

# DAMAR INDUSTRIES LTD TRAFFIC MANAGEMENT PLAN



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|-----------------------|----------------------------|
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| <b>Version Number</b> | 1.1                        |

## Damar Traffic Management Plan

Specific Risk Management Procedures

Page:

Page 2 of 13

Document Code:

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## 1.0 Introduction

### 1.1 Purpose

Damar Industries Ltd Traffic Management Plan (TMP), has been written to provide a single document which allows for external (within the site, but external to the Buildings) and Internal (within the walls of the buildings) traffic management for Damar Industries Ltd site located at Te Huaki Crescent, Eastgate Business Park, Rotorua.<sup>1</sup>

The purpose behind this Traffic Management Plan is to:

- Ensure for a safe, smooth, efficient and simple plan for various vehicle and pedestrian movements associated with product moving into and out of the site to the customer;
- Make all persons entering the site aware of both external and internal congestion areas during the operational period; and
- Highlight the extreme caution that must be taken when driving a vehicle, operating forklifts and reach trucks or moving around as a pedestrian on this site.

This TMP provides details on the management of vehicle and pedestrian traffic whilst on site at Damar Industries Ltd. The following types of traffic are referred to in this TMP;

- Inbound and Outbound Heavy Vehicles
- Worker/Visitor/Contractor Light Vehicles
- Pedestrians
- Forklifts and Reach Trucks

### 1.2 Site Operational Overview

Damar Industries operates two shifts, Monday through Friday from 6.00am.

Heavy Vehicle entry to the site is via the Vehicle Entrance on Te Huaki Crescent then through the controlled gates straight ahead and is based on being either inbound vehicles to be unloaded for receiving and outbound vehicles to be loaded for dispatch.



*Figure 1: Vehicle Entrance to Site*



*Figure 2: Heavy Vehicle Entrance Control Gate*

All drivers must use the intercom system in place at this gate and will be checked for their induction status prior to being permitted access.

<sup>1</sup> Document: **MHF HSMS 7000 Emergency Management Plan** has been considered throughout this TMP.

## Damar Traffic Management Plan

### Specific Risk Management Procedures

Page:

Document Code:

Issue Date:

Version:

Page 3 of 13

MHF-HSMS-6010

22/07/2019

1.1

The controlled gates lead to our Transit Depot, the area for inbound and outward bound vehicles, which on a daily basis may include:

- Heavy Vehicles (general freight) to be loaded/unloaded with goods in/goods out
- Heavy Vehicles (tankers) delivering dangerous goods to our LPG and Solvent Tank Farms
- Heavy Vehicles (swing lift) delivering or collecting sea containers
- Service vehicles such as Waste Management/Rotorua Lakes Council
- Light Vehicles (Courier vans) collecting/delivering urgent freight

Unless prior permission has been obtained (e.g. Courier Vans, pre-arranged product pick-up) light vehicles using this entrance must not proceed through to the control gate but turn and park beside the Reception area of the Administration Building. There are four marked 'Visitor' car parks beside the Reception Entry for light vehicle use.



Figure 3: Visitor car parks outside Reception



Figure 4: Transit Depot Canopied area

### 1.4 The Transit Depot

The Transit Depot on site is mostly covered with a canopy spanning from Warehouse 4 (as you enter the area) down to Warehouse 1. The surface under the canopy is concrete and relatively flat, suitable for the loading and unloading of goods into or from curtain-side trucks (and trailers) and units with tailgates fitted. There are no loading docks available for loading/unloading Rigid Trucks without tailgates.

There are pedestrians and counterbalance forklifts in use throughout the area during operational hours.

Entry to this area is from 7.00am Monday to Friday.

- The areas outside the canopy are suitable for the vehicles that are required to operate there, e.g. Service vehicles before the canopy and Bulk Solvent/LPG delivery vehicles after.

#### Service Vehicles

- Bins and cages are placed outside Warehouses 4 (under canopy) & 5 (outside canopy) for Heavy Vehicles to service.

#### General Freight

- The Logistics Office is located inside Warehouse 3. This team is responsible for loading and dispatching goods out from our site. Heavy vehicles picking up from site should park in the centre of the canopied area outside Warehouse 3 and report to the office.

**Damar Traffic Management Plan****Specific Risk Management Procedures**

Page:

Document Code:

Issue Date:

Version:

Page 4 of 13

MHF-HSMS-6010

22/07/2019

1.1

This office is open, with forklift operators available to load vehicles from 8:00am to 4:30pm Monday to Friday.

- The Raw Materials Office is a Port-a-com building located opposite Warehouse 2. This team is responsible for unloading and receiving goods into our site. Heavy vehicles delivering to site should park in the centre of the canopied area, past the entrance to Warehouse 2 and report to the office.

This office is open, with forklift operators available to unload vehicles from 7:00am. Closing times for receipting of goods is 2:30pm from Monday through to Thursday, 12:00pm on Fridays.

**Container delivery/pick-up**

- Heavy Vehicles delivering sea containers to Logistics should pull up to the right of centre, allowing space to place the containers within the designated area on the right hand side of the canopied area outside Warehouse 3.
- Heavy Vehicles delivering sea containers to Raw Materials must place within the designated area on the right hand side just past the Raw Materials office. Consideration must be given for LPG and Solvent delivery Tanker Vehicles who cannot stop under the canopied area for extended periods of time.

**Courier/Light Vehicles**

- Courier/Light vehicle drivers collecting items from Logistics should pull up to the left of centre, as close to the warehouse as possible and report to the Logistics Office.
- Courier/Light vehicle drivers with items for receipting should pull as close as possible to the parcel bench without blocking the entrance to Warehouse 2. Parcels are to be placed on the bench or a pallet if required.

**Contractor Vehicles**

- Contractor vehicles may utilise available space within the Logistics area if not in use. Permission will need to be obtained from the Logistics Coordinator.
- Contractor vehicles may utilise available space within the Raw Materials area if not in use. Permission will need to be obtained from the Raw Materials Office.

**LPG/ Bulk Solvent Deliveries**

- LPG Delivery drivers must travel through the canopied area and pull up to the delivery station on the left hand side of the roadway. Drivers should report in at the Raw Materials sign in register. Operators of the LPG Gas Farm will be available to assist with unloading from 7:00am until 2:30pm (or until delivery is completed) Monday to Friday.

Special deliveries must be requested outside of these normal working hours and must be pre-arranged through the Supply Chain office.

- Bulk Solvent tanker delivery drivers should stop and sign in at the Raw Materials sign in register, travel around to the Pump Station (on left of roadway) outside the solvent tank farm. Operators of the Solvent tank farm will be available to assist with unloading from 7:00am until 2:30pm (or until delivery is completed) Monday to Friday.

### Passenger Vehicles

- All passenger vehicles (workers/visitors/contractors) will gain access to the Main Car Park via the entrance off Te Huaki Crescent, Rotorua, and sign in at Reception.

### 1.5 Major Hazard Facility - High Hazard Area

It is important for all workers, visitors, contractors and drivers entering Damar Industries site to be aware that they are entering a Major Hazard Facility and High Hazard area. It is therefore a requirement for all persons to complete the relevant induction before entering site.

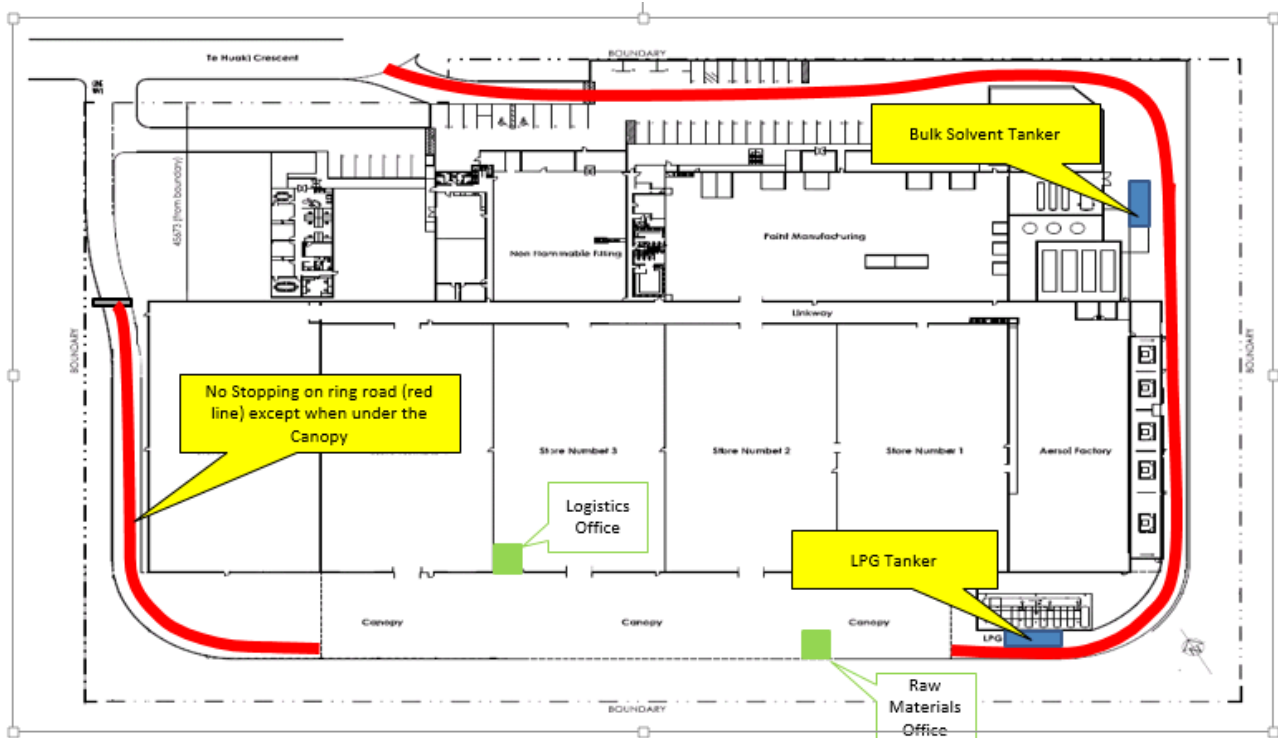
We encourage everyone entering our site to read the warning signage posted and abide by the hazard controls we have in place (these are covered in the Worker, Visitor, Transport and Contractor Inductions).

Damar Industries acknowledges the hazards identified in the table below. Current controls are regularly reviewed as per the time frames agreed by the Health and Safety Committee with the aim of continuing to reduce pedestrian, forklift/Reach Truck and vehicle interactions, and their associated risks.

**Table 1: Hazard Identification**

| Hazard ID No. | Hazard Name                                      | Raw Risk Rating | Corrective Risk Rating |
|---------------|--|-----------------|------------------------|
| 1147          | Visitors/Contractors/Unauthorised People on site | HIGH            | MEDIUM                 |
| 1102          | Forklift Operation                               | EXTREME         | HIGH                   |
| 1100          | Curtain siders – Loading/Unloading               | HIGH            | MEDIUM                 |
|               | <b>Chemicals/Hazardous Substances – Storage</b>  | TBA             |                        |
| 1149          | Pedestrians being hit by Mobile Plant            | EXTREME         | MEDIUM                 |
| 1122          | PPE – Non-wearing of                             | EXTREME         | HIGH                   |
| 1101          | Empty Pallets - Storage                          | HIGH            | MEDIUM                 |
| 1135          | Stored and Stacked Pallets                       | EXTREME         | HIGH                   |
| 1145          | Traffic  | HIGH            | HIGH                   |
| 1126          | Shared Traffic Areas                             | EXTREME         | HIGH                   |
| 1148          | Sea Containers – MPI Quarantine Risk             | HIGH            | LOW                    |

Figure 1: Basic External Traffic Flow and Main functional Areas within the Damar Site



## 2.0 Expected Inbound and Outbound External Traffic, and Internal Traffic

### 2.1 Overview

All receiving and dispatch traffic must enter Damar via the controlled entry gate, off Te Huaki Crescent Rotorua.

All visitors, contractors and staff must abide by the internal and external traffic flow plan and rules for the entire site (Figures 1 and 2). This includes all posted signage e.g. speed limits, direction of travel, PPE requirements.

All incidents on site must be reported. This company rule applies to all team members, contractors, agency casuals and visitors.

The expected average volumes of inbound/outbound per day are as follows:

- Receiving = **70** pallets/drums/parcels
- Dispatch = **120** pallets/IBC's/parcels

### 2.2 Inbound/Outbound Heavy Vehicle Traffic

*NOTE: All drivers must give way to any Forklifts operating in the Transit Depot area*

Receiving at Damar operates on a booking system controlled by Supply Chain. As a guide, transport companies have timeframes of when they can deliver as noted in the Weekly Purchase Delivery Timetable.

Any deliveries arriving outside of these agreed timeframes, are to be advised to the Supply Chain Manager.

Upon arrival onsite, drivers are to park in the centre of the canopy outside WH2.

**Figure 3: Truck prepared for unloading outside Raw Materials Office**



Driver is then to sign in the Raw Material Driver Register and report in to the Raw Materials office with Inwards documentation. A team member will inform them of when and where they will be unloaded at this time.

Dispatch vehicles entering the site should park in the centre of the canopy outside WH3. Drivers are required to sign in the Logistics Driver Register and communicate with the Logistic office on their arrival to site.

**Figure 4: Curtainsider prepared for Loading in Logistics area**



Tanker Delivery vehicles entering the site should park in the centre outside WH2 temporarily to allow signing in to the Raw Materials Driver Register and communicate with the Raw Materials office on their arrival to site. They are then to continue and park outside the gas farm or the tanks at the rear.

**Figure 5: LPG tanker delivery underway just outside the canopy area**



When leaving the Transit Depot area, drivers must first sign off the respective Driver Register. If the road past the LPG Tanker Delivery area is clear, proceed to controlled exit gate. If the sign is out alerting drivers they cannot pass a tanker currently unloading, they must wait until the LPG delivery has been completed.

### **2.3 Driver Site Inductions**

Access to site is not permitted to any receipt / dispatch vehicle unless the driver has completed a Damar Transport Induction.

Drivers name and details are recorded in the Vault Data Base which is accessible by all via the Damar Intranet onsite. Verification through the Vault Data Base of the driver's details is checked prior to entry to ensure the driver has in fact undergone the Transport Induction.

Drivers refusing to comply with Damar site rules, will be requested to leave the site immediately. Additionally, they will be referred to their Prime Contractor and refused entry to the site until they comply (see Damar Transport Inductions).

### **2.4 Loading/Unloading Areas and Exclusion Zones**

This is an area which surrounds each vehicle, defining the area in which forklift operations will occur.

### **2.5 Driver Safe Zones**

Safe Zones as per the Damar Transport Induction are as follows –

- Inwards Goods: At the Inwards sign in desk (outside exclusion zone) under the canopy;
- Dispatch: Next to wall of Warehouse 3 logistics office (outside exclusion zone) under the canopy.

Forklift operators are not to load/unload stock unless the driver is in the Safe Zone location – i.e. the forklift driver NEVER moves unless the truck driver is in the safe zone and in forklift driver's vision. If curtains must be moved, the forklift driver MUST stop and wait for truck driver to finish and return to driver safe zone. Whilst the truck driver is given this information during their induction, it is the forklift driver's responsibility to ensure the truck driver adheres to these rules. The forklift driver should cease the current task if the truck driver fails to comply with the site safety rules. The matter must then be escalated to the Logistics Coordinator or Supply Chain Manager.

### **2.6 Site Speed Limit**

The site speed limit is a maximum of 5kph for vehicles moving around the external access route through the site. This is signposted accordingly at the entrance to the site and also around the site.



Internal speed is limited to 5kph, all Powered MHE used at this site has been speed limited to this effect. The exception to this rule is the Inwards Goods ramp where operators must reduce their speed to 5kph per hour.

## **2.7 Personal Protective Equipment**

Whilst on site, all drivers must wear High Visibility Clothing, safety glasses and safety footwear at all times.

## **2.8 Interrupted Traffic Flow**

In the event of a vehicle breakdown/disabled vehicle in the Damar Transit Depot or on the one way road around the Damar site, the following actions will be adopted:

1. The driver will communicate to the Logistics Coordinator as to the issue at hand, the action taken at this point in time and the expected recovery time (if known).
2. The Logistics Coordinator will communicate with the Manufacturing and Operations Manager as to the issue at hand and any known information e.g. Location of vehicle, expected recovery time, nature of issue (Vehicle is on driveway).
3. The Manufacturing and Operations Manager will inspect the vehicle of concern as to its:
  - Risk to Safety
  - Risk to the building
  - Risk to the environment
  - Disruption to the business, and
  - Location
4. Recovery - The recovery vehicle should remove the stricken vehicle from site, prior to any attempt to repair the problem. Once the vehicle hazard has been recovered, the Manufacturing and Operations Manager should notify:
  - The Supervisors of all affected operational areas.

## **2.9 Traffic Flow Un-Interrupted**

The Logistics Coordinator will organise to have the area cordoned off by means of placing safety cones around the stricken vehicle, setting up an exclusion zone. No person is to be placed at risk in any way by their actions or physical location in order to perform this action.

Damar Management will:

- Confirm that the driver has contacted the transport operator in order to repair/remove vehicle.
- Establish with the driver as to the importance of a swift repair or removal of the stricken vehicle.
- Monitor and review in order to ensure safety is not compromised and that there remains no impact to the environment.

## 2.10 No Stopping Areas

No stopping is permitted on the Ring Road unless in a designated loading area and prior permission has been sought. The Ring Road consists of the driveway from the LPG Tank Farm, around the rear of the building up to the Water Tank.<sup>2</sup>

## 3.0 Pedestrians on Site

### 3.1 Pedestrian Traffic

Pedestrian traffic on site will be limited to Damar workers, inducted drivers, authorised visitors and contractors.

Pedestrians give way to forklifts and vehicles at all times.

Visitors, unless authorised are not permitted to wander around the site complex unescorted at any time. Pedestrian movement around the site must be limited to necessary activity. Inbound/ outbound vehicles and forklifts will be moving around the site and whilst the drivers of these pieces of equipment will be aware of possible pedestrian movement, every effort must be made by each individual pedestrian to be aware of the possible dangers involved. Eye contact and signalled agreement to pass is essential prior to walking into the path of a moving vehicle.

### 3.2 Pedestrian Restricted and 'No Go' zones

All warehouses, gas farm and production areas are restricted to visitors/contractors unless escorted at any time.

All vehicular entrances to the Damar site are a 'no go' zone for pedestrians. All personnel walking onto site, may only use the pedestrian gates to gain access.

### 3.3 Pedestrian PPE Requirements

On entry to the site, pedestrians performing any work on site must wear safety footwear, safety glasses and high visibility cotton or anti-static clothing at all times.

Any visiting pedestrians not performing work on site must be accompanied by a Damar employee, wear safety glasses, enclosed footwear and high visibility cotton or anti-static clothing at all times. PPE is available for visitors use if they do not have their own.

### 3.4 Car Park Overview

Damar Staff Car Park – Opposite vehicle entrance to site on Te Huaki Road.

Visitors to the Damar site have allocated car parking outside reception which is manned between 8.00am and 5.00pm Monday to Friday. Visitors arriving/departing outside these hours are required to contact (via telephone) the person they are meeting.

## 4.0 Mobile Plant

### 4.1 Forklifts and Reach Trucks

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<sup>2</sup> No Stopping Area Map MHF HSMS 6930 Health & Safety Transport Induction Package

Forklifts and Reach Trucks will be utilised on the Damar site for the purposes of product storage, manufacturing processes, order picking, vehicle loading and unloading.

Forklift and Reach Trucks will be utilised on the Damar site for daily operations.

Our fleet consists of Diesel operated counterbalance forklifts (predominantly Dangerous Goods (DG) rated for internal use with three non-DG machines for external operations only) and battery operated Reach Trucks for use in our Warehouses.

Forklifts and Reach Trucks will be in operation in the following areas of the site:

- Warehouse Racking Aisles
- Transit Depot
- Production areas (Batching/Liquid fill/Aerosol)
- Battery Charger Areas
- Forklift Parking Areas

**Table 2: Fork Truck Types and Numbers**

| MACHINE TYPE              | QTY |
|---------------------------|-----|
| Counterbalance – DG Rated | 5   |
| Counterbalance – Non-DG   | 3   |
| Reach Truck – Electric    | 9   |

**4.2 Forklift/Reach Truck Operation on Site**

Some safety controls in place at Damar include:

- Operators must hold current OSH Certificate for all types of powered MHE they operate
- Operators must have Damars Authorisation to Operate Forklifts/Reach Trucks on the site, specifying the type/s of powered MHE applicable
- Operators must be signed off on all relevant SOP’s  
 MHF-HSMS 6923 Damar Forklift SOP  
 HRM-GENR 1127 Forklift Policy  
 TRM-FORM 2005C Replacement Forklifts
- Transport Driver Inductions  
 MHS-HSMS 6930 Damar Transport Induction  
 Drivers Licence (F Endorsement)

**4.3 Mobile Plant Restrictions**

Reach Truck Forklifts, in most cases only operate within the internal areas of the warehouses. Reach Trucks with masts higher than 3.2 metres cannot go into the linkway off Warehouse 1, 2 or 3.

DG Rated Counterbalance forklifts, mainly operate in the loading and unloading areas but may be required to enter the warehouse to retrieve pallets, etc. from time to time.

Non-DG Rated Counterbalance forklifts, operate in the loading and unloading areas and must not enter any internal areas on site.

All pieces of powered mobile plant will have an operational horn and be speed limited to 5km per hour. Some of the powered mobile plant onsite comes with other standard warning activators fitted such as reversing alarm and flashing lights.

All powered mobile plant operators are required to wear safety glasses, hi visibility cotton or anti-static clothing and safety footwear.

Communication must be made at all times whilst powered mobile plant operators are interacting with pedestrian movement (Eye contact and positive acknowledgement). All pedestrian movement will be via designated walkways where available. All powered mobile plant is secured by licensing, authorisation to operate and key control.

**Loading/Unloading zones** – Operators of powered MHE involved in the loading or unloading of vehicles, need to be aware not only of pedestrian movement around the site, but also drivers of vehicles moving into and out of the driver safety zones, as well as other vehicles and powered MHE moving around or through the site. Safety signage is in place warning of pedestrian and vehicle movement.

**Restricted and 'No Go' zones** - Powered MHE traffic is restricted to only the operators with written authorisation to operate in the Inwards Goods, Pallet Wrap and Dispatch areas.

The restricted area in Inwards Goods becomes a 'No Go' zone to all operators (except for the loader/unloader and runner) when heavy vehicles are being loaded/unloaded.

- a) The 5kph per hour speed limit is strictly adhered to;
- b) The curtain is fully closed on the passenger side of the vehicle;
- c) The driver is in safe zone;
- d) The loader/unloader has been made aware of the Powered MHE travelling on the other side of the vehicle at every pass; and
- e) The operator of the Powered MHE ceases all activity if directed by the loader/unloader and does not resume travel until the unloader has given permission for the activity to continue.

**Aisles** – Direction of travel in aisles is shown in the Basic Internal Traffic Flow Plan by red arrows (see Figure 2). Powered MHE is to follow this plan wherever possible - exception to this rule is permitted to avoid pedestrian traffic such as split case pickers working in the aisle, provided that entering another aisle in no way endangers any other person. Entrance to the aerosol cage is one way traffic only.

**Parking** – Powered MHE is only to be parked in the designated areas of the site. No Powered MHE to be parked on pedestrian walkways within the aisles or over the end of the pedestrian walkway leading to the charging bay area.

#### 4.4 Battery Charging of Powered MHE

There are a couple of Battery Charging areas on site with the main location against the western wall of the General Manufacturing Hall for charging all powered MHE. This is a restricted area. Operators entering/leaving the area as pedestrians at the start and end of shift must use pedestrian walkway

between Receiving and Dispatch areas and take extreme caution when receiving and dispatch operations are in progress.

**Figure 12: Reach Trucks parked in Battery charging area at end of shift**



### 5.0 Review Panel

| Review Date                  | Document Code / Section | Review Details                           | New Version # | Reviewed by |
|------------------------------|-------------------------|--|---------------|-------------|
| 12/03/2019                   | All                     | New Document                             | 1.0           | S.Rimene    |
| 22/07/2019                   | All                     | Update to pedestrian access requirements | 1.1           | S. Rimene   |
|                              |                         |  |               |             |
|                              |                         |  |               |             |
|                              |                         |  |               |             |
| <b>Next review date due:</b> |                         | 22/07/2020                               |               |             |