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| Petroleum | Health, Safety & Environment Management System Marine Audit Protocol |  |
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PETROLEUM CSG


HSE MANAGEMENT SYSTEM PROTOCOL

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| MARINE AUDIT PROTOCOL |
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| Petroleum HSEC Protocol No: PR15.01 | |
| Reference: HSE Management Standard 15 - Monitoring, Audit and Review | |
| Date: November 30, 2007 | Revision: 0 |
| Originator: Paddy Shrimpton, Global Practices Leader Marine HSE | |
| Approver: Dave Banks, Vice President HSE | Signature on File |

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1.0 PURPOSE

The purpose of the Marine Audit Protocol is to identify & manage BHPB Petroleum's risk exposure with respect to Marine Facilities and Vessels through a series of specifically designed Audits.

The purpose of this document is to:

- Formalize the requirements for marine related audits conducted by BHPB Petroleum or external contractors on behalf of BHPB.
- Formalize minimum acceptable standards and procedures for BHPB Petroleum in conducting contractor HSE marine audits and inspections of marine Vessel/Marine Facilities.

2.0 SCOPE

The scope of the Audits includes but is not limited to Marine Vessels and Marine Facilities that are controlled (refer to corporate definitions of controlled).

This includes BHPB Petroleum Marine facilities and vessels and includes the management and operation of all contractor-managed Marine Vessel / Marine Facilities employed by BHPB Petroleum, their service contractors and subcontractors for all BHPB Group companies worldwide, where BHPB Petroleum is the operator.


3.0 REFERENCES

This section provides a list of documents that provide detailed information, procedures, and guidance associated with the Marine Audit Protocol.

3.1 Key Documents

Global Practices Marine HSE – Vessel/Marine Facility Class Audits
 BHP Billiton Petroleum “Project” Bridging Documents
 BHP Billiton Petroleum Worldwide Drilling 002 Audit & Inspection
 BHP Billiton FRCP Audit Check Sheet
 BHP Billiton Petroleum Contractor and Supplier HSEC MS & FRCP Audit Checklist
 BHP Billiton Petroleum Marine Operations (Guideline PG10.1)
 BHP Billiton Petroleum IMCA CMID (Rev 5)

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BHP Billiton Petroleum Marine Emergency Response Audit Check Sheet (PF15.01)
 BHP Billiton HSEC Management Standards
 BHP Billiton Safe Travel Management System
 BHP Billiton Fatigue Management (COP)

The above referenced documents can be searched in documentum by title.

3.2 Reference Documents

INTERTANKO, Risk Minimization Guidelines for Shuttle Tanker Operations Worldwide at Offshore Locations, 3/00 1st Ed
 OCIMF, Barge Safety Guidelines for Barges, Associated Tugs, and Non-regulated and Restricted Trading Tankers. 8/99, 1st Ed
 OCIMF, Guidelines for the Handling, Storage, Inspection, and Testing of Hoses in the Field. 1995, 2nd Ed
 OCIMF, Offshore Loading Safety Guidelines. 1999, 1st Ed
 ISGOTT 5th Edition
 SOLAS 2004
 MARPOL 2006
 1997 MARPOL Protocol Annex VI
 SOLAS Amendments Regulations for Prevention of Air Pollution from ships 2003 - 2005
 IMDG Code (International Maritime Dangerous Goods)
 IMDG Supplement 2006
 ISPS 2003 (International Ship & Port Security)
 STCW Convention 2001
 Fire Safety System Code (FSS) 2001
 Life Saving Appliances Code (LSA) 2003
 ISM code & Guideline 2002

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4.0 DEFINITIONS

This section provides detailed definitions for acronyms used in this manual or for operational terminology referenced in the Audit Protocol. Only definitions unique to this document are included.

4.1 Language and Meaning

Language used in this Protocol is consistent with the BHPB Petroleum Management System.

- The use of “shall” or “must” means a mandatory requirement.
- The use of “should” means a protocol which is strongly recommended.
- The use of “may” means a guideline which is to be considered.

4.2 Definitions

Major Accident Event – any incident that has the potential to lead to any of the following:

- A fatality
- Serious environmental effects, including impairment of ecosystem function
- Ongoing significant social issues
- Significant adverse attention from national media or non-government organisations (NGO), or loss of license to operate.

Tank Vessel - any vessel that has internal tanks or is carrying tanks (Tote) that’s primary loss of containment has the potential to result in an Environmental incident.


‘HSE-Critical’ Elements

HSE- Critical Elements comprise of the following:

Critical Activity – An activity or activities where conduct outside expected performance has the potential to result in a Major Accident Event.

Critical Equipment – A piece of equipment or a structure whose failure, or not performing to design specification, has the potential to result in a Major Accident Event.

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Critical Procedure – A procedure (or step in a procedure) - divergence from which has the potential to result in a Major Accident Event.

Critical System – A system (hardware or software, including human behavior) whose operation outside expected performance has the potential to result in a Major Accident Event.

HSEC Pre-qualification

Any process which establishes that a contractor has adequate HSEC systems in place to meet BHPB’s standards prior to inclusion of that contractor on the tender list.

HSEC Management System Review

A review of a contractor’s HSEC system to identify the basic elements included in the system; to establish how the system is intended to work and to identify any apparent deficiencies/weaknesses in the system.

HSEC Management System Audits

A formal examination of a contractor’s HSEC system to verify that the actual practices and procedures comply with documented systems and are in accordance with BHPB Petroleum’s Management System and this Protocol.

Technical Inspection

Inspections conducted on Vessel/Marine Facility to verify the equipment meets specification and contractual requirements, and to ensure safe and reliable operation of the Vessel/Marine Facility/facility equipment.

Competent Person


A competent person is an individual who, by way of training and/or experience, is knowledgeable of applicable standards, is capable of identifying workplace hazards relating to the specific operation, is designated by BHP Billiton Petroleum, and has authority to make recommendations based upon their findings. Some standards add additional specific requirements which must be met by the competent person.

4.3 Abbreviations


The following acronyms apply to this document.

| Acronyms | |
|-----------------|--|
| AHV | Anchor Handling Vessel/Marine Facility |
| ABS | American Bureau of Shipping |
| AHTS | Anchor Handling Tug Supply |
| BHPB | BHP Billiton |
| CA | Certifying Authority |
| CFR | Code of Federal Regulations |
| COLREGS | Collision Regulations |
| CoS | Chamber of Shipping |
| COSHH | Control of Substances Hazardous to Health |
| COSWP | Code of Safe Working Practices for Merchant Seamen |
| CMID | Common Marine Inspection Document |
| CCU | Cargo Containing Unit |
| DC | Daughter Craft |
| DESIGN | Diving Equipment System Inspection Guidance Notes |
| DOC | Document of Compliance |
| DP | Dynamic Positioning |
| DPO | Dynamic Positioning Operator |
| DPA | Designated Person Ashore |
| DSE | Display Screen Equipment |
| EPIRB | Emergency Position Indicating Radio Beacon |
| ERP | Emergency Response Plan |
| FMEA | Failure Modes and Effects Analysis |
| FRC | Fast Rescue Craft |
| FRC(P) | Fatal Risk Control (Protocols) |
| GMDSS | Global Maritime Distress and Safety System |
| HAV | Hand Arm Vibration |
| HLO | Helideck Landing Officer |
| HP | High Pressure |
| HRL | Hyperbaric Rescue Lifeboat |
| HSE | Health, Safety and Environment |
| HSEC | Health, Safety, Environment & Community |
| IAGC | International Association of Geophysical Contractors |
| ICS | International Chamber of Shipping |
| ICP | Independent Competent Person |

| Acronyms | |
|-----------------|---|
| IMCA | International Marine Contractors Association |
| IMDG | International Maritime Dangerous Goods Code |
| IMO | International Maritime Organization |
| IOPP | International Oil Pollution Prevention Certificate |
| ISGOTT | International Safety Guide for Oil Tankers and Terminals |
| ISPS | International Ships and Port Security |
| ISM | International Safety Management |
| JRA | Job Risk Analysis |
| JSA | Job Safety Analysis |
| LR | Lloyds Register |
| LSA | Life Saving Appliance |
| MARPOL | Merchant Shipping (Prevention of Oil Pollution) Regulations |
| MCA | Maritime and Coastguard Agency |
| MERSAR | Merchant Search and Rescue |
| MOB | Man Overboard Boat |
| MARPOL | International Convention for the Prevention of Pollution from Ships |
| MMS | Minerals Management Service |
| MODU | Mobile Offshore Drilling Unit |
| MSA | Master Services Agreement |
| NPDES | National Pollutant Discharge Elimination System |
| OCIMF | Oil Companies International Marine Forum |
| OIM | Offshore Installation Manager |
| OPITO | Offshore Petroleum Industry Training Organization |
| OSRV | Oil Spill Response Vessel/Marine Facility |
| OWS | Oily Water Separator |
| PFEER | Prevention of Fire and Explosion, Emergency Response Regulations |
| PIC | Person In Charge |
| POB | Personnel On Board |
| PPE | Personal Protective Equipment |
| PTW | Permit To Work |
| RDF | Radio Direction Finding |
| ROV | Remote Operated Vehicle |
| SART | Search and Rescue Transponder |
| SBV | Standby Vessel/Marine Facility |
| SCE | Safety Critical Elements |
| SMS | Safety Management System |
| SOLAS | International Convention for the Safety of Life at Sea |
| SOPEP | Shipboard Oil Pollution Emergency Response Plan |

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| Acronyms | |
|-----------------|---|
| STCW | International Convention on Standards of Training, Certification and Watchkeeping for Seafarers |
| SWL | Safe Working Load |
| TLP | Tension Leg Platform |
| UKOOA | United Kingdom Offshore Operators Association |
| UMS | Unattended Machinery Space |
| USCG | United States Coast Guard |

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5.0 PROCEDURE(S)

5.1 Contractual Arrangement Audit Management

5.1.1 Long Term Contracts

All BHPB Petroleum Operational Teams (Exploration, Development, Production & Marketing) should manage their business in such away so as to ensure that “Due Diligence” with respect to Marine Audits is achieved. This may include a process of “pre-qualification” for some contractors.

Long Term contractors shall complete all Marine Audit requirements that are designated for the class of vessel or services that they provide.

5.1.2 Spot Charters / Vessel of Opportunity

Spot Charter contractors shall meet the minimum audit requirements for the class of vessel or services that they provide.

Where this is not practicable an exemption form will be required which should be signed off by the Global Practices Leader – Marine HSE and by the Senior Line Manager (Production Unit Manager, Project Directors, Drilling Manager, Geophysical Project Manager) based on advice from the relevant HSE Manager (Appendix D).

Exemptions will be dealt with on a case by case basis and will require at a minimum that a risk analysis is completed and that an independent competent person completes a vessel inspection.


5.1.3 Vessel of Opportunity

Due to the nature of our business there may be occasions for a request for a “vessel of opportunity” when needed for offshore work. While these situations are sometimes needed and cost effective there are required HSE preparations to charter a vessel to conduct BHPB Petroleum controlled activities.

Respective HSE Departments and Global Practices Leader Marine HSE will need 1 week (at least 5 working days) minimum to ensure that the necessary HSE requirements and vessel’s suitability have been adequately assessed.

Ensure up to date MSA, or service contract or Charter Party Agreement is in place.


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HSE evaluation of contractor's HSE management system - or review of already approved contract and HSE evaluation.

Vessel audits

- Common Marine Inspection Document (CMID)
- Consider other Audits applicable to the class of the vessel
- Emergency Response Audit
- Conduct a HAZID / Risk assessment specific to the scope of work for the vessel or marine facility, including FRCP.
- Development of an HSE Plan and/or bridging document
- Conduct a Contract Kick-off meeting
- Assign a BHPB Representative to the Operation (should be relevant Operations Manager).

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5.2 Marine Vessel Audit Matrix

The Marine Vessel Audit Matrix is covered in Appendix B of this Protocol and outlines the recommended Audit for each type of vessel. The Audit scope for each vessel should be pre-determined by the HSE Manager and the Marine HSE Global Practices Leader and should be based on the following:

- Historical Data of Contractor, Vessel or Facility
- Scope of operation
- Location of the operation
- Associated risks involved with operation

| Marine HSE VESSEL CLASS AUDITS | | | | | | | | | | |
|---|---------------------------|--|-------------------------|--------------------------------------|---------------------------------|-----------------------------|-------------------|---|---|--|
| Pre Contract | Post Contract | | | | | | | | | |
| Safety Management System Review | Bridging Compliance Audit | Common Marine Inspection Document | WWD MODUSPEC Inspection | WWD Containment Integrity Inspection | HSE MS & FRCP Audit Check Sheet | HSE Critical Elements Audit | Lifting & Rigging | Emergency Response & Preparedness Audit | | |
| Contractor | | Contact GPL Marine HSE to Assess Requirements | | | | | | | | |
| All - "Spot Charter" " Vessel of Opportu | | | | | | | | | | |
| All - Long Term Charter/Contracts | | | | | | | | | | |
| Anchor Handling Vessel (AHVs) | ◆ | ◆ | ● | | ◆ | ■ | | | ◆ | |
| Offshore Supply Vessels (OSVs) | ◆ | ◆ | ● | — | ◆ | ■ | | | ◆ | |
| Seismic Vessel & Vessels contracted by GGO | | For Seismic Vessels all audits will be conducted on a case by case basis | | | | | | | | |
| Standy Vessels (SBVs) | ◆ | ◆ | ● | | ◆ | ■ | | | ◆ | |
| Dynamic Positioning (DP) Vessls | ◆ | ◆ | ● | | ◆ | ■ | | | ◆ | |
| Deepsea Installation Vessel (DSV) | ◆ | ◆ | ● | | ◆ | ■ | ▲ | | ◆ | |
| Rigs | ◆ | ◆ | ● | ♣ | — | ◆ | ■ | ▲ | ◆ | |
| Tankers | ◆ | ◆ | ● | | — | ◆ | ■ | ▲ | ◆ | |
| FPSO / TLP | ◆ | ◆ | ● | | — | ◆ | ■ | ▲ | ◆ | |

| Legend | |
|---|---|
| BHPB Audit | ◆ |
| BHPB Approved CMID Auditor | ● |
| BHPB Approved Lifting & Rigging Auditor | ▲ |
| BHPB Approved SCS&E Auditor | ■ |
| MODUSPEC Technical Inspection WWD 002 | ♣ |
| WWD Containment Inspection | — |

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5.3 Safety Management Systems Review

5.3.1 Purpose

An HSEC management systems review should usually be conducted prior to Vessel/Marine Facility contract award, with the purpose of:

- Confirming that all of the necessary elements of HSEC management are included within the contractor’s HSEC management system.
- Providing an indication of the capability of the contractor to deliver adequate HSEC performance based on historical records.

The ‘deliverables’ of such a review conducted at the pre-contract stage should be:

- Identification of weaknesses or problem areas in the contractor’s HSEC management systems which, if a contract should be awarded, would require attention when developing the HSEC Plan and any ‘bridging document’ required.
- A scope for the planned HSEC management systems audit.
- The MS Audit should include an equivalency comparison with BHPB’s Standards, FRCP’s and MS requirements under the IMO/ISM code of practices.


5.3.2 Timing

An HSEC Management Systems Review shall usually be made at an early stage as part of the prequalification assessment or prior to contract award if no formal prequalification exercise is carried out. Where BHPB has no direct or recent experience or knowledge of a proposed contractor, the assessment shall be made on a formal, documented basis.

A Safety Management Systems Review is considered appropriate where:


- A substantial marine contract is planned (Major Installation or multi Vessel/Marine Facility operations, long-duration, etc.)
- There are several available Vessel/Marine Facilities which are technically suitable.
- Where there are statutory requirements in the country of operations which require a formal tendering process, for example in the European Union (EU).
- Where there are statutory requirements in the country of operations for a formal tender and where there are concerns that (for example, local-) contractors with poorly-managed or poorly-equipped Vessel/Marine Facilities might offer a ‘low-bid’ for such a Vessel/Marine Facility which might not be desirable.

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At this early stage, consideration should be given to defining:

- The scope of audit of the contractor's HSEC management systems.
- The scope of the Vessel/Marine Facility inspection, based upon the protocol established in the Vessel/Marine Facility Matrix in Appendix B.

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5.4 Bridging Document

5.4.1 Purpose

Both BHPB Petroleum and Contractors have their own HSEC Management Systems. Prior to the commencement of any marine operational project, a 'Bridging Document' must be prepared in order to remove any uncertainties that might otherwise arise from any ambiguities or contradictions between the project's and the Contractors and HSEC-Management Systems or their components.

The intent in producing such a document is to establish and clearly define which of the systems – BHPB or Contractor - will take precedence during both routine operations and emergencies.

This is necessary in order to:


- Clarify and assign responsibilities.
- Establish and confirm the chain of command.
- Ensure that hazards are identified and controlled through a separate HAZID and Risk Analysis process.
- Ensure a proper response to incidents that may arise during the campaign.
- Identify and confirm operational procedures.

The Bridging Document will usually be between BHPB and the Lead contractor. The Lead contractor may execute all or part of the scope of work through subcontractors.

Third Party Service and Support Contractors also use Management Systems. Where the BHPB HSE Project Manager considers it appropriate, those Management Systems used by these contractors may also be included in the Bridging Document.

This Protocol is intended to provide guidance on the procedures used in constructing the 'Bridging Document', which should interface between the Project's and the Contractor's HSEC and Marine Management Systems.

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5.5 Common Marine Inspection Document (CMID)

The purpose of the Common Marine Inspection Document is to reduce the number of audits carried out on individual marine Vessel/Marine Facilities, together with the adoption of a common auditing standard for the Offshore Marine Industry. This is achieved by sharing audit reports amongst IMCA and UKOOA members. If there is a requirement to audit a Vessel/Marine Facility, the company requesting the audit shall first ascertain the date when the last audit was conducted, using this format. If the audit is more than one year old then a new audit shall be conducted. A competent and independent third party completes the audit.

If the audit is less than year old the status of corrective actions identified in the audit should be ascertained to determine vessels approach and diligence in closing actions and HSE in general. If deficient in this area another CMID may be warranted.


If the audit is less than a year old and vessel has changed management or completed a shipyard or major overhaul period another CMID is warranted.

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5.6 MODUSPEC Inspection (WWD)

For Rig specific Audits & Inspections please defer to (WWD 002 Section 3 “Rig Inspection & Audits”)


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5.7 Containment Integrity Inspection (WWD & Tank Vessels)

Defer to (WWD 002 Section 3 “Rig Inspection & Audits” Containment Audit 3.16)

This Audit is to ensure that all containment measures are in place during the loading carrying or discharging of products to or on behalf of a BHPB vessel or facility.

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5.8 HSEC MS and FRCP Audit Check Sheet

5.8.1 Purpose & Timing

The HSEC management systems audit has two components.

1. A comprehensive document process outlining policies and procedures (Pre-Qualification)
2. Physical Evidence (observed On Site) that the policies and procedures stated in the SMS are being implemented utilizing the HSE MS and FRCP.

The purpose of these HSE MS Audit Check Sheet audits is to:

- Assess the contractor's compliance with their own HSEC management systems, including implementation of the systems on board at the Vessel/Marine Facility.
- Confirm compliance by the contractor with the formation of a 'bridging document', which should then be checked against the vessel/facility when it is completed to ensure compliance and roll out effectiveness.
- Assess the contractor's compliance with their own 'HSEC Plan'.
- Confirm that the contractor meets the relevant HSEC provisions in the contract


The audit should determine the effectiveness of the contractor's HSEC management systems, identify weaknesses in the systems and the corrective actions required to improve ineffective systems.

Any deficiencies identified in the contractor's HSEC management system shall be documented, discussed and corrective actions and the timing of their implementation agreed.

In developing the HSEC management systems audit scope the following should be considered:

- Any areas of weakness identified in the HSEC management systems review carried out at the pre-award stage of the project
- Recent audit history, recommendations arising and follow-up actions, particularly any outstanding actions (it is recommended that a selection of actions noted as closed be physically verified).
- Recent operating history of the Vessel/Marine Facility such as safety performance, area of operations etc.
- Previous knowledge of the contractor's HSEC management systems, for example from contracted services in other BHPB projects.
- BHPB's Joint Venture Partner or other Operators experience which may be available.

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5.8.2 FRCP

Fatal Risk Controls shall be communicated to the contractor prior to operation commencement in conjunction with the BHPB Fatal Risk Control “Self Assessment”.

The purpose of this Audit is:

- To define the procedures that shall apply in order to ensure that all Marine contractors comply with the requirements of BHPB Fatal Risk Controls.
- To outline the general requirements of any Fatal Risk Control audit undertaken within BHPB Petroleum.

Preparation time for the audit should include some time in the operations base, prior to visiting the Vessel/Marine Facility, to review documentation paperwork and identify the adequacy of the contractor’s HSEC management systems to comply with the requirements of BHPB Fatal Risk Controls.

To ensure that time on Vessel/Marine Facility is used productively, some documents must be reviewed prior to the Vessel/Marine Facility visit. Such a review will allow the audit team to evaluate the contractor’s systems and to determine whether they are adequate to allow Vessel/Marine Facility personnel to effectively manage fatal risks and controls. If risk are not adequately controlled or do not comply they will be noted in the Audit findings as an action item that shall be completed by an agreed date.

Documents to be reviewed should include:


HSEC Management System Documents

- Review of the Contractor and Supplier HSEC MS and FRCP Audit Checklist, Form No. PF11.01
- Vessel/Marine Facility PTW system
- Vessel/Marine Facility Training Matrix
- Vessel/Marine Facility Safety Critical Procedures

Vessel/Marine Facility or Facilities Standard Operating Procedures


- Confined Space Entry
- Working at Height
- Isolation Procedure
- Hazardous Materials Register
- Selection of maintenance records
- Dropped Object Register

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- Lifting Operations Procedures
- Equipment Safeguarding Procedures
- Light vehicles/surface mobile equipment procedure (mobile crane operations alongside forklifts, etc.)

The FRC Audit Team should consist of experienced line management and HSE personnel from BHPB Petroleum.

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5.9 HSE – Critical Elements

HSE- Critical Elements comprise of the following:

- **Critical Activity** – An activity or activities where conduct outside expected performance has the potential to result in a Major Accident Event.
- **Critical Equipment** – A piece of equipment or a structure whose failure, or not performing to design specification, has the potential to result in a Major Accident Event.
- **Critical Procedure** – A procedure (or step in a procedure) divergence from which has the potential to result in a Major Accident Event.
- **Critical System** – A system (hardware or software, including human behaviour) whose operation outside expected performance has the potential to result in a Major Accident Event

The Equipment inspection and audit procedures must be developed to ensure the proper maintenance and operations of HSEC-critical elements.

HSEC-critical elements provided by service contractors and suppliers for use on any BHPB-operated vessel are subject to verification by an independent, competent person.


Prior to being put in service on a vessel/marine facility, the person responsible for the vessel shall ensure to their own satisfaction that the HSEC-critical elements supplied have been designed, constructed, tested, commissioned and installed on the vessel/marine facility that they will operate safely.

Also, ensure that operators of the HSEC-critical elements are appropriately trained and qualified.

Routine testing of HSEC-critical equipment and systems shall be implemented where necessary to ensure that such equipment or systems are maintained in good operating conditions. Such tests should be conducted by competent persons and should be witnessed by or on behalf of BHPB when deemed appropriate.

Routine Audits of Safety Critical Elements shall be conducted both prior to and after start up, and periodically thereafter, as provided for in the SCE Audit Check Sheet.

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5.10 Lifting & Rigging Audit

All Specialized Vessels with complex rigging profiles (Rigs, Installation Vessels, Lift vessels etc)

The purpose of this Audit is to ensure that all Marine Operations and related equipment complies with the relevant BHPB Petroleum Lifting Operations guideline.

It includes all types of lifting gear, cargo containers (CCU's) and personnel carrying units and includes cranes and hoists, transportable tanks (tote tanks), slings, shackles, chains, etc,

This standard should be used by BHPB Petroleum in all Marine operations and includes contractors or subcontractors on Marine Vessels, Facilities, Rigs, Shore bases operated, where BHPB Petroleum is the operator and at all BHPB Petroleum controlled sites.

Marine Mooring Equipment should not be included in the lifting and rigging Procedures but should follow the IMCA guidelines and are captured within the CMID

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5.11 Emergency Response Audit Check Sheet

The Emergency Response Audit Check Sheet reviews vessel & marine facilities with respect to:

- Emergency Response Preparedness
- Emergency Response Training
- Emergency Response Drills
- Emergency Response Effectiveness

The Audit review shall include a general review of the Vessel/Rig/Facilities Emergency Response Process and its alignment with the:

- Emergency Response Audit Check Sheet
- Interviews with the vessels crew involved with Emergency Response Plans
- Observations of Drills
- Review of Emergency Response Documentation
- Review of Drill Logs

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6.0 RESPONSIBILITIES

Production Unit Manager, Project Director, Geophysical Project Manager, or Drilling Manager - ensure that the Marine Audit Protocols are followed.

Global Practices Leader Marine HSE

- Review the process every two years and ensure that any external revisions relating to the Audit protocols (CMID, SOLAS, MARPOL, etc.) are captured and amended where applicable.
- Review "Vessel of opportunities" requests and risk access with the Production Unit HSE Manager prior to Sign off on "Policy Exemption Form."

Project, Drilling or Production Unit HSE Team Leader

- Review & schedule Marine Audits
- To ensure that all vessels/facilities receive a BHPB Orientation package including posters, FRCP booklets, etc.
- To ensure that all vessels/facilities receive the appropriate level of support to introduce our Fatal Risk Control Protocols
- To ensure that all vessels/facilities are subject to the audits outlined in this Protocol or as otherwise agreed with the Global Practices Leader Marine HSE
- To ensure that "Vessel of opportunity" requests are risk accessed with the GPL Marine HSE (or Risk Group) and a policy exemption form is signed by both parties
- To ensure that all vessels operating for BHP Billiton Petroleum operations submit a voyage management plan & POB update for every voyage. Passage Plans shall be sent to the Area Shore Base Manager and POB's logged with the Emergency Communications Centre (ECC) in London on a daily basis.

Senior Site Representative

- To ensure that all vessels that are operating with BHPB that call into the shore base are visited on every port visit to encourage two way feedback and to develop a strong safety culture
- To ensure that BHPB safety expectations are fully understood by all crew members and to ensure all "new" crewmembers receive a BHPB Orientation
- To ensure that all vessels operating within the shore base region submit voyage management plans and POB's to the Shore Base Manager

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7.0 RECORDS

7.1 Marine Audit Document Control

The respective BHPB Petroleum Operations Representative who requests a Marine Audit shall be responsible for the assignment of a document control number for each individual Audit.

The document number should reside with the operation but there should be a link to a common location in Documentum under Global Practices (Marine HSE) under the file name of the specific vessel for which they are associated provide a path or simply ask that a copy be forwarded to the Marine HSE Global Practices Leader.

This will allow for Marine Audit Data and archives to be referenced for future use.

8.0 UPDATES TO THIS DOCUMENT

This is a Petroleum HSE Controlled Document. Requests for updates to Petroleum HSE Controlled Documents shall be documented on the Petroleum HSE Document – Update Request Form and sent to the **Petroleum HSE Systems Support** email in the GAL.

9.0 ATTACHMENTS

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Appendix A – Vessel / Marine Facility Types

| Table A | |
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| Vessel / Marine Facility Type | Operation |
| Anchor Handling Vessel | Supporting Rig Operations or Facility Mooring |
| Offshore Supply Vessel | Supporting all Marine Activities |
| Stand-By Vessel | Supporting all Marine Activities |
| Seismic Vessel | Seismic Operations |
| Seismic Support Vessel | Supporting Seismic Operations |
| Deep Sea Installation Vessel | Installation of Facility and Sub Sea Infrastructure |
| Rigs (MODU, Jack up) | Drilling Operations |
| Drill Ships | Drilling Operations |
| Tankers | Off Takes & Shuttle Tankers |
| Dive Support Vessel | Supporting Sub-sea, Rig & Marine Facility Operations |
| ROV Vessel | Supporting Sub-sea, Rig & Marine Facility Operations |
| Barges | Supporting Well Test & Installation Operations |
| Tug Boats | Supporting all Marine Activities |
| Geotechnical vessels/platforms | Geotechnical Investigations |
| Survey Vessels | Multibeam, geophysical, geotechnical survey operations |
| Accommodation Vessels | Support Offshore construction |
| CALM Buoy | Support “Offtake Operations” |
| FPSO / TLP | Production Facility |