

PETRONAS TECHNICAL STANDARDS

HEALTH, SAFETY AND ENVIRONMENT

STANDARD

GROUP CONTINGENCY PLANNING STANDARD

PTS 60.0112

SEPTEMBER 2011



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This revision of PTS **60.0112 – Group Contingency Planning Standard (September 2011, Revision 2)** has been updated to incorporate new PETRONAS management structure, Lessons Learnt, Best Practices and new information issued by relevant industry code and standards. All updates in the document are highlighted in *italic* font.

The previous version of this PTS **60.0112 (March 2008)** will be removed from PTS binder / e-repository from herein onwards.

The custodian of this PTS is: Manager - HSE MS, Standards & Regulations, GHSED

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PREFACE

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They are based on the experience acquired during the involvement with the design, construction, operation and maintenance of processing units and facilities. Where appropriate they are based on, or reference is made to, national and international standards and codes of practice.

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SECTION 1

1.0 DEFINITIONS & ABBREVIATIONS

1.1 Definitions

- **Incident**

An incident may be defined as any abnormal or unplanned event that affects normal operations, requires attention and has the potential to precipitate an emergency, disaster, and / or crisis.

- **Emergency**

An adverse situation or incident that has an impact on operations, personnel, image, environment and property but which usually can be brought under control by OPUs.

- **Disaster**

Disaster is an event that causes great harm or damage to Company's image, its operations or process significant economic or legal liabilities, requiring PETRONAS Groups' support and intervention.

- **Crisis**

Crisis is a significant business disruption which invites extensive media coverage. The resulting public scrutiny will affect the organisation's normal operations and could have political, financial and governmental impact on its business.

1.2 Abbreviations

ALAM

Akademi Laut Malaysia

BODEVAC

Body Evacuation

BCP

Business Continuity Planning

BCRT

Business Continuity Response Team

BU
Business Unit

CDMRC
Central (National) Disaster Management and Relief Committee

CEFS
Central Emergency & Fire Services

CEO
Chief Executive Officer

COMCEN
Communication & Control Centre

CSP
Country Support Plan

CST
Country Support Team

DDMRC
District Disaster Management and Relief Committee

DOSC
District On-Scene Commander

DOSH
Department of Occupational Safety and Health

DOE
Department of Environment

DG
Director General

ECC
Emergency Control Centre

EMT
Emergency Management Team

ERP
Emergency Response Plan

ERT
Emergency Response Team

GCA
Group Corporate Affairs

GCMD
Group Crisis Management Department

GCMP

Group Crisis Management Plan

GCMT

Group Crisis Management Team

GCPS

Group Contingency Planning Standard

GHSED

Group Health, Safety and Environment Division

GTS

Group Technology Solution

HSE

Health, Safety and Environment

HSEMS

Health, Safety and Environment Management System

HCU

Holding Company Unit

HCMT

HCU Crisis Management Team

IAP

Incident Action Plan

ICS

Incident Command System

IC

Incident Commander

JPM

Jabatan Perdana Menteri

JVs

Joint Ventures

MEDEVAC

Medical Evacuation

NOCC

National Oil Spill Control Committee

NOK

Next-of-Kin

NSC / MKN

National Security Council / Majlis Keselamatan Negara

OCMT

OPU Crisis Management Team

OCPD

Officer-in-Charge of Police District

OPU

Operating Unit

OSC

On-Scene Commander

PDRM

Polis Di Raja Malaysia (Royal Malaysia Police)

PETRONAS

Petroleum Nasional Berhad

PIMMAG

Petroleum Industry of Malaysia Mutual Aid Group

PIP

Pre-Incident Plan

PPE

Personal Protective Equipment

PTS

PETRONAS Technical Standard

PKTK

Pusat Kawalan Tempat Kejadian

PKOB

Pusat Kawalan Operasi Bencana

PPIC

PETRONAS Petrochemical Integrated Complex

SDMRC

State Disaster Management Relief Committee

SOCC

State Oil Spill Control Committee

SOP

Standard Operating Procedure

SRMCP

Security Risk Management Contingency Plan

SECTION 2

2.0 INTRODUCTION

PETRONAS Group of Companies is constantly exposed to potential incidents due to the nature of its business. Unpreparedness and lack of foresight in emergency response and crisis management can be costly and detrimental to the organisation. To ensure a business as usual environment, PETRONAS shall always be prepared to handle all emergencies. Emergency, if not managed effectively, may cause a great impact to people, environment and asset damage and tarnished reputation.



The purpose of GCPS is to provide the philosophy of operations for responding to any emergency / crisis at every level of PETRONAS' operations. It also clearly defines the essential plans and framework by providing clarity of roles and responsibilities to enable support and back-up.

This Standard will minimise adverse effect of an emergency and crisis to:

People	Employees, stakeholders, contractors, suppliers, customers and communities
Environment	Water, air, land and sensitive areas
Asset	PETRONAS, JVs, contractors, communities and third party facilities
Business	Business continuity and reputation

GCPS will provide standards for PETRONAS Group of Companies to continue business activities during emergency and recover to normal and safe operations in a timely manner. It refers to all aspects of emergency preparedness response and continuity that meet the requirements of PETRONAS and related regulatory and industry standards.

This standard shall be adopted by all PETRONAS Group of Companies for developing, implementing and maintaining Emergency Response Plans (ERP), Country Support Plans (CSP), Business Unit Crisis Management Plan (BUCMP), Group Crisis Management Plan, Oil Spill Response Plan, Emergency Management Plan and other related response and recovery plans.

GCPS is an internal document of PETRONAS and is distributed Groupwide.

SECTION 3

3.0 REFERENCES

The following documents have been referred to in preparation of Group Contingency Planning Standard:

- i. PETRONAS Disaster Management Manual October 2003.
- ii. Contingency Management Plan PTS 60.0112.
- iii. Medical Emergency Management PTS 60.1501.01.
- iv. Emergency Management Plan PTS 60.2306 Revision 1, June 2006.
- v. Guidelines for Contingency Planning PTS 60.2308 Revision 1, June 2006.
- vi. Oil Spill Contingency Plan PTS 60.3004.
- vii. Government Emergency Procedures:
 - a. NSC Directive No.18: Policy and Mechanism on Terrorism Control, July 2002 (MKN Arahan No. 18: Pengurusan dan Pengendalian Krisis Keganasan)
 - b. NSC Directive No.20: The Policy and Mechanism on National Disaster and Relief Management, May 1997
 - c. (MKN Arahan No.20: Pengurusan dan Pengendalian Bantuan Bencana)
 - d. NSC Directive No.21: Policy and Mechanism on Public Order, September 2003
 - e. (MKN Arahan No 21: Pengurusan dan Pengendalian Situasi Ancaman Ketenteraman Awam)
 - f. SOP for Oil, Gas & Petrochemical Disasters, September 2004
 - g. National Oil Spill Contingency Plan, Edition 2000

The listed documents at Section 3 (Document i, ii, iv and v) is hereby revoked and no longer applicable.

SECTION 4

4.0 GCPS FRAMEWORK

4.1 Objective

The objective of this standard is to ensure PETRONAS as a group is capable of dealing and managing emergency and crisis. GCPS clearly defines essential processes to deal with emergencies at every level of PETRONAS operations. The PETRONAS GCPS provides a framework within which individual plans are integrated by providing clarity of responsibility and enabling support and back up to be provided where needed.

4.2 Principles

Guidelines on emergency management, organisation structure, roles and responsibilities are provided within this standard to adopt and minimise impact.

The following principles apply in managing emergency and crisis in PETRONAS:

- i. Protect and save people, environment, long-term operability of assets and reputation, in that order.
- ii. Overreact, assess, respond and stand-down.
- iii. Three-tiered response and management approach.
- iv. OPU, BUS, Country Offices and Group shall have appropriate response plans.
- v. Plans shall be regularly tested through structured trainings, drills and exercises.
- vi. Identify resources to support during emergency e.g. mutual aid, resource matrix, etc.
- vii. Plans shall be reviewed every 3 years or when there are significant changes.

4.3 Scope

The scope of this standard shall encompass the following:

- i. Applicable to PETRONAS Group of Companies where PETRONAS has operational control.
- ii. Joint Operating Companies, Joint Ventures Companies and Production Sharing Contract (PSC) Companies shall follow their own standards but can leverage on this standard.
- iii. Response related plans shall be in conformance to this standard. (e.g. Security Risk Management Contingency Plan (SRMCP), Guideline for Handling Haze Hazards, Guidelines on Oil Spill Contingency Planning, Business Continuity Plan and Avian Influenza Preparedness Plan)

4.4 PETRONAS EMERGENCY PREPAREDNESS AND RESPONSE MANDATORY REQUIREMENT

All PETRONAS facilities/operations shall develop and maintain emergency plans and teams conforming to regulatory requirements, manage physical response to incident and the associated external issues.

- i. OPU, facilities, vessels and operations shall develop and maintain the Emergency Response Plan and establish appropriate emergency response and management teams e.g. ERT, EMT, Duty Manager, etc.
- ii. Each business shall develop and maintain Business Units Crisis Management Plan and establish its Business Crisis Management Team.
- iii. PETRONAS global/international operations shall have ERP and Country Support Plan (CSP) and establish appropriate emergency response and management team.
- iv. PETRONAS centre shall develop and maintain Group Crisis Management Plan and establish PETRONAS Crisis Management Team.
- v. Each OPU, facility, vessel and operation shall develop and maintain Pre-Incident Plan in advance for all significant potential threats.
- vi. All PETRONAS facilities/operations shall established and maintain an Emergency notification and response processes
- vii. OPU shall establish, equip and maintain emergency facilities including Incident Command Post (ICP), Staging Area and Emergency Control Centre (ECC).
- viii. All emergency responders shall attend prescribed training and participate in emergency drills and exercises.
- ix. OPU shall establish resource matrix/mutual aid agreements/programmes to cater for resource support and requirement during major emergency.
- x. All emergency plans shall adopt Incident Command System to manage emergency response in line with emergency response objectives and principles as per Appendix A.

4.5 PETRONAS Three-Tiered Response Approach Model

PETRONAS three-tiered response approach provides a clear demarcation of roles and responsibilities between site personnel, OPU Business, Group and Authorities.

The three-tiered response definitions are as follows:

- i. Tier 1 - Minor

A situation where there is no danger to life and where risk of damage to property, environment and business is minimal. The emergency is within the control of the Facility/ vessel, Operation and OPU.

ii. Tier 2 - Major

A situation where there is danger to life and risk of damage to property, environment and business. The emergency is within the control of the Facility/ vessel, Operation and OPU with limited external assistance.

iii. Tier 3 – Crisis

A situation where there is a potential for multiple fatalities/injuries and severe damage to property, environment and business which involves neighbouring sites and surrounding communities. The emergency is clearly beyond the capacity of the Facility/ vessel, Operation, OPU and Business to control and consequently requires action from PETRONAS business unit and/or centre, government or other external parties.

Facility/ vessel, Operation, OPU and Business may be required to further enhance the tiered definition based on their business needs. However, the main frame of the definition shall be maintained.

4.6 Linkages and Integration with Malaysia and Host Government

Depending on the severity, the authorities will take control of response operations either for reasons of public safety, national interest or if it determines PETRONAS is unable to manage the situation. This is achieved by invoking government emergency protocols or its equivalent in international operations. In such a case, unified command shall be established and a handing over certificate as per appendix B shall be prepared and duly signed by the IC and authorities.

Note: Summary of Malaysia government protocols for emergency management i.e. NSC 18, NSC 20 and NSC 21, SOP Oil, Gas & Petrochemical Disaster is available at Appendix B.

The figures below illustrate PETRONAS emergency process and linkages to authorities and host government.

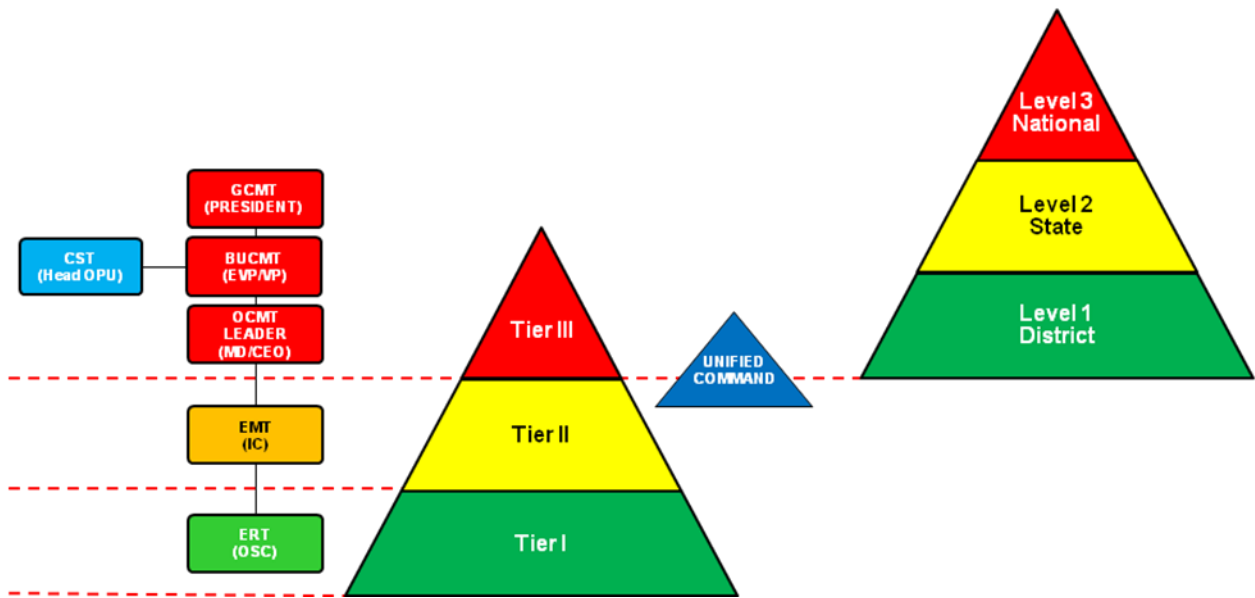


Figure 1: PETRONAS Three-Tiered Emergency Management and Linkages to NSC 20 and SOP for Oil, Gas and Petrochemical Industries

Note: International operations shall comply to host government response regulations

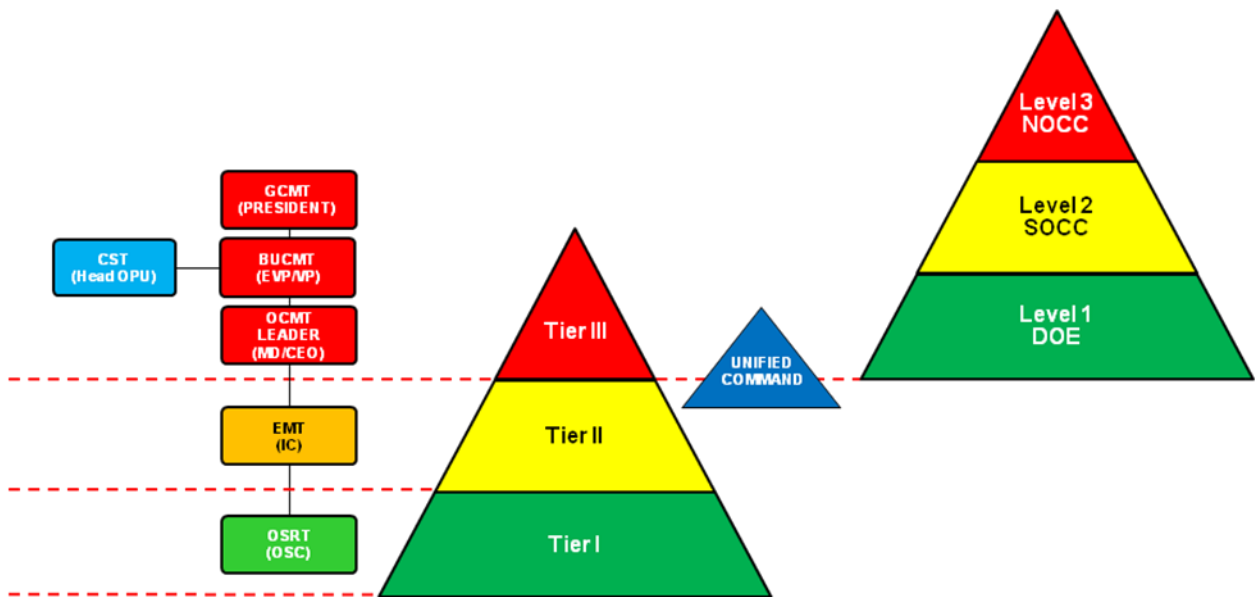


Figure 2: PETRONAS Three-Tiered Emergency Management and Linkages to Government Oil Spill Response System

Note: International operations shall comply to host government oil spill response regulations