make, vehicle registration number, vehicle identification number (VIN) and gross vehicle mass (GVM).
- b) As a minimum the following documented evidence:
 1. that the daily check is being completed in accordance with the instruction;
 2. that faults occurring on the road are being recorded and reported in accordance with the procedures;
 3. that reported faults are being repaired in accordance with the set method;
 4. that vehicles are maintained in accordance with the set periodic schedules;
 5. that the persons maintaining vehicles under the Maintenance Management System are suitable qualified or experienced to do so;
 6. that records, procedures, and methods in place under the system are regularly reviewed in accordance with the procedures.
- c) Current documentation is available to all relevant personnel and at all locations where operations essential to the effective functioning of the system are performed.
- d) That a record of nominated vehicles is kept and regularly updated. The format should be able to record the following details for each nominated vehicle: type of unit: manufacturer: date of construction; registration number; and unique identifier.
- e) For operators using accreditation to gain a fuel tax credit, records are to be kept of the date of maintenance, odometer reading at time of maintenance, invoices detailing where the work was undertaken by an external workshop, purchase records / receipts of parts replaced or serviced where work has been undertaken by the operator, an indication as to whether maintenance is in accordance with manufacturer's specifications and the signature / stamp of the person responsible for the maintenance. Records are to be kept for a period of five years.

6. Responsibilities

Standard: The authorities, responsibilities and duties of all positions involved in the management, operation, administration, participation and verification of the Maintenance Management System are current clearly defined and documented.

Description: Responsibility for each operation of the Maintenance Management System is to rest with appropriate people within the road transport operation as nominated by the operator. For operators using accreditation to gain a fuel tax credit, specific reference has to be made to the qualifications of the person responsible for the maintenance of the oil and oil filters, air filters, fuel filters, injectors, injector pumps and valves.

Criteria: An operator would need to demonstrate the following:

- a) The appropriateness of each person's position, qualifications or training for the responsibilities allocated to him or her.

7. Internal Review

Standard: The Maintenance Management System must be subject to annual internal review to verify that all results and activities comply with the systems policies, procedures and instructions.

Description: An internal review of the Maintenance Management System is a regular look at the system against the standards to see that it complies. An effective review will pick up problem areas in the basic requirements, show failures to comply with procedures, and identify non-compliances that should be fixed as soon as possible.

Criteria: An operator would be able to demonstrate the following:

- a) Procedures exist that define how the internal review is to be undertaken.
- b) An internal review schedule.
- c) Internal reviews are undertaken by persons independent of the activity being reviewed, where practical.
- d) That there is a documented method to identify and correct all non-conformances detected from all sources to make sure the incidents are not repeated.
- e) That the responsibilities for identifying and correcting all non-conformances are current, clearly defined and documented.
- f) That all non-conformances and action taken to correct them are recorded and quarterly compliance statements produced containing advice of:
 - number of vehicles in the accredited fleet;
 - total number of daily checks conducted over the period and the total number of incidences where the check was not completed;
 - the total number of services and the total number of incidences where services were not carried out at the recorded intervals;
 - the total number of fault repairs and total incidences when faults were not closed out.
- g) That changes to documents and procedures are recorded and the original documents and procedures are kept for external audit purposes.

8. Training and Education

Standard: The persons who hold a position of responsibility under the Maintenance Management System are trained in and familiar with the specific policy procedure and instruction they are to carry out.

Description: Training and education is essential to ensure all employees, including managers understand the Maintenance Management System, and have the appropriate knowledge and skills to carry out the tasks given to them.

9. Fuel Quality (for operators using accreditation to gain a fuel tax credit)

Standard: Fuel purchased for use in the vehicle must be obtained from a reputable supplier and when stored, the storage facilities must be properly designed and maintained to prevent fuel contamination and deterioration.

Description: Control of the diesel fuel quality is essential to minimising the environmental damage caused by the emissions from a heavy vehicle.

Criteria: An operator would need to identify the following:

- a) The source of bulk fuel supply.
- b) Measures taken to ensure that there was no fuel contamination or deterioration during storage.