ATOM

Bulwer Jet Terminal
Community Safety Information

June 2020

Message from the Chief Executive Officer

Australian Terminals Operations Management Pty Ltd. (ATOM) is a joint venture company, established in 2015 by BP Australia Pty Ltd (BP Australia), part of one of the world's largest international oil and gas companies, and UGL Operations and Maintenance Pty Ltd (UGL), a leading provider of engineering services in Australia, New Zealand and Asia.

At ATOM, we prioritise safe operations to prevent incidents that could place our staff, our neighbours, the community and the environment at risk.

Our teams are experienced and reliable, and we aim high. Our goal is to deliver safe, simplified and efficient terminal operations. We manage operations, capital and maintenance projects across seventeen bulk fuel storage terminals in Australia, including the Bulwer Jet Terminal in Pinkenba, Queensland.

As a Major Hazard Facility operator, Bulwer Jet Terminal is required to ensure risk of harm to the community from our operations are identified, assessed and eliminated or reduced so far as is reasonably practicable.

This Community Safety Information booklet explains the potential impact of Bulwer Jet Terminal on our local community.

Chris Gatt

Chief Executive Officer

Introduction and Background information

This document outlines the major incidents that could occur at Bulwer Jet Terminal. It outlines hazards that could cause incidents, control measures in place to prevent or minimise their occurrence and consequences, and emergency plans and procedures should an incident occur.

Facility Ownership and Operation

BP ceased refining operations at BP Refinery (Bulwer Island) Pty Ltd in April 2014. Refinery operations were converted into a jet fuel terminal in July 2015, and operational responsibility of the terminal transitioned to Australian Terminal Operations Management Pty. Ltd. (ATOM) in September 2015.

BP retains ownership of the terminal facility, and undertook further expansions of the terminal facility in 2019-2020, introducing bulk storages of diesel and petrol grades in June 2020, to improve supply security in the south east Queensland market.

Safety Case

As part of Bulwer's MHF obligations, ATOM maintains a Safety Case to demonstrate that we have eliminated or reduced the risk of harm to our personnel and the community so far as is reasonably practicable. The Safety Case describes in detail:

- BJT's safety management system, emergency procedures and security procedures
- hazards that could result in major incidents at the facility
- a comprehensive and systematic safety assessment of potential major incidents, including any potential off-site safety risks
- controls to eliminate or reduce risk to health and safety so far as is reasonably practicable.

The Safety Case has been updated to include the recent site changes, and has been reviewed and verified by the regulator.

Major Incidents

The Work Health and Safety Regulation 2011 defines a major incident as an occurrence arising from an uncontrolled event, involving (or potentially involving) schedule 15 materials, which exposes a person to a serious and immediate or imminent risk to health and safety.

Major Incidents that may potentially occur at Bulwer Jet Terminal are fires or explosions caused by spills of flammable liquids, associated with activities such as:

- receiving flammable liquids from tanker vessels
- transferring flammable liquids through on-site and off-site pipelines, and associated pumps and manifolds
- receiving flammable liquids into bulk tanks.

The impact of the recent site changes to the potential risk of major incidents has been assessed, and the level of risk remains Tolerable.

Facility Description

Scheduled Materials

Schedule 15 of the *Work Health and Safety Regulation 2011* defines the materials to be considered in the scope of the Safety Case:

- **Flammable Liquids** – Jet fuel (Jet-A1) and petrol grades are received via Port North Common User Berth No.1 and stored at the Terminal Main Site. Jet A1, petrol and aviation gasoline (Avgas) may also be present at the Product Terminal Wharf or in pipelines during cargo operations and transfers to other nearby facilities.
  Diesel is a combustible liquid (not a flammable liquid) that is also present in these operations. It is **not** a Schedule 15 material and is **not** capable of causing a major incident.

- **Hydrogen Sulphide (H_2S)** – Hydrogen sulphide is a highly odorous and toxic gas which may be present in small quantities in the vapour spaces of some combustible liquid storage tanks operated by BJT at Kirra Street Terminal and Product Terminal. H_2S is not present in sufficient quantities to present a risk to public health and safety.

Locations

Bulwer Jet Terminal operates across multiple sites:

1. **Terminal Main Site** – Located at 398 Tingira Street, Pinkenba, QLD 4008. BJT receives and stores flammable liquid in bulk tanks on the original Bulwer Refinery site. BJT's control room and office facilities are also located at the Terminal Main Site.

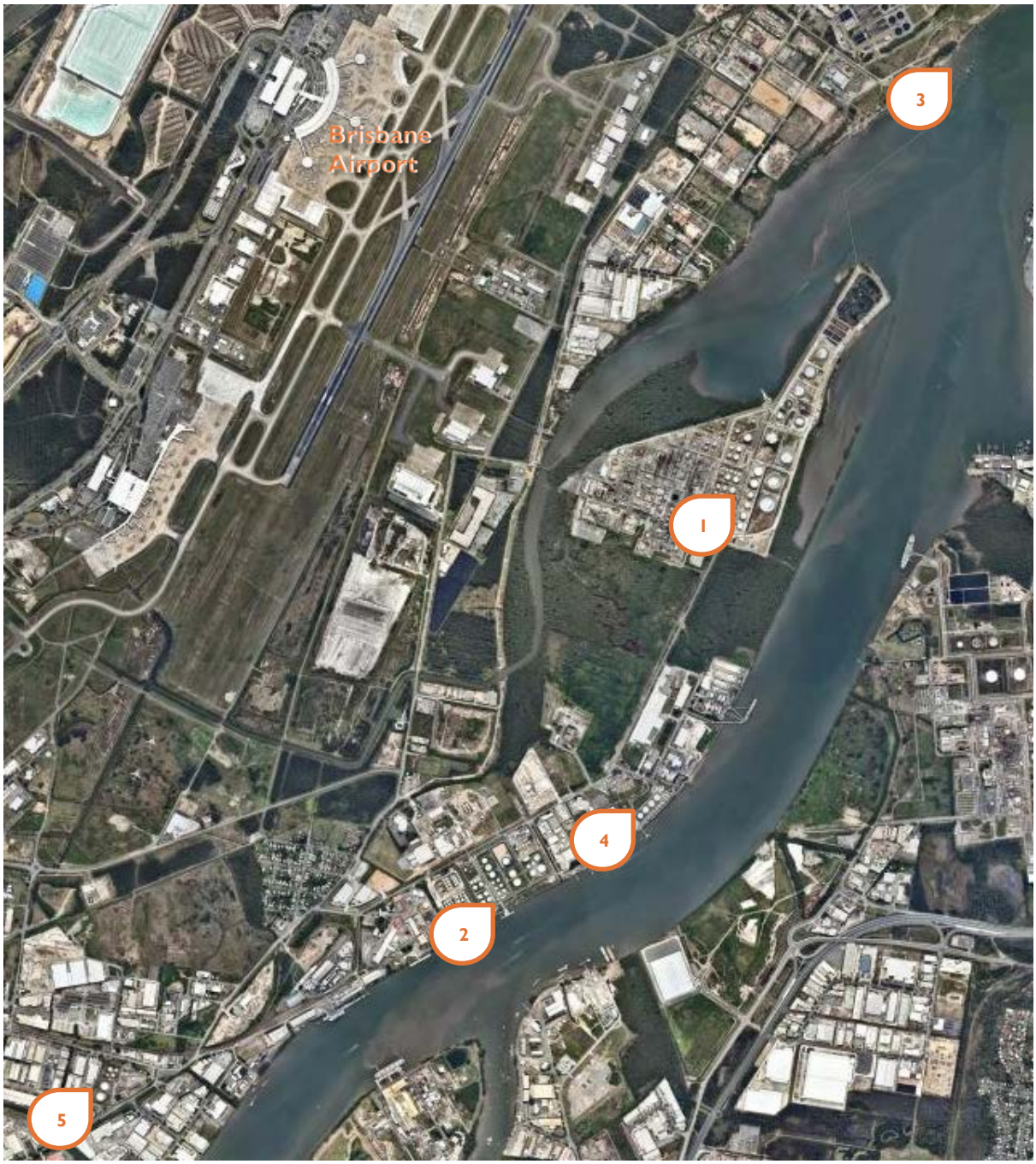
2. **Product Terminal** – Located at Lot 846 Tingira Street, Pinkenba, QLD 4008. BJT stores a small quantity of flammable liquid at the Product Terminal. Additionally, BJT receives and stores combustible liquid in a single bulk tank. A small quantity of hydrogen sulphide gas may be present in the vapour space of this tank. Flammable liquids are also present at the Product Wharf during shipping activities, and in pipelines, pumps and manifold located at this site.

3. **Port North Common User Berth No. 1** – Located at Lot 963, Piped Road, Luggage Point, Pinkenba, QLD 4008). BJT stores no flammable or combustible liquids at Luggage Point Wharf, however they are present during shipping activities, and in pipelines located at this site.

4. **Kirra Street Terminal** – Located at Kirra Street, Pinkenba, QLD 4008. BJT receives and stores combustible liquids in bulk tanks. These materials are then exported via a barge wharf at this site. Hydrogen sulphide gas may be present in small quantities in the vapour spaces of some of these storage tanks. There is also a control room for controlling combustible liquid transfers between Product Wharf, Product Terminal and Kirra Street Terminal.

5. **Meeandah Terminal Booster Pump** – Located at 1309 Kingsford Smith Drive, Pinkenba, QLD 4008. BJT remotely operates a booster pump at this site for the transfer of flammable and combustible liquids from the Product Terminal to other facilities. BJT does not operate the bulk fuel storage tanks at this site.

BJT also operates a number of pipelines between these facilities, which will be included in the Safety Case.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Preventing Major Incidents at Bulwer Jet Terminal

Control Measures

Control measures are the equipment, systems and procedures in place to prevent major incidents from occurring.

Preventative control measures are in place to reduce the risk of major incidents occurring:

- Equipment design specifications
- Instrumented control systems
- Leak detection system
- Pressure relief systems
- Detailed inspection strategies and maintenance schedules
- Operating and maintenance procedures and training
- Permit to work procedures
- Site access controls.

In the unlikely event of the preventative control measures failing and an incident occurring, mitigation and recovery control measures are also in place to detect and control an incident, to minimise the likelihood that it will become a major incident:

- A comprehensive emergency plan
- Site layout and equipment separation
- Emergency shutdown devices
- Site alarms
- Fire protection systems.

Emergency Response

Bulwer Jet Terminal has a detailed Terminal Emergency Response Plan, which is regularly tested to ensure staff and emergency services can respond effectively to incidents.

In the unlikely event of an incident, the local community should remain at their premises unless otherwise instructed by emergency services. It is highly unlikely for any incident at Bulwer Jet Terminal to require evacuation of the local community.

In the event the local community needs to take action or needs to be aware of any potential disruptions such as a road closure, this would be at the direction of emergency services.

Terminal Alarms

Alarms are vital in ensuring on-site personnel respond quickly and safely to an incident.

The purpose of alarms is not to notify the local community. However, alarms are loud so they may be heard off-site.

Fire alarm testing is carried out once per month.

More Information

This information report presents a summary of the Safety Case for the Bulwer Jet Terminal. We welcome your comments and feedback.

Bulwer Jet Terminal can be contacted on the following numbers:

- (07) 3243 7339 (general enquiries)
- 1800-293-292 (emergencies – ISS First Response)

More information regarding requirements for Major Hazard Facilities is available from Workplace Health and Safety Queensland: www.whs.qld.gov.au

Acronyms and Definitions

ATOM	Australian Terminal Operation Management Pty. Ltd.
BJT	Bulwer Jet Terminal
BP	may mean BP Australia Pty Ltd or BP Refinery (Bulwer Island) Pty Ltd, depending on the context
Major Incident	A Major Incident at a Major Hazard Facility is an occurrence that: • results from an uncontrolled event at the Major Hazard Facility involving, or potentially involving, Schedule 15 chemicals; and • exposes a person to a serious risk to health or safety emanating from an immediate or imminent exposure to the occurrence. (per Regulation 531 in *Work Health and Safety Regulations 2011*)
QLD	Queensland