

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



Prepared in accordance with AS 3745 – Planning for Emergencies in Facilities DWER Compliance Requirement Submission for Matic Transport Pty Ltd, 203 Exploration Drive Gap Ridge, 6714

1. Introduction

This Fire and Emergency Management Plan (FEMP) has been developed for a transport and logistics facility comprising office administration, workshop/storage shed, truck wash bay, heavy vehicle parking areas, container loading/unloading zones, and outdoor storage of mining conveyor equipment.

The facility operates near a neighbouring fuel (gas) transport yard (transitional yard not storage) located on the southern boundary. While not part of this facility, the adjacent land use presents an elevated external fire exposure risk.

This plan has been prepared in accordance with AS 3745 – Planning for Emergencies in Facilities and addresses Department Water Environment Regulation (DWER) requirements for fire prevention, response, environmental protection, training, firefighting capability, and site containment systems.

2. Vehicle Exclusion Zones and Separation Controls - Solid Materials/Conveyor Belt Storage Areas.

To reduce the risk of ignition, mechanical disturbance, and fire propagation, defined vehicle exclusion and separation zones are implemented around all solid combustible storage areas, including conveyor belt stockpiles and packaged goods storage zones.

2.1 Control Measures

- A minimum vehicle exclusion buffer zone is to be maintained between:
 - Conveyor belt stockpiles
 - Container storage areas
 - General vehicle parking and loading/unloading zones
- Only authorised operational access vehicles are permitted within defined loading corridors.
- Non-operational vehicles are strictly prohibited from entering stockpile proximity zones.
- Heavy vehicle movement is restricted to designated access lanes only, which are maintained free of combustible storage.

2.2 Separation Objectives

The exclusion and separation zones are designed to:

- Prevent ignition from vehicle exhaust systems, braking systems, or electrical faults
- Reduce likelihood of accidental contact or disturbance of stockpiled materials
- Maintain firebreak separation to slow or prevent lateral fire spread
- Provide unobstructed access for emergency response and fire suppression activities
- Reduce radiant heat exposure to parked vehicles and adjacent infrastructure

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	Uncontrolled if Printed	Page 1 of 6

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



2.3 Minimum Separation (Site Principle)

The following principles apply:

- Operational vehicle lanes: fully segregated from stockpile areas
- Static stockpiles (conveyor belts / waste materials): located outside vehicle turning and parking zones
- Emergency access corridors: maintained clear at all times for fire service entry and deployment

2.4 Compliance Alignment

These controls align with:

- AS 3745 – *Planning for Emergencies in Facilities* – requirement to maintain safe evacuation and emergency access routes
- General fire prevention principles under Australian emergency planning practice
- DWER expectations for fire risk reduction in combustible storage environments

3. 3. Fire Prevention, Detection, Response, Suppression, Containment and Control

3.1 Fire Prevention

Fire prevention measures include:

- Strict control of ignition sources within workshop, loading, and container handling areas.
- Prohibition of smoking outside designated smoking areas.
- Hot works permit system for all welding, grinding, cutting, or fabrication works.
- Routine housekeeping of combustible materials within yard areas.
- Separation and controlled storage of combustible goods within containers and yard storage zones.
- Regular inspection of conveyor belt storage areas located along eastern and western and southern boundaries due to high combustible rubber content.
- Management of vehicle parking to always maintain clear emergency access routes.
- Vehicle exclusions zones.

3.2 Fire Detection

Early detection is managed through:

- Routine staff visual inspections during operational shifts.
- Monitoring loading areas for heat, smoke, or unusual odours.
- Immediate escalation procedures for any suspected smouldering materials (particularly conveyor belts or packaged goods).

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	Uncontrolled if Printed	Page 2 of 6

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



3.3 Fire Response

In the event of fire:

- Activate alarm and notify the Chief Warden (Emergency Coordinator) immediately.
- Contact 000 and provide site access details.
- Evacuate all personnel to designated assembly area.
- Do not attempt firefighting beyond incipient stage unless trained and conditions are safe.
- Prioritise evacuation of loading zones, container areas, and workshop personnel.

3.4 Fire Suppression Strategy

Initial fire attack capability is provided through:

- Portable fire extinguishers positioned throughout the site in accordance with AS 2444.
- Existing hose reels located at the storage/workshop shed.

Proposed Enhancement (Critical Control Measure):

To improve early-stage suppression capability for high-risk combustible materials (packaged goods, and conveyor belts) FlameTech Solutions recommends:

- Installation of foam branch capability on both existing hose reels.
- Provision of 2 x 20L F-500EA foam concentrates per hose reel (total 4 x 20L) to allow inline education through hose reels for rapid knockdown of Class A/B fires.
- This system will support rapid suppression and safe evacuation conditions prior to arrival of emergency services.

This significantly enhances the facility's ability to suppress incipient fires involving:

- Rubber conveyor belts
- Packaged goods in containers

3.5 Fire Containment and Control

Fire spread control measures include:

- Use of heavy machinery to create separation zones and fire breaks where safe to do so.
- Isolation of container loading zones during emergency events.
- Preservation of emergency access lanes for fire services.
- Protection of adjacent storage areas (particularly conveyor belts along north and south boundaries).
- Onsite containment of firewater runoff within internal drainage and hardstand areas.

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	<i>Uncontrolled if Printed</i>	Page 3 of 6

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



4. Environmental and Human Health Protection

In the event of fire:

- Immediate evacuation of all non-essential personnel.
- Establishment of exclusion zones, particularly downwind of smoke impact.
- Notification of emergency services and DWER if environmental contamination is possible.
- Containment of firefighting water within site boundaries.
- Prevention of runoff entering external drainage systems.
- Protection of adjacent fuel facility on southern boundary through fire spread control and exposure monitoring.

Post-incident environmental assessment will be undertaken where required.

5. Staff Training and Emergency Preparedness

Training is conducted in accordance with **AS 3745** and includes:

- Emergency induction training for all personnel.
- Annual refresher emergency response training.
- Practical fire extinguisher awareness training.
- Designated Emergency Wardens trained in evacuation coordination and accountability.
- Annual evacuation drills covering yard, and loading operations.

Training records will be maintained and reviewed annually.

6. Firefighting Equipment and Responsibilities

6.1 Existing Firefighting Equipment

- Portable fire extinguishers (AS 2444 compliant selection and placement).
- 2 x hose reels located at storage/workshop shed.
- Fire signage and emergency evacuation diagrams.
- Designated Emergency Assembly Area.

6.2 Proposed Additional Fire Protection Enhancements

To improve early intervention capability:

- Foam education capability installed to both hose reels.
- 4 x 90L F-500 mobile foam units positioned as follows:
 - 2 units on the southern side of the storage shed/office complex
 - 2 units on the northern side of the storage shed/office complex

This arrangement provides:

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	Uncontrolled if Printed	Page 4 of 6

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



- Rapid access to suppression media across the site
- Redundancy in case of blocked access routes
- Enhanced protection for high-risk storage and loading zones

6.3 Responsibilities

- Site Manager / Chief Warden (Emergency Coordinator): Overall emergency control.
- Fire Wardens: Evacuation coordination and communication.
- All Staff: Immediate hazard reporting and evacuation compliance.
- Emergency Services (DFES): Primary suppression of major fire events.

7. Site Plans and Mapping Requirements (Appendices)

The following drawings will be provided:

- Fire equipment location plan (extinguishers, hose reels, foam units, assembly points)
- Drainage and stormwater flow plan including containment zones
- Emergency access and fire response entry points
- Facility layout showing:
 - Workshop and office
 - Truck wash bay
 - Container loading/unloading zones
 - Vehicle parking areas
 - Conveyor belt storage along northern and southern boundaries

8. Waste / Material Storage and Separation

Although not a waste processing facility, combustible and high-risk materials include:

- Packaged goods in shipping containers
- Rubber conveyor belts stored externally
- Workshop consumables and flammable liquids
- Vehicle fuels and oils

Controls include:

- Defined storage zones with maintained separation distances
- Segregation of incompatible materials
- Controlled stacking heights for stability and fire spread reduction
- Regular inspection of high-risk stored materials

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	<i>Uncontrolled if Printed</i>	Page 5 of 6

FIRE AND EMERGENCY MANAGEMENT PLAN

Karratha SB4 Conveyor Belt Storage



9. Firewater and Contaminated Runoff Containment

Firewater management is achieved through:

- Onsite hardstand areas designed to retain runoff.
- Natural grading of surfaces directing flow internally.
- Isolation of stormwater outlets during fire events where possible.
- Provision of spill kits including absorbent materials
- Provision of tarps and water pump and IBCs to collect fire water management in drain at the southern boundary of the property
- Temporary bunding using earthmoving equipment if required during emergencies.
- Prevention of discharge beyond site boundaries, particularly towards neighbouring properties.

All contaminated water will be managed and disposed of in accordance with environmental regulatory requirements.

10. Conclusion

This Fire and Emergency Management Plan establishes a structured and practical framework for managing fire risk at the facility in accordance with AS 3745 Planning for Emergencies in Facilities and DWER expectations.

The proposed enhancements, including foam eduction capability and mobile F-500EA units, significantly improve early-stage fire suppression capacity and evacuation safety, particularly given the presence of combustible stored materials and adjacent high-risk industrial land use.

The plan will be reviewed periodically and updated in response to operational changes, site layout modifications, or regulatory updates.

11. Attachments

- Attachment A Buffer Zone KTA SB4
- Attachment B Buffer Zone explanation
- Attachment C Emergency Controls KTA SB4
- Attachment D Emergency Controls explanation

Fire & Emergency Management Plan – KTA SB4 Belt Storage	Document No.: QSE07-REF-04	Version No.: 1A
Release Date: 28/04/	<i>Uncontrolled if Printed</i>	Page 6 of 6