

PETRONAS TECHNICAL STANDARDS

HEALTH, SAFETY AND ENVIRONMENT

PANDEMIC PREPAREDNESS AND RESPONSE GUIDELINE

PTS 60.1501.09

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PTS Title:	Pandemic Preparedness and Response Guideline

This new PTS **60.1501.09- Pandemic Preparedness and Response Guideline** has been developed to provide guidelines for integrate planning and directions to PETRONAS Holding Company (HCU), Business Unit (BU), Operating Unit (OPU) and Joint Ventures (JV) on mitigating and minimising any potential risks or impacts from a communicable disease pandemic to PETRONAS staff, facilities and operations.

This PTS also includes PETRONAS Lessons Learnt and PETRONAS Best Practice for the subject matter **Pandemic Preparedness and Response Guideline**.

Document Approval

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PREFACE

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1.0 OBJECTIVE

This document is to provide guidelines for integrated planning and direction to PETRONAS Holding Company (HCU), Business Units (BU), Operating Units (OPU) and JV (Joint-Ventures) on mitigating and minimizing any potential risks or impacts from a communicable disease pandemic to PETRONAS staff, facilities and operations.

1.1 SCOPE

This Guideline is a general framework of preparedness and response against an infectious disease pandemic and covers the following:

1. Overview of infectious disease pandemic and potential impacts to PETRONAS operation and businesses
2. The philosophy and strategies of the PETRONAS Preparedness and Response Plan
3. PETRONAS Pandemic Preparedness and Response Plans which includes measures required before, during and after a pandemic to reduce potential negative impacts to PETRONAS operations and businesses

The key components of the PETRONAS Pandemic Preparedness and Response Plan are highlighted and execution/activation of the plan is described.

1.2 APPLICABILITY

All requirements established in this Guideline shall be applicable to all PETRONAS HCU/BU/OPU/JV.

In locations where applicable statutory requirements are available, the more stringent requirements shall take precedence.

1.3 RESPONSIBILITY

Custodian (Occupational Health) shall be the custodian of this Guideline. The Custodian shall be responsible for periodically reviewing and revising/updating its contents and distributing the revised/updated documents to relevant end users.

PETRONAS HCU/BU/OPU/JV, HSE Managers or HSE Focal points shall be responsible for communicating the requirements set forth in this Guideline and its revisions to the

relevant personnel. They shall also be responsible, where applicable, for modifying the requirements of this Guideline in consultation with Custodian (Occupational Health), Group HSE Division, PETRONAS to suit local statutory requirements and PETRONAS HCU/BU/OPU/JV needs.

All employees shall adhere to the requirements of the Guideline.

1.4 REVIEW OF DOCUMENT

This Guideline shall be reviewed every 5 years or as and when deemed necessary. All queries, interpretations, clarifications and proposed amendments shall be addressed in the first instance to the custodian of this Guideline.

1.5 LANGUAGE

In this Guideline, the acronym PETRONAS and the term Company are used interchangeably and refer to PETRONAS Group of Companies. Additionally, the use of the following terms shall carry the following meaning:

SHALL	Mandatory action required. Deviation requires PETRONAS Management's approval
SHOULD	Preferred action. Deviation requires Operating Unit Management's approval
MAY	Recommended action

1.6 REFERENCES

1. PTS 60.0112 – Group Contingency Planning Standard (September 2011, Revision 2)
2. PTS 60.0111 - Emergency Drills and Exercise Guideline
3. PTS 60.1501.07 – Avian Influenza Preparedness Plan
4. Recommendations of Influenza Pandemic Preparedness for Industry in Malaysia, MOH, SOEM, MMA – March 2006
5. Whole of Society Pandemic Readiness – WHO Guidelines for Pandemic Preparedness and Response in the Non-Health Sector (Geneva, July 2009)

2.0 BACKGROUND

An epidemic of infectious disease occurs, when emergence of new cases of the disease, in a given human population, and during a given period, substantially exceeds the normal prevalence (endemic) levels.

An epidemic is usually restricted to a certain community or locality. Occasionally it may spread to multiple communities and localities and involve many countries or even the whole world – it is then called a pandemic. Pandemic outbreaks are characterized by wide-spread occurrence of the disease over a short period in the whole human population across different continents.

A pandemic usually occurs with airborne diseases with emergence of a new pathogen that the human population has no immunity to. The speed of its spread is further enhanced by the mobility of people and with modern day transportation (e.g.air travel).

Examples of pandemics are Spanish Influenza (1918-1919), Asian Influenza (1957-1958), Hong Kong Flu (1968-1969) and the Influenza A H1N1 pandemic in 2009.

2.1 IMPACT OF A PANDEMIC

A pandemic can happen anytime and its impacts on a country can be severe. The fast spreading of infectious disease with high morbidity and mortality will create panic among the affected population. People will avoid contact with each other leading to closure of businesses, public transportation and other public amenities. The rising cases will overwhelm the public and private health services resulting in inability to care for those infected. This will cause panic and chaos among the population.

A pandemic will cause serious socioeconomic problems to governments and industries in affected countries. Air-travel, tourism and in-flow of foreign investments will be severely affected causing loss of revenue, unemployment and socio-political problems. Governments will need to spend vast amounts of money to control outbreaks.

In industries, such widespread outbreaks may lead to unplanned shut-downs, high absenteeism and loss of productivity. A Company such as PETRONAS with worldwide

operations will be especially vulnerable. Although the occurrence and dynamics of a pandemic are unpredictable and uncontrollable, adequate preparations are valuable to minimize the adverse impacts on the business of a Company. The response towards a pandemic is largely dependent on the type and scenario of the pandemic.

2.2 WORLD HEALTH ORGANISATION (WHO) PANDEMIC PHASES

Appendix 1 (Table 1) depicts the WORLD HEALTH ORGANISATION (WHO) PANDEMIC PHASES and Preparation/Response Activities.

2.3 DESCRIPTION OF PANDEMIC PHASES

Appendix 2 describes in detail the Pandemic Phases.

3.0 THE PHILOSOPHY OF THE PETRONAS PREPAREDNESS AND RESPONSE PLAN

Effective management of a pandemic essentially depends on the level of preparedness a country, its industries and its people have before the pandemic strikes. Managing pandemic requires resources including expertise from the government and its people. It requires multiple department approach with centralized coordination. Most of all, everyone needs to understand the issues involved and the plans to resolve them.

Similarly, a company like PETRONAS needs to be prepared to effectively manage any pandemic occurring in communities and localities where it operates. The preparation and the plan require coordination and resources at all levels. The preparations and the plans must be communicated to all employees so that everyone understands their roles and responsibilities when a pandemic happens.

To achieve this, the PETRONAS Pandemic Preparedness and Response Plan shall be made an integral component of PTS 60.0112 – Group Contingency Planning Standard (September 2011, Revision 2) The PETRONAS Pandemic Preparedness and Response Plan is essentially a contingency plan aimed at minimizing the risk imposed by the global phenomenon of a pandemic outbreak and reducing the impact on the Company's business activities whereby safeguarding its people, environment, assets and reputation. This plan also involves leveraging on the strategies to align measures that would constitute the framework of business continuity for the Company during a crisis situation.

The PETRONAS Pandemic Preparedness and Response Plan is based on the following philosophies:

- Prevention of infection amongst staff
- Prevention of contamination of PETRONAS facilities
- Rapid treatment of staff and dependants
- Decontamination of PETRONAS facilities in the event of any breach
- Interface with the WHO Pandemic Preparedness Plans and similar Plans in Malaysia and in countries where PETRONAS operates
- Leveraging on PETRONAS Group Contingency Planning Standards
- Consultation with JV companies on issues of mutual concern in the Preparedness Plans

All PETRONAS HCU/BU/OPU/JV shall have their own Pandemic Preparedness and Response Plan that is aligned to the PETRONAS Pandemic Preparedness and Response Plan.

The principles of managing a disaster implicit in the PTS 60.0112 – Group Contingency Planning Standard (September 2011, Revision 2) shall be activated as required.

3.1 OBJECTIVE OF THE PETRONAS PANDEMIC PREPAREDNESS AND RESPONSE PLAN

The PETRONAS Pandemic Preparedness and Response Plan outline the PETRONAS Group Plan to manage a communicable disease pandemic. It provides guidelines for PETRONAS HCU/BU/OPU/JV to develop similar plans in alignment with the Group Plan for management of a pandemic at the respective business levels.

3.2 IMPLEMENTATION STRATEGIES

PETRONAS Pandemic Preparedness Plan is aligned to WHO Pandemic Phase 1-3 and correlates with preparedness, including capacity development and response planning activities and focuses on the following strategies

- Ensuring Company's preparedness by planning for probable scenarios/situations and ensuring availability of resources to handle a pandemic crisis.
- Education on Pandemic Awareness for the workforce.
- Ensuring that the necessary resources to handle a pandemic crisis are acquired and stocked
- Preparedness evaluations through periodic emergency exercises and review of emergency procedures.

PETRONAS Pandemic Response Plan is aligned to WHO Pandemic Phase 4-6 and clearly signals the need for response and mitigation efforts. In addition to intensifying the strategies of the Phase 1-3, the following are addressed:

- Ensuring that measures for prevention of disease transmission amongst workforce and dependents have been implemented as required