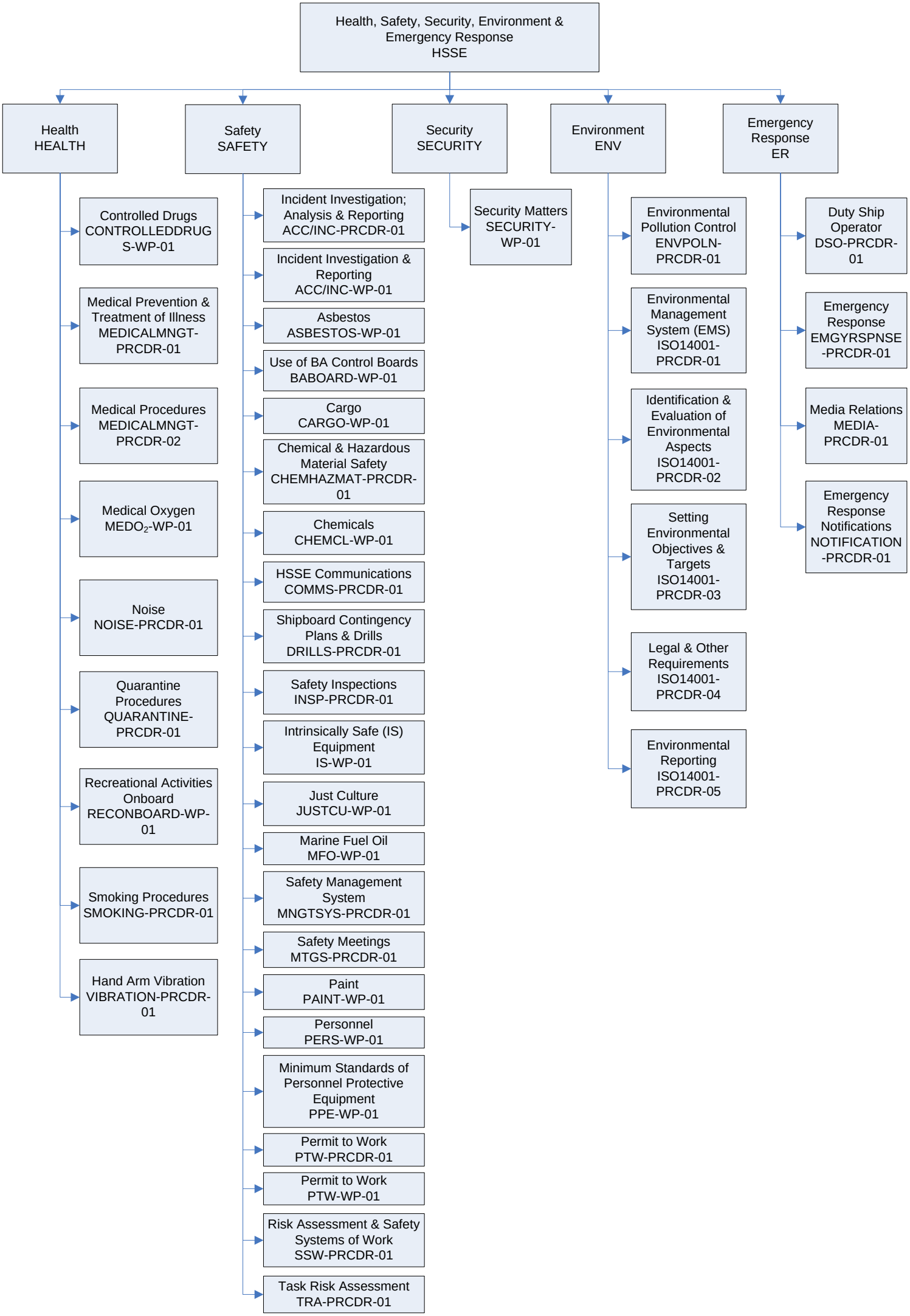
Health, Safety, Security, Environment & Emergency Response
HSSE
Health
HEALTH
Safety
SAFETY
Security
SECURITY
Environment
ENV
Emergency Response
ER
Controlled Drugs
CONTROLLEDDRUGS-WP-01
Medical Prevention & Treatment of Illness
MEDICALMNGT-PRCDR-01
Medical Procedures
MEDICALMNGT-PRCDR-02
Medical Oxygen
MEDO2-WP-01
Noise
NOISE-PRCDR-01
Quarantine Procedures
QUARANTINE-PRCDR-01
Recreational Activities Onboard
RECONBOARD-WP-01
Smoking Procedures
SMOKING-PRCDR-01
Hand Arm Vibration
VIBRATION-PRCDR-01
Incident Investigation; Analysis & Reporting
ACC/INC-PRCDR-01
Incident Investigation & Reporting
ACC/INC-WP-01
Asbestos
ASBESTOS-WP-01
Use of BA Control Boards
BABOARD-WP-01
Cargo
CARGO-WP-01
Chemical & Hazardous Material Safety
CHEMHAZMAT-PRCDR-01
Chemicals
CHEMCL-WP-01
HSSE Communications
COMMS-PRCDR-01
Shipboard Contingency Plans & Drills
DRILLS-PRCDR-01
Safety Inspections
INSP-PRCDR-01
Intrinsically Safe (IS) Equipment
IS-WP-01
Just Culture
JUSTCU-WP-01
Marine Fuel Oil
MFO-WP-01
Safety Management System
MNGTSYS-PRCDR-01
Safety Meetings
MTGS-PRCDR-01
Paint
PAINT-WP-01
Personnel
PERS-WP-01
Minimum Standards of Personnel Protective Equipment
PPE-WP-01
Permit to Work
PTW-PRCDR-01
Permit to Work
PTW-WP-01
Risk Assessment & Safety Systems of Work
SSW-PRCDR-01
Task Risk Assessment
TRA-PRCDR-01
Security Matters
SECURITY-WP-01
Environmental Pollution Control
ENVPOLN-PRCDR-01
Environmental Management System (EMS)
ISO14001-PRCDR-01
Identification & Evaluation of Environmental Aspects
ISO14001-PRCDR-02
Setting Environmental Objectives & Targets
ISO14001-PRCDR-03
Legal & Other Requirements
ISO14001-PRCDR-04
Environmental Reporting
ISO14001-PRCDR-05
Duty Ship Operator
DSO-PRCDR-01
Emergency Response
EMGYRSPNSE-PRCDR-01
Media Relations
MEDIA-PRCDR-01
Emergency Response Notifications
NOTIFICATION-PRCDR-01

HSSE Index

Health, Safety, Security, Environment Emergency Response

Manual Type / Discipline	Section in Manuals	Sub-Section	Document Type	Consequtive Number	Document Title	Master	Chief Officer	2nd Officer	3rd Officer	OOW	deck cadet	Safety Officer	Chief Engineer	2nd Engineer	3rd Engineer	4th Engineer	Junior Engineer	ETO	Cargo Engineer	engine cadet	bosun	pump man	Fitter	cook	catering rating	deck rating	engine rating	All Office Roles
HSSE	ENV	ENVPOLN	PRCDR	01	Environmental Pollution Control	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	ENV	ISO14001	PRCDR	01	Environmental Management System (EMS)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	ENV	ISO14001	PRCDR	02	Identification & Evaluation of Environmental Aspects	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	ENV	ISO14001	PRCDR	03	Setting Environmental Objectives & Targets																							x
HSSE	ENV	ISO14001	PRCDR	04	Legal & Other Requirements	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	ENV	ISO14001	PRCDR	05	Environmental Reporting	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	ER	DSO	PRCDR	01	Duty Ship Operator	x																						
HSSE	ER	EMGYRSPNSE	PRCDR	01	Emergency Response	x																						
HSSE	ER	MEDIA	WP	01	Media Relations	x							x															
HSSE	ER	NOTIFICATION	PRCDR	01	Emergency Response Notification	x																						

HSSE Index

Health, Safety, Security, Environment Emergency Response

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HSSE	HEALTH	CONTROLLEDDRUGS	WP	01	Controlled Drugs	x																						
HSSE	HEALTH	MEDICALMNGT	PRCDR	01	Medical Prevention and Treatment of Illness	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
HSSE	HEALTH	MEDICALMNGT	PRCDR	02	Medical Procedures	x	x																					
HSSE	HEALTH	MEDO2	WP	01	Medical Oxygen	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	HEALTH	NOISE	PRCDR	01	Noise	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	HEALTH	QUARANTINE	PRCDR	01	Quarantine Procedures	x	x																					
HSSE	HEALTH	RECONBOARD	WP	01	Recreational Activities Onboard	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
HSSE	HEALTH	SMOKING	PRCDR	01	Smoking Procedures	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
HSSE	HEALTH	VIBRATION	PRCDR	01	Hand Arm Vibration	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
HSSE	SAFETY	ACC/INC	PRCDR	01	Incident Investigation; Analysis & Reporting	x	x					x	x	x														x

HSSE Index

Health, Safety, Security, Environment Emergency Response

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HSSE	SAFETY	ACC/INC	WP	01	Incident Investigation and Reporting	x	x					x	x	x														x
HSSE	SAFETY	ASBESTOS	WP	01	Asbestos	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	BABOARD	WP	01	Use of BA Control Boards	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	CARGO	WP	01	Cargo	x	x	x	x	x	x																	
HSSE	SAFETY	CHEMCL	WP	01	Chemicals	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	CHEMHAZMAT	PRCDR	01	Chemical and Hazardous Material Safety	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	COMMS	PRCDR	01	HSSE Communications	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								x
HSSE	SAFETY	DRILLS	PRCDR	01	Shipboard Contingency Plans & Drills	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	INSP	PRCDR	01	Safety Inspections	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	IS	WP	01	Intrinsically Safe (IS) Equipment	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

HSSE Index

Health, Safety, Security, Environment Emergency Response

Manual Type / Discipline	Section in Manuals	Sub-Section	Document Type	Consequtive Number	Document Title	Master	Chief Officer	2nd Officer	3rd Officer	OOW	deck cadet	Safety Officer	Chief Engineer	2nd Engineer	3rd Engineer	4th Engineer	Junior Engineer	ETO	Cargo Engineer	engine cadet	bosun	pump man	Fitter	cook	catering rating	deck rating	engine rating	All Office Roles
HSSE	SAFETY	JUSTCU	WP	01	Just Culture	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	MFO	WP	01	Marine Fuel Oil								x	x	x	x	x		x	x								
HSSE	SAFETY	MNGTSYS	PRCDR	01	Safety Management System	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	MTGS	PRCDR	01	Safety Meetings	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	PAINT	WP	01	Paint																					x	x	
HSSE	SAFETY	PERS	WP	01	Personnel	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	PPE	WP	01	Minimum Standards of Personal Protective Equipment	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	PTW	PRCDR	01	Permit To Work	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	PTW	WP	01	Permit to Work	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
HSSE	SAFETY	SSW	PRCDR	01	Risk Assessment & Safety Systems of work	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								

HSSE Index

Health, Safety, Security, Environment Emergency Response

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HSSE	SAFETY	TRA	PRCDR	01	Task Risk Assessment	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x								
HSSE	SECURITY	SECURITY	WP	01	Security Matters	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Health, Safety, Security & Environment (HSSE) - Contents Page

Health

1. Applicable Roles
2. When working with cargoes the following should be considered
    2.1 Cargoes

Chemicals – Working Practice **HSSE-SAFETY-CHEMCL-WP-01**

1. Applicable Roles
2. Use and Storage of Chemicals
    2.1 Assessments of Chemicals
    2.2 Stowage and Handling of Chemicals

Chemical & Hazardous Material Safety – Procedure **HSSE-SAFETY-CHEMHAZMAT-PRCDR-01**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
    4.1 Purchase & Supply
    4.2 Hazard Information
    4.3 Packaging
    4.4 Storage
    4.5 Handling Onboard
    4.6 Maintenance of Controls
    4.7 Disposal
5. Information, Instruction and Training
6. Records
7. Responsibilities

HSSE Communications - Procedure **HSSE-SAFETY-COMMS-PRCDR-01**

1. Applicable
2. Object
3. Scope
4. Procedure
    4.1 Definition / Purpose
5. Reporting Requirements
6. Time Charter Ship Reporting
7. Reporting to BP Oil

Shipboard Contingency Plans & Drills - Procedure **HSSE-SAFETY-DRILLS-PRCDR-01**

1. Applicable
2. Object
3. Scope
4. Requirements
5. Records
6. LNG

Safety Meetings – Procedure **HSSE–SAFTEY-MTGS–PRCDR-01**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
    - 4.1 Safety Officer
    - 4.2 Safety Representative (not applicable on coastal vessels)
5. Responsibilities

Paint – Working Practice **HSSE-SAFETY-PAINT-WP-01**

1. Applicable Roles
2. Exposure to Paint
    - 2.1 Paint Spraying
    - 2.2 General Precautions
    - 2.3 Eye Protection
    - 2.4 Ingestion
    - 2.5 Inhalation
    - 2.6 Personal Hygiene
    - 2.7 Skin Contact
    - 2.8 Smoking
    - 2.9 Spillages
    - 2.10 Storage and Handling of Flammable Liquids

Personnel – Working Practice **HSSE–SAFETY-PERS–WP-01**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
    - 4.1 Master
    - 4.2 Safety Officer
    - 4.3 Safety Representative (not applicable on coastal vessels)

Minimum Standards of Personal Protective Equipment – Working Practice **HSSE-SAFETY-PPE-WP-01**

1. Applicable Roles
2. Provision of Protective Clothing and Equipment
    - 2.1 Selection of PPE
    - 2.2 Maintenance of Protective Clothing and Equipment
    - 2.3 Storage of Immersion Suits
    - 2.4 Eyewash Solutions

Personal Protective Equipment – Selection Matrix

Risk Based Permit to Work System – Procedure **HSSE-SAFETY-PTW-PRCDR-01**

1. Applicable Roles

Security

Security Matters – Working Practices **HSSE-SECURITY-SECURITY-WP-01**

Environment

Environmental Pollution Control - Procedure **HSSE–ENV–ENVPOLN-PRCDR-01**

Environmental Management System (EMS) - Procedure **HSSE–ENV-ISO14001–PRCDR-01**

Identification & Evaluation of Environmental Aspects - Procedure **HSSE–ENV–ISO14001-PRCDR-02**

3. Scope
4. Procedure
5. Records
6. Responsibilities

Environmental Management System – Significance Screen

Setting Environmental Objectives & Targets - Procedure **HSSE-ENV-ISO14001-PRCDR-03**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
5. Records
6. Responsibilities

Legal & Other Requirements - Procedure **HSSE–ENV–ISO14001-PRCDR-04**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
5. Records
6. Responsibilities

Environmental Reporting - Procedure **HSSE–ENV-ISO14001-PRCDR-05**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
5. Records
6. Responsibilities

Emergency Response

Duty Ship Operator - Procedure **HSSE-ER-DSO-PRCDR-01**

1. Applicable Roles
2. Object
3. Scope
4. Procedure
5. Records
6. Responsibilities

Emergency Response – Procedure **HSSE-ER-EMGYRSPNSE-PRCDR-01**

1. Applicable Roles
2. Object

Environmental Pollution Control - Procedure

1. Applicable Roles

All operated and managed vessels
Vessel Superintendents

2. Object

To ensure all discharges, emissions and environmental impacts from vessels are kept to a minimum and where possible are less than those stated in Flag State and Local Government statutory regulations.

3. Scope

This procedure shall apply to all vessels operated and managed by BP Shipping Ltd.

4. Procedure

4.1 Atmospheric Emissions

The requirements of Marpol 73/78 Annex VI and any subsequent amendments shall apply to air pollution from vessels, at all times. This includes SOx, NOx, and ozone depleting substances.

The requirements of the UK Clean Air Act of 1993 and any subsequent amendments shall apply to all smoke emissions from vessels.

Excluding the purpose of the securing the safety of life at sea or damage to the ship or its equipment, the release of Ozone depleting substances shall be kept to the absolute minimum.

a. The Shipboard incinerator is not to be used when vessel is:-

- Inside ports, harbors and estuaries
- In the Baltic Sea, Californian waters, Svalbard, Antarctic and Great Barrier reef areas

b. Cargo vapour emissions to the atmosphere shall be minimised. Where both vessel and terminal are suitably equipped vapour recovery systems shall be used.

4.2 Garbage

a. The vessel shall ensure that all garbage is disposed of in accordance with Marpol 73/78 Annex V.

b. Collection, separation, processing and disposal of garbage shall be in accordance with the procedures contained in the vessel's Garbage Management Plan – CD 9.1.

4.3 Sewage

a. The vessel shall ensure that sewage is discharged in accordance with Marpol 73/78 Annex IV

b. The vessel's approved sewage treatment plant shall be maintained and used at all times.

4.4 Oil

a. The vessel shall ensure that all discharges of oil or oily mixtures are in accordance with Marpol 73/78 Annex 1.

b. Where oil or oily mixtures are disposed of to shore reception facilities, the Master should obtain a receipt and append this to the Oil Record Book.

5. Records

5.1 All transfers and discharges of oils and oily mixtures shall be recorded in the Oil Record Book Part 1 [Machinery Spaces] and/or Part 2 [Cargo Ballast Operations].

5.2 A record of use of the incinerator shall be maintained in the Oil Record Book (Part 1), [Machinery Spaces] for disposal of oil residues. A record should be maintained in the garbage disposal record book for incineration of solid material.

5.3 A record of all garbage disposal shall be maintained in the Garbage Disposal Record book. Where shore side reception facilities exist garbage may be landed ashore and effort made to obtain a receipt.

5.4 A record of reviewing pollution prevention controls and practices should be kept in the HSSE Committee minutes and the HSSE Area Inspection Record Book.

6. Responsibilities

6.1 The vessel's superintendent has overall responsibility for ensuring vessel compliance with all pollution control requirements.

6.2 The Master is responsible for ensuring on board compliance with

all procedures for pollution control.

6.3 The Chief Engineer is responsible for ensuring compliance with on board procedures for sewage, shipboard incineration and funnel emissions.

6.4 The Chief Engineer is responsible for ensuring that the sewage treatment, shipboard incinerators, oil discharge monitoring and control system and the oily water separator equipment are maintained in an operational condition.

6.5 The Chief Officer is the designated oil pollution prevention officer and responsible for minimising cargo vapour emissions

6.6 The deck OOW is responsible for ensuring that garbage disposed to sea or shore reception facilities in port is in accordance with Marpol 73/78 Annex V.

6.7 The ship's safety officer is responsible for reviewing pollution prevention procedures, control practices and equipment when conducting HSSE area inspections.

Environmental Management System (EMS) - Procedure

1. Applicable Roles

All

2. Object

To provide an environmental management system within which significant aspects recorded, objectives and targets are established and monitored and achievements recorded which can demonstrate continual improvement in our commitment to minimising damage to the environment through our operations.

3. Scope

This procedure applies to the activities that are carried out in the following areas of BP Shipping:

3.1 BP Shipping offices.

3.2 BP Shipping managed and operated vessels.

3.3 BP Shipping time and voyage charter vessels.

4. Procedure

4.1 Environmental aspects are to be identified and significance determined as detailed in HSSE–ENV–ISO14001–PRCDR–02

4.2 Environmental targets and objectives are set and reviewed on annual basis as detailed in HSSE–ENV–ISO14001–PRCDR-03

4.3 An environmental legislation register is maintained by the Environmental Representative as detailed in HSSE–ENV–ISO14001–PRCDR–04

4.4 The Environmental Management System shall be held as a controlled document

4.5 Progress against the completion of the relevant objectives and targets is to be provided to the Chairman of the Fleet Ops HSSE Meeting by the responsible person where it will be recorded in the minutes of the meeting.

4.6 Progress review of EMS or completion of objectives and targets is to be provided to the Chairman of the Management Review Meeting for discussion with attendees, who will agree on progress and any further actions necessary for satisfactory

completion.

5. Records

Environmental Management System controlled document HSSE-ENV-ISO14001-GLOBALCD-01

HSSE Meeting Minutes

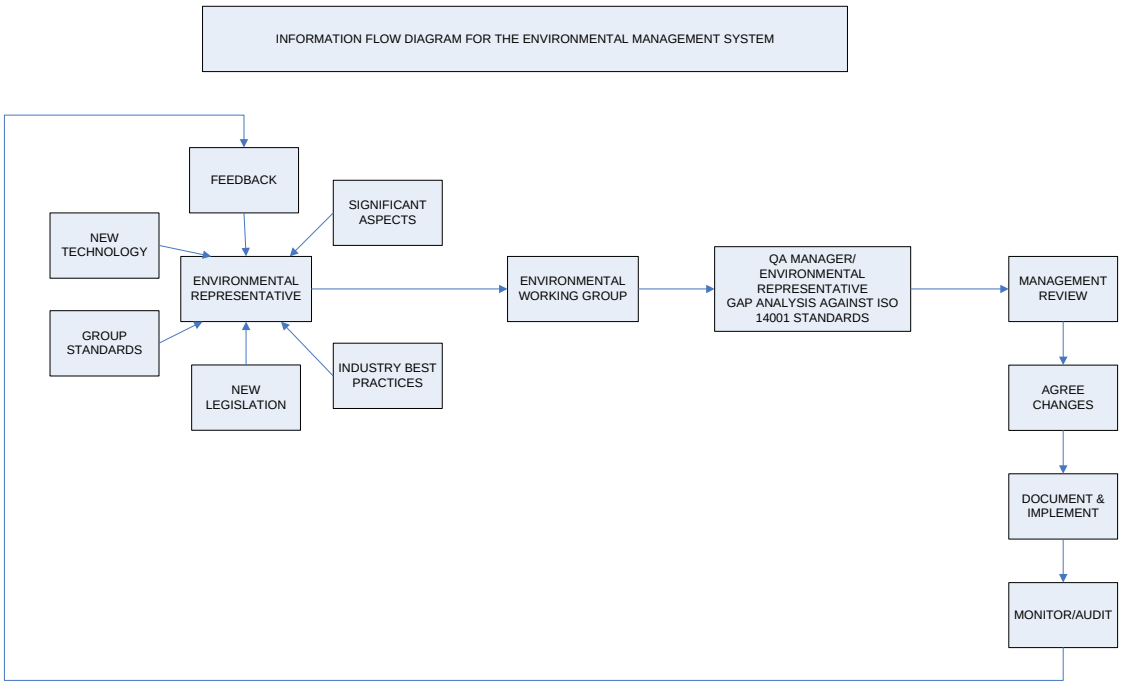
HSSE Meeting Minutes

6. Responsibilities

The Environmental Representative will:

- present an Environmental Management Programme to the Management Review Meeting for approval by the Management Team. The Chairman of the Management Review Meeting will ensure details are recorded in the Minutes of the meeting.
- develop an environmental management programme and present issues to the Fleet Ops HSSE meeting for review and comment .

Implementation will be by the BP Shipping Leadership team.



Identification & Evaluation of Environmental Aspects - Procedure

1. Applicable Roles

All

2. Object

To identify environmental aspects of BP Shipping, examine, evaluate and determine those which are significant.

3. Scope

This procedure applies to the activities that are carried out in the following areas of BP Shipping:

3.1 BP Shipping Offices

3.2 BP Shipping operated and managed vessels

3.3 BP Shipping time and voyage charter vessels

4. Procedure

All relevant identified environmental aspects are discussed at the Fleet Ops HSSE Meeting

4.1 Contributions to the discussion may be received from, but not limited to the following sources:

- Observation by ships' staff and office-based staff as per QA-DOCNTRL-DCR-WP-01
- Scanning articles from technical press
- Review of environmental audit findings
- Analysis of Non-Compliances
- Analysis of complaints
- Feedback from Regulatory Bodies
- Feedback from suppliers and customers
- BP Group requirements

4.2 Establishing Significance

At least once a year the Environmental Representative is to review the criteria and establish significance and make any recommendations for change to the Management Review Meeting.

a. Criteria for establishing Past, Current, Future, Normal, Abnormal, and Emergency significant aspects comprises an evaluation

based on YES/NO detailed in the significance screen flow diagram.

b. Definitions:

Past - Past Activities
Current - Current Activities
Future - Planned Activities

Normal operating condition - routine working condition
Abnormal operating condition - a planned but not normal working condition
Emergency - incidents, accidents and potential emergencies.

c. Details of existing controls are described and responsibilities are defined on the evaluation sheet.

4.3 All other aspects are classed as non-significant.

4.4 Once the BPS Environmental working group has identified the significance of aspects, and agreed by the management review. This will be recorded in the minutes of the meeting and the Environmental representative will ensure the Significant Aspects Register is updated with the new information.

4.5 The aspects register is maintained as a Controlled Document

5. Records

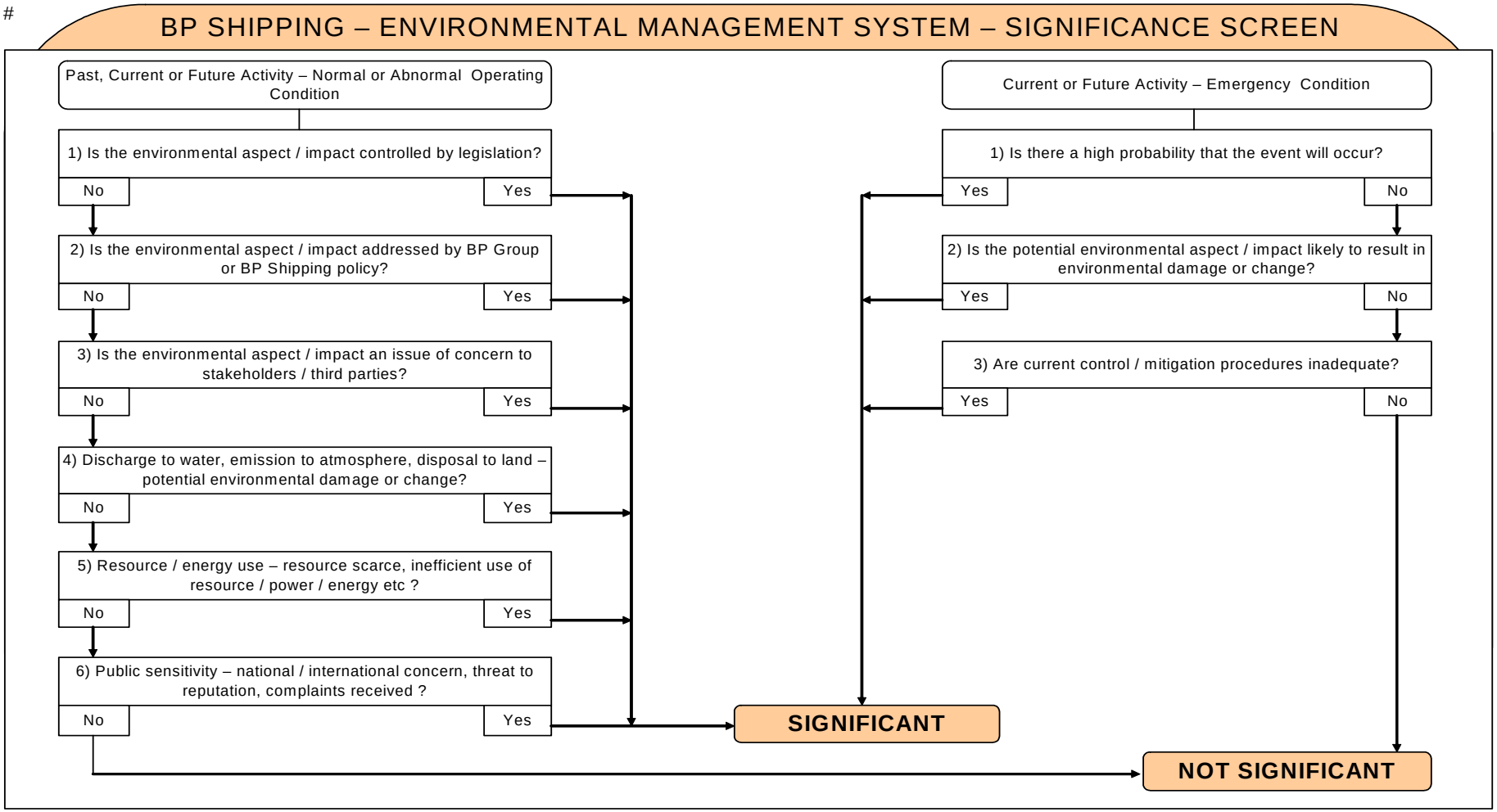
Current version of Aspects Register
Current version of Significance Screen
Management Review Meeting Minutes

The Environmental Representative is responsible for collating potential significant aspects and advising the Environmental working group and for updating the Significant Aspects Register.

6. Responsibilities

The Environmental Representative is responsible for reviewing the criteria of the significance screen and to make recommendations to the Environmental working group. Agreed changes are to be provided by the Environmental Representative to the Management Review Meeting.

#


BP SHIPPING – ENVIRONMENTAL MANAGEMENT SYSTEM – SIGNIFICANCE SCREEN
Past, Current or Future Activity – Normal or Abnormal Operating Condition
1) Is the environmental aspect / impact controlled by legislation?
No
Yes
2) Is the environmental aspect / impact addressed by BP Group or BP Shipping policy?
No
Yes
3) Is the environmental aspect / impact an issue of concern to stakeholders / third parties?
No
Yes
4) Discharge to water, emission to atmosphere, disposal to land – potential environmental damage or change?
No
Yes
5) Resource / energy use – resource scarce, inefficient use of resource / power / energy etc ?
No
Yes
6) Public sensitivity – national / international concern, threat to reputation, complaints received ?
No
Yes
Current or Future Activity – Emergency Condition
1) Is there a high probability that the event will occur?
Yes
No
2) Is the potential environmental aspect / impact likely to result in environmental damage or change?
Yes
No
3) Are current control / mitigation procedures inadequate?
Yes
No
SIGNIFICANT
NOT SIGNIFICANT

Setting Environmental Objectives & Targets - Procedure

1. Applicable Roles

Environmental Representative
BP Shipping Environmental Working Group Representatives

2. Object

To provide a system whereby environmental objectives and targets are set for the BP Shipping Environmental Management system that are based on the significant aspects.

3. Scope

This procedure applies to the activities that are carried out in the following areas of BP Shipping:

3.1 BP Shipping offices.

3.2 BP Shipping operated and managed vessels.

3.3 BP Shipping operated and managed vessels.

4. Procedure

4.1 Objectives and targets shall be set based on significant environmental aspects, legal, and adequacy of existing controls with the aim of reducing the overall impact of BP Shipping operations on the environment.

4.2 Objectives and targets are reviewed on an annual basis by the Environmental representative.

4.3 The objectives and targets will be developed by the Environmental Representative and the BPS Environmental Working Group. Financial, operational, and business requirements are key considerations presented during the development process. Details are to be recorded in the Minutes of the meeting.

4.4 Details of objectives and targets are to be documented which shows time-scales, responsibilities and availability of resources.

4.5 Each objective and target will be assigned to a person responsible for completing the agreed action within the agreed time-scale.

4.6 The developed objectives and targets will be presented at the

Management Review Meeting. Details are to be recorded in the Minutes of the meeting.

4.7 Relevant Environmental Objectives and Targets are updated and tracked during the Fleet Ops HSSE Meetings.

5. Records

Current version of Significant Aspects Register

Current version of Significance Screen

Fleet Ops HSSE Meeting Minutes

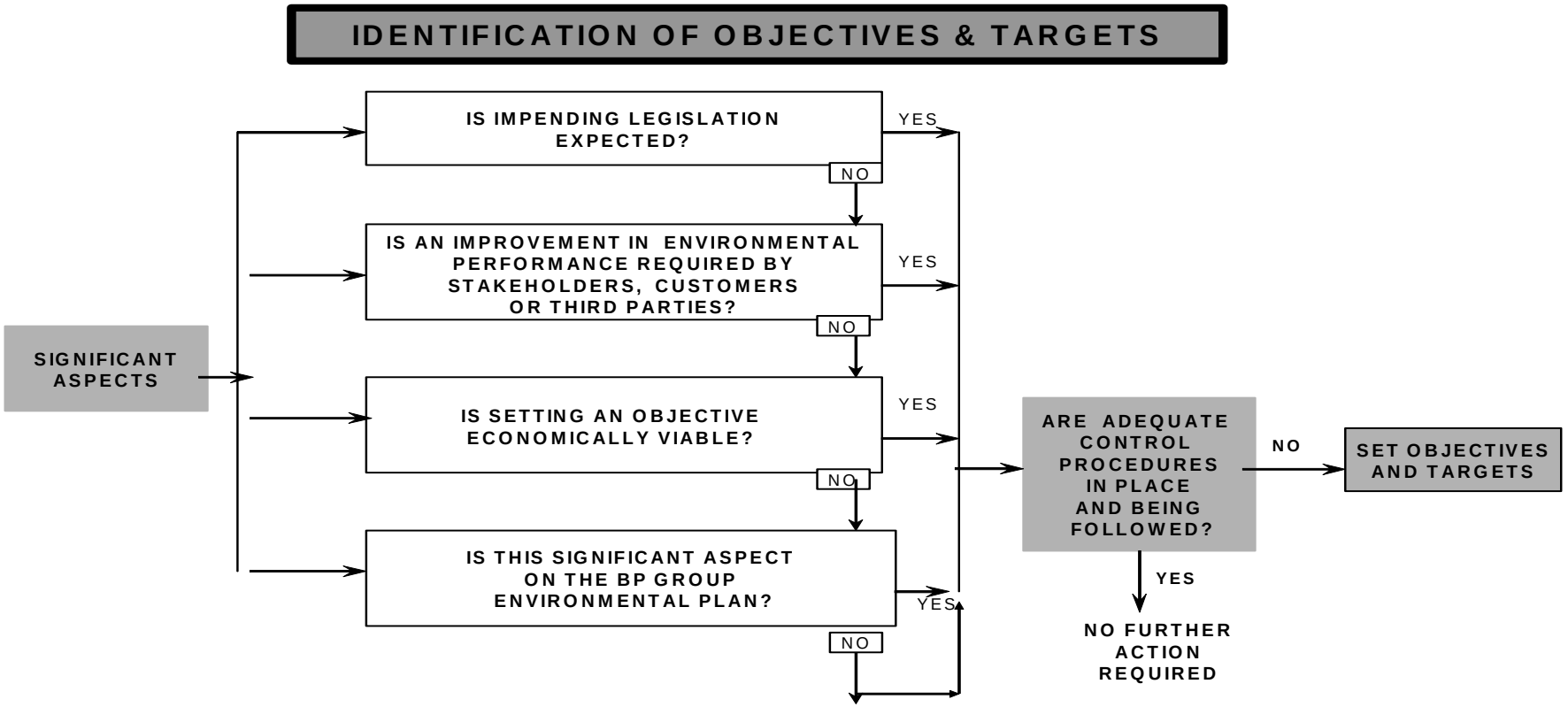
Management Review Meeting Minutes

BPS Environmental Working Group Meeting Minutes

6. Responsibilities

The Environmental Representative will consider suitable objectives and targets with the BPS Environmental Working Group and present to the Management for review and agreement.

Implementation will be by the leadership team


IDENTIFICATION OF OBJECTIVES & TARGETS
SIGNIFICANT ASPECTS
IS IMPENDING LEGISLATION EXPECTED?
YES
NO
IS AN IMPROVEMENT IN ENVIRONMENTAL PERFORMANCE REQUIRED BY STAKEHOLDERS, CUSTOMERS OR THIRD PARTIES?
YES
NO
IS SETTING AN OBJECTIVE ECONOMICALLY VIABLE?
YES
NO
IS THIS SIGNIFICANT ASPECT ON THE BP GROUP ENVIRONMENTAL PLAN?
YES
NO
ARE ADEQUATE CONTROL PROCEDURES IN PLACE AND BEING FOLLOWED?
NO
SET OBJECTIVES AND TARGETS
YES
NO FURTHER ACTION REQUIRED

Legal & Other Requirements - Procedure

1. Applicable Roles

All

2. Object

To provide a system whereby all relevant national and international environmental legislation and other requirements pertaining to BP Shipping's Environmental Management System are identified, examined, evaluated and recorded.

3. Scope

This procedure applies to the activities that are carried out in the following areas of BP Shipping:

3.1 BP Shipping offices

3.2 BP Shipping operated and managed vessels

3.3 BP Shipping time and voyage charter vessels

4. Procedure

4.1 The BP Shipping legal division is available to advise on interpretation or implementation of all legislation relating to BP Shipping's activities, including environmental legislation.

4.2 BP Shipping has representation on many internal company networks and industry bodies and receives details of company HSSE developments and advance notice of legislative development from numerous sources such as Chamber of Shipping, Maritime Law Policy Committee, OCIMF Legal Committee, ITOPF, P & I Clubs, SEAaT, external solicitors and trade journals.

4.3 As part of the charts and nautical publications contract, BP Shipping head office and company vessels are provided with an outfit of the latest editions of a number of legal publications including Statutory Instruments and Merchant Shipping Notices. They are maintained according to the controlled publications and documents procedures.

4.4 The company Standing Instructions to Agents require the agents to supply vessels with local environmental regulations applicable to the port being visited. They are also instructed to ensure that third party contractors or companies employed to dispose of

shipboard wastes, for example slops, oil residues and garbage, and do so in compliance with national or local regulations. Where company operated vessels are working for third parties where BP agents have not been appointed, the master is to request details of local environmental legislation from the Charterer's agents on sending the initial ETA to the agents or prior to the agent appointing third party contractors or companies.

Foreign going vessels are issued with port information guides containing details including but not limited to port regulations, facilities, various contact details and navigation restrictions. This information is maintained through the publications contract and controlled document system.

Where port details are unknown or uncertain the Master should contact the assigned agent to verify information that may be required.

4.5 Legal Register

New or updated environmental legislation or requirements identified from any source is to be reviewed against BP Shipping's activities and considered for inclusion on the Legal Register.

The legal register is updated twice a year by Clyde and Co (BP Shipping lawyers)

The Environmental Management System Legal Register incorporates all environmental, legal and other requirements appropriate to BP Shipping's activities.

The Legal Register does not incorporate Health and Safety legislation, except where there is a clear interface with environmental issues.

Details of new or impending environmental legislation shall be discussed at the Management review meeting.

5. Records

Environmental Management System Legal Register
Environmental Management System Aspects Register
Management Review Meeting Minutes
Communications with agents
Standing Instructions to Ship's Agents

6. Responsibilities

Company network and industry body representatives to inform the Environmental Representative & QA Manager of developments for consideration of inclusion.

The Environmental Representative is responsible for updating the EMS Legal Register as required.

The Environmental Representative is responsible for providing a summary of details of new or updated environmental legislation to the Management Review Meeting.

The Master is responsible for ensuring that local environmental legislation has been received from agents.

The Fleet Operations Commercial Manager is responsible for updating the Standing Instructions to Ship's Agents.

Environmental Reporting - Procedure

1. Applicable Roles

All operated, managed and time chartered vessels

2. Object

To provide a system whereby BP Shipping can measure its environmental performance for reporting to the Management Review Meeting, the BP Group and to assist in identifying areas where enhancements in environmental performance may be made.

3. Scope

This procedure applies to the activities that are carried out in the following areas of BP Shipping.

3.1 BP Shipping Operated and managed fleet (excluding Loch Rannoch, NGSSCO and Northwest Shearwater vessels)

3.2 BP Shipping Time Chartered vessels

4. Procedure

4.1 Environmental Reporting Workbooks (controlled document HSSE-ENV-GLOBALCD - 02) incorporating formulas to calculate Air emissions (CO2, CH4, SOx, NOx, particulates, CO and THC), record garbage disposal, halocarbons emissions and ODME discharge are issued to vessels for completion.

4.2 Vessels record data as detailed within the workbook on a monthly basis and submit data quarterly to the Environmental Representative.

4.3 Prior to submission, the data should be checked and approved by the Master.

4.4 Statistics obtained from the Environmental Workbooks (HSSE-ENV-GLOBALCD-02) are examined by the Environmental Representative to identify areas where environmental performance may be enhanced.

4.5 Any vessel departing the BP fleet for whatever reason, must submit their completed Environmental Workbook (HSSE-ENV-GLOBALCD-02) on completion of their final voyage. The workbook must be forwarded to the Environmental Representative.

5. Records

Quarterly Environmental Workbooks (HSSE-ENV-GLOBALCD-02)
Quarterly BP Shipping Greenhouse Gas report
Annual BP Shipping Environmental Inventory
Management Review Meeting Minutes

6. Responsibilities

The Master is responsible for ensuring that the workbooks are completed monthly and checking the results prior to submission to the Environmental Representative on a quarterly basis.

The Environmental Representative is responsible for verifying the data and reporting to the BP Group.

The Environmental Representative is responsible for presenting the environmental performance at the Fleet Ops HSSE Meetings and Management review meetings.

Duty Ship Operator - Procedure

1. Applicable Roles

Master

2. Object

To provide a BP Shipping single point of contact for emergency situations and weekend urgent operational issues in the region called Most of the World (MoW). This region includes; Europe Region, Asia Pacific Region, and Russia, Caspian, Middle East & Africa Region)

3. Scope

This Procedure shall apply to all personnel designated as the Emergency Duty Ship Operator.

4. Procedure

4.1 The Emergency Duty Ship Operator shall ensure that the dedicated emergency contact phone **(UK +44 (0) 1442 247147)** is at all times directed to the business issued mobile phone which will be answered without delay. This shall be verified at the commencement of each new duty period by the incoming Duty Ship Operator and by the HSSE / ER Advisor/alternate.

4.2 On receipt of advice of an urgent/emergency situation, the Emergency Duty Ship Operator shall evaluate the nature of the urgent/emergency situation as follows:

a. If the nature of the emergency involving the vessel includes collision, grounding, disabled, fire, pollution (oil/chemical), fatalities, multiple injuries, significant adverse reaction from the authorities, media, NGOs, public (a BP Casualty situation):

- Obtain details as per the Initial Incident Report (see BP Shipping Incident Management/Business Support Plan (Section 5.4)) or **HSSE-ER-NOTIFICATION-PRCDR-01** (Part 4.2).
- Record the relevant facts of the emergency
- contact the Duty Incident Commander and relay the incident details
- For directly managed BP vessels; establish and maintain an open line with the Master of the BP Casualty (For all externally managed ships do not attempt to secure the

open line to the Master of the BP casualty).

- Assist the Incident Commander as requested / directed.

b. If the situation is a non-BP Casualty situation, liaise with the appropriate personnel to resolve the necessary issues. If the Duty Ship Operator is uncertain he shall contact the Duty Incident Commander who will provide direction on how to handle the situation.

c. At any time, if the Duty Incident Commander is not contactable, the Duty Ship Operator will attempt to contact members of the Emergency Duty Call-out Team in the following order:

- ER Adviser
- BST Leader
- Operations Chief

d. The Emergency Duty Ship Operator must be available to respond to any emergency situation. He/she is to ensure that they have the ability to access BPOSS at reasonable short notice and that they have access to the diverted phone at all times.

e. In the event that the Emergency Duty Ship Operator is unable to respond to an incident as per 4.1, the Duty Incident Manager must be informed as soon as practicable.

4.3 The duty period shall run from Monday morning at 09:30 until Monday 09:30 of the following week. If the Monday is a bank holiday the duty period will normally be extended until 09:30 of the next business day.

4.4 At the completion of the duty period, the Emergency Duty Ship Operator shall speak to his/her relief and request that they arrange to divert and assume responsibility for the 24-hour telephone number: **+44 (0) 1442 247147**.

5. Responsibilities

5.1 The Emergency Duty Ship Operator shall be responsible for compliance with this Procedure.

5.2 The Operations Group will be responsible for ensuring a person is available to fill the Emergency Duty Ship Operator role on a rotational basis. The Emergency Duty Ship Operator will be responsible for finding a suitable alternate if they are unable to fulfil their duty.

5.3 The HSSE / ER Advisor/alternate will be responsible for

circulating the name and contact details of the Emergency Duty Ship Operator to BP Shipping personnel and vessels as part of the BPS Integrated Emergency Duty Rota.

Emergency Response – Procedure

1. Applicable Roles

Master

2. Object

The purpose of this procedure is to ensure an effective emergency response system is in place to respond quickly and effectively to any emergency affecting BP Shipping. This includes but is not limited to:

- Owned, managed, operated or chartered vessels
- Other marine incidents where BP Shipping is requested to provide expertise or support
- Where BP Shipping has agreed, through contractual obligation, to provide emergency response services to a third party or another business unit.

3. Scope

3.1 The BP Shipping emergency response system will be in compliance with Element 11 of ***getting HSE right:***

"Emergency management plans will be maintained to cover all of our facilities, locations and products. These plans will identify equipment, training and personnel necessary to protect the workforce, customers, public, environment and BP's reputation in the event of an incident."

3.2 The BP Shipping Emergency Response System is comprised of the following elements:

a. An emergency notification system
b. An emergency response plan
c. A functioning Emergency Response Centre (ERC)
d. A team of trained emergency responders
e. A regular exercise and training schedule for members of the emergency response team
f. A process to evaluate and incorporate lessons learned from incidents and exercises.

4. Emergency Notification System

4.1 BP Shipping shall maintain a system for the timely reporting of emergency incidents and the mobilization of the emergency response team. **(HSSE-ER-NOTIFICATION-PRCDR-01)**

5. Emergency Response Plan

5.1 BP Shipping will maintain an Incident Management/Business Support Plan for responding to emergencies.

5.2 The Incident Management/Business Support Plan will cover BP Shipping activities worldwide

5.3 The BP Shipping Crisis Management & Emergency Response Adviser will ensure that the BP Shipping Incident Management/Business Support Plan is made readily available and distributed to all relevant parties.

5.4 The BP Shipping Incident Management/Business Support Plan will be exercised on a regular basis throughout the year. The HSSE & ER Team is responsible for these exercises.

5.5 The BP Shipping Incident Management/Business Support Plan will be reviewed and updated at least annually.

6. Emergency Response Centre (ERC)

6.1 For both the Americas Region and Most of the World, BP Shipping will ensure they have immediate access to an ERC.

6.2 The ERC will be maintained and kept in a condition that it can be immediately used to respond to an emergency event.

6.3 It will include facilities for both the Incident Management Team as well as the Business Support Team.

7. Trained Emergency Responders

7.1 An exercise and training schedule for members of the BP Shipping emergency response teams shall be produced on an annual basis.

7.2 All members of the emergency response team(s) shall be responsible for ensuring that they complete and maintain the required training to match the training set required for their allocated emergency roles as recorded in the BP Shipping Incident Management System and should make themselves available when requested to attend training courses and exercises.

8. Exercise and Training Schedule

8.1 An exercise and training schedule for members of the BP

Shipping emergency response teams shall be produced on an annual basis.

8.2 All members of the emergency response team(s) shall be responsible for ensuring that they complete and maintain the required training to match the training set required for their allocated emergency roles as recorded in the BP Shipping Incident Management System and should make themselves available when requested to attend training courses and exercises.

9. Evaluating and Incorporating Lessons Learned

8.1 Feedback and lessons learned from exercises/ training/ and live incidents shall be co-ordinated, recorded and incorporated into the emergency response system

8.2 A lessons learned report will be completed for exercises and live incidents no later than 90 days following the closure of the event. Feedback will be evaluated and agreed actions / revisions will be entered into Traction for tracking purposes. For the Americas Region the responsibility for this action rests with the HSE Manager – Americas Region and for MoW with the Crisis Management & Emergency Response Adviser, HSSE & ER Team.

Media Relations – Working Practice

1. Applicable Roles

Master
Chief Engineer

2. Dealing with the Media

In general, media relations are handled by company Press Officers. If a major incident occurs, the Master should always endeavour to channel any press enquiries through the BP Shipping Incident Management Team (IMT) which includes a Press Officer. In some cases, the local or regional BP office may also be involved and will identify or assign a Press Officer. The Master should concentrate on operational response to the incident.

There may be exceptional circumstances when the Master will need to handle media enquiries. The following provides some general guidance on how to handle the media in this type of situation.

3. Unsolicited Approach from the Media

- Do not treat the media as 'the enemy'. They have a job to do and should be treated with courtesy and respect. Explain that you are not the right person to speak to
- Do not give out any information; be polite and firm
- Take contact details of the enquirer and pass to the relevant press office together with any other useful information
- Do not say "no comment" to an unsolicited approach

4. If authorised to deal with the media on a specific subject

- Stick to the subject and the planned messages, and avoid speculation
- Don't be afraid to say "I don't know but I'll find out" and be sure to deliver on a promise to get back in contact with an answer
- Restrict the use of "no comment" to politely respond to requests to speculate about people and motive
- Be as honest as you can be
- Say if you are not the right person for the press to talk to on a particular issue

- If in doubt, err on the side of caution, be polite and seek advice

- Do not assume that reporters are unaware of the facts just because they are asking questions

- Do not talk to the press on matters you are not authorised to talk about
- Do not be drawn into speculation and analysis

- Do not expose BP to the accusation that different parts of the company are telling different stories about the same issue

- Remember, there is no such thing as ‘off the record’.

- Do not make statements regarding:

    1. Liability for a spill or incident
    2. Speculation on the cause of an incident; instead assure the media that a full investigation will be made
    3. Cost estimates of damage
    4. Estimates of clean-up and containment costs
    5. Promises that property, ecology or anything else will be restored to normal
    6. Appropriateness of Government response
    7. Names of persons injured, missing or killed. The names must not be revealed until a responsible member of the immediate family has been notified.
    8. Do not make false statements

Emergency Response Notification – Procedure

1. Applicable Roles

Master

2. Object

To provide a clear and definite instruction describing how the Master of a BP Owned or Managed vessel must report a BP Casualty.

3. Scope

BP Casualty emergencies will include:

- Situations that seriously threaten the immediate or future safety of people, the environment, property or business.
- Actual or impending situations involving fatalities, serious injury/ illness, marine pollution, collision, grounding, stranding, flooding, fire, explosion, or where the vessel is disabled.
- Any uncontrolled release of oil, chemical or gas whether cargo or bunkers or system related to the deck/ environment
- Uncontrolled release will mean normal practice operational containment systems have failed
- Cargo/ non-cargo reaching the environment will mean liquids reaching the water or gas reaching the air.
- Any situations where the vessel is exposed to adverse reaction / publicity from authorities, the media, the general public, the vessel charterer or other credible source.
- Request for the vessel to offer assistance to vessels or persons in distress.
- Any emergency incident in the proximity of a BP interest vessel, the circumstances of which will actually/ probably impact the vessel.

Notes:

Any incident that involves a breach of vessel security (where actual/ probable loss of control over vessel operations, or harm to people, or

damage to the environment, did or could have occurred) shall also be reported using the Ship Security Alert System as detailed in the Ship Security Plan.

4. Procedure

4.1 Notification

In addition to statutory reporting requirements, the Master must report the BP emergency to one of two BP Notification Centres. Selection depends on the geographic position of the BP Casualty vessel:

Notification Area 1 (Americas Region):

West of 30 degrees West to 180 degrees notification by (i) telephone to BP Shipping USA, via the BP Naperville Notification Centre, USA +1 630-961-6200 followed by (ii) telex to BP Shipping USA (telex 6738208)

Notification Area 2 (Called Most of the World which includes; Europe Region, Asia Pacific Region, and Russia, Caspian, Middle East & Africa Region):

East of 30 degrees West to 180 degrees notification by (i) telex to: BP Shipping UK (telex 290851) followed by (ii) telephone to BP Shipping, Sunbury, UK +44 (0) 1442 247147.

a. The Master must take care to check if any SECONDARY notifications are stipulated on the Voyage Orders in additional to the primary requirements described above.

b. The words BP Casualty should appear at the beginning of the first line of text immediately following the address.

c. The words BP Casualty must have no spaces, stops or commas between B and P and may be in the upper or lower case.

d. For ADNOC Gas Vessels the words BP Casualty should be at the start of the line immediately following "URGENT GAS TANKER ALERT".

e. If the accident occurs within a port the master must copy all messages sent to BP shipping to BP Shipping's agent in the port.

f. The format of the BP Casualty telex must be based on the letter prefix system below, which provides a short code for the required information e.g. a) = name of ship.

g. To activate the BP emergency system early a short telex covering fields a) to f) will suffice allowing time for the collection of additional information.

4.2 Transmission Format:

Notification by either telephone or telex should contain the following information:

a. Name of ship
b. Nature of emergency
c. Position of ship
d. Name, nationality and type of other ship(s) involved
e. Nature and extent of damage
f. Fatalities and/or personal injuries - if any
g. State of sea and weather
h. Whether towage is required
i. Is the emergency escalating or under control
j. Time of casualty
k. Situation regarding cargo (and containment system LPG)
l. Charterer (if known)
m. Cargo type and quantity on board
n. Cargo owner if known
o. Date, time and origin of report
p. Any other relevant comments

In the event of oil spill the message should also include

q. The local time, date and location of the spill
r. Name of the owner of the installation (if in port) and whether at a jetty, CBM, SBM etc.
s. Type of oil e.g. crude, black, white, lubricating etc.
t. Cause if known e.g. overflow, hose burst, hull defect, leaking ship valve(s), pipeline defect, etc.
u. Estimated quantity spilled
v. Estimate of rate of spill if continuing
w. Whether clean up has been attempted either by ship or third party

4.3 Effect of sending a BP Casualty Emergency Response Instruction

Once the BP Casualty Emergency Response Instruction is received, the following on-call BP Shipping Emergency Response staff will be alerted to the incident:

Notification Area 1 (Americas):	**Notification Area 2 (Most of the World):**
• Incident Commander/ Qualified Individual • Business Support Team Leader	• Incident Commander • Business Support Team Leader • Communications & External Affairs

	Adviser • Legal Adviser • Emergency Response Adviser • Operations Section Chief • Planning Section Chief • Logistics Section Chief

5. Responsibilities

5.1 Master
The Master shall be responsible for complying with this procedure.

5.2 BP Notification Centre, BP Duty Operator
The BP Notification Centre, is responsible for:

- Collecting the emergency detail as per the format described in Section 3.2
- Relaying that emergency detail to the duty BP Shipping Incident Commander
- For BP managed vessels acting as liaison to establish a secure line between the vessel and the BP Shipping Incident Management Team

5.3 Duty Incident Commander
The Duty Incident Commander is responsible for the overall management of BP Shipping's incident-response operations.

Controlled Drugs – Working Practice

1. Applicable Roles

Captain or Deputy

2. Regulation

The supply, use and disposal of Controlled Drugs are covered in the Misuse of Drugs Act 2001, which governs supply, storage, record keeping administration and destruction of Controlled Drugs. The M notice defining ships' medical stores should be referred to.

3. Storage

Morphine, or any other Schedule 2 Controlled Drug on board, must be kept in the Master's safe.

4. Purchasing and Stock Control

The quantity of Controlled Drugs to be carried is defined in the relevant M notice, and stocks should be maintained at this level

Expiry dates should be noted, and new stock ordered to ensure that sufficient time is given for delivery prior to the expiry date.

A specimen requisition form for controlled drugs is given in the M notice. As Controlled Drugs cannot be shipped across international borders, ships not sailing out of the UK must order these locally, rather than from the UK. Ships in the UK should order from their usual supplier.

5. Record Keeping

a. Controlled Drugs used in treatment should be recorded in the medical log.

b. The receipt or disposal of Controlled Drugs should be recorded in the ship's official log book.

c. All transactions involving Controlled Drugs should also be recorded in a register kept specifically for this purpose.

- A separate page should be used for each strength or formulation of the drug.
- Entries must be made in chronological order, within 24 hours of the transaction, in ink.
- Entries must be signed by two people, one of whom acts as a witness. In the case of supply or disposal of drugs, one of the

signatories should be the chemist involved.
- Alterations and amendments should not be made. If an error is made, a note of the fact should be made in the margin, and a correct entry made directly beneath.

The following details should be recorded:

- The name of the drug, strength and formulation across the top of the page.
- Date
- Amount of drug either supplied, dispensed or to be disposed of. If an incomplete ampoule is administered the amount discarded should also be recorded.
- Details of the person and firm supplying drugs, the name and rank of the patient receiving the drug, or the person and firm accepting drugs for disposal.
- The amount of drug remaining in stock.

Eg: Morphine 10mg in 1 ml in glass ampoules

Date	Name of patient/supplier	Detail	Amount	Sign 1	Sign 2	No. in stock
01/01/04	LE West and Co	Supply	20 amps	Sign 1	Sign 2	20
05/01/05	John Smith, 1EO	Injured Crew	5mg (5mg discarded)	Sign 1	Sign 2	19
06/12/06	Garcia, pharmacy Barcelona	Expired	10 amps	Sign 1	Sign 2	9

The amount of Morphine remaining in the Captain's safe must be checked on each change of Captain, and this check recorded in the register.

6. Destruction

Controlled Drugs may only be disposed of by incineration on board, or to an approved Chemist or to the police. Any approved chemist supplying or removing any drug should signify this by signing in the Controlled Drug Register. Whatever means of destruction is chosen, the record should be completed as above, with two signatures ensuring that destruction/disposal has been witnessed.

Medical Oxygen – Working Practices

1. Applicable Roles

Ship's Medical Officer

2. Regulation

Ships that are subject to the MFAG, IMDG, IGC and IBC codes are required to carry a 40 litre (200 Bar) Oxygen cylinder installed in the ship's hospital for resuscitation purposes.

Because the storage of such a quantity of oxygen in an accommodation space is potentially dangerous and would contravene other fire safety requirements the Isle of Man Marine Administration has ruled that medical oxygen may be supplied in 4 x 10 litre cylinders.

3. Storage

3.1 Oxygen is not a flammable gas, but supports combustion. Safe storage therefore requires:

- A well ventilated locker not subjected to extremes of temperature
- The absence of electrical fittings
- No Smoking signs
- The absence of combustible materials
- Cylinders must be properly secured
- Empty cylinders should be marked appropriately

3.2 One cylinder should be stored in the hospital ready for immediate use. A 60% mask should be connected to the regulator using a length of oxygen tubing, but the regulator should not be connected until needed.

3.3 The remaining cylinders should be stored in a suitable space outside the accommodation, in which the bottles will be protected from deterioration and where the risk of fire and explosion is minimised.

3.4 An oxygen resuscitator set such as the Sabre/Mars or Microvent Mariner should be kept ready for use by the emergency team, and any further sets or spare cylinders stored as above.

4. Maintenance

When new cylinders are received, the plastic seal should be left undisturbed, and the cylinder marked full. One cylinder only should be used to check that equipment is functioning, the other full cylinders

should be left undisturbed with the valves firmly closed.

The oxygen cylinders and resuscitator sets should be inspected monthly on board, ensuring appropriate storage and readiness for use. Routine annual maintenance by a competent person (either via the manufacturer or Unitor) should be arranged for resuscitators in compliance with the manufacturer's instructions. Regulators on resuscitators require servicing every 3 years, and oxygen should be refilled every 3 years. Cylinder valves and hydrostatic pressure testing for cylinders must be arranged every 5 years.

5. Use

The instructions provided with the oxygen supplies should be referred to. Should any person be sufficiently unwell to require medical oxygen, radio medical advice should be sought.

In the short term, while advice is awaited, the acutely unwell, blue or severely breathless patient, or any patient with suspected cardiac chest pain, should be given high flow oxygen through a 60% mask. Patients with slight breathlessness due to chest infection may benefit from 24% oxygen. This applies to children as well as adults.

Masks provided in the Poisons Chest have a variable flow rate, and should be kept separately

Medical Prevention & Treatment of Illness – Procedure

1. Applicable Roles

All Officers and Crew

2. Medical Examination

All seafarers will be required to undergo annual medical examinations in accordance with legislation or Manning Contractors' requirements in order to ascertain that they are fit to perform their prescribed duties. (See **HSSE-HEALTH-MEDICAL-PRCDR-01**). When joining a ship, all seafarers must carry with them a certificate of fitness valid for their full tour of duty.

3. Medication and Fitness for Duty

Seafarers have a duty to declare whether they possess or are taking any medication that may alter their performance. This will have been asked at the time of the annual/pre-joining medical. However, if there has been any significant change to a seafarers health during work leave this must be reported to the manning agent to ensure appropriate medical clearance measures can be arranged prior to return to work.

4. Ship Captain's Medical Guide

The Ship Captain's Medical Guide (SCMG) contains detailed advice on the causes and prevention of disease. A copy is to be stored in the ships dispensary for reference and guidance by the Master or appointed Medical Responder. Information relevant to crew members must be brought to their attention. The SCMG is designed to be used in conjunction with the relevant Merchant Shipping Notice setting out the statutory requirements for medical stores, which should be kept with the Guide in the medical locker for immediate reference. The Medical First Aid Guide should also be referred to.

5. Prevention of Illness

5.1 General Measures

To reduce and minimise the risk of personnel contracting sickness and diseases, it is essential that the precautions contained in the Ship Captain's Medical Guide and Chemicals supplement are strictly observed, and are construed in accordance with the Employers Regulations. See also HSSE-SAFETY-CHEMCL-WP-01

Potable water treatment, food hygiene, personal hygiene and a clean environment are essential. Any person suspected of an

infectious illness should be isolated, and radio medical advice sought where appropriate.

5.2 Vaccinations

It is the seafarer's responsibility to ensure that all routine vaccinations are kept up to date. Other vaccinations and prevention measures relevant to the area of travel must be reviewed before joining each ship. All crew must carry their vaccination certificates, which should be checked by the Master on signing on ship's articles. Any boosters falling due should be arranged as appropriate. Detailed information may be found in the relevant M notice.

5.3 Malaria

a. Prophylaxis

Should the ship be entering a malarial area, the captain should ensure well in advance that all officers and crew are aware of the risk, and are adequately provided with prophylaxis if required. Sufficient tablets should be dispensed to cover the entire period in the malarial area, plus the recommended period before entering and after leaving the area. Crew leaving the ship should be informed how long they must continue taking the tablets, and be issued with the appropriate number of tablets to complete the course. Advice as to which specific prophylaxis should be taken should be obtained via radio medical, and further information may be found in the National Pharmacy Association leaflet, supplemented by the websites noted in 5.3c.

b. Mosquitoes.

Mosquitoes carry Dengue fever as well as malaria, so their bites should be avoided in any tropical area.

c. Information and advice

Refer to the relevant M Notices on Ships' Medical Stores and Prevention of Infectious Diseases at Sea, the SCMG, the current National Pharmacy Association leaflet and the websites listed below.

- www.fitfortravel.nhs.uk
- www.fco.gov.uk
- www.doh.gov.uk
- www.hpa.org.uk
- www.masta.org
- www.who.int
- www.who.int/ith/diseasemaps

5.4 Sexually Transmitted Disease (STD)

Although the diagnosis and treatment of STDs including HIV/AIDS are covered extensively in the SCMG, the most important issue is prevention. Abstinence is the most effective method, coupled with education, but a supply of condoms should be available on board.

If emergency shore based treatment is necessary in a country where medical facilities are limited, and there is a high risk of HIV, the patient should be equipped with a kit for protection against blood transmitted diseases.

5.5 Environmental Exposure

Clothing should be appropriate to the climate, particularly in extremes of temperature. In hot climates or work environments, an adequate fluid intake and regular rest breaks are essential. Care should be taken to avoid sunburn and heat stroke, by wearing a broad-brimmed hat, sunglasses, and using adequate high SPF sunscreen. Both heat exposure and hypothermia are covered in detail in the SCMG.

6. Medical Treatment on board

The Master is responsible for the medical treatment of crew members, but may delegate this duty for the day to day running to the Chief Officer. The Master must have full knowledge of all treatment being administered.

6.1 Medical Advice

Attention is drawn to the SCMG and to M notices and the Notices issued by the Flag State authorities giving information on medical and health matters. The advice and instructions in these publications must be observed whenever treatment is necessary and no doctor is available. Advice covers both immediate treatment and the provision of medical advice from an external source.

Medical Attention

Whether it concerns safety of navigation, the observance of Safety Regulations, illness or any other matter, the preservation of human life and the general well-being of the ship's complement must always be the principal consideration. It is important that the Master is kept fully informed of:

The more serious matters affecting the health of the Officers and Crew.

Details of minor complaints and treatments through regular and full reports. No matter how carefully the Safety Regulations are observed or how healthy the crew may appear, it is almost inevitable that at some stage it will be necessary for the Master to deal with the consequences of an accident or illness on board.

In this situation the Ship Captain's Medical Guide will be of assistance but the Master will also be called upon to exercise his own judgement and discretion. If in any doubt as to the course of action to be taken, the Master must obtain other and more expert assistance. The Ship Captain's Medical Guide contains advice on obtaining assistance by radio.

The sources available to the ship are:

- Another ship with a doctor on board.
- Some shore radio stations and ocean weather ships handle such traffic and details of these are contained in the Admiralty List of Radio Signals, Volume 1.
- The International Radio Medical Centre (CIRM) – Rome. Literature detailing procedures to be adopted are available on board, and information on frequencies is contained in the Admiralty List of Radio Signals, Volume 1. Refer also to the appropriate MCA MGN detailing Radio Medical Advice for Ships at Sea.
  Telex (both satellite or radio telex): 612068 C.I.R.M. I
  Telephone: [+39] - 06.54223045
  Mobile GSM Telephone: [+ 39] - 348 - 3984229
  Fax [+39] - 06.5923333
  E-mail telesoccorso@cirm.it

Through the AMVER or AUSREP systems, in which Company ships should participate.
North Sea platforms and rigs normally carry a Medic who may give guidance/assistance. Emergency helicopter evacuation might also be arranged if required.
Queen Alexandra Hospital, Portsmouth, Accident & Emergency Department, Tel +44 (0) 2392 286226

The Master must not hesitate to take prompt action to divert the ship in cases where, in his opinion, or when advised from one of the above sources, there is a need to obtain expert medical attention for a patient. Details of the action taken should be sent promptly to the Company and to the Crew Managers.

Occasions may arise where a patient appears to make a rapid

recovery AFTER the ship has diverted. If the Master is convinced that the recovery is genuine, and has the full agreement of a medical authority – preferably the one which initially recommended the diversion – the diversion may be abandoned and the voyage continued.

6.2 Record of Medical Attention

a. Medical Log. The Master, or a delegated officer, is responsible for recording in the Medical Log details of all cases of illness and injury reported, and any treatment or medicine given or refused. Full instructions for use are contained on the inside front cover of the log. The Log is a Staff Confidential document, and therefore should be kept in the custody of the Master, or delegated officer. The contents relating to any patient must not be divulged to any person other than an authorised Medical Officer without the permission of the patient.

b. Official Log Book. Pertinent details of the illness or injury must also be entered in the Official Log Book.

c. Incident Report. In the case of injury an incident report is to be completed and the procedure in HSSE – SAFETY-ACC/INCID –WP01 followed.

   Occupational Illness record. An occupational illness is an illness (as opposed to an injury) that is caused or exacerbated either wholly or partly by the work environment. (Refer to HSSE-HEALTH-MEDICAL MNGT- CHART-01 and HSSE-HEALTH-MEDICAL-CHART-02). Identification of these illnesses allows the company to identify work related circumstances leading to illness, and to act to minimise the risk. For this reason, all illnesses that are thought to relate to work must be recorded so that a report may be made. If an occupational illness is identified or suspected on board, this must be made the subject of an SLCO1 incident report. The superintendent ashore will then submit the report in Tr@ction.

d. For any other illness serious enough to require treatment ashore or repatriation, the Manning Agent and Superintendent must be informed.

6.3 Record of Use of Controlled Drugs

See HSSE – SAFETY- ACC/INCID –WP01 – Controlled Drugs

6.4 Reporting

Death, suspected infectious disease, or any circumstances likely to cause the spread of infectious disease must be reported in the Maritime Declaration of Health.

7. Medical Treatment Ashore

Treatment will be arranged by the Master, via the Port Agent. Costs for transport and urgent treatment should be charged to the company. Any non-urgent treatment charged to the Company will be recovered from the individual.

Crew members on ships calling at UK ports should receive emergency treatment under the terms of the NHS. Those ordinarily resident in the UK are fully entitled to NHS treatment. British staff should therefore carry their NHS Medical Card with them when calling into UK ports.

Also refer to the Shipboard Contingency Plan – Illness/Injury of Personnel

8. Medical supplies and equipment

8.1 Ship's Medical Locker

The contents of the ship's medical locker are to be maintained as required in the latest Merchant Shipping 'M' Notices unless otherwise advised by BP Shipping. All equipment must be kept ready for immediate use. The ship's medical locker is to be checked and replenished every 6 months.

Some items, as noted on the spreadsheet, must be stored in the refrigerator at 2 to 5 degrees C. These include Tetanus vaccine, immunoglobulin, and Neomycin ear drops. They must not be frozen. Unless there is a designated medical refrigerator, they should be kept in a sealed plastic container, clearly marked with the contents.

8.2 Oxygen

Refer to HSSE- HEALTH-MED O2-WP 01

8.3 Paramedic Equipment

With the exception of the coastal vessels, the ship's medical locker is provided with equipment for intravenous cannulation, fluid administration and endotracheal intubation in medical emergencies. This equipment should only be used by officers who have received Paramedic Training or on the direct advice of an external medical authority

8.4 Ship's Hospital

The ship's hospital accommodation is to be kept in a clean, orderly condition and ready for occupation at all times. It is not to be used for the storage of articles other than hospital equipment, and must not be used to accommodate supernumerary personnel.

8.5 Engine Room Burn Box

A Burn Box is supplied to each ship for the immediate treatment of burns. This box is to be mounted in a suitable position in the Engine Control Room or adjacent to the Engine Control position. Its contents are to be checked and replenished as part of the Planned Maintenance System.

8.6 First Aid Kits

One first aid kit shall be carried for every ten persons on board. The contents of the first aid kits are to comply with the requirement of the relevant Merchant Shipping Notice.

One first aid kit shall be located in a readily accessible position for the use of catering staff. The remaining first aid kits are to be placed at suitable, readily accessible and well marked locations around the vessel.

The contents of all the first aid kits are to be checked and replenished as part of the Planned Maintenance System.

8.7 Inspections

Medical stores must be inspected monthly by the Master or Medical Responder to ensure that:

- all medicines and equipment required are available;
- all are correctly stowed;
- any time-expired items have been replaced

Stocks should be replenished annually on coastal vessels, or otherwise six-monthly, when a certificate will be issued. The certificate must be retained with the Ship's Certificate File.

9. Pregnancy

9.1 The Health and Safety at Work regulations with regards to shipping require that risks to all workers are assessed, and measures are taken to control these risks. Particular account

must be taken to new and expectant mothers.

9.2 The employment at sea of pregnant workers after 28 weeks, and up to 6 weeks after the birth, is prohibited. Although pregnant workers may be considered fit for work at sea up to 28 weeks, this would only be on coastal vessels, and after a careful individual risk assessment by an approved doctor. The rapid and sometimes unpredictable turnaround of ships does not allow for routine ante natal care and medical facilities on board are not adequate to deal with the complications that may be encountered at any stage in a pregnancy. Posts currently available with BP shipping are unlikely to provide a risk free environment, and therefore pregnant seafarers are likely to need to remain ashore for the duration of their pregnancy and post natal period.

9.3 Any seafarer who becomes pregnant either during a tour of duty or on leave should declare this immediately. Their medical certificate will require review by a Department for Transport or equivalent Approved Doctor.

9.4 Further details may be found in the relevant Marine Guidance Notice regarding New and Expectant Mothers, and the relevant M notice regarding Medical Fitness Standards.

Medical Procedures - Procedure

1. Applicable Roles

Master
Master's appointed Deputy

2. Object

The purpose of this procedure is to ensure that the policy of BP Shipping, with regard to the medical treatment of all seagoing personnel, is defined and followed.

3. Scope

This procedure applies to all vessels owned, operated or managed by BP Shipping.

4. Procedure

4.1 Medicals

It is BP Shipping's policy that all seafarers undergo medical examinations at approximately annual intervals. The details of this procedure are contained in the Crew Management Agreements between BP Shipping and the Manning Contractor.

4.2 Medical Treatment

The master or his appointed deputy must be informed whenever medical attention of any sort is required onboard. In port, when watches are suspended, a delegated officer appointed by the Master must remain on board to attend to medical matters.

Where treatment is given, or is offered but refused, a record is to be made of this in both the Medical Log sheet SFT3 and the ship's Official Log Book.

All treatment given should be in accordance with the latest edition of the Ship Captain's Medical Guide and/or information received from a competent authority such as radio medical advisors, Coast Radio Stations, or Company recommended specialists ashore.

Refer to – HSSE-HEALTH-MEDICAL MNGT-PRCDR 01.

4.3 Medical Locker

All medical supplies excepting controlled drugs should be kept

in the medical locker. Recommended levels of stock should be maintained, and any items used replaced as soon as practicable. The locker must be kept locked at all times when not in use.

4.4 Controlled Drugs

All Schedule 2 controlled drugs must be kept in the Master's safe. A Controlled Drugs Register must be maintained showing the receipt, use or subsequent disposal of any controlled drugs carried.

5. Records and Reports

The vessel's Medical Log SFT3 shall be retained on board for a period of three years after completion, then returned to BP Shipping's office for archiving in event of future claims.

The Controlled Drug Register must be kept on board for two years from the date of the last entry.

Medical Declarations must be kept with the medical records, and destroyed as the seafarer leaves the ship.

The maintenance and storage of all other records regarding manning matters on board BP Shipping's vessels are the responsibility of the Manning Contractor.

6. Responsibilities

6.1 The Master shall be responsible for the medical treatment of all persons on board his ship, for completing all necessary records, for the security of medical supplies, and for checking and keeping the medical locker stock up to the required levels.

6.2 The Fleet Personnel Manager shall be responsible for ensuring compliance with the Training Matrix contained in the BPCS manual.

Noise - Procedure

1. Applicable Roles

All

2. Object

The object of this procedure is to minimise the risk of hearing damage due to exposure to noise at work.

3. Scope

This procedure shall apply to all vessels owned or managed by BP Shipping.

4. Procedure

4.1 Purchasing

Personnel selecting new equipment for use on board vessels shall take into consideration the noise levels produced.

Information on the sound power level of the equipment shall be obtained from the equipment supplier. This can then be used to estimate the contribution the equipment is likely to make to the noise environment in the area into which it is to be installed.

4.2 Assessment

A noise risk assessment shall be undertaken on one vessel per class, provided the procedures, equipment, work practices, cargo and control equipment are substantially the same.

Monitoring shall take place in all spaces specified in the IMO code of noise on board ships and under the operating conditions specified.

This should identify:

All areas and activities where daily noise exposures are likely to equal or exceed 85 dB(A) or where the peak sound pressure is likely to equal or exceed 137 dB(C)

All areas and activities where daily noise exposures are likely to be between 80 and 85 dB(A) or where the peak sound pressure is likely to be between 135 and 137 dB(C)

Appropriate control measures to reduce the risk of hearing damage.

The assessment should be reviewed every 5 years following any structural changes that may affect noise levels if there is any reason to suspect that it is no longer valid

4.3 Noise Controls

Where practicable, exposure to noise should be eliminated at source or, where this is not practical, reduced to the lowest level possible using engineering controls or organisational measures.

Only approved ear defenders which are listed on the Safety Equipment List must be provided and worn where these measures cannot reduce daily noise exposures below 85 dB(A), or where the peak sound pressure is likely to exceed 137 dB(C).

Suitable ear defenders should be made available for use on a voluntary basis where daily noise exposures are likely to be between 80 and 85 dB(A), or where the peak sound pressure is likely to be between 135 and 137 dB(C).

Selection of ear defenders should take into account both the sound pressure level and the frequency components of the noise and also consider compatibility with other personal protective equipment.

Ear plugs should not be used where there is a risk that they may become contaminated due to employees inserting them with dirty hands.

All equipment used to reduce exposure to noise, including reusable ear defenders, should be checked on a regular basis. With engineering controls these checks should be included in the preventative maintenance schedule.

4.4 Hearing Protection Zones

Areas where daily noise exposures are likely to equal or exceed 85 dB(A), or where the peak sound pressure is likely to equal or exceed 137 dB(C), should be designated as “hearing protection zones”. These areas should be properly demarcated and all entrances should have signs indicating the need to wear ear defenders on entry. Suitable signs should also be posted in lifts that allow direct entry into a hearing protection zone (e.g. a lift serving the engine room).

Anyone entering a designated hearing protection zone, for any length of time, must wear suitable ear defenders.

4.5 Use of Ear Defenders

All personnel with reusable ear defenders should be provided with a box, bag or other storage facility in which they should be kept when not in use.

Reusable ear defenders should be inspected immediately prior to use. They should also be checked on a weekly basis. Equipment which is damaged or with defective parts should be repaired or discarded and replaced.

Where disposable ear defenders are used a supply must be readily available for all personnel who require them.

5. Health Surveillance

All personnel whose daily noise exposures are likely to equal or exceed 85 dB(A) on a regular basis or who may be regularly exposed to peak sound pressure equal to or exceeding 137 dB(C), should be provided with regular hearing tests.

A baseline hearing test should be given to all new employees likely to have such exposures and for exiting employees when transferred to work in areas where such exposures could occur. Following this they should be given annual tests for the next two years and then tested every three years. More frequent testing should be undertaken if any significant changes in hearing are detected.

6. Information, Instruction and Training

All employees who are likely to have daily noise exposures at or above 80 dB(A), or who work in areas where the peak sound pressure is likely to exceed 135 dB(A), should be provided with information, instruction and training covering:

- The risks from exposure to noise
- The measures implemented to control noise
- The availability of ear defenders
- The importance of wearing ear defenders at all times in designated areas
- Measures they can take to reduce the risk
- Their responsibilities under this procedure.

Personnel provided with reusable ear defenders should be

given additional information and training on

- How to use the defender correctly
- How to care for them, including storage requirements
- How to inspect the ear defenders, including what faults to look out for
- When the defenders should be replaced.
- Personnel provided with ear plugs should be instructed on how to insert them correctly.

7. Records

7.1 An up to date copy of the findings from the noise risk assessment shall be kept by the Master and filed with the ships drawings.

7.2 Records of tests undertaken on noise control measures shall be kept by the Master.

8. Responsibilities

8.1 The Superintendent shall ensure:

- consideration is given to the noise levels produced when purchasing new equipment.
- orders for new equipment include an instruction to provide information on sound power levels.

8.3 The Chief Engineer shall ensure:

- local orders for new equipment includes an instruction to provide information on sound power levels.
- a noise assessment is undertaken, that it is reviewed when appropriate and that appropriate control measures are introduced
- all designated hearing protection zones are properly demarcated.

8.5 The Master ensures an up to date record of the assessment is filed on the vessel.

Quarantine Procedures – Procedure

1. Applicable Roles

Master
Master's appointed Deputy

2. Object

The purpose of this procedure is to ensure that the correct procedures as required by port states are complied with.

3. Scope

This procedure applies to all vessels owned, operated or managed by BP Shipping.

4. Quarantine Procedures

4.1 Sanitary Regulations

The public health and quarantine regulations for most countries are governed by the International Sanitary Regulations adopted by the World Health Assembly in 1951. These have been modified from time to time.

4.2 Definitions

Relevant definitions in the Sanitary Regulations are:

a) Infected Person means a person who is suffering from a quarantinable disease, or who is believed to be infected with such a disease.

b) Infected Ship means a ship which has had on board a case of:

i) Human plague, cholera, yellow fever or smallpox on arrival
ii) A plague-infested rodent is found on arrival
ii) Human plague during the voyage developed by the person more than six days after his embarkation
iii) Cholera during the voyage developed within five days before arrival
iv) Yellow fever during the voyage

c) Infectious Disease means a quarantinable disease or any other infectious or contagious disease other than venereal disease or tuberculosis.

d) Quarantinable Disease means plague, cholera, yellow fever, typhus or relapsing fever.

e) Suspect means a person who is considered by the health authority as having been exposed to infection by a quarantinable disease and is considered capable of spreading that disease.

f) Suspected Ship means:

i) A ship which, not having on board on arrival a case of human plague, has had on board during the voyage a case of that disease developed by the person within six days of his embarkation.
ii) A ship in which there is evidence of abnormal mortality among rodents, the cause of which is unknown on arrival.
iii) A ship which has had on board during the voyage a case of cholera more than five days before arrival.
iv) A ship which left within six days before arrival an area infected with yellow fever.

4.3 Articles of the Regulations

The following articles of the International Sanitary Regulations are of concern to all foreign going ships:

a) Article 35 – Grant of Pratique by Radio: Whenever practicable, States shall authorise granting of pratique by radio to a ship when, on the basis of information received from it prior to arrival, the health authority for the intended port of arrival is of the opinion that its arrival will not result in the spreading of a quarantinable disease.

b) Article 95 – Bill of Health: Bills of Health, with or without Consular visa or any certificate, however designated, concerning health conditions of a port, shall not be required from any ship.

c) Article 96 – Maritime Declaration of Health: The Master of a ship, before arrival at its first port of call in a territory, shall ascertain the state of health on board and he/she shall, on arrival, complete and deliver to the health authority for that port a Maritime Declaration of Health, which shall be countersigned by the ship's surgeon if one is carried (see Paragraph 4.4 below).

d) Note to Articles 95 and 96: Certain countries may still remain outside the World Health Assembly, and if the ship

is proceeding to one of these countries, it may be necessary to obtain a Bill of Health from the last port of call. If in any doubt as to whether a Bill of Health is required or not, Masters should obtain advice from the Agent at the last port of call.

4.4 Maritime Declaration of Health

The World Health Organisation (WHO) adopted this document in 1951. It supersedes the former Bill of Health. This declaration should be completed before arriving at the first port of call in a country.

Certain countries remain outside the WHO. If the ship proceeds to one of these countries, it may be necessary to obtain a Bill of Health. If the Master is in any doubt whether this is necessary or not, he/she should obtain the agent's advice at the last port of call.

4.5 Standard Radio Quarantine Messages

Certain countries or ports require that standard quarantine radio messages, as prescribed in the Admiralty List of Radio Signals, are sent.

Recreational Activities Onboard – Working Practice

1. Applicable Roles

All Officers & Crew

BP Shipping supports and encourages the participation of sea staff in safe recreational activity in order to enhance physiological and psychological health. To ensure that all risks associated with these activities are minimised, sea staff must read and adhere to the following guidelines.

Suitable footwear throughout refers to training shoes rather than sandals or flip-flops

2. Gym Activities

On some vessels the Company will provide a Gymnasium and equipment. Equipment handbooks and training guidance should be available. The following safety guidelines shall be posted locally:

- All users must carry out a visual check of the equipment prior to use.
- All users are responsible for notifying faults to the Chief Engineer and for marking equipment as “Not to be Used – Awaiting Inspection”.
- All users must read and comply with equipment handbooks and training guidance, and ensure that equipment used is within their capability
- Equipment must be wiped down after use
- Equipment must not be used for competitive purposes.
- With the exception of “Pull-Up” bars located outside the Gym, which must be inspected for safety by the Chief Engineer, “home made” equipment. is not permitted. e.g. weights, benches, skipping ropes, barbells etc
- Punch-bags may only be used with proper boxing gloves.

3. Swimming

Many ships have a Company provided Swimming Pool. Swimming from the ship’s side is NOT permitted. Staff swimming from beaches ashore are advised to check locally the suitability of the site. Water must be kept on flow through, or the pool cleaned weekly. The pool must be

emptied in port. The following safety guidelines shall be posted locally:

- No diving.
- No running.
- Not to be used by non-swimmers unless supervised.
- Children are not to use facility unsupervised. Appropriate
- Flotation equipment must be used.
- Not to be used in rough weather
- Not to be used during hours of darkness unless accompanied by at least one other person.
- Guard rails and lighting around pool to be in good order. Guard rails to be kept closed, especially when the pool is empty.
- All users are responsible for carrying out a visual check of the pool prior to use, and for notifying faults (e.g. guard rails or lighting) to the Chief Engineer.
- Not to be used within one hour of having eaten.
- Swimmers to wear appropriate bathing costumes.

4. Table Tennis

On some vessels the Company will provide Table Tennis equipment in the Accommodation Block. The following safety guidelines shall be posted locally:

- All Table Tennis players are responsible for carrying out a visual check of the equipment provided prior to use. This shall include the surface condition of the deck (dry, no lifting edges or trip hazards).

- Table Tennis not to be played in bad weather when balance would be adversely affected.

- Suitable footwear should be worn

5. Basketball/Cricket

These games may be played on the open decks once a Local Risk Assessment has been carried out by the Master. Other team ball games such as football and hockey are not permitted. Steel deck surfaces are inappropriate for higher-level contact sports. The risk of personal injury is too great onboard and suitable medical treatment may not be readily available. Football and Hockey ashore in personal leisure time are permitted, but staff are advised to check the appropriateness of the surface and availability of local medical facilities for their own benefit.

The local risk assessment shall include but not be limited to:

- Proximity of fixtures and fittings that may cause injury.

- Suitability of the surface finish on the deck.
- Establish an agreed and defined area to which play shall be confined.

Basketball - The following guidelines shall be posted locally in the Basketball area:

- Basketball only to be played within the marked area.
- Barging and aggressive play prohibited.
- Not to be played on wet or slippery decks.
- Suitable footwear must be worn

6. Walking Jogging

A Local Risk Assessment is to be carried out and agreed walking or jogging routes established. Jogging will only be feasible on larger ships with clearer deck structures. It will not be feasible on product carriers with external tank frames. Individuals should note that there is a possibility of long-term injuries to knees and joints from jogging because of the rigidity of the steel deck. Any personal decision to engage in jogging should take this into account.

The following safety guidelines shall apply to those engaging in walking or jogging exercise:

- If the route includes working areas but is being done outside working hours or no work is taking place on deck, then PPE need not be worn providing appropriate personal footwear is worn.

- Walking or jogging shall not take place in poor weather when seas may break on deck or the vessel is moving such that it may affect balance.

- Leisure walking shall not take place on the main deck during hours of darkness.

- Decks should be clean and dry, and free from trip or slip hazards.

Jogging NOT permitted;

- In extreme heat, i.e. temperatures above 30°C.
- When work is taking place on deck

7. Darts

Darts may be played in the vessel Bar/Recreation Areas. Seating

areas and walk through traffic should be cordoned away from the Darts “lane” and the “bounce back” area.

Arm wrestling/Boxing/Horseplay

These are not permitted The risks of injury are too great with these activities. Engaging in Horseplay, in particular, will be treated as a disciplinary matter.

Where the above states that notices are to be posted, BP Shipping will provide the necessary notices to each ship.

Smoking Procedures - Procedure

1. Applicable Roles

All

2. Object

The purpose of this procedure is to ensure that the policy of BP Shipping, with regard to smoking on board, is defined and followed.

3. Scope

This procedure applies to all vessels owned, operated or managed by BP Shipping.

4. Procedure

4.1 Smoking

In a mixed regime like a ship where social and work areas are combined, it is difficult to be totally prescriptive due to ship / trade variation. However, the following details represent a pragmatic approach based on common sense and a **requirement** to protect staff from “enforced” secondary (or passive) smoking.

a. Prohibitions and Restrictions

SMOKING PROHIBITED AREAS (At all times)

Smoking is prohibited at all times, whatever the class of cargo, and whether or not the ship is gas free, in the following areas:

- All open decks, spaces, tanks and compartments external to the main accommodation block.
- All storerooms including linen lockers and laundry rooms.
- Machinery spaces and steering gear flat.
- In bed, whatever the circumstances.
- For hygiene reasons, any area where food is stored or prepared.
- In alleyways and passages in the accommodation

SMOKING RESTRICTED AREAS (At all times)

Common Working Areas:

Bridge Engine Control Room	the **default status** of all of these

General Office Cargo Control Room	spaces is **NON SMOKING.**
Conference Rooms	the **default status** of these spaces is **NON SMOKING** at all times when used for official business (e.g. pre/post cargo ops meetings). However, when used for other purposes approved by the ship's management team (e.g. duty mess/social events), they shall have the discretion to assign it as a smoking room (within terminal guidelines if in port). Any Local Procedure so determined shall be prominently displayed within that Conference Room.

Recognising that special circumstances may exist:

- where a **single** watch-keeper is engaged in watch-keeping duties on the Bridge or in the Engine Control Room / Workshop, or,
- where **prolonged** periods on duty may result in confinement of personnel to either the Bridge or Engine Control Room / Workshop, or,
- where **pilots** are engaged in **prolonged** pilotage / berthing duties onboard, who may not readily comply, then,
- the Master or Chief Engineer (as appropriate) have discretion to allow a **temporary** re-classification of the space involved.

Common Recreational Areas:

TV Lounge(s)	where provided as a separate unit from the bar / smokeroom, **NON SMOKING**.
Games Rooms / Gym	where provided as a separate unit, **NON SMOKING**.

Note: due to space limitations on the "Border" class coastal vessels, the current arrangements which permit the use of the Crew Messroom and Officer Saloon as the designated "Smoking Rooms", outside meal times, remain valid and in force.

SMOKING PERMITTED AREAS (At sea)

Private Cabins	Subject to the normal safety restrictions.

Private Offices	Subject to the normal safety restriction, **however** when used for interview or other such business purposes, the involvement of any non-smokers must be recognised.
Bars / Smokerooms	Subject to the normal safety restrictions.
Engine Room Workshop	Subject to the normal safety restrictions, free of combustible materials and properly ventilated (e.g. welding bay area with fan).

Note – Whilst a ship is:

- alongside any oil berth, whether working cargo or not, or
- engaged in any cargo, ballasting (into cargo tanks), tank cleaning or gas-freeing operation whether in port or at sea

Smoking shall be restricted to the designated “Smoking Rooms” as agreed with terminals in accordance with ISGOTT guidance / Terminal Regulations. This will normally be more stringent than the routine “at sea” condition, further restricting the number of permitted smoking areas. The agreed “Smoking Rooms” should be clearly identified and made known to all onboard.

Designation and Control of Smoking Places

1. The agreed smoking place should not have doors or ports which open directly on to open decks (ISGOTT).

2. Notices should be displayed at the smoking place to ensure that all staff are aware of the location of the smoking place (ISGOTT).

3. In a designated smoking place all ports are to remain shut and doors leading into passageways are to be kept closed except for access (ISGOTT).

4. Doors that must be kept shut should be clearly marked, but in no case should doors be locked. (ISGOTT).

Some rare, ship-specific, situations may make literal interpretation of these requirements difficult. In such cases, the shipboard management team shall take a pragmatic approach to the problem but always recognising the requirement that **no staff shall be subject to enforced secondary smoking** during the course of the shipboard duties and that this fact shall be incorporated in any arrangements.

In the event that the policy is not adhered to, this will be regarded

as offensive or disorderly behaviour under the BPMS contract/Code of Conduct and may be subject to disciplinary action.

b. In Port – Additional Restrictions
The designated smoking areas must be agreed in writing between the Master and the Terminal Representative before any cargo operations commence. Suitable notices must be displayed outside the chosen areas.

The designated smoking areas are to be used throughout the vessels stay in port. All doors and ports in the area are to be kept closed when not in use.

On LNG vessels the conference room is also a designated smoking area when smoking restrictions are in force. Due to proximity to CCR it may be necessary to have door(s) open. This to be at Master's discretion.

c. Matches and Lighters

The use of matches is only allowed in designated smoking areas both at sea and in port. Matches must not be carried on any open deck or area where flammable gas may be encountered.

Matches must always be the 'safety' type that are supplied to all ships. Lighters are not permitted onboard ships at any time.

Hand Arm Vibration – Procedure

1. Applicable Roles

All

2. Object

The object of this procedure is to minimise the risk of injury due to exposure to hand arm vibration at work.

3. Scope

This procedure shall apply to all vessels owned or managed by BP Shipping. It should be applied to all work where vibration can be transmitted to the hands.

4. Procedure

4.1 Purchasing

Personnel selecting new hand held equipment for use on board vessels shall take into consideration the vibration levels produced.

Information on the vibration level of the equipment shall be obtained from the equipment supplier.

4.2 Assessment

A hand arm vibration risk assessment shall be undertaken on all vessels. This should identify:

- All activities where daily vibration exposures are likely to equal or exceed 2.5 m s-2
- All activities where daily vibration exposures are likely to equal or exceed 5.0 m s-2
- Appropriate control measures to reduce the risk of injury.

Where the vibration level produced by a tool or piece of equipment exceeds 2.5 m s-2, then an “allowable exposure time” for that tool should be determined. This is the time it would take for daily vibration exposure to reach 100 vibration points 2.5 m s-2. In addition, the number of “vibration points” associated with use of the tool or equipment for one hour should be determined, using the table given in Appendix 1.

A colour coding scheme shall also be applied, as follows:

- RED to indicate tools / equipment with vibration levels in excess of 5.0 m s^{-2}
- AMBER to indicate tools / equipment with vibration levels between 2.5 and 5.0 m s^{-2}
- GREEN to indicate tools / equipment with vibration levels below 2.5 m s^{-2}

A register (see **HSSE-HEALTH-VIBRATION-FORM -01)** should be kept of the assessments undertaken for all tools and equipment, which should include the following details

- Name / identification
- An identification number
- Date of the assessment
- Description of tasks for which the tool or equipment is used
- The vibration level
- The allowable daily usage time
- The number of vibration points
- Reassessment date

The assessment should be reviewed if there is any change to the work that may affect vibration exposures, if health surveillance indicates that employees have suffered injury or if there is any reason to suspect that it is no longer valid.

4.3 Control Measures

Where practicable, exposure to hand arm vibration should be eliminated at source or, where this is not practical, reduced to the lowest level possible by selecting the tool or equipment and working method producing the lowest vibration levels and by using engineering controls or organisational measures.

Daily exposure to hand arm vibration should not normally be allowed to exceed 2.5 m s-2.

No activities shall be allowed which would result in an exposure to hand arm vibration equal to or exceeding 5.0 m s-2.

Any tools that produce vibration levels above 2.5 m s-2 should have a label attached that provides the following information:

- An identification number
- Description of tool / equipment
- Date of the assessment
- Colour code
- The vibration level

- The allowable daily usage time
- The number of vibration points per hour
- Reassessment date

Where an individual undertakes an activity using a single tool that presents a vibration risk during a particular day, then it shall be ensured that the total "trigger time" (i.e. the time when the tool or equipment is active and transmitting vibration to the hands) does not exceed the allowable daily usage time.

If more than one tool or piece of equipment is used during the day, then it shall be ensured that the total number of vibration points does not exceed 100. (See Appendix 1).

Individuals using vibrating tools should keep a daily log sheet (**HSSE-HEALTH-VIBRATION-FORM-02)** that should include the following details for each task performed:

- Description of task
- Tool / equipment used
- Tool / equipment identification number
- Vibration level
- Allowable usage time
- Vibration points per hour
- Usage time
- Total vibration points for task

Where more than one task is performed the total daily vibration points should also be recorded in the log.

The completed log sheet should be forwarded to the Master.

4.4 Maintenance of Equipment

All hand tools and equipment presenting a risk from exposure to vibration should be checked on a regular basis (normally every six months). These checks should be included in the preventative maintenance schedule.

5. Health surveillance

All personnel whose daily vibration exposures are likely to equal or exceed 2.5 m s^{-2} on a regular basis should be provided with health surveillance.

A baseline test should be given to all new employees likely to have such exposures and for exiting employees when transferred to work in areas where such exposures could occur.

Following this they should be given annual tests for the next two years and then tested every three years. More frequent testing should be undertaken if any injury is detected, or if the employee's exposure to hand arm vibration increases.

6. Information, Instruction and Training

All employees who are likely to have daily vibration exposures at or above 2.5 m s-2 should be provided with information, instruction and training covering:

- The risks from exposure to vibration
- How to recognise the symptoms of vibration related damage
- The measures implemented to reduce exposure
- How to interpret information provided on vibration levels
- The importance of only using tools and equipment for the designated times
- Measures they can take to reduce the risk
- Their responsibilities under this procedure.

7. Records

7.1 An up to date copy of the findings from the hand arm vibration risk assessment shall be kept by the Master. (**HSSE-HEALTH-VIBRATION-FORM-01)**

) 7.2 Records of tests undertaken on tools and equipment shall be kept by the Master.

7.3 Vibration exposure log sheets (**HSSE-HEALTH-VIBRATION-FORM-02)** shall be kept in a central file maintained by the Master.

7.4 A list of personnel requiring health surveillance shall be kept by the HSSE team.

8. Responsibilities

8.1 The Superintendent shall be responsible for ensuring that consideration is given to the vibration levels produced when purchasing new equipment.

8.2 The Superintendent shall be responsible for ensuring that all orders for new equipment include an instruction to provide information on vibration levels.

8.3 The Chief Engineer shall be responsible to the Superintendent that all local orders for new equipment include an instruction to provide information on vibration levels.

8.4 The Chief Engineer shall be responsible for ensuring that hand arm vibration assessments are undertaken, that they are reviewed when appropriate and that appropriate control measures are introduced

8.5 The Master shall be responsible for ensuring that an up to date record of the assessment is filed on the vessel.

8.6 The Chief Engineer shall be responsible for ensuring that an indication of the allowable usage time and other information relating to vibration exposure is attached to all tools and equipment which can present a risk of injury from hand arm vibration

8.7 The Chief Engineer shall be responsible for ensuring that all control measures introduced to minimise exposure to vibration are properly used by the officers, crew and visitors to the vessel.

8.8 All officers and crew shall be responsible for using the controls provided, following the exposure guidelines and for reporting any defects with tools and equipment.

8.9 All personnel using tools and equipment presenting a risk from vibration are responsible for completing the vibration exposure log sheets. (**HSSE-HEALTH-VIBRATION-FORM-02).**

8.10 The HSSE team shall be responsible for arranging for health surveillance to be undertaken as appropriate.

9. Appendix 1

Determining Vibration Points

Vibration magnitude (ms^{-2})	Vibration points per hour
20	800
19	720
18	650
17	580
16	510
15	450
14	390
13	340
12	290
11	240
10	200
9	160
8	130
7	98
6	72
5.5	61
5	50
4.5	41
4	32
3.5	25
3	18
2.5	13
2	8
1.5	5
1	2

Total vibration points are determined as follows

- For each tool, multiply the number of vibration points per hour by the total number of hours “trigger time” for that day. This gives the total daily vibration points for the tool.
- Add together the total daily vibration points for each tool to give the overall total for the day.

Note: “Trigger time” is the time when the tool or equipment is active and transmitting vibration to the hands

Incident Investigation, Analysis and Reporting – Procedure

1. Applicable Roles

Master
Chief Engineer
Chief Officer
Second Engineer
Shipboard Safety officer
Fleet safety Advisor
Office

2. Object

The purpose of this procedure is to ensure that a formalised system exists for the reporting and investigation of all incidents, including near misses, for carrying out an analysis of the incidents and for implementing corrective actions.

3. Scope

This procedure applies to:

- Any casualty, accident or serious incident involving a BP Shipping owned, managed or operated vessels including pollution of the environment or risk of such pollution

- All incidents involving any person on Articles of Agreement on a BP Shipping owned or managed vessels whether on board, ashore or accessing the vessel.

- Any Contractor, visitor or Head Office personnel who have any connections with on board operations. Note: - Contractor excludes shipyard workers when a vessel is in a repair yard or dry-dock.

4. Procedure

4.1 The initial response to an incident should be made by the appropriate means as determined by the category of the incident. For detail see HSSE–SAFETY-ACC/INCID–WP01.

- Where immediate assistance is required the BP Casualty telex should be sent. (For details see BPS Incident Management/Business Support Plan).

- For an actual or potential Days Away From Work Case (DAFWC) an URGENT message should be sent to BP Shipping.

- All incidents should be reported directly to the vessel Superintendent.

- Reference should also be made to LEGAL-ACC/INCID-PRCDR with regard to the legal requirements.

4.2 Following the initial reporting of the incident the vessel should carry out an investigation and produce a report using the BP Shipping Incident Investigation Report Form in accordance with HSSE–SAFETY-ACC/INCID–WP-01.

The completed report will be passed to the vessel's Superintendent for any necessary actions or response. The Superintendent shall circulate the completed report by Email according to the incident category and copy all correspondence to the Safety Superintendent for filing. See QA-RECORDS-PRCDR

NB: In the case of 'personal injury' incidents a copy of the completed report shall be sent to the Manning Contractor by the vessel. For Notifiable Incidents as defined in HSSE–SAFETY-ACC/INCID –WP-01, the vessel should also complete the appropriate forms and report the incident to the Flag State.

Note – Isle of Man accepts the BP SLC01 Form in place of the ARF1 Form as per written permission, held by BPCS, from Isle of Man Marine Administration.

Responsibility for "Flag State" representation for all Company operated and managed tonnage, registered in the Isle of Man, has been transferred to BP Crewing Services Limited.

To be in compliance with Manx Shipping Notice MSN 003, any incidents that are reportable to the Isle of Man Marine Administration must be reported to the Isle of Man Marine Administration by the Master, or to BP Crewing Services Limited for them to pass on to the Isle of Man Marine Administration. In any event, both BP Crewing Services Limited and the Company must be advised of any such incidents.

Flag States for Liberia and United Kingdom must also be notified as required.

There may be a requirement to report certain incidents to other parties depending on the type of incident and the vessels location, under national or local legislation. (I.e. USCG with reference to CFRs when in the USA or US EEZ).

4.3 The ship's safety officer shall have involvement with the

investigation of all reportable incidents onboard to ensure the safety aspects have been considered. Evidence of this taking place shall be recorded in the incident report section detailing those persons who investigated the incident.

The ship's safety officer shall maintain records of all incident investigation reports, statements and other relevant information in a file. See QA-RECORDS-PRCDR.

NB: Where paper copies are used, the file should contain signed copies of the Incident Investigation Reports and copies should be sent by Email to the Vessel Superintendent with relevant drawings or pictures by post or Fax as appropriate. Those using the Tr@ction system should submit the report through this system and then send any relevant drawings or pictures by post, fax or e-mail.

4.4 All data reported on the Incident Investigation Reports should be collated and analysed for trends by the Fleet Safety Advisor with assistance from the FTM Team.

Statistical information for BP Employees, Contractors and Third Parties shall be reported to BP Oil UK as required by their procedures. The format of these reports is reviewed periodically by BP Oil UK.

4.5 Near Miss reporting is an integral part of an Incident Reporting System. Not all Near Misses will require a full investigation and thus a system for capturing these unsafe acts and conditions should be available. Near Miss Report may be completed anonymously; these reports should be discussed by the Ships HSSE Committee and used to determine onboard Safety Themes, corrective actions and education /training to prevent recurrence.

4.6 All Corrective Actions recommendations developed from any investigation will be reviewed and accepted or rejected by the person issuing the "Terms of Reference" for the investigation. Where "Terms are Reference" are not issued the Fleet Technical Manager will accept or reject the recommendations. All accepted corrective actions will be entered into TRACTION. Recommendations rejected will be noted as such with reason and entered into Traction as "Closed". The individual Leading the investigation is responsible to make the entries into TRACTION.
See QA-ACTIONITEMS-PRCDR.

5. Responsibilities

5.1 All BP Shipping Personnel and Ship's Crews shall be responsible

for ensuring all incidents and accidents are reported to the appropriate superior or departmental head.

The legal duties that are placed on all employees are listed below:

Each individual is personally responsible for working safely. To ensure there is no ambiguity about this, staff should be knowledgeable about and work to the Code of Safe Working Practice for Merchant Seamen.

Staff should work safely and, if they identify unsafe conditions, they should stop immediately and only continue when the unsafe condition is rectified and work can continue in a safe manner. If they cannot rectify the deficiency safely it should be brought to the attention of a responsible officer. If an unsafe condition is left it may harm someone else. (A near miss report should be completed as soon as possible after the unsafe working condition is rectified.)

Correct use of Personal Protective Equipment is mandatory. Boiler suits, boots, hard hats, eye and ear protection where appropriate must be worn as a minimum. Additional safety equipment will be required for handling chemicals, welding and other hazardous activities.

The Company's Quality Management System is mandatory for all staff and it should be clear that breaches may result in disciplinary action on board or ashore – ignorance of it is not an excuse. It is the responsibility of all staff to know the relevant sections of QMS and follow them.

Enforcement of these duties is an important part of any successful management system, and on this basis, deliberate and irresponsible breach of Company procedures may result in disciplinary action, or even dismissal. If a workable procedure or guidance note is in place then it must be followed.

If a procedure that is in place cannot be followed in full then this must be drawn to the attention of a senior officer who should then advise the Appropriate Superintendent (Engineer or Marine) followed up by a Document Change Request Form detailing the problem and proposed rectification. This must be done immediately such a problem is recognised to allow QMS to be revised before a possible incident occurs.

5.2 The Master shall be responsible for ensuring that the reporting of accidents and incidents is completed as per the instruction contained in this procedure and in HSSE – SAFETY- ACC/INCID

–WP01.
He must also ensure that Just Culture is carried out for every incident that occurs on board. (HSSE-SAFETY-JUSTCU-WP-01)

5.3 The Engineering Superintendent, in conjunction with the Marine Superintendent, shall be responsible for ensuring that the incident investigation undertaken is appropriate to the category of the incident and that all actions are fully completed.

5.4 The vessel Superintendent shall be responsible for recording all incidents and ensuring circulated reports are filed.

The Master shall ensure that a common collection point is available on board for completed Near Miss forms and that details of the reports are discussed at the Shipboard HSSE Meeting and brief details recorded.

In addition to the above, there will be a requirement to report certain incidents to the Relevant Project. These incidents are defined in the relevant charterers instructions.

Incident Investigation and Reporting – Working Practice

1. Applicable Roles

Master
Chief Engineer
Chief Officer
Second Engineer
Shipboard Safety Officer
Fleet Safety Advisor

2. Incident Investigation and Reporting

Incident investigation has the primary purpose of preventing further incidents by identifying the causes and lessons learned to allow safeguards to be put in place to prevent recurrence. If the investigation is only concerned with the actual injuries and losses associated with the incident then some potential causes and lessons may be missed. In a simpler incident the causes may be more readily apparent than in a Major Incident. In a Major Incident there will probably be complex multiple causes and error chains which will take time and effort to identify. In essence the more serious an incident the more potential there may be to identify causes and lessons. The classification of incidents in terms of consequence and potential gives a structure to the Incident Investigation process and ensures that the correct level of effort and expertise is expended for each incident to maximise the benefit.

3. Classification of Incidents

The following table details the consequences and categories against which the potential of an incident should be measured in order to ascertain the level of Investigation:

Consequence or Potential				
Incident Category	**Personal Injury**	**Property Damage**	**Environmental Release**	**Near Miss**
A	Fatality	Explosion/ Collision/ Grounding >= $100,000	Major spill >=100bbls or uncontrolled gas release>10 tonnes or volumetric equivalent	Category A Potential
B	DAFWC	Vessel Disabled or >= $100,000	Regional environmental impact, likely to receive citation / fine and could jeoperdise reputation of BP Shipping	Category B Potential
C	RWI	<100,000 >=$10,000	Local environmental impact, moderate possibility that environmental law broken and potential for long term impact to BP Shippings reputation	Category C Potential
D	Medical Treatment Injury	< $10,000 >=1,000	Environmental impact not existent, low possibility law would be broken and little possibility of damage to BP Shippings reputation	Category D Potential
E	First Aid Case	< $1,000	LoC < 1 barrel not on deck or to environment	N/A

Yellow shading indicates RCA always to be carried out.
Pale shading indicates RCA to be carried out where potential categorization is at A or B.

4. Level of Investigation

Category A	Investigation Team to be appointed by Director, Fleet Operations To include representation from outside BP Shipping, if required by the severity of the incident. Circulation – BP Shipping Management Team, Operations Group Team Leaders, all Operations Superintendents, all ships, discussed at HSSE Working Group, specific departments where appropriate, Fleet Safety Advisor for review, discussed at Fleet Ops HSSE Mtg.
Category B	Investigation Team to be appointed by the Workgroup Leader concerned to include representation from outside Operations Group, if required by the severity of the incident. Circulation – Management Team, Operations Group Team Leaders, all Operations Superintendents, all ships, discussed at HSE Working Group, specific departments where appropriate, Fleet Safety Advisor for review, discussed at Fleet Ops HSSE Mtg.
Category C	Engineering Superintendent or Marine Superintendent, as appropriate, to report the causes and action plan to the Workgroup Leader within one week of the incident. Where the potential of the incident is considered to be Category A or B, an RCA will be instigated by the workgroup leader as per B above. Circulation – Operations Group Team Leaders, Workgroup Leaders, all Operations Superintendents, specific departments where appropriate, copy to sister ships and other classes where appropriate, Fleet Safety Advisor for review, discussed at Fleet Ops HSSE Mtg.
Category D&E	Master and Ship investigation team to investigate fully and forward completed incident report to the Engineering Superintendent who, in conjunction with the Marine Superintendent (where appropriate), shall ensure that the investigation has fully explored the possible causes and identified appropriate actions to prevent recurrence. Circulation – Engineering Superintendent, Fleet Technical Manager, Workgroup Leader, specific department where appropriate, copy to sister ships

where appropriate, Fleet Safety Advisor review, summary details recorded at Fleet Ops HSSE Mtg.

At all levels of investigation, the Incident Investigation Report will form the basis from which further investigation will be conducted. Any incident below category E should be reported as a near miss.

NB: For Category A and B incidents the time-scales for reporting cannot be specified as the nature of the incident is liable to require that the ship is visited by an individual or a team of investigators. However the reporting of full facts from the ship to the Ship Team and to the investigation team should be as soon as practicable. The investigation team should aim to report its findings in terms of full facts as early as possible. The analysis of these facts to establish cause(s) may take some time but publishing facts by way of an interim report will allay fears and stop conjecture into what occurred.

5. Incident Categorisation

In deciding the Category of an Incident the “Potential” as well as the “Actual” Consequence must be taken into account. Personal Injury should be the first Consequence to be evaluated and this will take precedence over other types of loss or damage.

When assessing the potential of an incident the level of exposure must be taken into account to ensure that creditable outcomes are considered and hence “potential” equates to “reasonably possible”. Usually one additional failed defence or coincident event should be added to the actual event to identify the potential of the event and thus the appropriate category.
The actions required to correct the outcomes of an incident and those required to prevent a recurrence may not be totally understood or clear until the investigation into the incident has been completed.

However the circumstances of an incident may determine that it is prudent to circulate the details to the fleet or class as appropriate. This will be achieved by the use of a Safety Flash which will be co-ordinated and issued by the Fleet HSE Team. The Controlled Document Incident Categorisation Guidance Doc should be referred to for further guidance on incident categorisation.

5.1 Decision on Category – Initial Actions

In order to be able to address each incident with the correct level and speed of response the decision on the Category must be

made within 24 hours of the incident and the relevant personnel notified.

For incidents of Category E or above the incident must be fully discussed by the Master and Engineering Superintendent, in conjunction with the Marine Superintendent where appropriate, to agree the Category. For incidents which are or have the potential to be Category A or B then this discussion should include the Workgroup Leader. In order to assist these discussions the initial incident notification should be forwarded to the Engineering Superintendent.

This information can then be used by the Engineering Superintendent to inform the required group (according to the Category of the incident). In this way the information passed on within 24 hours of the event will be sufficiently detailed for the recipients to be aware of the scale of the incident.

5.2 Decision on Category – Definitions

Category	Potential Consequences	Definition
A	Fatality	Death caused by work related incident / illness
B	DAFWC	A work-related injury which causes the injured person to be away from work for at least a normal shift after the shift on which the injury occurred because he/she is unfit for ANY work as deemed by a physician.
C	RWI	A work related injury which causes the injured person either: (i) to be assigned to another job on a temporary basis, or (ii) to work at a permanent job less than full time or (iii) to work at their permanent job without undertaking all the normal duties.
D	Medical Treatment Injury	A work-related injury that requires attention from a medical practitioner (even if treatment is provided by someone other than a physician, eg. suturing by a nurse) but does not result in either a Days Away From Work Case or Restricted Work Injury. Note – First Aid Cases have a different definition and should not be reported as Medical Treatment Injuries.

E	First Aid Case	***Include:*** (i) follow up visits to a physician or nurse for observation ONLY, or for routine dressing change; (ii) negative X-ray results; (iii) cleaning abrasion/wounds with antiseptic and applying dressing; (iv) irrigation of eye and removal of non-embedded foreign objects using a cotton swab; (v) one time administration of oxygen after exposure to toxic atmosphere and resumption of normal (but not restricted) work the following day; (vi) soaking, application of hot-cold compress and use of elastic bandage on sprains and strains immediately after injury; (vii) applying one-off cold compress or limited soaking of a bruise; (viii) use of non prescriptive medicines (over the counter medication); (ix) treatment of First Degree burns.

a. Property Damage, Spill/Environmental Damage

See consequence or potential table

N.B. Major leak in the pumproom would be categorised as a potential explosion. Category A.

6. Incident Investigation

Incident Investigation Report should be completed as fully as possible with all the facts and relevant information. Statements from participants and witnesses should be used to establish the facts. If statements conflict or sufficient information does not become available to establish a clear sequence of events then individuals should be interviewed again. It should not be assumed that information is deliberately being withheld as it may be that the detail is perceived by the individual as not relevant has been overlooked or due to the trauma of the event has been suppressed.

6.1 The Investigator

The seniority of the person carrying out the investigation will vary according to the gravity of the incident. In the case of major incidents an independent Board of Inquiry may be set up. At the other end of the scale it would be more appropriate for the immediate line supervisor or department head of the personnel/area involved to carry out the investigation. On a vessel the Master and Safety Officer must be part of the

investigation team. All lead investigators for Root Cause investigations will have completed an RCA course and have been involved in previous investigations.

The line supervisor or department head has a personal interest and involvement with the incident and would be well informed on how to obtain the information needed.

6.2 Procedure

The first stage in an investigation involves establishing the factual information. This requires observation at the scene of the incident. Photographs may be taken to help clarify the report and perhaps assist in promulgation of the lessons learned at a later date. Further information is obtained by checking records, interviewing personnel involved, witnesses and experts as appropriate. In the case of a category A or B incident, then terms of reference will be issued by either the Fleet Operations Director or the Fleet Technical Manager.

The second stage is to analyse the facts and make a judgement on the immediate and basic causes and the shortcomings in control. This permits the investigator to draw conclusions on causation factors.

The third stage is to recommend actions to ensure, so far as possible, that the incident will not or is less likely to happen again.

All incidents involving the ship/shore interface shall, whenever possible, be investigated by both parties involved. Where this is considered impracticable the minimum action required, subject to any legal or business constraints which may apply, is that a draft copy of the completed investigation report must be sent to the other party for comment on or addition to the conclusions, followed by a copy of the final report.

For root cause investigations the first draft is to be submitted within 14 days of the incident occurrence, with a final report within 30 days where logistics and legal requirements allow.

The Fleet Technical Manager shall draw upon the expertise of the Legal Team and MATA, FTM Team and/or HSSE Team as necessary to assist his own personnel and shall, in any event, copy reports of such investigations to those Teams.

The Fleet Technical Manager will be responsible for reviewing all investigations and for satisfying the Management Team that accidents and incidents have been adequately investigated, that

follow up action has been initiated and that any necessary dissemination of information has been undertaken. Should the Management Team suspect that there is an unresolved fault on the part of the Team(s) involved, they will require the incident to be investigated further.

Any member of the Management Team may commission an investigation into any of the operations for which he is responsible at any time and for any reason.
When conducting any such investigation the Investigating Team shall, with the agreement of the commissioning Team member, co-opt expert advice and assistance.

6.3 Review

The report should then be reviewed by the Superintendent with guidance from the Fleet Safety Advisor to confirm that the incident has been adequately investigated, analysed, categorised and sound recommendations made.

6.4 Action Plan and Follow-up

The Superintendent is responsible for ensuring that corrective actions are documented, tracked and closed out. Where corrective actions cannot be immediately completed and documented on the submitted Incident Report From, they shall be tracked and closed out using the action item system in Tr@ction.

Action Items and Investigation report will be entered into Traction. The individual issuing “the terms of reference” is responsible to ensure that Traction is updated with results of the Investigation including action items.

7. Analysis

The objective of analysis is to identify trends from incidents. From these trends, aims and objectives will be produced for agreement at the Management Review. This will enable the most effective actions to be carried out to reduce losses in the future.

All incidents will be reviewed by the Fleet Safety Advisor and analysis discussed at the Operations Fleet Operations HSSE Meeting. By categorising incidents by type and cause trends will be identified which will give rise to further analysis and remedial actions.

8. Time Charter Ship Reporting

Detail to be completed when charter party changes agreed.

All incidents and Accidents will be entered into TRACTION by the superintendent. All reports, Investigation materials, RCA's, and supporting documents will be included in TRACTION.

9. Reporting to BP Oil

The HSSE Team will complete information reports for BP Oil as indicated by their procedures and in the format required.

10. Commercial Aspects of Accidents and Damage Investigation Recording

See LEGAL&INS-ACC/INC-ACC/INC-WP-01.

11. Appendix 1 – Incident reporting Definitions

Incident

An accident, near miss or dangerous occurrence.

Accident

An undesired event that results in harm to people, damage to property, loss to process or loss in profitability.

Property Damage

Physical damage to hardware such as plant or equipment as a consequence of fire, explosion, collision, criminal act, etc., or as the result of premature failure of equipment due to lack of maintenance or inadequate quality of equipment, materials or components. Incidents with the potential for a similar level of damage should be recorded as Near Misses.

Notifiable Incident

An incident, injury or illness which under local or industry legislation is required to be reported to a statutory authority (i.e., DTp, Flag State).

Dangerous Occurrence

As defined by Department of Transport form ARF/1G How to complete the Accident and Dangerous Occurrences report form, Section B, (A similarly numbered form is required by the Bermudan registry).

Near Miss

Any unplanned event that under slightly different circumstances could have led to a loss in the form of personal injury, environmental incident or property damage

Recordable Injury

Include every occupational death, and those non-fatal injuries which involve one or more of the following; loss of conscousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid). ie, Fatalities + DAFWCs + RWIs + Medical Treatment Injuries.

Frequency Rate
The number of days away from work per 200,000 hours worked.

$$\text{ie. DAFWC frequency rate} = \frac{\text{No of Days Away From Work Cases} \times 200{,}000}{\text{Man-hours worked}}$$

Note: Exposure is 24 hours / day

Notes:

- Where the requirement to seek medical advice results in the injured person spending time away from the ship, this time does not count as Lost Time provided the person is able to resume work on their return to the ship.

- Non work related injuries – where a person is injured on board and the activity was not work related this injury will not be included in company figures reported to the BP Group. However, the incident should still be investigated to ensure that the lessons learnt are identified and any necessary remedial actions are taken to prevent recurrence. Records will be kept under the heading of Non work related.

Loss of Containment and Spill – General Definitions

The BP group states that any oil escaping "**primary containment"** shall be considered as a **"spill"**, and that any "spill" exceeding 1bbl (159 litres) must be recorded at the Group centre for inclusion in the Group's annual environmental statement. Any spill exceeding 1 bbl (159 litres) is treated as a priority-reporting requirement and must be dealt with within **24hrs**. It is therefore essential that ships make timely and accurate reports if it is likely that the 1 bbl limited has been exceeded.

Spills

A spill is defined as an accidental or unplanned loss of primary containment from a BP or
contractor operation, irrespective of any secondary containment or recovery.
.
BPS clarification – “vessels” is used in the shore-side sense to mean a tank or similar.

Loss of Containment

Any unplanned event where hydrocarbons are released from primary containment and which results in the need for action such as shutdown, evacuation, recovery, clean-up or maintenance, to mitigate the effects of the loss of containment.

BPS clarification – it is on this basis that we determine that leaks from planned pressure testing activities are NOT considered to be “spills”. It is not unlikely that there maybe a leak during pressure testing and such activity is always carried out at an appropriate time in a controlled manner, i.e. risk assessed, and managed such that any outcome is

12. Appendix 2 – Completion of incident Investigation Report (Non-Tr@ction) System

1. Summary Description

A summary of the incident giving the main detail. The incident should be described in sufficient detail so that the reader has an overall picture of what has happened. This should include brief details of obvious causes; the reasons for these causes will be brought out in the investigation and recorded in section 3.

Comprehensive Description A full account including events leading up to the incident. Information from witness statements should be included but the statements should be attached to the report. In some cases statements may contain conflicting timings and information even after further interviews, where this is the case then the account should discuss these differences but make no conclusions at this stage.

Witnesses may include the person who gave instruction for the task being undertaken, even though that person may not have been present at the time of the incident.

To enhance the description of the area of the incident, the task being completed and the way in which systems work, then pictures, sketches, diagrams, copies of ships drawings or extracts from manuals and maintenance records may be appropriate to be included with the report.

Include details of any planning or appropriate procedures in place for the task. If there is a procedure was it followed and if not why not? Are there any deficiencies in the procedure or plan?

The description should detail facts and not opinions.

2. Losses

(If a section does not require to be completed mark Not Applicable)

2.1 People

Should only be completed where actual personal injury is involved. Detail the type of injury, size of cut, treatment given, ie. Butterfly stitches applied, dressing to be changed daily, pain killers if appropriate. Is further treatment necessary? Is/was further medical advice sought, if so detail how this was provided. Where medical treatment is sought then a copy of the report should be provided.

Ensure details of persons name, employer, rank/position, part of body, type of contact are confirmed. Also detail days lost or days on restricted work as applicable. The description should detail the level of personal injury as per the definitions in: Appendix III.

2.2 Equipment

Should be completed only where actual damage to equipment has occurred. Detail the equipment damaged including manufacturer, model, type etc. Detail the damage sustained, whether repairable, cost of repair or replacement, with indent and/or work order number, as applicable. Equipment should be taken as hull, fixtures, fittings, machinery and auxiliary machinery.

2.3 Material

Should be completed only where actual damage to material has occurred or material is lost. Detail as for equipment. Material should be taken as items not defined as equipment and would include items used or lost as part of the incident or in cleaning up, or in making the area safe or spare parts used to effect a repair, i.e., loss or contamination or bunkers or lub oil, materials used in oil spill clean up

2.4 Environment

Detail damage to environment such as that caused by spill or emissions to water or air of contaminants. This should only be competed where the damage is measurable or definable.

2.5 Other

Examples of items that could be included here are compensation costs to third parties, increased insurance premiums, loss of production and legal & insurance fees.

3. Causes and Remedial Actions

3.1 Causal Analysis

a. Immediate Causes

These are divided into Substandard Practices and Conditions. They can usually be sensed, ie. seen, heard or touched, at the time of, or immediately prior to, the incident. These are frequently referred to as “unsafe acts” or unsafe conditions

(behaviours or circumstances which could permit an incident to occur). The inference here is that if something is substandard then there should be an acceptable standard that acts and conditions can be measured against.

b. Basic Causes

These are the reasons why the unsafe acts and conditions are being “allowed” to occur. Basic causes help explain why people perform unsafe acts. If a person has not been taught the correct method then he/she cannot follow it.

4. Conclusion

To complete this section the information detailed in the previous sections of the report should be analysed to arrive at a view as to what occurred, what went wrong and why. The amount of detail required for this section should be sufficient as to be unambiguous and deal with the facts that the investigation has established. If the facts do not allow a conclusion to be reached this should be stated. If the analysis points to a conclusion that is not backed up by the facts then further investigation should be undertaken to establish whether there are more facts. In this regard any staff who need to be interviewed should be made aware that the identification of full facts is the only way that it can be hoped to prevent a recurrence of the incident. If staff have made genuine mistakes, they must be informed that they will not be disciplined for this.

5. Action Plan

This should follow on logically from the conclusion and identify the actions to correct the situation, if that is necessary. The main actions should be aimed at preventing recurrence both in the short and the long term. All actions should clearly identify the person(s) responsible for completion and the planned date for completion.

Asbestos – Working Practice

1. Applicable Roles

All

When working with asbestos the following should be considered:

2. Asbestos

2.1 Legislation

The UK Health and Safety at Work Act and the Merchant Shipping (General Duties) Regulations and similar overseas legislation require an employer, as far as is reasonably practicable, to provide and maintain a safe place of work without risk to health. In addition it is the duty of every employee to co-operate with the employer so as to enable such a duty or requirement to be complied with.

2.2 Asbestos Procedures

Procedures to ensure that this standard is maintained are outlined below. These guidelines should be read in conjunction with the advice contained in Department of Transport “M” Notices and the Code of Safe Working Practices for Merchant Seamen.

Where doubt exists as to the procedure to be followed, the Superintendent must be consulted for advice.

A register will be kept by all ships recording details of any material which has been confirmed by analysis to contain asbestos, or where high risk material is suspected.

2.3 Health Hazards Of Asbestos

Asbestos is the name given to a group of naturally occurring fibrous crystalline silicates. The three most commonly encountered in industry are:

- Crocidolite, commonly called blue asbestos
- Amosite, commonly called brown asbestos
- Chrysotile, commonly called white asbestos

It should be noted that colour is not a reliable indication of the presence of asbestos, as it may be mixed with other materials during application, and may undergo colour change whilst in use. Asbestos can only be identified positively by laboratory analysis.

Asbestos materials in sound condition do not present a hazard to health. Danger arises when asbestos materials begin to flake, crumble or are disturbed during maintenance or by movement of the ship and dust is created.

Under such circumstances asbestos materials have the ability to form minute fibres, invisible to the naked eye, some of which are of a critical size and may remain suspended in the atmosphere for long periods. Such fibres may be inhaled and those of a critical size will pass deep into the lungs where, over a long period of time, they may cause scarring and subsequent reduction in lung function, identified as the disease asbestosis.

In some cases inhalation of blue or brown asbestos fibres may cause cancer in the lining of the chest or abdominal cavity. The relevant M Notice on asbestos should also be referred to for additional information.

2.4 Location Of Asbestos Materials On Ships

Due to its excellent properties of heat and chemical resistance asbestos has traditionally been used in many areas of ship construction, as follows:

a. Older ships may have asbestos materials in:

- brake linings on windlass, mooring and lifeboat winches
- cable gland packing
- high temperature putty
- insulation and lagging material on high temperature pipes and casings
- pipe jointing material
- sprayed coatings on accommodation panelling
- valve gland packing
- sandwich filler in decorative panelling material used for accommodation bulkheads and deck heads
- electrical switchboard partitioning

b. In recent years specifications have required the use of alternative materials. Notable dates which may provide an indication of the presence of asbestos are:

- machinery insulation materials on all ships built for the Company since1976 were specified asbestos free since 1981 only asbestos free materials have been approved by the UK Department of Transport for use as accommodation panelling or flooring

Note: These refer only to materials supplied by the builder and should not be relied upon for items of equipment or materials

purchased from elsewhere after delivery for either modification or repair work.

When the presence of high risk asbestos material, as defined below, is confirmed in any position by analysis, or is suspected, details must be recorded in the Asbestos Register

2.5 Asbestos Replacement Materials

The Company has adopted and is actively pursuing a policy to phase out the use of asbestos materials. This is not as yet totally achievable and the present requirements are:

- All lagging/insulation materials supplied, together with rope, tape, putty and millboard will be free of asbestos.

- Certain valve packing and jointing material currently supplied do contain asbestos. These items have been studied in detail to confirm that they do not present a risk to health, and are clearly marked to indicate the presence of asbestos.

- Company purchasing staff and ship's staff must ensure that replacement lagging or insulation supplied by other contractors conforms to the specifications set out Technical Memorandum 16/83 Thermal Insulation for Marine Systems.

- When such materials are obtained abroad every endeavour should be made to ensure they are asbestos free. In some cases this may not be possible and, if asbestos materials have to be used, they should be in minimal quantities and their presence recorded in the Asbestos Register. Where asbestos materials have to be purchased abroad they must be for immediate use and not for storage and later use.

2.6 Procedures For Handling Asbestos Materials

The procedures necessary to minimise exposure to asbestos depends upon the nature of the material and its ability to release fibres into the atmosphere. To establish safe handling procedures the asbestos materials on ships can be divided into two fibre generation categories:

- Low risk materials – valve packing, jointing material, accommodation panelling (providing that it is intact) and brake linings. Such materials are either dust suppressed or the asbestos content is held in a greasy or resinous binder.

High risk materials – raw asbestos packed into cable glands and insulation or lagging material applied in bulk and which must be

broken up for removal.

2.7 Precautions for Handling Low Risk Materials

Intact materials of this type present no hazard to health but the possibility of some dust emission exists if they are cut, or when old materials are being removed and are liable to break up. Normally this type of work will be undertaken by specialised contractors but if ship's staff are required to cut or handle low risk materials then the following precautions must be taken:

- Prior approval must be obtained from the Company who will provide a checklist of procedures to be followed.
- Every effort must be made to minimise dust emission by careful handling.
- Hand tools must be used in preference to power operated appliances.
- Where possible the material must be kept wet.
- A high standard of cleanliness must be maintained in the work area. Any loose material must be damped and cleaned away immediately.
- Personnel must not smoke, eat or drink whilst handling asbestos materials.
- On completion of work, overalls must be laundered immediately and exposed areas of the body washed, to remove any residual fibres. The work area must be thoroughly cleaned to remove all traces of the material.
- All rags etc. used must be bagged and secured for disposal ashore.

Note: Special care must be taken when removing accommodation panels where movement of the ship may have abraded the edges and created dust which may lie behind the panelling. Any such dust must be damped and removed as soon as it is exposed.

When working with brake linings dust should be cleaned away using a wet cloth, not by blowing clear.

2.8 Precautions for Handling High Risk Materials

These materials have the potential to create hazardous concentrations of asbestos dust either due to the asbestos being in its raw form, as can be found in cable glands, or due to the quantity and powdery nature of old lagging materials. Any such cable glands identified, or crumbling areas of lagging, must be sealed immediately with paint.

Where it is necessary for such materials to be disturbed and the

work is liable to create dust, samples must be forwarded to the Company for analysis prior to work being undertaken, at the same time advising the quantity to be removed, location and reason for removal. It is important that samples for analysis should be representative of the suspect material. The whole thickness of any insulation should be sampled in case it consists of several layers of non-homogenous composition. This type of sample can most effectively be taken by coring. It is possible that sections of the original insulation may have been replaced and therefore more than one sample may be needed. A dust respirator should be worn when taking samples.

The minimum sample size should be approximately 15 cm^3. Samples should be placed immediately into a sealable plastic bag and further sealed in a second plastic bag with an identifying label. These bags should be placed inside a brown envelope and labelled “HANDLE WITH CARE – MAY CONTAIN ASBESTOS”.

This envelope should be placed inside a second envelope for despatch. If the presence of asbestos is confirmed the ship will be advised whether the work is to be undertaken by specialist contractors, or whether it may be progressed as described below. In an emergency or for the safety of personnel, or upon receipt of instructions from the Company that the work can be progressed, the following precautions must be observed:

- The area of work must be screened off from surrounding areas and ventilation systems isolated, unless they are of the extraction type and vent to a safe area.

- Personnel working in the area must be kept to a minimum.

- All personnel working in the area must wear disposable overalls supplied specifically for this task and full face high efficiency respirators. The effectiveness of a respirator is entirely dependent upon facial fitting and before commencing operations personnel must test for air tightness of the mask. Filters must be changed daily in the case of extended work.

- The material to be removed must be thoroughly soaked prior to work by piercing the outer surface and allowing water to penetrate to the inner areas.

- Efficient wetting of the material can reduce dust emissions by a factor of 20.

- Any dry areas which appear during removal must be immediately soaked.

- Removed material must be placed and sealed in impervious sacks before being transported from the hazard area.

- Personnel involved must not smoke, eat or drink whilst in the hazard area, or whilst wearing contaminated overalls.

- On completion of work the area must be thoroughly cleaned and washed to remove all traces of asbestos.

- Screening material, overalls and mask filters must be sealed in impervious containers before being transported.

- All personnel involved must use shower facilities immediately on completion of work. All clothing worn under disposable overalls must be washed.

- All rags etc. used must be bagged and secured for disposal ashore.

- Compressed Air Breathing Apparatus (CABA), while an effective form of respiratory protection, must not be used when working with asbestos unless the express approval of the Company has been given. Approval would normally be granted in exceptional circumstances only, and will be subject to procedures detailed by the Company.

2.9 Protection Against Airborne Particulates

As part of the Company asbestos policy, and in order to provide increased protection against other dust hazards, ships undertaking such work are supplied with specialised protective equipment. The outfit comprises:

- 4 High Efficiency Respirators (consisting of full face mask each with 6 main and 25 pre-filters).

- 12 Disposable Overalls (in fibre resistant material with hood and elasticised cuffs and ankles).

High Efficiency Respirators are for use when handling any asbestos materials and during any operation in which other hazardous dust concentrations may occur. Conventional respirators should be used for paint spraying operations only, in conjunction with the correct filters.

Disposable Overalls are supplied only for use with high risk asbestos material in accordance with the asbestos guidelines and are not to be used for any other purpose. The overalls must not be unpacked until required for use.

Plastic chrome gloves must be disposed of after use. Seaboots must be worn inside overalls and may be washed down and re-used.

Use of BA Control Boards – Working Practice

1. Applicable Roles

All

2. Use of BA Boards

Following the issue of Breathing Apparatus Control Boards to each ship in the fleet, the following sets out the guidelines for their use.

Two Breathing Apparatus Control Boards have been supplied on the following basis:

- One BA Control Board is to be located at each emergency team station. The board can either be used to control BA wearers for just that team or one BA Control Board can be used to control all BA wearers.
- The BA Control Boards have 6 tallies enabling each board to be used to control up to 6 BA wearers (as detailed above). A person must be designated to control the board, he/she is responsible for completing the tally as the BA wearer dons the set. The BA wearers Name, Time of Entry and Cylinder Pressure are to be clearly entered onto the tally before it is placed in the BA Control board.
- Once the BA wearers have been despatched to the scene, then the BA Board Controller must calculate the theoretical time out. This is done by aligning the time of entry (in minutes) with the cylinder pressure, on the duration calculator, the “time out” is then read off against either the current or next hour. These times are then entered on the outside of the BA Control Board for each wearer.

- Where team sizes are small, the use of local BA Control Boards may not be practical despite this being the most preferable means of use. In such circumstances control of BA wearers must be carried out as an identified function of the Control Team.

It must be noted that the calculated durations are based on an average consumption rate of 40 litres of air per minute and the actual working duration will be severely affected by the breathing rate and amount of work done by the wearer. The working duration of a two man-BA team will be governed by the wearer with either the lower cylinder capacity or the higher rate of air usage.

It should be borne in mind that whilst the heat and humidity of a fire or rescue situation will affect a BA wearers air consumption, it will also cause fatigue. A BA team should **NEVER,** UNDER ANY

CIRCUMSTANCES be forced to stay at the scene to use up all air if they feel they are unable to cope with the conditions and need to withdraw. BA wearers should be encouraged and prompted to give a cylinder pressure reading on arrival at the actual scene, this will assist the BA Board Controller in assessing the point at which the BA team should withdraw.

On return to the exit point/fresh air, the tally is removed from the board, wiped clean and returned to the BA Control Board. Recovery of the BA team to a safe atmosphere should be reported to the control Team. It is recommended that the tally is not stored with the BA set, as when used for standby at tank entry, or other working uses, the tally may become lost or damaged.

Note 1. The BA duration calculator is based on a 300 bar, 9 litre capacity bottle and should not be used for other cylinder capacities or working pressures.

Note 2 These principles apply to other vessels although the precise design of the BA Control Board may differ.

Note 3 BA boards must be removed to a safe atmosphere before the mounting of the clock is opened and batteries are changed.

Battery life for the digital clocks is estimated to be at least 24 months, but it is recommended that batteries are changed on an annual basis.

Cargo – Working Practice

1. Applicable Roles

Deck Officers and Deck Crew

2. When working with cargoes the following should be considered:

2.1 Cargoes

Personnel are advised of the Health Hazards of Hydrocarbons. When a cargo is to be carried which is outside the range of cargoes normally carried by the Company, or where traditional cargoes have additional hazards, from whatever cause, the ship's Master will be advised of any additional precautions to be taken by the ship operator.

MAROPS-CARGO-H2S explains the dangers and precautions of carrying cargoes which contain H2S.
Personnel will also be advised of any hazards associated with certain stores supplied for use on Company ships. This advice will be readily available to all persons on board.

a. Whenever a person has been exposed to petroleum products, immediate medical attention must be obtained (in the absence of professional medical advice, procedures described in the Shipmaster's Medical Guide must be followed).

It is emphasised that if the ship is in port at the time of an incident medical assistance should be sought immediately, especially if swallowing or breathing substances which are in Group 3 – Gasolines, Group 4 – Low Aromatic Hydrocarbon Solvents or Group 5 – Aromatic Solvents. At sea, medical advice should be obtained by radio telephone following any major incident.

It is recommended that the preventative measures indicated in the Guide be observed at all times and that close attention is paid to personal hygiene. Barrier creams and hand creams should be available for all personnel handling petroleum products. Oily rags and wipes should never be kept in overall pockets because of the possibility of inducing cancer of the scrotum.

Chemicals – Working Practice

1. Applicable Roles

All

When working with chemicals the following should be considered:

2. Use and storage of Chemicals

The Chemical Register gives details of storage, handling, emergency action and fire fighting procedures for chemicals approved for use on board. The guidance given in the Register must be followed.

Chemicals must be stored in designated areas. Only the minimum quantities of ready use chemicals, appropriately segregated shall be kept at the point of use. They shall only be used for the specific purpose for which they are supplied and in accordance with the procedures laid down. Correct Personal Protection Equipment (PPE) must be used as prescribed in the relevant MSDS for product being used.

2.1 Assessments of Chemicals

The Company will assess hazards inherent in chemicals before permitting their use on board ship. Whenever possible technically, hazardous chemicals should be replaced by safer substitutes. The Company will also review, as knowledge of new hazards becomes available, chemicals already in use and take appropriate action.

The Company will ensure that there is sufficient information available to the ship's crew to allow them to take appropriate precautions to eliminate or minimise, so far as is reasonably practicable, any risks from use, handling, storage or disposal of the chemical.

Hazardous Chemicals will be classed under the 'Chemicals (Hazard Information and Packaging for Supply) Regulations 1994' which are the latest regulations and are in line with all present European Directives.

Under these Regulations materials are categorised as hazardous if they fall into any of the following categories:

Physico chemical Hazards:
- Explosive
- Oxidising
- Extremely Flammable
- Highly Flammable

	Flammable
Health Hazards:	Very Toxic Toxic Harmful Corrosive Irritant Sensitising Carcinogenic Mutagenic Toxic for Reproduction
Environmental Hazard	Dangerous for the environment

Any material falling into these categories is hazardous and a Material Safety Data Sheet (MSDS) for them will be held on board if they are likely to be carried.

Material Safety Data Sheets shall be held on board for all hazardous materials carried. Core Manufacturers of Lub Oil, Paint and Chemicals shall supply a folder containing MSDS for all the products they supply to the company. These folders will be held on board and updated at intervals not exceeding 24 months. Materials from other manufacturers shall be put upon an Approved Product List when their MSDS is supplied.

Materials supplied in small volumes with comprehensive health and safety instructions may be carried without an MSDS provided this is approved by the company and the product is on the Approved Product List.

Ships should endeavour to order only products and materials that are on the Approved Product List.

Prior to obtaining any chemical or potentially hazardous substance on a ‘Local Order’, the vessel must obtain a Material Safety Data Sheet (MSDS) for the product.

The details on this Data Sheet should be checked against the MSDS of a similar known substance from the miscellaneous substance MSDS file to assess the potential hazard of the product. If the information available is insufficient to assess the hazard, the MSDS should be faxed to the Fleet Technical Team for clarification. The product should not be used until this clarification is obtained.

Each ship shall carry a folder of office supply containing MSDS for all the products on the Approved Product List that are hazardous or are not supplied with safety instructions. This file

shall be updated regularly as new products are approved and shall be reviewed on an annual basis by the office.

2.2 Stowage and Handling of Chemicals

Careful consideration should be given to the storage location of hazardous chemicals. Care must be taken to ensure that incompatible materials are properly segregated.

All containers of hazardous materials must be properly secured in all locations where they are stored and used.

Appropriate extinguishing media must be available at all locations where flammable materials are stored and used.

Appropriate materials for dealing with a spillage must be available in all locations where hazardous materials are stored and used.

Appropriate personal protective equipment (PPE) must be available in all locations where hazardous materials are stored. Suitable facilities should be provided for the storage of this equipment.

Eye wash stations shall be provided in chemical storage and at dispensing locations.

Due note must be taken of precautions advised by the suppliers of chemicals in their instruction manuals and data sheets, regarding stowage and handling of chemicals.

The special protective clothing and equipment supplied to the ship for handling chemicals must be maintained in good condition and used as directed by the chemical supplier's instructions. Any deficiencies or defects in protective clothing and equipment must be reported to the Company at the earliest opportunity.

Attention is drawn to the spontaneous combustion properties of certain oxygen scavenging chemicals (such as solutions of hydrazine), which have a known tendency to cause ignition of rags, cotton waste and sawdust used to clean up spillage. Contaminated cleaning materials of this type must therefore be washed or destroyed immediately after use.

Chemical & Hazardous Material Safety – Procedure

1. Applicable Roles

All
Procurement Department
Fleet Safety Advisor

2. Object

This procedure describes the method for arranging for the handling, storage and packaging of chemicals and other hazardous materials used onboard.

The aim of this procedure is to ensure that materials of a hazardous nature meet BP Shipping's Health and Safety Charter and all Statutory Regulations, (see QAM 05).

3. Scope

This procedure shall apply to all chemicals and hazardous materials, used by any vessel owned or managed by BP Shipping.

"Hazardous materials" include but are not limited to:

- Biocides
- Lubricating oils
- Fuel oils
- Paints and thinners
- Refrigerants
- Water treatment chemicals
- All other similar materials

4. Procedure

4.1 Purchase and Supply

See also Procurement Procedures

When specifying a new material for purchase, consideration should be given to its hazardous properties. Where alternative products are available, as far as possible the least hazardous material should be selected.

As far as possible, Chemicals and Hazardous materials should only be supplied by an Approved Supplier, who shall provide prior to delivery or on delivery, a Material Safety Data Sheet (MSDS) with each chemical.

In the event of chemicals or hazardous materials being supplied other than by an Approved Supplier, particular attention should be paid to inspection and monitoring of the chemicals or hazardous materials received. An MSDS must be supplied. The MSDS shall be sent to Head Office (Procurement Team and the HSSE Team) to verify that the chemical or hazardous material meets with the requirements of the Company's HSSE Policy prior to use.

4.2 Hazard Information

All materials stored and used onboard must be labelled in accordance with European Union requirements on the classification, packaging and labelling of dangerous substances.

All packages and containers should have a label which indicates

- The name of the material
- Details of the supplier
- The relevant hazard classifications and related symbols (where applicable)
- The relevant R and S phrases

All working containers of hazardous materials must have a label which, as a minimum, identifies the contents and the relevant hazard classification (where applicable.)

Where hazardous substances pass through pipes, or are contained within equipment, the contents and the associated hazards should be readily identifiable.

The supplier shall deliver with the chemicals or hazardous materials an up to date material safety data sheet (MSDS) in English, complying with European Union requirements.

The Chief Engineer shall be responsible for ensuring that the packages and containers are labelled in accordance with the above requirements, that an up to date MSDS has been provided and that the information on the label is consistent with that in the MSDS.

Copies of the MSDS shall be kept

- In a central register on board the vessel
- In the storeroom where the material is kept.

Instruction notices shall be posted at the storage location and at the work site, listing the precautions and dangers of handling chemical or hazardous materials.

4.3 Packaging

The Chief Engineer shall be responsible for ensuring that all hazardous substances received onboard are provided in a suitable container or package which is in good condition.

All containers and packages of hazardous substances stored and used onboard the vessel must be maintained in good condition.

4.4 Storage

Chemicals and hazardous materials shall be kept in approved chemical storage lockers or in a well ventilated space suitable for their stowage. The stowage area shall be clearly identified by an appropriate notice. Enclosed areas used to store paints and thinners should normally be provided with mechanical ventilation.

4.5 Handling Onboard

Where the need to use personal protective equipment for handling chemicals and hazardous materials is identified it should be ensured that appropriate equipment is supplied. This must provide adequate protection and be compatible with both the task to be performed and any other PPE worn.

The task risk assessment should also consider the risk of spillage and fire and specify appropriate measures and equipment to be made available at the work site for use during such occurrences.

All specified controls must be used, working procedures followed and PPE worn.

Where containers of hazardous materials are kept in working areas, proper arrangements should be made to secure them to minimise the risk of spillage.

4.6 Maintenance of Controls

All engineering measures used to control exposure to hazardous substances shall be maintained in good working condition. Regular inspections shall be undertaken to ensure that this is the case. Exhaust ventilation systems should be given a thorough examination and test at least once every year. In addition a visual check should be undertaken on a weekly basis.

Personal protective equipment should be stored in suitable accommodation to minimise the risk of contamination. It must be

inspected immediately prior to use. A weekly inspection should also be undertaken. PPE which has become contaminated or which is not in a suitable condition should be discarded and replaced.

A weekly inspection should be undertaken to check the availability and condition of emergency response equipment (e.g. fire extinguishers and spill kits).

4.7 Disposal

An assessment should be undertaken for all waste materials to determine whether they should be classified as “hazardous waste”.

All wastes should be kept in appropriate containers which should have a label attached identifying the contents and any associated hazards. They should be stored and handled in accordance with the requirements of sections 4.4 and 4.5.

Appropriate arrangements should be made for the disposal of hazardous wastes.

When water that is dosed with trace levels of chemicals or hazardous materials are drained into the Engine Room bilges, attention shall be given to prevent it mixing with reactive chemicals or hazardous materials.

Any chemical or hazardous materials discharged at sea, (including any chemicals or hazardous materials contained in the Engine Room bilges), shall be discharged at sea only if able to comply with the instructions contained in the MSDS and the MARPOL regulations. If unable to comply with the MSDS or MARPOL, then any chemical or hazardous material shall be retained onboard to be disposed of at the next convenient port and if practical returned to supplier

Any discharge or disposal of chemicals or hazardous materials shall be recorded in either the Oil Record Book (discharge from bilges) or Garbage Disposal Record Book (disposal in drums).

5. Information, Instruction and Training

All personnel who handle or use hazardous substances shall be made aware of the hazards the substances present and the associated risks.

All personnel who handle or use hazardous substances shall be instructed on the correct use of control measures and working

procedures which need to be followed.

All personnel required to use personal protective equipment should be :

- provided with information on the specific equipment which needs to be used during a task and where it can be obtained
- trained on the correct use and storage of the equipment
- instructed on any tests and inspections they may have to perform on the PPE

6. Records

An indexed Chemical Register listing all the chemicals and hazardous materials used onboard shall be kept by the Master and the Fleet Safety Advisor

The list shall contain the following information,

- supplier,
- product name,
- product code,
- issue date /issue number of the MSDS
- flash point
- hazard classification and R numbers.

A MSDS shall be available for all chemicals and hazardous materials and a copy of these shall be retained in the Chemical Register. The Chemical Register may be filed electronically. However, hard copies of the relevant MSDS must be available at the storage location of the relevant chemical.

7. Responsibilities

The HSSE dept are responsible for collating the Chemical register and ensuring copies and updates are sent to all vessels.

7.1 The Superintendent shall be responsible for ensuring that all orders for chemicals and hazardous materials include an instruction to supply the relevant MSDS.

7.2 The Chief Engineer shall be responsible to the Superintendent that all local orders for chemicals and hazardous materials include an order to supply the relevant MSDS.

7.3 The Chief Engineer shall be responsible for the handling, storage, labelling and use of chemicals and hazardous materials onboard.

7.4 The Master shall be responsible for the recording and filing of all MSDS in the Chemical Register onboard and reporting any additional chemical details to the Fleet Safety Advisor.

7.5 The Fleet Safety Advisor shall be responsible for the recording and filing of all MSDS in the Chemical Register in the office and ensure that MSDS details are filed and available for review in the office.

7.6 The Chief Engineer shall be responsible for ensuring that all measures introduced to control exposure to hazardous substances are properly used by the officers, crew and visitors to the vessel.

7.7 The Chief Engineer shall ensure that all inspections and tests of control measures are undertaken at the specified intervals.

7.8 All officers and crew shall be responsible for using the controls provided and for reporting any defects.

7.9 All personnel issued with personal protective equipment are responsible for inspecting it prior to use and at other intervals as instructed.

HSSE Communications - Procedure

1. Applicable Roles

All Officers
Fleet Safety Advisor
Health Advisor
Environmental Advisor
Legal Representative
HSE Communication Originator
Fleet Technical Management Manager

2. Object

This procedure will describe how HSSE Communications are created, issued and their content incorporated / maintained within the QA system.

3. Scope

This Procedure shall apply to all BP Shipping owned or managed vessels.

4. Procedure

4.1 Definition / Purpose

Safety Alert:
Notify staff to urgent safety, health or environmental issues which require immediate action or demand immediate attention.

Stand-downs:
Are used to communicate HSSE messages requiring the attention and or action from the entire fleet usually in response to a trend or a single catastrophe.

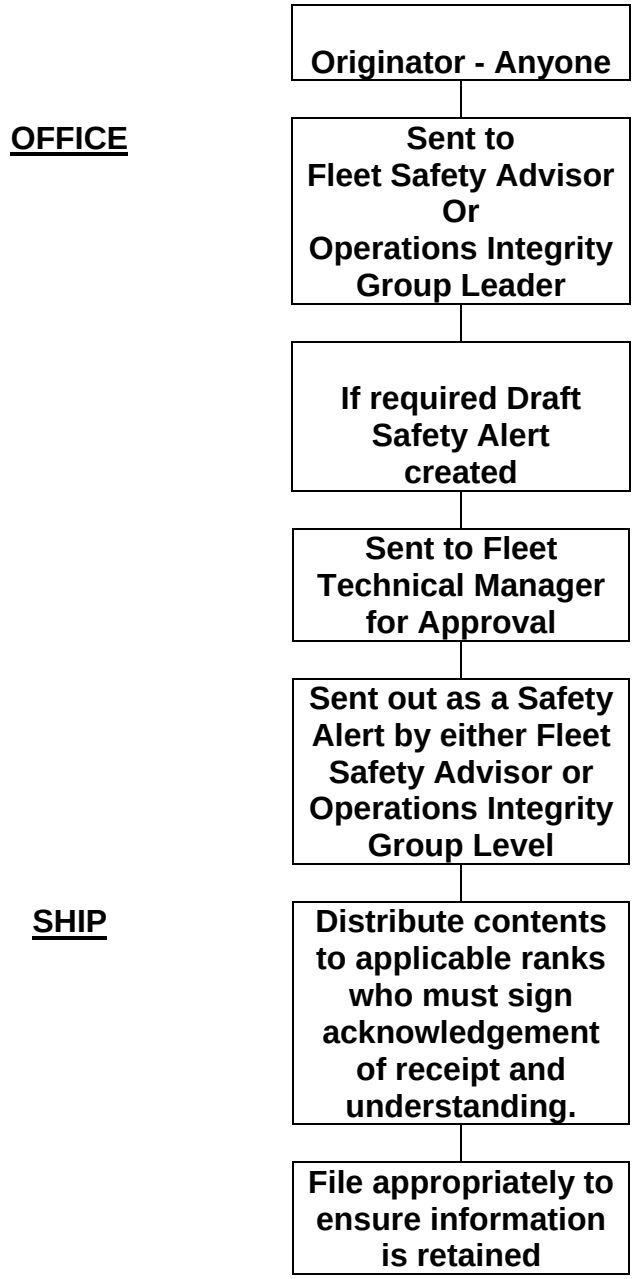
Monthly HSSE Reports:
Are used for vessels to communicate monthly HSSE performance information to the office.

Quarterly HSSE Themes:
These themes are used as a catalyst for discussion and Ideas on how to improve a particular aspect of the HSSE performance. They run in cycles and are targeted at major areas of HSSE.

Monthly HSSE Topics:
These monthly HSSE topics are used as needed in support of quarterly themes or identified trends.

CEO's HSSE Teleconferences:
These are an opportunity for shipboard personnel to discuss matters concerning HSSE directly with the CEO.

Figure 1: Flowchart showing how Safety Alert's are originated and distributed



5. Reporting Requirements

The Master of each Company owned and/or operated ship will provide monthly data to the Manning Contractor and BP Shipping, Operations Group for incorporation in the BP Shipping monthly and quarterly reports.

This will be done by a monthly E-Mail to G OSH SHIPPING HSE Team in the following format:

For the attention of Fleet Safety Advisor

No DAYS MONTH	**31**
MONTH	**October**
VESSEL	**BRITISH SAFETY**
Av No ONBOARD	**22**
	NUMBER OF REPORTS
SLC03 Total	**5**
Incorrect / Misuse / Equipment and Systems	**1**
Incorrect / Misuse/ Lack of – PPE	**1**
Incorrect / Misuse of Tools	**0**
Working without Permits / Procedures	**2**
Almost Slip or Fall (could have or nearly did)	**1**

6. Time Charter Ship Reporting

To be completed when charter party changes agreed.

7. Reporting to BP Oil

The HSSE Team will complete information reports for BP Oil as indicated by their procedures and in the format required.

Shipboard Contingency Plans & Drills - Procedure

1. Applicable Roles

All

2. Object

The purpose of this procedure is to ensure that

- shipboard contingency plans exist for dealing with various emergency situations which
- may arise on board.
- that shipboard contingency plans are regularly tested, effective and updated as required.
- response to an emergency situation is improved.
- all possible actions are taken to reduce potential loss of life, personnel injury and environmental damage
- the image of the BP Group is protected.

3. Scope

This procedure applies to BP Shipping owned, managed or operated ships.

4. Requirements

4.1 The Shipboard Management Team shall ensure written plans are available for a list of possible emergencies, including:-

1. BP Casualty
2. Emergency Teams and Locations
3. Emergency Teams Equipment
4. Fire
5. Oil Pollution
6. Grounding
7. Collision
8. Security/Stowaway Searches
9. Pirate Precautions (not for U.K. coastal vessels)
10. Man Overboard
11. Flooding, including Structural Failure
12. Equipment Failure, includes Main Engine, Steering Gear and Electrical
13. Power Failure
14. Boats run in water at regular intervals.
15. Boat/Abandon Ship Drill.
16. Enclosed Space Rescue Drill.
17. Gas leakage (LNG Vesssels).
18. Helicopter Operations
19. Chemical Emergency

20. Angle of Loll

4.2 All staff must be made aware of their responsibilities in each contingency plan as soon as practicable after joining the ship.

4.3 The efficiency of each contingency plan is to be taken as per paragraph 3.5 of this procedure. Any additional contingency plans must be carried out at intervals not exceeding 6 months.

4.4 The plans must be specific to each ship and take due account of capabilities and number of crew on board. The emergency teams must be made up of the best people to tackle an emergency. Each person should be assessed on his/her suitability for that person's duty in the team.

Masters are reminded that female members of the ships company are not to be treated any differently than their male colleagues, especially in emergency situations and in particular on deciding on evacuation priorities.

1. The plans and drills shall, where applicable, contain procedures for the following:

   i) where one emergency escape route or exit is cut off
   ii) where one evacuation route is cut off
   iii) where one emergency muster point is not usable
   iv) where one lifeboat is not usable

2. Each fire drill should include a minimum training and instruction in the use of ship fire fighting appliances as follows:

   i) reporting to stations and preparing for duties descibed in the muster list required by the Regulations;
   ii) starting fire pumps and using jets of water to show that the system is in proper working order;
   iii) checking firemen's outfits and other personal rescue equipment;
   iv) check the relevant communications equipment;
   v) checking the operation of watertight doors, fire doors, and fire dampers;
   vi) checking the necessary arrangements for subsequent abandonment of the ship.

4.5 Each contingency plan shall be tested with the following time scales as a minimum.

Where statutory requirements are more demanding, these should be followed:-

1. BP Casualty Telex/Drill – Fleet Rota Basis **as requested** by BPS.
2. Emergency Teams and Locations at change of staff.
3. Emergency Teams Equipment at change of staff.
4. Fire Drill at least monthly.
5. Oil Pollution Drill at least monthly.
6. Main Engine Failure, Flooding, Grounding, Collision, and Electrical Power Failure, with an interval of not less than 3 months for the testing of the Contingency Plan.
7. Stowaway /Security Search Drill at least every 4 months
8. Anti Pirate Drill prior to entry into known Pirate waters.
9. Man Overboard Drill at least every 4 months.
10. Emergency Steering Drill at least every 3 months.
11. Boats run in water at regular intervals (intervals to comply with SOLAS regulations)
12. Boat/Abandon Ship Drill at least monthly.
13. Enclosed Space Rescue Drill at least every 2 months.
14. Gas Leakage at least every six months.
15. Helicopter Operations – at least every 6 months.
16. Emergency Manoeuvring of Main Engine – at change of Engine Room staff or at periods not to exceed 3 months.

In the case of LNG Vessels which do not carry oil cargoes and which bunker only annually, the Oil Pollution Contingency Plan shall be tested every 3 months, but the Safety Tour for new staff shall include familiarisation with the Oil Pollution Equipment and its deployment shall be included in safety lectures. For LNG vessels that bunker more frequently, an Oil Pollution Drill should be held prior to bunkering.

Security drills must be held as per the vessel security plan.

4.6 Following each drill, there must be a *wash up* meeting to discuss effectiveness of the drill, the lessons learnt and agree improvements [if any] to be made to the contingency plan. Points arising from wash up meetings should be included in HSSE Meeting Minutes (Shipboard Management Meeting Minutes in the case of the coastal vessels).

4.7 The contingency plans should be freely circulated onboard to ensure that all staff are aware of their contents.

4.8 During protracted port stays, where it is neither practical nor feasible to undertake the practice drills required by this procedure (e.g., Dry-docking), an entry in the Official Log Book shall be made to this effect.

4.9 More stringent timescales for practising these drills may be laid

down by the Ship's Flag State.

5. Records

All contingency plans must be written and copies held in a central file. Copies of this file should be available on the bridge and at an alternative location.

Dates of all drills must be recorded in the ship's official log and deck log books.

Dates of all oil pollution drills are to be recorded in Appendix 9 of the SOPEP or SMPEP manuals.

Updates to the contingency plans must be recorded and monitored to ensure completion.

6. LNG

From time to time, the vessel will also participate in additional contingency drills in conjunction with the Project Management Companies. These will take place at the loading/discharge terminals and at sea.

Copies of the Project Contingency Manuals are held on board the ship and in BP Shipping Head Office. These shall be consulted for the correct emergency communications procedures with the Project Management Companies. The Project Contingency Manuals shall also be consulted for details of location and availability of salvage and cargo transfer equipment.

7. Responsibilities

The Master shall be responsible for ensuring all plans and drills are prepared and carried out as required by this Procedure and Flag State Regulations.

The Designated Person or Operations Integrity Leader shall identify and instigate any changes required to the list of possible emergencies requiring a shipboard contingency plan.

Safety Inspections - Procedure

1. Applicable Roles

Master
Chief Engineer
Other Officers and Crew
Procurement Department
Fleet Safety Advisor

2. Object

Safety Inspections

The object of this procedure is to ensure that all safety inspections required by legislation are carried out.

3. Scope

This procedure shall apply to all Company owned, managed and operated ships.

4. Procedure

4.1 Inspections (also see QA-AUDITS-EXPLAIN-WP-01)

The Master, accompanied by an Officer or crew member, must inspect all parts of the ship on a weekly basis. He/she is to assure himself/herself that the ship is in a satisfactory condition, particularly in respect of safety, cleanliness and hygiene.

He must ensure immediate remedial action to any deficiencies found. Inspections should be undertaken during normal working hours with the minimum disruption to routine work and leisure activities.

All inspections are to be recorded in the Deck Log Book and Official Log Book and should include:

a) Deck Areas
b) Galleys, store rooms and refrigerators (officially required)
c) Lifesaving/fire fighting appliances
d) Living quarters and public spaces (officially required)
e) Machinery Spaces
f) Pump rooms
g) Condition of water, food and stores (officially required)

4.2 Safety Officer

The safety officer is responsible for carrying out occupational health and safety inspections of each accessible part of the ship at least once every three months.

For the purpose of the inspections it is suggested that the ship is divided into at least 5 areas (see below) and that these are inspected in rotation during the three month period.

a) Accommodation – internal.
b) Accommodation – external.
c) Main deck and store rooms.
d) Engine Room.
e) Pump room and steering flat.

During inspections of the internal accommodation the Safety officer should ensure that the following are complied with:-

5. Safety Regulations Poster

The BP Shipping Limited Safety Regulations Poster (D27) is to be displayed in full view of all on board as follows:

a) In at least two places in the crew's quarters.

b) In at least one place where it can be seen by Officers and Visitors to the ship.

6. Cabin Safety Packs

Each ship is supplied with cabin safety packs. These packs comprises two 30 minute high intensity lightsticks on a photoluminescent back plate, each cabin should have one pack, public rooms should have 2 packs.

Ships fire plan should be notated "lightsticks in all cabins and public rooms".

The condition of the light stock shall be checked monthly. Provided that the foil cover remains intact, the lightsticks should last up to expiry date. Expiry dates should be noted on a maintenance schedule and replacement ordered in good time.

Intrinsically Safe (IS) Equipment - Working Practice

1. Applicable Roles

All

2. Use of Electrical equipment on board

Electrical Equipment

Refer to the ISGOTT for the requirements on the use of fixed and portable electrical equipment.

The use of radios, tape recorders, mobile phones, pagers, cameras and other such equipment is prohibited on the tank deck or any other areas where flammable gas may be encountered (unless approved for use in a flammable atmosphere).

3. Mobile Phones

3.1 Restrictions on the use and carriage of private mobile telephones.

The use of mobile telephones both in port and at sea should be confined to private cabins, designated in-port smoking areas or any other areas within the confines of the accommodation designated by the Master or ETO. Visitors to vessels must be instructed accordingly.

In general, mobile telephones should not be carried in or through hazardous areas. However, where this is necessary, the equipment must be switched off. Visitors to ships, having to pass through terminal areas, will normally be instructed on the requirements applying at the particular terminal.

At all times, consideration must be given to other personnel on board, particularly those off-duty watchkeepers.

In an emergency situation, personal mobile telephones must not be used to contact relatives or other persons unless authorised by the Master. It is essential that information concerning an incident is closely controlled for the well-being of all on board and to ensure a consistent response from those involved in dealing with the incident, both on board and ashore.

All personnel are required to comply with any other operating restrictions which may be applied on certain vessels to the use of mobile telephones, e.g. such as NGSCo.

3.2 Ships with Company-Supplied mobile telephones.

A limited number of vessels have mobile (or more likely transportable) telephones supplied by the Company to reduce communication costs, particularly whilst in port. These systems may be provided with a fixed external aerial for improved signal strength.

Where this equipment is provided and remains connected to the external aerial, its use for ship's business may continue. If this equipment is disconnected from the fixed aerial installation to allow use in alternative locations or is temporarily provided to the ship by local agents, its use shall be in compliance within the provisions as above.

Just Culture – Working Practice

1. Applicable Roles

All

2. Just Culture

We have raised our HSSE performance over the years by learning lessons from incidents and adapting our equipment, procedures and training to avoid repetition. This has been achieved by establishing a culture that encourages open reporting in a '**Just Culture'** environment. The need for continuous improvement in our HSSE performance can only move forward in this way. The "Just Culture" approach must be taken in accessing all incidents. For incidents where an investigation team is put together in addition to the vessel investigation team, they will complete the "Just Culture " process, in all other cases, this should be carried out by the onboard investigation team.

Analysis of our incident database shows a significant number of cases where the laid down procedure or good working practice has not been followed, resulting in personal injury and/or property damage.

When mistakes are made, we need to distinguish between those which are genuine and those which are wilful/careless breaches or neglect of accepted procedures. Depending on the seriousness of these breaches, wilful/careless breaches or neglect may be viewed as a disciplinary matter. This can be best described as a 'Just Culture', where the action taken is appropriate to the circumstances of the incident. If disciplinary measures have to be taken then reference should be made to the Merchant Navy Code of Conduct and/ or the Masters Guide to Shipboard Disciplinary Procedures.

The "Just Culture" Model will guide personnel through the type of questions that should be asked to get to the root cause of the problem when carrying out the process. The following is an example:

At the time the unsafe act was committed

1. Establish if the actions taken by the person(s) involved were as intended. If yes proceed to 2, if no proceed to 3.

2. If they were as intended, establish if the consequences, or possible consequences, were as intended. Quite often the actions taken were as intended, but the outcome / consequences were not. This is often the case when a proper risk assessment has not taken place. If the result was as intended then it was sabotage or a malevolent act. If no, proceed to 3.

3. Establish if any unauthorised substance was being taken. This can vary from alcohol and illegal drugs to medicines (these may or may not be prescribed). If unauthorised substances are being taken then proceed to 4, if not proceed to 5.

4. Establish if the substances were taken as a result of a medical condition. If the answer is no then this is substance abuse without mitigation. If the answer is yes then this is substance abuse with mitigation and may require further investigation in consultation with a medical practitioner.

5. Did the person(s) knowingly violate safe operating procedures? If no proceed to 7. Most violations involve a conscious decision on the part of the perpetrator to break or bend the rules.

6. Were procedures available, workable, intelligible and correct? If yes, this is a possible reckless violation. If no, then it is a possible system-induced violation. Most violations will be non-malevolent in terms of intent, so the degree to which they are blameworthy will depend largely on the quality and availability of the relevant procedures. Where it is judged that the procedures were not appropriate for the situation, the problem lies more with the system than with the individual. However when good procedures were readily accessible but deliberately violated, the question of reckless behaviour must be raised. If there is any doubt as to this then the substitution test should be applied.

   If the procedures are found not to be workable, intelligible and correct then a Document Change Request (QA-DOCUMENT-CNTRL-WP-01) must be raised and submitted.

   The Substitution test.

7. Could (or has) some well motivated, equally competent and comparably qualified individual make (or made) the same kind of error under those or very similar circumstances? If the consensus given by the investigation team is “yes”, then the error is probably blameless and likely that the unsafe act was largely a system-induced error – (Proceed to 8). If the answer is “no” then consider if there were any system induced deficiencies in the person’s training, selection or experience. If such deficiencies are not identified then the possibility of negligent error must be considered.

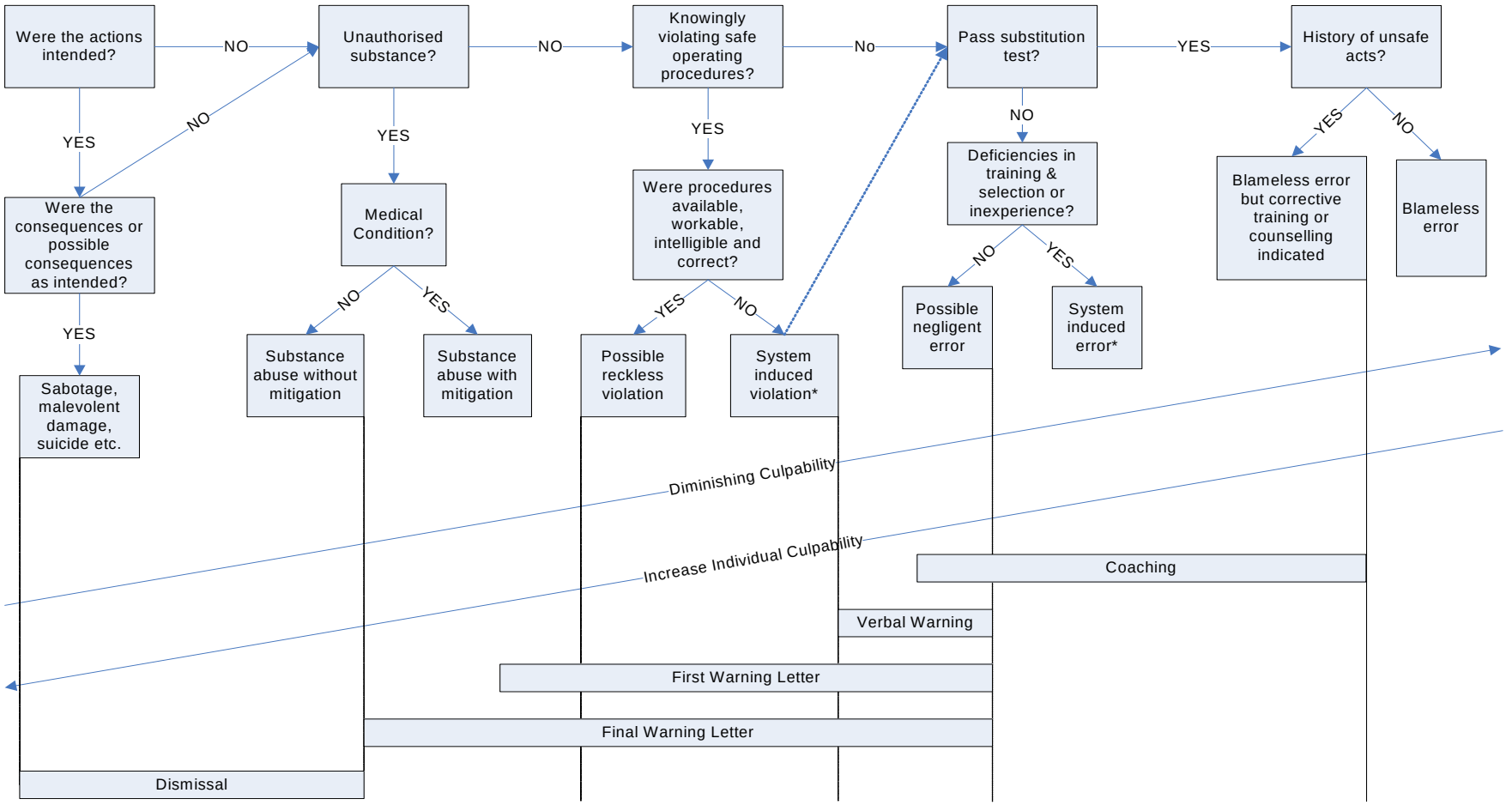
8. Establish if the person(s) have any previous history of Unsafe Acts. If there is a history then although the unsafe act was “blameless error” the person(s) may require corrective training or counselling to establish the reasons behind these lapses. If there

is no previous history of unsafe acts then it was a blameless error and no further action need be taken in connection with the individual(s).

Further training will be given on the vessels by the safety department when they visit the vessels. This will mainly consist of taking personnel through different examples and in particular the way the substitution test should be applied.

In future, no SLCO1 report or reported breaches of QA will be deemed to be complete unless the “Just Culture” process has been completed and the outcomes agreed with the Vessel Superintendent.

Just Culture Model



The above diagram should be looked upon as a set of Questions to be asked when reviewing an occurrence or breach of QA (Not necessarily an accident or incident)

*Management/Supervision responsibility to correct root causes of system issues

Marine Fuel Oil – Working Practice

1. Applicable Roles

All Engineers
Engine Room Crew
Deck Crew

2. Considerations for working with marine fuel oils

2.1 Exposure To Marine Fuel Oils

Fuel oils can cause skin complaints and irritation of the eyes, nose and throat. Details of first aid measures can be found in the Ship's Captain's Medical Guide.

a. Skin Contact

The following precautions shall be taken when handling fuel oil:

- Gloves should be worn (PVC type).
- Disposable wipes should be used, oil soaked rags should not be put in overall pockets.
- Overalls should be changed and cleaned frequently.
- Exposure of skin or eyes to high pressure jets should be avoided.

b. Eye Protection

Effective eye protection shall be worn when there is a risk of eye contact.

c. Inhalation

The following precautions shall be taken to avoid inhalation of vapour and/or droplets:

- Spillage should be minimised.
- Care should be taken to avoid vapours expelled from tanks during loading and from fuel valve testing.
- Compressed air should not be used in the cleaning of combustion equipment components, or when cleaning with solvents.

Safety Management System - Procedure

1. Applicable Roles

All

2. Object

This procedure will describe the components and relationships of activities and programs within the Safety Management System.

3. Scope

This Procedure shall apply to all BP Shipping Operated vessels.

4. Procedure

4.1 Safety Management System

The BP Shipping Safety Management System is used to manage risk on a daily basis. The system is designed to meet the requirements put forth by BP Group (Getting HSSE Right and the Golden Rules) and requisite regulation and legislation.

The management risk first requires the assessment of risk. This assessment requires recognition of hazards, quantifying or qualifying the consequences, and determining the likelihood or potential of consequences from actually happening. Once the risk has been identified controls can be put in place to manage that Risk.

The processes and controls identified in the BP Shipping Quality and Safety Management System have been developed to address and manage the risks that have been identified through a Risk Assessment Process.

These processes support the Plan, Execute, Monitor, and Analyze (PEMA) model of safety management process. The tools that BP Shipping utilizes to fulfil this PEMA Process include:

- **SMT Planning Meeting** (HSSE – SFTY- MTGS –PRCDR-01)
- **Daily Work Planning Meeting** (HSSE – SFTY- MTGS –PRCDR-01)
- **Risk Assessment** (HSSE-SAFETY-SSW-PRCDR-01)
- **COW - Permit to Work** (HSSE-SAFETY-PTW-PRCDR-01) & (HSSE-SAFETY-PTW-WP-01)
- **Work and Safety Procedures** (HSSE-SAFETY-SSM-PRCDR-01)
- **MoveSMART** (defined below)

- **Advanced Safety Audit** (defined below)
- **Safety Officers HSSE Area Inspection** (COSWP chapter 3.10.6)
- **Masters weekly inspection** QA-AUDIT-EXPLAIN-WP-01.
- **HSSE Meetings** (HSSE – SFTY- MTGS –PRCDR-01)
- **Incident Reporting, Investigation, and Analysis** (HSSE – SAFETY- ACC/INCID -PRCDR-01) and (HSSE-SAFETY-ACC/INCID –WP-01)

The tools and programs listed above are described elsewhere in the Quality Assurance System either in procedures, work instructions, or controlled documents.

These tools are supported with communications and training to ensure that they are vigorously applied with the ultimate goals of No Accidents, No Harm to People & No Damage to the Environment.

4.2 Definitions:

a. Getting HSSE Right(GHSSEr)

The BP GROUP HSSE management system framework that provides a broad-based set of Expectations integrated into thirteen elements of accountability. This framework will help line managers focus on critical HSSE needs, forecast and allocate resources, set direction for HSSE activities, and consistently deliver improved HSSE performance. See BPGROUP-BPGROUP-BPGROUP-GLOBALCD-02.

b. Golden Rules

These rules have been prepared to allow the learning from past safety incidents to be shared widely across BP and emphasize the basic rules that should be in place in all locations for managing safety during typical risk activities.

The Golden Rules of Safety cover the following activities:

- Permit to work
- Energy isolation
- Ground disturbance
- Confined space entry
- Working at heights
- Lifting operations
- Driving safety
- Management of change (Risk Assessment).

They are the minimum standards for safeguarding personal safety and the key controls and procedures that must be followed in all places of work. Refer to BPGROUP-BPGROU-BPGROUP-GLOBALCD-02.

c. Advanced Safety Audit (ASA)©-

Advanced Safety Auditing © is an audit program used by ship and shore personnel to continually monitor the safe working practices and behaviors of BP Shipping personnel. The program is based upon techniques that have been proven in many different industries to have a dramatic effect upon safety related behaviors at all levels in the organization.

d. MoveSMART©

An exciting process for outstanding cultural and personal improvement, cutting movement injuries (strains, sprains, slips, trips, falls, and hand injuries) through elevating attention, control and judgment skills, personal motivation, and physical leverage and balance.

Safety Meetings - Procedure

1. Applicable Roles

All
Procurement Department
Fleet Safety Advisor

2. Object

Safety Meetings

The object of this procedure is to ensure that all operations are carried out with due regard to the Health, Safety, Security and Environmental Charters of the Company (QAM 05).

3. Scope

Safety meetings will be held at regular intervals to ensure that safety concerns are raised and addressed in an orderly fashion.
This procedure shall apply to all Company owned, managed and operated ships.

4. Procedure

SMT planning meetings will be held by the shipboard Management Team at a time convenient to the operation of the vessel. These meetings are to discuss the planned work for the next 24 hours

Daily work planning meetings should be held prior to commencement of work between the area authority and the workforce to discuss the specifics of the job with emphasis on the safety aspects.

The HSSE Committee (On border vessels a safety officer must be appointed, but there is no requirement for elected representatives)

Each ship will form an HSSE Committee comprising of the Master, Safety Officer and Safety Representatives. They shall meet at monthly intervals. The agenda for the ship's HSSE meeting shall follow the pro-forma HSSE–SAFTEY-MTGS-FORM-01

The minutes will be recorded, filed and forwarded to the vessel's Superintendent for subsequent action/comments. In addition, a copy of the minutes is to be displayed on ship's notice boards for everyone onboard to see. The purpose of the HSSE Committee will be to:

a) Manage the day to day safety on board.
b) Give crew members a voice on safety matters.
c) Resolve safety related problems on board. Situations that

cannot be resolved on board should be reported to the Company.
d) Discuss any incident/accident reports.
e) Promote the use and spirit of the Code of Safe Working Practices for Merchant Seamen.
f) Discuss hygiene and medical matters.
g) Monitor garbage disposal and other pollution matters.
h) Discuss and review the Quality Management System and ISPS matters.

4.1 Safety Officer

The Master will appoint a Safety Officer.

The safety Officers duties are detailed in HSSE-SAFETY-PERSONNEL-WP-01

4.2 Safety Representative (not applicable on coastal vessels)

One Safety Representative shall be elected by the Officers and at least one by the Crew. The Crew may elect more than one representative if there are more than 16 Crew.

The safety Representatives duties are detailed in HSSE-SAFETY-PERS-WP-01.

4.3 The HSSE Committee shall use its best endeavours to ensure compliance with the Code of Safe Working Practice and company procedures, to improve the standards of safety and promote good working practices. The Safety Management system shall be reviewed as required by the International Safety Management Code (ISM).

4.4 The Master shall read and approve the minutes from the HSSE Committee meeting before forwarding them to the Vessel Superintendent. The minutes shall be posted within the ship and filed in the ship's HSSE Committee minutes file (QAV13).

The minutes shall be e-mailed directly to the ship's superintendent and copied to the Fleet Safety Advisor and QA Manager.
The Superintendent shall reply to the ship with comments and actions, and seek guidance from the Fleet Safety Advisor, HSSE team and QA dept as necessary.

Relevant items from the minutes shall be discussed at the monthly Fleet Operations HSSE Meeting to identify any further action necessary

4.5 Fleet Operations shall hold an HSSE meeting, entitled the Fleet

Ops HSSE meeting, with representatives from all Fleet Ops departments, HSSE Team and other areas of shipping as required. These meetings should be held each month whenever practicable with a main meeting being held every quarter. Details of vessel operation with regard to safety and working practices shall be discussed. Minutes shall be recorded, circulated to Fleet Operations Group and copied to all vessels.

4.6 The HSSE Team shall provide advice on safety and working practices to the Superintendents and the Fleet.

4.7 When carrying out ships visits, the superintendent shall ensure that the shipboard meetings as mentioned above are taking place and are effective.

5. Responsibilities

The Master is responsible for ensuring that all shipboard safety meetings as listed above are being held at the requisite timings and that records are being kept of such meetings.

Paint – Working Practice

1. Applicable Roles

Deck & Engine room ratings

When working with paint the following should be considered:

2. Exposure to paint

2.1 Paint Spraying

In the process of paint spraying, paint liquid is converted into a mist of paint droplets which are directed onto a surface to produce an evenly distributed film of the required thickness and texture.

Inevitably not all the paint sprayed is deposited on the workplace. Some is lost as over spray from the spray gun itself and some by ricochet of the paint droplets from the surface being sprayed. Both over spray and ricochet can be reduced by a skilled operator using well-designed and maintained equipment.

There are basically two methods used, one which uses a compressed air operated gun and secondly the airless spray. Vapour evolved during the spraying of paint may present a serious fire and health hazard unless the process is controlled. Some finishes, particularly lacquers, may contain up to 80% of volatile solvent which must evaporate to allow drying to take place.

If the vapours of certain solvents are allowed to accumulate even in concentrations as low as 200 ppm, a toxic hazard may be created. If the concentration is increased to about 10,000 ppm (that is, 1% of solvent in the atmosphere by volume which is the lower flammable limit for a number of common solvents) a fire or explosion may occur if the vapour and air mixture is ignited.

With airless spraying the paint is pumped out of the gun at high pressure. Paint particles so formed are expelled at such pressure that they can penetrate the skin. Great care must be taken to avoid pointing the gun at any person.

2.2 General Precautions

When paint spraying, the principal safeguards necessary to prevent fire or explosion and to minimise the risk to health are effective separation from other processes, enclosure and ventilation. All possible sources of ignition of both solvent vapours and solid residues must be removed from the vicinity of the work. For this reason spray application of solvent paints is not

recommended in machinery spaces unless all the plant in the area of application can be shut down.

Spraying must not be carried out in confined spaces where the permanent or portable mechanical ventilation provided is insufficient to guarantee the reduction of the vapour concentration below the Threshold Limit Value.

2.3 Eye Protection

It is recommended that personnel should wear goggles classified for gas and chemicals protection when there is a risk of paint splashing into the eyes (for example, when painting deck heads). Splashes of paint in the eyes should be treated immediately by copious irrigation with clean water. Medical attention should be sought and the Shipmaster's Medical Guide and MSDS sheets consulted.

Additionally, means of eye irrigation should be provided at the site of the spraying operations.

2.4 Ingestion

The ingestion of paint or thinners should always be avoided. Food and drink should not be brought into, stored, prepared or consumed in the areas where paints are stored, handled or used. If paint or thinners are accidentally swallowed immediate medical attention must be obtained (in the absence of professional medical advice, procedures described in the Shipmaster's Medical Guide must be followed).

2.5 Inhalation

The inhalation of paint droplets or fumes should be avoided and adequate ventilation must be provided, especially in confined spaces. Where for any reason adequate ventilation cannot be provided and it is essential to apply paint, suitable respirators or face masks should be worn and changed regularly.

Polyurethane paints which contain the chemical hardener ISO-cyanate can, under certain circumstances, cause irritation to the upper respiratory passages resulting in coughing and spasms. Attacks of an asthmatic nature can occur either immediately, or some hours later following exposure. Polyurethane paints normally contain less than 0.5% (5,000 ppm) of free volatile ISO-cyanates but the exceptionally low TLV of 0.02 ppm means that a very high ventilation level is necessary.

In practice, this is very difficult to attain and therefore polyurethane

paints must not be used inside any accommodation spaces. When applied to external surfaces it must be applied by brush or roller only since the use of spray equipment can produce droplets of paint which are of respirable size and may cause the ill effects described above.

2.6 Personal Hygiene

It is strongly recommended that after work, and especially before taking food, personnel who have been working with paint should thoroughly cleanse themselves with soap and water.

2.7 Skin Contact

Normally inert chemicals can cause irritation by repeated or prolonged contact with the skin and in extreme cases there is a risk of dermatitis. All personnel who handle and use paints should wear appropriate protective clothing (as a minimum gloves and overalls) and use a suitable barrier cream. Splashes of paint on the skin should be treated immediately after work by thorough washing with clean water, or an approved cleansing agent. Solvents should not be used for personal cleansing.

2.8 Smoking

Smoking materials will ignite the vapour from a highly flammable liquid and must therefore be controlled in order to prevent the outbreak of fire. Smoking is to be prohibited in areas where paint or lacquers are stowed, handled or used.

In the event of a fire involving paint or thinners, the possibility that poisonous fumes may be given off must always be taken into account and those engaged in fighting such fires should wear breathing apparatus.

2.9 Spillages

Spillages of paint should be cleaned up as soon as they occur. Materials used for cleaning up spillages should be disposed of as soon as possible and not be left lying around the area. If the spillage has occurred in a confined space the toxic effects of released fumes must be taken into account whilst cleaning up and adequate ventilation must be provided.

2.10 Storage And Handling Of Flammable Liquids

The quantity of paint, varnish, lacquer, enamel, polish, thinners or other flammable liquid present in a work area should be kept to the minimum practicable. All drums or cans should be securely closed

when not in use. When empty, the drums or cans should be closed and removed from the work area. Adequate ventilation must be maintained in the area of use and in any spaces provided for the storage or handling of paint.

Personnel – Working Practice

1. Applicable Roles

Master
Shipboard Safety Officer
Shipboard Safety Representatives
Fleet Safety Advisor

2 Object

This working practice will describe the safety responsibilities of those who have responsibilities within the safety management system.

3 Scope

This working practice shall apply to all BP Shipping Operated vessels.

4 Procedure

4.1 Master

The Master is responsible to the Company for the safety of the ship and all on board through the correct implementation of the SOLAS Regulations and other safety related Regulations as amended from time to time.

It is therefore important that Masters are aware of their personal responsibilities for the health, safety and welfare of themselves and others who may be affected by their actions and that they must discharge their responsibilities with care. The Master MUST take a personal interest in ensuring the safety of the ship and personnel. The Master is responsible for ensuring:

a) Adherence to the Company Safety, Health, Security and Environmental Charters.
b) That all ships' personnel are advised of, and understand, their responsibilities for their own and other persons safety, health and welfare and that they discharge their responsibilities with reasonable care.
c) Compliance with all Statutory regulations relating to Occupational Health and Safety, and in particular to facilitate the work of Safety Officers, Safety Representatives and HSSE Committees as required by the Merchant Shipping (Accident Reporting & Investigation) 1994 Regulations.
d) That all notifiable accidents or dangerous occurrences as required by the Merchant Shipping (Accident Reporting & Investigation) Regulations are reported to the appropriate Flag State.

Copies of any reports should be sent to the Company and Crew Managers.

Other Statutory Requirements

Legislation such as The Merchant Shipping (Accident Reporting & Investigation) 1994 Regulations, The Merchant Shipping (Health and Safety; General Duties) Regulations 1984 and others, is applicable to UK registered ships. Similar legislation does not necessarily exist for non-UK registered ships but it is Company policy that the same high standards are maintained throughout the fleet.

Therefore, on those ships where the legislation does not apply, it will be tacitly adopted. The only exception will be the direct reporting to the flag administration of such items as the notification of accidents and dangerous occurrences.

The Master is to assume the Chairmanship of the ship's HSSE Committee. He/she is to appoint the Safety Officer and ensure that regular training exercises are held on board. He/she is responsible for ensuring that the permit systems are administered properly. Any accidents to personnel and all instances of medical attention must be:

a) Brought to the Master's notice
b) Properly treated

Reported in accordance with the Company's procedures

Masters must ensure that all Officers and crew are familiar with emergency procedures and are capable of operating all safety equipment and appliances, including fire pumps, fire flaps, breathing apparatus, extinguishing systems, lifeboat engines (where applicable).

The Master should never jeopardise the safety of the vessel by undertaking tasks that put his own personal safety at risk. Such tasks include, but are not limited to, tank entry and going out on open deck in heavy weather. If he/she should deem it necessary to carry out such tasks, then they should always be carried out independently of the Chief Officer, his second in command.

The Master should also ensure that this general principle is applied to all departments on board.

4.2 Safety Officer

The appointed Ship's Safety Officer is responsible to the Master for compliance with the duties ascribed to him by the Merchant Shipping (Accident Reporting & Investigation) Regulations.

Other duties of the Safety Officer include, but are not limited to:

a) Reporting of safety hazards as they exist and suggesting procedures for the elimination of such hazards.
b) Ensuring the investigation of all accidents, incidents, dangerous occurrences and near misses is carried out.
c) Ensuring compliance with the Company's Safety Instructions.
d) Carrying out occupational health and safety inspections of each accessible part of the ship at least once every three months.
e) Attending HSSE Committee Meetings.
f) Conducting safety tours.
g) Completing all Company paperwork relating to safety.

4.3 Safety Representative (not applicable on coastal vessels)

The elected Safety Representatives are to assist the Ship's Safety Officer in the performance of his duties in accordance with the requirements of the Merchant Shipping (Accident Reporting & Investigation) Regulations.

This will include reporting to the Safety Officer and/or HSSE Committee any dangerous occurrence or hazard that he may see or that has been reported to him by any other crew member. Suggestions on improving safety are to be passed on to the HSSE Committee via the Safety Representative.

Minimum Standards of Personal Protective Equipment – Working Practice

1. Applicable Roles

All

2. Provision of Protective Clothing And Equipment

The Company provides protective clothing and equipment to all personnel serving on board Company ships, by arrangement with the Manning Contractors. Equipment supplied is to the standard specified in the UK Merchant Shipping (Protective Clothing and Equipment) Regulations and the associated Merchant Shipping M Notices.

For crewmembers who would normally wear prescription glasses during working hours, prescription safety glasses should be obtained. The crewmember should contact their Manning Contractor who will assist in the process of obtaining these prescription safety glasses, prior to joining the vessel

The Regulations place a duty on all crew members to wear protective clothing and use protective equipment appropriate to the work process and also to report any deficiencies or defects in equipment issued for individual use.

Failure to carry out these duties could result in disciplinary action being taken on board or by the Manning Contractors.

2.1 Selection of PPE

The following instructions should be used as part of any safety awareness tour and are intended to introduce Officers, Ratings, Cadets and Outside Contractors to what are considered to be the minimum acceptable levels of PPE, for all work that is carried out onboard BP vessels.

Whenever working outside of the accommodation the minimum PPE that must be worn is :-

- Boiler suits
- Safety Helmet
- Company supplied and approved working boots/shoes
- Safety Glasses

When working in machinery spaces (or any area with high noise levels) then ear defenders are also to be worn.

Before commencing any task, a Task Risk Assessment (TRA)

should be carried out to identify the hazards that may be associated with the task. Using these hazards as a guide consult the PPE Matrix to identify the hazard protection required and what PPE is to be used.

2.2 Maintenance of Protective Clothing and Equipment

Protective clothing and equipment must be properly maintained, as per the manufacturers' recommendations and the Company PM System. All should be regularly inspected and, where appropriate, operationally checked. All necessary repairs, cleaning, decontamination or component replacement should be undertaken without delay.

Please ensure that your PPE is in good working order and available to you at all times. All PPE must be inspected prior to use, and any defects must be reported to your head of Department, who will provide a replacement.

When off-duty personnel are either proceeding ashore or returning to the vessel hard hats are to be worn whilst traversing through areas where operations are being conducted. A box of hard hats is to be made available at the exit from the accommodation to the deck and at the gangway for this specific purpose. The supply of these hats is over and above those normally available at the gangway for the use of visitors to the vessel.

2.3 Storage of Immersion Suits

Immersion suits are for the use of rescue boat or lifeboat launching members. The suits should not be stowed in a dedicated rescue bo a lifeboat designated as a rescue boat. The suits should be stored suitable location where they can be donned prior to manning the lif

2.4 Eyewash Solutions

Eyewash Solutions stored in polypropylene bottles and being stored in ambient temperatures as recommended by the manufacturer will have an expiry date as stated on the bottles.

Eyewash Solutions which are subject to ambient temperatures in excess of those recommended by the manufacturer shall have the expiry date changed to 12 months from the time of introducing the solution to temperatures above those recommended by the manufacturer.

Providing the changed date does not exceed the original manufacturers expiry date. The altered expiry date shall be

appended to the particular bottle using indelible marker or dymo tape.

Personal Protective Equipment - Selection Matrix			
	PPE	**When to wear**	**Hazard Protection**
HEAD PROTECTION	Safety Helmet (Chip straps to be worn when working aloft, during helicopter operations and in windy conditions.	**At all times when:-** a) outside the accommodation spaces b) Outside the Engine control room Exceptions are when engaged on bridge watch keeping duties or off duty.	To prevent / reduce injuries to the head when being struck from above or the side.
HEARING PROTECTION	Ear defenders Ear Plugs	**At all times when:-** a) Working in the engine room b) Any machinery space where the noise level exceeds 85dB c) In spaces where mandatory hearing protection signs are shown.	To prevent hearing impairment or loss in later life from
FACE & EYE PROTECTION	Safety Glasses (with side shield)	**At all times when:-** a) outside the accommodation spaces b) Outside the Engine control room Exceptions are when engaged on bridge watch keeping duties or off duty.	To prevent injury from wind or mechanically blown debris, particulate or Liquid.
	Safety Goggles	a) Working with or in the vicinity of hazardous liquids or liquids under pressure b) Any activity where particulate or debris is generated and thrown off with velocity	Contamination to the eye from hazardous liquid splashes or from damage caused by flying particles.
	Face shield	Grinding, needle gunning or any other activity where particulate debris, or sparks are generated and thrown off with velocity.	Working where particulate matter or liquids may cause harm to the face.

	PPE	When to wear	Hazard Protection
FACE & EYE PROTECTION	Face shield	Where thermal extremes may damage tissue (i.e. Pulling burners and lighting off boilers, cleaning incinerators, etc..)	**Faceshields: do not provide eye protection and require the compliment of goggles or safety glasses**
	Shaded Lenses	Welding, Brazing	Protect eyes from flashburns
	Welding hood with appropriate lens	Welding	Face protection from welding hazards
RESPIRATORY PROTECTION	Dust Masks	a) whenever working in a dusty atmosphere or when particulate debris is being generated i.e. needle gunning, etc	Protection from irritation / damage to the respiratory system
	VOC masks (Half face masks / Full Face Masks)	a) whenever working in an environment which contains low concentrations of non-toxic gases and vapours i.e. Painting, welding , tank sweeping, etc	Protection from irritation / damage to the respiratory system
	Before deciding which type of mask to use, an assessment to be made by a competent person to determine the most appropriate type of mask / respirator to be worn. **MASKS AND RESPIRATORS DO NOT PROTECT AGAINST OXYGEN DEPLETED ATMOSPHERES OR TOXIC GASES**		
HAND & FOOT PROTECTION	Gloves – Leather, riggers or anti-cut gloves	whenever there is a risk to the hand from handling jagged, sharp or abrasive materials	To prevent cuts / grazes to the hand or fingers
	Chemical gloves	Whenever there is a risk from corrosive, caustic and/or toxic materials	To prevent chemical burns and/or absorption into the skin
	Safety shoes / Boots	**At all times when:-** a) outside the accommodation spaces b) Outside the Engine control room Exceptions are when engaged on bridge watch keeping duties or off duty.	To prevent / reduce injuries to the foot/ankle if struck struck from above, from the side or below. To help prevent slipping.

	PPE	When to wear	Hazard Protection
FALL PROTECTION	Harness	To be used when working more than 2m above deck level or when working outside of the ships rail.	Protects the body from damage from falling / impact
	Safety Line	To be used in conjunction with Safety harness when required	Protects the body from damage from falling / impact
BODY PROTECTION	Leathers	When welding	Protects the body from heat, burns and UV light
	Chemical protective disposable coveralls	Tasks where dust or dirt contaminated with chemicals may render clothing hazardous.	To prevent chemical burns and/or absorption into the skin
	Rain suits	During inclement weather and or washing down decks with mild detergents	Protects from the environment and mild detergents
	Chemical Suit	When working with chemical, corrosive or caustic substances	To prevent chemical burns and/or absorption into the skin
DROWNING PROTECTION	Immersion suit	a) Always when using the rescue boat. b) When using the lifeboats and the climate and or sea environment requires there use.	Protects the body from the cold, frostbite or Hypothermia
	Flotation aid	a) Whenever working outside the ships rail b) When lifeboats / rescue boats are being used	Protects from drowning
HYPOTHERMIA PROTECTION	Thermal Suits	a) When working for protracted periods in the fridge rooms. b)When the climate dictates	Protects the body from the cold, frostbite or Hypothermia
	Immersion Suits	a)Always when using the rescue boat. b) When using the lifeboats and the climate / sea environments requires their use.	Protects the body from the cold, frostbite or Hypothermia

Risk Based Permit to Work System – Procedure

1. Applicable Roles

All

2. Object

To provide a documented system to ensure that the risks associated with carrying out certain tasks are fully assessed and controlled.

3. Scope

Section 1.1 of the Globally Cont Doc - Permit to Work System Guidance Book details the scope of the Permit to Work System within a Safe System of Work.

Permits are provided which cover the following areas:

- Hot work (Naked Flame)
- Hot Work (Spark Potential)
- Hazardous Task

The Permits are supported by the following Certificates:

- Fit for Entry
- Isolation Confirmation
- High Voltage

All permits and certificates are to be issued in compliance with the requirements of this Procedure, HSSE–SAFETY-PTW–WP-01 and Permit to Work System Guidance Book

4. Procedure

4.1 The work activities that are to be controlled by the various permits are specified in Section 4 of the Permit to Work System Guidance Book .

4.2 Scheduled activities requiring a permit should be discussed at the SMT Planning Meeting. Where unscheduled work requiring a permit becomes necessary it must be ensured that the scope of work is fully agreed and discussed before the permit is authorised.

a. Before any work that is to be controlled by a permit can commence, a permit must be fully authorised and endorsed, and then be registered by the Officer of the Watch (OOW) with the appropriate copies held by the Area and Performing Authority.

The copies of the permit held by the OOW, who will act as the Registrar for the system, and the Performing Authority must be displayed at the Bridge/Cargo Control Room (Issuing Centre) and the work site respectively.

The OOW must also check that there are no permits already in place or ongoing activities which may affect of impact on the work which is detailed within the new permit

b. The permit is registered by using the Permit to Work Stamp (with Red ink) on the daily events page of the Deck Log Book or in a separate Permit Registry Book. If a separate permit registry book is used an entry should be made in the Deck Log Book when each permit is registered.

c. When registered the permit and certificate number will be allocated using the next sequential number from the check list for that permit/certificate type for that year. Permits and certificates will be numbered in line with the following protocol:

Hot Work (Naked Flame)	NF001/03
Hot Work (Spark Potential)	SP001/03
Hazardous Task	HT001/03
Fit for Entry	FE001/03
Isolation Confirmation	IC001/03
High Voltage (Only supplied where applicable)	HV001/03

4.3 On completion of the work all copies of the permit(s) and certificates(s) must be returned by the Performing Authority to the Registrar (OOW) to enter the cancellation in the deck log book. The original copy of the completed permit will then be filed with all certificates and supporting material in the appropriate section of file QAV 15.

NB All permits and certificates are automatically suspended on the sounding of any ships emergency alarm, change of performing authority or if the task significantly changes and must be risk assessed / revalidated before work can recommence.

4.4 Where hot work is required to be completed outside the engine room space then this must be authorised by Head Office in accordance with HSSE – SAFETY- PTW – WP-01 section 4.3.

4.5 There may be occasions when some permits/certificates are issued by a shore authority, chemist or competent authority. This can occur when a ship is in a repair yard, when a ship is in port limits and repair work is being undertaken (local legislation) or stated in a repair or other work contract. At all other times the

Company Permit to Work System shall be utilised.

5. Responsibilities

5.1 The Master shall be responsible for the onboard implementation and enforcement of the Permit to Work System and shall ensure that the completed Work Permits and Certificates are retained on board for 12 months in file QAV 15.

5.2 The Register of Hot Work Authority (File QAO 15) shall be maintained by the ship team member as identified as responsible for monitoring the Hot Work HSSE – SAFETY- PTW – WP-01 (Section 4.3 d)

5.3 The Safety Officer in conjunction with the Master shall carry out internal audits of the Permit system at regular intervals.

5.4 The Engineering Superintendent and Marine Superintendent shall be responsible for auditing the Permit to Work System by representative sample as part of the Superintendent's periodic inspection report as (See QA-AUDIT-EXPLAIN-WP-01).

Permit to Work – Working Practice

1. Applicable Roles

All

2. Overview

2.1 The Permit to Work System provides the control measures and documentary evidence necessary within a Safe System of Work in order to demonstrate that hazardous activities are being adequately assessed and controlled, and that the correct safeguards are being applied.

2.2 This Work Instruction is to be used in conjunction with HSSE-SAFETY-SSW-PRCDR-01 Safe System of Work, HSSE-SAFETY-PTW-PRCDR-01 Permit to Work System, HSSE-SAFETY-TRA-PRCDR-01 Task Risk Assessment and the Controlled Document 03.7 (Guidance in the use of the Permit to Work System) in order to provide the framework within which the permits and certificates shall be administered and implemented.

2.3 The purpose of the Work Instruction is to provide a broad outline on how and when permits and certificates should be issued. Those decisions are for the Shipboard Management Team to make, taking full cognisance of the aims of HSSE-SAFETY-SSW-PRCDR-01 Safe System of Work, HSSE-SAFETY-PTW-PRCDR-01 Permit to Work System, HSSE-SAFETY-TRA-PRCDR-01 Task Risk Assessment.

3. Documentation

3.1 The component parts of the system comprise:
Three types of Permits with supplementary certificates.

- A detailed specification of the task to be undertaken, including the duration and timing.
- Assessment of the risks associated with the performance of the task and its impact on other activities.
- Definition of the hazards involved and the actions and precautions to be taken before, during and on suspension or completion of the tasks.
- Appropriate levels of authorisation for the task to proceed, with cross referencing to other task where appropriate.
- Monitoring during the performance of the task.
- Transfer of responsibilities at watch change, crew change or any other changes of key personnel.
- Revalidation of Permits and Certificates following suspension or cancellation.

- Safe return to service of the equipment and/or workplace.

3.2 The Permit to Work System requires the allocation of a task to one of the following three categories:

- Hot Work (Naked Flame) Permit
- Hot Work (Spark Potential) Permit
- Hazardous Task Permit

Three supplementary certificates are provided for use where supporting activities have to be performed before a Permit can be issued:

- Fit for Entry Certificate
- Isolation Confirmation Certificate
- High Voltage Certificate(Only supplied where applicable)

3.3 The Permits are designed to be issued singularly. Thus if Hot Work is taking place within an enclosed space, the required controls can be detailed on the Hot Work Permit without the need to also complete a Hazardous Task Permit. However, there may be cases when the complexity of the task and the outcome from a Risk Assessment indicate that it would be prudent to control the task with more than one permit.

3.4 The issue and completion of permits is detailed in Controlled Document 03.7 Sections 7 to 12.

3.5 Enclosed Entry and Isolation Tag System

a. Enclosed Entry Tags

. As soon as the access point to an enclosed space has been opened, a plastic Entry Tag holder is to be placed at the access. This holder will advise that entry is prohibited. When entry to the space is permitted the Permit number, date and name of Area Authority is to be written on the green Entry Tag Insert. This Insert is only to be placed in the holder when **all** entry precautions have been met.

b. Isolation Locks & Tags

Isolating locks and tags are to be placed on all isolated equipment. Each tag is to have the Permit number, date and signature of the Isolating Authority on it.

4. Hot work (Naked Flame)

4.1 The Hot Work – Naked Flame Permit is detailed in Section 4.1 of Controlled Document 03.7 / HSSE-SAFETY-PTW-

GLOBALCD-01.

A Hot Work – Naked Flame Permit is to be completed and authorised before **any** welding, burning or hot cutting operations are performed anywhere on the ship (except the Workshop see section 4.2). When a ship is in a repair yard a hot work certificate will normally be issued by a Government appointed shore chemist, and the Permit system for the repair yard will be utilised.

4.2 Hot Work in the Workshop

Welding and burning equipment may be used within the area designated the machinery space workshop without the need for an authorisation permit provided that:

- The area has been inspected and the declaration inside the back cover of the Main Engine Log Book has been signed (or the Chief Engineers Night Order book where a Main Engine Log Book is not used).
- The workshop continues to remain clean and tidy and the welding and burning equipment is in good condition.
- Hot Work (Workshop Only) Notice is permanently posted and ALL the conditions are being fully complied with.

HOT WORK (WORKSHOP ONLY)

THIS AREA IS APPROVED FOR HOT WORK SUBJECT TO THREE MONTHLY INSPECTIONS BEING CARRIED OUT BY THE VESSEL'S SAFETY OFFICER AND ENDORSEMENT BY THE CHIEF ENGINEER.

ALL OTHER HOT WORK IS SUBJECT TO THE PERMIT TO WORK SYSTEM AS DETAILED IN CONTROLLED DOCUMENT 03.7, HSSE-SAFETY-PTW-PRCDR-01 Permit to Work System.

Details are to be recorded at the back of the Main Engine Log Book.

HOT WORK OF ANY DESCRIPTION IS NOT ALLOWED:

- DURING ANY CARGO OPERATION, INCLUDING VENTING OF CARGO TANKS, TANK CLEANING AND BUNKER OPERATIONS.

- IN PORT, WITHOUT PRIOR PERMISSION FROM SHORE AUTHORITIES.

General Precautions

These items should be checked on each occasion that the equipment is used:

- Only authorised personnel are allowed to use the equipment.
- Working area free from combustible material.
- Adjacent area free from combustible material.
- Working area ventilation in operation (extraction fan running).
- Fire fighting appliances in place and ready for use.
- The provision of a Fire Watch should be considered.
- Surrounding area free of obstructions.
- Drawn curtains should be in use (where practicable), or post a notice outside workshop to warn other personnel.
- Workshop fire detection zone inhibiting timer (where fitted) to be in use during work and re-instated on completion.
- Welding mask/goggles/gloves and other PPE to be used to be in good condition.
- Clothing to be oil free and dry.
- No electric arc welding should take place if the person is standing in water or has any part of the body immersed in water.
- Welding set should be turned off when changing electrodes.
- The relevant guidance in on the use of electric arc welding and gas welding/cutting equipment is to be taken into account. (See ENG Procedures).

Equipment Condition

Electric arc Welding Equipment

- Cables, connections and electrode holder to be in good condition.
- Quick disconnect couplings are to be free and operational.
- Welding return cable firmly clamped to the work piece.
- Oxy/Acetlene Equipment
- Regulators, gauges, hoses and connections in good condition.
- Flame arrestors and back pressure valves fitted and operational.
- Torch in good condition and fitted with correct size nozzle for the task.
- Gas pressures correctly set (as per Welding handbook).

ANY DEFECTS FOUND ARE TO BE REPORTED TO THE SECOND/CHIEF ENGINEER AND RECTIFIED BEFORE ANY HOT WORK IS CARRIED OUT.

4.3 Hot Work Outside the Machinery Space.

Hot Work involving welding, cutting or burning shall not take place outside the machinery space without the prior approval of the Company **(except in the case of Extreme Emergency).**

In an emergency, the Master has the authority to override the requirement for Head Office authority for Hot Work. However, Head Office must be informed as soon as possible of the work carried out and *the reasons why permission was not requested.*

a. Procedure for Head Office Authority for Hot Work.

Where Hot Work outside the machinery space is required, the following procedure must be followed:

- Request for Head Office Authority must be completed by the Master and transmitted from the ship by E-Mail and copied to
  "G OSH FLEET TECH MANAGEMENT".
- The Hot Work Request must be put in the relevant file.
- The Hot Work Request must be authorised in accordance with 4.3c
- Head Office Authorisation must be E-Mailed to the ship.
- Details of the hot work in progress must be filed in the front section of the file.
- The Head Office Authorisation may specify additional precautions.
- The request and authorisation E-Mails must be attached to the original copy of the Hot Work (Naked Flame) Permit.
- Hot Work is to be restricted to one location at any one time.
- Authority is only to be granted for a maximum seven day period.
- For reasons of safety, hot work is to be restricted to day time working hours when a full fire fighting capability will be readily available.
- Where the HW exceeds the expected completion date but is still within the 7 days max limit, the vessel supt should be informed.
-

b. Request for Head Office Authority

The Master's request to Head Office must be transmitted in the following format:

- Cargo on board, if any. Stowage
  Condition of the Tanks
  Previous Cargo
  Whether the Tanks are Empty/Ballasted
  Whether any slops and location
- Gas Free/Inerted
- Present Position of the Ship
- Destination
  Speed
  Estimated Time of Arrival
- Location of Hot Work
- Details of Specific Hazards and intended precautions
- Nature of Hot Work
- Expected Duration of Hot Work

c. Head Office Authorisation E-Mail

This E-Mail should contain the following information, as a minimum

- Reference to conditions of the Hot Work (Naked Flame) Permit, HSSE-SAFETY-PTW-WP-01 and any 2nd Stage Risk Assessment that has taken place.
- Any additional requirements.
- Commencement of authority (date and time)
- Expiry of authority (date and time)
- Person responsible for monitoring the work

d. Registration of Hot Work

The Ship Team member identified as responsible for monitoring the hot work shall enter in the Register of Authorised Hot Work the following details:

- Ship name
- Team Member responsible for monitoring the hot work.
- Date of issue of Hot Work Authority.
- Date of E-Mail sent to the ship authorising the hot work, together with details of any special conditions, including the seven day limit.
- The date the hot work is expected to be completed.

e. Hot Work in Progress

The Hot Work Authority (and all accompanying messages) shall then be filed in the Hot Work in Progress Section. When the hot work is completed or authority has expired, the Ship Team member (or his superior) responsible for monitoring the work

shall:

- Complete the remainder of the Hot Work Register Section
- Transfer the Hot Work Authority to the Hot Work Completed Section where it will be retained for six months.

The Vessel Superintendent (or his superior) is responsible for the monitoring and application of the Hot Work Procedure. The Ops Integrity Leader is responsible for ensuring the above procedure is uniformly adopted and therefore correctly applied by the Vessel Superintendent. The Hot Work Records are to be maintained as per QA-RECORDS-KEEPING-PRCDR-01.

f. Authority

The Vessel Superintendent (or his superior) is to obtain authority for the hot work by:

- Completing the “Request for Hot Work Authority” Form – HSSE-SAFETY-PTW-FORM-01. No spaces shall be left blank.
- Completing the “Requirements Section” detailing any specific requirements, e.g., a fire watch.
- Obtain an authorisation signature on Hot Work Request Form from:
  - Designated Person
  - Fleet Technical Manager
  - Ops Integrity Leader
  - Director, Fleet Operations

Authority must be obtained from one of the above in all cases.

- The date/time of validity and of expiry is to be clearly shown in the spaces provided.
- Any additional requirement stated on the Head Office Authorisation E-Mail must be complied with.

g. Hot Work Authority – Outside Office Hours

There is allowance for Hot Work without authority in Extreme Emergency. Wherever possible, hot work authority should be sought in good time to allow the correct process, as outlined above, to be completed. Should work emerge which will require Head Office authority when the office is closed then the following procedure should be followed:

- Ship must contact its vessel Superintendent or nominated alternate with details of the request. The full details as per Section 4.3b should be sent by E-Mail. If the Vessel Superintendent is unable to view the E-Mail, then the

information should be relayed by other agreed suitable means

- The Vessel Superintendent will agree the procedures and precautions with the ship.
- The Vessel Superintendent will contact the Duty Incident Manager by phone and request his approval for the work to progress.
- When the office is next open the appropriate paperwork should be completed and signed.

4.4 General Requirements for Hot Work (Naked Flame)

a. A Hot Work (Naked Flame) Permit for work outside the machinery space can only be issued subsequent to approval by Head Office.

b. "Requirements for spaces within 30 metres of the Hot Work location:

   - Cargo tanks to be purged to less than 1% hydrocarbon (by vol) and inerted to less than 5% O2 (by vol) and free of slops or dirty ballast.

   ADJACENT cargo tanks to be washed, purged to be less than 1% hydrocarbon (by vol) .and inerted to less than 5% O2 (by vol). Ballast tanks, and compartments other than cargo tanks to be gas free (0% LEL).

   Bunker tank atmosphere to be less than 30% LEL."

c. Inert Gas system to be maintained with a slight positive pressure with no leaks from the cargo tanks.

d. Work location and/or bilges to be clean and free of oil.

e. Work location to be gas free and to be tested for hydrocarbon vapour prior to, **immediately before** and frequently during welding. Changes in ambient conditions, including the influence of the hot work, should be considered in determining an adequate gas-testing frequency.

f. When carrying out hot work in machinery spaces or pump rooms fire resistant blankets (non asbestos) should be rigged to prevent sparks falling to lower levels.

g. Work is to be clamped prior to welding, **not hand held**, in position.

h. When working 2 metres or more above a deck level, adequate staging and the use of a securely attached safety harness is

essential. The harness should always be anchored to a substantial structure.

i. Fire hoses must be rigged and charged with water supply immediately available.

j. A fire watch must be continually in attendance for any hot work outside the engine room workshop.

k. When multiple repairs are to be carried out in different locations, each job should be planned and executed as an **individual and separate repair.**

l. If the plan of one repair is affected by circumstances relating to another, then all work **must** be suspended until the ramifications have been studied and appropriate precautions implemented.

m. Where hot work is interrupted by meal breaks etc., then the hot work permit conditions shall be revalidated prior to resuming work.

n. When repairing pipelines which normally carry hydrocarbon liquids the pipelines are to be removed to a remote repair location, wherever possible. If repaired *in situ*, a 2nd Stage Risk Assessment must be undertaken and submitted to BP Shipping Head Office for approval.

o. When Hot Work Authority is requested for repair to a pump room pipeline system, a 2nd Stage Risk Assessment must be undertaken for **each** repair and submitted to BP Shipping Head Office for approval.

p. Due care must be taken with the routing of welding cables or hoses. Direct contact with a hot surface should be avoided by the use of a fire blanket where practical.

q. The welding machine is to have separate earth return attached at the work site as near as possible to the welding operation.

5. Hot Work (Spark Potential)

The activities covered by the Hot Work – Spark Potential permit are detailed in Section 4.2 of Controlled Document 03.7.

5.1 The intention of this permit is for use where activities are likely to cause sparks in areas where there is a possibility of hydrocarbon liquid, vapour or other combustible material being present. It is not the intention that this permit is used in every case where spark potential activities occur.

5.2 The permit WILL be required when spark potential activities, as defined in section 4.2.1 of Controlled Document 03.7, are undertaken in the following areas:

- all main deck areas (oil tankers)
- main deck, tank cover and flying passage (gas carriers)
- adjacent to bunker tank or oil storage tank vents
- adjacent to any engine room vent which may be venting flammable vapours.
- adjacent to battery lockers or in store rooms

NB Any grinding operation in a cargo tank will require Head Office authority in accordance with the requirements of Section 4.3 of this Work Instruction.

5.3 Where grinding is taking place in the engine room, consideration should be given to the use of a permit when assessing the proximity of hazards such as bilge wells, tank tops and save-alls which may contain oil.

6. Hazardous Task

The activities covered by the Hazardous Task permit are detailed in section 4.3.1 of Controlled Document – Guide to Permit to Work System. This list is NOT intended to be exhaustive, and thus the Shipboard Management team should not feel restricted in the application of this permit if they consider that the hazards of a task are such that adequate control can only be demonstrated with the application of a permit.

6.1 Permit Intent

The intent of the permit is to show that the hazards, associated with the types of task in the above list, have been evaluated and the appropriate safeguards put in place and recorded.

6.2 Entry into an Enclosed Space

a. No person shall enter any cargo, ballast, bunker or fresh water tank, double bottom, cofferdam, boiler furnace, pipe, flue, crankcase or similar enclosed space unless:

- A valid Permit has been issued, Hot Work Naked Flame, Hot Work Spark Potential as appropriate or Hazardous Task where no Hot Work is to take place.

- Pipework and machinery are correctly isolated and an Isolation Confirmation Certificate has been issued along

with isolation tags fully completed and put in place as necessary.

- The space has been gas freed and a Fit for Entry Certificate issued.
- Ventilation to the space is maintained throughout entry and the atmosphere is monitored as required by the Permit.
- Inert gas pressure in adjacent spaces is at a minimum (if applicable).
- Adequate lighting and safe access have been provided.
- Emergency equipment is ready for use at the entrance and sufficient manpower is available in the immediate area to provide a rescue party.
- A responsible officer or senior rating is in attendance and the Officer of the Watch (OOW) has been notified.
- Communications procedures have been agreed.

The OOW is to note the names and times of entry and exit to a space in the daily events page of the Deck Log Book.

The only exception to the above requirements will be in an emergency at the discretion of the Master, or when the space is covered by a valid Entry Permit issued by a shore authority.

b. Entry into an enclosed space shall be restricted to a single space at any given time.

   This requirement may be waived when a 2nd Stage Risk Assessment has been completed and approved by Head Office. It should be borne in mind that the major concern in respect of multiple tank entry is the ability to mount an effective rescue in the event of an incident in any tank or enclosed space.

c. A Fit for Entry Certificate MUST be issued for **each** enclosed space to be entered. Enclosed Entry Tags must be correctly completed and in place at the entrance to the enclosed space.

d. Criteria for Gas Testing Prior to Entry

   A tank is said to be gas free for entry when the space has been ventilated and tests confirm that the hydrocarbon gas concentration throughout the compartment is not more than 1%

of the lower flammable limit (LEL) on a properly calibrated explosimeter, and additional tests have been made to check that oxygen content is 21% and that hydrogen sulphide, benzene and other toxic gases are not present.

Oxygen deficiency must always be suspected in a cargo tank which has contained hydrocarbon vapour or inert gas or in a compartment which has been sealed for any length of time. Entry to the tank must not be made until 21% oxygen is indicated on a properly calibrated oxygen analyser.

Particular attention to the maintenance of a gas free atmosphere is essential if adjacent compartments contain bulk volatile cargo.

Toxic gas testing must always be included as part of the enclosed space entry procedure, where that space has or is likely to have contained hydrocarbon material.

Toxic gases to be tested for are hydrogen sulphide, benzene and total mercaptans. These are to be measured using a sample pump and tubes. Personal Protective gas detection equipment can also be used to detect and warn against H_2S vapours.

Vessels shall maintain an adequate stock of tubes. A table showing the gases which are to be tested for, the tube type and TLV is shown over:

GAS TYPE		TUBE NO.	PRINTED SCALE	TLV	REMARKS
Hydrogen Sulphide H_2S	4LL	5 – 60 ppm	0.25 – 60	5 ppm	Found in sour crudes
Benzene (C6 C6)	121S	0.5 – 10	0.5 – 10 ppm	3 ppm	Particularly in Naptha (spiked crude) an other spirits
Total Mercaptans	70L	0.5 – 8	0.5 – 4 ppm	5 ppm	Caused by the decomposition of organic materials in crudes and particularly in tank sludge. Contained in Pentane Cargoes.

e. Personal Protective gas detection instruments are supplied to all vessels. They monitor % LEL, % oxygen and ppm hydrogen sulphide and provide display information and alarms for all three gases. One of these instruments is to be worn by personnel entering cargo tanks or other enclosed spaces. It can also be used as a back up instrument for taking IG 02 readings.

6.3 Pump Room Precautions

- In order to prevent build up of vapours, efficient ventilation must always be maintained in cargo pump rooms during cargo operations.

- Most of the Company's vessels are fitted with inlets to the vent trunks, both below and above the level of the pumproom bottom gratings. These should be operated with the lower flaps open and the upper flaps closed.

- The upper inlets should only be opened in the case of flooding which causes the lower inlets to be covered, or if there is a leakage of oil from a pump or line where ventilation would be improved by a more suitable set up of the inlet flaps.

- To emphasise the importance of this procedure the following notice should be permanently marked against the upper vent operating mechanisms: “Emergency High

Level Vent – Normally Closed".

- When the cargo pump rooms and/or their ventilation systems have been closed down for an extended period, the ventilation must be restarted and maintained in use for a period of at least 30 minutes prior to entry,

- If entry is necessary within the 30 minute period required for minimum ventilation, then the atmosphere should be tested for hydrocarbon gas concentration and oxygen content. The precautions for entry should be appropriate to the conditions found from the tests.

- Oil and/or water must not be allowed to accumulate in pump room bilges. Bilge discharge or transfer operations must comply with all requirements of the applicable Oil Pollution regulations.

- All pump and valve glands and joints must be kept tight and must be inspected whenever discharge or transfer of cargo or ballast is commenced and at regular intervals thereafter. If CO2 smothering systems are fitted in pump rooms, the alarm system must be tested periodically to ensure that it is functioning correctly. Personnel should be familiar with the operation of the system and the sound of the alarm.

6.4 Entry into Pump Rooms

No person shall descend into a cargo pump room unless:

- The OOW has been informed and permission obtained.

- Portable radios should be used to maintain direct communications between the OOW or the deck watch and those in the pumproom. Where this is not possible an agreed means of communication must be established. (This could include use of the pumproom telephone or a responsible person standing by at the pumproom entrance).

- The ventilation fans are running and operating effectively.

- The pump room lifelines and harness are ready for immediate use.

- An approved escape set (breathing apparatus) shall be located at an easily accessible position at the pumproom bottom.

- Prior to entry, atmosphere checks for oxygen, hydrocarbon and toxic gases are to be completed to establish that the space is safe for entry. Provided these readings are within acceptable limits as defined in section 5.2.4 the space will then remain fit for entry, subject to satisfactory retesting at regular intervals which should not exceed six hours. The results of the atmosphere check are to be recorded by the Officer of the Watch (OOW) in the narrative section of the Deck Log Book. Additional tests are to be carried out when there is any doubt as to the condition of the atmosphere.

- As an additional precaution, Personal protective gas detection instruments are to be worn by anyone entering the pump room since these will provide early warning of any deterioration in the atmosphere.

6.5 Entry to LNG Double Bottom and Pipe Passage Procedures.

The above spaces, by their nature, present different hazards and these have been separately assessed and Local Procedures produced to be used in conjunction with the permit system. The Local Procedures detail the requirements for communications, standby teams, roles and responsibilities and equipment.

6.6 General Requirements for Working on Cargo Systems

a. Cargo Pipelines and Pumps

Any work which requires the breaching of the cargo pipeline system or opening up of cargo pumps MUST be controlled by a Permit and an Isolation Confirmation Certificate. If it is required to enter the pipe or strainer then a Fit for Entry Certificate is also required.

As a minimum:

- Pumps and lines should be thoroughly flushed through with water.

- The line should be tested and proved gas free, if possible before opening or at least when first opened up and before any work commences.

- Depending upon the nature of the work it may be relevant to continually ventilate the pipe.

b. • Working in Cargo Tanks

- Hand tools when used in cargo tanks, bunker spaces and pump rooms, shall be used with particular care. Tools should never be dropped on a steel deck.

- Electrical equipment or portable lamps on wandering electrical leads must not be used in any cargo space unless the vessel is wholly gas free and frequent gas test are made.

- Aluminium or light alloy portable equipment, such as ladders or scaffolding, may be used in cargo tanks, cofferdams or pump rooms, provided that precautions are taken to prevent aluminium smears on steel structures.

- Non-sparking shovels or scoops made from plastic, wood or similar materials shall be used for removing scale or sludge from cargo tanks.

c. Work in Pump Rooms

Routine maintenance work in pump rooms, such as fabric maintenance, may be carried out in ballasted and loaded condition without the need for a permit, provided that the integrity of the cargo pipelines and pumps is maintained.

Where it is essential to undertake maintenance and/or repair work which entails breaching the integrity of the pipeline system and/or the opening up of cargo pumps, the following precautions must be adhered to:

- A Hazardous Task Permit is to be completed and authorised prior to the commencement of the work.

- The pump room lines are to be checked and proved empty of ALL cargo and vapour by a responsible officer.

7. Supplementary Certificates

Fit for Entry, Isolation Confirmation and High Voltage Certificates are used where supporting activities have to be performed before a permit can be issued. Details of the issue and completion of these certificates is contained in Section 5 of Controlled Document Guide to Permit to Work System.

8. High Voltage Systems

8.1 Request for Work on High Voltage Systems

Regulations and guidelines for carrying out inspection and maintenance on high voltage electrical equipment from the Company's High Voltage Safety Rules (G88) are to be followed before commencing any work on high voltage systems. These Rules are set out below:

8.2 High Voltage Safety Rule (G88)

a. High Voltage circuits

High Voltage circuits are potentially more dangerous than Low or Medium Voltage circuits, not only due to the increased voltage, but also because, under certain quite common circumstances, High Voltage circuits can retain a lethal charge even when switched off. In addition, dangerous potentials can exist some distance from live High Voltage conductors, the distance being determined by the conductor voltage and the dielectric strength of the insulating materials (including air) surrounding the conductor.

It is therefore essential that all persons who may be required to work on, or operate high voltage apparatus are fully aware of the hazards and how to avoid the associated danger.

When work is to be carried out on a High Voltage system, it is highly desirable that a previously prepared programme incorporating a check list be strictly following in order to ensure that the work is correctly performed without mistakes with their inherent danger. To safely operate a High Voltage system, it is necessary to ensure that all persons concerned are suitably qualified for the duties they are to perform.

b. Definitions

High Voltage Apparatus – Any apparatus, equipment and conductors which are normally operated at a voltage exceeding 650 volts.

Danger – Means danger to health or danger to life or limb from shock, burn or other injury to persons employed, or from fire, attendant upon the generation, transformation, distribution or use of electrical energy.

Dead – At or about zero voltage and disconnected from any live system,

Earthed – Connected to the general mass of metal of the ship's hull in such a manner as will ensure at all times an immediate discharge of electrical energy without danger, when applied to apparatus, equipment and conductors, all phases short circuited and efficiently connected to earth.

Circuit Main Earth – An earth which is applied before a Permit to Work is issued.

Caution Notice – A notice for attaching to apparatus or its control equipment to convey a warning against interference, e.g., “CAUTION MEN WORKING”.

Danger Notice – A notice for attaching to apparatus when 'live', calling attention to the danger of approach to, or interference with, such apparatus, e.g., “DANGER LIVE APPARATUS”.

Permit to Work – A form of declaration signed and given by a Chief Engineer to an authorised person in charge of work to be carried out on any earthed High Voltage apparatus for the purpose of making known to such person exactly what apparatus is dead, isolated from all live conductors, has been discharged, is connected to earth, and on which it is safe to work.

Sanction for Test – A form of declaration signed and given by a Chief Engineer to an authorised person in charge of testing High Voltage Apparatus for the purpose of making known to such person exactly what apparatus is to be tested and the condition under which the testing is to be carried out.

Authorised Person – A person, over 18 years of age, who has sufficient technical knowledge or experience to enable him to avoid Danger, and carry out specific operations and/or work on High Voltage systems.

c. Procedures

Access – No person except an Authorised Person or person acting under his immediate supervision shall have access to any enclosure, chamber, or cell in which a live conductor is exposed. All access shutters not required for immediate work or operation shall, if not otherwise made inaccessible, be locked shut.

Switching – No High Voltage switching shall be carried out without the sanction of the Chief Engineer, except for agreed routine switching or in cases of emergency.

When a Chief Engineer gives instructions for High Voltage

switching to be carried out, he shall communicate directly with the person who is to carry out the switching. The switching, in accordance with the instructions given, shall be carried out without undue delay.

When switch gear shows any sign of distress after operating, its conditions shall be reported immediately to the Chief Engineer, and it shall be examined before further operation.

Safety Locks – Safety locks shall be used to lock off all switches and shutters at points where the circuit on which work is to be carried out could be energised. Where appropriate, a generator prime mover shall also be isolated and locked off to prevent the generating set starting. Where earths are applied by use of circuit breakers or switches, these shall be locked in the earth position. The keys for such locks shall be kept in a key safe provided for this purpose, and the key safe shall be under the direct control of the Chief Engineer.

Notices – Caution Notices shall be fixed at all points where safety locks are applied, and on all switch gear controlling the apparatus which has been made dead, and on which work is to proceed. Danger notices shall also be attached (where applicable) on, or adjacent to, live apparatus at the limits of the zone in which work may be carried out.

NB Caution and Danger Notices shall be fixed or moved only under the supervision of the Chief Engineer.

8.3 Precautions

No person shall undertake any repairs, maintenance, cleaning, alteration or work on any part of High Voltage Apparatus unless such person is fully conversant with the nature, and also the extent of, all the work to be done, and the following conditions are complied with:

- The apparatus has been made dead.
- The apparatus is isolated and locked off from live conductors.
- The apparatus is efficiently earthed at all points of disconnection of supply to such apparatus and Caution and Danger notices posted.
- The apparatus is released for work by the issue of a Permit to Work or Sanction for Test.

A second person, who should be competent in the treatment of electric shock, should be continually in attendance.

It is the duty of the person issuing the Permit to Work or Sanction for Test to ensure that the foregoing provisions are complied with.

8.4 Earthing

a. When High Voltage apparatus is to be discharged and earthed in accordance with 8.3c it shall be done by use of a circuit breaker or specially provided earth switch to make the earth connection. After closing, the circuit breaker or earth switch shall be locked in the earthed position, while it is a Circuit Main Earth.

b. No high voltage earthing switch shall be operated or Circuit Main Earth applied or removed, without the consent of the Chief Engineer, and then only by an Authorised Person.

8.5 Permits to Work and Sanctions for Test

a. A Permit to Work or Sanction for Test shall only be issued by the Chief Engineer who shall retain a written record of the issue and cancellation of each Permit to Work. See QA-RECORDS-KEEPING-PRCDR-01

b. A Permit to Work or Sanction for Test shall be issued to the Authorised Person under whose supervision the work is to be carried out, and who, after reading its contents to the Chief Engineer issuing the Permit to Work or Sanction to Test, shall thereupon sign its receipt and its duplicate.

c. The Authorised Person to whom a Permit to Work or Sanction for Test is issued, shall retain the Permit to Work or Sanction for Test in his possession at all times whilst work is being carried out.

d. The apparatus isolated and earthed for work under the terms of a Permit to Work shall remain so until the Permit to Work has been cleared, returned to the Chief Engineer and cancelled.

e. The apparatus isolated and earthed for testing under the terms of a Sanction for Test must not be connected to the system without the sanction of the Chief Engineer. The recipient of the Sanction for Test will be responsible for co-ordinating all testing operations on the isolated equipment and for ensuring safety during the tests. He may, without further reference to the Chief Engineer, remove and replace earths as necessary and carry out test including making live the apparatus concerned from a testing

supply.

f. When work on apparatus for which a Permit to Work or Sanction for Test has been issued is suspended or completed, the recipient shall sign the clearance and return the Permit to Work of Sanction for Test to the Chief Engineer who shall cancel it.

g. Where more than one Permit to Work has been issued for work on High Voltage apparatus associated with the same Circuit Main Earths, the Chief Engineer shall ensure that all such Permits to Work have been cancelled before the Circuit Main Earths are removed.

Risk Assessment & Safe Systems of Work – Procedure

1. Applicable Roles

All Officers

2. Object

The objective of this procedure is to summarise the processes associated with hazard identification, risk assessment and control that contribute towards achieving a safe system of work.

3. Scope

To provide an overview of the elements that comprises the Risk Based Approach to a Safe System of Work and should be read in conjunction with HSSE-SAFETY-TRA-PRCDR-01.

4. Procedure

4.1 The control of risks within the workplace requires careful planning and can be categorised on a scale from long term to short term, these categories include:

a. Eliminate

b. Substitute

c. Engineer out – separate plant from people, ventilation / protect, remove employees from the risk, e.g., defining areas where access is authorised

d. Administration changes - Reduce employees exposure to risk, e.g., defining duration of the task and safeguards

e. Utilise protective equipment, e.g., hard hats to protect against dropped objects.

Within a project design stage the level of controls tend to be related to avoiding/reducing the risk at source. Once these controls have been incorporated into the design, any remaining risks have to be addressed at the operational stage where the level and amount of safeguards tend to be related to the containment and exposure to the risk. PPE is a last resource and should be used in conjunction with the other controls; it is not a control on its own.

4.2 The following documents within the Safety Management System comprise the framework of the risk based approach to providing

a safe system of work within ship operations:

- HSSE-SAFETY-PTW-PRCDR-01 – Permit to Work System and Local Procedures.
- HSSE-SAFETY-TRA-PRCDR-01 – Task Risk Assessment
- Globally Controlled Document – Guidelines to Permit to Work System.
- HSSE-SAFETY-PTW-WP01
- Planned Maintenance Routine Safety Checklist

Successful completion of the activity depends on the support from other procedures and working practices within the Safety Management System.

Collectively these procedures and documents contribute towards the Safe System of Work.

4.3 All tasks onboard must be subject to a risk assessment. The level and depth of risk assessment carried out and subsequent control measures will depend on the hazard exposures identified. Where the hazards are not simply controlled, the significant risks must be recorded along with the control measures put in place to reduce these risks. The risk assessment should identify any permits / certificates required.

For activities where the control measures need to be strictly controlled a permit to work / certificate relevant to the operation and hazards is to be used. This includes areas where a number of tasks are being carried out, but need to be co-ordinated.

For activities with increased levels of risk and uncertainty whereby hazards cannot be fully identified and/or control measures defined, then a team based approach Task Risk Assessment is to be carried out. The outcome of the risk assessment is to be incorporated within the relevant Permit.

A visual risk assessment of the work area for routine activities covered by established procedures using competent persons will identify if any further in depth risk assessment is required. It is unlikely that additional safeguards are necessary provided the person carrying out the work is familiar with the established procedure. For activities that have known risks the necessary safeguards may be predetermined by legislative requirements.

For activities that are routine, yet require interaction with a range of hazards, then these hazards are to be identified and appropriate control measures stated and a local procedure put in place.

5. Records

The Master is to retain files of the following :-

5.1 Local Procedures approved by the Engineering Superintendent, in conjunction with the Marine Superintendent, Fleet Safety Advisor and QA Manager.

5.2 Completed Permit to Work and Supporting Certificates.

5.3 Completed Task Risk Assessment and Safety Management Plan.

5.4 Completed Vessel Visit Report Form reflecting that the visiting Engineering Superintendent or Marine Superintendent has reviewed the effectiveness of the safe system of work with details of any deficiency noted.

6. Responsibilities

6.1 The Master is responsible for the onboard implementation of the Safe System of Work. This shall take place by the utilisation of established Company Procedures, Local Procedures, Permit to Work System and Task Risk Assessment.

6.2 The visiting Engineering Superintendent or Marine Superintendent is responsible for taking an overview of the tasks being carried out onboard since the previous visit in order to establish whether the selection and combination of the Procedures, Permits and Task Risk Assessment, demonstrates that reasonable practicable measures have been put in place to establish a safe place of work.

Task Risk Assessment - Procedure

1. Applicable Roles

All Officers

2. Object

The objective of this procedure is to ensure that tasks are planned in a systematic manner to ensure that risks are established in terms of consequence and likelihood and the necessary safeguards put in place prior to allowing any work to commence.

3. Scope

The procedure outlines the requirements for carrying out Task Risk Assessment. The process of task risk assessment is a team based approach for systematically examining an individual work assignment (task) to identify all the hazards, evaluate the risks and specify appropriate safeguards (control measures).

4. Procedure

4.1 The process has two stages, each dependent on stopping and thinking about the task before it commences. These comprise:

Stage 1 - a broad overview by the person appointed to carry out the work – the performing authority, in order to determine whether the hazards are significant and, if so, whether the risks can be controlled by existing means (Safeguards within a Planned Maintenance routine, Established Procedure / Local Procedures, Permit to Work).

Stage 2 - comprises a formal qualitative assessment which is required when the permitting authority (senior person overseeing the task) judges that additional safeguards will be needed to minimise the risks of being hurt or causing harm within the working environment.

Appendix 1 on Page 5 of 8 provides an overview of both stages.

4.2 A Stage 1 Risk Assessment is an assessment of the task by the performing authority to determine whether any significant hazards are likely to be involved, using his own knowledge/experience. If there are no significant hazards, the risks can be considered not significant and no further assessment of action is necessary. Where the risks are considered significant, the performing authority must decide whether they can be adequately controlled by existing means,

taking into account the safeguards required by any relevant regulation or procedure, and the knowledge/experience of the person carrying out or supervising the work.

If the activity has been scheduled through the planned maintenance system then the performing authority must complete the safety measures as required by the planned maintenance routine. If the activity is detailed in a Local Procedure then the safeguards detailed within the Local Procedure must be implemented.

Where the risk and complexity has not been addressed through PM routine safety measures and / or Local Procedure, the additional risks shall be recorded along with the relevant additional control measures. Where it is identified that a Permit to Work is required to be issued, the assessment and safeguards are to be established by the completion of the relevant permit and associated certificates where necessary. If the performing authority is not completely assured the risks will be adequately controlled using these approaches, he must inform the person in charge of the work and state that a Stage 2 Risk Assessment is required.

4.3 A Stage 2 Risk Assessment must be carried out where, as a result of Stage 1, the performing authority believes that significant risks exist which cannot be adequately controlled with existing safeguards. Typical circumstances that necessitate a Stage 2 Risk Assessment include:

- The task is new and unfamiliar.
- It is physically impossible to comply fully with the requirements in a Local Procedure, or other recognised source of guidance.
- Previously used safeguards may not be reasonably practicable in this case.

4.4 The objective of the Stage 2 assessment is to use local knowledge and expertise in a structured way to examine the hazards from first principles, and to devise a set of safeguards which will ensure an acceptable level of risk. Assessment can be undertaken by teams comprising ships staff and office staff.

4.5 In the case of ship's staff, the team would normally comprise the Shipboard Management Team and the Safety Officer together with other members of the workforce who have specialist knowledge or experience which could help with the assessment.

4.6 When the type and level of hazards justify an office-based Task Risk Assessment, the Superintendent is to consult with the

Workgroup Leader, Safety Advisor, QA Manager, Fleet Technical Manager and Operations Integrity Leader (or their deputies) to agree the make-up of the team and scope of assessment to take place.

Refer to HSSE-SAFETY-TRA-FORM-01 to see a typical hazard checklist.

4.7 The team must ensure that they fully understand the task and its implications.

A Hazard Checklist is to be completed which identifies which significant hazardous agents, critical activities and hazard effects may exist whilst undertaking the task. Aspects such as location, type of equipment, critical activities, e.g., lifting, draining, gas freeing and possibility of interaction with other activities within the task or unrelated tasks nearby will all need consideration.

4.8 The risk created by each hazard on the list must be evaluated using the Task Risk Assessment pro-forma and hazard effect/probability evaluation matrix.

The team must then work systematically through the list of hazards to specify all of the safeguards needed to control the risks. Existing safeguards must be included on the task risk assessment pro-forma or it must define the assumptions that have been made, i.e., the plan is based on the assumption that the operational status is assumed normal and that the safeguards defined are in addition to the ones that are in place under normal conditions. Safeguards can include physical, i.e., fitting locks, removing pipelines, etc., procedural, i.e., regular monitoring of the task, adequate supervision, ensure competency of personnel.

In addition, time should be considered and measures taken to limit the duration of task by good planning and preparation.

HSSE-SAFETY-TRA-FORM-02 shows the Task Risk Assessment Pro-forma and Appx 2 the Evaluation Matrix.

4.9 The Team must decide whether each risk can be accepted, basing their judgement on the number and effectiveness of safeguards available to control that risk. The higher the perceived risk for any particular hazard, the greater should be the number and/or quality of independent safeguards that the team specify as necessary.

4.10 If the team considers that there are insufficient safeguards available, or that the safeguards are likely to be ineffective

against any particular risk, that risk must be abandoned and referred to higher management for further action. The team may also conclude that because of the complexity or severity of the risk, a more formalised risk assessment is needed. In this case the task must be suspended until the assessment is available.

4.11 On completion of the Stage 2 Risk Assessment, the safeguards specified by the team must be implemented, including any training and/or special briefing to the performing authority. The Area Authority must be satisfied that the required safeguards are in place, and that all the individual risks will be under adequate control before the permit is issued for work.

5. Records

5.1 Completed Stage 2 Risk Assessments are to be filed with the respective Permit to Work.

5.2 Completed Supt Vessel Inspection Form reflecting that the Engineering Superintendent or Marine Superintendent, as appropriate, has reviewed the Stage 2 Risk Assessments with the Permit to Work documentation work with details of any deficiency noted.

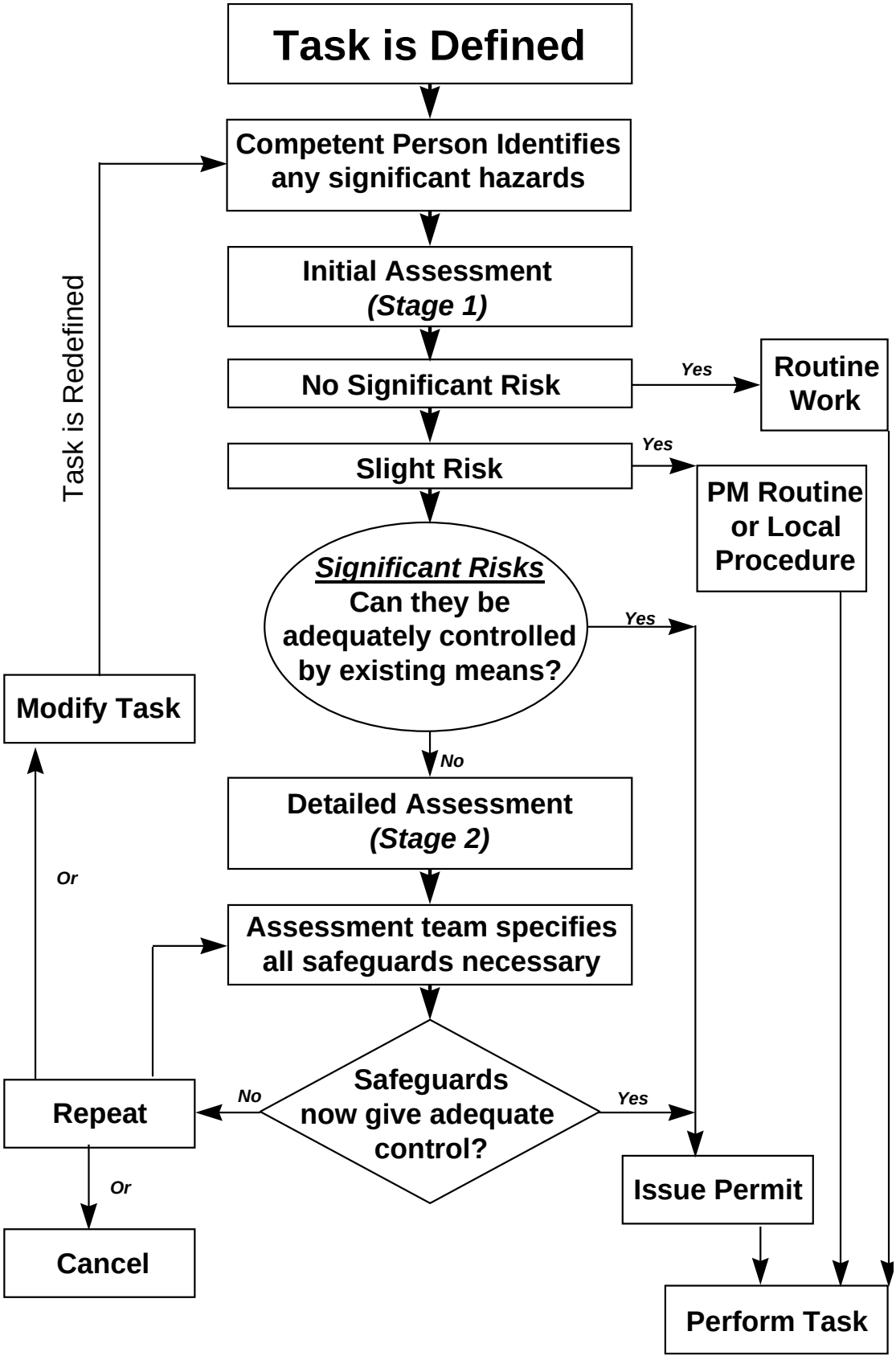
6. Responsibilities

6.1 The Master is responsible for the onboard implementation of the Stage 2 Risk Assessment and forwarding the details to the Vessel Superintendent prior to proceeding with the work.

6.2 The Engineering Superintendent, in conjunction with the Marine Superintendent if appropriate, is responsible for ensuring that the Stage 2 Risk Assessment adequately addresses the risks and to confirm this with the Master prior to any work commencing.

6.3 When the type and level of hazards justify an office-based Task Risk Assessment, see 4.6 above.

7. Appendix 1 Model of Task Risk Assessment



8. Appendix 2 Evaluation Matrix

RISK = HAZARD EFFECT × PROBABILITY

PEOPLE	Asset Damage ($)	Low	Med	High	
Multiple Fatalities	> 1M	**H**	**H**	**VH**	Very High
Fatal Injury Permanent Disability	100K – 1M	**M**	**H**	**H**	High
Lost time Hospital Stay Temporary Disability	15K – 100K	**M**	**M**	**H**	Medium
No Lost Time No Hospitalisation First Aid Treatment	<15K	**L**	**M**	**M**	Low
		Very Unlikely (Hardly Ever)	Possible (Sometimes)	Very Likely	

Increased Hazard ↑ **HAZARD EFFECT**

PROBABILITY → Increased Probability

Security Matters – Working Practices

1. Applicable Roles

All Officers & Crew

2. Security Statement

In this Section, all references to Policies are to be taken as being part of BP Shipping's overall Security Policy. See QA Manual Section 5.1.2.and the statement in the Ship Security Plan (Controlled Doc 6.5).

The Policy applies to all BP Shipping employees, BPMS employees, BP Oil UK Ltd. staff and Contractors staff working at all BP Shipping premises or sites, including BP Shipping managed vessels operating under the BPS ISM DoC.

3. General

3.1 Security Responsibilities

The Chief Executive Officer is responsible for implementation of the Security Policy at all sites and premises, including ships, throughout BP Shipping.

The Director, Fleet Operations, is accountable for the implementation of the Security Policy and the ISPS Code within the Fleet Operations Group and the vessels for which it holds accountability.

The Company Security Officer (ISPS statutory position) is accountable for:

a) Providing the management system and processes that allow the statutory obligations of the ISPS Code to be met
b) Advising the CEO, the Director of Operations and Fleet technical Manager on fleet security relating to BP Shipping managed fleet (ISM DoC).
c) Development of BP Shipping Fleet Security Standards.
d) Monitoring compliance with the Security Policy and Standard in the Fleet.
e) Maintaining a centre of expertise on Fleet Security Matters for BP Shipping.

The Director, Fleet Operations and all Team Leaders, including ship's Masters, are responsible for ensuring that the Security Policy is complied with throughout their Teams and areas of responsibility.

3.2 Security Standards

The following Standards will apply:

a) Security risks are to be kept under regular review.

b) Security considerations must be covered in all planning and be taken into account of in operations from the earliest stage.

c) Protective measures must be based on sound appreciation of risk, be cost effective, be proportionate to the risks and be in conformity with BP Group Guidelines and the ISPS Code (International Ship and Port Facilities Security Code).

d) Management must make a positive commitment to effective security, allocating resources and responsibilities clearly, assuring themselves of the competence of specialist staff and ensuring an acceptance by all staff of the need for security.

e) A security awareness programme must be developed and maintained.

f) Security arrangements must be the subject of regular reporting, periodic reviews and audit checks.

g) Criminal or malicious incidents which result in the death or serious injury of Company employees or in serious damage or loss to BP assets must be reported to the Head of Security at the BP Corporate Centre, this is in addition to statutory reporting requirements of the ISM and ISPS Codes.

h) Security breaches and failures to comply with the BP Code of Business Ethics must be investigated and, where appropriate, legal and/or disciplinary action taken against offenders.

4. Security Guidance

4.1 Personal Security

Personal Security is the responsibility of each individual working at Company premises or sites, both in their home life and at their place of work. Company recommendations are contained in the booklet “Personal Security” and although this publication is mainly aimed at staff who travel or are posted overseas, the recommendations can equally apply to staff resident in the UK.

Sea staff joining or leaving vessels – All such personnel movements shall be governed directly by BP Group Security

Policy for business travellers which is regularly updated on the BP Group Security web site on the intranet. Actual movements are controlled by the BPMS Manning Manager in conjunction with BPCS and in consultation with BP Group Security (where necessary). The manning contractor(s) administering seastaff travel on behalf of BPMS shall be responsible for providing personal security advice to onsigning seastaff for the countries through which they are expected to transit. This information shall be provided in writing as a supplement to the normal joining letter.

Seastaff shore leave - shall be controlled by the Master who is responsible for providing security advice to ship's crew for ports and countries visited and controlling visits ashore whether for business or recreational purposes. This advice to be based on the latest information available from the local shipping agent and in CD 6.1 – Marine Security Pack

Shore Staff - Personnel movements to/from ships, shipyards, or other offices etc. All such personnel movements shall be governed directly by BP Group Security Policy for business travellers which is regularly updated on the BP Group Security web site on the intranet. Shore staff movements are controlled by line manager in accordance with BP Group Policy

4.2 Piracy and Armed Robbery

For guidance on these matters please refer to the following publications:

Pirates and Armed Robbers: A Master's guide
CD 6.1 – Marine Security Pack
CD 6.5 – Ship Security Plan

5. Business Cards & Identification Badges

5.1 Ships Staff

Business Cards and Identification Badges (not applicable on coastal vessels) As part of Customer Responsiveness and Image, all ship's staff shall wear identification badges when visitors to the ship may be expected, i.e. dry-dock, repair yard, in port or other area of cargo operation and canal or river passage. Each vessel shall be supplied with the following:

a) Blank business cards bearing the BP Shipping house flag.
b) Clear plastic business card holders (ship's staff)
c) C.D. 6.3 Visitor Pass/Log System.

Masters shall issue card holders and cards to all staff, to be worn visibly at all times when visitors may be on board the ship as described above. The cards shall, as a minimum, show the person's rank/position, with the name of the person being optional. (Masters and Chief Engineers shall use the BPMS business cards issued to them by the relevant Crew Managers).

5.2 Visitors

In accordance with the procedures put in place to comply with the ISPS Code, the following arrangements will be used to identify visitors onboard and control access to the ship. These arrangements can be found in more detail in the vessels Ship Security Plan (SSP). However, those parts of the SSP are of a confidential nature and thus a brief outline of the arrangements are included here the information of QA/ISM auditors and ship vetting inspectors if required. Use shall be made of the C.D. 6.3 Visitor Pass/Log system as supplied to all ships. This applies whether on a berth or at an anchorage. Special arrangements can apply however during a repair period/dry docking and this is referred to later. **All** visitors to the ship shall be positively identified against their own ID and against an official visitors list as prepared for the gangway watch by the Master. Once the identification process is complete each visitor may be subject to a personal or baggage search as required by the ISPS Code and thereafter, if all is order, **a visitor pass will be issued to each individual.** Where possible and depending on the Security Level in force at the time, all visitors shall be escorted to the main administrative area onboard to be seen by the Master, Chief Engineer, Chief Officer or 2nd Engineer. This visitor pass will be dated, serial numbered, clearly marked 'VISITOR' and bear the ships name and port to which it applies. The reverse of the visitor pass contains instructions for the visitor on shipboard safety and security procedures. CD 6.3 allows for duplication of details on a record sheet that will, when full, be archived in CD 6.4 Ship Security Records. Person refusing to comply with the ships access control measures will be denied entry and the Ship Security Officer (SSO) informed.

5.3 Terminal Staff

An exception to the above will be, at the SSO's discretion, terminal personnel that come onboard in connection with the cargo operations and are always employed externally on the ship in the manifold area. These personnel should have their own Terminal identification and a tally system can be used by the ship if numbers are large. Terminal staff and cargo surveyors that will enter the accommodation spaces on their business will require Visitor Passes. Visitor Passes shall be worn, clearly visible at all

times. Losses are to be reported and on leaving the ship the Visitor Pass is to be given up to the gangway watch. Prior to departure, all used Visitor Passes are to be given to the SSO to check for discrepancies. Ships personnel that observe anyone onboard without a Visitor Pass shall investigate the matter and/or report the fact to the SSO immediately.

5.4 Drydock and Repair Periods

Special arrangements for visitor access during major repair and/or drydocking events shall be the subject of close co ordination between the ship and shore shore facility and be addressed in the Safety Management Plan prior to the event/project in question.