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Appendices

Appendix 1: List of HSSE Guidelines/Recommended Practices/Standards issued by MPM to Contractor(s)

| Guideline | Serial Number | Revision/ Date |
|--|------------------|-----------------------|
| Guidelines for PETRONAS Assessment of Fitness to Work for Offshore & Remote Onshore Workers. | MPM/HSE/GD/01/04 | Rev 4: Jan 2018 |
| PETRONAS Guidelines on Respirator Fit Test Program for Upstream Oil & Gas Industry in Malaysia | MPM/HSE/GD/06/00 | Rev 0: June 2014 |
| PETRONAS Guidelines on Produced Sand Disposal | MPM/HSE/GD/07/01 | Rev 1: Oct 2019 |
| PETRONAS Health, Safety and Environment (HSE) Minimum Procedure and Requirement for Decommissioning of Upstream Installations | MPM/HSE/GD/09/00 | Rev 0: June 2015 |
| PETRONAS Recommended Practice on Personal Protective Equipment (PPE) for Malaysia Upstream | MPM/HSE/GD/12/00 | Rev 0: July 2015 |
| PETRONAS Process Safety Management (PSM) Key Performance Indicator (KPI) Guidebook | MPM/HSE/GD/13/00 | Rev 0: S Sept 2015 |
| PETRONAS Guideline on Onshore Drilling Waste Management | MPM/HSE/GD/15/00 | Rev 0: Nov 2015 |
| PETRONAS Basic Onshore Safety & Emergency Training Module Requirements for Personnel Working At Remote Locations Of Malaysia Onshore Upstream | MPM/HSE/GD/16/00 | Rev 0: Dec 2015 |
| PETRONAS Communication Protocol Guidelines for Upstream Activity | MPM/HSE/GD/17/00 | Rev 0: Dec 2015 |
| PETRONAS Guideline on Upstream Hydrocarbon Fingerprinting | MPM/HSE/GD/18/01 | Rev 1: Jan 2019 |
| PETRONAS Guiding Note for The Implementation of OGP 423 – HSE Management (Guidelines For Working Together In A Contract Environment) For Malaysia Upstream Operations | MPM/HSE/GD/19/00 | Rev 0: April 2016 |
| PETRONAS Minimum HSE Case Requirements for Malaysia Upstream Operations | MPM/HSE/GD/20/00 | Rev 0: |

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| | | July 2016 |
|--|------------------|-----------|
| Alarm Management Guideline for Malaysia Upstream Operations | MPM/HSE/GD/21/00 | Rev 0: |
| o perations | | Aug 2016 |
| Recommended Practice on Food Safety Management for Malaysia Upstream | MPM/HSE/GD/22/00 | Rev 0: |
| TOI Malaysia Opstream | | Dec 2016 |
| PETRONAS Minimum Expectation On SW Management | MPM/HSE/GD/23/01 | Rev 1: |
| for Offshore Operators Prior To Onshore Storage | | Oct 2019 |
| PETRONAS Guidelines on Asbestos Management | MPM/HSE/GD/24/00 | Rev 0; |
| Programme for Upstream Oil & Gas Industry In Malaysia | | Aug 2017 |
| PETRONAS E&P Minimum Environmental Specifications (MES) | MPM/HSE/GD/25/03 | Rev 3: |
| Specifications (MLS) | | Oct 2019 |
| PETRONAS E&P Minimum Expectation on Procedures to Reuse Scheduled Waste as Alternative Raw Materials | MPM/HSE/GD/26/00 | Rev 0: |
| or Alternative Fuel in Cement Co-processing | | Sept 2017 |
| PETRONAS Guiding Notes for Health Risk Assessment | MPM/HSE/GD/29/00 | Rev 0: |
| | | July 2018 |
| PETRONAS Guideline on Substance Misuse Control Programme | MPM/HSE/GD/27/00 | Rev 0: |
| Frogramme | | July 2018 |
| PETRONAS E&P Guideline on The Management of Scheduled Waste Recovery Facility | MPM/HSE/GD/34/00 | Rev 0: |
| Scrieduled Waste Recovery Facility | | Oct 2018 |
| PETRONAS Offshore Safety Passport (OSP) Guideline | MPM/HSE/GD/37/00 | Rev 1: |
| For Malaysia Upstream | | Oct 2019 |
| PETRONAS E&P Process Safety Minimum Requirement | MPM/HSE/GD/36/01 | Rev 1: |
| | | Dec 2018 |
| Incident Notification, Investigation And Reporting Guidelines (Major & High Potential Incidents) | MPM/HSE/GD/38/00 | Rev. 0 |
| Galactines (Major o Frigit Fotertiat incluents) | | Oct 2020 |

NOTE: Any amendments to the above list will be communicated to the Contractor(s) accordingly. All the guideline listed above is available at Platinum website via https://platinum.petronas.com

Appendix 2: Occupational Health Nurse (OHN) and Occupational Health Doctor (OHD) Requirements during Production Phase

| Total Number of Workers | Occupational Health Nurse | | Occupational | Health Doctor |
|-------------------------|---------------------------|-----------|--------------|---------------|
| | Part Time | Full Time | Part Time | Full Time |
| 50-500 | | Χ | Χ | |
| Above 500 | | Χ | | Х |



Appendix 3: Emergency Preparedness and Response Minimum Requirements

- 2.1 The Contractor(s) shall develop and maintain emergency plans conforming to regulatory requirements of the Government of Malaysia and PETRONAS to manage the response operation and associated external issues.
- 2.2 The Contractor(s) shall establish standalone, comprehensive, tiered emergency response plans as follows:
 - a) Health and crisis response plan;
 - b) Safety and crisis response plan;
 - c) Security and crisis response plan;
 - d) Environment and crisis response plan (including oil spill response plan);
 - e) Business Unit Crisis Management Plans; and
 - f) Country Contingency Plans
- 2.3 The Contractor(s) emergency response plans shall:
 - a) Be integrated with relevant, external agencies;
 - b) Indicate emergency/crisis Contractor(s) structures and associated roles and responsibilities of key personnel, e.g. Duty Manager, Emergency Response Team (ERT), Oil Spill Response Team (OSRT), Emergency Management Team (EMT), Country Contingency Team (CCT), Business Crisis Management Team (BCMT);
 - c) Indicate internal and external notification, communication and activation arrangement;
 - d) Indicate list of resources and personnel including subject matter experts (SMEs);
 - e) Indicate post emergency procedures; and
 - f) Indicate training, drill and exercise matrix.
- 2.4 All emergency/crisis plans shall be periodically reviewed at least once in 3 years or as and when necessary and tested as per PETRONAS requirements.

Open

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Appendix 4: Holding Statement

Initial Standard Holding Statement Template

The initial statement should be brief but make clear to the media that is responding quickly to bring the situation under control.

- a) What, when, and where it happened ensure the terms used for the incident is as neutral as possible, without invoking fear to public
- b) Our immediate response to the incident
- c) Concern for the people
- d) Cooperation with responders

This template must be strictly followed and endorsed by Contractor(s) Management. The holding statement may be utilized to provide information (for reactive dissemination) when approached by members of the media on-site.

Template

HOLDING STATEMENT

[STATE INCIDENT] AT [STATE LOCATION]

[Contractor's Name] confirms/wishes to inform that a [state incident – e.g. fire/containment breach/security breach/cyber intrusion/spillage] has occurred on [date] at [time] at [affected asset/facility] located in [town, city, country].

Our Emergency Response Team has been mobilized to contain the incident and is working closely with [insert details of the significant emergency services/ relevant authorities]. All other relevant authorities have been informed. Our utmost priority and concern are the safety of the people and environment at the moment.

We will provide additional information in due course as investigation is still being carried out.

For further inquiries, please contact [Contractor's Focal Person]

| Issued by |
|------------------------------------|
| [Contractor's Name]: |
| [Contractor's Contact Information] |

Date

Appendix 5: Media Relations Guideline

- a) Media statement Checklist
 - i. Does the statement include the following priorities?
 - 1) People
 - 2) Environment
 - 3) Asset
 - 4) Reputation
 - ii. Are all information factually correct and checked?
- iii. Are there any missing, injured or fatalities?
 - 1) Are we able to release this information?
 - 2) If so, does the statement say so in a sensitive way?
 - 3) Have you checked with HR what the Next of Kin (NOK) guidance is and what other implications of release of individual's details might be?
 - 4) Are contractors or employees of partner organizations involved? What protocols on release of data have been agreed?
- iv. Does the statement tell you...
 - 1) What happened?
 - 2) Where it happened?
 - 3) When it happened?
 - 4) How many people are affected?
 - 5) What are we doing about it?
 - 6) What resources are available or being mobilized (fire crews, helicopters, responders, etc.)?
 - 7) Who we have told (Environment Agency, etc.)
 - 8) What is the contact numbers for next of kin and media to call?
- v. Does anyone else need to see the statement?
 - 1) Any statement must be approved by PETRONAS before issuing to any parties
 - 2) If there are fatalities (confirmed by a doctor) or serious injuries, agencies such as the police should see the statement before it is issued
 - 3) If there is terrorism, criminal activity or an offshore incident, seek police advice and/or other relevant agencies

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4) Legal should be consulted and Contractor(s) Management must endorse all statements

b) Press Release Template

The subsequent media release or statement are prepared as incident or crisis progresses and should express concern for the individuals. If the welfare of any individuals is threatened, the concern for the people must be expressed. A commitment to investigate or to get to the bottom of the matter should be expressed to enhance our integrity.

PRESS RELEASE TEMPLATE RELEASE NO. XX DATE:

TIME:

Date, LOCATION – regrets/ is deeply saddened to confirm that a/an [e.g. fire/oil spill/release of gas/chemical spill/tanker accident/etc.] occurred at [local time] at [location, town, region/country].

Never issue this information before receiving confirmation that the families have been informed. Refer to regulations and emergency service (police/ law enforcement agencies) procedures about confirming fatalities and for notifying next of kin.

[If there are unconfirmed reports of casualties]

• The incident had unfortunately resulted in [a number] of fatalities and injuries, and massive damage to the [name of building, asset]. The identities of the [victims/deceased/affected personnel] are yet to be confirmed.

[If there are survivors, rescued]

• The emergency responders managed to rescue [a number] of survivors from the incident. However, [a number] remain missing and the authorities have confirmed [a number] fatalities. The identities of the victims [victims/deceased/affected personnel] are yet to be confirmed.

Every possible action is being taken to ring the situation under control. Our team is working closely with [emergency services/relevant authorities] to manage the situation and protect the people and environment. Our priority is to do the best we can for those affected by this serious incident.

(Continue to next page)

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(Continued from previous page)

[If deem necessary, detail out actions]

We are taking the following actions:

- Emergency response procedures have been fully implemented, the site has been evacuated and we are fully cooperating with the emergency responders and authorities present at the scene.
- The site has been shut down as a precaution
- The release of chemicals/gas has been contained
- The fire is under control/has been extinguished
- The spill has been contained
- The injured has been taken to the hospital to receive appropriate medical attention
- We have called in teams to provide every possible assistance to the families

We have set up a Hotline for affected family members or next-of-kin who wish to obtain more information, as well as for the members of the Media.

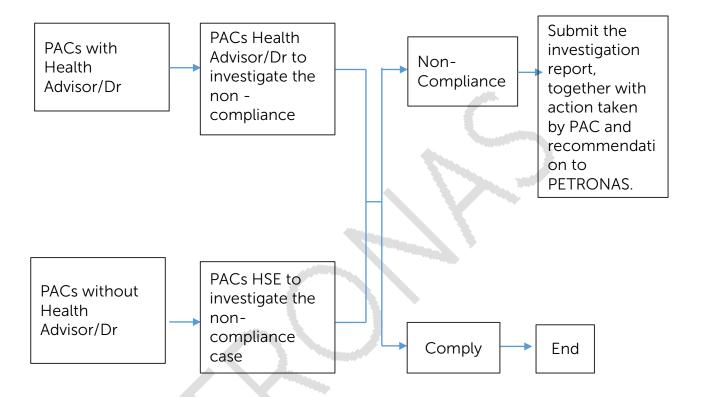
PPGUA 4.1 | 16 Dec 2020

Contact:

[Contractor's Name]:

[Contractor's Contact Information]:

Appendix 6: Flowchart for Reporting of Non-Compliance To PETRONAS Guidelines On Medical Assessment Of Fitness To Work For Offshore and Remote Onshore Workers



Note: Health Advisor is a Doctor appointed by PAC either full time or part time basis to oversee and advice on Contractor's Health Programme.

Appendix 7: Risk Assessment Activities by E&P Phases

| PHASES | RISK ASSESSMENT REQUIRED | |
|--|--|---------------|
| Exploration | | |
| Data acquisition e.g. seismic, electromagnetic, air borne gravity magnetic | Safety Risk Assessment Security Risk Assessment Environment Risk Assessment /Environmental Imp Assessment (as required under EQA 1974)* Health Risk Assessment Social Risk Assessment | act |
| Exploration drilling | Safety Risk Assessment Security Risk Assessment Environment Risk Assessment /Environmental Imp Assessment (as required under EQA 1974)* Health Risk Assessment Social Risk Assessment Drilling HSE Case | act |
| | *applicable for onshore (State DOE, i.e. NREB) | |
| Development | | |
| Facilities Design | Health Risk Assessment Safety Risk Assessment Health Impact Assessment (onshore) Social Impact Assessment (onshore) Quantitative Risk Assessment (QRA) Environment Risk Assessment/Environmental Impassessment (as required under EQA 1974)* Design HSE Case Social Risk Assessment Formal Safety Assessments (FSA) Process Hazard Analysis (PHA) SIL/IPF Study *At this stage EIA proposal is required. Full EIA is subject DOE decision. | oact et to |
| Fabrication/Installation/ HUC | Safety Risk Assessment Health Risk Assessment | |

| PHASES | RISK ASSESSMENT REQUIRED |
|----------------------|--|
| | Environment Risk Assessment/Environmental Impact Assessment (as required under EQA 1974) Security Risk Assessment Social Risk Assessment |
| Production | |
| Onshore | CIMAH Safety Risk Assessment Health Risk Assessment (including CHRA) Security Risk Assessment Environmental Impact Assessment (as required under EQA 1974) Post EIA Monitoring Social Risk Assessment Process Hazard Analysis (PHA) Operation HSE Case* *applicable for onshore facilities not subjected to CIMAH |
| Offshore | Operation HSE Case Safety Risk Assessment Health Risk Assessment Security Risk Assessment Environmental Impact Assessment (as required under EQA 1974) Post EIA Monitoring Social Risk Assessment Process Hazard Analysis (PHA) Formal Safety Assessments (FSA) |
| Abandonment and Deco | ommissioning |
| Offshore & Onshore | Environmental Impact Assessment/Environmental Risk Assessment Health Risk Assessment Environmental Site Assessment (onshore only) Safety Risk Assessment Security Risk Assessment Social Risk Assessment Decommissioning HSE Case |

Appendix 8: Minimum Requirements of HSSE Procedures and Guidelines

The Contractor(s) shall establish the procedures and guidelines listed below as a minimum if the Contractor's organization is engaged in upstream production operations.

- a) Organization-type procedures and guidelines:
 - 1. Hazards and effects management process (HEMP)
 - 2. Contractor(s) management
 - 3. Management of change
 - 4. Incident investigation and reporting
 - 5. Permit to work (PTW)
 - 6. Job hazard analysis (JHA)
 - 7. Emergency preparedness and response
 - 8. Oil spill contingency
 - 9. Fitness to Work
 - 10. Occupational Health & Hygiene
 - 11. Food Safety Management
 - 12. Substance Misuse Control Programme
- b) The Contractor(s) is required to establish the procedures and guidelines for the activities specified below if the activities are carried out in the Contractor's organization
 - 1. Energy isolation
 - 2. Safety critical protective device/element/equipment bypass
 - 3. Confined space entry
 - 4. Working at height
 - 5. Excavation
 - 6. Lifting and hoisting operations
 - 7. Control of ignition sources
 - 8. Aviation operations
 - 9. Maritime operations

Appendix 9: Notification Form

NOTIFICATION FORM (NF)



COMCEN:

Tel: +603-2331 2141/42/43/44 **OR** +603-2161 1703

Fax: +603-2161 1696 / +603-2051 2101 SMS: +6019-384 4696 / +6012-316 8496

Email: comcen@petronas.com.my

FROM:

BU: OPU: Tel:

Fax:

Sequence No:

| Type (OPU to Tick) | COMCEN to notify the following notification list: (OPU to tick With IMPACT / Hi-PO / No IMPACT whe relevant) | ere | OPU to notify internally as follows: |
|------------------------------------|---|-------|---|
| □ Non- emergency □ Tier 1 □ Tier 2 | With IMPACT / HIGH POTENTIAL INCIDENT* PETRONAS ELT VP GHSSE Head GHSE Head Group Security Head Group Strategic Communications GM HSE MPM (for Domestic Upstream Emergency only) No IMPACT* VP GHSSE Head Group Security Head Group Strategic Communications GM HSE MPM (for Domestic Upstream Emergency only) | | Notification list as established by OPU / BU |
| □ Tier 3 | PETRONAS ELT VP GHSSE Head GHSE Head Group Security Head Group Strategic Communications GM HSE MPM (for Domestic Upstream Emergency only) | ′ | Notification list as established by OPU / BU |
| * | DESCRIPTION OF IMPACT, EMERGENCY, NON-EMERGI | ENCY | & HI-PO |
| Impact: • Fatality | | • Inc | rgency: ident where emergency crisis team have been |

- Major injury / health effect that resulted in Permanent Partial activated (Tier 1, Tier 2, or Disability / Lost Workday Case more than 4 days Tier 3) Occupational Illness with irreversible health impact Non-Emergency: Asset damage equal or exceeding USD 100,000 Incident where there is no LOPC release equal to or above Tier 1 threshold quantity** activation of emergency or • Spill no longer confined within company site, with off-site crisis team environmental impact (e.g. visible contamination to soil / water **High Potential (Hi-Po)** system, fish killed, vegetation damaged). Incident: Emission or discharge from regulated / permitted source, exceeding Any incident which, under regulatory standard different circumstances, Chemical / Noise over exposure (exceeds the occupational exposure would have caused more limit (OEL)) severe consequences leading Local media / public concerns with considerable reputation to a major incident consequence or worst ** Note: Natural gas, Methane, Ethane, Propane, Butane, LPG, LNG = 500 kg Petrol, Gasoline, Methanol, above 15 API Gravity Crude oil = 1000 kg or 7 bbl
- *** Mandatory to be filled up for initial notification

Diesel, below 15 API Gravity Crude oil = 2000 kg or 14 bbl

For other material, please refer to PTS 18.06.01 / API 754 Standard

| | | | BU: | | | |
|-----------------------------|--|-------------------|---------------------------|--------------|------|----------------------------------|
| | NOTIFICATION FORM | | OPU: | | | |
| | NOTIFICAT | NOTIFICATION FORM | | | | |
| PETRONAS | | | Fax: | | | |
| *** Type of Notification | · | odate | To Report be resumed o | | | wn / All Clear Time:) |
| ***SECTION A: BASIC | INFORMATION | | | | | |
| Location: | ☐ Onshore: | | ☐ Malaysia | | Date | |
| | ☐ Offshore: | | ☐ Internation | nal | Time | |
| Department Responsible: | · | | | | | |
| ***SECTION B: TYPE | | | | | | |
| HSE & | □ Fire | ☐ Explosion | □ наzмат | ☐ H Incid | | ☐ Chemical / Noise Over Exposure |
| Process Safety | ☐ Loss of Primary Containment (Liquid) ☐ Loss of Primary Containment | | Release Volu | ime: | | |
| | (Gaseous) | | Recovered V | olum | e: | |

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| | ☐ Spillage | | | | | |
|--------------------------------|-------------------------|------------|------------------------|--------------------------------------|--------------|------------------|
| | ☐ Others. Please sp | _ | | | | |
| | ☐ Community Disturbance | | croachment itrusion | ☐ Bomb Threat | ☐ Piracy | ☐ Robbery |
| C: | ☐ Demonstration | ☐ Host | | | ☐ Hijack | □ Sea |
| Security | | | | Kidnapping | | Robbery |
| | ☐ Murder | ☐ Terr | | ☐ Others. PI | lease specif | |
| Transportation | □ Land | □ Wat | ter | □ Air | Others, pl | lease specify: |
| Natural Disaster | □ Flood | □ Eart | thquake | ☐ Tsunami | Others, pl | lease specify: |
| ***SECTION C: IMPAC | т | | | | | |
| ☐ People (specify in SI | ECTION D) | vironmer | nt Ass | set | □ Re | eputation |
| ***SECTION D: INJURE | • | | | | | |
| Number of Injured | Number of III Per | rson | Number of | | Num | nber of Missing |
| Person | ☐ PETRONAS (|) | ☐ PETRON | NAS (| ☐ PE | ETRONAS () |
| ☐ PETRONAS () | ☐ Contractor (| 1 | ☐ Contrac | | | ontractor () |
| ☐ Contractor () | ☐ 3rd Party (|) | ☐ 3rd Part | ty () | ☐ 3r | rd Party () |
| ☐ 3rd Party () | | | | | | |
| ***SECTION E: POTEN | TIAL ESCALATION | | | | | |
| ☐ Under control with a | | No | | quire additiona | | |
| potential of escalation | | | authoriti | ies, contractors | s, mutual ai | d group) |
| ☐ Authorities may take control | e over command and | | | gger significant nity / media int | | s / public / |
| ***SECTION F: AUTHO | ORITIES INFORMED | | | | | |
| Authorities / | olice 🗆 F | HSE Regi | ulator: e.g. D | OSH, | ☐ Other | rs: e.g. Coast |
| | | _ | ent of Enviro | | | l, Marine Dept., |
| | • | ilease spe | | | Munici | cipality, etc. |
| | ivil Defence | | | | Please | e specify: |
| *** Mandatory to be fill | | ication | | | | |
| | · | | | | | |
| SECTION G: BRIEF DES | CRIPTION (Who, Who | at, Whe | re, When & | Consequence) |) | |
| | | _ | | _ | | |
| | | | | | | |
| | | | | | | |
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| | | | | | | |
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| SECTION H: RESPONSE / ACTION T | AKEN | | | | | |
|--------------------------------------|---|------------|--|--|--|--|
| | | | | | | |
| SECTION I: ADDITIONAL INFORMA | TION | | | | | |
| | | | | | | |
| SECTION J: STAND DOWN / ALL CLEAR | Date: | Time: | | | | |
| ***Prepared / Reported by | Name: Designation: Contact No Date / Time | Signature: | | | | |
| ***Approved and Submitted by | Name: Designation: Contact No Date / Time | Signature: | | | | |

Appendix 10: Incident Notification Table

| Incident Classification | Notification Period | Remarks |
|--|--|----------------------------------|
| Fatality/Death Case (Refer Appendix 10) | Immediate | |
| Permanent Partial Disability (PPD)/Permanent Total Disability (PTD)/Lost Workday Case (LWC)/Restricted Workday Case (RWC)/Medical Treatment Case (MTC) | Immediate | |
| First Aid Case | Within 24 hours | |
| Occupational Illness | Within 24 hours after diagnosis confirmed by Occupational Health Doctor (OHD) | |
| Missing Person | Immediate | |
| Man Overboard | Immediate | |
| Epidemic/Pandemic Disease | Immediate | |
| Major and Minor Fire (Process & Non-Process) | Immediate | |
| Major Lost of Primary Containment (LOPC) | Immediate | |
| Minor Lost of Primary Containment (LOPC) | Within 24 Hours | |
| Major Oil & Chemical Spills | Immediate | |
| Minor Oil & Chemical Spills | Within 24 Hours | |
| Major Property Damage | Immediate | |
| High Potential Incident | Immediate | |
| Hijacking | | 5 |
| Piracy/Sea robbery | | Parallel notification to |
| Fish Bombing/Fish Poison Activities within 500m Safety Zone | Immediate Notification to | PETRONAS for faster coordination |
| Fishing Vessel encroachment into 500m Safety Zone | relevant Authorities | Coordination |

| Other security incident e.g. Merchant/Military Vessel Encroachment, aircraft encroachment, FLEAA**, etc. | and copy to PETRONAS (MPM HSE) and | with relevant authorities. |
|---|--|---|
| Sighting foreign submarine/foreign warship/foreign aircraft/armed boats | PETRONAS NF is necessary | *separate report to PETRONAS Security Section |

^{**}Foreign Law Enforcement Agency Asset

Note:

The requirement of immediate notification period is when there is an incident which may cause the death of a person, serious injury or illness and dangerous occurrence. Other than that, the notification period shall be as stated in the Incident Notification Table. Immediate notification means Contractor(s) to inform PETRONAS on the incident after ensuring incident has been secured as soon as possible.

For vessel encroachment incident notification, Contractor(s) to state in the Notification Form, the number of vessels for each encroachment.

For notification of emergency, which is not listed in the Incident Notification Table, refer to Emergency Notification Matrix below:

Emergency Notification Matrix

| Tier | No ECC Activation | With ECC Activation |
|--------|-------------------|---------------------|
| Tier 1 | Within 24 hours | Immediate |
| Tier 2 | Within 24 hours | Immediate |
| Tier 3 | Immediate | Immediate |

Appendix 11: Death Case

Definition: Death Case is defined any workers (employee or subcontractor) with no sign of life as per medical terminology which occurs in Contractor(s) premise including death on arrival to hospital during evacuation.

Contractor(s) shall notify death case immediately.

Contractor(s) shall investigate all death case to ascertain the following but not limited to:

- a) Work-related exposures that could have contributed to the death have been excluded;
- b) Assess adequacy of Medical Emergency Response (MER); and
- c) Recommend corrective actions, if applicable.

The following are the checklist in investigating Death Case that may be opt by Contractor(s) but not limited to:

- 1. Have all possible work-related exposures that could have contributed to the cause of death been excluded?
 - a) The cause of death has been ascertained/reviewed by a suitably trained Health professional.
 - b) Where there is a possibility of a link between a workplace hazard and the cause of death, obtain a suitably qualified health professional's assessment of the likelihood of a causal relationship. Such an assessment may require further investigation (e.g. exposure data monitoring).
- 2. Was the Medical Emergency Response (MER) requirements met?
 - a) MER was correctly initiated and communicated.
 - b) All Tier response times were met
 - c) First Aiders have the competency to identify an emergency, provide basic life support, defibrillation and basic first aid. Site Medical Professionals possess the competency to provide advanced life support.
 - d) Equipment (e.g. First Aid Box, Defibrillator, Trauma Bag, Site Clinic, Ambulance, etc.) were adequate, available and accessible.
 - e) MER plans/procedures are in place and fits the workplace risks.

- 3. Was the Fitness to Work requirements met?
 - a) Where the individuals who performed the tasks required to undergo FTW evaluations, such evaluations have been completed by Approved Medical Examiner (AME), in accordance to the FTW protocols.
 - b) Where the individual has pre-existing medical conditions that may be worsened by work or may limit his/her ability to perform the work, a "with cause" or "return to work" FTW evaluation has been completed.
- 4. Check on fatigue management.

Classification

Contractor shall classify Death Case in the investigation report as either:

- a) Non work related Death Case
- b) "Fatality"- if work related and the case shall be reflected in the HSSE KPI reporting.

Appendix 12: Monthly Reporting of MEDEVAC, Death Case(s) and Occupational Injury and Occupational Disease Cases

Monthly Reporting of Medevac cases

| No | Date | Age | Gender | Nationality | Work Group | Designation | Type of MEDEVAC: | Type of Incident | Work Categorization | Diagnosis at site/location | Final diagnosis by Treating Doctor/Hospital (Onshore) | Fitness To Work Medical Assesment Report by MPM AME was conducted in accordance to GUDELINES ON MEDICAL ASSESSMENT OF FITNESS TO WORK FOR OFFSHORE & REMOTE ONISHORE WORKERS Issued by MPM (YES/NO) | |
|----|------|-----|--------|-------------|------------|-------------|------------------|------------------|---------------------|----------------------------|--|---|--|
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

Monthly Reporting of Death cases

| No | Date | Age | Gender | Nationality | Work Group | Designation | Work Categorization (Subject To Investigation Report) | Possible Cause of Death | Post Mortern done. (Yes/No) | If YES (Col J) Please state the Final Diagnosis | Fitness To Work Medical Assesment Report by MPM AME was conducted in accordance to GUIDELINES ON MEDICAL ASSESSMENT OF FITNESS TO WORK FOR OFFSHORE & REMOTE ONSHORE WORKERS Issued by MPM (Yes/No) | Location |
|----|------|-----|--------|-------------|------------|-------------|---|-------------------------|--------------------------------|---|--|----------|
| | | | | | | | | | | | | |
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Monthly Reporting of Occupational Injury and Occupational Disease Cases

| No | Date | Age | Gender | Nationality | Work Group | Designation | Cofirmed Diagnosis | Locations | Type of Injury | Classification Of Case (Fatality, PTD, PPD, LWC, RWC, MTC, FA) | Days of Loss Work Day Case (i.e MC). |
|----|------|-----|--------|-------------|------------|-------------|--------------------|-----------|----------------|--|--|
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Appendix 13: Management Review

Management Review shall address but not be limited to:

- a) Findings of previous reviews;
- b) HSSE Performance;
- c) Need to change HSSE policies and strategic objectives;
- d) Impact of significant organisational, location or activity changes;
- e) HSSE concerns of employees, contractors and external stakeholders;
- f) Provision of adequate resources and competent personnel to achieve HSSE targets objectives and strategies;
- g) Assurance findings;
- h) HSSE MS Self-Assessment;
- i) Verification of closure of corrective actions resulting from HSSE reviews, assurance/audits, self-assessments, inspections and incident investigations;
- j) Review of legal compliance;
- k) Relevant communication(s) from external parties including grievances; and
- l) Significant social impacts including human rights issues on operations

Appendix 14: PETRONAS Helicopter and Aeroplane Basic Configuration Requirement

HELICOPTER STANDARD EQUIPMENT

M = Mandatory LT = Long Term, one year or over ST = Short Term, below 1 year R = Recommended N/R = Not Required O = Optional

| Helicopter Performance/Equipment | Multi-Engine 10 or more passengers Or Multi-Engine ≥ 5700 Kg | Multi-Engine 9 or less passengers Or Multi-Engine ≤ 5700 Kg | | |
|---|--|---|--|--|
| Minimum Twin Engine aircraft operated by two qualified crew | | 7 | | |
| (1)(7) | | | | |
| Performance Class 1, Class 2 or 2e (13) | | | | |
| IFR Certified | | | | |
| Autopilot or AFCS | | | | |
| Mode C or S Transponder | N | 1 | | |
| ELT with TSO 126 & GPS (remote area) preferred (5) | | | | |
| Passenger Briefing Cards | | | | |
| GPS (IFR TSO preferred) | | | | |
| 2 VHF Transceiver | | | | |
| 1 HF Transceiver (if VHF coverage is not assured for the | | | | |
| entire area) | | | | |
| 1 ADF, 2 required if ADF is only navigation source | N/R VI | FR (7) | | |
| 2 VOR/ILS & 1 DME (where DME is available) | | | | |
| Instantaneous Vertical Speed Indicator (IVSI) | M IFR and Offshore | | | |
| Radio Altimeter with audio and visual alert | MAIED and | Offich and | | |
| (11) Weather Radar with colour screen (min scale 2.5 nm) | M IFR and | Offshore | | |
| Public Address /intercom (PA) System | | | | |
| (4)(12) | N | 1 | | |
| Loud Hailer with externally mounted speaker | R (| 8) | | |
| CVR and FDR or CVFDR | N | - | | |
| Satellite Flight Following with panic button & light | | | | |
| indicating proper option | N | 1 | | |
| Enhanced or synthetic visual system | R | | | |
| Enhanced Ground Proximity Warning System (EGPWS) | | | | |
| or equivalent Helicopter Terrain Awareness Warning | MLT / | ' RST | | |
| System (HTAWS) | | | | |

| Helicopter Performance/Equipment | Multi-Engine 10 or more passengers Or Multi-Engine ≥ 5700 Kg | Multi-Engine 9 or less passengers Or Multi-Engine ≤ 5700 Kg | | |
|--|--|---|--|--|
| Flight Data Monitoring, crashworthy systems preferred if available | MLT / | 'RST | | |
| Helicopter Operational Monitoring Program (HOMP) | R | | | |
| Health Usage Monitoring System (HUMS) with Advanced Anomaly Detection (AAD) or equivalent (10) | | | | |
| Upper Torso Restraints, ALL seats, with quick release all straps (3) | N | 1 | | |
| 2 First Aid Kits | | | | |
| 2 Fire Extinguisher with pressure gauges preferred | | | | |
| Raft(s), tethered to aircraft (6) | M Offshore, 2 rafts w | /50% overload each | | |
| Altitude Voice Alert Device (AVAD) (9) | RL | T | | |
| Emergency Exit Lighting System | M | | | |
| External Mounted Life Rafts | | | | |
| Aircraft Flotation Equipment (Auto-activation) | | | | |
| Passenger life vests with EBS, constant wear (2) | M Offshore / O Onshore | | | |
| Certified emergency pop-out windows | | | | |
| Life raft emergency radio/ beacon /transponder | | | | |
| Sonar Transmitter (Pinger) / Underwater Locator Beacon (ULB) (5) | | | | |
| Pilot vest with EBS & voice capability Emergency Radio | | | | |
| Search and Rescue Transponder (SART) Beacon | | | | |
| Approved Immersion Suits crew/Pax | Offshore - M if Required by Aviation Authority, R - if risk analysis justifies | | | |
| Survival Equipment | M for all appropriate environment | | | |
| Traffic Collision Avoidance System (TCAS) - interrogating only (If certified). TCAS 2 preferred where approved | MLT for all in high density | | | |
| | MST - TCAS | | | |
| High visibility pulse lights | M for all in high densit | | | |
| Mirrors for external situation awareness | R (if available) - to impro outside | | | |
| Heating for Cabin | M for temperatu | | | |
| Air conditioning for cabin | MLT / RST for temperature above 16°C | | | |
| Litter Kit, Cargo Hook, Hoist, Aux. Fuel | 0 (| , | | |
| De-icing equipment | M for known, forecast or a | nticipated icing conditions | | |

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NOTES: (For Helicopter Standard Equipment)

- (1) All night flights SHOULD be flown with multi-engine equipped for IFR flight, using IFR flight procedures.
- (2) Where TSO approved and available life vests with crotch strap design preferred.
- (3) When an approved modification exists for the a/c type and it is recommended by Company Aviation Advisory personnel. Shoulder harnesses should be designed for each strap to release and not allow a closed loop entrapment hazard.
- (4) Should have means of communication with passenger compartment, may be a phone type system.
- (5) Sonar pinger/ELT direction finding (homing) device should be available in the country of operation, if not specify in contract specs. 406 MHz ELT/beacon/radios are preferred where registration is possible (see Section 10 OGP Aircraft Management Guideline July 2008, updated August 2013).
- (6) See Section 6 & 10 OGP Aircraft Management Guideline July 2008, updated August 2013 for additional details on de-icing / emergency response equipment. Life rafts should be reversible or self-righting.
- (7) When flown IFR, these items are mandatory.
- (8) Optional items are added based on role specific mission requirements (Section 4 OGP Aircraft Management Guideline July 2008, updated August 2013).
- (9) Dual display required for dual pilot or IFR operations Long Term and AVAD (Automatic Voice Alert Device). For standalone units, analog displays should be used.
- (10) HUMS reference is CAP 753 or equivalent, and UMS is EASA OPS AMC2 CAT.POL.H.305 (b) or equivalent.
- (11) Not required if an EGPWS is installed that provides equivalent capability over water. Mandatory if EGPWS/GPWS not been installed.
- (12) A means of two-way communication between the passenger cabin and cockpit is recommended for long term contracts.
- (13) Performance Class 2e the helicopter is supposed to climb to 30 feet (above the helideck), the practical rotation point height at take-off, before it flies away. In the event of an engine failure before it reaches that height, the helicopter will lose altitude and the surviving engine will not have developed enough extra power to prevent a hard landing and airframe damage.

AEROPLANE STANDARD EQUIPMENT

M = Mandatory LT = Long Term, one year or over ST = Short Term, below 1 year R = Recommended N/R = Not Required O = Optional

| Aeroplane Equipment | Multi-Engine ≥ 5700 Kg | Multi-Engine ≤ 5700 Kg |
|---|---------------------------|---------------------------|
| Minimum Twin Engine aircraft operated by two qualified | | |
| crew | | |
| IFR Certified | | |
| Autopilot | | |
| Mode C or S Transponder (or equivalent) | | |
| ELT with TSO 126 & GPS (remote area) | | |
| preferred (4,6) | | |
| Underwater Locator Beacon (ULB) | M | |
| Passenger Briefing Cards | | |
| GPS (IFR TSO preferred) (5) | | |
| 2 VHF Transceiver | | |
| 1 HF Transceiver (if VHF coverage is not assured for the entire area) | | |
| 1 ADF, 2 required if ADF is only navigation source | | |
| 2 VOR/ILS & 1 DME (where DME is available) | | |
| Radio Altimeter with audio and visual alert with analogue | | |
| display | M | MLT/RST |
| Weather Radar with colour screen | | |
| Public Address /intercom (PA) System | M | |
| CVR and FDR or CVFDR | IVI | |
| Satellite Flight Following with panic button & light indicating proper option | MLT/ | RST |
| Enhanced or synthetic visual system | 0 | |
| Enhanced Ground Proximity Warning System (EGPWS) or Terrain Awareness Warning System (TAWS) | MLT/ | RST |
| Operational Flight Data Monitoring (OFDM) | R | |
| (1) | | |
| 2 point harness, ALL seats, with quick release all straps | M | |
| 2 First Aid Kits | IVI | |
| 2 Fire Extinguisher with pressure gauges preferred | | |
| Raft with ability to attach to aircraft via lanyard | M extended ove | |
| Emergency Exit Lighting System | M | |
| Pilots & Passenger Life-jackets with attached single devices, and water activated lights. | M for extended o | verwater flights |
| Portable Emergency Radio Beacon (EPIRB) | | |
| Search and Rescue Transponder (SART) Beacon | М | |
| High Visibility Pulse Lights | | |

| Aeroplane Equipment | Multi-Engine ≥ 5700 Kg | Multi-Engine ≤ 5700 Kg | |
|---|---|---------------------------|--|
| Sonar Transmitter (Pinger), attach to CVR if equipped. | | | |
| Survival Equipment appropriate for environment being | R | | |
| flown (e.g. Arctic, jungle, desert, sea, etc.) | | | |
| Traffic Collision Avoidance System (TCAS) - interrogating | MLT for All in High Density Area, with no radar | | |
| only (If certified). TCAS 2 preferred where approved | | | |
| Heating for Cabin | MLT for temperatures below 15° C/RST | | |
| Air Conditioning | MLT for temperature above 16° C/RST | | |
| De-icing equipment | M for known, forecast | or anticipated icing | |
| (3) | condit | cions | |
| Carbon Monoxide detector in cockpit (electronic) | M with fuel/sh | roud heaters | |
| Medical Evacuation Kit capability | | | |
| Large Cargo Door capability | Ü | | |

NOTES: (For Aeroplane Standard Equipment)

- (1) When an approved modification exists for the aircraft types.
- (2) All night flights SHOULD be flown with multi-engine turbine, equipped for IFR flight, using IFR flight procedures & dual pilot.
- (3) Aero plane de-icing equipment should be approved and functioning for the prevention or removal of ice accumulation or be certified for a limited icing clearance approved.
- (4) 406 MHz ELT/beacon/radios are preferred.
- (5) Mandatory for pipeline patrol aircraft.
- (6) Recommended on pipeline patrol aircraft.

Appendix 15: Pre-Embarkation Health Status Declaration for Staffs and Contractors Form

PRE-EMBARKATION HEALTH STATUS DECLARATION FOR STAFFS AND CONTRACTORS FORM BORANG PENGESAHAN TAHAP KESIHATAN SEBELUM PERJALANAN UNTUK PEKERJA DAN KONTRAKTOR

Tick (X) in the relevant boxes. Form to be reviewed by Aviation Service Officer (Airport Briefing room) or Crew/Admin Clerk (Contractor's Office) before travelling offshore and to be submitted to site medic on arrival. Ditanda (X) dalam kotak berkaitan. Borang perlu diperiksa oleh Pegawai Perkhidmatan Penerbangan atau Kerani Perkhidmatan (Pejabat Contractor) sebelum memulakan perjalanan dan borang ini perlu diserahkan kepada site medic setelah sampai ke luar pesisir pantai.

I hereby declare that (Saya dengan ini mengaku bahawa):-

| 1 | I have experienced at least one of the followings in between my previous and current trip that may affect my work offshore. (Saya telah mengalami salah satu dari perkara dibawah ini diantara perjalanan yang lepas dan sekarang yang boleh mengganggu keja saya di luar pessir pantai): |
|------|---|
| | Physical (e.g. Chest Pain/Stomach Ache/Tooth ache/Difficulty in breathing/Bleeding etc) or Mental Illnes (Stress/Difficult to sleep /Poor concentration/Family or personal problem) which was not assessed and treated by Dodor. (Penyakit fizikal (Sakit dada) Penut/Gigi/Susah bernafas/Pendarahan dlf) atau Mental (Tekanan/Susah Tidur/Susah berntumpuan/ Masalah pelbadi atau keluarga) yang belum di penissa dan dirawat oleh dodor sebelum in.) |
| | Had injury or surgery done before this travel. (Kecederaan berlaku atau menjalani pembedahan sebelum perjalanan ini.) |
| | Was sent back to shore (MEDEVAC) before end of my previous tour of duty due to medical reason. (Terpaksa dihantar balik ke darat (MEDEVAC) untuk rawatan perubatan sebelum tempoh masa kerja sebelum ini. |
| | Given medical leave for more than 7 consecutive days. (Mendapat cuti saldt melebihi 7 hari berturut-tuut.) |
| 2. | If you have ticked (X) any of the above, please confirm the following (Sekiranya anda telah menanda (X) pada salah satu kenyataan di atas, sila pastikan dengan memilih salah satu kenyataan di bawah):- |
| | I have done my return to work assessment for the above conditions and declared FIT TO WORK dishore by the examining Doctor before this trip. Letter to confirm fit to return to work is available. (Saya telah menjalan pemeniksaan kesihatan untuk kembal bekerja untuk perkara diatas dan disytihar oleh Doktor yang saya SIHAT UNTUK BEKERIA di luar pesisir pantai sebelum perjalanan ini. Surat menyatakan saya sihat untuk bekerja adalah sedia ada.) |
| | or (atau) |
| | have not done my return to work assessment. I am not sure whether my current health condition is suitable for me to travel or work offshore and request to be assessed by the Dotor. (Saya tidak menjalani pemeriksaan untuk kembal bekeija. Saya tidak pasti samada keadaan kesihatan saya sekarang ini sesuai untuk saya teruskan pejalanan dan saya memerlukan pemeriksaan Doktor.) |
| 3 | am HEALTHY to travel and work offshore and/or brought enough supply of medicine for my illness during this tour of duty. (Saya SIHAT untuk bekerja di bar pesisir pantai dan/ atau membawa bersama saya bekalan ubat yang menculupi untuk penyakit saya sepanjang tempoh ini) |
| I fu | ly understand that (Saya teleh sedia maldum bahawa):- |
| | If I feel unhealthy to travel or work offshore, I have to declare and not to travel to offshore and seek medical advice immediately. (Seldia nya saya tidak sihat, saya akan nyatakan dan tidak akan meneruskan perjalanan ke luar pesisir pantai dan mendapat nashat kesihatan serta mena.) |
| | By not declaring my health status truthfully, my action might cause significant negative impact to myself, others orboard as well as to my company and disciplinary action may be taken against me. (Dengan tidak menyatakan dengan jujur tahap kesihatan saya, indaka ini boleh mendatangkan impak yang negatif kepada saya sendiri, rakan sekerja dan juga keatas syarikat saya serta tindakan dispin boleh diambil keatas saya.) |
| Na | me (Nama) |
| Sta | aff No/IC No for Contractor (No. Staf/No. IC untuk Kontrator) |
| My | ork Location <i>(Lokasi tempat kerja)</i> y previous Trip to offshore <i>(Perjalanan saya ke luar pesisir pantai sebelum ini)</i> : |
| Pro | om Date (Dari Tarikh)to Date (kepada Tarikh) priod at Offshore (Jangka masa di luar pesisir pantai): |
| | om Date <i>(Dari Tarikh)</i> to Date <i>(Dari Tarikh)</i> |
| im | is form needs to be kept until the end of his/her Tour of Duty period and to be sent to Senior Occupational Health Physician mediately if this personnel was sent back to shore before end of this period due to medical reason. (Borang in i mesti simpan sepanjang tempoh "Tour of Duty" dan dihantar ke Senior Occupational Health Physician serta merta sekiranya |

pekerja ini terpaksa dihantar balik ke darat untuk mendapat rawalan perubatan sebelum tamat tempoh bekerja)

Appendix 16: Minimum Requirement on Competencies for Remote Site Medics

- a) Shall have a minimum Diploma in Nursing or Diploma in Medical Assistant or equivalent academic qualification
- b) Shall be registered as Medical assistant with the Board of Medical Assistant, Ministry of Health, Malaysia or registered as a Registered Nurse with the Nursing Board, Ministry of Health Malaysia
- c) Shall hold a valid Annual Practicing Certificate (APC) from the Malaysian Ministry of Health, Malaysia
- d) Shall have at least (3) years of working experience post-graduation with:
 - Minimum of (1) year experience in an emergency unit, trauma unit or similar settings within last 3 years; or

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- ii. At least two (2) years of experience as on Offshore Medic
- e) Shall have valid certifications in Advanced Cardiac Life Support (ACLS)

