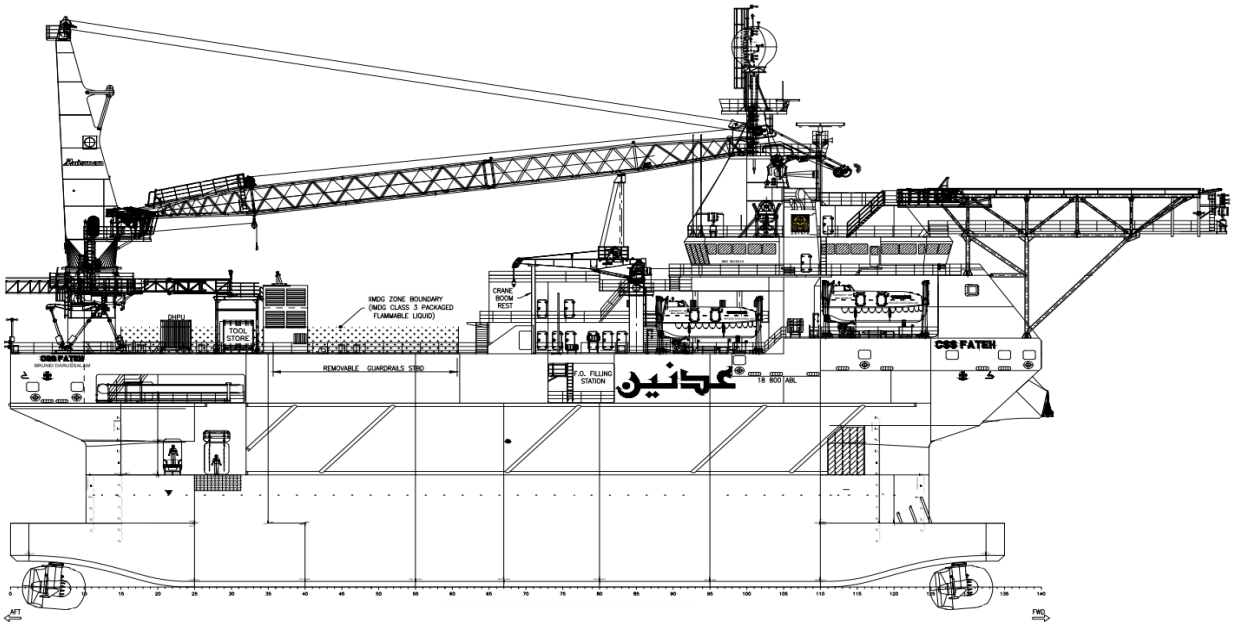
CSS Fateh



Safety Case Extracts
For Public Information

Safety Case Summary and Introduction

Safety Case Overview

This Safety Case is for the Compact Semi-Submersible Vessel CSS Fateh and its intended operations within the sovereign territory of Negara Brunei Darussalam. The Safety Case has been prepared by Pacific Radiance Ltd in compliance with the Brunei Government Workplace Safety and Health (Facilities) (Control of Major Accident Hazards) Regulations 2013 and all applicable amendments.

The Safety Case document demonstrates that the risks arising from the identified Major Accident Hazards (MAHs) for the vessel are appropriately managed through application of suitable engineering control measures and that the residual risk levels are reduced to As Low as Reasonably Practicable (ALARP).

Mobile Facility Duty Holder

Duty Holder for the vessel CSS Fateh is Pacific Radiance Ltd Fleet Director, Mr. Wisan Wataniyakun with controlled copies of the Mobile Facility Safety Case document kept onshore and on board the vessel.

Address in Singapore : Pacific Radiance Ltd.
15 Pandan Road,
Singapore 609263

Address in Brunei : Automac Multiresources Sdn Bhd,
Lot 4157, Simpang 85,
Jalan Maulana, Kuala Belait,
Brunei Darussalam, KA1931

Statement of Fitness / Justification to Operate

This Safety Case document demonstrates to the extent possible that the Duty Holder:

- Has a Safety Management System in place to ensure daily operations, including the provision of accommodation services and deck space for offshore support activities, are conducted in a safe manner;
- Has taken all reasonably practicable measures necessary to prevent major accidents and limit their consequences to the public, property, and the environment by conducting Formal Safety Assessments (FSA) of the vessel, and ensuring that all controls are in place to reduce the risks to ALARP levels;
- Has prepared an onsite emergency plan and liaised with relevant authorities responsible;
- Has prepared an offsite emergency plan in conjunction with the charterer while in Brunei waters and liaised with relevant authorities responsible;
- Has provided means to ensure the adequacy of the design, construction, operation, maintenance or modification of the vessel, for the relevant stage or stages in its life;
- Is committed to submit a Safety Case for the vessel as required by regulations and not operate the vessel until Safety Case Certificate has been issued by the competent authority;
- Is committed to ensure the procedures and arrangements described in this Safety Case are followed; and
- Is committed to make all necessary information about the vessel, its activities and hazards available to the public.

Therefore, in managing its hazards through physical barriers, procedures and supervision whilst nurturing a HSE culture, it is the opinion of the undersigned that the vessel is fit for operations in Brunei waters.

This assessment has been made by:

Wisan Wataniyakun
Fleet Director, Document Owner and Duty Holder

Confirmation that the facility is subject to these Regulations and that the notification or the Safety Case has been submitted to the competent authority

Pacific Radiance Ltd is obliged under Workplace Safety and Health (Facilities) (Control of Major Accident Hazards) Regulations to submit a Safety case for the vessel CSS Fateh. Safety Case was submitted, and it is accepted that Pacific Radiance Ltd has complied with the requirements under the Workplace Safety and Health (Facilities) (Control of Major Accidents Hazards) Regulations (COMAH). Pacific Radiance Ltd Duty Holder shall ensure that the procedures and arrangements described in the current safety cases are followed and the information referred to is updated as required.

An explanation in simple terms of the activity or activities undertaken at the facility

CSS Fateh is a compact semi-submersible vessel capable of undertaking a wide range of offshore subsea support activities alongside the charterer's facility. It is not designed to exploit any hazardous substances.

Activities which may be conducted by the vessel whether as individual operation or as part of combined operations includes:

- Navigation
- Anchoring and berthing
- Station keeping by dynamic positioning
- Crane lifting for transferring or storing of material, equipment or cargo
- Heavy lifting operations;
- Wellhead Maintenance Activity on charterer's facility;
- Boat to boat transfer of personnel
- Provision of a gangway for personnel transfer to and from the platform
- Provision of helideck for helicopter operation
- Provision of accommodation for personnel including catering and domestic services
- Daily communications between the vessel Master and the platform offshore installation manager

A separate Combined Operations Safety Case will be submitted by the Charterer for all 'Combined Operations' with the vessel in full compliance with the laws and regulations of Brunei Darussalam.

The common names or, in the case of hazardous substances, the generic names or the general danger classification of the substances and preparations involved at the facility which could give rise to a major accident, with an indication of their principal hazardous characteristics

Substance specified in Division 2 of Part II of the Fifth Schedule to the WSH Act	Present on board	Above Threshold limit
Acetylene	Yes – Maximum six (6) acetylene bottles with volume of 40L each onboard at any one time.	No – limit is 50 tonnes
Acetylene Overview: Acetylene is not especially toxic, but it can contain toxic impurities such as traces of phosphine and arsine. It is also highly flammable, combustion of acetylene with oxygen produces a flame of over 3600 K (3300 °C, 6000 °F), releasing 11.8 kJ/g. Oxyacetylene is the hottest burning common fuel gas. Its singular hazard is associated with its intrinsic instability, especially when it is pressurized. Samples of concentrated or pure acetylene can easily react in an addition-type reaction to form several products, typically benzene and/or vinyl acetylene. These reactions are exothermic, and unlike other common flammables, do not require oxygen to proceed. Consequently, acetylene can explode with extreme violence if the absolute pressure of the gas exceeds about 200 kPa (29 psi). Acetylene and Oxygen on board the vessel will be used in welding, cutting and burning operations.		
Oxygen	Yes – Maximum twelve (12) oxygen bottles with volume of 40L each onboard at any one time.	No – limit is 2000 tonnes
Oxygen Overview: Oxygen is a nontoxic odourless, colourless, tasteless gas. It is naturally present in the air (21%) and is essential for life. Increased levels of oxygen promote rapid combustion. Acetylene and Oxygen on board the vessel will be used in welding, cutting and burning operations.		
Marine Gas Oils	Yes – Marine Gas Oil 1833 m^3 maximum onboard at any one time.	No – limit is 25,000 tonnes
Marine Gas Oil Overview: MGO is a blend of diesel fuel and is thus flammable. It may be fatal if swallowed, harmful if inhaled and causes skin irritation. It may cause damage to organs through prolonged or repeated exposure. It is toxic to aquatic life with long lasting effects.		

General information relating to the nature of the major accident hazards, including their potential effects on the public, property and the environment

No.	MAE (Major Accident Event)	Consequences
1.	Lifting Operations / Dropped Objects	Dropped objects risks could potentially arise due to severe weather, overloading, or structural failure of the crane when the lifting operations are being performed leading to asset damage on the vessel.
2.	Ship Collision / Loss of Stability or Buoyancy and Potential Breach of Fuel Tank	Collision impact from infield or passing vessels within the vicinity and ballast failure leading to potential loss of stability and buoyancy, and potential breach of fuel tank which leads to environmental damage.
3.	Marine Operations / Loss of position due to failure of DP system	DP system failure, could lead to loss of position resulting in potential collision with adjacent facility.
4.	Vessel Fires / Machinery Space and Accommodation Fire	Machinery Space / Accommodation fires are usually localised events that could lead to potential personnel injuries / fatalities within the immediate area of the ignition source.
5.	Occupational Hazards / Occupational Accidents	Occupational accidents are associated with manual activities including enclosed space, working at height, working at side, electrocution, hot work, falls, trips, slips, man overboard, burns, pressurised cylinders, asphyxiation, wires/ ropes/ cables under tension etc. leading to potential personnel injuries / fatalities.
6.	Personnel Transfer Hazards / Personnel Transfer Accidents	Personnel transfer accidents occur during the transfers of personnel between vessel and offshore installations leading to potential personnel injuries / fatalities.
7,	Diesel Releases / Loss of Containment from Fuel Lines or during Bunkering	Diesel releases during bunkering or from supply lines to the power generator could result in potential fires leading to personnel injuries / fatalities.
8.	Contagious Disease / Spread of Contagious Diseases onboard	The spread of contagious diseases (including the COVID-19) onboard could lead to personnel injuries/ fatalities.
9.	Helicopter Operations / Loss of Control of Helicopter and Exposure to Harm	Mishaps during helicopter operations could result in helicopter crash during take-off, landing or in-flight leading to potential helideck damage and injuries / fatalities. Fault in helideck design could result in structural collapse leading to personnel injuries/fatalities with extensive asset damage. A potential for fire leading to personnel injury/fatality may also arise from fuel leak on helideck.

Adequate information on how the public concerned will be warned and kept informed in the event of a major accident

In the event of a MAE, Pacific Radiance Ltd will provide information to the public via a secured website and/or through media releases / statement. Information will include details of the MAE and the resulting losses and damages and any potential long-term effects for the public (though in this case the only long-term damage of concern to the public from any MAE would be the results of an oil spill). All enquiries from the media shall be directed to the CEO who will be the sole spokesperson for the Company unless authorized otherwise.

All Major Accident Events that occur on the vessel are to be reported by the Fleet Director or designate to relevant authorities directly by telephone and followed with an initial incident notification. The nature of the emergency will be communicated together with the relevant information regarding requirements for support and danger to the public and /or natural environment.

If there are any trans-boundary effects, potential or actual from the incident, these will be communicated by the client's emergency coordination centre in accordance with the client emergency response procedures if the client's platform is involved (assuming the platform's assets are responsible for most of the trans-boundary effects). If the incident purely involves only the vessel, Pacific Radiance Ltd will be responsible for contacting any emergency services as necessary including those in neighbouring states (such as marine authorities in the event of an oil spill).

Adequate information on the actions the public concerned should take, and on the behaviour, they should adopt, in the event of a major accident

In the event of a major accident, the public are advice to:

- Stay calm and alert, do not panic or act impulsively
- Keep away from any dangerous situations
- Listen to the instructions and information from the authorities and emergency services and follow their directions and advice
- Stay tuned to the official sources of information and instruction for updates
- Do not spread rumours or misinformation

It is the responsibility of Pacific Radiance Ltd to ensure that the relevant authorities are contacted as appropriate in the event of an emergency.

Confirmation that the duty holder is required to make adequate arrangements onsite, in particular, liaison with the emergency services to deal with major accidents and to minimise their effects

Pacific Radiance Ltd emergency preparedness provides a framework to provide the implementation of effective response measures and ensures procedures are properly controlled and managed.

Emergency teams are formed onboard to deal with the emergencies, which will consist of a command team, an on-scene team and a backup team. The command team will be responsible for liaison with emergency services onsite to deal with major accident and to minimise their effect.

A reference to the offsite emergency plan for the facility. This should include advice to cooperate with any instruction or request from the emergency services at the time of an accident

In the event of an emergency onboard the vessel, the Master will contact the Designated Person Ashore (DPA) who will discuss with the Emergency Response Team Leader (ERTL) whether to activate the shore-based Emergency Response Team based on the severity and nature of the emergency.

Should the emergency be considered a Major Emergency, the shore-based Emergency Response Team will be mobilised to provide support and request extra support as necessary from external parties (emergency services or relevant authorities).

Where the emergency is minor and can be handled without the need of external support, the ERTL along with the DPA, will continue to monitor the situation from onshore. Should the emergency escalate, the shore-based Emergency Response Team will be activated as necessary.

The overall objectives and functions of Pacific Radiance Ltd shore-based Emergency Response Team during emergencies is to:

- Provide a link between the Company and the vessel
- Provide lines of communications between the Company, emergency services, regulatory bodies, underwriters, P&I clubs, agents and media, etc.
- Provide advice, assistance and guidance to the vessel
- Provide a communication centre manned by qualified personnel who have available to them all the technical details and the data necessary to mitigate the situation
- Provide a link between the Company and charterer / client

And including but not limit to:

- Reporting and providing information of the incident to the responsible authorities
- Liaising and cooperating with any instruction or request by the emergency services or authorities responsible for providing assistance with onsite emergency response action, including those in the neighbouring states in the event of a major accident with possible transboundary consequences
- Provision of recovery and restoration of the environment following a major accident
- Seeking assistance from client's resources as necessary

Communications with external support will be handled by the client in the event of an emergency involving the platform. However, it will be the responsibility of Pacific Radiance Ltd shore-based Emergency Response Team to ensure that this is done in the event of an emergency – this is achieved though communications and agreement with the client's Emergency Coordination Team.

Details of where further relevant information can be obtained, unless making that information available would be contrary to the interests of national security or personal confidentiality or would prejudice to an unreasonable degree the commercial interests of any person.

Further information may be requested and obtained from:

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