ENGEN ROAD
TRANSPORT SAFETY
MANAGEMENT
SYSTEM

2018
1 PRELIMINARY

1. Overview

Engen Petroleum Ltd is an African energy company focusing on the downstream refined petroleum products market and related businesses. Our core functions include the refining of crude oil, the marketing of our primary refined petroleum products and the provision of convenience services through an extensive retail network.

The objective of this Road Transport Safety Management System, which will be referred to as RTSMS in the rest of the document, is to describe how Road Transportation risks within are managed to As Low as Reasonably Practicable (ALARP). This is consistent with the following requirement of PTS 18.55.01, and ISO 39001. The RTSMS will be reviewed as and when required and approved by senior management. This RTSMS manual covers

This RTSMS has been established in accordance with Engen HSEQ Manual, ISO 9001 & 14001, PETRONAS Technical Standard (PTS), HSE Mandatory Control Framework and any relevant applicable International Standards.

Where Local requirements differ from those described in this manual, the more stringent requirements need to be followed. This document includes the transportation of refined oil products, including lubricants but excludes Customer on Demand trucks/contractors.

“The company” in this document refers to Engen or the Road Transport contractor.

2. Scope

This RTSMS provides an organisational framework that requires continuous monitoring and periodic review, and an effective direction for management response to changes in internal and external factors. It requires that all levels in the organisation to accept responsibility for working to achieve continuous HSE improvements.

Figure 1. The PDCA concept + Continual Improvement Loop
3. Continual Improvement

Within the context of PDCA continual improvement loop, HSE Management System and the Mandatory Control Framework (MCF) is committed to strive for continual improvement in HSEQ performance for Road Transportation. The RTSMS is a documented demonstration that an effective HSEQ Management system is in place. This shall be achieved through:

- Provision of necessary resources and organization
- Appropriate vehicle specifications in accordance with legal requirements, PETRONAS’ standards and industry best practices
- Appropriate training and qualification programs with effective controls in place
- Effective contingency plans to deal with any land transportation emergencies
- Regular communication with key stakeholders on matters related to land transportation safety

![Diagram](image)

Figure 2. Effective MCF and Management system implementation

The requirements of this RTSMS apply to land transportation activities where:

- Engen products is transported using heavy goods vehicles e.g. bulk tanker, prime mover, trailer and flatbed whereby Engen has direct control on the RT Contractors
- Heavy vehicles used for transportation of heavy equipment/vessels during project/construction stage where Engen has direct control on the RT Contractors
1. LEADERSHIP AND COMMITMENT

1.1 Purpose
This requirement addresses the top-down commitment and company culture necessary for success in the systematic management of Road Transportation. Critical to road transport safety, as with safety in any area involving personnel, is management leadership and involvement. It is essential that managers and supervisors at all levels actively demonstrate commitment to the Road Transport Safety Policies to accept and promote HSEQ initiatives.

1.2 Requirement
The Company should have clear Road Transport Policies in place, which emphasize the paramount importance of safety and the protection of employees, customers, the public and the environment from the adverse effects of all logistics operations, whether carried out by or on behalf of the company.

The company is responsible for producing and maintaining an effective RTS MS, which should contain:

- Road Transport Safety Policies which specifically refer to the requirements regarding road transport safety.
- An Organization Chart, which identifies the persons responsible for management and upkeep of the Management System, and the associated records.
- A process for ensuring that all employees are aware of their responsibilities regarding road transport safety, and the requirements of the RTS MS as relevant to their jobs.
- An audit procedure to be used for regular checks by senior management on the degree of compliance with the RTS MS.
- A document control and record retention system to safeguard the integrity of the RTS MS.
- Detailed procedures for the implementation of each of the RTS MS Elements.
- A main HSE Committee shall be formed under the chairmanship of the most senior executive.
- An emergency response procedure.
- An incident reporting and investigation procedure.
- A truck injection process – to ensure that a procedure is in place in the company to add additional trucks as and when Engen requires.

Prime responsibility should lie with line management who should be required to demonstrate a high level of commitment to safety, health and environmental protection not only in terms of logistic operations but also in terms of personal behaviour.
Senior Management must lead by example in order to influence positively workers’ attitude and behaviour and to continuously improve the safety culture within the company.

2. POLICY AND STRATEGIC OBJECTIVES

2.1 Purpose

The company must have Road Transport Safety Policies, which affirms the company’s commitment to road safety, and safety responsibilities for individuals throughout the company.

The policies should outline the organization, arrangements and responsibilities for achieving the required results and should be known and understood by all employees.

2.2 Requirement

The Policies should:

- be signed either by the CEO on the site, or alternatively by the Chairman or Managing Director of the company, reflecting the fact that the overall responsibility for HSEQ issues rest at the top of the organization;
- be reviewed annually as a minimum, or following any major change in company organization;
- recognize the importance that individuals play in achieving successful implementation;
- be supported with goals and targets.

2.2.1 Road Transport Safety Policy

- The RTS policy provides the starting point for establishing strategic road transportation objectives, which aims are:
  - Reduce the number of incidents and fatalities
  - Establish driver selection, testing and training programs
  - Establish a fleet management system that also allocates for non-driver positions within the organisation
  - Establish and support safe road transport working procedures and practices and to strive for an incident-free activity
  - Ensure that the company will employ only transport assets, facilities and equipment which conform to acceptable standards and that they are maintained in a safe, secure and operational condition; and
• Specify the need to develop and emergency response capability in cooperation with authorities and emergency services.

2.2.2. Drug and alcohol policy
Drugs and alcohol tests shall be conducted for all BTOs

• Prior to appointment or employment as a driver (as part of pre-employment medical check-up)
• At random throughout employment / working period
• After involvement in vehicle accident
• Under suspicion of being influenced by drug/alcohol

3. ROLES AND RESPONSIBILITIES

3.1 Purpose
An overall management structure for road transportation and its relation to the implementation of the transport policy within the organization should be in place. Clear roles and responsibilities should be established.

3.1.1 Contract Owner
The contract owner, responsible for any RT contract, for the supply of land transport services shall ensure that the requirements of this RTSMS are reflected in the contract.

3.1.2 Contractor Management
The Company management is responsible to ensure compliance to the terms of the contract, e.g.:

• All BTOs are trained, properly assessed and competent, with the appropriate licenses
• All BTOs are medically assessed and fit for the work
• All vehicles used are adequately maintained and identified with valid inspection records and safe for use
• All vehicles need to meet minimum Engen Requirements, should there be any deviation, a formal deviation should be applied
• Journey and risk management planning is implemented as required
• On an ongoing basis, managers and supervisors are responsible to ensure that operations are being carried out safely and that all legal requirements are being met.
• Periodic checks should be made and documented to ensure that operating procedures are fully understood and being followed.
On-site/in the vehicle verifications should be made for all phases of the delivery process, including loading, unloading and on the road driving.

Management should ensure that adequate resources are made available in a timely manner to fulfil the strategic objectives set out in the company management plan.

Senior management should establish clear expectations and objectives and ensure the involvement of managers/supervisors at each level of the organization.

### 3.1.4 Contractor Road Transport Advisors

The RT advisor shall advise the management and facilitate the implementation of RTSMS and other matters relating to road transportation safety in accordance with local legislation.

### 3.1.5 Professional BTOs

All Professional BTOs, shall:

- Depending on the vehicle class, attend appropriate training
- Be registered with or certified by the appropriate authorities, as required by local legislation.
- Undergo refresher training as specified by legislation or this document

While management is responsible for fostering a positive safety culture and providing training, support programs, equipment, and other appropriate tools for safe vehicle operations, success or failure ultimately depends on the vehicle driver.

- It is critical that the BTO be highly motivated and committed to performing all aspects of his job in a safe manner, strictly following established procedures, maintaining alertness to potential hazards and observing defensive driving principles at all times.

- Major emphasis must be placed on attaining a high degree of awareness and self-motivation on the part of all drivers. This can be aided by actively involving BTOs in a wide range of safety related activities and programs.

While voluntary employee commitment and involvement are critical to the success of any safety program, the organization must also place upon its BTOs minimum expectations which will be detailed in section 5.6 BTO Training and competency.
4. **RISK MANAGEMENT PROCESS (HEMP)**

4.2 Purpose

This process provides a demonstration that all potentially significant hazards and effects have been identified, the risks from the hazards evaluated and the controls to manage the causes (threats) and consequences of the hazards are in place.

4.3 Requirement

- identification and description of all hazard and possible hazardous events for road transportation
- assessment of risks arising from the hazards, including identification of all possible threats, consequences and escalation factors, based on the Risk Matrix
- controls required for each threat to reduce the risk, and identification of any controls not in place to be included in the Remedial Work Plan
- recovery methods and facilities required to mitigate consequences, and identification of any recovery measures not in place to be included in the Remedial Action Plan

The risk assessment process is explained in detail in Module 5 of the RTSOG guidelines.

5. **MANAGEMENT OF CHANGE**

5.1 Purpose

Many incidents include direct and indirect causes with origins in change management failures. The cause-and effect relationship associated with introducing changes to fleet operations or any element of the Road Transport Management system, if not anticipated and dealt with, could directly result in serious losses being sustained.

The main aim of MOC System is to ensure that a proper level of review(s) is applied to prevent adverse effects from changes. MOC ensures that safety of fleet and BTOs are not compromised by inadequate evaluation of hazards related to change. Well implemented, MOC ensures that the health, safety, and environment of the fleet and their associated personnel are not compromised and the intended benefits of the change are fully realized as planned.

The goal of MOC process is to provide a coherent, systematic, and as simple a strategy as possible for all end-users to implement in order to ensure that changes considered produce their intended benefits without adverse side-effects.
5.2 Requirements

The MOC provides the procedures and tools required to manage all changes associated with the Fleet business. It addresses the following areas:

- MOC Personnel, Roles and Responsibility
- MOC Process
- MOC Request Form
- Delivery Route Change
- BTO Task Change
- Equipment Change
- Facility Change
- Haulier Management Change
- ENGEN Personnel Change
- Work Procedure Change
- Supply Point Change
- Personnel Change
- RTSOG Changes or Deviations

The MOC process shall follow the following steps:
6. BTO MANAGEMENT

6.1 Purpose
The Company shall review the BTO background and credentials before taking him/her into service.

6.2 Requirement
The process for recruitment and selection of BTOs shall include the following and detailed in BTO Recruitment Procedure

- Driving Record and test (proven past safety performance)
- Employment Record (reference check)
- Personal Characteristics and Personality (polite/reliable/team)
- Personal Image (pride in appearance and employer’s image)
- Personal Circumstances (distance from work/current earnings)
- Motivation (wants to be best in class)
- Health/Fitness/Physical Abilities (with drug & alcohol done during medical assessment)
- Level of Education (can read and write in local language)
- Demonstrated Intelligence (understands job requirements)

The following is a mandatory requirement of and should be complied with at all times:

- HGV BTOs should be within 28 and 55 years old, unless there are specific country’s legal requirement
- Has a minimum of 3 years driving experience for HGV & Dangerous goods vehicles
- Possess appropriate driving license for the vehicle being driven
- Has attended training appropriate to the vehicle class and type of goods

6.3 Driving Procedure
The Company shall establish system or arrangement to ensure the following are met:

- Reference to the BTO’s recent driving hours and rest hours/days is done when preparing the duty roster
- The BTO shall not use a mobile phone or walkie-talkie while driving. This includes the hands free kit
- BTO shall use seat belt and remind passengers to do the same
- BTO shall be fit for the job
• BTO is not under the influence of drug or alcohol and not on medication that may interfere with driving (e.g. causing drowsiness)
• BTO brings along important documents e.g. valid license, log book, identity card, BTO safety passport and other documents deemed necessary
• BTO performs daily vehicle checks by checklist before journey, a defect report should also be completed
• BTO must be briefed on Journey Management Plan on new or revised route
• The BTO provides feedback and submits to the supervisor if there are changes in the route
• BTO does not allow unauthorized passenger(s) to be in the vehicle
• BTO should ensure that all doors are kept locked when vehicle is unattended (for example at approved rest areas)

6.4 Driving hours and working hours limits
The Company shall monitor driving hours and working hours for the BTOs for fatigue management, adhering to the following requirements as a guideline:

• Maximum 4 continuous driving hours
• Maximum 8 driving hours per day
• Maximum 12 working hours per day
• Minimum 30 minutes rest time after specified hours of continuous driving
• 1 day of rest after 6 continuous days of work
• Minimum 36 hours of rest before starting new

*Where Local requirements differ from those described, the more stringent requirements need to be followed or a deviation needs to be completed for the working times being used as long as those times are within the local legislation.*

6.5 Driver monitoring
The Company shall monitor the performance of BTOs through observation, inspection and audit to ensure they comply the established safe operating procedure and requirement related with the following:

• Driving
• Loading and off loading
• Pre-trip inspection of vehicle

Company shall monitor driver through In Vehicle Monitoring System (IVMS), road audits, spot checks which should be able to monitor BTOs at risk behaviours such as:-

• Speeding
• Fatigue driving
• Harsh braking
• Continuous driving without rest
• Making unauthorized stops
• Violation of work hours
• Or any other at risk behaviour

Company shall monitor drivers’ compliance to the requirements and performance on a periodic basis. In the event of noncompliance by the drive, or the Company shall impose their consequence management program.

6.6 Driver Training and competency

6.6.1 Induction Training

A documented system of initial or induction training should be in place to ensure that new BTOs are fully trained to meet the responsibilities and functions of the job, and comply with minimum training requirement as well as regulatory requirements.

1. Induction training should include a combination of theory and practical work, requiring a balance between classroom and “on the job” instruction. Reviews, testing and other methods to confirm understanding of content should be incorporated into the structure.

2. The following are minimum requirements that should be part of the induction training:

• Depot Safety Rules and Procedures.
• Retail sites and commercial site Safety Rules and Procedures
• ZeTo rules
• Company HSE policy & Drug and alcohol Policy
• Emergency Procedures
• Pre-departure Checks.
• Trailer Un-couple and Couple.
• Refuelling/Lubricants/Water/Air.
• Driving Principles and Techniques.
• Product Loading and unloading procedure which covers signing off on product delivery
• Incident reporting and notification  Journey Management plan
• Operating the IVMS on the vehicle
• Fatigue and rest management
• Hazard identification and route hazards on road
• Behaviour based training
• Local culture/attitude towards driving
• Accident black spots
• Highway code including observing speed limits
• Action in case of breakdown
• Medication, drug effect on driving
• No mobile phone when driving
• Vehicle stability and safe loading

6.6.3 Defensive Driving Training

1. Developing skill in the use of “defensive driving” techniques (maintaining continuous awareness of the surrounding road environment, planning ahead and avoiding hazardous situations) is a fundamental requirement for safe driving.

2. Comprehensive training in defensive driving techniques is an integral part of any driver training program. Initial training should be included as part of the induction training provided for delivery vehicle BTOs and refresher training provided annually.

3. Good defensive driving programs are typically based on similar concepts and include a series of interlocking techniques and practices for avoiding hazards and/or preventing accidents.

4. The minimum requirements of the defensive driving training should include the following:

   • Expanding the driver’s field of observation.
   • Continuous visual search.
   • Total awareness of the surrounding environment.
   • Perceptive anticipation of the actions of others
   • Planning ahead.
   • Timely and deliberate actions/reactions.
   • Handling characteristics of the vehicle
   • Unpredictable behaviour of animals
   • Unpredictable behaviour of pedestrians, cyclist and other road users
   • Hazardous climatic conditions
   • Hazardous road features e.g. curves, hills, narrow roads, bridges, absence of signs or signals and obstructions

5. By exercising the above skills, defensive BTOs maintain a safety zone around the vehicle. Defensive driving training should be carried out by a driving specialist and should include classroom training.
followed by an assessment on the road, the results of which should be recorded in the drivers’ personal training record.

6.6.3 Ongoing and Refresher Training
Following the initial driving courses outlined in earlier sections, refresher training for defensive driving training should be provided annually, the actual frequency shall be determined by the affiliate especially if the legislative requirements differs from Standards. The training can be conducted in various format including modularised, and should cover the key road safety issues in the context of the local driving standards and conditions. One of the main Challenges will be to retain the interest of the driver, so simple repeats of the first course should be avoided. A workshop style format is an alternative approach, where BTOs can become directly involved in the discussion on road safety issues.

Competence profiling exercises may reveal specific training requirements, which will need to be addressed. Similarly, if specific weaknesses in a driver's performance have been identified (e.g. following an incident or by monitoring the driving characteristics recorded on the IVMS then similar action will be required. This could take the form of counselling, coaching (e.g. use of mentor drivers), a workshop, discussion in a driver meeting or attending a specific course.

6.6.4 In-the-Vehicle Driver Observation Training
HGV BTOs shall receive regular in-the-vehicle driver skills evaluation training. Such training should equip BTOs to both demonstrate safe driving and/or defensive driving principles behind the wheel.

Trained supervisors can in effect make each opportunity to ride with HGV BTOs a training session, follow up on previous evaluations, isolate problem areas and provide direction to help employees overcome driving weaknesses.

6.7 Mentor BTOs for training and coaching
"Mentor Drivers" concept has proven to be effective in the road transportation industry. Experienced BTOs acting as Mentor BTOs play a key role in the "quality control" aspects of the driving activity. They need to demonstrate above average driving skills and be capable of working effectively in a coaching and mentoring role, as well as evaluating new recruits and carrying out periodic reviews of existing fleet BTOs and their vehicles.

6.8 Qualified Driver Trainers
Driver Trainers should be qualified and competent and should be used to assess and train new BTOs during their induction period and for general driving training. They will also carry out refresher training and monitor on a regular basis the driving standards of all the BTOs in the fleet.
7. VEHICLE MANAGEMENT

7.1 Requirements
HGV vehicles should meet the requirements of the Vehicle Management Procedure. Please consult the RTSOG 3.5.06 Vehicle Management for the list of minimum requirements.

Any modification to vehicle specifications that has impact on safety is NOT allowed unless a proper risk assessment is done through the MOC process with the involvement of Engen competent MOC team members. Vehicles used for the transportation of dangerous goods shall also comply with regulatory in country requirement.

7.2 Inspection and Maintenance
System and arrangement shall be in place for periodic and pre-use inspection of vehicle to identify vehicle faults, with the ability to take urgent action for safety–related faults. Procedure to include but not limited to:

- Prevention mechanism for defective / unsafe vehicles from going on public road.
- Vehicle fault recording and reporting.
- Safety Maintenance and Inspection Plan
- Safety Inspection, Maintenance and Repair Facilities
- Maintenance Record
- Vehicle Cleanliness

7.3 Legal and commercial documentation
The following documentation shall be kept where applicable.

Vehicle

- Vehicle registration document (road tax, permit)
- Insurance
- Emergency contact numbers including specific ERP
- Safe Loading Pass

BTO

- BTO’s driving license
- Delivery order
- Safety Data Sheet (SDS)
- Custom clearance form (if applicable)
- BTO Manual
- Authorised BTO’s safety Passport
8. JOURNEY MANAGEMENT PLAN (JMP)

8.1 Purpose
Journey Management Plan (JMP) aims to minimize exposure to road transport related hazards and ensure adequate measures are taken to mitigate the risks. The extent and approach of JMP may vary depending on nature of the transportation activity, however should take into consideration the following aspects:

- Fatigue Management
  a. Trip schedule – working, driving and rest hours
  b. Health and physical fitness
- Hazards Identification and mitigation
  a. Travel route
  b. Customer sites
  c. Road traffic conditions and hazards
  d. Geophysical/environmental hazards
- Security
  a. Rest location
  b. Travel time and route
- Journey Monitoring and Tracking
- Vehicle Inspection
- Emergency preparedness

8.2 Requirement
JMP Form shall be completed for all road transport activities during delivery of fuel (from base location to final destination).

For specific road transportation activities or special driving conditions as listed below, route hazards assessment should also be conducted prior to each journey and the report/information is included/attached to the JMP Form.

- Transportation and delivery of hazardous products
- Travelling on off-road terrains or unpaved road to remote locations e.g. site camp
- For routine trips on regularly used routes, pre-established Route Hazards Map (RHM) could be used for reference. However, the information should be regularly updated to reflect current conditions.
- All Vehicles should be inspected at Base Location/Office using pre-established checklist. This exercise should be conducted by the BTO. The supervisor should review all paperwork and ensure that one truck is sampled for inspection on a daily basis.
- The BTO should be briefed on the hazards and requirements identified in the JMP Form and Route Hazards Assessment Report prior to the journey by his supervisor.
9. EMERGENCY RESPONSE

9.1 Purpose
Emergency response that is quick and effective is capable of minimizing accident impact of death or serious injury and capable of saving lives and property. As such, it shall be given due priority by the company.

9.2 Requirement
- An Emergency response procedure should be in place with relevant arrangements;
- Training on first-aid and basic fire-fighting plus first-aid kit and treatment handling shall be given to BTO;
- First aid kit shall be made available, sufficient, and in a good condition at all times inside every vehicle and other location such as terminal, workshop and warehouse;
- Active and usable fire extinguishers kept in an easily visible and retrievable in vehicles, terminals and workshops;
- Emergency equipment such as torches and hazard indicators such as emergency cones and triangular signage in the vehicle;
- Spill kits should also be present in the vehicle;
- Usable spare tires and tire-changing equipment are in the vehicle; and
- Written procedure for reporting incidents or accidents for staff especially BTOs (such as calling the relevant authorities, the officer in charge) in BTO’s manual. It shall be easily comprehensible, clear and always updated.

10. PERSONAL PROTECTIVE EQUIPMENT

10.1 Purpose
All BTOs engaged in land transportation shall have the basic minimum personal protective equipment.

10.2 Requirement
All BTOs during road transportation and loading/offloading activities shall, as a minimum, wear:
- Safety shoes with steel toe cap and oil/acid resistant sole and anti-slip while driving
11. REPORTS, ACCIDENT INVESTIGATION AND PERFORMANCE MONITORING

11.1 Purpose
All incidents related to land transportation activities shall be reported as Engen Incident Notification, Investigation and Reporting. All incidents, including high potential near misses, require appropriate investigation in order to establish root causes and identify action to prevent recurrence.

11.2 Requirement
- Each Company should have a written procedure which is known and understood by BTOs, supervisors and managers, which ensures prompt response in the event of vehicle accident.
- All incidents, including near misses should be timeously reported to BTO immediate supervisor.
- All accidents should be reported by the driver of the vehicle involved and countersigned by the BTO’s immediate supervisor. The initial report of a serious accident should be the trigger for the start of a detailed investigation process.
- Serious incident investigation needs to be coordinated by a senior line manager with the involvement of mentor BTOs and HSE advisors.
- In the case of a fatal accident the report should be approved by the member of the management team who has line responsibility and submitted to Engen and for contractors to Engen relevant contact person.
- In the case of a fatal incident, Engen will also initiate an investigation and all necessary information should be provided to Engen timeously on demand.

11.3 PERFORMANCE MONITORING
Engen has established a system for monitoring and reporting of land transportation safety performance using the following key performance indicators (KPI). The Company shall supply the following KPIs on a monthly basis to:
<table>
<thead>
<tr>
<th>Accident</th>
<th>Fatality</th>
<th>LTI</th>
<th>LOPC</th>
<th>Contaminations</th>
<th>Near Miss</th>
<th>No of OTC/GPS violations</th>
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<tbody>
<tr>
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<td>- No of Speed, Harsh Braking and Harsh Acceleration violation</td>
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<td>- No of unauthorized stop</td>
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<td>- No of Work &amp; Rest Hours violation</td>
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<td>- Tampering with equipment</td>
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<td>No of OBC violations</td>
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<td>- Not following DD techniques e.g.:</td>
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<td>- Not using signals, not looking mirrors, improper use of seat belt, improper hand on wheel</td>
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</table>
12. ASSURANCE

12.1 Assurance
Regular assessment of the RTSMS should be of paramount importance. The assessment process is to monitor performance, set action plans for correcting deficiencies, and ensure that lessons learnt lead to further improvement in RTS Management.

Planned and systematic audits of the RTSMS together with management reviews of performance should be established and maintained as an integral part of the land transport operations.

Deficiencies observed during audits should be recorded, their implications assessed, and remedial actions prioritized and implemented.

12.2 Requirement
The table below gives the frequency and the type of assurance required to ensure that the RTSMS is working effectively

<table>
<thead>
<tr>
<th>Type of Assurance</th>
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<tbody>
<tr>
<td>Vehicle pre-departure checklist</td>
</tr>
<tr>
<td>On the road ‘spot checks’</td>
</tr>
<tr>
<td>Stop area checks</td>
</tr>
<tr>
<td>Unloading / Loading Tier 1 (depot, retail and commercial sites)</td>
</tr>
<tr>
<td>Site Visit Audit (Tier 1 assurance)</td>
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<tr>
<td>RTSMS Audit (included in Tier 2 audits)</td>
</tr>
</tbody>
</table>

------ END OF RTS MS MANUAL ------
APPENDIX 1: LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>RTSM</td>
<td>Road Transport Management system</td>
</tr>
<tr>
<td>RT</td>
<td>Company</td>
</tr>
<tr>
<td>HSEQ</td>
<td>Health Safety Environment and Quality</td>
</tr>
<tr>
<td>LOPC</td>
<td>Loss of primary containment</td>
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<tr>
<td>PTS</td>
<td>PETRONAS Technical Standards</td>
</tr>
<tr>
<td>ZeTo</td>
<td>Zero Tolerance (set of 10 golden rules)</td>
</tr>
<tr>
<td>JMP</td>
<td>Journey Management Plan</td>
</tr>
<tr>
<td>OBC</td>
<td>On Board Computer</td>
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<tr>
<td>HA</td>
<td>Harsh Acceleration</td>
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<tr>
<td>HB</td>
<td>Harsh Braking</td>
</tr>
<tr>
<td>DD</td>
<td>Defensive Driving</td>
</tr>
<tr>
<td>LOPC</td>
<td>Loss of primary containment</td>
</tr>
<tr>
<td>LTI</td>
<td>Loss Time Injury</td>
</tr>
<tr>
<td>Engen RTSOG</td>
<td>Engen Road Transport Safety Operations Guide</td>
</tr>
<tr>
<td>GPS</td>
<td>Global Positioning system</td>
</tr>
<tr>
<td>IVMS</td>
<td>In Vehicle Monitoring System</td>
</tr>
</tbody>
</table>
APPENDIX 2: ENGEN ZETO RULES

- Work with a valid work permit (PTW) required by the job
- Verify energy isolation before starting work
- Obtain authorisation before overriding or disabling safety critical equipment
- Obtain authorisation before entering a confined space
- Protect yourself against a fall when working at height
- Use the correct personal protective equipment (PPE) when handling hazardous chemicals
- Obtain authorisation before excavation or entering a trench
- Do not position yourself under a suspended load
- Do not smoke outside designated areas or bring potential ignition sources into process areas without authorisation
- Do not use your mobile phone/walkie-talkie while driving, follow the speed limit and use your seat belt

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