



## ENERGY DEPARTMENT PRIME MINISTER'S OFFICE

### SAFETY CASE CONTENTS MATRIX: MOBILE FACILITY

	Duty Holder to provide data in shaded boxes	
Submitted By	"Billy Bunter "	
Title	QHSE Manager	
Received date		
Received by		
Allocated number		
Content reviewed by	A,B,C and D	
Review date	6/11/2013 - 8/11/2013	
Overall EDPMO comments	<p>Safety Case is written corporately and is not specifically for Brunei or for the actual rig operations. For example, in Section 4, a list of possible hazard identification and assessment techniques are provided but no description of what was actually done for the the rig. In places, the Safety Case does not provide the information that would be required by the IADC template and tends to cross-reference to other sections in the Safety Case (circular references). Also in some cases, the actual references made do not correspond to the right details required under COMAH regulations (the information is often elsewhere). Safety Case is based on the company corporate directive, but this is not been operationalised in Brunei. Some sections state "Rev in Progress".</p>	
Safety Case Certificate to be issued		No
Date Duty Holder informed		

ITEM	REQUIREMENT	DOC/PAGE LOCATION	EDPMO COMMENTS	Y/N
General Assessment Requirements:				
G1	Signature page with Safety Case Owner Name and Position	Section 1 Page 2	Signature page present including approver name. It is unclear who the Safety Case Owner is and whether the Safety Case approver is part of the Rig organisation.	
G2	Document Control Evident including Revision Number, Revision Date and Document Number for each section of Safety Case is valid.	Section 1 Page 2	All present but some sections state "Rev in Progress".	
G3	Date of last revision is less than 5 years ago	Section 1 Page 2	Revised in 2013.	
G4	Company and Facility Name are correct	Section 1 Page 2	Yes.	
G5	Executive Summary present including Justification to Operate or Statement of Fitness for Service incorporating requirements from Regulation 9 (below).	Section 1.2.12	Justification to operate included but not in an Executive Summary.	
G6	Review of remedial action plan to ensure actions are closed out in timely manner.		Please explain why the actions have taken more than a year to complete. Is the Remedial Action Plan updated as the revision is in progress.	
ITEM	REQUIREMENT	DOC/PAGE LOCATION	EDPMO COMMENTS	Y/N
Regulation 9:Duties of Duty Holder				
9.(a)	Take all reasonably practicable measures necessary to prevent major accidents and limit their consequences to persons, limit their consequences to assets and limit their consequences to environment.	2.3. / HSE Case Part 4 Risk Management	Section 1.2.12 provides justifications for continued operations. Section 2.3 is not focused and not providing an overview of the MAHs and the assessments specifically for the rig. Part 4 does not provide details on how MAHs are identified for the rig (too generic).	
		2.3.3	Refer to Section 1.2.12.	
		2.3.3	Refer to Section 1.2.12.	
		2.3.3 / 2.3.6 / 2.3.6.1 / 2.3.6.2	Refer to Section 1.2.12.	
9.(b)	Prepare an onsite emergency plan;	5.1 (5.1.1 to 5.1.3) / Database - Station Bill / Safety Plan	Sections referred do not provide the details of how the DSHA has been established and linked to the MAEs.	
9.(c)	Prepare an offsite emergency plan and liaise with the government department and other authority responsible;	5.2.2	Section referred does not provide the details of how offsite emergency plan has been developed, and any arrangement/ consultation with external parties.	
9.(d)	Describe in the safety case the means by which the duty holder will ensure the following for the relevant stage or stages in the life of the facility:  Describe adequacy of design,  Describe adequacy of construction,	HSE Case Part 6 - Performance Monitoring	Section 3.2.2.1 provides the information of the design life and expected service life remaining. Section 3.1.2 provides the information of the classification society and flag state.	
		3.2 / 6.6	Section 3.1.4 does describe about modification, but not about the major upgrade. Duty Holder should consider description/ reference of Material Change to be included.	
		3.1.3 / 6.6	Section 6.6 does not provide the description of	

	Describe adequacy of operation,	3.1 / 6.5	how the Duty Holder demonstrate adequacy of design/ construction. For adequacy of operation and maintenance, reference should be made to Section 1.2.12.	
	Describe adequacy of maintenance and	2.3.19 / 6.5		
	Describe adequacy of modification.	2.3.2 / 3.1.4		
ITEM	REQUIREMENT	DOC/PAGE LOCATION	EDPMO COMMENTS	Y/N
<b>Regulation 17: Management of Health and Safety and control of Major Accident Hazards</b>				
17.(1)(a)	There is clarity in the following (for both facility and organizational interfaces):  roles in the management structure of the Facility,  responsibilities in the management structure of the Facility,  accountabilities in the management structure of the Facility,  roles in the organizational interfaces,  responsibilities in the organizational interfaces and  accountabilities in the organizational interfaces.	2.0.3  2.2.1.4  2.2.2.2  2.2.2.3  2.2.1.1 / 2.2.1.4  2.2.2.1 / 2.2.2.2  2.2.2.1 / 2.2.2.2 / 2.2.3.4 (Bridging doc)	There are two organisation charts in Section 2.2.1.4 and only one specific to the rig should be provided.  Section 2.2.2.2 provides the line management responsibilities, but it is not clear who is responsible for the Rig Safety Case (should be on the signature page).  There are no roles and responsibilities for Safety Officer.  There is no description of support functions within Brunei such as onshore engineering and technical support including contractors and sub-contractors, QHSE Manager, Technical Department Manager, QSC Discipline Manager.	
17(1)(b)	There are effective means of ensuring the implementation of a HSE management system;	2.0.4 and whole section 2	Section 6 Performance Monitoring should be referred as well.	
17.(1)(c)	There are effective means of defining and managing Material Changes to their operations;	2.3.2 (MOC)	Safety Case describes Management of Change process but does not define Material Changes. Reference shall be made to Section 1.2.5: HSE Case Reviews and Updates but there should be clear definitions for each Material Change (Refer to Definition of Material Change in COMAH regulations).	
17.(1)(d)	Established adequate arrangements for audit of the safety and health management system and  Established adequate arrangements for the making of reports thereof;	2.4.5 / 6.4  6.4	Section 6.4 covers reportings and audit findings.  Suitably covered.	
17.(1)(e)	There are effective means of ensuring continual and systematic improvement of the safety and health management system;	2.0.1 / 1.2.6	Reference should be made to Section 6.	
17.(1)(f)	The safety and health management system ensures that the operation of the facility remains in compliance with any relevant written laws.	1.2.9 / 6.2 / 6.3 / 6.4 / 6.5/ 6.6	Section 1.2.9 identifies relevant personnel (who are they for communicating legislative changes in Brunei?).  Section 6.2, 6.3, 6.4, 6.5 and 6.6 are irrelevant. These sections cover internal compliances.	
ITEM	REQUIREMENT	DOC/PAGE LOCATION	EDPMO COMMENTS	Y/N

Regulation 26: Documents				
26.(1)	Address on state land for the purposes of storing copies of documents.	TMS Server is kept at Kepper Tower Singapore 2.2.1.2 in Dir-00-0008	There is no address on State Land where controlled copies of documents outlined in Regulation 26 (1) (b) and (c) are stored.	
ITEM	REQUIREMENT	DOC/PAGE LOCATION	EDPMO COMMENTS	Y/N
Schedule 3: Particulars in Safety Case for Mobile Facility				
1	The name and address in Brunei Darussalam of the duty holder of the facility.	the company Sdn Bhd Lot# 5146, Jalan Pandan Enam Kuala Belait KA1189 Negara Brunei Darussalam	The information should be provided in the Safety Case and referred.	
2	A description of the extent to which the duty holder has taken into account any matters raised by the competent authority pursuant to these Regulations.	1.2.4	Nothing to report.	
3	A description of the facility, operations, activities and environment should be provided including requirements below:			
3.(a)	Descriptions and diagrams of the principal process and safety features including technical control measures identified from the major accident hazard assessment of the facility;	3.1.5 / Safety Plan Database	Remove the reference to UK Safety Case Regulations as mentioned in Section 3.1.5. Reference should be made to Section 3 to address this requirement.	
3.(b)	the layout and configuration of the facility;	3.1.3	Reference should be made to Section 9.	
3.(c)	the process technology used, where applicable;	3.3 onward	Suitable information provided.	
3.(d)	any hazardous substances the facility is designed to exploit;	3.4.10.1 to 3.4.10.4	No description of the hazardous substances that the facility is designed to exploit e.g. crude oil, gas, and condensate.	
3.(e)	the maximum number of persons allowed on the facility at any one time, their location and accommodation details;	3.7	No daytime limit of POB provided. Maximum POB of 102 is limited by the number of beds and lifeboat capacity (2 x 105 POB).	
3.(f)(i)	the particulars of environmental conditions to which the facility may foreseeably be subjected to; and	3.2.1.1	Suitable information provided.	
	the limits to which the facility has been designed; and	3.2.2		
3.(f)(ii)	the types of operation and activities in connection with the facility, which are expected to be performed;	3.1	Reference should be made to Section 3.8, 3.9, 3.10 and Section 14.	
3.(g)(i)	Where applicable, particulars of the equipment and arrangements for the control of well operations including those to control pressure in a well;	3.3.3.1 - 3.3.3.5	Reference should be made to Section 3.3.2.	

3.(g)(ii)	where applicable, particulars of the equipment and arrangements for the control of well operations including those to prevent the uncontrolled release of hazardous substances; and	3.2.4.2.2 /3.3.2.2.5 / 3.3.2.2.6 / 3.3.3 / 3.4.2 / 3.4.5.1 / 3.4.5.2 / 3.4.5.3 / 3.4.10	Section 3.2.4.2.2, 3.4.2, 3.4.5.1/2/3 and 3.4.10 is not applicable to well operations. Section 3.3.2.3 should be referenced.	
3.(g)(iii)	where applicable, particulars of the equipment and arrangements for the control of well operations including those to minimise the effects of damage to subsea or land based equipment by drilling equipment.	Same as above	Reference should be made to section 3.2.3.3 and 3.2.3.4. Description of dropped object back loading. Dropped casing onto the wellbore is identified as MAE in the Hazard Register hence it should be described here.	
4	Details of expected hazardous substances to be present on the facility, names of the hazardous substances including			
4.(a)	properties and location;	3.4.10 / 3.5.1	Details of substances name, properties and location are not provided.	
4.(b)	maximum inventories;	which inventory??	maximum inventories of each hazardous substance in accordance with WSHO not provided.	
4.(c)	physical and chemical behaviour;	MSDS / Chem watch	Information for each hazardous substance not provided.	
4.(d)	details of potential (immediate and delayed) harm to people,	MSDS / Chem watch	Information for each hazardous substance not provided.	
4.(d)	details of potential (immediate and delayed) harm to environment.	MSDS / Chem watch	Information for each hazardous substance not provided.	
5	A detailed description of the major accident hazard assessment for the facility being an assessment or series of assessments conducted by the duty holder that			
5.(a)	identifies all hazards having the potential to cause a major accident event;	HSE Case Part 4 and See Hazard Register	Confusion on occupational and major hazards assessment. There is no reference of Major Accidents as defined in COMAH. Safety Case describes the SHIDAC process but does not describe what was done for this Rig, when it was done and who is involved.	
5.(b)	is a detailed and systematic assessment of the risks associated with each of those hazards,	Yes - 4.5 / 4.6	Explanation needed on how the Risk Matrix and Screening Criteria are used in Section 4.5. Summary of FSAs that have been conducted to be provided e.g. QRA, FERA, Ship Collision Study, Dropped Objects Study, FMEA etc. Hazard Register identifies a number of MAEs yet there are not Bow-tie for these MAEs. Provide explanations.	
5.(b)	including the likelihood of each major accident event and	See Major Accident Events Database	Reference should be made to Section 11 and 12.	
5.(b)	consequences of each major accident event;	See Hazard Register Database	Reference should be made to Section 11 and 12.	
5.(c)	identifies the measures needed to respond to each of the identified major accident events, including impact on the availability of the escape, effectiveness of the escape, evacuation and rescue facilities;	See Hazard Register Database 5.5 3.6 3.6.2.1 to 3.6.2.5 / 3.6.3	Reference should be made to Section 11 and 12. Section 5.5 describes escape and evacuation system, and means of recovery but it does not describe how the Duty Holder has determined whether these are sufficient.	

5.(d)	identifies the technical measures that are necessary to ensure compliance with any relevant written laws and	1.2.9 / 2.2.2.4	Reference should be made to the identified regulations (Appendix 4). Discussion on how the Duty Holder complies with the regulations should be available in Safety Case.	
5.(d)	other control measures that are necessary to ensure compliance with any relevant written laws;	1.2.9 / 2.2.2.4		
5.(e)	identifies effective onsite emergency response plans are in place and	5.1 / 5.1.1 / 5.1.3 / 5.2.1	Sections referred do not provide the details of how the DSHA has been established and linked to the MAEs. They also do not provide analysis whether the emergency response plans can be carried out efficiently during the MAEs.	
5.(e)	identifies effective offsite emergency response plans are in place;	5.2.2	Section referred does not provide the details of how offsite emergency plan has been developed, and any arrangement/ consultation with external parties. They also do not provide analysis whether the offsite emergency response plans can be carried out efficiently during the MAEs.	
5.(f)	identifies there are effective means to test the emergency response plans at least every 3 years, involving all relevant internal and external parties;	5.3.2	The involvement of relevant external parties should be described.	
5.(g)	identifies an effective recovery plan and arrangements for the execution of the recovery plan are in place.	5.5.1 / 5.5.2	More descriptions of recovery of personnel from the water to a place of safety and oil spill recovery in Brunei water to be provided.	
6.(a)	A description of the safety critical people required to mitigate and control the major accident risks,	4.7 / 4.7.1 / the rig Critical Activities by Rig Positions	Reference should be made to Section 12 and a list of Safety Critical People should be included in Section 4.	
6.(a)	A description of Safety Critical procedures to mitigate and control the major accident risks and	4.7	Reference should be made to Section 12 and Section 3.1.5 and a list of Safety Critical Procedures (not just activities) to be included in Section 4.	
6.(a)	A description of Safety Critical Equipment required to mitigate and control the major accident risks;	4.7	Reference should be made to Section 12 and Section 3.1.5. Is Section 3.1.5 at the right place (as Section 3 is the Rig Description)?	
6.(b)	A description of performance standards to be met by the safety critical people,	the rig Critical Activities by Rig Positions	Section 13 should be referenced and Performance Standards should be included.	
6.(b)	Safety Critical procedures and	4.7 / 6.5	Section 13 should be referenced and Performance Standards should be included.	
6.(b)	Safety Critical Equipment;	4.7 / 6.5	Section 13 should be referenced and Performance Standards should be included.	
6.(c)	contingency measures that will be implemented should a performance standard not be met;	2.3.2 / 2.3.19	Management of Change for non-conformity deviation is managed through Synergi.	

6.(d)(i)	how the duty holder ensures that each Safety Critical Equipment shall provide a minimum level of operational performance in terms of functionality, availability, reliability, suitability and survivability throughout its operating life.	2.3.19/ 6.5	Section 13 should be referenced and Performance Standards should be included. There should be clear description of functionality, availability, reliability, suitability and survivability of each SCE.	
6.(d)(ii)	there is a suitable competence assurance system for safety critical people associated with a facility (including contractors and sub-contractors) to assure they have the necessary skills, training and ability;	2.2.4.1 to 2.2.4.5	Please include a statement linking Safety Critical People to the Safety Critical Activities Matrix.	
6.(d)(iii)	a process is in place for the management and review of the safety critical procedures.	6.5	Please provide a list of Safety Critical Procedures.	
7	A summary of the onsite organisation and predetermined actions that are in place in order to respond effectively to the identified major accident events that may occur on the facility. It shall include a summary of			
7.(a)	the names or positions of persons authorised to command and control resources during an onsite emergency;	5.2.1	OIM is named as the On Scene Commander, but back up should be named as well as the rest of the OSC team.	
7.(b)	arrangements for communicating the necessary information to all employees, staff and visitors of the facility;	3.4.6.1	Reference should be made to Section 2.2.4.5 as well as Section 9: Fire Fighting Escape and Safety Plans.	
7.(c)	arrangement for communicating the necessary information to the public and to emergency services and authorities concerned in the area;	3.4.6.2	Suitable information provided.	
7.(d)	the actions which should be taken to control the identified major accident events to limit their consequences including a description of the safety equipment and resources available;	5.1.3 / 5.2 3.7.1 / 3.5.3 / 3.5.4	Reference should be made to Section 5.1.1 and DSHA should be listed and more details on the escape and evacuation strategy should be provided.	
7.(e)	means of escape, muster and evacuation;	3.6.1 / 3.4.7 3.6.2 / 5.5.2	TEMPSC is not an escape mean but is for evacuation as per Duty Holder definition of evacuation. Reference should be made to 3.5.6 and 5.4.	
7.(f)	arrangements and drills in place for training staff in the duties they will be expected to perform, in response to the identified major accident events where necessary coordinating this with the emergency services;	5.3.2	Reference should be made to the whole Section 5.3.	
7.(g)	periodic review of procedures to ensure continuous development of arrangements.	2.5.1 / 2.1.2	Reference should be made to Section 5.3.2.	
8	A summary of the offsite organisation and predetermined actions that are in place in order to respond effectively to the identified major accident events that may occur on the facility. It shall include a summary of -			

8.(a)	the name or position of the person with responsibility for liaison with the government department or other authority responsible for preparing the offsite emergency plan;	1.2.4	Incorrect reference made. The reference should be made to Section 5.2, however it should be made clear who is responsible for liaison with external parties in development of the offsite emergency plan.	
8.(b)	arrangements for communicating the necessary information to the all employees, staff and visitors of the facility;	3.4.6 / 3.4.6.2/ 5.2.2	The referenced sections provides the information of hardware communication. Reference should be made to Section 2.2.4.5.	
8.(c)	Arrangement for communicating the necessary information to the public and to emergency services and authorities concerned in the area;	3.4.6.2/ 5.2.2	As per IADC requirements, Section 5.2.2 should provide details of consultation and corporation with other parties identified as external emergency support e.g. coast guard, and NOSCOP.	
8.(d)	the names or positions of persons authorised to set emergency procedures in motion and of persons authorised to take charge of and coordinate offsite action;	5.2.2	Suitable information provided.	
8.(e)	arrangements for providing warning of the incident to the authority responsible for setting the offsite emergency plan in motion, the type of information which should be contained in an initial warning and the arrangements for the provision of more detailed information as it becomes available;	5.2.2	Please indicate who, how and when EDPMO is contacted within 6 hours of a major accident.	
8.(f)	arrangements in place with the authority responsible for providing assistance with onsite emergency response action;	5.2.2	Please provide clear line of communication and arrangement with EDPMO and other authorities during a major accident.	
8.(g)	arrangements for offsite emergency response action;	5.2.2	Reference should be also made to Section 5.2.3 on communication.	
8.(h)	arrangements for providing the public with specific information relating to the accident and the behaviour which it should adopt;	5.2.2	Please explain how the public can be informed for example to warn the fishing community in the event of major oil spill/ gas release.	
8.(i)	arrangements for the provision of information to the emergency services in the neighbouring states in the event of a major accident with possible transboundary consequences;	5.2.2	Please explain how the authorities/ community in Malaysia will be informed in the event of transboundary events.	
8.(j)	arrangements for coordinating drills and exercises with offsite emergency services in response to the identified major accident events; and	5.3	Please explain which DSHA scenario drill will involve external emergency support and how often are they involved.	
8.(k)	arrangements for the provision of recovery and restoration of the environment following a major accident.	5.2.2	Please describe arrangements in place for recovery and restoration such as NOSCOP, land remediation contractors and oil spill recovery operations.	
9	The Safety Case shall reflect that the duty holder has ensured that the development of the document is through effective consultation and participation of the workplace safety and health officer for that facility.	1.2.6 / 2.2.1.4 / 2.2.2 / 2.2.3 / 2.3.9 / 2.5	Reference should be made to Section 1.2.4 and 2.2.1.3. Safety officer position is reflected in the Rig organisation, however their responsibilities need to be described.	
10	A description of any potential combined operations which may involve the facility shall include			



10.(a)	a summary of the arrangements in place for co-coordinating the safety health and environment management system of all duty holders involved in any such combined operation;	2.3.12.1.1 / 2.3.12.1.2 / See SOOB Database	Suitable information provided.	
10.(b)	A summary of the arrangements in place for a joint review of the safety aspects of any such combined operation by all duty holders involved which shall include the identification of hazards with the potential to cause a major accident and the assessment of risks which may arise during any such combined operation;	4.7.3 / See SOOB Database	Duty Holder should describe the pre-activities and assessments conducted prior to Combined Operations e.g. hazard identification, risk assessment, interface arrangement, identification of all out-standing maintenance issues on Client's facility.	
10.(c)	the equipment likely to be used during any such combined operation; and	4.7.3 / See SOOB Database	Describe SCE used during Combined Operation such as personnel transfer gangway, communication loops, firewater pump, shutdown system interfacing etc.	
10.(d)	the likely impact any such combined operation may have on the facilities involved and neighbouring communities.	2.3.12.1.1 / 2.3.12.1.2	Duty Holder should describe some of the generic impacts due to the combined operation e.g. moving on side, in print of seabed, impact on emergency escape route, re-location of life-saving equipment if required, interface with shutdown system and client critical equipment. More details should be provided in the Combined Operation Safety Case.	

- Information is missing
- Information is minimum, or incorrect reference
- Information is suitable and correctly referenced