WESTERN AUSTRALIAN HEAVY VEHICLE ACCREDITATION

MASS MANAGEMENT MODULE STANDARDS

June 2015

This document is to be read in conjunction with the “Guidelines for Audit Providers” and the “WA Heavy Vehicle Accreditation Business Rules”.

Main Roads Western Australia makes this material available on the understanding that users exercise their own skill and care with respect to its use. Before relying on the material in any important matter, users should carefully evaluate the accuracy, completeness and relevance of the information for their purposes and should obtain appropriate professional advice relevant to their particular circumstances. Main Roads, its employees and agents, and authors and contributors expressly disclaim liability, whether in negligence or otherwise, for any act or omission done in reliance on the information or advice provided or for any consequences, whether direct or indirect, of any act or omission.
TABLE OF CONTENTS

MASS MANAGEMENT MODULE OVERVIEW ..................................................3
APPLICATION ..................................................................................................4
STANDARD 1: ELIGIBILITY REQUIREMENTS FOR MASS MANAGEMENT ...............................................................5
STANDARD 2: VEHICLE CONTROL ..............................................................7
STANDARD 3: VEHICLE LOADING – MASS ..............................................9
STANDARD 4: RESPONSIBILITIES .............................................................11
STANDARD 5: RECORDS AND DOCUMENTATION ................................13
STANDARD 6: INTERNAL REVIEW ..........................................................15
STANDARD 7: TRAINING AND EDUCATION .........................................18
APPENDIX 1 – Accredited Mass Management Scheme Levels ...............20
FURTHER ENQUIRIES ..................................................................................21
MASS MANAGEMENT MODULE OVERVIEW

In Western Australia, the heavy vehicle mass requirements are prescribed in the *Road Traffic (Vehicles) Act 2012* and associated Regulations. Under certain circumstances, Main Roads Western Australia (MRWA) allows Western Australian Heavy Vehicle Accredited (WAHVA) operators to operate vehicle combinations in excess of the prescribed mass limits, under approved concessional loading schemes.

The Accredited Mass Management Scheme (AMMS) was developed in consultation with the Ministerial Heavy Vehicle Advisory Panel for the purpose of providing the WA transport industry with an efficient concessional loading scheme, while ensuring road infrastructure protection and sustainability. AMMS allows for three (3) concessional mass levels for operators who have proven loading controls.

As a transport operator, some of the benefits include:
- Improved productivity and efficiency;
- Greater flexibility for loading control methods;
- Reduced risk of overloading;
- Improved skills and accountability of drivers and loaders;
- Improved driver morale;
- Better relationships with enforcement agencies;
- Reduced impact of enforcement;
- Improved safety; and
- Improved environmental outcomes.

Benefits to the community include greater and more consistent compliance with road safety standards and fewer vehicles frequenting the road network for the same task.

Prior to being eligible to operate under AMMS, transport operators must decide how they intend to control their loads. Once the transport operator has decided on their loading control method, they will need to demonstrate to MRWA that it works within the required standards. If this can be successfully demonstrated, MRWA will then approve the Loading Plan for the relevant loading point(s).

The Loading Plan(s) forms part of the operators Mass Management System (MMS), which must conform to the standards in this module. To remain accredited, the operator must have documents and records to prove their method works and vehicles are loaded within the mass requirements. In part, this means keeping records of all loads carried on their vehicles to show they are within the allowable mass limits.

The following Standards have been developed to ensure all operators participating in this module are achieving at least the same minimum level of compliance. The operator’s MMS must comply with these Standards.
This document explains what the standards are and what they mean in practical terms. It also explains what operators need to do in order to comply with the standards and how they can demonstrate compliance.

In the explanations of the standards on the following pages, the term “Mass Management System” means the procedures developed and documented by the operator to qualify for AMMS.

There are checklists at the end of each standard to assist operators in determining whether or not they are complying with the standards. If an operator is able to meet the criteria outlined in the checklist they should be able to comply with the standard.

APPLICATION

The Mass Management Module must be read in conjunction with the WAHVA Business Rules.

The Mass Management Module only applies to restricted access vehicles operating under the Accredited Mass Management Scheme (AMMS).

All documentation relating to WAHVA is available on the MRWA website at www.mainroads.wa.gov.au.

Remember:

If you do it, record it.

If you don’t record it, how can you prove that you have done it?
STANDARD 1: ELIGIBILITY REQUIREMENTS FOR MASS MANAGEMENT

Standard:
Prior to being approved under the AMMS, operators must have systems in place to meet Mass Management Module Standards. Operators will need to demonstrate they can accurately control their loading, within the allowed tolerances shown under Standard 3.

Criteria:
To satisfy this standard the operator must:

1.1 Provide a MRWA approved Loading Plan for the relevant loading point(s) or vehicle (in the case of vehicle specific loading controls) to be included as part of the operators Mass Management System.

1.2 Provide appropriate documents and records to demonstrate the loading method is accurate and consistent to within the allowed tolerances (except in an Entry Audit).

1.3 Provide certification that any devices used for establishing mass or volumes have been appropriately calibrated in accordance with manufacturer’s specifications, or the National Measurement Institute (NMI) regulatory requirements.

1.4 Engage an Exemplar Global qualified Auditor who has been approved by MRWA to audit the Mass Management Systems.

1.5 Complete an Entry Audit or a Mass Management Module Audit and submit the completed audit to MRWA for processing.
Checklist for Standard 1:

☐ Has a Mass Management System been established in accordance with these Standards?

☐ Does the operator have a MRWA approved Loading Plan for relevant loading point(s)/vehicle?

☐ Have appropriate records been retained to demonstrate the loading method is accurate to within the allowed tolerances?

☐ Has the operator provided evidence of certification for any devices used for establishing mass or volume demonstrating they have been appropriately calibrated?

☐ Has an Entry Audit been completed by an approved third Party Auditor?

☐ Has a completed audit been submitted to MRWA?
STANDARD 2: VEHICLE CONTROL

Standard:
Operators must ensure all vehicles operating under the AMMS meet the technical specifications required for the relevant higher mass limits.

Criteria:
To satisfy this Standard the operator’s Mass Management System must:

2.1 Have a comprehensive register of all vehicles operating under the AMMS (including sub-contractor’s vehicles). The register must include the following details about each vehicle used under the Accredited Mass Management Scheme:

   a) Make and model
   b) Registration number
   c) Registered owner
   d) Vehicle Identification Number (VIN)
   e) Tare mass
   f) Gross Vehicle Mass (GVM) rating
   g) Gross Combination Mass (GCM) rating
   h) Date added to or removed from vehicle list
   i) Relevant AMMS permit number and expiry date

2.2 Have procedures in place to ensure all vehicles have sufficient ratings to conform to the authorised higher mass under which they will be operating.

2.3 Have procedures in place to ensure all nominated vehicles have the required authorisations (i.e. licences, permits or order) to operate under the AMMS, prior to operating on the public road network.

2.4 Be able to demonstrate any nominated subcontractor’s vehicles are operating exclusively for the operator. If a subcontractor wishes to work for others, they must be accredited in their own right.
Checklist for Standard 2:

☐ Do you have a list of your accredited vehicles?

☐ Are you employing subcontractors and if so how are you nominating vehicles for use i.e. is the subcontractor accredited independently or accredited to your organisation for work by your organisation only?

☐ Does the list show all of the required details for each vehicle?

☐ Is there sufficient documentation and records supporting the required vehicle details?

☐ Are the vehicle ratings shown on the vehicle’s compliance plate? If not, do you have evidence of the vehicles ratings, such as suspension upgrade certification?

☐ Does the list include subcontractors? Is there a separate section for sub-contractors?

☐ Is there a written agreement between the subcontractor and your organisation to demonstrate their compliance with your Mass Management System?

☐ Who is responsible for maintenance of the vehicle list?

☐ How and when will the list be updated?

☐ Are there provisions to notify MRWA when a vehicle is added/deleted from the list?

☐ Where is the list of accredited vehicles kept and do the operators/staff know of this?

☐ Is there a procedure in the Mass Management System for ensuring the drivers know the maximum allowed mass limits for each vehicle?
STANDARD 3: VEHICLE LOADING – MASS

Standard:
The Mass Management System must be able to demonstrate the methodology used to ensure vehicles are loaded within allowable mass limits. Before the vehicle departs, it must be weighed, or have its weight assessed by other means.

The methodology must be able to allow for normal variations of the product and still ensure all mass requirements are met. The loading system must deliver axle group and gross loadings within the allowable limits, prior to the vehicle travelling on the road.

Criteria:
To satisfy this standard the operator’s Mass Management System must:

3.1 Demonstrate product loading is controlled to ensure the axle masses remain within the allowable limits, as shown in Appendix 1. Loading is taken to be sufficiently controlled when the axle masses are within the allowable limits, plus the following tolerance:
   a) Level 1 - 300kg
   b) Level 2 - 200kg
   c) Level 3 - 100kg

3.2 Demonstrate product loading is controlled to ensure the vehicle’s loading limits are not exceeded.

3.3 Specify how the mass is recorded and where the records are kept for each trip.

3.4 Describe how any variations, such as load density, temperature, size variations etc., will be controlled.

3.5 Describe the procedure for dealing with vehicles detected as being overloaded.

3.6 Demonstrate how the loading or weighing devices are maintained and calibrated.

Note: For the purpose of Standard 3.1 “allowable limits”, the 5% tolerance across adjacent axle groups provided for under Section 29 Road Traffic (Vehicles) Act 2012 may be applied in addition to the above mentioned mass tolerance.
Checklist for Standard 3:

☐ Does the Mass Management System have a procedure for establishing the mass of the load?

☐ Has the procedure been verified and is there a schedule in place for continual verification to ensure the loading is within the allowed tolerances?

☐ Is there a system in place for keeping auditable records of the measured weights?

☐ Does your procedure have specific instructions for loading where there may be variance in the loads, such as
  o Density
  o Wet over dry material
  o Aggregate size

☐ Are all parties involved in the loading process aware of the vehicle’s maximum mass and where the mass should be placed for correct distribution?

☐ Will the loading affect the centre of gravity for the vehicle? (NB: A Static Rollover Threshold (SRT) Calculator has been made available on MRWA’s website to assist the transport industry in reducing the rollover risk for their particular vehicles. The tool provides an indication of whether the vehicle is at risk of rollover and what measures can be taken to reduce the risk. Transport operators are encouraged to use the SRT Calculator before commencing a transport task).

☐ Is there specialist equipment involved, are staff suitably trained to use the equipment and are there documented procedures available?

☐ If a third party is utilised are they trained accordingly and where are the records, training requirements and information packages kept?

☐ Is there a procedure in place for dealing with overloaded vehicles and are staff aware of the procedure?

☐ Are the maintenance and calibration records available?
STANDARD 4: RESPONSIBILITIES

Standard:
The Mass Management System must clearly identify what tasks are involved in loading a vehicle, nominate each person involved and their responsibilities during each task. Each person must be competent to undertake the task.

Note: It is important the operator clearly identifies the tasks to be carried out and who is responsible for performing each task.

Criteria:
To satisfy this standard the operator’s Mass Management System must:

4.1 Clearly identify what the tasks in the Mass Management System are;

4.2 Clearly identify who is responsible for conducting each task listed in the Mass Management System.

4.3 Contain current and detailed Responsibility Statements for each position involved in the Mass Management task.

4.4 Ensure Responsibility Statements are read, signed and dated by each person responsible for the task.

4.5 Ensure all people assigned to the task are competent to conduct the task and suitably trained.

4.6 Ensure there is a suitable system in place in the event the responsible person is not available.

4.7 Ensure all relevant staff know how to access the written record stating their responsibilities.
Checklist for Standard 4:

☐ Is there a documented task list?

☐ Are the tasks defined and could another person follow the steps to do the work?

☐ Is there a documented competency assessment?

☐ Have the responsibilities for each task been documented?

☐ Have all the relevant staff members been instructed on what their responsibilities are?

☐ Do all the relevant staff members know how to access their documented work instruction?

☐ Does the Mass Management System include procedures for ensuring the standards are met and correct procedures followed?

☐ Are all staff aware who is responsible for each component of the loading and who they report to?

☐ Is there an appointed person/s to ensure the Mass Management System is followed?
STANDARD 5: RECORDS AND DOCUMENTATION

Standard:
A Mass Management System must contain sufficient records and documentation for an Auditor to determine all Standards have been complied with.

Criteria:
To satisfy this standard an operator's Mass Management System must:

5.1 Have documentation recording all policies and procedures required under these Standards.

5.2 Ensure all required records are legible and clearly identify the vehicle, driver and trip involved.

5.3 Ensure current documentation is available to all relevant staff (at all locations) where operations related to load management are undertaken.

5.4 Ensure all elements of the Mass Management System are maintained and updated and the responsibility for this task is documented.

5.5 Ensure all documents and records be are retained for a minimum of three years. This includes superseded procedures.

5.6 Ensure the following records and documentation be retained for each trip, as a minimum:
- The registration details of all vehicles in the combination used;
- Applicable authorisations (i.e. licences, permits and orders) under which the vehicle was operating;
- Details of the load carried;
- The axle masses of the vehicle, and the methodology used for determining this information; and
- The rollover threshold of each vehicle in the combination.
Checklist for Standard 5:

☐ For each vehicle / journey, sufficient records and documentary evidence be retained to demonstrate all relevant standards have been met?

☐ Has sufficient documentary evidence been retained to clearly demonstrate records, procedures and methods in place under the Mass Management System are regularly reviewed?

☐ Does the Mass Management System have procedures for ensuring all relevant staff can access or know how to access the Mass Management System (including other relevant records and documents)?

☐ Does the Mass Management System have a record of nominated vehicles (to include sub-contractor vehicles) which is regularly updated?

☐ Are all relevant records and documentation stored in a manner to allow an Auditor to conduct the necessary audits in an effective and efficient manner?
STANDARD 6: INTERNAL REVIEW

Standard:
An annual internal review must be conducted to ensure loads are being adequately controlled and all activities are being undertaken in accordance with the Mass Management System. An internal review of the Mass Management System is required to confirm the ongoing relevance and appropriateness of processes and practices. An effective review will identify non-conformance for immediate rectification.

Criteria:
To satisfy this standard an operator’s Mass Management System must:

6.1 Provide procedures for conducting annual internal reviews to include:
   • When the reviews are to take place;
   • Who is to conduct them;
   • How the reviews are to be conducted; and
   • The checklists of documents and records to be used for the review.

6.2 Ensure where practicable, the internal review is to be conducted by a person not involved in the operation of the procedures being reviewed.

6.3 Separate from the annual internal review, an operator must have written procedures to ensure all non-conformance identified at any time during the year, including during regular compliance reporting are corrected.

   The procedures for handling non-conformance must include:
   • How non-compliances can be detected;
   • Who is responsible for detecting them;
   • Who else should be told about them;
   • Corrective action to be taken;
   • Timeframes for reporting identified non-conformance; and
   • How the responsible person is to document the process to prevent further non-conformance.

   Retain evidence of non-conformance and the action taken to correct them. This is done in the form of a non-conformance Register.

6.4 Have written procedures for allocating responsibility to designated staff for ensuring all non-conformances are addressed and not repeated.

6.5 Require the production of a regular compliance statement, and detail the form of this report which must include as a minimum:

   • The number of vehicles in the MMS
   • The number of trips taken
   • The number of trips taken where non-conformance occurred with the MMS, and
• The level of mass excess for each non-compliant trip.
Checklist for Standard 6:

☐ Does the Mass Management System include procedures for conducting internal reviews which cover:
  - When the reviews are to take place;
  - Who is to conduct them; and
  - How the reviews are to be conducted?

☐ Are internal reviews carried out by an independent person/people?

☐ Are there written procedures for ensuring any identified non-conformance is corrected?

☐ Have staff been identified for taking action so instances of non-conformance are not repeated?

☐ Is a quarterly compliance report produced?

☐ Have you identified the person/people responsible for updating your Mass Management System procedures?

☐ Do you have a non-conformance register or similar?
STANDARD 7: TRAINING AND EDUCATION

Standard:
A Mass Management System must ensure all persons associated with the management of loads have the appropriate knowledge and skills to undertake their required tasks.

Criteria:
To satisfy this standard an operator's Mass Management System must:

7.1 Identify what training in relation to load management is required for each person associated with load management activities.

7.2 Include procedures for recording what training has been undertaken in relation to load management by anyone associated with load management activities and when the training was undertaken.

7.3 Include what training in mass management is given to all new drivers, contractors or employees as part of their induction process.

7.4 Ensure training is reviewed regularly and detail this process, the staff responsible for training and reviewing and the frequency of the review.

7.5 Ensure all relevant staff (including sub-contractors and any third parties) are provided with information of the Mass Management System, including any revisions.
Checklist for Standard 7:

☐ Has training been provided to all relevant staff including any sub-contractors or any third parties who are involved in your Mass Management System?

☐ Are there records of staff (including sub-contractors and third parties) who participated in the training?

☐ Is refresher training conducted when non-compliances are identified, are they recorded and documented?
APPENDIX 1 – Accredited Mass Management Scheme Levels

<table>
<thead>
<tr>
<th>LEVEL 1</th>
<th>Axle Mass Limits</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle Group</td>
<td>Tonnes</td>
<td></td>
</tr>
<tr>
<td>Single steer axle</td>
<td>6.0*</td>
<td>Operators must comply with the approved level of extra mass, Mass Management Standards and WAHVA Business Rules.</td>
</tr>
<tr>
<td>Tandem axle (dual tyres)</td>
<td>17.0</td>
<td>Equivalent to the current Certified Weighbridge Mass Management Scheme (CWMMS) and the national Concessional Mass Limits (CML).</td>
</tr>
<tr>
<td>Tri-axle (dual tyres)</td>
<td>21.5</td>
<td>Allows alternative weight control methods, providing greater flexibility to transport operators who are able to prove accurate loading to within 300kgs of the allowable limit. Individual axle group weights and gross weights would need to be controlled prior to entering the public road system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 2</th>
<th>Axle Mass Limits</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle Group</td>
<td>Tonnes</td>
<td></td>
</tr>
<tr>
<td>Single steer axle</td>
<td>6.0*</td>
<td>Operators must comply with the approved level of extra mass, Mass Management Standards and WAHVA Business Rules.</td>
</tr>
<tr>
<td>Tandem axle (dual tyres)</td>
<td>17.0</td>
<td>Equivalent to the national High Mass Limits (HML). Allows alternative weight control methods, providing greater flexibility to transport operators who are able to prove accurate loading to within 200kgs of the allowable limit. Individual axle group weights and gross weights would need to be controlled prior to entering the public road system.</td>
</tr>
<tr>
<td>Tri-axle (dual tyres)</td>
<td>22.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LEVEL 3</th>
<th>Axle Mass Limits</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axle Group</td>
<td>Tonnes</td>
<td></td>
</tr>
<tr>
<td>Single steer axle</td>
<td>6.0*</td>
<td>Operators must comply with the approved level of extra mass, Mass Management Standards and WAHVA Business Rules.</td>
</tr>
<tr>
<td>Tandem axle (dual tyres)</td>
<td>17.5</td>
<td>Equivalent to the current Concessional Loading Bulk Products Scheme (CLBPS). Allows alternative weight control methods, providing greater flexibility to transport operators who are able to prove accurate loading to within 100kgs of the allowable limit. Individual axle group weights and gross weights would need to be controlled prior to entering the public road system.</td>
</tr>
<tr>
<td>Tri-axle (dual tyres)</td>
<td>23.5</td>
<td></td>
</tr>
</tbody>
</table>

*NOTE:* Steer axles may exceed the limits shown in this table if they are allowed under a separate legal instrument.
FURTHER ENQUIRIES

Main Roads Western Australia
Heavy Vehicle Services
525 Great Eastern Hwy
Redcliffe WA 6104

Phone: 138 HVO (138 486)
Fax: (08) 9475 8497
Web address: www.mainroads.wa.gov.au
E-mail: hvoaccreditation@mainroads.wa.gov.au