

Aster Chemicals & Energy Pte Ltd

General Requirements for Road Transport Carriers

Definition “Road Tank”: *Transport vehicles with tank vessel /demountable or not demountable containers*

Carriers collecting product from or delivering product to, any of the Aster Chemicals & Energies companies (collectively “ACE”) at a location owned by ACE or its affiliates (“ACE Location”) or by a third party (“Third Party Location”), e.g. storage terminals, must meet and abide by the general HSSE requirements in this document (the “General Requirements”). “Carriers” used in this document means any or all of the following collectively as the context requires: the entity contracted by ACE, ACE’s customer or ACE’s supplier to transport product to or from the ACE Location or Third Party Location (“Carrier company”), subcontractors of such entity or their subcontractors, and the respective personnel of such entity or subcontractors.

In addition to complying with the General Requirements, Carriers also must comply with any Site Specific Requirements imposed by the ACE Location or Third Party Location and applicable law where product will be collected or unloaded (“Site Specific Requirements”). Information on Site Specific Requirements for ACE Locations can be accessed via this link.

www.aster.com.sg/safe-product-handling-transportation/road-transport-requirements

For Site Specific Requirements of Third Party Locations, please always contact the Third Party Location directly. Customers purchasing product from and suppliers supplying product to ACE must ensure that their Carriers comply with the General Requirements, the Site Specific Requirements and the applicable law.

The relevant ACE Location or Third Party Location reserves the right to reject any means of transport presented for loading or discharge when the condition of the equipment, standard of maintenance, lack of necessary equipment or (insufficiently qualified) staff would constitute an unacceptable hazard or in the event of non compliance with the applicable law, the General Requirements and/or Site Specific Requirements.

Customer and/or Supplier are solely responsible for advising their Carriers that access to ACE Locations and Third Party Location is conditioned upon compliance with the General Requirements, any Site Specific Requirements and the applicable law.

1. General Requirements

General Requirement 1: Life Saving Rules

All Carriers must comply with the 9 Life-Saving Rules, these are:

- 1. Bypassing Safety Controls.**
Obtain authorization before overriding or disabling safety controls.
- 2. Confined Space.**
Obtain authorization before entering a confined space.
- 3. Driving.**
Follow Safe driving rules.
- 4. Energy Isolation.**
Verify isolation and zero Energy before works begins.
- 5. Hot work.**
Control flammables and ignition sources.
- 6. Line of Fire.**
Keep yourself and others out of the line of fire.
- 7. Safe Mechanical Lifting.**
Plan lifting operations and control the area.
- 8. Work Authorisation.**
Work with a valid permit when required.
- 9. Working at Height.**
Protect yourself against a fall when working at height.

Bypassing Safety Controls

Obtain authorisation • before overriding or disabling safety controls

- I understand and use safety-critical equipment and procedures which apply to my task
- I obtain authorisation before:
 - disabling or overriding safety equipment
 - deviating from procedures
 - crossing a barrier

Confined Space

Obtain authorisation before entering a confined space

- I confirm energy sources are isolated
- I confirm the atmosphere has been tested and is monitored
- I check and use my breathing apparatus when required
- I confirm there is an attendant standing by
- I confirm a rescue plan is in place
- I obtain authorisation to enter

Driving

Follow safe driving rules



- I always wear a seatbelt
- I do not exceed the speed limit, and reduce my speed for road conditions
- I do not use phones or operate devices while driving
- I am fit, rested and fully alert while driving
- I follow Journey management requirements

Energy Isolation

Verify isolation and zero energy before work begins



- I have identified all energy sources
- I confirm that hazardous energy sources have been isolated, locked, and tagged
- I have checked there is zero energy and tested for residual or stored energy

Hot Work

Control flammables and ignition sources



- I identify and control ignition sources
- Before starting any hot work:
 - I confirm flammable material has been removed or isolated
 - I obtain authorisation
- Before starting hot work in a hazardous area I confirm:
 - a gas test has been completed
 - gas will be monitored continually

Line of Fire

Keep yourself and others out of the line of fire



- I position myself to avoid:
 - moving objects
 - vehicles
 - pressure releases
 - dropped objects
- I establish and obey barriers and exclusion zones
- I take action to secure loose objects and report potential dropped objects

Safe Mechanical Lifting

Plan lifting operations and control the area



- I confirm that the equipment and load have been inspected and are fit for purpose
- I only operate equipment that I am qualified to use
- I establish and obey barriers and exclusion zones
- I never walk under a suspended load

Work Authorisation

Work with a valid permit when required



- I have confirmed if a permit is required
- I am authorised to perform the work
- I understand the permit
- I have confirmed that hazards are controlled and it is safe to start
- I stop and reassess if conditions change

Working at Height

Protect yourself against a fall when working at height



- I inspect my fall protection equipment before use
- I secure tools and work materials to prevent dropped objects
- I tie off 100% to approved anchor points while outside a protected area

General Requirement 2: Drugs and Alcohol Policy

It is prohibited to light a fire, to possess alcohol and/or drugs on site, to bring in passengers or to record videos or take photographs at any ACE Location.

General Requirement 3: Communication

Carriers must be able to communicate with staff at the ACE Location or Third-Party Location (as the case may be) in English and/or the most widely used official language of the country where such location is.

General Requirement 4: Entrance

Carriers must always report at the gate or site entrance and ask for site inductions. These site inductions may include, but are not limited to, emergency procedures, site safety orientation/training, required PPE, parking restrictions, route to loading or unloading point, general information such as the prohibition of smoking, alcohol and drugs, prohibition of the use of mobile phones, driving speed limits etc., or any other site procedures. Carriers must always comply with instructions. Carriers must witness the whole unloading/loading activity, unless Site Specific Requirements stipulate otherwise.

General Requirement 5: Instructions

After reporting to the gate or site entrance and receiving site induction, Carriers must proceed to the unloading/loading area and park any Transport vehicles with tank vessel /demountable or not demountable containers (collectively “Road Tank”) according to site instructions. Additionally, Carriers must always take the necessary precautions to prevent any movement of Road Tanks during loading/unloading.

Carriers are responsible for their own protection and must wear all necessary personal protective equipment to mitigate product and other site specific hazards as mandated by law and Site Specific Requirements. This may include but is not limited to helmet, goggles or safety spectacles with side protection, rubber gloves, suitable footwear (e.g. non-slip soles and steel toe caps) or flame-retardant protective clothing. The personal protective equipment must be available on the transport vehicles.

Carriers must carry an adequate supply of numerals and plates for hazard placarding purposes, and it is their responsibility to apply said numerals and hazard labels / placards as mandated by law.

General Requirement 6: Road transport requirements

Road Tank sent to a ACE Location or Third Party Location for product collection or delivery may be subjected to close inspection by personnel at the ACE Location or Third Party Location. Should it be determined that a Road Tank, or its accompanying equipment (e.g., hoses, valves, pump) is defective or non-compliant with the General Requirements, the applicable law or Site Specific Requirements in any respect it will be rejected.

Carriers must operate to good professional standards, competence and safety performance.

General Requirement 7: Equipment and Road Tanks requirements.

No loaded Road Tanks will be permitted to leave an ACE Location or Third-Party Location until it is properly hazard placarded.

Road Tanks must be suitable for the product(s) being transported and meet all requirements as mandated by law.

Carriers must ensure that the Road Tanks are fit for purpose and in good condition.

Carriers' equipment inspection and maintenance program must have been reviewed and found to be fit for purpose by the employing customer/supplier.

Road Tanks must be clean, dry and free from odor or if they had been used for a prior cargo, that prior cargo must be of the same product that will be loaded at the ACE Location or Third Party Location.

Road Tanks cleanliness and fitness for transport is the sole and exclusive responsibility of the Carrier. The Carrier must provide a certificate of cleanliness to the site personnel prior to loading. Any visual inspection by personnel at the applicable loading location does not relieve the Carrier from responsibility in this regard.

If site personnel that operates the loading or unloading facility (collectively "Site Staff") determine, in their sole discretion, that the Road Tanks are not clean and dry or are otherwise unfit for loading, the Road Tanks will be rejected and will only be reevaluated on presentation of a valid document of cleaning.

Carriers must be familiar with the precise capacity of the Road Tanks and be able to pass on this information to the personnel at the applicable loading location.

The order quantity for all ACE products to be loaded must meet the following requirements: Road Tanks compartments larger than 7500 liters shall not be loaded between 20% and 80% of the maximum capacity, unless they are fitted with baffle/surge plates dividing the compartment in sections of maximum 7500 liters. Carriers will not be permitted to load the Road Tanks if the offered Road Tanks does not conform with this requirement.

Products which are incompatible must not be loaded in adjoining compartments of the Road Tanks.

Incompatible materials which could present an increased hazard when in contact with product(s) to be collected or delivered must not be present on the Road Tanks. Such incompatible products must not be subsequently loaded whilst the collected or delivered products are still on board.

General Requirement 8: Prohibited products

The following products are not allowed for collection by road, without prior written approval by ACE:

- Ethylene oxide (EO)
- Butadiene (BD)
- Propylene oxide (PO)
- Ethylene
- Propylene
- Benzene (& Pygas)
- MPG USP, IPA GMP/USP & Acetone NF
- Toluene Di Isocyanate (TDI)
- D.C.P.D.

General Requirement 9: Documents

The documents identified below must be presented by the Carrier at the applicable gate/site entrance of loading/ unloading/ drop off location:

A written loading order specifying:

- Indent number
- Product and quantity to be loaded or unloaded
- Destination of the product, if applicable
- Carrier's company name
- Driver's name
- Road tank license numbers
- Way of transport (ferry, road, combined road rail) (Carriers declaration)
- Weighing ticket
- Delivery note,
- Certificate of analysis,
- Certificate of cleanliness and transport document,
- the required dangerous goods information

Carrier must have emergency response instructions. These instructions shall be provided by the Carrier company to drivers in language(s) that drivers can read and understand. Carriers shall be fully conversant with the hazard(s) of the product(s) they are transporting for loading or unloading.

Should any Road Tanks arrive without the documents as mandated by law, then:

- it will not be permitted to enter the site and loading/unloading will not take place or will be delayed.

General Requirement 10; Capacity and Weight Restrictions

Road Tanks capacity: Before loading, Carriers must verify that the Road Tanks can accommodate the quantity to be transferred. Under no circumstances will ACE Locations or Third Party Locations (as the case may be) load a Road Tank more than the applicable legal weight limits between the ACE Location or Third Party Location and destination. Where necessary, ACE Locations or Third Party Locations will reduce the order quantity to bring the loaded quantity within these legal limits.

Loading of Liquids into Multiple Compartments: Carriers must ensure that the loading is conducted according to the load plan provided by the ACE Location or Third Party Location.

Connections: Carriers must be familiar with the related equipment of the Road Tanks, e.g. (un)loading valves, pressure/vapor return connections, number and capacity of compartments, hoses, couplings and gauges.

Permission to Load/Unload: Carriers are only allowed to operate equipment on the Road Tanks such as valves, compressor and pump after explicit approval of the site operator. Carriers must not operate site equipment, except for connecting hoses to truck. Only site operators may operate the storage tank valves, pressure valves and the pump.

Road Tanks Weight Restrictions: Carriers, in co-operation with the Site Staff, must ensure that the maximum permissible Road Tanks gross weight is not exceeded.

During loading of the Road Tanks, Carriers should take all possible precautions not to exceed the maximum permissible axle weight and never exceed applicable legal weight limits between the ACE Location or Third Party Location and destination. Where necessary, ACE Locations or Third Party Locations will reduce the order quantity to bring the loaded quantity within these legal limits.

Pre-departure labelling, placarding and documentation:

(a) Prior to departure, the waybill must be fully completed by the Carrier. The Carrier shall always be responsible for the proper issuance of transport documentation and accompanying documents, such as permits, licenses, notifications, certificates in line with the applicable law.

(b) Carriers must ensure that the correct hazard markings and placards have been affixed to the Road Tanks.

General Requirement 11: Adverse weather conditions near the ACE Location or Third-Party Location

ACE Locations and Third-Party Locations reserve the right to suspend loading/unloading when adverse or unusual weather conditions such as thick fog, ice or heavy snowfall persist in the vicinity of such location until such time as conditions improve.

General Requirement 12: Reporting of Unsafe Situations, Near Misses, and Incidents

Carriers are requested to report all loading/discharge problems, unsafe situations or conditions, near misses and incidents to Site Staff.

Disclaimer

The information contained in this publication is, to the best of our knowledge, true and accurate, but any recommendations or suggestions that may be made are without warranty or guarantee of any kind. ACE counterparties and any carriers engaged by ACE counterparties are solely responsible for ensuring that they are knowledgeable about the goods (including dangerous goods) to be transported, and that their equipment is suitable for such transport.