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**PAN ORIENT ENERGY (SIAM) LTD.**

# EMERGENCY RESPONSE MANUAL

**Compiled by:**  
Various

**Approved by:**  
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General Manager

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PAN ORIENT THAILAND EMERGENCY RESPONSE

## DISTRIBUTION LIST

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## FOREWORD

Pan Orient Energy (Siam) Ltd. ("The Company") recognizes that effective health, safety and environmental management contributes significantly to its long-term business success.

This document sets out The Company's Emergency Response Procedures. It emphasizes the systematic approach in the way we manage incidents and emergencies at our upcountry sites. The integration of health, safety and environmental protection into our day-to-day activities is the key to successful health and safety management.

The application and success of this system requires the participation and commitment of management, employees and contractors at all levels.

These procedures have the Board's full support but we require **your** commitment through a personal understanding of this document and full participation as required in the effective implementation of the procedures, should they be required

It is imperative that everyone involved in the business of Pan Orient Energy (Siam) Ltd. familiarize themselves with their roles and responsibilities in this document. Only by total commitment by everyone can we ensure the best possible protection of our personnel, contractors, the public, our assets and the environment.

Signed



Jeff Chisholm

Chief Executive Officer

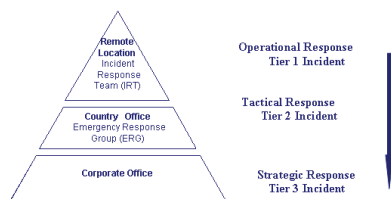
Date : May 27<sup>th</sup>, 2016

## Area of Application

These Emergency Response Procedures apply to all Pan Orient activities in Thailand.

## 1.3 Pan Orient Energy (Siam) Ltd. Emergency Response Organisation

The Company's emergency response management is handled through a three-tiered structure with teams for each of the following locations:



The **Incident Response Team (IRT)**, based at the remote locations (Kam Paeng Saen and Suphanburi), is trained and responsible for dealing with all envisaged incidents and emergency situations which may occur at the location. Where additional support, in the way of resources and advice, may be required by the IRT at a remote location this will be requested through and provided by the Country Emergency Response Group. On all occasions that a remote location IRT is mobilised due to an incident or emergency situation the Emergency Response Group Manager must be notified immediately.

The **Emergency Response Group (ERG)** is based in the Bangkok Office. The ERG is responsible for providing tactical response, support, assistance and advice to all incident and emergency situations at any of the sites or locations within the Country and for providing operational response to any emergency situation which may occur in the or affecting the Bangkok Office.

This Emergency Response Manual describes how the ERG should handle both the "technical" crises e.g. fire, explosion, oil spill, and "social" crises e.g. illness, injury, kidnapping, civil unrest.

On all occasions that the Country ERG is mobilised due to a major incident or emergency situation the Corporate Office must be notified immediately.

## 1.4 Response Group Interfaces

The relationship between the Corporate Office, the Country ERG and Remote Location IRT and a classification of emergencies is illustrated below:

## 1 INTRODUCTION

It is Pan Orient's (the Company) intention to properly manage any emergency situation so as to minimise the impact it may have upon all personnel, the environment, the Company's financial position and the Company's reputation.

The key to effective response to emergencies and incidents is having a pre-established organisation, on-call and capable of mobilising and responding to the extent required by different levels of emergency. It should be staffed with competent individuals, organised into teams, with allocated and clearly defined roles, and practised in those roles.

This manual details the procedures to be followed by the Thailand Emergency Management Group from the Emergency Co-ordination Centre in the Company's Head Office in the Bangkok, Rasa Tower Office Building to ensure a prompt and efficient Company response to emergency situations at any of the Company's sites where ever in the Country they are located.

## 1.1 Policy &amp; Principles

This manual is issued under the authority of the General Manager. Recommendations for any change should be addressed to the General Manager who is responsible for reviewing this document. The health and safety manager will ensure that:

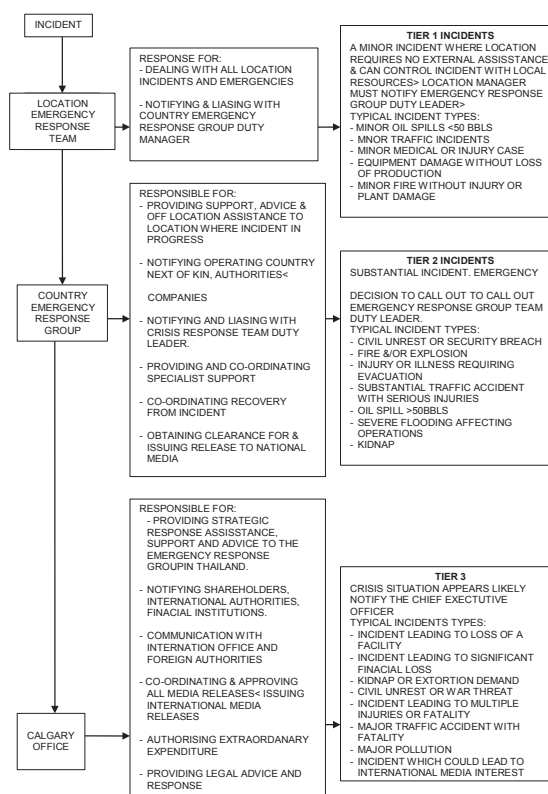
- A meeting with all Emergency Response Group (ERG) Members, including all positions identified within this document, is conducted annually to review and update the procedures.
- A database of all Pan Orient Energy (Siam) Ltd. personnel charged with emergency management responsibilities within this manual is maintained. The database will include name, job title, office, and mobile and home telephone numbers.
- The Emergency Co-ordination Centre (ECC) and associated systems and equipment to support these procedures are maintained in a state of readiness and tested regularly.
- Regular training and exercises are conducted to test the robustness of these emergency procedures and the preparedness of all personnel to respond to an emergency situation.

## 1.2 Purpose &amp; Scope

The purpose of this document is to ensure that Country Head Office personnel based in the Bangkok, who are appointed to the Emergency Response Group (ERG), are aware of their roles and responsibilities and the emergency response procedures. This document also details the procedures to be followed by members of the ERG to ensure a prompt and efficient management response, should an emergency situation occur at any of the Company's assets including office and remote site activities (Production, Seismic and Drilling) or locations under the management of this Head Office.

The Emergency Response Group as shown in **Table 2.1** is made up of Managers, Supervisors and Support Staff. Personnel who form the Emergency Response Group will be notified of their role. If an emergency situation develops the Emergency Response Group will be mobilised and as the situation develops other personnel may be called to provide assistance to the Emergency Response Group.

Copies of this manual will be issued to relevant personnel. Those with specific duties for dealing with an emergency must ensure that they are aware of their responsibilities and duties as contained in this manual, and the manner in which these procedures interface with the remote location emergency response plan for the Company's operations.





## 2 EMERGENCY RESPONSE ORGANISATION

The key to effective emergency response is to have a pre-established organisation on-call and capable of mobilising and responding quickly and appropriately to all envisaged emergency situations. This organisation should be staffed by personnel with appropriate experience, organised into a team, with allocated and defined roles, responsibilities and practised in dealing with emergency situations.

The composition and organisation of the emergency response organisation is formalised to meet operational requirements. The emergency organisation at each location is similar to the normal day-to-day organisation. It is the Country Emergency Response Group's responsibility to respond to and control the immediate response to all emergencies, which occur within the Country in which it is based.

The Country emergency response organisation, called the Emergency Response Group (ERG), the roles and responsibilities of its members and the procedures for dealing with emergency situations are described as follows in this document.

### 2.1 Country Emergency Response Group (ERG) Overall Responsibilities

The primary responsibilities of the ERG are:

- To manage all emergency situations within the Country.
- To provide emergency support, advice and assistance to all the remote locations, assets and operations within the Country.
- To manage any emergency situation which may occur in or affect the Country Office
- To notify the General Manager and keep him/her informed of the situation.
- To notify the Corporate Office within 2 hours minutes of the Emergency Response Group being mobilised and to keep them informed of the situation.
- To notify and liaison with Government and local authorities in accordance with legal and legislative requirements.
- To prepare and release media holding statement.
- To prepare national media releases and obtain authority from the Corporate Office to release media statements. To notify and provide assistance to the next of kin of all Pan Orient Energy (Siam) Ltd. nationals involved at the emergency site.
- To inform the Corporate Office of the names and conditions of all personnel involved at the emergency location.
- To communicate with all national Companies, with employees or equipment at the emergency location and notify them of the names and condition of their employees.
- To arrange the reception and treatment for all personnel evacuated from the emergency site.
- A designated ERG Leader will be available at all times, who will be of Senior Manager level. In all situations, which have resulted in the mobilisation of the ERG, it is the ERG

Leader's responsibility to report the situation to the General Manager and to the Corporate Office .

- The actions of the ERG will vary depending on the nature of the emergency and it is the ERG Leader's responsibility to determine the extent of the response required. The ERG may call on additional staff to assist them in responding to any emergency or incident situation.

All ERG members are required to read and familiarise themselves with this document, in particular their own respective functions, for which checklists are provided on the following sections. ERG members should ensure that they have access to this document at all times.

### 2.2 ERG and Support Team Individual Roles and Responsibilities

The primary roles and responsibilities of the Emergency Response Group members are outlined below:

Table 2-1 Bangkok Emergency Response Group

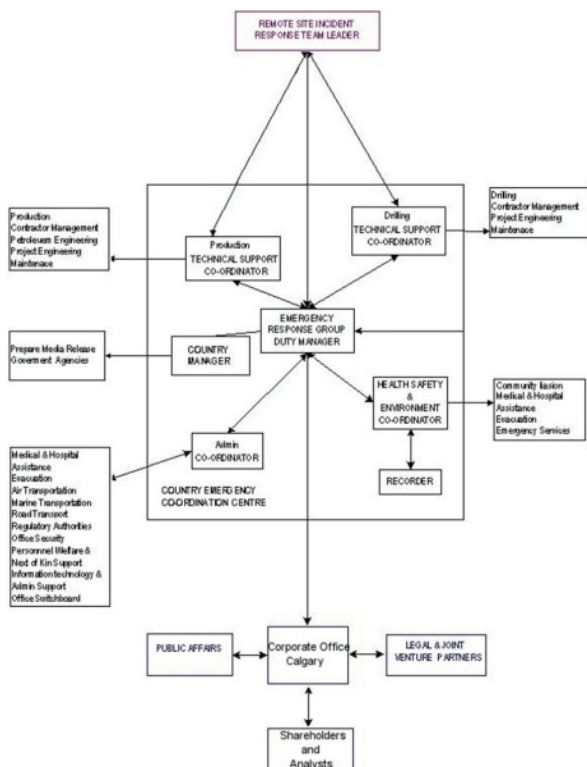
Emergency Response Group Leader	<ul style="list-style-type: none"> <li>• Responsible for managing and co-ordinating the overall response of the ERG to the emergency situation. Reports to the General Manager and the Corporate Office.</li> <li>• Responsible for mobilising the ERG and Support personnel.</li> <li>• Responsible for informing and updating the Corporate Office.</li> <li>• Responsible for compliance with the actions and procedures laid down in this document for dealing with emergency situations.</li> <li>• Responsible for obtaining authority from the General Manager and the Corporate Office for the release of information to the Media.</li> </ul>
Drilling Operations Technical Co-ordinator	<ul style="list-style-type: none"> <li>• Reports to the ERG Leader and responsible to him/her for providing operational and technical drilling related information.</li> <li>• Responsible for providing operational and technical advice, including production, drilling and subsurface, to the emergency site</li> <li>• Responsible for all communications with the IRT Leader at the emergency site.</li> </ul>
Production Operations Technical Co-ordinator	<ul style="list-style-type: none"> <li>• Reports to the ERG Leader and responsible to him/her for providing operational and technical Well Production/Testing information.</li> <li>• Responsible for providing operational and technical advice, including production, drilling and subsurface, to the emergency site</li> </ul>

Health Safety & Environmental (HSE) Co-ordinator	<ul style="list-style-type: none"> <li>• Responsible for all communications with the IRT Leader at the emergency site.</li> <li>• Reports to the ERG Leader and responsible to him/her for providing risk, health, safety and environmental information.</li> <li>• Responsible for compliance with legislation and appropriately informing and liaising with National Government and Regulatory authorities.</li> <li>• Responsible for providing HSE advice &amp; support and information to the ERG and the IRT at the emergency site.</li> <li>• Responsible for co-ordinating office security.</li> <li>• Responsible for advising and maintaining the emergency responses in line with the Company emergency response procedures.</li> <li>• Responsible for maintaining the information on the status boards.</li> </ul>
Administration Co-ordinator Bangkok	<ul style="list-style-type: none"> <li>• Reports to the ERG Leader and responsible to him/her for providing information and managing all human resources matters.</li> <li>• Responsible for providing welfare support and advice to employees and their families if required.</li> <li>• Responsible for co-ordinating with the Logistics Co-ordinator onward travel for personnel being evacuated.</li> <li>• Responsible for communication with and notifying the next of kin of national Company employees in collaboration with ERG Leader.</li> <li>• Responsible for providing information about all expatriate personnel at the emergency site to the ERG Team.</li> <li>• Responsible for providing information to Contractor Companies about their personnel at the emergency site.</li> <li>• Responsible for co-ordinating the arrangements for the disposal of fatalities.</li> <li>• Responsible for providing IT support to the ERG.</li> <li>• Responsible for co-ordinating the office switchboard and reception services.</li> </ul>

Production Foreman	<ul style="list-style-type: none"> <li>• Reports to the IRT Leader and responsible to him/her for providing information and managing all human resources matters upcountry.</li> <li>• Responsible for arranging temporary accommodation, transportation and assistance for personnel being evacuated from emergency site if required.</li> <li>• Responsible for co-ordinating with the IRT Leader regarding onward travel for personnel being evacuated.</li> <li>• Responsible for communication with and notifying the next of kin of national Company employees as directed by IRT/ERG.</li> <li>• Responsible for providing information about all expatriate personnel at the emergency site to the IRT Co-ordinator.</li> <li>• Responsible for co-ordinating the arrangements for the disposal of fatalities.</li> <li>• Responsible for co-ordinating the office switchboard and reception.</li> </ul>
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Additional personnel may be mobilised by the ERG Co-ordinators to provide support and assistance. The personnel mobilised to provide support would, so far as possible, be from the appropriate department or have the necessary skill to provide the required support.

The relationship between the ERG, IRT, Corporate Office, and external parties is shown schematically in the diagram below:



### 2.3 Location of Emergency Response and Support Personnel

When the Emergency Response Group and Support Personnel are mobilised they will proceed immediately to the Emergency Response Co-ordination Centre (ECC) in order to carry out the tasks and actions required.

The floor plan showing the layout of the Emergency Co-ordination Centre located at is shown in **Attachment 9**.

The main Meeting Room at Rasa Tower II is designated as this Centre. The General Manager, in consultation with the Emergency Response Group (ERG) will declare if an Emergency has escalated to a crisis, or has the potential to do so and advises the Corporate Office.

### 2.4 Office Incident Response

In the event of an emergency in the Office, the Operations Manager is responsible for the evacuation of all personnel from the office and the Emergency Response Group is responsible for the Recovery Process. This procedure is more fully described in **Section 5.0**.

## 3 EMERGENCY RESPONSE GROUP (ERG) PROCEDURES

The following is the procedure to be followed by the ERG Leader, when the Incident Response Leader, as a result of an incident in Remote Location, has contacted him and the ERG Leader decides that the incident requires the activation of the ERG.

### 3.1 Notification and Activation of the ERG

In the event of a Remote Location activating the Incident Response Team (IRT), the Incident Response Controller will contact the duty ERG Leader and inform him/her of the situation. The ERG Leader must be informed within 30 minutes of the activation of an Incident Response Team.

The ERG Leader is the principal point of contact in Bangkok. The IRT Leader will contact the duty ERG Leader if a Remote Location operation contacts them with information regarding an incident.

The call originator will need to provide:

- Persons name;
- Originator's location and contact telephone number;
- Nature of the Incident;
- Local time of report.

Further details of the Emergency should not be transmitted.

Once the ERG Leader has made contact with the Incident Response Controller and has details of the incident he/she will decide whether there is a requirement for the Emergency Response Group to be activated, and what the initial composition of the ERG is to be. The ERG Leader is responsible for initiating the activation and call out of the duty ERG.

On any occasion that the ERG is activated, due to an emergency situation, the ERG Leader will notify the Corporate Office and inform the General Manager within 30 minutes.

### 3.2 Contact Details

The duty ERG and Support Personnel are on 24-hour call out for the duration of their duty period.

Although office, home and mobile telephone numbers are given in the weekly contact list, the policy is to contact ERG and Support members via their mobile number first.

It is essential that people on duty fully understand their responsibilities and can be contacted 24 hours per day, on one of their listed numbers, during the whole period they are on call.

ERG members are responsible for maintaining a list of contact details of the personnel they would call out to support them in the event of the ERG requiring assistance. It is their responsibility to activate, inform, and direct any support personnel they consider necessary to provide them with the appropriate level of assistance. The respective ERG members are also responsible for briefing activated support personnel about the incident and giving them direction.

### 3.3 Call Out and Delegation of Authority

It is the responsibility of individual members of the ERG to ensure that their emergency response function is delegated to another from the same nominated group, see **Attachment 10**, when they are unavailable (i.e. unable to reach the ECC within 60 minutes). They must ensure their alternate is appropriately briefed and the alternate remains within contact.

At the end of the duty period, the ERG member must handover his duty in person thus ensuring the next on duty has acknowledged the responsibility.

### 3.4 Emergency Co-ordination Centre (ECC) Initial Actions

On the activation of the ERG, all the team members should immediately proceed to the Emergency Co-ordination Centre (ECC). The first to arrive must assume the role and duties of the ERG Leader until the duty Leader arrives. A copy of this manual is available in the Emergency Co-ordination Centre.

The most important early action for the first persons to arrive in the Emergency Co-ordination Centre is to ensure that:

- Telephones are set up to establish and establish communications with the affected emergency location and the Incident Response Leader.
- They identify the facts of the incident and ensure that they are written up on the status boards.

These actions, see **Attachment 7**, should not be delayed until the ERG Leader's arrival. The layout of the Emergency Co-ordination Centre and the equipment for use during the management of an Emergency situation is shown in **Attachment 9**.

### 3.5 Formal Updates of Information to ERG

The ERG Leader should conduct updates to the whole ERG Group at frequent intervals throughout the duration of an incident, at least every hour in the early stages of the incident.

All available ERG members should attend updates. The individual ERG member should report and update any relevant information to Support personnel as soon, as is practicable.

A checklist for holding a Formal Update of Information is contained in **Attachment 1**.

### 3.6 Media Response

The ERG Leader, in consultation with the General Manager is responsible for the preparation and early release of the Media Holding Statement see **Attachment 5**.

The Corporate Office must approve all further information for release to national and international media groups. The ERG Leader is responsible for obtaining any approvals before release.

Once approval for release of information to the national Media is received the ERG Leader, in consultation with the General Manager, is responsible for arranging for the release of such information. All personnel must be instructed to direct external telephone calls requesting media comment on any incident to the nominated ERG spokesperson.

### 3.7 External Notifications

There may be a requirement during an incident to notify and liaise with a number of national companies, authorities and agencies. It is important that the ERG maintains a record of all these external communications and liaises effectively to ensure overall co-ordination and to ensure they speak with one voice.

The HSE Co-ordinator is responsible for advising the ERG Leader of the requirement, and for making the relevant contact and or notify to national Government and Regulatory authorities.

The HR Co-ordinator is responsible for making contact with the next of kin of national staff and the employing Company of national contractors. He/she is also responsible for providing the CRT HR Co-ordinator with information regarding expatriate personnel. The HR Co-ordinator is also responsible for notifying the appropriate national authority regarding any fatalities.

In general, existing business channels of communication should be retained during an incident, but the ERG must retain overall responsibility and control for this communication. The range of contacts will inevitably vary greatly depending on the location of the affected site.

A checklist of contacts is contained in **Attachment 2**. This list should be developed further at the time of the incident, where appropriate.

### 3.8 Kidnap and/or Extortion

While the basic ERG procedures remain much the same, kidnap and/or extortion require some different methods to address them. In some cases the information may need to be retained by a very small core team and the negotiations may take place over a protracted period of time.

The ERG are to gather and records the information available regarding the kidnap/extortion situation in line with checklist see **Attachment 3**.

Due to the extreme sensitive nature of a kidnap and/or extortion negotiation it is imperative that the ERG Leader makes immediate contact with the Corporate Office. The Corporate Office will either take over the responsibility for the negotiations or will provide guidance to the ERG Leader.

### 3.9 Civil Unrest or War Threat

If civil unrest or war threat occurs or appears likely either in operating area or close to an area where operations are in progress the ERG will be required to consider and discuss the threat with the General Manager and the Corporate Office.

The primary objective must be to safeguard and evacuate all personnel from the danger area. A plan will be drawn up identifying actions to be taken in order to safeguard personnel, their families and Company assets if the situation continues to deteriorate.

The plan of action should state what the Company considers to be the trigger points which, when reached, will require actions to commence. Once the action plan has been developed it should be clearly communicated to those who require to know.

### 3.10 Bomb Threat

Bomb threats have become increasingly commonplace in recent years and used by various groups that want to cause disruption of business. Although 99% of the bomb threats are hoaxes all should be

treated seriously. In all circumstances the first thing that must be done is to determine the nature of the threats to the organisation.

The ERG is to gather and record the information available regarding the Bomb Threat in line with checklist see **Attachment 19A**.

The ERG are to assess the credibility of the threat and possible consequences and devise an evacuation plan of the premises. See **Attachment 19**

### 3.11 Installation Loss or Significant Business Loss

A situation may occur, for example a loss of key equipment, which could result in a significant delay in bringing a field into operation, or the shut down of a field or installation as the result of an incident. Such a situation will inevitably result in a significant loss of business and therefore loss of revenue to the Company unless it is addressed immediately.

Such a situation will require the ERG to consider what actions have to be taken immediately, and by whom, in order to avoid or minimise loss to the Company.

### 3.12 Pollution Incident

A pollution incident can refer to a number of different types of pollution. They can be broadly categorised as:

- Oil spill
- Chemical spill
- Smoke or fumes into the atmosphere.

It is the responsibility of the ERG to ensure that:

- The spill plans are activated immediately any pollution situation is detected or reported
- The source of the pollution is quickly identified and stopped
- That specialist clean up contractors is mobilised as quickly as possible
- That the appropriate authorities and agencies are notified.

The ERG has to also consider that any pollution type wherever it may occur can result in significant media and environmental group interest. The ERG Leader must be prepared to consider and address the issues that the media or environmental groups may raise with the Company. Failure to take this seriously can result in public concern, loss of shareholder confidence, and possible disruption to business and the associated loss of revenue.

### 3.13 Extended Emergencies

Some emergencies may extend over a long period of time. When this is the case the relief of ERG members and Support personnel should be considered in order to avoid fatigue.

In the event that the ERG is likely to be required to sit for longer than 8 - 12 hours the following procedures should be observed:

- Alert alternates for each group member, giving them the time that they will be required to start their take-over
- Change over times of individual team members should be spread out over a reasonable period of time
- The hand over is to include a complete brief on the incident. The departing team member must sit with the alternate until he/she is satisfied that the alternate is fully conversant with the situation and his/ her duties
- Relieved group members must ensure they get adequate rest and sustenance, in case they are required further.

Responsibility for managing the arrangements for alternates to ensure group efficiency lies with ERG Leader.

### 3.14 Supporting Information

Individual ERG members must ensure that information that they may be required to support their specific function is readily available.

## 4 CHECKLISTS FOR EMERGENCY RESPONSE GROUP

Checklists are provided to facilitate swift, organised and comprehensive action and should be used by ERG members to assist them to carry out their functions. In general checklists should be used to confirm that appropriate actions have been taken and to check if any actions have been missed.

Checklists are available at the Emergency Co-ordination Centre (ECC) and made available to the group members concerned as part of the setting up process. However group members are advised to maintain and improve their own checklists to be used when their group is activated. All group members should examine the checklists as part of their preparedness and propose improvements to the General Manager. Checklists are to be reviewed following any exercise or incident in common with other procedures. Responsibility for updating checklists lies with individual functions rather than the General Manager.

### 4.1 Emergency Response Group (ERG) Leader

Upon being informed of an emergency situation, follow the steps and the checklist given below:

- Establish communications with the emergency site IRT Leader and establish the facts of the situation, support and assistance required at the scene.
- Decide whether the ERG should be activated.
- Issue instruction to mobilise ERG members and decide the requirement for and mobilise Support personnel.
- Proceed to the Emergency Co-ordination Centre (ECC).
- Inform the General Manager and keep him/her updated at regular intervals.
- Review the facts of the emergency situation and determine whether the incident is contained or escalating.
- Ensure that the ECC has been set up and that all incident and status boards are positioned, and that data is being recorded.
- Ensure that the emergency site IRT has ERG/Corporate Office contact telephone numbers.
- Notify the Corporate Office, as information becomes available.
- Confirm that the ERG has arrived and brief them see **Attachment 16** ERG and Support Group Status Board.
- Brief all ERG members on arrival, state plan and delegate actions.
- Ensure that Support personnel are briefed and that the Reception is manned.
- Ensure clear lines of communication with the emergency site and IRT are established and continue to monitor situation and provide appropriate support and assistance.
- Ensure that next of kin are being notified.
- Ensure that appropriate Authorities are notified.

- After approval from General Manager Issue Media Holding Statement - **Attachment 5**.
- After approval from General Manager Issue Statement to Staff - **Attachment 6**.
- Agree the media strategy with General Manager, including the management of the media release process.
- Monitor and maintain the up-to-date picture of the emergency situation.
- Prepare information for national media release.
- Provide Corporate Office and General Manager with information for release to international media groups.
- Organise media briefings.
- Ensure that the Receptionist is aware of the situation and have a copy of the holding statement to be read out to callers.
- Ensure that media enquiry numbers have been released and brief the Receptionist that the Media Response telephone line is available.
- List who should receive the media statements and issue e.g.:
  - Media agencies
  - Internal office staff
  - Operating Companies in other Countries
  - Partners
  - Contractors
- Update information frequently and issue statements at regular intervals.
- Brief Reception on the handling of any media persons arriving at the office.
- Brief the IRT Leader at the incident site on what information to release in the event of receiving media enquiries.
- Arrange media monitoring, and playback of any appropriate broadcasts to ERG.
- Prepare, obtain authorisation and issue of an incident update report to all employees.
- Arrange for distribution of press packs to media.
- Update ERG at regular intervals on actions taken and media releases.
- Identify the need for and mobilise additional Support personnel
- Identify if a representative from senior management is required at the incident site.

- Identify and obtain authorisation for extraordinary expenditure.
- Confirm that the IRT is coping. Consider if extra support is required.
- Confirm that the ERG is satisfactorily supporting the IRT.
- Hold ERG updates on a regular basis see **Attachment 1**
- Consider the following local aspects of the incident:
  - Local Government
  - Local population
  - Environmental
- Ensure that office personnel are being kept informed of the incident.
- Confirm that interfaces with external bodies are being managed effectively.
- Monitor the level of stress in the ERG, IRT and Support personnel.
- Identify if the emergency likely to be extended. Implement rotation of ERG members

INCIDENT CHECKLIST – STATUS BOARD	
Detail	Comment/Notes
Incident <ul style="list-style-type: none"> <li>• Where?</li> <li>• What facilities/vehicles are involved?</li> <li>• When?</li> <li>• What is happening?</li> </ul> (Fire, Explosion, Collision, Gas Leak, Toxic Gas Leak, Oil Spill, Well Control problem, Blowouts, Person Missing, Structural Failure, Equipment Failure, Storm, Transport Incident, Medical Emergency, Criminal Act, Terrorism, Bomb Threat, Kidnapping, Extortion, Industrial Dispute, Natural Disaster).	
Current State of Incident <ul style="list-style-type: none"> <li>• Contained?</li> <li>• Potential to escalate?</li> <li>• Escalating?</li> <li>• Who is handling the response?</li> <li>• How is it going?</li> <li>• Who has legal control of the incident?</li> </ul>	
Accuracy and timeliness of information <ul style="list-style-type: none"> <li>• How good is information?</li> <li>• Is it complete</li> <li>• Is it coming from the right sources?</li> <li>• How can it be improved?</li> </ul>	
Damage/ Loss <ul style="list-style-type: none"> <li>• Installation</li> <li>• Equipment</li> <li>• Third Parties</li> <li>• Major</li> <li>• Minor</li> </ul>	
Drilling <ul style="list-style-type: none"> <li>• Stopped</li> <li>• Delayed</li> <li>• Continuing</li> </ul>	
Company Involvement <ul style="list-style-type: none"> <li>• Operator/ Non-operator</li> </ul>	
Casualties <ul style="list-style-type: none"> <li>• Deaths</li> <li>• Injuries</li> <li>• Missing</li> </ul>	
Environmental <ul style="list-style-type: none"> <li>• Oil Spill</li> <li>• Chemical Spill</li> <li>• Air Pollution</li> <li>• Quantity</li> </ul>	

INCIDENT CHECKLIST – STATUS BOARD	
Detail	Comment/Notes
• Sensitivity of area	
Production <ul style="list-style-type: none"> <li>• Stopped</li> <li>• Delayed</li> <li>• Lost</li> <li>• Continuing</li> </ul>	
Parties involved at Incident <ul style="list-style-type: none"> <li>• Company</li> <li>• Partners</li> <li>• Contractors</li> <li>• Neighbours</li> <li>• Other Third Parties</li> </ul>	
Is everyone being kept informed? <ul style="list-style-type: none"> <li>- Emergency Services</li> <li>- General Manager</li> <li>- Corporate Office</li> <li>- Next of Kin</li> <li>- Company Employees</li> <li>- Contractors</li> <li>- Partners</li> <li>- Environmental Agencies</li> <li>- Local Government</li> <li>- National Government</li> <li>- Media</li> <li>- Other Oil Companies</li> <li>- Pressure Groups</li> <li>- Neighbours</li> <li>- Unions</li> </ul>	
What Media Activity and Coverage <ul style="list-style-type: none"> <li>• Tone of media</li> </ul>	

ERG LEADER - PUBLIC AFFAIRS STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
Current / likely public perception of the incident/ Company?	Confirm media strategy Establish media monitoring Review media coverage and tone. What is the media saying? Ensure Q & As and Media Releases are available, read and understood by spokesperson Identify spokesperson
Government at home or abroad concerned?	What are the Authorities saying? How are they reacting? Establish policy for lobbying Consider Government/ Partner briefings
International perception of the incident?	Inform Company offices abroad
Likely effects on the Company's reputation? • At home/Abroad	Monitor and advise the General Manager regarding image considerations.
Will this affect/ influence planned/ future Company operations in country and abroad?	
Likely impacts on/ responses from: • National governments • Local government • Regulators/ legislators • Pressure Groups • Environmental agencies • Neighbours at this and other sites • Community PR near site	Consider regulatory repercussions Consider Community PR near site  Counsel and reassure neighbours at affected site - Information on incident - Decisions on future operations - Establish enquiry centre.
Other industry companies and agencies • Customers • Suppliers • Partners • General Public • Third parties affected by the incident	Communicate with customers

DRILLING TECHNICAL CO-ORDINATOR STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
Own equipment/ property? Denial of use? Consequential loss? Loss of output? Inability to meet commitments?	Arrange for site survey
Impact on customers?	
Inability to supply customers? • Short Term • Long Term Impact on suppliers? Inability to accept supplies? • Short Term • Long Term	Examine alternative sources of product supply  Arrange stoppage/ diversion of supply
Other direct business interruption? Impact on contractors/ consultants?	
Effects on other Companies/ businesses? Any indirect constraints on other businesses?	Keep other Companies/ businesses informed
Need to shut down similar operations? Consider threat to new/planned operations and opportunities?	Consider revised business plan Decide on whether to continue operations
How long for repair/ replacement?	
Potential ban on product/ operations?	
Any regulatory impacts? • Local • National • International	Ensure regulators are kept well informed Manage regulators proactively
Overall effect likely on the industry? Additional loads placed on management? • Managing incident • Managing recovery	Consider disclosing information to other operators

## 4.2 Drilling Operations Co-ordinator

In the event of an emergency and being mobilised follow the steps and the checklist given below:

- Proceed to the Emergency Co-ordination Centre and obtain a full briefing from the ERG Leader.
- Establish and take over communications with the IRT Leader and request an update on the situation, identify support and assistance required.
- Brief ERG on the current situation and support requirements
- Maintain a close liaison with the IRT and regularly update ERG.
- Confirm ERG/ECC telephone numbers/fax numbers with IRT. Consider communications security.
- Start logging messages. Pass message sheets to the Recorder and ensure that the Status Boards reflect the latest situation.
- Ensure that appropriate site and operational documents, diagrams and plans are available to the ERG.
- Ensure that the ERG is aware of the IRT actions, decisions and concerns.
- Advise ERG on the operational and technical aspects and impacts of the incident.
- Assess the requirements for specialist or technical support at the site.
- Keep the IRT advised on actions being taken to support them.
- Establish the morale and effectiveness of the IRT. Are they coping?
- Remind the ERG Leader, if necessary, that an update is required.
- Advise ERG Leader if external contacts are required to be made to:
  - Local and/or central government authorities;
  - Contractors concerned;
  - Joint Venture Partners;
  - Others
- Where appropriate arrange cover for normal job.
- Keep a personal log of all communications and actions taken.

## 4.3 Production Operations Co-ordinator

In the event of an emergency and being mobilised follow the steps and the checklist given below:

- Proceed to the Emergency Co-ordination Centre and obtain a full briefing from the ERG Leader.
- Establish and take over communications with the IRT Leader and request an update on the situation, identify support and assistance required.
- Brief ERG on the current situation and support requirements
- Maintain a close liaison with the IRT and regularly update ERG.
- Confirm ERG/ECC telephone numbers/fax numbers with IRT. Consider communications security.
- Start logging messages. Pass message sheets to the Recorder and ensure that the Status Boards reflect the latest situation.
- Ensure that appropriate site and operational documents, diagrams and plans are available to the ERG.
- Ensure that the ERG is aware of the IRT actions, decisions and concerns.
- Advise ERG on the operational and technical aspects and impacts of the incident.
- Assess the requirements for specialist or technical support at the site.
- Keep the IRT advised on actions being taken to support them.
- Establish the morale and effectiveness of the IRT. Are they coping?
- Remind the ERG Leader, if necessary, that an update is required.
- Advise ERG Leader if external contacts are required to be made to:
  - Local and/or central government authorities;
  - Contractors concerned
  - Joint Venture Partners
  - Others
- Where appropriate arrange cover for normal job.
- Keep a personal log of all communications and actions taken.

PRODUCTION TECHNICAL CO-ORDINATOR STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
Own equipment/ property? Denial of use? Consequential loss? Loss of output? Inability to meet commitments?	Arrange for site survey
Impact on customers?	
Inability to supply customers? • Short Term • Long Term Impact on suppliers? Inability to accept supplies? • Short Term • Long Term	Examine alternative sources of product supply  Arrange stoppage/ diversion of supply
Other direct business interruption? Impact on contractors/ consultants?	
Effects on other Companies/ businesses? Any indirect constraints on other businesses?	Keep other Companies/ businesses informed
Need to shut down similar operations? Consider threat to new/planned operations and opportunities?	Consider revised business plan Decide on whether to continue operations
How long for repair/ replacement?	
Potential ban on product/ operations?	
Any regulatory impacts? • Local • National • International	Ensure regulators are kept well informed Manage regulators proactively
Overall effect likely on the industry? Additional loads placed on management? • Managing incident • Managing recovery	Consider disclosing information to other operators

## 4.4 HSE Co-ordinator

In the event of an emergency and being mobilised follow the steps and the checklist given below:

- When directed by the ERG Leader, activate the call out the ERG and Support personnel in accordance with the ERG duty list.
- Proceed to the Emergency Co-ordination Centre and obtain a full briefing from the ERG Leader.
- Commence logging information onto the Status Boards, and ensure that they are kept up-to-date throughout the incident.
- Advise the ERG Leader of the safety, environmental, and regulatory aspects of the incident.
- Assess damage and potential damage to environmental and sensitive areas, which might be affected by the incident.
- Obtain total personnel numbers, names, company and nationality at incident site.
- Identify and mobilise Support persons required to assist with:
  - Next of Kin notification and assistance
  - Emergency travel arrangements
  - Medical and Casualty treatment
  - Reception and handling of evacuees from incident site
  - Personnel enquiry information
  - Office Reception
- Obtain accurate information on person's casualties at incident site with their status, location and intended movements.
- Obtain Next of Kin data for national staff members and contractor personnel at incident site.
- Maintain up-to-date movement and status list of all personnel evacuated from the site.
- Ensure that casualties being evacuated from incident site are being attended to correctly.
- Advise ERG what actions should be taken to minimise the effects on the environment.
- Mobilise Oil Spill Response specialist contractor to spill site if required.
- Ensure that the General Manager is aware of the Company's safety and environmental record.
- Keep a personal log of all communications and actions taken.

HSE CO-ORDINATOR STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
Has there been any environmental impact from? • Oil spill • Gas release • Smoke • Chemical spill • Radio Active material • Other substance	
What are the likely effects on people? • At the site • Surrounding community	
What are likely to be the effects on the environment? • Land • Air • Shorter Term • Longer Term	
What are the short and long term effects of pollution? • What quantity has been released?	Implement short term response to pollution  Decide on longer term response to pollution  Effect rapid containment and clean-up  Implement immediate monitoring of perimeter and as yet unaffected areas  Consider and implement long term clean-up and monitoring plan
How is the clean up progressing?	What quantities have been released?
Which Agencies have been notified?	
Have all appropriate environmental bodies and agencies been notified?	

## 4.5 Administration Co-ordinator Bangkok

In the event of an emergency and being mobilised follow the steps and the checklist given below:

- Proceed to the Emergency Co-ordination Centre and obtain a full briefing from the ERG Leader.
- Inform Crisis Response Team of details of all expatriate personnel at the incident site and give details of any casualties.
- Arrange travel and accommodation for evacuees, including reception of expatriates in own country.
- Ensure that personnel and casualty information is accurately recorded on the Status Boards.
- Ensure that enquiry numbers have been released and inform Reception when and where to divert calls.
- Establish contact with Contracting Companies give them information regarding their personnel at the incident site and disposition of casualties and evacuees. Confirm that they will notify next of kin of their employees.
- Consider and arrange for the provision of translators.
- Support the evacuation of casualties or others.
- Arrange travel and accommodation for Next-of Kin to visit casualties.
- Ensure that the next of kin of all personnel at the affected site are notified.
- Ensure that arrangements are being made to support families.
- Ensure that liaison with hospitals is undertaken.
- Ensure Next of Kin of casualties or fatalities are notified.
- Ensure procedure for the disposal of fatalities being followed.
- Arrange for Government and Environmental personnel to go to the site.
- Implement notification of relevant Government and Environmental agencies.
- Keep a personal log of all communications and actions taken
- Obtain appropriate financial authorities for advances and travel.

ADMINISTRATION CO-ORDINATOR BKK STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
Consider long term welfare of casualties	Make arrangements for specialist and follow up medical treatment of all casualties  Follow up on persons in hospital and recuperating at home.  Consider moral and financial support.
Consider the morale of all personnel.  What are the impacts on • Site workforce • Families  • Other company employees (concern at loss of employment, guilt) • Contractors/ consultants • Neighbours (fear of recurrence, casualties, property damage, loss of business)	Provide compassionate assistance to injured/ evacuated employees and support to the families, to include: • Medical checks • Counselling • Travel assistance/ accommodation • Loans • Cash Keep all employees informed on personnel issues Reaffirm positive aspects of Company actions.  Counsel and reassure neighbours affected by site and similar company locations Disclosures about incident
What effect on morale of Company personnel?	Reinforce Company morale
What are the likely effects of the incident on the workforce and its relationship with the Company?	Reaffirm positive aspects of Company to all
Stress. Who might be affected? • Site personnel • Response/ telephone teams • Families • Third party witnesses	Reaffirm positive aspects of Company to all  Monitor for stress at site and in teams  Arrange for stress counsellors  Arrange for relief's where signs of serious stress are detected  Put in place a stress counselling programme

#### 4.6 Field Operation Engineer, Production Supervisor & Production Foreman Kam Paeng Sean

In the event of an emergency and being mobilised follow the steps and the checklist given below:

- Proceed to the IRT meeting and obtain a full briefing from the IRT Leader.
- Identify and assist with:
  - Arranging transportation of evacuees
  - Transporting materials and equipment
  - Local Hospital reception arrangements.
  - Locating and mobilising land transport.
- Identify and arrange mobilisation of Local emergency support such as Fire Service, Police, Military Services, Ambulance, Hospitals.
- Co-ordinate together with the IRT Leader:
  - Evacuation actions
  - All transport movements.
- Locate and mobilise materials and equipment required at the incident site.
- Co-ordinate transportation of casualties to hospitals once left incident site.
- Update ERG at regular intervals on actions taken.
- Keep a personal log of all communications and actions taken

PRODUCTION FOREMAN STRATEGIC CHECKLIST	
EFFECTS / IMPACTS	ACTIONS
What are the impacts on Incident location, Vehicles, Facilities and inability to meet the requirements?	Keep identify
Impact on Emergency Services and Equipment	Arrange to send required Emergency Services
Available resources status	Mobilise resources when and where needed
What are the likely effects of the incident and need repair/replacements	Provide assistance
Inability to supply/arrange	Arrange alternate source
Additional supports and services	Keep ready

#### 4.7 Support Positions

The following are the procedures for Support personnel who will or may be mobilised to support the Emergency Response Group in the event of an incident or emergency situation.

##### 4.7.1 Recorder

In the event of an emergency and being mobilised follow the steps below:

- Proceed to the Emergency Co-ordination Centre and obtain a full briefing from the HSE Co-ordinator.
- Check off all ERG members against Call-out and Arrival Checklist
- Record and maintain the incident information on the Status Boards.
- Support the ERG by providing maps, plans, diagrams, stationary
- Summarise the main points from the Status Boards for the ERG.
- Where appropriate arrange cover for normal job.
- Keep a personal log of all communications and actions taken.

##### 4.7.2 Reception

In the event of an emergency and being mobilised follow the steps below:

- On arrival in the office advise the Admin Co-ordinator Bangkok who will give a briefing on what to do and how to handle callers.
- Receive instruction from Admin Co-ordinator Bangkok on how to respond to visitors and callers such as:
  - Media
  - Next of Kin
  - VIPs
  - General Public
  - Normal business
- Direct visitors and callers as instructed.
- Inform Admin Co-ordinator Bangkok when visitors are at Reception.
- Request assistance from Security if required to control visitors.
- Keep a log of all calls that come through to reception.
- Contact the Admin Co-ordinator Bangkok for additional advice and support.



## 5 OFFICE EMERGENCY RESPONSE

The Company's Emergency Response objectives require that the Company is effectively and efficiently prepared to address any foreseeable emergency situation, which involves any of its assets wherever they are located in Thailand.

In order to comply with this the Bangkok Office has two levels of emergency response:

- **Emergency Response** for dealing with any incident or emergency situation that could occur at any of the Pan Orient Energy (Siam) Ltd. assets over which the Bangkok Office has responsibility or interest. The operation of the Emergency Response Group is described in the previous sections of this manual.
- **Office Incident Response** for dealing with any incident which may affect the people or operation of the Bangkok Office.

The Emergency Response Group shall also respond to any Office Incident and co-ordinate the actions and activities required in order to deal with the office incident.

In order to ensure that the Emergency Response Group (ERG) can carry out both Emergency response and Office Incident response actions in an efficient and effective manner the ERG is required to carry out exercises and drills at regular intervals. These exercises and drills will be carried out in accordance with the plan shown in **Section 5.5**.

In order to test the effectiveness of the office emergency procedures and to ensure that all personnel based in the office are conversant with the office fire and emergency procedures there will be regular drills as shown in **Section 5.5** which will involve everyone in the office.

The Bangkok Office emergency and incident response procedures are contained in the following sections and the details require to be completed by the Administration Manager.

### 5.1 IDB Office Emergency Alarms and Actions

Fire and Evacuation Alarms for Rasa Tower II are: **Ringing Bells!! or**

**'Whistle Blowing' proceeded by Shouting**  
**'Fire', 'Fire', 'Fire'.**

### 5.2 Evacuation Procedure

All personnel shall follow the following procedure on hearing the alarm. All personnel will be trained and exercised in the procedures to follow in the event of an incident in the office require the office to be evacuated.

#### 5.2.1 General

All personnel are to observe emergency alarm and proceed immediately to the Muster Point at the SCB side of the building at Road Level.

See Attachment 18 – RASA TOWER II FIRE / EVACUATION

In the event of a person discovering a fire or smoke they must activate the fire alarm by alerting the Reception or the Administration manager.

Pan Orient occupies the 17<sup>th</sup> Floor in the Rasa Tower II building. Fire Wardens have been appointed. All personnel must follow the instruction issued by a Fire Warden.

### 5.2.2 Fire Wardens and Duties

	Name	Duty
<b>Fire Warden</b>	Khun Noppadon	Operations Manager
<b>Alternate Fire Warden</b>	Khun Nunticha	Finance & Accounting Manager

### 5.2.3 Fire Warden – Roles and Responsibilities

The Fire Warden is responsible to the Emergency Response Group Leader for implementing the office emergency procedures. His/her duties are as follows:

- Ensure the safe evacuation of and accounting for all personnel from Rasa Tower II office.
- In the event of an emergency in the Office, the Fire Warden is responsible for the management of the incident/emergency. Alternate Fire Warden will carry the duties of Fire Warden in his/her absence.
- To ensure that all Employees, Contractors and visitors are familiar with the aspect of Office Emergency Procedure.
- To ensure that emergency drills are conducted in accordance with **Section 5.5** and personnel are trained to a level of competence as appropriate to their emergency responsibilities.
- Interface with Emergency Response Group for assistance and support and to co-ordinate the office emergency response with Emergency Response Group Leader.
- To mobilise external assistance from the local Emergency Services.
- To co-ordinate office response with that of the Emergency Services and provide them with information and assistance.
- To identify missing persons and make arrangements to locate any missing person or persons.
- In the case of an emergency, the Fire Warden should confirm the location and nature of the emergency.
- Confirm that it is safe for people to re-enter and resume duties in the office, arrange for "All Clear" signal, terminating the emergency.

### 5.2.4 Personnel in Office without Emergency Duties

#### Pre-Emergency

- Must remain alert at all times for situations, which have the potential to escalate into an emergency.
- Must read and observe office emergency response procedures posted on the Floor Notice Board

#### Emergency Actions

- Report any unusual situation to the Fire Warden or Administration Manager immediately; provides brief details.
- If observe an emergency situation raise alarm or seek assistance urgently; speak clearly and slowly.
- Remove yourself or any injured persons from any immediate exposure or danger.
- Ensure safety of other personnel and secure/isolate area.
- If safe and trained to do so, attempt to extinguish the fire using available resources.
- If alarm is raised, make your way to the Muster Point; remain there until given further instructions.
- If civil unrest/protest occurs, avoid the disturbance area if possible; do not confront, aggravate or interfere with protestors.

#### Office Personnel receiving Visitors:

- It is the responsibility of POE office based staff to take care of their visitors at all times and not to allow them to move around the office unescorted.
- In the event of an alarm he/she must escort the visit to their Muster Point and ensure the Floor Fire Warden accounts for the visitor.

#### Contractors working in the Office:

- It is the responsibility of the engaging departments to ensure that Contractors working are made familiar with the office emergency procedures and the actions they are to follow.

### 5.3 End of Emergency

Prior to demobilising the Emergency Response Group the ERG Leader must ensure that the following issues are be considered:

- Confirm that the emergency is concluded.
- What resources are required for recovery?
- Issue of final information release, notification and stand down to all those notified or involved in the emergency response.
- De-brief all personnel involved in the emergency situation and gather all logs and records.
- Close down additional security arrangements
- Continuing counselling for those involved in the emergency
- Compile and file all documents relating to the response
- Initiate investigation into the emergency.
- Initiate a review of the effectiveness of and lessons learnt from the emergency response.
- Recommend revision of Emergency Plans as required.



#### 5.4 Emergency Response Group Training and Drills

Drill/Exercise Type	Frequency	Who	Remarks
ERG & IRT Exercise	Alternate 2 monthly x 1 hour	All ERG & Support personnel.	Desktop exercise to test responses to a specific incident. Test call out system.
Combined Company wide emergency response exercise	Annually x 3-4 hours	Corporate Office, ERG and a remote location.	Scenario based real time exercise to test effectiveness of the combined Corporate Office & ERG response to a specific incident. Test all call out systems. Test effectiveness of Crisis and Emergency Response procedures.
Office Fire Drill	6 monthly x 30 minutes	All personnel & visitors in the office	All personnel proceed to muster points. Test Office emergency response procedures.

#### 6.1.2 Administration Co-ordinator with I.T. Officer

##### Pre-planning:

- Ensure backup and recovery IT requirements are in place (hardware, systems, data and information) for all functions.
- Align backup office facilities with requirements, monitor and implement changes.
- Ensure appropriate protection is in place against system failures (e.g. Virus protection, Firewall requirements etc).
- Ensure roles of outsource companies are defined and agreed.
- Ensure that all Bangkok Office staff are contacted and given instruction on how they are to proceed.

##### Actions:

- Establish communications systems for ERG and critical business functions
- Re-route or enable alternative, telephone numbers, holding messages, e-mail, network, and fax.
- Obtain required data, information and systems for backup as/if required.
- Liaise with staff at backup facility and/or the outsource contractors.
- Mobilise IT support personnel.
  - Establish disaster recovery requirements.
  - Provide assistance and instruction to core business functions.
  - Arrangements for hardware/software and communications links to enable home working where necessary.
  - Review re-routing of Bangkok Office e-mails.
  - Identify and establish alternative contact numbers for business units.
  - Assess need for additional alternative office facilities, identify contacts
  - Co-ordinate provision of instruction to all staff in the event of office evacuation and provide support for transport, cash loans etc
  - Liaise with department managers to ensure ongoing provision of information and instruction for staff and contact all Staff to provide basic instruction or delegate to department management.
  - Establish trauma counselling if required.

#### 6 BANGKOK OFFICE INCIDENT

In the event of an incident that affects the Bangkok Office it may render the Office unavailable through, for example: -

- Evacuation of the Office Building (s)
- Denied Access
- Partial destruction/failure of business systems

In such cases the ERG function is to act as the Incident Response Team and in the short term is to manage and co-ordinate the continuation of essential business functions and in the medium term to facilitate the restoration of all elements of the business.

Call out of the ERG will follow the established procedures and the ERG Leader will decide on the location for the ERG to convene. In the event that the Bangkok Office is totally unavailable alternative facilities will be brought into use.

In the event that the Bangkok Office is evacuated the ERG Leader should be contacted and the response co-ordinated through mobile phones. The basis for communication is through observance of the preparatory actions listed in the checklists.

A summary checklist is included below.

#### 6.1 Emergency Response Group (ERG) Business Recovery Actions

The principal actions for each of the ERG members are listed below; the points are included to complement the ERG Member Roles and Responsibilities listed below.

##### 6.1.1 Emergency Response Group Leader

##### Pre-planning:

- Familiarise with Alternative Business Location

##### Actions:

- Assess extent of non-availability of the Office, duration of unavailability and the need to use alternative ERG location.
- Decide if/where ERG should convene.
- Ensure that the necessary ERG members are present and identify any additional needs
- Ensure the identified critical business functions are able to function
- Ensure all department managers are contacted to establish how secondary needs are being addressed.
- Ensure communication is made with appropriate staff.
- Ensure all external parties are contacted as appropriate.
- Ensure overall business recovery strategy is in place and is being effective

#### 6.1.3 Administration Co-ordinator Bangkok

##### Pre-planning:

- Liaison with authorities (City Authorities, Police, Government Departments etc.)
- Familiarise with alternative facilities.
- Conduct exercises and awareness initiatives.

##### Actions:

- Liaise with ERG Leader to call out ERG and Support personnel.
- Ensure safety and security procedures for alternative office.
- Liaise with appropriate authorities.

#### 6.1.4 Country Manager

##### Pre-planning:

- Ensure contact data for external support and department staff is maintained off-site (Media contact, call-out and contact list etc)
- Ensure necessary Legal and Contractual data and information to support the Business Recovery is backed up offsite

##### Actions:

- Review the need for a Media Release and if necessary establish general Media statement
- Liaise with IT to establish communications and external enquiry room
- If necessary establish 'Media Room' and management of Media.
- Monitor media response to the incident.
- Provide Legal Advice to Business Recovery/ERG on key actions.
- Review the statutory obligations.
- Advise on and initiate contacts with Joint Venture Partners.

#### 6.1.5 Finance Co-ordinator

##### Pre-planning:

- Arrangements for securing cash for Business Recovery work
- Ensure key contact data is kept off-site for insurers and support staff
- Ensure key policy information is available off-site.

**Actions:**

- Provide support to Business Recovery activities requiring cash transfers.
- Review insurance implications of the incident.
- Liaise with Corporate Finance Co-ordinator.
- Ensure remedial actions taken are acceptable on insurance terms.
- Ensure that appropriate records are kept for recovery of losses, increased costs of working etc.
- Support ERG to procure goods and services as part of Business Recovery

**6.2 All ERG & Support Team Members**

In the unlikely event of a concurrent Bangkok Office incident and a Remote Location incident the ERG function should be performed at the alternative office site.

The ERG Members together with the General Manager must ensure that the information required to support the ERG is backed up at the alternative office.

**6.3 Checklist for Business Recovery**

BUSINESS RECOVERY CHECKLIST		
	ACTIONS	Responsibility
1	Assess the ERG size and scope requirements for business continuation and identify an alternative address for CRT.	ERG Leader
2	Call-out ERG	ERG Leader
3	Contact the critical business functions and department representatives as per the Disaster Recovery Plan.	ERG Leader
4	Make alternative arrangements for critical business functions, CRT and other functions; if necessary involve alternative facilities as set out in the Business Recovery Plan.	Admin Co-ordinator
5	Ensure effective communications are in place for all individuals and locations.	I.T.
6	Acquire back-up CD's and files and establish the hardware/software facilities at the alternative facilities for critical business functions.	I.T.
7	As soon as the alternative facilities are operational, call-out the critical business functions.	ERG
8	Assess the duration for non-availability of the Bangkok Office and consider to rent alternative office space for all other office users.	ERG
9	Arrange hardware/software facilities for essential staff who are able to work from their home address (PC Rental)	I.T.
10	Inform all office users about the situation	Admin Co-ordinator
11	Inform all other Business Units of the situation	Operations Technical Co-ordinator(s)

**ATTACHMENT 1 - INCIDENT SITUATION UPDATE PROCEDURE CHECKLIST**

The ERG Leader should conduct formal updates on at regular intervals to all members of the ERG and Support personnel.

Updates should normally be held once a week. The ideal duration of an update should be no more than 15 minutes.

**Procedure**

- ERG Leader gives a 10-minute notice.
- All ERG and Support personnel to attend.
- All telephones in the Emergency Co-ordination Centre (except the ERG telephone line) are diverted to the Reception and instruction given to hold all calls until Update is over.
- Inform IRT of the update meeting.
- Commence update with operations brief on the latest state of incident.
- Follow with short statements from all the ERG members giving the latest situation update and actions from their own area of responsibility.
- Clarification of points of fact, if required, following each statement.
- Update completed. Individual ERG members revert to carrying out their actions.
- Telephone lines diverted back to Emergency Co-ordination Centre.
- Recorder to make a summary of the update / prepare and issue with copies to all ERG members. One copy to be retained on the central incident log.

**ATTACHMENT 2 – EXTERNAL CONTACTS CHECKLIST**

Agencies to be Contacted	Date / Time Contacted
• Other Countries / Operations	
Government	
• Thailand	
• Local	
Airlines	
Contractors (i.e. Oil Spill Contractors)	
Consulate(s)	
Consultants	
Customers	
Embassies/ High Commissions	
Environmental Agencies	
Financiers	
Foreign & Commonwealth Office (FCO)	
Hospitals/ Medical Agencies	
Insurers	
Joint Venture Partners	
Lawyers	
Other Oil Companies	
Pressure Groups	
Police	
Security Consultants	
Specialists	
Suppliers	
Others	

**ATTACHMENT 3 - KIDNAP AND EXTORTION CHECKLIST**

This checklist supplements the normal ERG checklists where Kidnap or other extortion is occurring or is possible.

Kidnap And Extortion Checklist	
	Responsibility
1. Call-out Emergency Response Team <ul style="list-style-type: none"> <li>- ERG Leader</li> <li>- HSE Co-ordinator</li> <li>- Administration Co-ordinator Bangkok</li> <li>- Drilling Operations Co-ordinator</li> <li>- Production Operations Co-ordinator</li> </ul>	ERG Leader
2. Establish secure communications link with IRT	ERG Leader
3. Ensure secure meeting room for ERG.	ERG Leader
4. Maintain effective logs	All
5. Establish: <ul style="list-style-type: none"> <li>- The current situation</li> <li>- The political and operational background</li> <li>- If any contacts or demands have been made by the instigators.</li> <li>- Who is aware of the incident <ul style="list-style-type: none"> <li>• Government</li> <li>• Security Forces/Police of country</li> <li>• Canadian Embassy/High Commission</li> <li>• Local employees</li> <li>• Relatives</li> </ul> </li> <li>- What the country's policy is concerning negotiation with kidnappers etc.</li> </ul>	ERG
6. Notify General Manager	ERG Leader
7. Notify Corporate Office and pass on details	ERG Leader
8. Evaluate the situation <ul style="list-style-type: none"> <li>- Is there positive evidence of kidnap?</li> <li>- How reliable is the available information?</li> <li>- Are the instigators known to be criminals, psychopaths or terrorists?</li> <li>- What are the likely future actions of the instigators?</li> <li>- What is the risk? <ul style="list-style-type: none"> <li>• What threats have been made? Likely to be carried out?</li> <li>• Is there a threat to life - hostage or others?</li> <li>• Are other employees/families at risk?</li> <li>• What is the business risk?</li> <li>• What is the local Government likely to do if you negotiate?</li> </ul> </li> </ul>	ERG
<ul style="list-style-type: none"> <li>- Need for containment of information</li> <li>- Is containment of information possible, likely to last and appropriate?</li> <li>- What time scale may the Company have to work to?</li> <li>- What is likelihood rescue?</li> <li>- What attitude is local Government likely to take?</li> <li>- What are the immediate implications on operations?</li> </ul>	ERG

**Kidnap And Extortion Checklist**

	Responsibility
11. Confirm Company objectives <ul style="list-style-type: none"> <li>- Remove threat to life</li> <li>- Display Company's determinations to show firm resolves and remain a responsible corporate citizen.</li> </ul>	ERG Leader/ Corporate Office
12. Advise ERG on local laws and potential liabilities relating to communication and negotiation with kidnappers etc. and other liabilities.	Legal Counsel
13. Consider basic Company policies/strategies <ul style="list-style-type: none"> <li>a. Response</li> <li>b. Control/secretcy</li> <li>c. Risk</li> </ul>	Corporate Office
14. ERG Leader to take instruction from Corporate Office.	ERG Leader
15. Discuss options with the Corporate Office (remember security). Confirm roles, powers and delegated authority of both the ERG and the IRT. <ul style="list-style-type: none"> <li>- Who is to be the ultimate Decision Maker?</li> <li>- Who is to conduct any negotiations?</li> <li>- Who will make up the Negotiating team locally?</li> <li>- Is additional support required in Country?</li> </ul>	ERG Leader
16. Decide basic policies and initial way ahead. How much is to be pro-active, and how much sit-and-wait?	Corporate Office
17. If agreed by Corporate Office, notify national Police/Security forces if not already aware.	ERG Leader
18. Take all other actions as instructed by Corporate Office	ERG Leader

**ATTACHMENT 4 - EVACUATION CHECKLIST**

This checklist supplements the ERG checklists in an Evacuation situation.

It is unlikely that a total or partial evacuation from a country will occur without prior knowledge of a deteriorating situation. Routine monitoring should ensure that a planned and controlled evacuation is possible. The ERG must however be prepared to respond to an evacuation at little or no notice if the unexpected should happen.

Evacuation Checklist	
	Responsibility
1. Call-out ERG. In a potential evacuation situation the ERG is likely to require conducting many of the lower level roles normally associated with the IRT.	ERG Leader
2. Establish communications with the IRT. If communications are not possible, best use must be made of alternative sources, e.g. FCO, Embassies, other companies, airlines etc.	ERG Leader
3. Establish: <ul style="list-style-type: none"> <li>- The current situation locally <ul style="list-style-type: none"> <li>• Political</li> <li>• Security</li> <li>• Operational sites/equipment</li> <li>• And other offices</li> </ul> </li> <li>- The current alert state</li> <li>- The expected rate of change in the situation</li> <li>- The immediate plans and intentions of the local management</li> </ul>	ERG
4. Confirm objectives: <ul style="list-style-type: none"> <li>- Safety of and associated personnel and their families.</li> <li>- Safety of property and operations.</li> <li>- Maintenance, where possible, of good relationships with the host government.</li> </ul>	ERG
5. Confirm the responsibilities of the General Manager/ERG in relation to the Corporate Office at this stage.	ERG Leader
6. Is additional professional advice required at this time? Does the ERG have the right people available to it?	ERG
7. Evaluate the situation. <ul style="list-style-type: none"> <li>- How reliable is the available information?</li> <li>- What is the threat to personnel and their families?</li> <li>- What is the threat to contractors and their families?</li> <li>- What is the threat to operations/equipment?</li> <li>- What are the threat to and other associated offices?</li> <li>- What are the implications of Company's relationships with the host Government?</li> </ul>	ERG
8. What is the likely change in events <ul style="list-style-type: none"> <li>- in the next few hours.</li> <li>- over the next few days.</li> <li>- over the next two weeks and more.</li> </ul>	ERG

**Evacuation Checklist**

	Responsibility
9. If the decision has already been taken to evacuate all or part of the community: <ul style="list-style-type: none"> <li>- How is this to be done?</li> <li>- Who is leaving?</li> <li>- Where are they going?</li> <li>- What arrangements are being made by the IRT?</li> <li>- What arrangements need to be made by the ERG?</li> <li>- What is happening to active operations?</li> <li>- What is to happen to offices?</li> <li>- What is to happen to confidential documents?</li> </ul>	ERG
10. ERG makes necessary evacuation arrangements. If possible, keep HR ERG informed. <ul style="list-style-type: none"> <li>- Flight bookings.</li> <li>- Charter aircraft.</li> <li>- Ship bookings.</li> <li>- Other transport.</li> <li>- Reception party at local arrival point.</li> <li>- Reception party in arrival Country</li> <li>- Accommodation at local arrival area.</li> <li>- Accommodation in arrival Country</li> <li>- Clothing, cash, immediate needs.</li> <li>- Keep Next-of-Kin or Expatriate based (extended) families informed.</li> <li>- Make necessary arrangements for families to meet evacuees.</li> <li>- Consider safety and welfare of any employees/contractors and families remaining in country.</li> <li>- Safety and welfare of national employees.</li> <li>- Protection of residences, offices and other property.</li> </ul>	Admin Co-ordinator
11. If no decision to evacuate yet, ERG should: <ul style="list-style-type: none"> <li>- Consider arrangements that could be required</li> <li>- Conduct advance planning for transport, accommodation, greeting parties etc.</li> <li>- Keep families outside of affected country informed.</li> <li>- Keep employees updated.</li> <li>- Maintain communications with IRT.</li> </ul>	Admin Co-ordinator
12. Once evacuation has started: <ul style="list-style-type: none"> <li>- Implement agreed actions.</li> <li>- Monitor evacuation progress.</li> <li>- Maintain communication with ERG as long as possible</li> <li>- Keep families informed</li> <li>- Keep employees informed</li> <li>- Provide PR advice to employees and family</li> </ul>	ERG
13. Establish Media policy. Prepare immediate defensive Press Statement for use if media enquire about the evacuation and its effects upon business.	Admin Co-ordinator
	ERG Leader
	ERG

Evacuation Checklist	
	Responsibility
14. Consider broader implications <ul style="list-style-type: none"> <li>- Impacts on Company's operations, image and liabilities</li> <li>- Impacts on trading, oil sales and cash flow.</li> <li>- Relationships with host government</li> </ul>	ERG
<ul style="list-style-type: none"> <li>- Likelihood of commercial or other sanctions</li> <li>- Effect on the current and longer term trading position of the Company in the affected country.</li> <li>- How entry back into the country might be effected</li> <li>- Effects on employee morale (local, national, company wide)</li> </ul>	
15. Consider legal and other potential liabilities relating to the evacuation	Legal Counsel

## ATTACHMENT 5 – MEDIA HOLDING STATEMENT

Date:  
Press Release No 1  
Time:

Pan Orient Energy (Siam) Ltd. regrets to confirm that an incident – (describe in broadest terms) –

occurred at – (site/location) –

at – (time) –

today/yesterday – (date)-.

Pan Orient Energy (Siam) Ltd. has mobilised its Emergency Response Teams, and is working closely with the Local Emergency Services and is in contact with the relevant authorities.

Details of the incident are not yet confirmed, but every action is being taken to safeguard lives and the environment.

A further statement will be issued as soon as more information becomes available.

Direct enquiry lines have been established as follows:

Media \*\*\*\*

Relatives \*\*\*\*

Notes for Editors:

## ATTACHMENT 6 – INITIAL STATEMENT TO STAFF

**Note:** To be sent by electronic mail to all within the Bangkok office, and to all Pan Orient locations and offices.

From ERG Leader, (name of location)

Date

Time

INCIDENT REPORT

All staff should be aware that an incident has occurred at (place) at (time)

today/yesterday.

(Briefest description of incident, e.g. The Installation is on fire following an explosion).

The local Incident Response Team and the Emergency Response Group in (location name) are taking necessary action.

More information will be made communicated, as it becomes available. In the meantime any staff member approached for information by outside sources should refer them to the ERG Media Information Group in (location tel. No.xxxxx)

ERG Leader (Name/Location)

## ATTACHMENT 7 – FIRST TO ARRIVE PROCEDURE

The steps described in this procedure are to be used by the first person arriving in the Emergency Co-ordination Centre. A package of equipment and documents are ready and available for the first to arrive in the Emergency Co-ordination Centre.

- First person to arrive in the Emergency Co-ordination Centre is to assume the roles and duties of the ERG Leader. The 2nd person to arrive is to assume the role of Recorder (unless this person is the designated ERG Leader).
- Set-up the first telephones in the dedicated slots of the Emergency Co-ordination Centre table, set-up the Status Boards.
- Establish contact the IRT Leader at the emergency site and confirm latest details on the emergency and support requested.
- Ensure that the holding statement to press and initial statement to staff is issued by the local office.
- Fax the unlisted ERG telephone numbers to the affected IRT only.
- Make preparations for initial statement to all office staff.
- Make preparations for holding statement to press.
- Make personal notes of all calls and actions.

This procedure and further guidance on the use of the Emergency Control facility and equipment are available in the Emergency Co-ordination Centre.

## ATTACHMENT 8 - RECEPTION STANDING INSTRUCTION

- All Visitors should be received at the reception.
- Restrict all access to card / pass / permission holders.
- Exercise extra caution during emergency situations.
- Always ensure company assets / personal property and valuables are secured and protected.
- Confidential things should be kept in a secured place.
- The receptionist on duty should inform to concern department to receive the visitor and inform the visitor to wait in the reception till a responsible person arrives.
- Reception to ensure not to leave the visitors to wander around alone.
- Identify strangers and report to Administration Manager

## ATTACHMENT 9 - ERG AND SUPPORT PERSONNEL LIST

### Emergency Response Group Leaders Drilling

**Operations Technical Co-ordinators Production**

**Operations Technical Co-ordinators Health.**

**Safety & Environment Co-ordinators**

Administration Co-ordinators Bangkok

**Production Foreman Kam Paeng Sean**

Public Affairs Co-ordinators

### Recorders

### Receptionists

**ATTACHMENT 10 - TELEPHONE CALL RECORD**  
(Use One Page Per Call)

<b>Call Taken By:</b>	Extension No:		Date:	Time:
<b>Call Source:</b> Government: <input type="checkbox"/> Media: <input type="checkbox"/> Employee <input type="checkbox"/> Employee Family: <input type="checkbox"/> Public <input type="checkbox"/> Assistance Offer: <input type="checkbox"/> Other: <input type="text"/>				
<b>Caller details:</b>				
Name:				
Title/Relationship:				
Organisation/Department:				
Phone Number:		Fax Number:		
Message For:			Return Call By:	
Message/Information Request:				
<b>Action Required:</b>	Call Back <input type="checkbox"/>	Send Fax <input type="checkbox"/>	Wants To See You <input type="checkbox"/>	Will Call You <input type="checkbox"/>
<b>Action By:</b>			Date:	Time:

## ATTACHMENT 11 – GENERAL NOTIFICATION

<b>NOTIFY</b>						(Circle either Notifying or, Updating Emergency Information)							<b>UPDATE</b>
<b>Location</b>				<b>No:</b>		<b>Date:</b>			<b>Time:</b>				
<b>Priority</b>		<b>Urgent</b>		<b>Immediate</b>		<b>Standard</b>							
<b>Emergency</b>		Medical <input type="checkbox"/>		Fatality <input type="checkbox"/>		Environment <input type="checkbox"/>		Natural Disaster <input type="checkbox"/>					
Oil Spill <input type="checkbox"/>		Marine <input type="checkbox"/>		Explosion <input type="checkbox"/>		Fire <input type="checkbox"/>		Aviation <input type="checkbox"/>		Extortion <input type="checkbox"/>			
Other: _____													
<b>Injuries</b>		No. Of Fatalities				No. Of Injuries		Serious		No. Of Minor Injuries			
<b>DO NOT LIST NAMES ON THIS FORM - Report names verbally to EC/ERG Leader</b>													
<b>Injuries This Report:</b>													
<b>Updated Weather Forecast:</b>		Dry <input type="checkbox"/>		Wet <input type="checkbox"/>		Windy <input type="checkbox"/>		Wind Direction			Wind Speed		
<b>Impact on Immediate Operations:</b>													
<b>External Assistance Mobilised:</b>		Govt. <input type="checkbox"/>		Mutual Aid <input checked="" type="checkbox"/>		External Agency <input type="checkbox"/>		Medical <input type="checkbox"/>		Police <input type="checkbox"/>		Fire <input type="checkbox"/>	
Other: _____													
<b>Forward Response Plan:</b>													
<b>Next 30 Mins:</b>													
<b>Next 6 Hrs:</b>													
<b>Next 12 Hrs:</b>													
<b>Last External Contact:</b>													
<b>Agency</b>	<b>Time</b>	<b>By</b>	<b>Agency</b>	<b>Time</b>	<b>By</b>	<b>Agency</b>	<b>Time</b>	<b>By</b>	<b>Agency</b>	<b>Time</b>	<b>By</b>	<b>Agency</b>	
Aviation			Govt.										
Medical													
Police													
<b>Response Room Incumbents: (Role and Person)</b>													
_____													
_____													
_____													
<b>Prepared by:</b>								<b>Approved by:</b>					
<b>Distribution:</b>		ERG											

## ATTACHMENT 12 – GOVERNMENT EMERGENCY NOTIFICATION

1. (a) Company Name:		Date:	Time:
(b) Address:		Ph:	Fax:
(c) (i) Vehicle Registration Number: (as applicable)			
(d) (i) Nature of Activity:			
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Emergency	Medical	Fatality	Environment
Oil Spill	Blowout	Explosion	Fire
Other:		Aviation	Natural Disaster
Extortion			
3. Description of the Incident:			
(a) Date:		Shift:	Time:
(b) Department:		Name:	Location:
(c) Summary of Incident:			
4. Emergency Measures Taken:			
5. Causes of Incident:			
- Known (specify)			
- Not Known			
- Information to be Supplied ASAP			
6. Nature and Extent of Damage:			
(a) Within the	No. Of Fatalities	No. Of Injuries	No. Of Illness
Location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persons Exposed to Incident			
Material Damage	Danger Still Present	Danger No Longer Exists	
(b) Offsite	No. Of Fatalities	No. Of Injuries	No. Of Illness
Persons Exposed to Incident	Damage to the Environment		
Material Damage	Danger Still Present	Danger No Longer Exists	
7. Data Available for Assessing Effects of the Incident on Persons and Environment:			
8. Corrective Actions and Follow up:			
(a) To Alleviate Medium or Long-term Effects			
(b) To Prevent a Recurrence			
(c) Any Other Relevant Information			

## ATTACHMENT 13 - SPILL NOTIFICATION

รายงานการหกรั่วไหลของน้ำมันและสารเคมี

## Spill Notification

ระดับของการหกรั่วไหล :	
Spill classifier :	
.....	น้อยมาก (น้อยกว่า 1 – 10 บาร์เรล) Housekeeping spill (< 1 – 10 bbl)
.....	น้อย (มากกว่า 10 – 50 บาร์เรล) Minor spill (> 10 – 50 bbl)
.....	ปานกลาง (มากกว่า 50 – 100 บาร์เรล) Significant spill (> 50 – 100 bbl)
.....	รุนแรง (มากกว่า 100 บาร์เรล) Major spill (> 100 bbl)
รายละเอียดของการหกรั่วไหล :	
Spill description :	
1. ชื่อ-สกุล ของผู้สังเกตการณ์	Spill observer .....
2. ประเภทของสารที่หกรั่วไหล	Material spilled .....
3. แหล่งกำเนิด สาเหตุ	Apparent source/ Cause .....
4. ผู้รับผิดชอบ	Responsible person/ Contractor .....
5. ระยะเวลาที่เกิดเหตุ	Date and time spill occurred .....
6. สถานที่เกิดเหตุ/ชื่อหลุม	Location of spill/ Wellsite name ..... N ..... E .....
7. ปริมาณการหกรั่วไหล (บาร์เรล)	Volume of discharge ..... barrel

8. ขนาดพื้นที่ที่หกรั่วไหล (ตารางเมตร)	Area size of spill .....
9. การหกรั่วไหลอยู่ในพื้นที่ ที่ ถักตักหรือไม่ (ใช่/ไม่ใช่)	Is spill contained? (Yes/ No) .....
10. มีปฏิกิริยาปล่อยแก๊สหรือไอ (ใช่/ไม่ใช่)	Is spill being released into water body? (Yes/ No) .....
11. สภาพอากาศขณะเกิด การหกรั่วไหล	Weather condition .....
12. ภาพถ่ายขณะที่เกิดการหกรั่วไหล (หากมี)	Photograph taken (if required) .....

ขั้นตอนการเก็บกู้ :	
Clean up procedure :	
13. จำเป็นต้องเรียกหน่วยงานภายนอก/ใช้อุปกรณ์หนักในการเก็บกู้หรือไม่ (ใช่/ไม่ใช่)	Is third party/ heavy equipment required to clean spill? (Yes/ No) .....
14. หากใช่ หน่วยงานเวลาที่เริ่ม	If yes, time third party/ equipment called out .....
15. เวลาที่ หน่วยงาน/ อุปกรณ์ มาถึงที่เกิดเหตุ	Time third party/ equipment arrived at scene .....
16. เวลาที่เริ่มการเก็บกู้	Time start of clean up .....
17. เวลาที่เก็บกู้เสร็จ	Time clean up completed .....
18. จำเป็นต้องมีการตรวจวัดการปนเปื้อนในดินหรือไม่ (ใช่/ไม่ใช่)	Is soil or water monitoring necessary, as per EIA requirement? (Yes/ No) .....
19. ปริมาณของดินที่ปนเปื้อน (ตัน)	Volume of contaminated soil ..... tons
20. ภาชนะบรรจุของเสียที่ปนเปื้อน	Container of stored waste .....
21. สถานที่จัดเก็บของเสียที่ปนเปื้อน	Location of stored waste .....

22. การกำจัดของเสียที่ปนเปื้อน	
Disposal of contaminated waste .....	
23. ภาพถ่ายหลังการเก็บกู้ (หากมี)	
Photograph after disposal taken (if required) .....	
ผู้บันทึกรายงาน :	โทรศัพท์ :
Prepared by :	Office phone :
บริษัท :	แฟกซ์ :
Company :	Fax :
ตำแหน่ง :	โทรศัพท์มือถือ :
Position :	Mobile phone :
ลายเซ็น :	วันที่ :
Signature :	Date :

## ATTACHMENT 14 - EMERGENCY RESPONSE LOG

[illegible]

**ATTACHMENT 15 – ERG AND SUPPORT GROUP STATUS BOARD**

Attachment 15 – ERG and Support Group Status Board		
ERG and Support Group Members	Called Out	Arrived
<b>Drilling Operations Technical Co-ordinator</b>		
Name		
<b>Production Operations Technical Co-ordinator</b>		
Name		
<b>HSE Co-ordinator</b>		
Name		
<b>Administration Co-ordinator Bangkok</b>		
Name		
<b>Production Foreman Kam Pheang Sean</b>		
Name		
<b>Recorder</b>		
Name		
<b>Reception</b>		
Name		

ATTACHMENT 16 – RASA TOWER II BUILDING FIRE / EVACUATION PLAN

**Tier 1**

- Persons discovering the fire to summon immediate assistance
- Notify Fire Warden
- Persons in the office of the fire are to take reasonable actions with the available equipment in the area to tackle the fire (only if safe to do so)
- All staff to proceed to the Elevator Area
- If anyone is injured give first aid, stay with the victim and shout for assistance
- Fire Wardens to assess status of fire

If fire is extinguished, return to normal

**Tier 2 (if Fire is deemed out of control, and threatens office floors)**

- The affected area must be sealed off
- Evacuate building – Fire Warden in charge
- Take only personnel valuables with you
- Do not use lifts/elevators
- Secure building until fire department arrives
- Muster count by Fire Warden, account for any missing persons
- Inform Fire Department on missing persons
- Fire Warden & General Manager to assess status of fire together with Fire Department

**Tier 3 (if office is on fire, personnel have been injured and major damage will result)**

- Assemble all staff to safe location

**Muster Point for Rasa Tower II Building    Opposite Building Road Level SCB side.**

## ATTACHMENT 17 - BOMB THREAT RESPONSE ACTIONS

### Response Actions - Bomb Threat

The person receiving the call will:

- Activate recording equipment if fitted and the threat is received by telephone.
- Adopt helpful attitude and be conciliatory.
- Make written notes using guidelines issued for that purpose - (see Appendix 17A).
- Report immediately to General Manager.

Management will assess the credibility of the threat and possible consequences and consider whether to:

- Do nothing, evacuate or stay and search.
- Notify law enforcement agencies/emergency services.
- Alert neighbouring business/residents.
- Implement emergency shut down procedures.

**Search (only if search is not a Police responsibility)**

Searches may be undertaken in response to a specific warning. Attention points:

- Know the police policy and role on search and evacuation.
- Prepare search plans in advance to ensure that premises are checked as quickly and effectively as possible.
- Divide the area into manageable-sized sectors.
- Form search teams familiar with the area.
- Define search priorities.
- Search in a logical and thorough manner so that no part of the sector is left unchecked.

**"Do not touch or move any suspicious object"**

### Suspicious Object

If a suspicious object is found:

- If possible leave a marker near the device.
- Inform the General Manager.
- Stay out of sight of the object at a safe distance (normally at least 25 metres) and report every possible detail to the General Manager.

## Evacuation

The decision to evacuate will be taken by management on the advice of the General Manager. The police will be consulted for advice:

- Evacuate as quickly and efficiently as possible using all available exits.
- Provide alternative routes to avoid the danger of passing close to any suspicious device.
- Consult neighbouring premises and emergency services.
- Gather all people in pre-designated "Assembly Areas" taking personal belongings with them.
- Check that everyone has left the premises

## ATTACHMENT 17A - BOMB THREAT CHECKLIST

- SWITCH ON TAPE RECORDER (IF CONNECTED)
- TELL THE CALLER WHICH TOWN/DISTRICT YOU ARE ANSWERING FROM
- RECORD THE EXACT WORDING OF THE THREAT

## ASK THESE QUESTIONS

- Where is the bomb right now?.....
- When is it going to explode?.....
- What does it look like?.....
- What kind of bomb is it?.....
- What will cause it to explode?.....
- Did you place the bomb?.....
- Why?.....
- What is your name?.....
- What is your address?.....
- What is your telephone number?.....

- ◆ RECORD TIME CALL COMPLETED.....
- ◆ KEEP TELEPHONE LINE OPEN
- ◆ WHERE AUTOMATIC NUMBER REVEAL EQUIPMENT IS AVAILABLE RECORD NUMBER
- ◆ INFORM THE GENERAL MANAGER

Time informed.....

THIS PART SHOULD BE COMPLETED ONCE THE CALLER HAS HUNG UP AND THE GENERAL MANAGER HAS BEEN INFORMED

Time and date of call.....

Length of call.....

Number at which call is received (Your extension number).....

## ◆ ABOUT THE CALLER

Sex of caller?.....Male ◆ Female ◆

Nationality?.....Age? ◆

## ◆ THREAT LANGUAGE

Well Spoken ◆ Irrational ◆ Taped ◆

Foul ◆ Incoherent ◆

Message read by threat-maker ◆

## ◆ CALLER'S VOICE

Calm ◆ Crying ◆ Clearing throat ◆

Angry ◆ Nasal ◆ Slurred ◆

Excited ◆ Stutter ◆ Disguised ◆

Slow ◆ Lisp ◆ Accent ◆

Rapid ◆ Deep ◆ Familiar ◆

Laughter ◆ Hoarse ◆

If the voice sounded familiar, who did it sound like? .....

## ◆ BACKGROUND SOUNDS

Street noises ◆ House noises ◆

Animal noises ◆ Crockery ◆ Motor ◆

Clear ◆ Voices ◆ Static ◆

PA system ◆ Booth ◆ Music ◆

Factory machinery ◆ Office machinery ◆  
Other (specify).....

## ◆ REMARKS

.....

.....

Signature.....Date.....

## Letter and Parcel Bomb Recognition Points

- Foreign mail, air mail and special delivery
- Restrictive markings such as confidential, personal etc.
- Excessive postage
- Hand-written or poorly typed address
- Incorrect titles
- Titles but no names
- Mis-spellings of common words
- Oily stains or discolourations
- No return address
- Excessive weight
- Rigid envelope
- Lopsided or uneven envelope
- Protruding wires or tinfoil
- Excessive securing material such as making tape, string etc.
- Visual distractions

## ATTACHMENT 18.- IRT MEDICAL EMERGENCY INFORMATION

Total number of injured persons			
Names of injured persons			
Present location of injured persons	Location		
	Crew		
	Hospital		
	Doctor/s Name		
	Phone		
	Fax		
Brief medical description			
Medical treatment given so far (on site, local hospital, etc.)			

## Other Emergency

Nature of the emergency.	
Location of the emergency.	
Assistance required	

ATTACHMENT 18A. IRT MAJOR EMERGENCY MEDICAL INFORMATION  
(Form to be completed by a Doctor)

1.	NAME OF CALLER a) Name: b) Telephone: c) Fax: d) Company:		
2.	NAME OF PATIENT a) Name: b) First Name: c) Age: d) Sex: e) Company	F / M	
3.	LOCATION OF PATIENT a) Country: b) Telephone: c) Address:		
1.	Has the patient been seen by a doctor?	Yes / No	
5.	Name of Doctor: Telephone Number:		
6.	Medical Condition:	a) Is the patient conscious b) Is patient agitated/confused c) Breathing problems d) Significant bleeding e) Chest pain f) Burns g) Fractures h) Abdomen pain i) Trauma j) Fever k) Vomiting/diarrhea/de-hydration l) Multiple/Serious/Head injury	Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No
7.	Comments:		



IN CASE OF AN ACCIDENT	
1. Date and time of accident	
2. Details of the accident (eg. Fall, traffic accident, etc)	
3. Is there any fracture?	Yes / No
A – probable	Yes / No
B – obvious	Yes / No
C – confirmed by x-ray	Yes / No
4. Localisation:	
A – skull	( )
B – face	( )
C – cervical column (neck).....level	( )
D – vertebral column	( )
E – ribs.....side.....how many	( )
F – pelvis	( )
G – upper limb left ( ) right ( )	( )
H – lower limb left ( ) right ( )	( )
I – other places	
5. Wounds. Are there any? Locate them, especially the ones located in the thorax and the abdomen; indicate their size and depth:	
6. Bleeding. Has there been profuse bleeding?	

IN CASE OF BURN				
1. Date and time of burn?				
2. Cause of burn:				
A – Explosion	( )			
B – Fire (flames)	( )			
C – Chemical products	( )			
D – Others (specify)	( )			
3. Localisation and degree of the burn:		1 <sup>st</sup> deg	2 <sup>nd</sup> deg	3 <sup>rd</sup> deg
A Face				
B Neck				
C Thorax				
D Abdomen				
E Left arm				
F Right arm				
G Left leg				
H Right leg				
4. Time of the first treatment:				
5. When did patient last pass urine:				

IN CASE OF ILLNESS	
1. Date of first symptoms:	_____
2. Presumed diagnosis of this illness	_____
3. Temperature	_____
4. Spontaneous respiration:	Yes / No
If Yes: normal	( )
laboured	( )
5. Respiratory rhythm:	regular ( )
Irregular	( )
6 Artificial respiration	effective ( )
ineffective	( )
7 Number of respiratory movements per minute:	_____
8 Colour of the nails, lips, ears:	
White ( ) Pink ( ) Black ( )	
9 Does the patient cough?	Yes / No
10 Does the patient cough up sputum?	Yes / No
11. Does the patient cough up blood?	Yes / No
12. Has a thorax x-ray been carried out?	Yes / No
If so, results:	_____
13. Blood pressure	_____
11. Pulse rate	_____
15. Has the patient urinated?	Yes / No
16. If yes, how much per 24 hour?	_____
17. Are the extremities cold? (hands, feet, ears)	Yes / No
18. Is he paralysed?	Localisation:
A right arm	( )
B left arm	( )
C right leg	( )
D left leg	( )
E respiratory	( )
19. Is the patient agitated?	Yes / No
20. Is the patient conscious?	Yes / No
21. Is the patient in a coma? If so, time/date coma began	_____

22. The pupils are:	Right	A normal ( )	Left	A normal ( )
		B dilated ( )		B dilated ( )
		C contracted ( )		C contracted ( )
23. Is patient in pain?				
If so, localisation and degree?	Yes / No			
21. Has patient had malaria?	Yes / No			
25. Is patient diabetic?	Yes / No			
26. Does patient vomit?	Yes / No			
27. Does patient have diarrhea?	Yes / No			
28. Does patient have intestinal bleeding?	Yes / No			
29. Is there any other bleeding?	Yes / No			
If so, where?	_____			
30. Is patient a psychiatric patient?	Yes / No			

ALL CASES TREATMENT ALREADY GIVEN	
1. Has the patient been operated on? If so, indicate nature and result of the operation:	Yes / No
2. If fracture, how has it been immobilised?	Yes / No
3. Is the patient on drip? Nature of infusion	Yes / No
4. Treatment initiated – present medications	
5. Does the patient need blood?	Yes / No
6. If known, blood type:	
7. Give any other useful, precise details on the nature of the illness and the patient's condition:	
8. Was the patient suffering from an illness known previously?	
9. Were laboratory tests carried out? If so, which one and state results:	
10. Has the patient been given with any Medicine/ Drugs ? If so give details	

## ATTACHMENT 19 - FIELD INFORMATION REQUIRED FOR PROPERTY OR ENVIRONMENT DAMAGE

Name and location of the rig/crew/workshop/other place	
Date and time of the accident	
Description of the accident	
Number of personnel at the location	
Extent / number of casualties (see above)	
Detail of equipment down	
Evacuation / rescue requirements	
Extent of loss	
Action being taken to control losses	
Any external assistance participating	
Weather Conditions if applicable	
Has the client been informed?	
Client contact person and telephone number for this event	
Extent of nature of Environmental damage	
Immediate actions taken to contain the environmental damage.	

## ATTACHMENT 20A - BANGKOK AREA HOSPITALS



Pan Orient Energy (Siam) Ltd.

## Bangkok Area Hospitals

## Recommended Hospitals

**1 Samitivej Hospital**  
133 Sukhumvit Klongtan Nua,  
Vadhana, Bangkok

Tel: 0-202-2222

**2 Vibhavadi Hospital**  
51/3 Ngamwongwan Rd.,  
Jatujak, Bangkok

Tel: 0-2561-1111

**3 Bangkok General Hospital**  
2 Soi Soonvijai 7, New Petchburi Rd.,  
Bangkapi, Huay Khwang, Bangkok

Tel: 0-2310-3000

**4 Bumrungrad Hospital**  
33 Sukhumvit Soi 3 (Soi Nana Nua),  
Wattana, Bangkok

Tel: 0-2667-1000

## Local Hospital (Closest to site)

**1 Vibhavadi Hospital**  
51/3 Ngamwongwan Rd., Jatujak, Bangkok

Tel: 0-2561-1111

(Closest hospital to rig site with  
International standards avoiding traffic  
delays in central Bangkok)

**2 Mongkutwattana General Hospital**  
34/40 Chaeng Wattana Rd.,  
Thung Song Hong, Luk si, Bangkok

Tel: 0-2574-5000-9

**3 Rangsit General Hospital**  
733/345 Phahonyothin Rd,  
Khu Khot, Lam Luk Ka District,  
Pathum Thani

Tel: 0-2998-9999

**4 Nonthavej Hospital**  
30/8 Ngamwongwan Rd.,  
Bang Khen, Muang, Nonthaburi

Tel: 0-2596-7888

## ATTACHMENT 20 - IMPORTANT TELEPHONE NUMBERS

Organization	Service/Supplier	Position	Phone	Mobile	Fax	After Hour
POES	Bangkok Office	General Manager	02-937-1138-40 # 23	084-975-8222	02-937-8841	084-975-8222
		Operations Manager	02-937-1138-40 # 18	089-892-6805	02-937-8841	089-892-6805
		Finance & Accounting Manager	02-937-1138-40 # 24	090-888-6659	02-937-8841	090-888-6659
		Refinery Team	-	090-888-6638	-	090-888-6638
		Procurement/Contract Logistics & Inventory Supervisor	02-937-1138-40 # 19	090-888-6643	02-937-8841	090-888-6643
		EIA & Government Liaison Coordinator	02-937-1138-40 # 20	081-923-2583	02-937-8841	081-923-2583
		IT Officer	02-937-1138-40 # 12	090-888-6657	02-937-8841	090-888-6657
		Field Operations Engineer	-	090-888-6649	02-937-8841	090-888-6649
		Production Supervisor	-	091-379-7501	02-937-8841	091-379-7501
		Production Foreman	-	090-888-6640	-	090-888-6640
Pan Orient	KPS Field	Production Helper	-	090-888-6641	-	090-888-6641
		BMV Officer	-	081-916-5152	-	081-916-5152
		Mechanic	-	084-752-5335	-	084-752-5335
		Electrical & Instrument Engineer	-	090-888-6653	-	090-888-6653
		CFO	+1 403-294-1777 # 233	+1 403-294-1780	-	-
		DMF Office	DMF	Onshore Production Engineer Group (Mr. Puvrarak)	02-794-3377	089-969-8141
		HSE Group (Mr. Winaret)	02-794-3390	081-838-8917	02-794-3362	081-838-8917
		Drilling Rig Company	ELITE Drilling	Rig – Radio Room	-	085-4099-291
				Rig Manager	-	083-132-8828
				Medical Support	-	089-525-7680
Mod Logging	International Logistics	President	02-158-2688-90	081-838-6803	02-158-2687	081-838-6803
		Managing Director	02-158-2688-90	081-838-5959	02-158-2687	081-838-5959
		Thailand Manager	02-455-4955	081-917-3684	02-455-4955	081-917-3684
		Country Manager	02-284-2918-3	081-854-2377	02-284-2914	081-854-2377
		Country Manager	02-512-1074, 512-3611	081-896-9056	074-334-609	081-896-9056
		Singkhli	074-334-609	-	02-512-1078	-
		Phonabok	055-759-6119	-	055-719101	-
		Managing Director	02-379-4388-1	081-855-6945	02-379-1485	081-855-6945
		Thailand Manager	02-537-8788	081-896-4251	02-937-8788	081-896-4251
		CEO	02-512-7079	081-826-1738	02-532-1117	081-826-1738

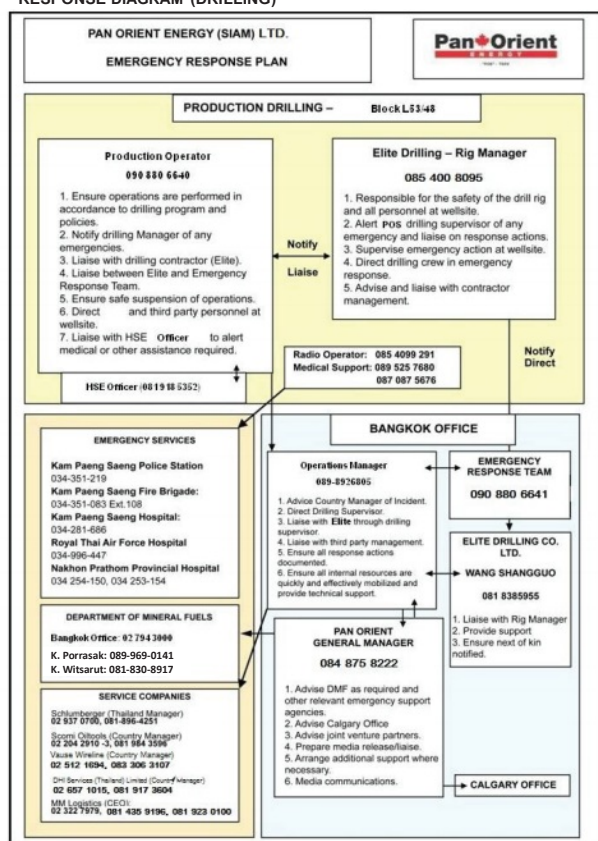
ATTACHEMENT 20B – KAM PAENG SAEN (L53/48) EMERGENCY CONTACT NUMBERS AND LOCAL EMERGENCY SERVICES

Name	Contact Number	Emergency Service Capabilities										
		Doctor/Experts	Nurse	Others Staff	ER	OR	Burn Unit	Portable Resuscitation Unit	Ambulance	On call 24 hrs	Vaccine Serum	No. Beds
Thung Luk Nok Health Center	034-375-053	No Doctor	GN =1	Pub= 2	No	No	No	No	No	- Nurse	No serum	2
Nong Jik Health Center	034-375-027	No Doctor	GN =1	Pub= 2	No	No	No	No	No	- Nurse	No serum	2
Nong Kaman Health Center	034-997-259	No Doctor	GN =1	Pub= 2	No	No	No	No	No	- Nurse	No serum	2
Kam Paeng Saen Hospital	034-281-686	Ortho = 0 Surgery = 0 Occ = 0 GP = 4	GN =100	N/A	1	1 Day Time only	No	Yes at Ambulance and hospital	3	Nurse at ER = 4 Doctor = 1	Yes	60
Jan Ta-Ru-Bok-Sa Hospital (Royal Thai Air Force Hospital)	034-996-447-52	Ortho = 2 Surgery = 4 Occ = 1 GP = 3	GN =100 Occ = 2	Asst. Occ N = 2	1	3 24 hrs	No	1	3*	Doctor = 3 Nurse = 3	Yes	200

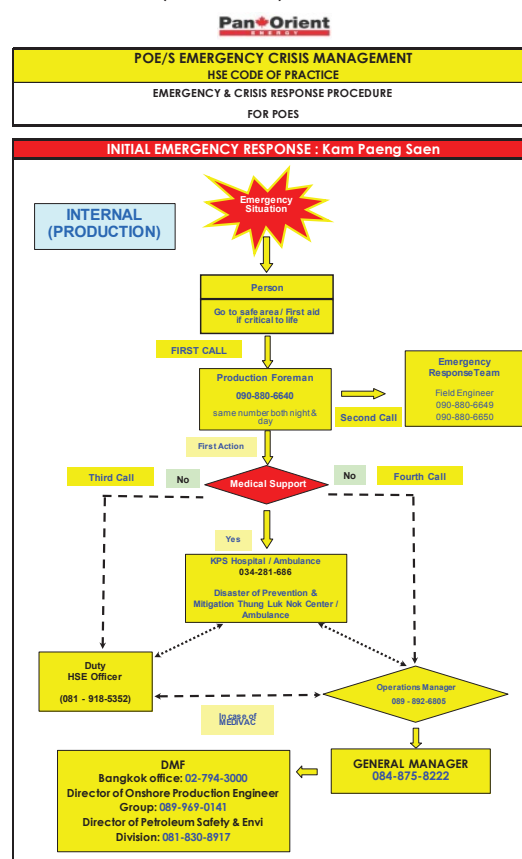
ATTACHEMENT 20B – KAM PAENG SAEN (L53/48) EMERGENCY CONTACT NUMBERS AND LOCAL EMERGENCY SERVICES (Continued)

Name	Contact Number	Distance from L53-A	Emergency Service Capabilities									Other equipment
			No. of fire truck	Water truck	Foam	Hose	Fire extinguisher	SCBA	Fire Suit	Officer		
Kam Paeng Saen Police Station	034-351-219	14.7	-	-	-	-	2	-	2	110		Communication device available for police network
Kha Threep Police Station	034-383-036-7	19.7	-	-	-	-	1	-	1	51		Communication device available for police network
Kam Paeng Saen Municipality, Fire Brigade	034-351-083 Ext.108	12.7	3 x 1,000 L 4 trucks with no water	1 x 1,000 L	-	7	200	0	2	7		1 of Portable Fire pump

ATTACHMENT 21 - EMERGENCY RESPONSE PLAN  
ATTACHMENT 21A, KAM PAENG SAEN (L53/48) EMERGENCY RESPONSE DIAGRAM (DRILLING)



ATTACHMENT 21B, KAM PAENG SAEN (L53/48) EMERGENCY RESPONSE DIAGRAM (PRODUCTION)



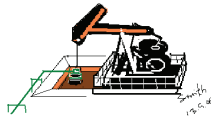


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## PAN ORIENT ENERGY (SIAM) LTD.

## PAN ORIENT ENERGY (SIAM) LTD.

# EMERGENCY RESPONSE PROCEDURES



(Updated 27 May, 2016)

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 1

# EMERGENCY RESPONSE PROCEDURES

(Included; Oil Spill Contingency Plan, Fire Plan and First Aid Plan)

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 2

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### Document Issue Record

Position	Location	Copy No.	Issue Date
Paper Copies			
General Manager	Bangkok	1	
Operations Manager	Bangkok	1	
EIA & Government Liaison Coordinator	Bangkok	1	
Field operation engineer	Kam Phaeng Sean	1	
Drilling Manager	Kam Phaeng Sean	1	
HSE Officer	Kam Phaeng Sean	1	

### REVISION STATUS

Rev	Date	Description	Originator	Approved
0	30 July 2006	First Working Version	Various	Chief Operating Officer
1	15 July 2014	Second Working Version	Various	Chief Executive Officer
2	10 July 2015	Third Working Version	Various	Chief Executive Officer
3	27 May 2016	Fourth Working Version	Various	Chief Executive Officer

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures

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### FOREWORD

Pan Orient Energy (Siam) Ltd. ("The Company") recognizes that effective health, safety and environmental management contributes significantly to its long-term business success.

This document sets out The Company's Emergency Response Procedures. It emphasizes the systematic approach in the way we manage incidents and emergencies at our upcountry sites. The integration of health, safety and environmental protection into our day-to-day activities is the key to successful health and safety management.

The application and success of this system requires the participation and commitment of management, employees and contractors at all levels.

These procedures have the Board's full support but we require your commitment through a personal understanding of this document and full participation as required in the effective implementation of the procedures, should they be required.

It is imperative that everyone involved in the business of Pan Orient Energy (Siam) Ltd. familiarize themselves with their roles and responsibilities in this document. Only by total commitment by everyone can we ensure the best possible protection of our personnel, contractors, the public, our assets and the environment.

Signed

Jeff Chisholm

Chief Executive Officer

Date : 27 May 2016

Area of Application

These Emergency Response Procedures apply to the activities of Pan Orient Energy (Siam) Ltd. in Thailand.

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures

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## EMERGENCY RESPONSE PROCEDURES

### 1.1 Definitions

An emergency is any unplanned event that has caused/may cause harm to employees, contractors, or the public or that disrupts operations, causes physical or environmental damage, or threatens the companies' financial standing or public image. Examples include injury, fire, explosion, riots or storms.

### 1.2 Classification of Levels of Emergency

This ERP addresses two levels of Emergencies:

- Minor
- Major

#### Minor Emergency

An Emergency requiring local support that can be handled by members of the Sites Incident Response Team (SIRT) such as:

- Light bodily injury requiring the assistance of the doctor or a local nurse
- Minor environmental or property damage
- Well kick etc.

#### Major Emergency

An Emergency that may require the assistance and support of the Emergency Response Group (ERG) at the Bangkok Office and external agencies e.g.:

- Serious Incidents of Blowout, Spills, release of hazardous/toxic substances, structural failure/collapse.
- Medical evacuation in the event of life threatening bodily injury or severe electric shock, life threatening illness
- Major environmental or property damage
- Man lost situation
- Major fire, Explosion, Radiation
- Unplanned evacuations such as Natural calamity, War crises, Security breach

These Emergency Response Procedures are prepared to provide guidance to specified individuals working at the well drilling and production sites in Kam Phaeng Sean and for the concerned personnel at the Bangkok Office.

### 1.3 Responsibilities of Sites Incident Response Team (SIRT) – Incident Location

The main objectives of the Sites Incident Response Team (SIRT) are to:

- Manage and tackle the Emergency situation effectively
- Provide managerial and technical support to the field crews in an emergency
- Effectively co-ordinate with the Bangkok office

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The SIRT is composed of the following personnel:

- Operations Manager and/or
- Field Operation Engineer
- Drilling Superintendent
- HSE Officer
- Production Supervisor, Production Foreman & Production operator

### 1.3.1 Operations Manager or Field Operation Engineer or Drilling Superintendent – Incident Response Controller (IRC)

The Incident Response Controller is responsible for implementation and exercising of this emergency response procedure, and will:

- Assume immediate and total responsibility upcountry during emergencies
- Ensure that all staff members working at the Production and Drill sites are fully conversant with the procedures, which affect them and act in accordance with the plan in the event of an emergency.
- Act as a focal point during all emergencies and co-ordinate the response.
- Ensure that drills are held and that key personnel are trained to a level of competence appropriate to their responsibilities in emergency scenarios.
- Ensure interface with ERG at the Bangkok office, where necessary local emergency services and local community organisation for assistance.
- During an emergency, those nominated as the Site Incident Response Team (SIRT) are to act quickly and the Production Manager and/or Drilling Superintendent or his alternate will take charge as Incident Response controller (IRC) as soon as possible to deal with the incident.

### 1.3.2 HSE Officer

- Assist the Incident Controller in the direction of Emergency Operations.
- Log the Emergency events
- Liaise with Incident Controller for likely requirements
- Conduct HSE assessment
- Co-ordinate with Incident Response Team members
- Provide HSE advice
- Prepare Incident impact report
- Coordinate with ERG for other necessary assistance if required.

### 1.3.3 Production Supervisor & Production Foreman & Production operator

- Assume responsibility to Co-ordinate the support services as soon as notified.
- Liaise with Emergency response group to meet the emergency requirements when required.
- Monitor Logistic requirements

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### 1.4 Responsibilities of Emergency Response Group (ERG) - Bangkok

#### 1.4.1 Emergency Response Group Leader

- Assume the charge of ERG Leader as soon as the notification is received
- Liaise with Incident Response Controller for incident update and likely early requirements
- Arrange to meet Site emergency incident needs.
- Assess and allocate resources as required
- Notify to POE(S) General Manager – Bangkok
- Activate, Brief and update ERG regularly
- Ensure relevant regulatory authorities are notified
- Advise Collector as appropriate.

#### 1.4.2 ERG-Technical/Operations Coordinator

- Assume the charge of Tech/Operations Coordinator as soon as information is received.
- Liaise with ERG Leader for incident update and likely requirement.
- Advise ERG leader on technical and operational aspects and impacts of the incident.
- Assess the requirement, brief and update ERG leader on the situation.
- Confirm that appropriate documents are available to ERG.
- Maintain close liaison with IRT.

#### 1.4.3 ERG – Logistics Coordinator

- Assume the charge of Logistic Co-ordinator as soon as information is received.
- Liaise with ERG Leader for likely emergency requirement
- Assess the requirement with Kam Phaeng Sean Logistics co-ordinator for additional support.
- Activate Emergency Logistic support Process the support needs and allocate the resources
- Supply support services, equipment and other resources as required.

#### 1.4.4 ERG – HSE Co-ordinator

- Assume charge as HSE Co-ordinator as soon as information is received.
- Liaise with ERG Leader for incident update and likely requirements
- Review incident HSE requirements and activate HSE support resources
- Conduct HSE assessment of incident
- Assess incident impact and likely effects of incidents
- Ensure that all regulatory and Government contacts are made
- Review incident requirements and advise as appropriate.

#### 1.4.5 ERG –HR and Public Affairs Co-ordinator

- Assume charge as HR and PA Co-ordinator as soon as information is received.
- Liaise with ERG Leader for incident update and likely requirements
- Review incident HR requirements and activate HR support resources
- Organise/Support evacuation of casualties where appropriate
- Ensure all the required notification of next of kin is completed
- Agree likely media strategy with ERG leader
- Arrange interface with media and monitor media, release press statements if appropriate

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### 1.5 Actions / Communications

Refer to Appendix 1 Flow chart details, for the actions required and communication of information. The flow chart also details actions and communication for escalating events. This forms part of the protocol of informing the management and includes the contact numbers required.

### 1.6 Emergency Recording and Communication

- A complete time log must be filled in during Emergency Response.
- Accurate and complete details of the location and personnel involved must be obtained at the earliest possible time and made available to the IRC.

Record the information in Appendix 2 and Appendix 3 (if necessary) and keep a time log of every conversation as per Appendix 5 (All SIRT members are involved in recording the information).

### 1.7 Response to a Minor Emergency

- Record the information as necessary and keep a time log of the conversation as per Appendix 5 (All IRT members are involved in recording the information).
- In the event of environmental or property damage ascertain the extent of the damage and whether local resources such as Police/Emergency Services are required to assist. Complete Appendix 4 form and fax to ERG at Bangkok Office at the earliest.
- Inform ERG at Bangkok office on the nature of the emergency.

### 1.8 Response to a Major Emergency

- Communicate, refer Appendix 1 and record in Appendix 3, 4&5 where necessary, and keep a time log of every conversation as per Appendix 5.
- Notify the ERG Leader at Bangkok office
- In the event of bodily injury or illness requiring immediate evacuation - refer to Appendix 3.
- To aid in the evacuation, complete the form in Appendix 3 & 4 (if this information is not available provide as much detail as possible). This information will then be passed directly to the hospital and ERG at Bangkok office by telephone/fax.

### 1.8.1 Major Incident Emergency Procedures

The Production Manager/Drilling Superintendent or his alternate as Incident Response Controller will have the authority to initiate any emergency response action without initially obtaining company's approval. With regard to Medical emergency evacuation he must take advice from a local doctor prior to making his decision.

The Incident Response Controller shall always have the final authority for initiating an evacuation.

#### 1.8.1.1 Emergency Plan

This Emergency Response plan is for incidents such as Earthquakes, environmental/property damage, that could necessitate emergency action and other Major Incidents like Blowouts, Spill, Release of hazardous/toxic substance, Structural collapse, Fire, Explosion, Radiation, Electrical shock, Serious road traffic incidents, War crises, Security breach etc.

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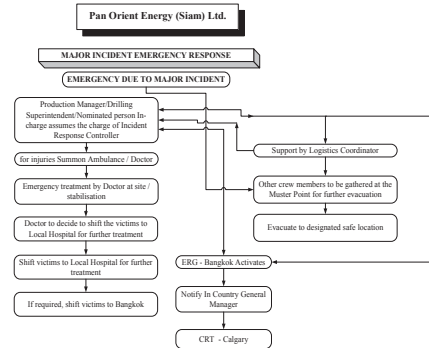
- A continuous alarm will be sounded for evacuation emergency.
- Incident management Team, employee and contractor are responsible to perform their roles as defined during emergencies.
- Evacuate to the designated safe assembly areas at site and the camp are (i.e.) Muster points
- Further evacuation if any will be to the designated safe place.

Appendix 1

#### 1.8.1.2 Emergency Procedure

The Incident controller will:

- Determine the level of emergency and whether the evacuation is necessary.
- Confirm that personnel are assembled and accounted for. If necessary, initiate emergency team response.
- Coordinate for technical support from ERG, Bangkok.
- Determine assistance needed from local response agencies.
- Direct essential personnel to commence appropriate corrective response actions.
- Initiate other incident response procedures as applicable.
- Cooperate fully with local officials when necessary.
- Confirm effectiveness of the evacuation.
- Determine cause of emergency and execute other applicable incident response procedures where needed.
- Initiate logistics support from Bangkok & Kam Phaeng Sean Co-ordinators
- Initiate damage assessment of Company, private and public property
- Notify and brief Bangkok of the nature of emergency incident.
- State the present status of emergency
- State whether there are any known injuries or persons missing
- State assistance that has been received (police department, fire department, etc.).
- Specify additional support needed.



At the well site the Emergency Response Procedure will be followed and the operational in-charge will be the incident controller at the well site. When emergency becomes a major one Production Manager and/or Drilling Superintendent take over as incident controller and inform Bangkok Office and ERG leader.

#### Appendix 2

#### MINOR MEDICAL EMERGENCY INFORMATION

Total number of injured persons		
Names of injured persons		
Present location of injured persons	Location	
	Crew	
	Hospital	
	Doctor/s Name	
	Phone	
	Fax	
Brief medical description		
Medical treatment given so far (on site, local hospital, etc.)		

#### Other Emergency

Nature of the emergency.	
Location of the emergency.	
Assistance required	

#### Appendix 3

#### MAJOR EMERGENCY MEDICAL INFORMATION

(Form to be completed by a Doctor)

1. NAME OF CALLER		
a) Name:		
b) Telephone:		
c) Fax:		
d) Company:		
2. NAME OF PATIENT		
a) Name:		
b) First Name:		
c) Age:		
d) Sex:	F / M	
e) Company		
3. LOCATION OF PATIENT		
a) Country:		
b) Telephone:		
c) Address:		
4. Has the patient been seen by a doctor?	Yes / No	
5. Name of Doctor:		
Telephone Number:		
6. Medical Condition:	a) Is the patient conscious b) Is patient agitated/confused c) Breathing problems d) Significant bleeding e) Chest pain f) Burns g) Fractures h) Abdomen pain i) Trauma j) Fever k) Vomiting/diarrhea/de-hydration l) Multiple/Serious/Head injury	Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No Yes / No
7. Comments:		

Appendix 3

IN CASE OF AN ACCIDENT	
1. Date and time of accident	
2. Details of the accident (eg. Fall, traffic accident, etc)	
3. Is there any fracture?	Yes / No
A – probable	Yes / No
B – obvious	Yes / No
C – confirmed by x-ray	Yes / No
4. Localisation:	
A – skull	( )
B – face	( )
C – cervical column (neck).....level	( )
D – vertebral column	( )
E – ribs.....side.....how many	( )
F – pelvis	( )
G – upper limb left ( ) right ( )	
H – lower limb left ( ) right ( )	
I – other places	( )
5. Wounds. Are there any? Locate them, especially the ones located in the thorax and the abdomen; indicate their size and depth:	
6. Bleeding. Has there been profuse bleeding?	

Appendix 3

IN CASE OF BURN				
1. Date and time of burn?				
2. Cause of burn:				
A – Explosion	( )			
B – Fire (flames)	( )			
C – Chemical products	( )			
D – Others (specify)	( )			
3. Localisation and degree of the burn:		1 <sup>st</sup> deg	2 <sup>nd</sup> deg	3 <sup>rd</sup> deg
A Face				
B Neck				
C Thorax				
D Abdomen				
E Left arm				
F Right arm				
G Left leg				
H Right leg				
4. Time of the first treatment:				
5. When did patient last pass urine:				

Appendix 3

IN CASE OF ILLNESS	
1. Date of first symptoms:	
2. Presumed diagnosis of this illness	
3. Temperature	
4. Spontaneous respiration:	Yes / No
If Yes: normal	( )
laboured	( )
5. Respiratory rhythm:	( )
regular	( )
Irregular	( )
6 Artificial respiration	( )
effective	( )
ineffective	( )
7 Number of respiratory movements per minute:	
8 Colour of the nails, lips, ears:	
White ( ) Pink ( ) Black ( )	
9 Does the patient cough?	Yes / No
10 Does the patient cough up sputum?	Yes / No
11 Does the patient cough up blood?	Yes / No
12 Has a thorax x-ray been carried out?	Yes / No
If so, results:	
13 Blood pressure	
11. Pulse rate	
15. Has the patient urinated?	Yes / No
16. If yes, how much per 24 hour?	
17. Are the extremities cold? (hands, feet, ears)	Yes / No
18. Is he paralysed?	Localisation:
A right arm	( )
B left arm	( )
C right leg	( )
D left leg	( )
E respiratory	( )
19. Is the patient agitated?	Yes / No
20. Is the patient conscious?	Yes / No
21. Is the patient in a coma? If so, time/date coma began	
22. The pupils are:	
Right A normal ( )	Left A normal ( )
B dilated ( )	B dilated ( )
C contracted ( )	C contracted ( )
23. Is patient in pain?	Yes / No
If so, localisation and degree?	
21. Has patient had malaria?	Yes / No
25. Is patient diabetic?	Yes / No
26. Does patient vomit?	Yes / No
27. Does patient have diarrhea?	Yes / No
28. Does patient have intestinal bleeding?	Yes / No
29. Is there any other bleeding?	Yes / No
If so, where?	
30. Is patient a psychiatric patient?	Yes / No

Appendix 3

ALL CASES TREATMENT ALREADY GIVEN	
1. Has the patient been operated on? If so, indicate nature and result of the operation:	Yes / No
2. If fracture, how has it been immobilised?	Yes / No
3. Is the patient on drip? Nature of infusion	Yes / No
4. Treatment initiated – present medications	
5. Does the patient need blood?	Yes / No
6. If known, blood type:	
7. Give any other useful, precise details on the nature of the illness and the patient's condition:	
8. Was the patient suffering from an illness known previously?	
9. Were laboratory tests carried out? If so, which one and state results:	
10. Has the patient been given with any Medicine/ Drugs? If so give details	

### FIELD INFORMATION REQUIRED FOR PROPERTY OR ENVIRONMENT DAMAGE

Note: If the event also included fatalities or multiple bodily injuries, the information should also be given on Appendix 3.

Name and location of the rig/crew/workshop/other place	
Date and time of the accident	
Description of the accident	
Number of personnel at the location	
Extent / number of casualties (see above)	
Detail of equipment down	
Evacuation / rescue requirements	
Extent of loss	
Action being taken to control losses	
Any external assistance participating	
Weather Conditions if applicable	
Has the client been informed?	
Client contact person and telephone number for this event	
Extent of nature of Environmental damage	
Immediate actions taken to contain the environmental damage.	

## EMERGENCY TIME LOG

Date: \_\_\_\_\_

Location: \_\_\_\_\_

IRT Member: \_\_\_\_\_

[illegible]

**PAN ORIENT ENERGY (SIAM) LTD. - EMERGENCY RESPONSE PROCEDURES**  
**IMPORTANT TELEPHONE NUMBERS**

IMPORTANT TELEPHONE NUMBERS					
Organization	Service/Supplier	Position	Mobile	Fax	After Hour
POES	Bangkok Office	General Manager	02-937-1338 x 218	004-875-8222	02-937-0841
		Operations Manager	02-937-1338 x 018	009-892-4885	009-892-4885
		Finance & Accounting Manager	02-937-1338 x 024	009-838-6569	009-838-6569
		Refinery Engineer	02-937-1338 x 018	009-838-6438	009-838-6438
		Personnel, materials/pipeline & Inventory Supervisor	02-937-1338 x 019	009-838-6643	009-838-6643
		EPA & Government Liaison Coordinator	02-937-1338 x 020	001-933-2583	001-933-2583
		IT Officer	02-937-1338 x 012	009-838-6567	009-838-6567
		Field Operations Engineer	02-937-1338 x 018	009-838-6447	009-838-6447
		Production Supervisor	02-937-1338 x 018	009-838-6450	009-838-6450
		Production Foreman	02-937-1338 x 018	009-838-6448	009-838-6448
Pan Orient	KPS Field	Production Helper	02-937-1338 x 018	009-838-6441	009-838-6441
		HSE Officer	02-937-1338 x 018	009-838-6452	009-838-6452
		Mechanics	02-937-1338 x 018	009-838-6453	009-838-6453
		Electrical & Instrument Engineer	02-937-1338 x 018	009-838-6453	009-838-6453
		CFO	+1 403-294-1777 x 233	+1 403-294-1780	
		Onshore Production Engineer Group (Mr. Pernack)	02-794-3377	009-769-8141	02-794-3362
		HSE Group (Mr. Weinart)	02-794-3390	001-838-8917	02-794-3362
		Rig - Radio Room	02-794-3390	005-4095-291	005-4095-291
		Rig Manager	02-794-3390	001-832-0828	001-832-0828
		Medical Support	02-794-3390	009-525-7480	009-525-7480
PDR Corporation	DMF Office	President	02-158-2680-00	001-638-0091	02-158-2687
		Managing Director	02-158-2680-00	001-638-0091	02-158-2687
		International Logistics	02-158-2680-00	001-638-0091	02-158-2687
		Country Manager	02-158-2680-00	001-638-0091	02-158-2687
		Accountant	02-158-2680-00	001-638-0091	02-158-2687
		Supplie	02-158-2680-00	001-638-0091	02-158-2687
		Freight	02-158-2680-00	001-638-0091	02-158-2687
		Logistics	02-158-2680-00	001-638-0091	02-158-2687
		Warehouses	02-158-2680-00	001-638-0091	02-158-2687
		Logistics	02-158-2680-00	001-638-0091	02-158-2687
Twining Franks Supply	Perforating	General Manager	02-937-1338 x 018	009-838-6448	009-838-6448
		Operations Manager	02-937-1338 x 018	009-838-6448	009-838-6448
		Finance & Accounting Manager	02-937-1338 x 024	009-838-6569	009-838-6569
		Refinery Engineer	02-937-1338 x 018	009-838-6438	009-838-6438
		Personnel, materials/pipeline & Inventory Supervisor	02-937-1338 x 019	009-838-6643	009-838-6643
		EPA & Government Liaison Coordinator	02-937-1338 x 020	001-933-2583	001-933-2583
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		CFO	+1 403-294-1777 x 233	+1 403-294-1780	
		Onshore Production Engineer Group (Mr. Pernack)	02-794-3377	009-769-8141	02-794-3362

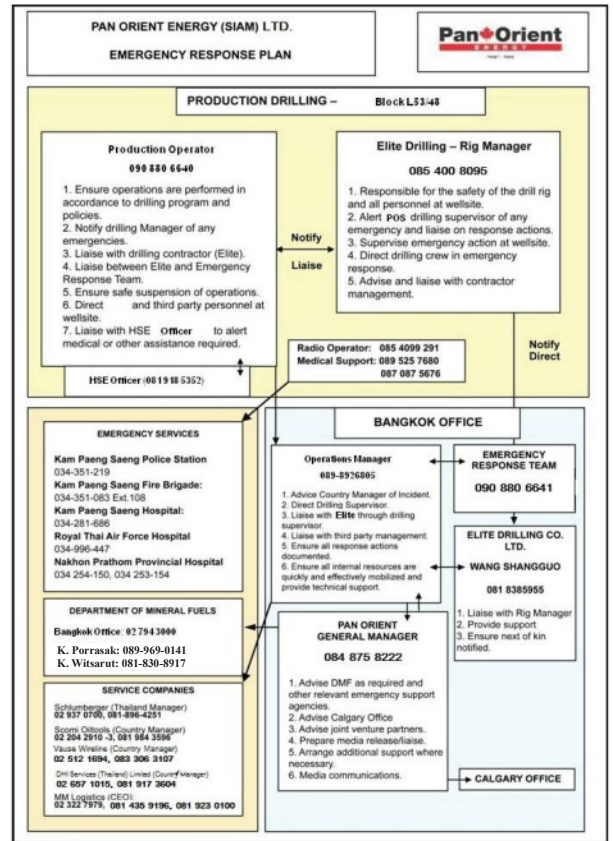
**KAM PHAENG SEAN OPERATIONS  
SUPPORT SERVICES EMERGENCY RESPONSE IMPORTANT TELEPHONE NUMBERS**

Name	Address	Telephone No.	Fax No.	After Hours Phone
Police	Kam Phaeng Sean	034-351-219		034-351-219
Fire Brigade	Kam Phaeng Sean	034-351-083 Ext.108		034-351-083 Ext.108
Hospital	Kam Phaeng Sean	034-281-686, 034-351-378		034-281-686, 034-351-378
District Offices				
Kam Phaeng Sean	Kam Phaeng Sean District, Nakhon Pathom	034-351-413, 034-351-086, 034-281-102	034-351-086	



**Bangkok Area Hospitals**

Recommended Hospitals	Local Hospital (Closest to site)
<b>1 Samitivej Hospital</b> 133 Sukhumvit Klongtan Nua, Vadhana, Bangkok  <b>Tel: 0-202-2222</b>	<b>1 Vibhavadi Hospital</b> 51/3 Ngamwongwan Rd., Jatujak, Bangkok  <b>Tel: 0-2561-1111</b>  (Closest hospital to rig site with International standards avoiding traffic delays in central Bangkok)
<b>2 Vibhavadi Hospital</b> 51/3 Ngamwongwan Rd., Jatujak, Bangkok  <b>Tel: 0-2561-1111</b>	<b>2 Mongkutwattana General Hospital</b> 34/40 Chaeng Wattana Rd., Thung Song Hong, Luk si, Bangkok  <b>Tel: 0-2574-5000-9</b>
<b>3 Bangkok General Hospital</b> 2 Soi Soonvijai 7, New Petchburi Rd., Bangkapi, Huay Khwang, Bangkok  <b>Tel: 0-2310-3000</b>	<b>3 Rangsit General Hospital</b> 733/345 Phahonyothin Rd., Khu Khot, Lam Luk Ka District, Pathum Thani  <b>Tel: 0-2998-9999</b>
<b>4 Bumrungrad Hospital</b> 33 Sukhumvit Soi 3 (Soi Nana Nua), Wattana, Bangkok  <b>Tel: 0-2667-1000</b>	<b>4 Nonthavej Hospital</b> 30/8 Ngamwongwan Rd., Bang Khen, Muang, Nonthaburi  <b>Tel: 0-2596-7888</b>



## Emergency Procedures Attachment I Oil Spill Contingency Plan

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## 1.0 INTRODUCTION

Pan Orient Energy (Siam) Ltd. is committed to operate at all times in such a manner as to minimize the risk of oil spills. In the unlikely event that a spill occurs, this plan provides guidance on the appropriated actions to take.

There are three levels of response identified. These range from minor spills readily contained and cleaned-up by on-site personnel and equipment, to more serious incidents where the oil spill contractors is called out.

The plan identifies the emergency organization and contacts as well as providing specific information about the site's ecology and water courses and the appropriated equipment deployment.

The SW1 Joint Venture, and Pan Orient Energy (Siam) Ltd., as operator, have a financial responsibility and legal requirement to clean-up and pollution that emanates from any of its sites.

## 2.0 PRIORITIES/LEVELS OF RESPONSE

### 2.1 Priorities

The following priorities need to be observed:

1. the prevention of emergencies
2. the safety and saving of life
3. protection of the environment
4. salvage of equipment and installations

### 2.2 Levels of Responses

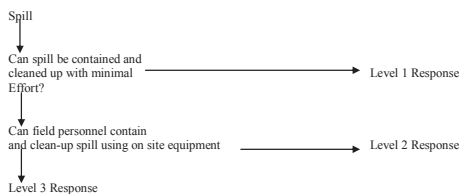
There are three levels of response relating to accidental discharges:

Level 1: when the discharge does not affect normal operations and can readily be cleaned-up by field personnel using equipment maintained on site.

Level 2: when the discharge is more serious than that of a level 1 response, but can still be contained and cleaned-up by field personnel, with assistance from the office if needed, using the oil spill control equipment maintained on site.

Level 3: when the discharge exceeds the capabilities of the immediate on-site personnel and the oil spill contractor has to be called in to assist in the containment and clean-up

### 2.3 Decision Trees



### Job Responsibilities

1. Inform the General Manager – Jeffrey Howard Chisholm, and other relevant senior POES Inc. people about the situation. If necessary inform the Local Water Authority.
2. Liaise with the Logistics Co-ordinator, act as a focal point for information passing to and from the site.

## 2.6 Level 3 Response

The following personnel would make up the basic emergency response organization:

Co-ordinator	-	Bangkok Office
Production Manager	-	POES
Material Controller	-	Richard Holt
Logistics Support Advisor	-	Khun Pramote

### Job Responsibilities

Operations Superintendent: Pan Orient Energy Representative  
Location: Kam Phaeng Sean Wellsites.

### Initial Response

1. Ensure safety of all personnel.
2. Shut down all potential ignition sources including non-certified and non-intrinsically safe equipment, e.g. cameras, tape recorders, radios, torches etc., until it is certain that there is no risk of fire or explosion.
3. Attempt to isolate/control source of spill
4. Contact emergency services.
5. Inform Emergency Controller that a Level 3 response is required and give the following information:
  - i) location of spill (e.g. access road, diesel tank)
  - ii) the kind of incident (e.g. tanker spill, blowout)
  - iii) when the incident occurred
  - iv) the type of oil
  - v) the volume spilt (best estimate)
  - vi) if it is continuing to spill and what the rate of spillage is
  - vii) any other relevant information
6. Try to contain spillage within as small an area as possible, away from points of ignition.
7. Deploy containment equipment at predesignated points.

### Follow-up Action

1. Continue to ensure safety of all personnel.
2. If source of spill not under control, continue efforts to isolate/control it.
3. Liaise with clean-up contractor, Pan Orient Energy personnel on site and local authorities.
4. Keep General Manager informed of the situation.
5. Restore normal operations promptly.
6. Fill out and submit an Incident Report Form to the General Manager (copy of an Incident Report Form can be found in Appendix I).

## 2.4 Level 1 Response

Level 1 is the response required to deal with a discharge which requires minimal clean-up and can readily be contained and cleaned-up on site by field personnel using the oil spill containment equipment kept on site.

Operations Co-ordinator: Pan Orient Energy Production Representative  
Location: Kam Phaeng Sean Wellsites.

### Job Responsibilities

1. Ensure the safety of all personnel
2. Ensure that the discharge is cleaned-up properly and that the site's containment facilities have been breached.
3. Fill out an Incident Report Form (See Appendix I). The completed form should be sent to the General Manager - Pan Orient Energy in Bangkok.

## 2.5 Level 2 Response

This level is the response required when the discharge can be contained and cleaned-up by on-site personnel using equipment maintained on site, with some assistance from Bangkok office.

Example of incidents that would probably require a level 2 response are a ruptured tank or a fractured pipe.

### Emergency Organisation

The following personnel would make up the basic emergency team.

Pan Orient Energy onsite Production representative  
General Manager – Pan Orient Energy

Operation Co-ordinator: Pan Orient Energy onsite Production representative  
Location: Kam Phaeng Sean Wellsites.

### Job Responsibilities

1. Ensure the safety of all personnel
2. Shut down all ignition sources to minimize the fire risk. If there is a possibility of fire, then notify the Fire Brigade.
3. Isolate or stop the source of spillage.
4. Inform the General Manager – Pan Orient Energy that a Level 2 Response situation exists, state:
  - i) The nature of the spill
  - ii) If the spillage is continuing and at what rate
  - iii) If the spill is on fire
  - iv) What volume has been spilt
  - v) Any other information
5. Ensure that the containment system is not damaged.
6. Decide whether the oil spill clean-up contractor is required on site (in which case it becomes a Level 3 Response).
7. Deploy clean-up equipment to deal with the discharge
8. Restore normal operations promptly.
9. Fill in an Incident Report Form (see Appendix I). The complete form should be sent to the General Manager – Pan Orient Energy, Bangkok office.

General Manager: Jeffrey Howard Chisholm  
Location: Bangkok

### Initial Response

1. Mobilise clean-up contractor, pass on relevant information.
2. Liaise with the Pan Orient Energy onsite Operations Superintendent Representative and give technical advice on press releases as necessary.
3. Provide a communications channel for passing information to and from site.

Project Leader: General Manager  
Location: Pan Orient Energy (Siam) Ltd., Bangkok

### Job Responsibilities

Liaise with Technical Director and Emergency Controller. Co-ordinate press releases.

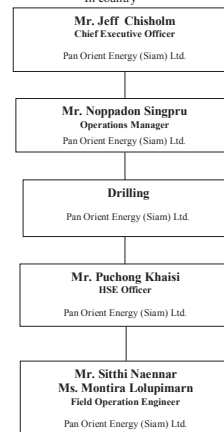
### Communications

Good communications are vital to the safe and efficient conduct of the clean-up operation. Hand-held radios with an adequate need to be supplied to ensure that personnel working away from the main site can be in contact.

The Company office on site will be the main communications center in the event of an emergency.

### Emergency Organisation

In country



2.7 Emergency Services  
The Emergency Services should be contracted by the Operations Superintendent from site.

**Police:**  
In the event of a major discharge, the Police would provide control of traffic to and from the incident area. Where a number of services are involved and no suitable communication centre is available, the police would provide a control and co-ordination post to facilitate clearance operations.

Kam Phaeng Sean Tel: 034 351 219

**Fire Brigade:**  
The Fire Brigade would attend all incidents where a risk of fire of ignition were present would assume control of the incident until the fire was extinguished.

Tel: 034 351 083 ext.108

**Hospital:**  
The Hospital Service should be called as necessary.

Kam Phaeng Sean Tel: 034 281 686

2.8 Clean-up Contractors  
Pan Orient Energy (Siam) Ltd. has made arrangements with various local contractors to provide oil spill containment and clean-up services in the event of a Level 3 incident.

Call-out Procedure  
In the event of a Level 3 incident, Contractors should be called and told what level of response is required (e.g. standby, full call-out).

2.9 Pan Orient Energy Call-out Numbers

Caller	Contact
Pan Orient Energy on site production Representative	Mr. Chaiyanan Mobile phone: 091-379-7501

2.10 Government Department  
In the event of a Level 3 Incident, the Emergency Controller should notify:

Department of Mineral Fuels  
Khum Puangthip Silpasart  
Director General  
Energy Complex 555/2 Energy Complex Building B, 21-22th Floor ,Vibhavadi-Rangsit Rd.,  
Kwaeng Chatuchak Khet Chatuchak, Bangkok 10900 Thailand

Tel: (662) 794-3001  
Fax: (662) 794 3058

2.11 Local Authority Contact Numbers  
The Emergency Controller should notify the following agencies in the event of a Level 1 Incident, or a Level 2 or Level 3 Incident, if appropriate:

**District Offices:**  
Muang Nakhon Pathom 034-258-411  
Kam Phaeng Sean 034-351-086, 034-281-102

2.12 Public Relations  
A press statement will be agreed between the Chief Operations Officer - Pan Orient Energy (Siam) Ltd. No one else and the Chief Executive Officer in Calgary, CANADA must give statements to the press.

PART 2

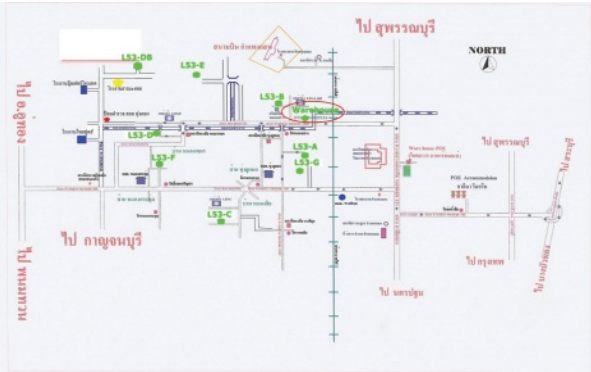
3.0 KAM PHAENG SEAN SITE DETAILS

3.1 Location of Sites  
Kam Phaeng Sean well site is located within approximately 10 km. of Amphoe Kam Phaeng Sean Village.

3.2 Access  
Kam Phaeng Sean is approached on Highway 3040 off Highway 346.

3.3 Soil Characteristics  
The sites are raised above the elevation of the surrounding fields to the level of the bitumised road. The material of construction of the well site area is compacted laterallite.

3.4 Maps



PROXIMITY AND TYPE OF ACTIVITIES:				
15. OUTSIDE AGENCIES AND GROUPS NOTIFIED:				
AGENCY/GROUP	PERSON NOTIFIED	DEATE/TIME OF NOTIFICATION	METHOD USED	PERSON NOTIFYING
16. ONSITE INVESTIGATORS (NON-COMPANY):				
17. REMEDIAL ACTION TAKEN:				
DATE STARTED:		DATE COMPLETED:		
18. ASSISTANCE REQUIRED, CONTRACTORS USED:				
19. SIGNATURE:		TITLE:	DATE:	LOCATION:

## Emergency Procedures Attachment II

### Fire Plan

- C. Telephone the supervisor of Pan Orient Energy, Production Manager, or other Pan Orient Energy locations for notification and assistance.
- D. If possible, without putting yourself in danger, and whilst waiting for the emergency services to arrive, use an extinguisher and try to contain the fire.
- E. When the fire trucks arrive, give the fire chief the copy of fire fighting equipment location. You must also tell the fire chief how much crude oil is inside both storage tanks, and what/where chemicals and lube oil are stored.
- F. **ASSIST THE FIRE CRE ONLY IF REQUIRED**, stay at the safety distance and keep other people away.

#### **FIRE EMERGENCY PROCEDURE**

- 2. FIRE OCCURS WITH NO RISK TO THE PRODUCTION PLANT**
  - A. Use fire extinguishers and put out the fire remove any inflammable material such as paint/paint thinner's
  - B. If the fire is electrical, turn off the power supply to the source of the fire.
  - C. Telephone the Pan Orient Energy Production Manager or other Pan Orient Energy locations, and advise them of the event.

**IF IN ANY DOUBT SHUT DOWN THE PLANT, NOTIFY THE EMERGENCY SERVICES AND WAIT FOR ASSISTANCE.**

## Emergency Fire Procedures

### **General**

Each installation or location has its own regulations for dealing with fires. However, there are some basic procedures which apply to fighting any fire.

- 1. Familiarize yourself with the location and use of all fire equipment in your work area.
- 2. Keep access to all fire equipment clear at all times. Equipment must be in place except when in use for fires or authorized drills.
- 3. If you discover a fire or a leak of any flammable fluid or gas, notify your supervisor at once, giving the nature of the fire or potential danger and the location.
- 4. After reporting, you should safely attempt to shut off flow of fuel and use extinguishers or hoses as available to help control the fire until the emergency crew arrives.

### **FIRE HAZARDS**

All employees must be alert to recognize fire hazards.

- 1. Any uncontrolled hydrocarbon must be reported.
- 2. Open accumulations of oil must not be allowed to remain in the work area.
- 3. Do not leave combustibles where they may be ignited by hot equipment.
- 4. Keep work area clean. Throw waste materials in containers provided.
- 5. Store all supplies in cabinets provided.
- 6. Smoke only in designed smoking areas.
- 7. Always ground equipment to avoid static electricity buildup.

### **CLASSIFICATION OF FIRE HAZARDS**

**For practical purposes there are four main classes of fire hazards A, B, C and D.**

**CLASS - A.** Fires are those involving ordinary combustible materials such as paper, wood etc. Water is the most effective medium for extinguishing. Other types of extinguisher can be used safely.

**CLASS - B.** Fires are those involving flammable liquids such as petroleum products, paints, solvents, fat etc. These are best extinguished by using dry power, foam, carbon dioxide or halons. Water is not suitable.

**CLASS - C.** Fires are those involving flammable gases, e.g., propane, butane, etc. Extinguishing the flame should be avoided until the source of the gas is located and then isolated. Isolation cuts off the fuel source and any resultant fire can then be dealt with.

**CLASS - D.** Fires are those involving burning metals, e.g., magnesium, aluminum, sodium, etc. Such metals usually react violently with the application of water. Blanketing with sand or earth is a satisfactory means of putting out such fires.

Electricity fires were at one time specifically classified, but it is now accepted that electricity is merely an added hazard. After electrical isolation, a fire in the equipment can be extinguished. Where isolation is temporarily impractical, carbon dioxide, halon or dry chemical powder should be used.

### **FIRE EMERGENCY PROCEDURE IN THE EVENT OF FIRE, THE FOLLOWING INSTRUCTIONS SHOULD BE FOLLOWED WHERE PRACTICAL**

- 1. FIRE OCCURS WITH ANY RISK TO THE PRODUCTION PLANT
  - A. Press the emergency shut-down button to stop all the processing equipment and the beam pump close the wellhead valves. If possible, (without putting yourself in danger), **CLOSE ALL ISOLATING VALVES** between the fire and the storage tank.
  - B. If it is a major fire with oil or gas alight, **IMMEDIATELY!!!!** Telephone the fire station & police

## Emergency Procedures Attachment III

### First Aid Plan

## Emergency First Aid Procedures

### FIRST AID PROCEDURES

First aid is the immediate and temporary care given to a person who has been injured or has suddenly taken ill. Its purpose is to sustain life and to prevent further injury until proper medical care can be obtained. Properly administered, first aid can save a life between the times an accident or serious illness occurs and professional help is available.

Incorrect movement or transfer of a person may cause additional injuries, permanent disability, or death. In an emergency, the person who remains calm, deliberate, and reasonable often prevents death or further injury. This section does not offer complete instruction in first aid nor is it intended to be an extended course in emergency care. It is simply a reference or guide to first aid in the field where professional medical assistance is not immediately available.

### FIRST AID IN THE FIELD

Make every attempt to avoid further injuries to the victim in your attempt to provide the best possible emergency first aid care.

### EMERGENCY RESCUE AND TRANSFER

Emergency rescue and transfer should be done **ONLY** by the qualified first aid person when there is immediate danger to victim or first aide from such hazards as:

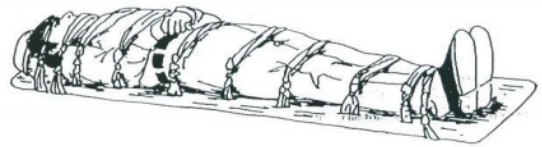
1. Fire or explosion
2. Serious traffic hazards
3. Risk of drowning
4. Exposure to severe weather conditions such as extreme heat or cold
5. Electricity injury
6. Pinning of the victim by machinery or vehicle (first aid can often be given in such cases until professional first aid people can remove the victim).

Do not transfer the victim until life-threatening problems, such as airway obstruction or hemorrhage, are taken care of wounds dressed.

### BLANKET-PULL METHOD

Where back or neck injuries are not indicated, use the blanket-pull method, keeping the victim as level as possible.

Where back or neck injuries are suspected, immobilize the victim with a backboard to prevent further injuries if movement is necessary.



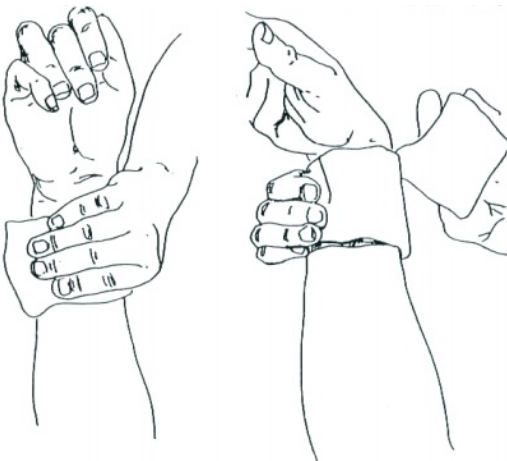
### SEVERE BLEEDING

Loss of more than one quart of blood presents a life threatening situation.

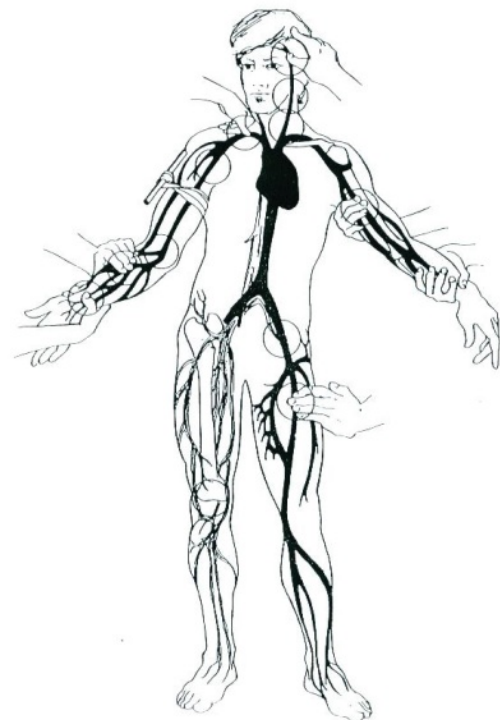
A person can bleed to death in less than one minute. The following are acceptable procedures to follow if severe bleeding occurs.

1. Apply direct pressure with the palm of one hand on a compress of cloth over the entire area of the wound. Use a thick pad of sterile gauze if possible. In an absolute emergency where no compresses are available use the bare hand or fingers.
2. If blood soaks through the compress, do not remove it. Instead add to the compress. Press blood vessels against something solid, such as underlying bone or uninjured tissue. Continue the pressure until the bleeding stops.
3. Secure the compress with a bandage of cloth placed directly over the pad on the wound.
4. Elevate the area above the victim's head unless there is a fracture.
5. Observe for signs of shock and treat accordingly.

### USING A COMPRESS



### PRESSURE POINTS FOR BLEEDING



Tourniquet and digital pressure (thumb or fingers) on pressure point stops vascular bleeding.

Venous bleeding is a steady stream of dark red blood. Control by using pressure either on the wound directly or at a spot near the injury which is away from the heart.

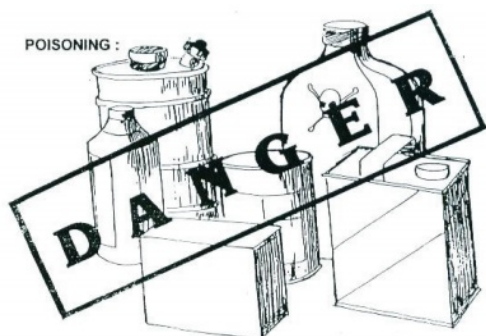
Arterial bleeding is bright red and flows in spurts. Control by using pressure either on the wound directly or on the nearest point in the direction of the heart.

#### AS A LAST RESORT:

#### APPLICATION OF A TOURNIQUET

Important things to remember:

1. The decision to apply a tourniquet is a decision to sacrifice a limb to save a life WHEN NO OTHER ALTERNATIVE EXISTS.
2. Use a strip of cloth at least two inches wide, wrap twice around the limb, twist the stick until arterial bleeding stops, and tie it off so it cannot untwist.
3. Do NOT use thinner material such as a wire, rope, or cord.
4. Write down the time and the date the tourniquet was applied on the patient's forehead or on the bandage.



Poisoning generally occurs in one of three ways: by ingestion, through contact with various substances, and by insect bites. In the case of poisoning through ingestion, the primary objective should be to dilute the poisons as quickly as possible. Poisoning by mouth is defined as the oral entry of any fluids or materials that will harm slow or stop any or all of the body functions or parts. Contact the nearest poison control center by phone for instructions then, induce vomiting as discussed below.

Hurry, medical aid is needed immediately. Once the poison enters the blood or system, it is difficult to treat.

Dilute the poison by giving fluids. Milk or water are most often available (the universal antidote is one part strong tea, one part milk or magnesia, and two parts crumbed, burned toast.

The following are a few more factors to consider in cases of snakebite:

1. Remember to watch for shock and to treat the victim as you would for any other shock.
2. Identifying the snake will be extremely helpful for further treatment of the victim. If possible, kill the snake and transport it with the victim.
3. Do NOT give the victim alcohol, sedatives, aspirin, or any medicine containing aspirin.

#### SHOCK

Shock is a life-threatening condition resulting from a depressed state of many vital functions. It can be life-threatening even though the injuries or conditions causing shock may not otherwise be fatal.

#### IN ANY ACCIDENT, ALWAYS CHECK FOR SHOCK.

Shock may be caused severe injuries, hemorrhage, burns, or loss of body fluids (prolonged vomiting or dysentery), infection, heart attack, stroke, poisoning, and obstruction in the throat, drugs, alcohol, or lack of oxygen.

Among the early symptoms of shock are:

1. Skin cold to the touch
2. Pale or bluish skin and cold, moist, bluish nail beds
3. Weakness
4. Rapid pulse (usually over 100)
5. Increased breathing rate and/or shallow breathing
6. Deep, irregular breathing
7. Restlessness, anxiety, or complaint of extreme thirst shocks is connected with hemorrhage.

Later symptoms include:

1. Apathy and relative unresponsiveness
2. Sunken eyes
3. Vacant expression
4. Widely dilated pupils
5. Mottled skin

Using a finger or spoon at the base of the victim's tongue, induce gagging and vomiting. However, note the following exceptions: when the victim has been poisoned with strong acids or alkalis, lye, strychnine, kerosene, oils or when the victim is in a coma or exhibiting symptoms of neither exhaustion nor convulsion.

Be sure to take the bottle or package containing the drug or poison ingested to the hospital with the victim. Information from the victim or others viewing the incident may also be of great value.

#### POISON CONTROL CENTERS

#### CONTACT POISONS MOST OFTEN ARE HARSH CHEMICALS, CORROSIVES, AND CERTAIN PLANTS.

Skin burns normally result in these cases. The following are first aid procedures to deal with situations involving contact poisons:

1. Drench and flush the affected skin or eyes for a least fifteen minutes while removing contaminated clothing and shoes.
2. Wash clothing before reuse.
3. Continue washing skin with soap and water for a least five minutes.
4. If corrosive fluid or pesticide is involved, send for ambulance immediately.
5. Keep the victim's airway open.
6. Provide artificial respiration if needed and NEVER leave the victim alone.
7. Give the victim ample quantities of water or milk for at least five minutes, unless he is unconscious of having convulsions. IN THE CASE OF POISONING BY INSECTS, it is important to know of any allergies the victim may have. Contact with the local poison control center is extremely important.

#### SNAKE BITE

When snake bites occur, take the following steps.

1. Keep the victim still, calm, and preferably in a prone position.
2. Immobilize the bitten area and keep it at or below the level of the head.
3. Transfer the victim immediately to experienced medical help. If the victim can be taken to a medical facility within four to five hours and no further symptoms develop, generally no further first aid is needed.
4. If mild-to-moderate symptoms develop, apply a constricting band two-to-four inches above the bite but not around a joint. The band should be no less than 1/4 to 1-1/2 inches wide. Tie the band snugly but loose enough for a finger to slip underneath. It is not meant to stop blood circulation, only to slow it down. Check the pulse in the extremity beyond the bite to ensure that the blood flow has not stopped.
5. If severe symptoms develop and you are more than four to five hours from medical help, revert to your snakebite kit. Do NOT use your mouth for suction: THIS COULD BE FATAL TO YOU.
6. Make an incision and apply suction immediately. After the constriction band is in place, cut into the skin through the fang marks using a sharp, sterilized knife. CUT NO DEEPER THAN JUST THROUGH THE SKIN, and about 1/2 inch long extending over the venom deposit point. Cut along the long direction of the limb. Do not cut if bite occurs on the heart, neck, or trunk, Apply suction cup for 30 minutes.

#### BODY POSITIONS FOR SHOCK TREATMENT





The three objectives in the first aid treatment of shock are to improve blood circulation, to ensure and adequate oxygen supply, and to maintain normal body temperature, these are the steps to follow:

1. Keep the victim lying down.
2. Cover only enough to prevent the loss of body heat.
3. Raise the feet eight to ten inches.
4. Obtain medical assistance as soon as possible
5. If the victim is conscious and medical aid will not be available for an hour or more give the victim half a glass every 15 minutes of the following solution: one level teaspoon of salt and ½ level teaspoon of baking soda I one quart of warm water. Allow the victim to sip the solution SLOWLY.

## BURNS

FIRST-DEGREE BURNS are characterized by red or mottled skin, blister formation, swelling over a period of several days, or a wet surface due to loss of plasma through the damaged layers of skin. Second-degree burns usually result from deep sunburn, contact with hot liquids, flash burns from gasoline, kerosene and the like, and coagulation of skin and destruction of red bloods cells. To treat second-degree burns, immerse in cold water (but NOT ice water) or apply freshly ironed cloth pads that have been wrung out in the ice water until the pain subsides. NEVER ADD SALT TO THE WATER. Gently blot the area dry with a sterile gauze or clean towel but NEVER use absorbent cotton. Apply dry sterile gauze as a dressing.

Do NOT try to break blisters or remove shreds of tissue, and NEVER use an antiseptic preparation, ointment, spray, or "home remedy" on severe burn.

THIRD-DEGREE BURNS may look white or charred and otherwise resemble second-degree burns. In these cases, there is coagulation of skin and destruction of red blood cell. Such burns result from flame, ignited clothing, and immersion in extremely hot water, or contact with hot objects or electricity. Often there is no pain with these burns.

In treating third-degree burns, do NOT remove particles of charred clothing. Cover the burned areas with a sterile dressing. If the hands are affected, keep them higher than the heart. Elevate burned legs or feet. Make the victim with facial burns sit up, and observe him for breathing difficulty.

ELECTRICAL SHOCK OR BURN presents a special case. Severity of the injury is not easily defined. It may on the surface appear to be minor. IF ANY doubt exists, seek immediate professional medical help.

CHEMICAL BURNS are the same as burn caused by flame, steam or hot liquids. As soon as possible, wash the chemical off completely using a shower or hose, and continue to wash for at least 15 minutes, while removing clothing from affected areas. Follow first aid directions on the chemical label. Then give additional first aid as for burns caused by heat.

In the case of ACID BURNS, wash the fact eyelids and eyes thoroughly for 15 minutes or more. If the victim is lying down, turn his head to the side and pour water from the inner corner holding eyelids open. Begin by washing the eye. Cover the eye with a dry, clean dressing. Never rub the eye. Get medical help.

## INTRODUCTION TO CPR TECHNIQUES

Cardiopulmonary resuscitation (CPR) is a holding action for sudden cardiac or respiratory arrest until more advanced life support care can be made available. CPR involves a combination of mouth-to-mouth rescue breathing (or other artificial ventilation techniques) and chest compressions. It keeps some oxygenated blood flowing to the brain and other vital organs until appropriate medical treatment can restore normal hear action.

Cardiac arrest causes the victim to lose consciousness within seconds. IF CPR IS STARED PROMPLLY after the pulse stops and if advanced life support is available quickly. The person has a chance to survive.

Cardiopulmonary resuscitation includes three basic rescue skills, the ABC/s of CPR: Airway, Breathing, and Circulation.

## AIRWAY



The first action for successful resuscitation is immediate opening of the airway. It is important to remember that the back of the tongue and the epiglottis are the most common cause of airway obstruction in the unconscious victim. Since the tongue, directly, and the epiglottis, indirectly, are attached to the lower jaw, tilting the head back and moving the lower jaw (chin) forward lifts the tongue and the epiglottis from the back of the throat and usually opens the airway.

## BREATHING



When breathing stops, the body has only the oxygen remaining in the lungs and bloodstream. It has no other oxygen reserve. Therefore, when breathing stops, cardiac arrest and death quickly follow. Mouth-to-mouth rescue breathing is the quickest way to get oxygen into the victim's lungs. There is more than enough oxygen in the air you breath into the victim to at least partly supply his or her needs. Rescue breathing must be performed until the victim can breathe on his or her own or until trained professionals take over.

REMEMBER: If the victim's heart is beating, you must (1) maintain an open airway and (2) breathe, for an adult victim, once every 5 seconds (12 times per minute). If the victim's heart is not beating, you will have to perform mouth-to-mouth rescue breathing PLUS check compressions.

## CIRCULATION



The third skill of CPR is check compressions, which replace the heartbeats of the victim. They thus maintain some blood flow to the lungs, brain, coronary arteries, and other major organs. Anytime chest compressions are performed, mouth-to-mouth rescue breathing (or a suitable alternate method of artificial ventilation) must also be performed.

Cardiopulmonary Resuscitation (CPR)				
	Objectives	Action	Child (1 to 8 yrs.)	Infant (under 1 yr.)
<b>A. Airway</b>	1. Assessment: Determine unresponsiveness.	Adult (over 8 yrs.) Tap or gently shake shoulder Say, "Are you okay?"		Observe
	2. Get help	Call out "Help"		
	3. Position the victim.	Turn on back as a unit, supporting head and neck if necessary. (4-10 seconds)		
	4. Open the airway.	Head-tilt/chin-lift		
<b>B. Breathing</b>	5. Assessment: Determine breathlessness	Maintain open airway. Place ear over mouth, observe chest. Lock. Listen feel for breathing. (3-5 seconds)		
	6. Give 2 rescue breaths.	Maintain open airway		
		Seal mouth to mouth		mouth to nose / mouth
		Give 2 rescue breaths, 1 to 1 1/2 seconds each. Observe chest rise. Allow lung deflation between breaths.		
	7. Option for abstracted airway	a. Reposition victim's head. Try again to give rescue breaths		
		b. Activate the EMS system.		
		c. Give 6-10 sub diaphragmatic abdominal thrusts		Give 4 back blows.
				Give 4 chest thrusts
		d. Tong-jaw lift and finger sweep	Tongue-jaw lift, but finger sweep only if you see a foreign object.	
		If unsuccessful, repeat a, c, and d until successful.		

<b>C. Circulation</b>	8. Assessment: Determine pulselessness. 9. Activate EMS system	Feel for carotid pulse with one hand; maintain head-tilt with the other (5-10 seconds)	Feel for brachial pulse: Keep head-tilt.
		If someone responded to call for help, send them to activate the EMS system. Total time steps 1-9, 15-35 seconds.	
	Begin chest compressions: 10. Landmark check	Run middle finger along bottom edge of rib cage to notch at center (tip of sternum).	Imagine a line drawn between the nipples.
	11. Hand position	Place index finger next to finger on notch;	Place 2-3 fingers on sternum, 1 finger's width below line. Depress 1/2 - 1 in.
		Two hands next to index finger. Depress 1 1/2-2 in.	Depress 1-1 1/2 in.
	12. Compression rate	80-100 per minute	At least 100 per minute
<b>CPR Cycles</b>	13. Compression to breaths.	2 breaths to every 15 compressions.	1 breath to every 5 compressions.
	14. Number of cycles.	4(52-73) seconds	10 (60-87 seconds)
	15. Reassessment.	Feel for carotid pulse. (5 seconds)	Feel for brachial pulse:
		If no pulse, resume CPR. Starting with 2 breaths.	If no pulse, resume CPR, starting with 1 breath.
<b>Option for entrance of 2nd rescuer: "I know CPR. Can I help?"</b>	1st rescuer ends CPR.	End cycle with 2 rescue breaths.	End cycle with 1 rescue breath.
	2nd rescuer checks pulse (5 seconds)	Feel for carotid pulse	Feel for brachial pulse:
	If no pulse, 2nd rescuer begins CPR.	Begin one rescuer CPR. Starting with 2 breaths.	Begin one-rescuer CPR, starting with 1 breath.
	1st rescuer monitors 2nd rescuer.	Watch for chest rise and fall during rescue breathing: check pulse during chest compressions.	
<b>Option for pulse return</b>	If no breathing, give rescue breaths.	1 breath every 5 second.	1 breath every 4 seconds. 1 breath every 3 seconds.

## APPENDIX

### HEAT EXPOSURE



### HEAT STROKE

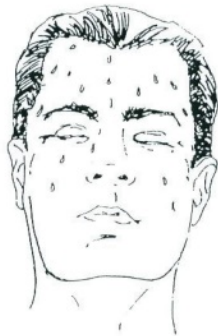
#### Symptoms:




1. Red, flushed face
2. Strong, rapid pulse
3. Hot, dry skin
4. Temperature of
5. Headache, nausea
6. Possible unconsciousness

#### Treatment:

1. Lie down and elevate head and chest.
2. Remove clothing and bathe body in isopropyl alcohol or lukewarm water to cool.
3. If the victim is conscious, give him sips of a mixture containing a pint of water and a teaspoon of salt.
4. Secure medical assistance.

### HEAT EXHAUSTION



Obstructed Airway: Conscious Adult			
Objectives	Critical Performance	Reason	
	Rescuer asks, "Are you choking?" Victim may be using the "Universal Distress signal" of choking: clutching the neck between thumb and index finger	Rescuer must identify complete airway obstruction by determining if victim is able to speak or cough	In the conscious victim it is essential to recognize the signs of an airway obstruction and take action immediately. If the victim is able to speak or cough effectively, do not interfere with his or her attempts to expel the foreign body. Continually check for success.
	Perform the Heimlich maneuver (sub diaphragmatic abdominal thrusts) until the foreign become unconscious	Sub diaphragmatic Abdominal thrust (the Heimlich maneuver): stand behind victim and wrap your arms around victim's waist. Grasp one fist with your other hand and place thumb side of your fist in the midline Slightly above the navel. Press fist into abdomen with quick inward and upward thrusts.	Such thrusts can force air upward into the airway from the lungs with enough pressure to expel the foreign body.
		Each abdominal thrust should be delivered decisively, with the intent of relieving the obstruction.  Chest thrusts: Stand behind victim and place your arms under victim and place your arms under victim's armpits to encircle the chest. Grasp one fist with other hand and place thumb side on the middle of the breastbone. Press with quick backward thrusts.	Chest thrusts are more easily done than abdominal thrusts when the abdominal girth is large, as in gross obesity or in advanced pregnancy.



**Symptoms:**

1. Pale face
2. Weak, rapid pulse
3. Cool, moist skin
4. Below normal temperature
5. Headache, nausea
6. Generally conscious

**Treatment:**

1. Lie down and elevate feet and legs.
2. Loosen clothing but keep warm.
3. If the victim is conscious give he sips of a mixture containing a pint of water and a teaspoon of salt.
4. Seek medical assistance.

**ALCOHOL POISONING****First Aid**

Immediate first aid is not necessary if the following symptoms are evident:

1. Sleeping quietly
2. Normal face color
3. Normal breathing
4. Regular pulse

Obtain IMMEDIATE medical treatment if the following symptoms are evident:

1. Sign of shock
2. Clammy, cold skin
3. Rapid and thread pulse
4. Irregular breathing
5. No response

**Treatment:**

1. Keep victim's airway open.
2. Treat victim for shock, if indicated.
3. Give victim artificial respiration only if indicated.
4. If victim unconscious, place him in the coma position. This guarantees good respiration.

NOTE: An intoxicated person can at times be violent; take care to prevent him from injuring himself or others.

**POISON BY MOUTH**

If a non-corrosive poison has been ingested (i.e., barbiturates, aspirin, ant paste, or roach powder):

1. Dilute poison as quickly as possible with water or milk unless the victim is unconscious or having convulsions. Give three of four glasses to an adult and one or two glasses to a child.
2. Contact the Poison Control Center or a physician for instructions. If indicated, induce vomiting. Insert the blunt of a spoon or your finger into the back of the victim's mouth. Use Ipecac syrup, if available, and give the dosage prescribed on the label. To prevent the victim choking on his vomits, hold his head face down below his hips. Save a sample of the vomits, as well as the poison container.
3. Contact the Poison Control Center or a physician.
4. Maintain respiration and circulation.
5. Treat for shock, if indicate.

If a corrosive poison has been ingested (i.e. strong acid or alkali):

1. Dilute poison as quickly as possible with water or milk unless the victim is unconscious or having convulsions. Give two glasses to an adult and one glass to a child. Egg white in water or cooking oil

may then be given. If a strong alkali has been ingested (i.e., drain cleaner, lye, ammonia, bleach, or laundry detergent) give water and vinegar or lemon juice.

2. Do not induce vomiting
3. Contact the Poison Control Center or a Physician
4. Maintain respiration and circulation.
5. Treat for shock if indicated.

If a petroleum product or turpentine has been ingested;

1. Dilute poison as quickly as possible with four ounces of mineral oil, if available, give milk or water unless the victim is unconscious or having convulsions. Give two glasses to an adult and one glass to a child.
2. Do not induce vomiting
3. Contact the Poison Control Center or a Physician
4. Maintain respiration and circulation.
5. Treat for shock if indicated.

**FRACTURES**

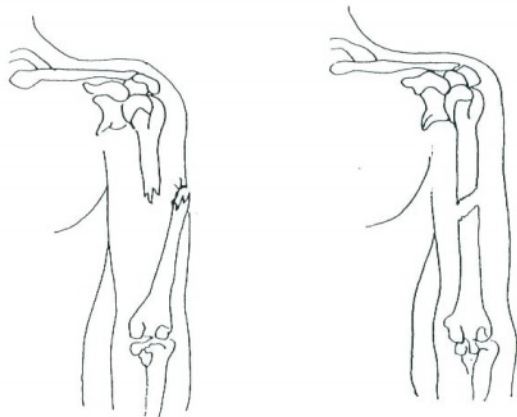
1. A compound fracture is a fracture with an open wound extending from the break to the outer skin.
2. A simple fracture is a break in a bone without an open wound.
3. A comminuted fracture is a bone broken in small pieces (shattered). The break can be closed or opened.

Signs and symptoms of a fracture include:

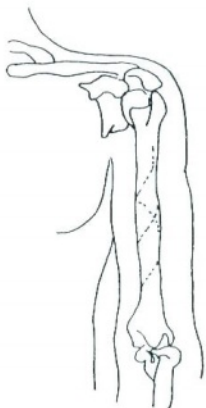
1. Swelling and numbness
2. Deformity
3. Tenderness to the touch and pain on motion.
4. Muscle spasms.

**FIRST AID FOR FRACTURES:**

1. Treat all bone injuries as fractures.
2. Splint and bandage to keep broken ends and adjacent joints from moving.
3. Treat muscle and joint strains and sprains similar to fractures. FRACTURES see next page.
4. Treat back injuries as a broken back or neck. If movement of transportation is absolutely necessary, move the body as a unit, avoiding twisting or turning the trunk. If possible, hold victims head and trunk in traction while placing on stretcher. Transport only on a rigid implement.
5. Give no stimulants to a person with a suspected head injury. Support the victim's head with a pillow, cushion, or other soft material to prevent further internal head injury.
6. Control the bleeding of a compound fracture by gentle direct pressure on a clean dressing over the wound. If the bleeding is or has been so severe as to threaten life, apply a tourniquet loosely above the wound. Use tourniquet only as a last resort to save a life.
7. Remember: Do not move a broken, dislocated sprained or strained member more than what is absolutely necessary.

**FRACTURES**

FIR



ภาคผนวก จ-2  
แบบฟอร์ม และตัวอย่างการตรวจสอบเครื่องจักรอุปกรณ์

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# แบบฟอร์มการตรวจสอบเครื่องจักรอุปกรณ์

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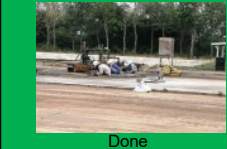



<div><div><div><div></div><div>Pan</div><div>ENERGY</div></div><div><div></div><div>Orient</div><div></div></div></div></div> <div>HSE Wellsite Audit</div>				Well Name (ชื่อบ่อ) : Date (วันที่):					
รายการที่ต้องตรวจเช็ค Checklist				Good ปกติ	Broken ผิดปกติ	รายละเอียดอาการ ผิดปกติ Broken Condition Description	การทำการ แก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date
แหล่งพลังงาน Power supply									
1	Power cord สายไฟ ตรวจสอบว่ามีรอยฉีกขาด หรือ ไหม้								
2	Ground wire สายดิน มีการตอกสายดิน และ สายไฟกับแท่งสายดินต้องไม่มีหลุด หรือมีการฉีกขาดของสายไฟ								
3	Power plug extension ปลั๊กไฟ ตรวจสอบ ว่ามีรอยแตก หรือรอยไหม้ ปลั๊กกับเต้าเสียบ ต่อกันแน่นสนิท								
4	Cable tray รางสายไฟ ตรวจสอบรางสายไฟต้อง ไม่บิดเบี้ยวหรือบุบ สายไฟ ต้องวางอยู่บนรางไม่หลุดออกมาข้างนอก								
หัวหลุม Wellhead									
5	Wellhead valve & stuffing box. วาล์วหัวหลุม ตรวจสอบวาล์วต่างๆ และ สดัฟฟิง บ็อกส์ที่หัวหลุม ต้องไม่มีการรั่วซึม ปิดได้สนิท ด้ามจับต่าง ๆ ต้องอยู่ครบ								
6	Wellhead nameplate. มีป้ายบอกชื่อที่หัวหลุม								
7	Sampling point จุดเก็บตัวอย่าง วาล์วปิดสนิทดีไม่มีการรั่วซึม และมีคราบน้ำมันเลอะสกปรกอยู่ตรงพื้นบริเวณที่เก็บหรือไม่								
8	Cellar grating ตะแกรงพื้นหัวบ่อ มีการติดตั้งไว้ให้ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่มีได้ขุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้ร่วงตกหล่น และควรตรวจดู รอยผุ หรือสนิม								
9	Mouse hole grating ตะแกรงพื้นเมาส์โฮล มีการติดตั้งไว้ให้ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่มีได้ขุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้ร่วงตกหล่น และควรตรวจดู รอยผุ								
10	Cellar หลุมใต้หัวบ่อ มีของเหลว น้ำมันสกปรก ซังอยู่หรือไม่ ระดับ ของเหลวหรือ น้ำมันซังสูงมากน้อยเท่าไร								
11	Flow line piping ท่อผลิตมีการรั่วซึมหรือไม่ รอยต่อข้อต่อต่าง ๆ แน่นสนิทดีหรือไม่								
บริเวณ แทงค์ผลิต Storage tank area									
12	Storage tank แท็งค์ผลิต มีการรั่วซึมหรือไม่ บันไดมี ราวจับ และ สายดินต่างๆ มีติดตั้งไว้และอยู่ในสภาพดี หรือไม่								
13	Stack Storage tank ปล่องควันแท็งค์ผลิต ใช้งานได้ดี หรือไม่								
14	Storage tank Burner เบอรันเนอร์ ที่แท็งค์ผลิต ใช้งานได้ตามปกติ ไม่รั่ว								
15	Storage bundle แผงคอนกรีตรอบบริเวณ แท็งค์ผลิต มีครบทุกด้านและ อยู่ในสภาพดีหรือไม่ ต้องไม่มีการแตก กระเพาะของปูน และการเจาะรู เพื่อป้องกันน้ำมันไหลออกนอกบริเวณ								
บริเวณโหลดน้ำมัน Loading Bay									
16	Ground rod แท่งและสายดินถูกติดตั้งไว้ถูกต้อง และไม่ขาด หรือชำรุด								
17	Loading arm งวงโหลด สามารถหมุนอย่างสมดุลย์และใช้งานได้ตามปกติ หรือไม่ ต้องไม่หย่อนห้อย สามารถ หมนเก็บได้อย่างถูกต้อง								
18	Concrete pad ลานคอนกรีต ต้องไม่แตก และไม่มีสิ่งกีดขวางเส้นทางรถ และ ไม่มีคราบน้ำมันหยดเรี่ยราด								
สภาพแวดล้อมทั่วบริเวณ Site location environment									
19	Fence รั้วรอบอาณาเขต เสารั้วต้องตั้งตรง และลวดหนาม ไม่ถ่าง และ ขาด								
20	Main Gate ประตูทางเข้า มีป้อมยาม, ประตูกัน และยามมาประจำสถานที่ หรือไม่ ป้ายชื่อหลุม และป้ายเตือนต่างๆ ต้องมีครบ และอยู่ในสภาพดี ไม่แตกหัก สกปรก								
21	Waste pit บ่อพักน้ำเสีย ตรวจสอบสภาพบ่อคอนกรีต ต้องไม่แตกร้ารั่วซึม และไม่มีขยะ								
22	Drainage & Oil trap ร่องระบายน้ำ และ บอดักไขมัน อยู่ในสภาพดีหรือไม่ ต้องไม่แตกหัก และไม่มีสิ่งกีดขวางเส้นทางน้ำไหล								
23	Flare bund & shield แนวกันไฟแฟลร์ พื้นและแนวกันต้องเป็นปูน ไม่มีการเจาะรู และ สามารถกันไม่ให้น้ำมันรั่วไหลลงสู่พื้นได้ สังเกตสีกันไฟ ควรอยู่ในสภาพที่ดี ไม่ผพัง หลุดลย และมี สลิ่ง								
24	Oil spill spot คราบน้ำมัน พบเห็นมีคราบน้ำมันหยด ตามพื้นรอบๆ อาณาบริเวณ หรือไม่ โดยเฉพาะบริเวณที่โหลดน้ำมัน และ บริเวณที่วางเครื่องปั้นไฟ								
25	Spill cleaning kits อุปกรณ์ทำความสะอาดคราบน้ำมันต้องมีอยู่ครบ และพร้อมใช้งาน ได้แก่ พลุ กระเบียง ถังทราย และผ้าดูดซับคราบน้ำมัน								
26	Waste bin มีถังขยะอยู่ในอาณานิเวณ 2 ชนิด คือ ถังขยะทั่วไป และ ถังขยะปนเปื้อน ขยะที่นำมาทิ้ง ต้องคัดแยก และทิ้งลงถังให้ถูกประเภท								
27	Well site good housekeeping บริเวณบ่อผลิตไม่มีขยะและจัดของเป็นระเบียบ								
28	Toilet ห้องน้ำอยู่ในสภาพใช้งานได้ดี สะอาด								
29	Tree Planting มีการปลูกต้นไม้รอบอาณานิเวณ								
อุปกรณ์ ความปลอดภัย Safety Equipment									
30	Fire Extinguisher ถังดับเพลิง อยู่ในสภาพพร้อมใช้งาน และตรวจดูแรงดันจากเกจว่ามีอยู่ในระดับที่ใช้งานได้								
31	First aid box & Eye washer ตู้ยาและ ที่ล้างตาฉุกเฉิน ต้องมียาและน้ำล้าง และอยู่ในสภาพพร้อมใช้งาน								
32	Wind sock & Safety sign กรวยลม อยู่ในสภาพดีไม่ขาด ป้ายความปลอดภัยอยู่ในสภาพที่ดีไม่ชำรุดเสียหาย								
33	PPE. พนักงานที่อยูบรือสวมใส่อุปกรณ์ความปลอดภัยครบ								
34	Access road ถนนพื้นที่ในบ่อผลิต ไม่เสียหาย								



## ตัวอย่างการติดตามตรวจสอบและซ่อมบำรุงของเจ้าหน้าที่

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<div>  <div>HSE Wellsite Audit</div> </div>				<div>Well Name (ชื่อบ่อ) :L53-B</div> <div>Date วันที่ 24 May 2022</div>			Picture Progress	
รายการที่ต้องตรวจเช็ค Checklist	Good ปกติ	Broken ผิดปกติ	รายละเอียดการผิดปกติ (Detail)	การทำการแก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After
<b>แหล่งพลังงาน Power supply</b>								
1 Power cord สายไฟ ตรวจสอบว่ามีรอยฉีกขาด หรือ ไม่	✓							
2 Ground wire สายดิน มีการต่อสายดิน และ สายไฟกับแท่งสายดินต้องไม่มีหลุด หรือมีการฉีกขาดของสายไฟ	✓							
3 Power plug extension ปลั๊กไฟ ตรวจสอบ ว่ามีรอยแตก หรือรอยไหม้ ปลั๊กกับเต้าเสียบ ต่อกันแน่นสนิท	✓							
4 Cable tray รางสายไฟ ตรวจสอบรางสายไฟต้อง ไม่มีบิดเบี้ยวหรือบุบ สายไฟ ต้องวางอยู่บนรางไม่หลุดออกมาข้างนอก	✓							
<b>หัวหลุม Wellhead</b>								
5 Wellhead valve & stuffing box. วาล์วหัวหลุม ตรวจสอบวาล์วต่างๆ และ สดไฟฟุ้ง บล็อกสที่หัวหลุม ต้องไม่มีการรั่วซึม ปิดได้สนิท ตามจับต่าง ๆ ต้องอยู่ครบ	✓							
6 Wellhead nameplate. มีป้ายบอกชื่อที่หัวหลุม	✓							
7 Sampling point จุดเก็บตัวอย่าง วาล์วปิดสนิทไม่มีการรั่วซึม และมีคราบน้ำมันและสกปรกอยู่ตรงพื้นบริเวณที่เก็บหรือไม่	✓							
8 Cellar grating ตะแกรงพื้นหัวบ่อ มีการติดตั้งไว้ให้ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่ได้ขุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้ร่วงตกหล่น และควรตรวจดู รอยผุ หรือสนิม	✓							
9 Mouse hole grating ตะแกรงพื้นเมาส์โฮล มีการติดตั้งไว้ให้ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่ได้ขุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้ร่วงตกหล่น และควรตรวจดู รอยผุ หรือสนิม	✓							
10 Cellar หลุมใต้หัวบ่อ มีช่องเหลว น้ำมันสกปรก ซังอยู่หรือไม่ ระดับ ของเหลวหรือ น้ำมันซึ่งสูงมากน้อยเท่าไร	✓							
11 Flow line piping ท่อผลิตมีการรั่วซึมหรือไม่ รอยต่อข้อต่อต่าง ๆ แน่นสนิทหรือไม่	✓							
12 Concrete bund รอบหัวหลุม well head	✓		ไม่พบ Concrete bund รอบหัวหลุม well head L53-B1	ดำเนินการทำ Concrete bund รอบหัวหลุม	Production	10-May-22		 Done
13 มี Hard barricade รอบ Beam pump	✓							
<b>บริเวณ แทงค์ผลิต Storage tank area</b>								
14 Storage tank แทงค์ผลิต มีการรั่วซึมหรือไม่ มีบันได มีราวจับ และ สายดินต่างๆ มีติดตั้งไว้และอยู่ในสภาพดี หรือไม่	✓							
15 Stack Storage tank ปล่องควันแทงค์ผลิต ใช้งานได้ดี หรือไม่	✓							
16 Storage tank Burner เบอรันเนอร์ ที่แทงค์ผลิต ใช้งานได้ตามปกติ ไม่รั่ว	✓							

Pan-Orient ENERGY				HSE Wellsite Audit			Well Name (ชื่อบ่อ) :L53-B Date วันที่ 24 May 2022			Picture Progress	
รายการที่ต้องตรวจเช็ค Checklist				Good ปกติ	Broken ผิดปกติ	รายละเอียดอาการผิดปกติ (Detail)	การทำการ แก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After
17	Storage bundle แผงคอนกรีตรอบบริเวณ แทงค์ผลิต มีครบทุกด้านและ อยู่ในสภาพดีหรือไม่ ต้องไม่มีมีการแตก กระเทาะของปูน และการเจาะรู เพื่อป้องกันน้ำมันไหลออกนอกบริเวณ			✓							
บริเวณโหลดน้ำมัน Loading Bay											
18	Ground rod แท่งและสายดินถูกติดตั้งไว้ถูกต้อง และไม่ขาด หรือชำรุด			✓							
19	Loading arm วงล้อโหลด สามารถหมุนอย่างสมดุลย์และใช้งานได้ตามปกติ หรือไม่ ต้องไม่หย่อน ห้อย สามารถ หมุนเก็บได้อย่างถูกต้อง				X	ไม่มีลานโหลด	จัดหาผู้รับเหมา ดำเนินการสร้าง ลานโหลด	Production/ HSE/ คุณ ประกายพฤษ์	30-Jun-22		
บริเวณทดสอบน้ำมัน Lab test station											
20	Ground rod แท่งและสายดินถูกติดตั้งไว้ถูกต้อง และไม่ขาด หรือชำรุด			✓							
21	Oil spill spot คราบน้ำมัน พบเห็นมีคราบน้ำมันหยด ตามพื้นรอบๆ อาณาบริเวณ หรือไม่			✓							
22	Crude oil bucket พบเห็นมีขยะปนอยู่หรือไม่			✓							
23	MSDS มีเอกสารเกี่ยวกับสารที่ใช้ในห้องทดสอบหรือไม่			✓							
24	ความสะอาด และ จัดเก็บอุปกรณ์ เป็นระเบียบ หรือ ไม่			✓							
25	สภาพอุปกรณ์ และ เครื่องมือในห้องปฏิบัติการ พร้อมใช้ หรือ ไม่			✓							
26	PPE สำหรับใช้ทำงานใน Lab มีผ้ากันเปื้อนสารเคมี และ ปลอกแขนป้องกันสารเคมี			✓							
สภาพแวดล้อมหัวบริเวณ Site location environment											
27	Fence รั้วรอบอาณาเขต เสารั้วต้องตั้งตรง และลวดหนาม ไม่ถ่าง และ ขาด			✓							
28	Main Gate ประตูทางเข้า มีป้อมยาม, ประตูกัน และยามมาประจำสถานที่ หรือไม่ ป้ายชื่อหลุม และ ป้ายเตือนต่างๆ ต้องมีครบ และอยู่ในสภาพดี ไม่แตกหัก สุกญหาย			✓							
29	Waste pit บ่อพักน้ำเสีย ตรวจสอบสภาพบ่อคอนกรีต ต้องไม่แตกร้าวรั่วซึม และไม่มีขยะ			✓							


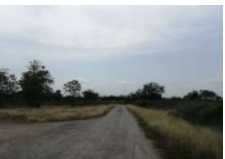
Pan-Orient ENERGY				HSE Wellsite Audit			Well Name (ชื่อบ่อ) :L53-B Date วันที่ 24 May 2022		Picture Progress		
รายการที่ต้องตรวจเช็ค Checklist				Good ปกติ	Broken ผิดปกติ	รายละเอียดอาการผิดปกติ (Detail)	การทำการ แก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After
30	Drainage & Oil trap ร่องระบายน้ำ และ บ่อดักไขมัน อยู่ในสภาพดีหรือไม่ ต้องไม่แตกหัก และไม่มีสิ่งกีดขวางเส้นทางน้ำไหล				X	มีใบไม้ในร่องระบายน้ำ	จัดหาผู้รับเหมา ดำเนินการทำ ความสะอาดร่อง ระบายน้ำ	Production/ HSE/ คุณ ประกายพฤกษ์	30-Jun-22		In-progress
31	Flare bund & shield แนวกันไฟแฟลร์ พื้นและแนวกันต้องเป็นปูน ไม่มีการเจาะรู และสามารถกันไม่ให้ น้ำมันรั่วไหลลงสู่พื้นได้ สังกะสีกันไฟ ควรอยู่ในสภาพที่ดี ไม่ผุพัง หลุดลุ่ย และมี สลึงยึดแน่นหนา			✓							
32	Flare system มีการเผาไหม้สมบูรณ์ ไม่มีควันดำ ระบบท่อและวาล์วอยู่ในสภาพดีไม่ชำรุด			✓							
33	Oil spill spot คราบน้ำมัน พบเห็นมีคราบน้ำมันหยด ตามพื้นรอบๆ อาณาบริเวณ หรือไม่ได้เฉพาะบริเวณที่ไหลดน้ำมัน และ บริเวณที่วางเครื่องปั้นไฟ			✓							
34	Spill cleaning kits อุปกรณ์ทำความสะอาดคราบน้ำมันต้องมีอยู่ครบ และพร้อมใช้งาน ได้แก่ พลาสติกทราย และผ้าดูดซับคราบน้ำมัน			✓							
35	Waste bin มีถังขยะอยู่ภายในอาณาบริเวณ 2 ชนิด คือ ถังขยะทั่วไป และ ถังขยะปนเปื้อน ขยะที่นำมาทิ้ง ต้องคัดแยก และทิ้งลงถังให้ถูกประเภท			✓							
36	Well site good housekeeping บริเวณบ่อผลิตไม่มีขยะและจัดของเป็นระเบียบ			✓							
37	Generator Drip Tray ถาดรองเครื่องปั้นไฟ มีหรือไม่			✓							
38	Toilet ห้องน้ำอยู่ในสภาพใช้งานได้ดี สะอาด			✓							
39	Septic tank บ่อเกรอะอยู่ในสภาพใช้งานได้ดี ไม่มีการรั่วซึม			✓							
40	Tree Planting มีการปลูกต้นไม้รอบอาณาบริเวณ				X	ต้นไม้รอบอาณาบริเวณขึ้นสูงใกล้หม้อแปลงและสายไฟฟ้า	จัดหาผู้รับเหมา ดำเนินการตัด ต้นไม้	Production/ HSE/ คุณ ประกายพฤกษ์	30-Jun-22		In-progress
41	ถังเก็บน้ำมัน หรือ สารเคมีที่ไม่ใช่แล้ว			✓							



## HSE Wellsite Audit

Well Name (ชื่อย่อ) : L53-B  
Date วันที่ 24 May 2022

### Picture Progress

รายการที่ต้องตรวจเช็ค Checklist		Good ปกติ	Broken ผิดปกติ	รายละเอียดการผิดปกติ (Detail)	การทำการ แก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After
42	ไม่มีหญาขึ้นสูงโดยรอบ หลุมผลิต		X	มีหญาขึ้นสูงโดยรอบ หลุมผลิต	จัดหาผู้รับเหมา ดำเนินการตัด หญ้า	Production/ HSE/ คุณ ประภาพรฤกษ์	30-Jun-22	 	In-progress
43	Access road ถนนพื้นที่ในบ่อผลิต ไม่เสียหาย	✓							
44	Site Office cabin บริเวณรอบไม่มีขยะ ภายในสะอาด มีสายGrounding ประตูล็อคได้	✓							
45	Lightning system ระบบไฟส่องสว่าง มีเพียงพอสำหรับการปฏิบัติงานหรือไม่ หลอดไฟต่างๆ ต้อง ใช้งานได้ดี ไม่ดับ หรือชำรุด	✓							
46	Main hole ควรตรวจระดับของเหลว	✓							
47	สิ่งก่อสร้างหรืออุปกรณ์ที่ไม่ใช้งาน ( ถังสารเคมีไม่มีที่สำหรับวางถัง )	✓							
48	ข้อต่อท่อที่มีถังรองรับที่อยู่นอกบริเวณเดินคอนกรีต ควรมีถาดรองรับ เพื่อป้องกันน้ำมันหกรั่วไหลสู่ พื้นดิน	✓							
อุปกรณ์ ความปลอดภัย Safety Equipment									
49	Fire Extinguisher ถังดับเพลิง อยู่ในสภาพพร้อมใช้งาน และตรวจดูแรงดันจากเกจว่ามีอยู่ใน ระดับที่ใช้งานได้	✓							
50	First aid box & Eye washer ตู้ยาและ ที่ล้างตาฉุกเฉิน ต้องมียาและน้ำล้าง และอยู่ในสภาพ พร้อมใช้งาน	✓							
51	Wind sock & Safety sign กรวยลม อยู่ในสภาพดีไม่ขาด บ้ายความปลอดภัยอยู่ในสภาพที่ดีไม่ ชำรุดเสียหาย	✓							
52	PPE. พนักงานที่อยู่ในบริเวณบ่อสวมใส่อุปกรณ์ความปลอดภัยครบ	✓							
53	Mobile phone ในพื้นที่ผลิตต้องมีโทรศัพท์มือถือ	✓							
ความเสี่ยงที่จะเกิดอุบัติเหตุ Risk Assessment									
54									

Audited by : Chakkraphan N.

Audited by : Thanakorn



## HSE Wellsite Audit

Well Name (ชื่อบ่อ) : L53-B

Date วันที่ 24 May 2022

Picture Progress

รายการที่ต้องตรวจเช็ค Checklist

Good  
ปกติ

Broken  
ผิดปกติ

รายละเอียดการผิดปกติ  
(Detail)

การทำการ  
แก้ไข  
Corrective  
actions required

ผู้รับผิดชอบ  
Respondent

เสร็จวันที่  
Estimated close  
out date

Before

After

Field Operations HSE Officer

PM of Air Compressor		Checked	Remark
Date:	3/5/22		
Location:	LS3-B1		
PM Period:	1 M		
Air Comp. No:	ACP-08		
Capacity:	148 L		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to stop air compressor.		/	
B) Observe any unusual of air compressor before stop.		/	
C) Stop air compressor, off mainbreaker.		/	
Comment:			
<b>After stop:</b>			
A) Check all drive belts and pulley condition.		/	
B) Clean air filter.		/	
C) Check any leakage.		/	
D) Check or change crankcase lube oil.		/	
E) Drain water of separator.		/	
F) Check all bolts and retighten.		/	
Comment:			
<b>Final check:</b>			
A) Check and clean air compressor, working area.		/	
B) Coordinate with production to operate air compressor.		/	
C) Start air compressor and check leaks, noise, vibration.		/	
D) Test pressure switch.		/	
Comment:			
Done by: <i>M. Ardi</i>			
Date: 3/5/22			
Endorser: <i>J. Ward</i>			
Date: 3/5/22			

PM of Transfer Pump		Checked	Remark
Date:	3/5/22		
Location:	LS3-B7		
PM Period:	2 hr		
Pump No:	NE/12		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to stop transfer pump.		/	
B) Observe any unusual of transfer pump before shutdown.		/	
C) Stop transfer pump, off mainbreaker.		/	
D) Close suction valve & discharge valve.		/	
Comment:			
<b>After stop:</b>			
A) Check all bolts retighten.		/	
B) Check rubber coupling element condition.		/	
C) Check any leakage.		/	
D) Check or change gear oil.		/	
E) Visually check all condition.		/	
Comment:			
<b>Final check:</b>			
A) Check and clean transfer pump, working are.		/	
B) Coordinate with production to start transfer pump.		/	
C) Open suction valve & discharge valve.		/	
D) Start transfer pump, check noise, leaks, vibration and load.		/	
Comment:			
Done by: <i>Morshah</i>			
Date: 3/5/22			
Endorser: <i>Awadno</i>			
Date: 3/5/22			

PM Top Loading Arm		Checked	Remark
Date: 3/5/22			
Location: 153-B1			
PM Period: 1 hr			
Equipment No: A-			
<b>Preparation for PM activities:</b>			
A) Coordinate with production for PM top loading arm.		/	
B) Observe any unusual of top loading.		/	
C) Close discharge valve of loading pump.		/	
<b>Comment:</b>			
<b>PM activities:</b>			
A) Regrease all bearing.		/	
B) Check any leakage.		/	
C) Check all bolts and retighten.		/	
<b>Comment:</b>			
<b>Final check:</b>			
A) Check and clean top loading arm, working are.		/	
B) Open discharge valve of loading pump.		/	
C) Restore top loading arm to normal operation.		/	
<b>Comment:</b>			
<b>Done by: Mohamed</b>			
Date: 3/5/22			
<b>Endorser: Mawho</b>			
Date: 3/5/22			

C

PM of Water Pump		Checked	Remark
Date:	3/5/22		
Location:	LS3-B7		
PM Period:	7:15		
Equipment No:	BK60-		
Preparation for PM activities:			
A) Coordinate with production to stop water pump.		/	
B) Observe any unusual of water pump before shutdown.		/	
C) Stop water pump, off mainbreaker.		/	
Comment:			
After stop:			
A) Check all bolts and retighten.		/	
B) Check any leakage.		/	
C) Visually check all condition.		/	
Comment:			
Final check:			
A) Check and clean water pump, working area.		/	
B) Coordinate with production to start water pump.		/	
C) Start water pump, check noise, leaks, load and vibration.		/	
Comment:			
Done by: <i>Morant</i>			
Date: 3/5/22			
Endorser: <i>Jandro</i>			
Date: 3/5/22			

PM of Heater Treater		Checked	Remark
Date:	3/5/22		
Location:	253-B1		
PM Period:	1M		
H/T No:	H1-4520-		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.			
B) Observe any unusual of H/T.			
C) Check temperature gauge. ( °F )		150	
D) Check pressure gauge. ( PSI )		10	
E) Stop burner and close gas supply valve.		1	
<b>Comment:</b>			
<b>After stop:</b>			
A) Check sight glass condition.		1	
B) Check pressure relief valve condition.		1	
C) Check drum valve condition.		1	
D) Check back pressure valve and gas pressure. ( PSI )		10	
E) Check gas flow meter.		1	
F) Check water leg siphon condition.		1	
G) Check leakage and retighten bolts.		1	
H) Check and clean burner.		1	
I) Check and clean fire tube.		1	
<b>Comment:</b>			
<b>Final check:</b>			
A) Check and clean working area.		1	
B) Coordinate with production to operate burner.		1	
C) Check leakage and adjust fire.		1	
<b>Comment:</b>			
<b>Done by:</b>			
Date:	3/5/22		
<b>Endorser:</b>	Dw20		
Date:	3/5/22		



PM of Oil Storage Tank		Checked	Remark
Date:	3/5/22		
Location:	253-B1		
PM Period:	1 M		
Tank No:	716-054		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.			
B) Observe any unusual of oil storage tank.			
C) Check temperature gauge.(°F)			
D) Stop burner and close gas supply valve.			
Comment:			
<b>After stop:</b>			
A) Take off burner housing from tank.			
B) Check and clean burner gun.			
C) Check and clean pilot gun.			
D) Check and clean fire tube .			
E) Clean frame arrester.			
F) Reinstall burner housing to tank.			
G) Check leakage and retighten bolts.			
Comment:			
<b>Final check:</b>			
A) Check and clean working area.			
B) Coordinate with production to operate burner.			
C) Check leakage and adjust fire.			
Comment:			
Done by: <i>[Signature]</i>			
Date: 3/5/22			
Endorser: <i>[Signature]</i>			
Date: 3/5/22			

PM of Oil Storage Tank		Checked	Remark
Date:	3/5/22		
Location:	253-111		
PM Period:	2 M		
Tank No:	716-059		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.		/	
B) Observe any unusual of oil storage tank.		/	
C) Check temperature gauge.(°F)		120	
D) Stop burner and close gas supply valve.		/	
<b>Comment:</b>			
<b>After stop:</b>			
A) Take off burner housing from tank.		/	
B) Check and clean burner gun.		/	
C) Check and clean pilot gun.		/	
D) Check and clean fire tube .		/	
E) Clean frame arrester.		/	
F) Reinstall burner housing to tank.		/	
G) Check leakage and retighten bolts.		/	
<b>Comment:</b>			
<b>Final check:</b>			
A) Check and clean working area.		/	
B) Coordinate with production to operate burner.		/	
C) Check leakage and adjust fire.		/	
<b>Comment:</b>			
<b>Done by:</b>			
Date: 3/5/22			
<b>Endorser:</b>			
Date: 3/5/22			

PM of Oil Storage Tank		Checked	Remark
Date:	3/5/22		
Location:	U53-B1		
PM Period:	12		
Tank No:	416-003		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.			
B) Observe any unusual of oil storage tank.			
C) Check temperature gauge. (°F)			
D) Stop burner and close gas supply valve.			
Comment:			
<b>After stop:</b>			
A) Take off burner housing from tank.			
B) Check and clean burner gun.			
C) Check and clean pilot gun.			
D) Check and clean fire tube.			
E) Clean frame arrester.			
F) Reinstall burner housing to tank.			
G) Check leakage and retighten bolts.			
Comment:			
<b>Final check:</b>			
A) Check and clean working area.			
B) Coordinate with production to operate burner.			
C) Check leakage and adjust fire.			
Comment:			
Done by: <i>Morad</i>			
Date: 3/5/22			
Endorser: <i>Mudro</i>			
Date: 3/5/22			

PM of Oil Storage Tank		Checked	Remark
Date:	3/5/22		
Location:	253-131		
PM Period:	7M		
Tank No:	TKD-004		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.			
B) Observe any unusual of oil storage tank.			
C) Check temperature gauge.(°F)			
D) Stop burner and close gas supply valve.			
<b>Comment:</b>			
<b>After stop:</b>			
A) Take off burner housing from tank.			
B) Check and clean burner gun.			
C) Check and clean pilot gun.			
D) Check and clean fire tube.			
E) Clean frame arrester.			
F) Reinstall burner housing to tank.			
G) Check leakage and retighten bolts.			
<b>Comment:</b>			
<b>Final check:</b>			
A) Check and clean working area.			
B) Coordinate with production to operate burner.			
C) Check leakage and adjust fire.			
<b>Comment:</b>			
<b>Done by:</b> <i>Morad</i>			
<b>Date:</b> 3/5/22			
<b>Endorser:</b> <i>Dwain</i>			
<b>Date:</b> 3/5/22			

PM of Oil Storage Tank		Checked	Remark
Date:	3/5/22		
Location:	C53-B7		
PM Period:	7:00 - 8:00		
Tank No:	767-006		
<b>Preparation for PM activities:</b>			
A) Coordinate with production to work.		/	
B) Observe any unusual of oil storage tank.		/	
C) Check temperature gauge. (°F)		100	
D) Stop burner and close gas supply valve.		/	
Comment:			
<b>After stop:</b>			
A) Take off burner housing from tank.		/	
B) Check and clean burner gun.		/	
C) Check and clean pilot gun.		/	
D) Check and clean fire tube.		/	
E) Clean frame arrester.		/	
F) Reinstall burner housing to tank.		/	
G) Check leakage and retighten bolts.		/	
Comment:			
<b>Final check:</b>			
A) Check and clean working area.		/	
B) Coordinate with production to operate burner.		/	
C) Check leakage and adjust fire.		/	
Comment:			
Done by: <i>[Signature]</i>			
Date: 3/5/22			
Endorser: <i>[Signature]</i>			
Date: 3/5/22			

ภาคผนวก จ-3  
การฝึกอบรมด้านอาชีวอนามัยและความปลอดภัย

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## การอบรมความปลอดภัยในการทำงานกับสารเคมี

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ใบทะเบียนวุฒิบัตร

No	ชื่อ - นามสกุล	บริษัท	อบรมวันที่	จบวันที่	หมายเลขทะเบียน
1	นายราชศักดิ์ เจริญวิทย์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652620
2	นายมนัส ชีพรัตน์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652621
3	นายชัยชัย อินทร์สุข	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652622
4	นายวรพล กชภูมิ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652623
5	นายอนุชิต แก้วคำ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652624
6	นายคณิน สะตะ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652625
7	นายมนัส หุ่นโยนก	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652626
8	นายวีระชัย หุ่นแพง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652627
9	นายธนพนธ์ จันทโชติ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652628
10	นายสมคิด สระทองมา	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652629
11	นายธนากร มีประสพ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652630
12	นายชัยนันท์ ประสิทธิ์สุข	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652631
13	นายบัณฑิต เจตนางานงค์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652632
14	นายทศพล แซ่ฮึ้ง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652633
15	นายจักรพันธ์ นาเจริญ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	26-09-65 -	26-09-65	652634





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายจักรพันธ์ นาเจริญ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652634



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายทศพล แซ่อิง**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
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*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Thue*

Certificate No. 652633





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายบัณฑิต เจตนน์จำนงค์**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652632



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายชัยนันท์ ประสิทธิ์สุข**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652631





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายธนากร มีประสพ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha*

Certificate No. 652630



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายสมคิด สระทองมา**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652629





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายธนพนธ์ จันทโชติ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652628





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายวีระชัย พุ่มแพง**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652627



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายมนัส พุ่มโยนก**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Mae*

Certificate No. 652626





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายคณิน สะตะ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652625



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายอนุชิต แก้วคำ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652624





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายวรพล คชภูมิ**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Nue.*

Certificate No. 652623



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายชัยยัญ อินทร์สุข**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha*

Certificate No. 652622





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายมนัส ชีพนุรัตน์**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha*

Certificate No. 652621



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์  
สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND)  
UNDER HER ROYAL HIGHNESS PRINCESS MAHACHAKRI SIRINDHORN PATRONAGE

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
With this certificate, hereto certifies that

**นายราชศักดิ์ เจริญวิกกัย**

ได้ผ่านการฝึกอบรมหลักสูตร  
has completed the training program, namely

ความปลอดภัยในการทำงานกับสารเคมีอันตรายและการจัดเก็บสารเคมีอันตรายและการโต้ตอบกรณีฉุกเฉิน  
Safety in working with hazardous chemicals and dangerous chemical storage and emergency response

Organized date  
September 26, 2022

Period of training  
6 hrs.

This certificate is issued on  
September 26, 2022

*L. Chaikittiporn*

(Assoc. Prof. Dr. Chalermchai Chaikittiporn)  
President of Safety and Health at Work Promotion Association (Thailand)

Name of Registrar: *Tha.*

Certificate No. 652620



## การอบรมและฝึกซ้อมดับเพลิง

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ที่ นฐ ๕๒๒๐๑/๒๕๐

สำนักงานเทศบาลตำบลกำแพงแสน  
๒๓ หมู่ ๑ ต.ทุ่งกระพังไหม อ.กำแพงแสน  
จังหวัดนครปฐม ๗๓๑๔๐

๒๐

กันยายน ๒๕๖๕

เรื่อง รายงานผลการฝึกอบรมการดับเพลิงขั้นต้น/ฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

เรียน ผู้จัดการฝ่ายปฏิบัติการ แพน โอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเต็ด

อ้างถึง หนังสือ แพน โอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเต็ด ที่ POS-126-2022 ลงวันที่ ๑๕ สิงหาคม ๒๕๖๕

สิ่งที่ส่งมาด้วย ๑. แบบรายงานผลการฝึกอบรมการดับเพลิงขั้นต้น/ฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ  
๒. วุฒิบัตรรับรองการผ่านการฝึกอบรมฯ

ตามหนังสือที่อ้างถึง แพน โอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเต็ด ตั้งอยู่เลขที่ ๕๕๕ อาคารรสาทาวเวอร์ ๒ ชั้น ๑๗ ห้องเลขที่ ๑๗๐๒ ถ. พหลโยธิน แขวงจตุจักร กรุงเทพฯ ๑๐๙๐๐ (สถานที่ฝึกอบรม โกดังหมู่ ๔ ตำบล ทุ่งลูกนก อำเภอกำแพงแสน จังหวัดนครปฐม) ได้แจ้งกำหนดการฝึกอบรมการดับเพลิงขั้นต้น/ฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ ในวันที่ ๒๒ สิงหาคม ๒๕๖๕ ระหว่างเวลา ๐๘.๐๐-๑๗.๐๐ น. โดยจัดฝึกอบรมภาคทฤษฎีและฝึกภาคปฏิบัติ ณ บริษัท นั้น

บัดนี้ เทศบาลตำบลกำแพงแสน ได้ดำเนินการฝึกอบรมเป็นที่เรียบร้อยแล้ว จึงขอรายงานผลการฝึกอบรมดังกล่าว รายละเอียดปรากฏดังสิ่งที่ส่งมาพร้อมนี้

จึงเรียนมาเพื่อโปรดทราบ

ขอแสดงความนับถือ

(นางสมพิศ ยืนนาน)

นายกเทศมนตรีตำบลกำแพงแสน

สำนักปลัดเทศบาล

งานป้องกันและบรรเทาสาธารณภัย

โทร/โทรสาร ๐๓๔-๓๕๕-๑๐๑/๐๓๔-๓๕๕-๐๕๘

คำนิยามจังหวัดนครปฐม “เดินตามรอยพระยุคลบาท ปฏิบัติราชการด้วยความเป็นธรรม”

# รายงานผลการฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

(สำหรับผู้ที่ได้รับใบอนุญาตเท่านั้น)

ชื่อหน่วยงานที่ได้รับใบอนุญาต.....สำนักงานเทศบาลตำบลกำแพงแสน.....

หมายเลขใบอนุญาต.....ดพฝ.-ร.๐๔๒.....หมดอายุ.....๑๒ สิงหาคม พ.ศ. ๒๕๖๖

อ้างอิงหนังสือแจ้งการฝึกซ้อม เลขที่นร.๕๒๒๐๑/๕๓๔ ลงวันที่ ๑๘/๐๘/๖๕.....

## ส่วนที่ ๑ รายงานการฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

๑.ข้อมูลสถานประกอบกิจการที่ฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

ชื่อสถานประกอบกิจการ แพน โอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเตด

ประเภทกิจการ ผู้รับสัมปทานปิโตรเลียม

เลขที่ ๕๕๕ อาคารรสาทาวเวอร์ ๒ ชั้น ๑๗ ห้องเลขที่ ๑๗๐๒ ถ. พหลโยธิน แขวงจตุจักร

กรุงเทพฯ ๑๐๙๐๐ โทรศัพท์ ๐๒-๙๓๗-๑๑๓๘-๔๐ โทรสาร ๐๒-๙๓๗-๐๘๔๐

๒.วัน เดือน ปี จัดฝึกอบรม ๒๒ สิงหาคม พ.ศ. ๒๕๖๕.....

๓.จำนวนผู้เข้ารับการฝึกอบรม รวม.....๒๐.....คน แยกเป็นชาย.....๒๐.....คน หญิง.....คน

๔.จำนวนผู้เข้ารับการฝึกซ้อมอพยพหนีไฟ.....๒๐.....คน

๕.ระยะเวลาในการฝึกซ้อมอพยพหนีไฟ.....๒.๓๐.....นาที

(เริ่มตั้งแต่สัญญาณอพยพหนีไฟดังขึ้น จนถึงคนสุดท้ายมาถึงจุดรวมพล)

๖.ชื่อวิทยากรผู้ดำเนินการฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

๖.๑ นายอำนวยการ สมจันทร์.....๖.๒ นายเวทิน เนตรทองคำ.....

๖.๓ นายวีรศักดิ์ สรงกระสินธุ์.....

๗.ชื่อผู้ดูแลการฝึกซ้อม

๗.๑ นายอำนวยการ สมจันทร์.....๗.๒ นายเวทิน เนตรทองคำ.....

๗.๓ นายวีรศักดิ์ สรงกระสินธุ์.....

ลงชื่อ.....

( นายอำนวยการ สมจันทร์ )

ผู้จัดทำรายงาน

วัน เดือน ปี ที่รายงานผล ๕/๐๙/๖๕.....

ลงชื่อ.....

( นายอำนวยการ สมจันทร์ )

ผู้มีอำนาจกระทำการแทนหน่วยงาน

ฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

พร้อมประทับตรา (ถ้ามี)

## ส่วนที่ ๒ การรับรอง

ข้าพเจ้าขอรับรองว่าได้มีการฝึกซ้อมดับเพลิงและหนีไฟตามรายละเอียดข้างต้นจริง

ลงชื่อ.....

( นายอำนวยการ สมจันทร์ ) วิทยากร

ลงชื่อ.....

( นายเวทิน เนตรทองคำ ) วิทยากร

ลงชื่อ.....

( นายวีรศักดิ์ สรงกระสินธุ์ ) วิทยากร

ลงชื่อ.....

เจฟฟรีย์ ไซวาร์ด ชิสฮอล์ม

นายจ้าง/เจ้าของสถานประกอบกิจการที่ได้รับการฝึกซ้อม

ดับเพลิงและฝึกซ้อมอพยพหนีไฟ หรือ ผู้มีอำนาจกระทำการแทน

# แบบรายงานการฝึกอบรมการดับเพลิงขั้นต้น

(สำหรับผู้ที่ได้รับใบอนุญาตเท่านั้น)

ชื่อหน่วยงานที่ได้รับใบอนุญาต สำนักงานเทศบาลตำบลกำแพงแสน

ใบอนุญาตเลขที่ ดพต.-ร.๐๔๒..... หมดอายุ ๑๒ สิงหาคม พ.ศ. ๒๕๖๖

อ้างอิงหนังสือแจ้งกำหนดการฝึกอบรมการดับเพลิงขั้นต้น เลขที่ นฐ.๕๒๒๐๑/๕๓๔ ลงวันที่ ๑๘/๐๘/๖๕

## ส่วนที่ ๑ รายงานผลการฝึกอบรม

๑.ข้อมูลสถานประกอบกิจการที่ส่งลูกจ้างเข้ารับการฝึกอบรมการดับเพลิงขั้นต้น

ชื่อสถานประกอบกิจการ แพน โอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด

ประเภทกิจการ ผู้รับสัมปทานปิโตรเลียม

เลขที่ ๕๕๕ อาคารรสาทาวเวอร์ ๒ ชั้น ๑๗ ห้องเลขที่ ๑๗๐๒ ถ. พหลโยธิน แขวงจตุจักร

กรุงเทพฯ ๑๐๙๐๐ โทรศัพท์ ๐๒-๙๓๗-๑๑๓๘-๔๐ โทรสาร ๐๒-๙๓๗-๐๘๔๑

๒.วัน เดือน ปี จัดฝึกอบรม ๒๒ สิงหาคม พ.ศ. ๒๕๖๕

๓.จำนวนผู้เข้ารับการฝึกอบรม รวม ๒๐ คน แยกเป็นชาย ๒๐ คน หญิง - คน

(แนบรายชื่อผู้ผ่านการฝึกอบรม หรือ เอกสาร ๑๐)

๔.ชื่อวิทยากรผู้ทำการฝึกอบรมภาคทฤษฎี

๔.๑ นายอำนวยการ สมจันทร์

๔.๒ นายเวทิน เนตรทองคำ

๕.ชื่อ - สกุลวิทยากรผู้ทำการฝึกอบรมภาคปฏิบัติ

๕.๑ นายอำนวยการ สมจันทร์

๕.๒ นายเวทิน เนตรทองคำ

๕.๓ นายวีรศักดิ์ สรงกระสินธ์

๖.ชื่อ-นามสกุลบุคลากรผู้ดูแลการฝึกอบรม นายอำนวยการ สมจันทร์

๗.สถานที่ฝึกภาคปฏิบัติ แพน โอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด

ลงชื่อ

( นายอำนวยการ สมจันทร์ )

ผู้จัดทำรายงาน

วัน เดือน ปี ที่รายงานผล ๕/๐๙/๖๕

ลงชื่อ

( นายอำนวยการ สมจันทร์ )

ผู้มีอำนาจกระทำการแทนหน่วยงานฝึกอบรมการดับเพลิงขั้นต้น

พร้อมประทับตรา (ถ้ามี)

## ส่วนที่ ๒ การรับรอง

ข้าพเจ้าขอรับรองว่าได้มีการฝึกอบรมตามรายละเอียดข้างต้นจริง

ลงชื่อ

( นายอำนวยการ สมจันทร์ )

วิทยากร

ลงชื่อ

( นายเวทิน เนตรทองคำ )

วิทยากร

ลงชื่อ

( นายอำนวยการ สมจันทร์ )

นายจ้าง/เจ้าของสถานประกอบกิจการที่ได้รับการฝึกอบรม

( นายอำนวยการ สมจันทร์ ) การดับเพลิงขั้นต้น หรือผู้มีอำนาจกระทำการแทน

เจฟฟรีย์ ไชวาร์ค ชีฮอลัม



วันที่ : 22 August 2022

ผู้ประสานงาน: Thanakorn M.

หลักสูตร : Basic Fire Training

Time : 13:00 - 17:00 น.

ชื่อ - นามสกุล	บริษัท / ต้นสังกัด	ตำแหน่ง	ลายเซ็น
1. ช่าง พงษ์ศักดิ์	POS	Production	Ungphat T.
2. ช่าง ประสงค์	Pos	Production helper	Theerachai P.
3. ช่าง พงษ์ศักดิ์	Pos	Production helper	Thapatt S.
4. ช่าง บ่อจ๋อ	Pos	Production Helper	คสสช
5. ช่าง ศักดิ์	Pos	Production Helper	Sathon T.
6. ช่าง สันติ	"	"	Sung J.
7. ช่าง รัชต์	"	"	Kachan
8. ช่าง รัชต์	Pos	Production Helper	Phan B.
9. ช่าง รัชต์	"	"	รัชต์
10. ช่าง รัชต์	"	"	รัชต์
11. ช่าง รัชต์	Pos	Production Helper	Thitsan T.
12. ช่าง รัชต์	Pos	Production Operator	Nattapong L.
13. ช่าง รัชต์	"	"	รัชต์
14. ช่าง รัชต์	Pos	Production Helper	Pichet W.
15. ช่าง รัชต์	Pos	Production helper	รัชต์
16. ช่าง รัชต์	Pos	Production operator	รัชต์ กุศล
17. ช่าง รัชต์	Pos	Production Operator	K.Kang, Kei
18. ช่าง รัชต์	Pos	Warehouse office	Weerachai P.
19. ช่าง รัชต์	Pos	Production	Phanlop M.
20. ช่าง รัชต์	Pos	ร.ร.	รัชต์
21.			
22.			
23.			
24.			
25.			

อบรมโดย:

นางฉัตรพร สมจันทร์



เลขทะเบียนวุฒิบัตร ๐๓๕ / ๒๕๖๕

## เทศบาลตำบลกำแพงแสน

ได้รับอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ ดพฝ. -ร ๐๔๒  
ขอรับรองว่า

### แพน โอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเตด

ตั้งอยู่เลขที่ ๕๕๕ อาคารรสาทาวเวอร์ ๒ ชั้น ๑๗ ห้องเลขที่ ๑๗๐๒ ถ.พหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพฯ

### ได้ดำเนินการฝึกซ้อมดับเพลิงและฝึกซ้อมอพยพหนีไฟ

ตามกฎหมายกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย  
และสภาพแวดล้อมในการทำงานเกี่ยวกับการป้องกันและระงับอัคคีภัย พ.ศ. ๒๕๕๕ ลงวันที่ ๗ ธันวาคม พ.ศ. ๒๕๕๕

เมื่อวันที่ ๒๒ สิงหาคม พุทธศักราช ๒๕๖๕ มีผู้เข้ารับการฝึกซ้อมจำนวน ๒๐ คน

ให้ไว้ ณ วันที่ ๒๒ สิงหาคม พุทธศักราช ๒๕๖๕

(นางสมพิศ ยืนนาน)

นายกเทศมนตรีตำบลกำแพงแสน





เลขทะเบียนวุฒิบัตร ๐๒๑ /๒๕๖๕

## เทศบาลตำบลกำแพงแสน

ได้รับอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ ดพต. -ร ๐๔๒  
ขอรับรองว่า

### แพน โอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเต็ด

ตั้งอยู่เลขที่ ๕๕๕ อาคารสาทาวเวอร์ ๒ ชั้น ๑๗ ห้องเลขที่ ๑๗๐๒ ถ.พหลโยธิน แขวงจตุจักร เขตจตุจักร กรุงเทพฯ

### ผ่านการฝึกอบรมหลักสูตรการดับเพลิงขั้นต้น

ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย  
และสภาพแวดล้อมในการทำงานเกี่ยวกับการป้องกันและระงับอัคคีภัย พ.ศ. ๒๕๕๕ ลงวันที่ ๗ ธันวาคม พ.ศ. ๒๕๕๕

เมื่อวันที่ ๒๒ สิงหาคม พุทธศักราช ๒๕๖๕ จำนวน ๖ ชั่วโมง

ให้ไว้ ณ วันที่ ๒๒ สิงหาคม พุทธศักราช ๒๕๖๕

(นางสมพิศ ยืนนาน)

นายกเทศมนตรีตำบลกำแพงแสน

การอบรมด้านสาธารณสุขจากแพทย์  
หน่วยงานภายนอก  
การปฐมพยาบาลเบื้องต้น

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วันที่ : 21 February 2022

ผู้ประสานงาน: Thanakorn M.

หลักสูตร : First aid and CPR training

Time : 08:00 – 12:00 น.

ชื่อ - นามสกุล	บริษัท / ต้นสังกัด	ตำแหน่ง	ลายเซ็น
1. Prawit Sealuang	Pos	Production	Prawit
2. Suttisak Sukhongkoch	Pos	Production	สุตสิกร
3. อรรถา วันแสงพงษ์	Pos	Production	อรรถา
4. Woraphot Nachareon	Pos	Production	Woraphot N
5. อดิศักดิ์ นนท์กัญ	Pos	Production	อดิศักดิ์
6. อดิศักดิ์ นนท์กัญ	Pos	Production	อดิศักดิ์
7. สันติภาพ นานะแก้ว	Pos	Production	Sammai K.
8. นพดล ขำคุณ	Pos	Production	นพดล
9. อธิสิทธิ์ ทวี	Pos	Production	อธิสิทธิ์
10. จักรพันธ์ วัฒนพงษ์	Pos	Production	จักรพันธ์
11. วิษณุ วัฒนพงษ์	Pos	Production	วิษณุ
12. นพดล นานะแก้ว	Pos	Production	นพดล (2)
13. อธิสิทธิ์ นานะแก้ว	Pos	Production	อธิสิทธิ์
14. เจริญ วัฒนพงษ์	Pos	Production	Remgchai T.
15. วิทยา นานะแก้ว	Pos	Production	T. Wirayatt
16. วิทยา นานะแก้ว	Pos	Production	วิทยา
17. วิชา นานะแก้ว	Pos	Foreman	Thamk D
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อบรมโดย:



วันที่ : 21 February 2022

ผู้ประสานงาน: Thanakorn M.

หลักสูตร : First aid and CPR training

Time : 13:00 – 17:00 น.

ชื่อ - นามสกุล	บริษัท / ตำแหน่ง	ตำแหน่ง	ลายเซ็น
1. Prawit Sealuang	Pos	Production	Pawit.
2. Subisak Sukbongkorn	Pos	Production	Subisak
3. อธิชา รัตนธรรม	Pos	Production	อธิชา
4. Woraphot Nacharoen	Pos	Production	Woraphot N.
5. พงษ์พรหม นนท์คำ	Pos	Production	พงษ์พรหม
6. ปิยะศักดิ์ พินิจกุล	Pos	Production	ปิยะศักดิ์
7. สมชาย งามบัว	Pos	Production	สมชาย L.
8. นพดล ชาญ	Pos	Production	นพดล
9. อธิชา ทอวดี	Pos	Production	อธิชา
10. กิจพันธ์ ธรรมพันธ์	Pos	Production	กิจพันธ์
11. วีระยุทธ อมรชัย	Pos	Production	วีระยุทธ
12. นวรัตน์ วัฒนศิริ	Pos	Production	Nawarat W.
13. สุวิมล คำพันธ์	Pos	Production	สุวิมล
14. เจริญชัย ชัยอนันต์	Pos	Production	Perngchai T.
15. กุศลศักดิ์ ทรัพย์ทอง	Pos	Production	กุศล
16. วีระยุทธ วัฒนธรรม	Pos	Production	T. Wirayut
17. อธิชา งามบัว	Pos	Foreman	Thanik D.
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อบรมโดย:





วันที่ : 28 May 2022

ผู้ประสานงาน: Thanakorn M.

หลักสูตร : HSE induction and basic operation refresher

Time : 08:00 – 12:00 น.

ชื่อ - นามสกุล	บริษัท / ต้นสังกัด	ตำแหน่ง	ลายเซ็น
1. นาย นิพนธ์ นวลอ้อม	Pos	Production Operator.	Nalpong L.
2. นาย อภิรักษ์ นวลอ้อม	Pos	Production helper	อภิรักษ์
3. นาย อภิรักษ์ นวลอ้อม	Pos	Production Helper	อภิรักษ์
4. นาย ดนัย ชัยกิจ	POS	"	Kachan
5. พ. กิ่งน้อย	"	"	Kir
6. พ. ดอนดา	POS	Production hyper	Donda
7. พ. วิชาญ นวลอ้อม	POS	"	Pichet N.
8. พ. สุนทร นวลอ้อม	Pos	"	Suthon T.
9. พ. สุนทร นวลอ้อม	POS	"	Suthon T.
10. พ. สุนทร นวลอ้อม	POS	Production Operator	Suthon T.
11. พ. สุนทร นวลอ้อม	Pos	Production Operator	K. Mangkai
12. พ. สุนทร นวลอ้อม	POS	Production Helper	Thanaphot S.
13. พ. สุนทร นวลอ้อม	Pos	Production Helper	Theerachai P.
14. พ. สุนทร นวลอ้อม	Pos	"	Sunja J.
15. พ. สุนทร นวลอ้อม	Pos	"	Sunja J.
16. พ. สุนทร นวลอ้อม	pos	HSE	Sunja J.
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อบรมโดย:

Chaiyaman.

<b>Pan+Orient</b> <small>ENERGY</small>	<b>Training Attendance Record</b>	Form No. HSE-FM-014
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วันที่ : 28 May 2022 ผู้ประสานงาน: Thanakorn M.

หลักสูตร : HSE induction and basic operation refresher Time : 13:00 – 17:00 น.

ชื่อ - นามสกุล	บริษัท / ต้นสังกัด	ตำแหน่ง	ลายเซ็น
1. นาย ภิรมย์ เนลิกอ้อม	Pos	Production Operator	Nallapong L.
2. นาย ภิรมย์ กิจกิจ	"	"	ภิรมย์
3. นาย อังกร เจริญกรสิน	"	"	อังกร
4. นาย ภิรมย์ นอภะธร	Pos	Production Helper	ภิรมย์
5. นาย อังกร อังกร	"	"	อังกร
6. นาย อังกร อังกร	"	"	อังกร
7. นาย อังกร อังกร	"	Production helper	อังกร
8. นาย อังกร อังกร	"	"	Pichet W.
9. นาย อังกร อังกร	"	"	Sathon T.
10. นาย อังกร อังกร	Pos	Production Operator	K. Kanykai
11. นาย อังกร อังกร	Pos	Production Operator	อังกร
12. นาย อังกร อังกร	Pos	Production helper	Theerachai P.
13. นาย อังกร อังกร	Pos	Production Helper	Thanaphat S.
14. นาย อังกร อังกร	"	"	Gunya J.
15. นาย อังกร อังกร	"	"	อังกร
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อบรมโดย:

Thanakorn M.





*การดำเนินการด้านความปลอดภัย และอาชีวอนามัย  
และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า*

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ใบทะเบียนนวัตกรรม

No	ชื่อ - นามสกุล	บริษัท	อบรมวันที่	จบวันที่	หมายเลขทะเบียน
1	นายภาณุภูมิ นามมา	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653532
2	นายหนพล คำบาง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653533
3	นายจักรพันธ์ นาเจริญ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653534
4	นายวิมล ไกรวิจิตร	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653535
5	นายทศพล แซ่เอ็ง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653536
6	นายบัณฑิต เจตนจำนงค์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653537
7	นายชัยนันท์ ประสิทธิ์สุข	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653538
8	นายวีระชัย พุ่มแพง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653539
9	นายมนัส พุ่มโยนก	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653540
10	นายคณิน สะตะ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653541
11	นายอนุชิต แก้วคำ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653542
12	นายธีรพล โพธิ์ทอง	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653543
13	นายวรพล กษภูมิ	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653544
14	นายชัยยัญ อินทร์สุข	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653545
15	นายวีระชัย ศรีทองอ่อน	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653546
16	นายมนัส ชีพนุรัตน์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653547
17	นายราชศักดิ์ เจริญวิทย์	แพนโอเรียนท์ เอ็นเนอจี้ (สยาม) ลิมิเต็ด	25-11-65 - - -	25-11-65	653548





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายภาคภูมิ นามมา**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม

Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) จำกัด  
เลขที่ 555 อาคารสาทวาเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม

Organized date

November 25, 2022

ระยะเวลาอบรม

Period of training

6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ

This certificate is issued on

November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653532



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายพนพล คำบาง**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) จำกัด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653533





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายจักรพันธ์ นาเจริญ**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr. Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653534



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายชิษณุ ไกรวิจิตร**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสหทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653535





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายทศพล แซ่อิง**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) จำกัด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653536



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายบัณฑิต เจตน์จำนงค์**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเตด  
เลขที่ 555 อาคารราชาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr. Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653537





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายชัยนันท์ ประสิทธิ์สุข**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารราชาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653538





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายวีระชัย พุ่มแพง**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr. Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653539



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายมนัส พุ่มโยนก**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr. Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653540





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004

License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า

This certificate is to recognize that

**นายคณิน สะตะ**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า

ตามกฎหมายกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558

Has completed Electrical Safety for Employees Working with Electricity

MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม

Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด

เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม

Organized date

November 25, 2022

ระยะเวลาอบรม

Period of training

6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ

(Mr. Prasopchai Yuvaves)

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ

This certificate is issued on

November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No.

653541



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายอนุชิต แก้วคำ**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอยี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารราชาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653542





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายธีรพล โพธิ์ทอง**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) จำกัด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653543



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายวรพล คชภูมิ**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653544





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า

This certificate is to recognize that

**นายชัยยัญ อินทร์สุข**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558

Has completed Electrical Safety for Employees Working with Electricity

MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม

Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) จำกัด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม

Organized date

November 25, 2022

ระยะเวลาอบรม

Period of training

6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr. Prasopchai Yuvaves)

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ

This certificate is issued on

November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No.

653545



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี

SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004

License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า

This certificate is to recognize that

**นายวีระชัย ศรีทองอ่อน**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า

ตามกฎหมายกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558

Has completed Electrical Safety for Employees Working with Electricity

MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม

Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเตด

เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม

Organized date

ระยะเวลาอบรม

Period of training

November 25, 2022

6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ

( Mr.Prasopchai Yuvaves )

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ

This certificate is issued on

November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน

Name of Registrar

เลขที่วุฒิบัตร

Certificate No.

653546





สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายมนัส ชีพนุรัตน์**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม

Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม

Organized date

November 25, 2022

ระยะเวลาอบรม

Period of training

6 hrs.

นายประสพชัย ยูวะเวส

นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)

President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

วุฒิบัตรนี้ออกเมื่อ

This certificate is issued on

November 25, 2022

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No.

653547



สมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ สมเด็จพระกนิษฐาธิราชเจ้า กรมสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี  
SAFETY AND HEALTH AT WORK PROMOTION ASSOCIATION (THAILAND) UNDER HER ROYAL HIGHNESS PRINCESS MAHA CHAKRI SIRINDHORN PATRONAGE

ได้รับใบอนุญาตจากกรมสวัสดิการและคุ้มครองแรงงาน ใบอนุญาตเลขที่ 0301-03-2565-0004  
License by Department of Labour Protection and Welfare, License number 0301-03-2565-0004

ขอมอบวุฒิบัตรนี้ไว้เพื่อแสดงว่า  
This certificate is to recognize that

**นายราชศักดิ์ เจริญวิวกัย**

ผ่านการฝึกอบรมหลักสูตรความปลอดภัยในการทำงานเกี่ยวกับไฟฟ้า สำหรับลูกจ้างซึ่งปฏิบัติงานเกี่ยวกับไฟฟ้า  
ตามกฎหมายกระทรวงกำหนดมาตรฐานในการบริหาร จัดการ และดำเนินการด้านความปลอดภัย อาชีวอนามัย และสภาพแวดล้อมในการทำงานเกี่ยวกับไฟฟ้า พ.ศ. 2558  
Has completed Electrical Safety for Employees Working with Electricity  
MINISTERIAL REGULATION ON THE PRESCRIBING OF STANDARD FOR ADMINISTRATION AND MANAGEMENT OF OCCUPATIONAL SAFETY, HEALTH  
AND WORK ENVIRONMENT ON ELECTRICITY : 2558 (B.E.)

สถานที่ตั้งในการฝึกอบรม  
Training Place

บริษัท แพนโอเรียนท์ เอ็นเนอจี (สยาม) ลิมิเต็ด  
เลขที่ 555 อาคารสาทาวเวอร์ 2 ชั้น 17 ห้องเลขที่ 1702 ถ.พหลโยธิน แขวง/เขต จตุจักร กรุงเทพฯ 10900

วันที่อบรม  
Organized date  
November 25, 2022

ระยะเวลาอบรม  
Period of training  
6 hrs.

วุฒิบัตรนี้ออกเมื่อ  
This certificate is issued on  
November 25, 2022

นายประสพชัย ยูวะเวส  
นายกสมาคมส่งเสริมความปลอดภัยและอนามัยในการทำงาน (ประเทศไทย) ในพระราชูปถัมภ์ฯ  
(Mr.Prasopchai Yuvaves)  
President of Safety and Health at Work Promotion Association (Thailand) Under Patronage

ชื่อเจ้าหน้าที่ทะเบียน  
Name of Registrar

เลขที่วุฒิบัตร  
Certificate No. 653548

ภาคผนวก จ-4  
ระบบบริหารด้านอาชีวอนามัย  
ความปลอดภัย และสิ่งแวดล้อม

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PAN ORIENT ENERGY (SIAM) LTD.

# CORPORATE HEALTH SAFETY ENVIRONMENT MANAGEMENT SYSTEM

JUNE 2021

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## Document Issue Record

Position	Location	Copy No.	Issue Date
<b>Paper Copies</b>			
Chief Executive Officer & General Manager	Bangkok	01	
Operations Manager	Bangkok	02	
Financial & Accounting Manager	Bangkok	03	
EIA & Government Liaison Coordinator	Bangkok	04	
Field Operation Engineer	Kam Phaeng Saen	05	
Production Supervisor	Kam Phaeng Saen	06	
HSE Officer	Kam Phaeng Saen	07	
Production Foreman	Kam Phaeng Saen	08	

## REVISION STATUS

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0	1 July 2006	First Working Version	Various	General Manager
1	20 April 2010	Second Working Version	Sirapop	General Manager
2	20 April 2012	Third Working Version	Pharada Meengoen	General Manager
3	31 January 2013	Fourth Working Version	Prakaipruek Boonkerd	General Manager
4	13 September 2013	Fifth Working Version	Prakaipruek Boonkerd	General Manager
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7	27 May 2016	Eighth Working Version	Prakaipruek Boonkerd	General Manager
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## FOREWORD

Pan Orient Energy (Siam) Ltd. ("The Company") recognises that effective health, safety and environmental management contributes significantly to its long-term business success.

This document sets out The Company's social and environmental management system. It emphasises the systematic approach in the way we manage our business activities and our belief that our performance can always be improved over time. The integration of social responsibility and environmental protection into our day-to-day activities is the key to successful management.

The application and success of this system requires the participation and commitment of management, employees and contractors at all levels.

This policy and management system has the Board's full support but we require your commitment through a personal understanding of this document and full participation in the effective implementation of the system.

It is imperative that everyone involved in the business of The Company familiarise themselves with their roles and responsibilities in this document. Only by total commitment by everyone can we ensure the best possible protection of our personnel, contractors, the public, our assets and the environment.

Signed

Jeffrey Howard Chisholm

General Manager

Date: June 18<sup>th</sup>, 2021

Area of Application

The policies and associated Safety Management System (SMS) apply to the activities of Pan Orient Energy (Siam) Ltd. in Thailand.

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Safety Management System

Pan Orient Energy (Siam) Ltd.

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#### Organizing:

The effective implementation of the management system requires a clear company organizational structure, with staff at all levels committed to the implementation and having an understanding of all the following requirements to achieve success:

- an explicit organizational structure
- identification of safety critical activities & resultant tasks
- ensuring personnel are competent to carry out assigned tasks
- clearly defined roles, responsibilities and accountabilities
- distinct lines of communication
- effective management and integration of contractors.

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#### Section 1: Introduction

The management of health and safety and the protection of the environment, by industry in Thailand, has evolved along with technological and management change. The Pan Orient Energy Safety Management System (SMS) provides a **structured** approach to the way we manage safety and environmental issues. It identifies individual responsibilities in respect of who does what, when and how against policy, objectives and business activities to ensure the creation, implementation and maintenance of safe systems of work in a safe working environment.

##### 1.1 This Document

The SMS represents the Company's corporate management standards for health, safety and environmental management performance. It includes the underpinning standards and instructions referred to in the document and listed in the Document Management System in Appendix 2. The structure of The Company's SMS documentation is illustrated in Appendix 2.

Implementation of the SMS will result in the health safety and environmental risks arising from the Company's activities, being effectively managed, to ensure that they are reduced to **as low as reasonably practicable (ALARP)**. This will also ensure **compliance** with all the relevant statutory requirements applying to the Company.

The SMS is a controlled document and the custodian is the **General Manager**. It will be reviewed periodically with the assistance of the Operations Manager and EIA & Government Liaison Coordinator.

##### 1.2 Background to Health, Safety and Environment Management

Pan Orient Energy, a Canadian independent Operator, will strive for world class HSE performance at its operations in Thailand. The company's Management Team and Board of Directors all bring with them experience from larger international Operating companies. This experience will be employed at its operations in the creation and maintenance of a fit-for-purpose Safety Management System.

##### 1.3 The Safety Management Model

The safety and environmental management model, based on HSG 65, is illustrated in Figure 1. The aim is not only to provide effective policies and procedures but also to incorporate the necessary management control systems to ensure that they are being applied correctly. Improving performance is achieved by management monitoring and feedback. The **Risk Assessment** process (See Section 4.2) compliments the overall HSE policy.

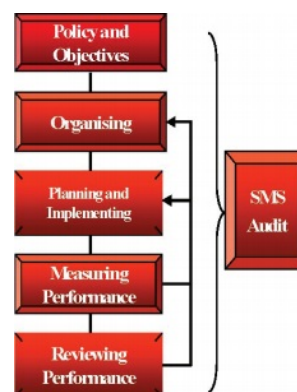
##### 1.4 The Safety Management Principles

###### Policy and Objectives:

The Pan Orient Energy Health, Safety and Environmental Policy (see Section 2.0) sets out The Company's overall statement of policy along with its objectives for health and safety management.

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**Figure 1: The (Safety) Management Model**



#### Planning and Implementing:

**Planning** for safety and environmental protection involves the identification of Pan Orient Energy's business activities and identifying the associated hazards, risks and control measures required. For the major safety critical activities, the hazards and risks associated with the activity are identified, controls defined, performance standards set and roles, responsibilities and competency standards defined.

**Implementation** takes the results of the planning phase and puts in place the systems, controls, procedures and performance measures to eliminate or control identified hazards and risks. As required by health and safety legislation, wherever possible, risks are eliminated by the use of engineering controls through selection and design of facilities and equipment and through physical control measures. Where risks cannot be eliminated in this ways, then safe systems of work, selection, training and competence of individuals and occupational health measures, including personal protective equipment, are used.

#### Measuring and Reviewing Performance

HSE performance measurement is based on the comparison of actual performance against the standards for each key activity. Performance is also assessed by the analysis of SMS audits, planned inspections and incident statistics. Performance is fed back to management and used as part of the performance review process.



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### 3.2 Personnel Responsibilities

Each employee within the Company has a role to play with regards to health, safety and environment. Personnel at all levels are required to understand their respective roles and responsibilities within the HSE Management System and be committed to implementation of this system as specified in this document.

#### 3.2.1. Senior Management

##### Corporation Board of Directors

The Board of Directors has ultimate responsibility for the performance of the Company. They appoint the General Manager who delegates health safety and environmental responsibilities to the line managers. The Company's Chief Executive Officer and Board of Directors are responsible for providing direction and guidance for all business activities and for safeguarding and communicating Company's principles and policy on HSE.

##### Chief Executive Officer

The Chief Executive Officer is responsible for establishing the Company's policy on health, safety and protection of the environment and for providing the resources to put that policy into effect.

##### General Manager

The General Manager is in charge of developing the organization and controls to achieve the corporate objectives and to ensure that all activities under his control are conducted in compliance with the relevant statutory provisions. The General Manager is also responsible for ensuring that the necessary resources are provided and that appropriate actions are taken to effectively implement and maintain the requirements of the HSE Management System.

##### Operations Manager

The Operations Manager oversees the Management Team and reports to the General Manager. He is responsible for upholding the implementation of the HSE procedures and delegating responsibility to engineers and HSE Officer ensuring they are competent and capable of carrying out their work to the required standard.

The Operations Manager's primary role is to:

- Account for production, sales and the proper disposal of all waste fluids streams (gas and water), as required by local regulations.
- Motivate staff, promote their growth and fully participate in the career planning and competence development process including HSE training;
- Ensure appropriate management controls and processes for operations activities (including HSE) are established and deployed in an effective and efficient manner and regularly appraised in order to achieve objectives and reach targets.
- Develop and implement HAZOPs plans;
- Comply with Thai Regulations and other relevant industry standards.

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- Supervising all subordinates and contractors in meeting HSE targets as specified by HSE Officer;
- Ensuring all possible precautions are taken to prevent incidents from happening or escalating and scheduling activities in such a way that no conflicting or potentially hazardous situations arise;
- In coordination with the HSE Officer, performing frequent site checks on processes, equipment, plant working conditions and safety standards.
- Act as emergency team leaders;
- Reporting all incidents, accident or spills immediately to Operations Manager and HSE Officer.

##### Production Operator/Helper

The Production Operator/Helper is the delegated person to check and control the on-site Permits to Work system and ensure that safe job executions. He reports to the Senior Production Shift Supervisor and shares the same HSE responsibilities.

The Production Operator/Helper is a member of the emergency response team (ERT) / on scene commander in case of an emergency. His roles also include:

- Monitoring of chemical injection operations and performance. Ensuring relevant safety precautions are taken with regard to chemical handling, storage and disposal.
- Maintaining an awareness of HSE issues at all times and immediately reporting any unsafe or unhealthy acts or conditions to his supervisor, if it is not possible to take action himself.
- Maintaining cleanliness and housekeeping at all times;
- Reporting all incident/accident/spills immediately to his field foreman or shift supervisor.

##### Refinery Operator

The Refinery Operator acts as a company representative, supervising crude oil loading at the refinery. He is responsible for ensuring all activities are carried out safely and in an environmentally acceptable way and that the Company's HSE policy is cascaded down to contractors. He is also tasked with:

- Ensuring competent staff operates the facilities and develops skills where necessary. Acting as mentor and "on the job" trainer for staff under control. Assisting in developing staff competency level.
- Improving safety awareness among staff;
- Assuming on-site responsibility in case of an emergency and initiate all required actions.
- Follow up on crude oil loading & HSE procedures at the refinery and ensure HSE regulations are adhered to;
- Maintain an awareness of safety with the road tanker drivers and immediately report any unsafe act or conditions to his supervisor, if it is not possible to take action himself;
- Reporting all incident/accident/spills immediately to his supervisor.

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### 3.2.2 Management Team

#### Field Operation Engineer

Field Operation Engineer has total responsibility for all HSE issues and coordinating with the Support Team to supply their respective services to all Assets and is responsible for supervising all activities which may pose a risk to health, safety and environment to ensure they are completed in a safe manner without damage to the environment by:

- In coordination with the Operations Manager and HSE Officer, performing frequent site checks on processes, equipment, rig working conditions and HSE standards.
- The supervision of contractors in applying the required procedures for safe operations with regards to all drilling activities especially blowout prevention; handling and storage of hazardous substances such as chemicals, radio-active sources and disposal of hazardous waste.
- Perform regular safety drills to ensure emergency preparedness.
- Responsibility in case of an emergency and initiate all required actions in accordance to the emergency response procedures.
- Ensuring all subordinates follow HSE procedures at all time;
- Act as the focal point of liaison between Federal H&S Manager to ensure all operational requirements are met and carried out in accordance to the HSMS;
- Ensuring the safety and welfare of field staff employees, contractors and all visitors to the Asset;
- Meeting HSE targets and objectives, as specified by HSE Officer;
- Creation & implementation of field policies and procedures;
- Creation and development of safe working procedures;
- Assuming on-site responsibility in case of an emergency and initiate all required actions.
- Reporting all incidents, accident or spills immediately to General Manager.

#### Inventory Supervisor

Inventory Supervisor's roles with regards to HSE include to:

- Integrate health, safety and environment in the design and specifications of construction and production sites by adopting and adhering to the relevant industry standards, as specified in the appendices of this document and environmental impact assessment (EIA) report;
- Approve the quality of design and engineering prior to construction and installation;
- Perform regular inspections during construction and installation to ensure approved designs are adhered to;
- Perform pre-start-up safety review and inspection of all equipment prior to commissioning;
- Administer preventative maintenance;
- Reporting all incidents, accident or spills immediately to Operations Manager and HSE Officer.

#### Production Supervisor & Production Foreman

The Production Supervisor & Production Foreman are responsible for supervising the field operators and contractors to ensure they are completed in a safe manner and adhered to the Company's HSE policy and procedures without damage to the environment by:

- Cascade the HSE policy and procedures down to subordinates and contractors to improve HSE awareness among staff and contractors;
- Ensuring all subordinates and contractors follow HSE procedures at all time;

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#### Crude Loading and Tanker Coordinator

- Report spills immediately to his supervisor;
- Maintain safety awareness with the tanker truck drivers and take action and immediately report any unsafe acts to his supervisor.
- Carry out & minute of HSE meetings for tanker trucks on a monthly basis

#### HSE Officers

HSE officers assist in managing the overall HSE assessment process and provide specialist HSE services including to:

- Perform regular onsite audit inspections all operational phases (site construction, drilling, testing and production) to monitor compliance and report results to the Operations Manager;
- Arrangement and coordination of site inspection and audits and timely assessment of risks to HSE and implementation of measures identified prevent or reduce further occurrences;
- Participate and conduct HAZOP, root cause analysis (RCA) studies / corrective action plans and execute as required, ensuring all non-compliance issues are addressed and closed out;
- Perform regular inspections of contractor's equipment;
- Educate and train staff within the Asset, using toolbox talks etc;
- Investigation of all reported incidents;
- Conduct the dust control and road cleaning program;
- Support road show and community relation activities;
- Reporting and documentation of all HSE matters.
- Be a part of the emergency response team (ERT).

### 3.2.3 Support Team

#### Warehouse Supervisor

The warehouse supervisor assisted by the Field operation Engineer is accountable for the site procurement and community relation. In coordination with the Land/CR/Legal Officer, their health and safety responsibilities include:

- Ensuring all subordinates follow HSE procedures at all time;
- Ensuring all emergency contact numbers of the emergency response team and local emergency services are updated and available to all staff;
- Coordinating with HSE Officer to distribute health, safety and environment information to staff;
- Coordinating with HSE Officer with regards to health, safety and environment in the office, staff accommodation and for the Company's vehicles;
- Coordinating with HSE Officer for PPE equipment;
- Providing specific health and safety training to personnel so that they are competent and capable of carrying out their work to the required standard and as required by regulations;
- Provision and supervision of all security issues;
- Reporting all incidents, accident or spills immediately to Operations Manager and HSE Officer.
- Conducting the road show activity for the villagers in the areas of sensitive receptors;

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- Recording all complaints in the log sheet and coordinating with relevant parties for clarification and reducing any conflicts between the company and nearby communities.

#### EIA & Government Liaison Coordinator

The EIA & Government Liaison Coordinator and HSE Officer are accountable for establishing a good environment, safe and healthy workplace by monitoring the standards, communications, training, processes and systems to ensure the HSE Management System is effectively implemented and that performance levels are aligned with the Company's HSE targets and objectives. The key enabling functions to achieve this are:

- Provision and promotion of suitable information concerning HSE policies and practices;
- Establishing HSE objectives and targets and monitoring performance;
- Ensuring all activities are performed in accordance with the HSE Management System meeting all the goals, standards and as required by law;
- Preparation and consultation with personnel on improving HSE standards, standing instructions and safe operating procedures;
- Prevention, precautions and adequate control against exposure to hazardous substances and danger from flammable, explosive, electrical, noise, radiation and equipment handling risks;
- Provision and supervision of emergency exercises, first-aid facilities, safety signs, relevant protective clothing and equipment, and incident reporting to the relevant authorities;
- Liaison and consultation with organizations and relevant authorities for assistance and cooperation in HSE issues.
- Participation and development of HAZOPs / corrective action plans and ensuring follow up and close out.

#### All Employees

All employees are encouraged to actively engage and participate with line management and supervisors in the implementation of and compliance to the requirements of the HSE Management System.

### 3.3 Employee Recruitment, Selection and Induction

#### Recruitment and Selection

The Company has procedures in place to ensure that all approved vacancies are filled by individuals with the appropriate qualifications and experience to fulfill the requirements of the position. All recruitment and selection is undertaken in accordance with the relevant legislation.

##### The management goals for recruitment and selection are to:

- conduct recruitment and selection in line with good practice and legislation;
- identify the best candidate for the position using job description, competence profile, and structured interview.

#### Induction

The company recognizes that communication and dissemination of information, rules and regulations is essential for any new employee. This is a staged process, as follows:

- initial induction with personnel which includes HSE awareness, fire, first aid and evacuation

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- procedures as well as day-to-day personnel issues; This will be oriented by HSE Officer.
- departmental induction by line management which includes pre-job discussions.

#### The management goals for induction are to:

- provide sufficient information specific to the job so that the individual is competent to perform the work in a safe and efficient manner;
- provide every new employee with general information on the Company;
- provide every employee with all necessary health and safety information including a general awareness of the Safety Management System.

#### Management performance standards for recruitment and selection:

- objective evidence that recruitment and selection processes and procedures have been successful;
- record of the induction, endorsed by the employee;
- personnel are fully aware of the information provided during inductions.

#### Management responsibility for meeting performance standards:

- General Manager/ Operations Manager

### 3.4 Employee Training and Development

The company recognizes the importance of the training and development of its entire staff in order to maintain and improve standards of performance and to maximize individual employee development.

#### Management goals for training and development:

- to train and develop employees, as necessary, against the requirements identified by performance appraisal and competence assessment and maximize their contribution to the Company;
- to ensure that employees maintain up-to-date knowledge of their specialist discipline and are aware of technological changes/advancements in their particular area.

#### Specific Health, Safety and Environmental Training

Specific HSE training is conducted as necessary and is specifically targeted to the requirements of the employee and his job. Specific HSE training includes, but is not limited to:

- specialized fire and first-aid training;
- health, safety and environmental legislative training;
- training in the specific elements of the Safety Management System
- Instructors of training courses will be both recognized private organization and government officers.
- Training requirement for concerned will be provided per POE-02-031.

#### Management performance standards for HSE training:

- identification of competence development requirements for all employees and the relevant training to address these requirements;
- evidence that training and development has been completed by individuals;
- maintenance of records for training & development.

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#### Management responsibility for HSE Training:

- Operations Manager

### 3.5 Employee Performance Appraisal

The Company has a formal performance appraisal process which is conducted on an annual basis. The immediate supervisor reviews the past performance of the employee against previously set objectives and determines the objectives for the forthcoming year. Individual career development and direction is discussed, as is training and development needs. From this, an individual training and development plan is developed, which is also linked to any competence development needs identified during the performance appraisal review.

#### Management goals for performance appraisal:

- to give a constructive overview of achievement over past year;
- to evaluate effectiveness of the individual's performance against their set objectives;
- to review training undertaken over past year and its effectiveness;
- to identify future training and development needs;
- to set objectives for the forthcoming year;
- to discuss individual's future career development and aspirations;
- to record performance and outcome of performance appraisal.

#### Management performance standard for performance appraisal:

- completion of annual performance assessments for all employees.

#### Management responsibility for performance appraisal:

- General Manager /Operations Manager

### 3.6 Employee Competence Assurance

The effective management of health, safety and environmental risk relies on the competence of all the personnel engaged in operations. Competence is defined by an employee or a contractor having suitable skills, experience and training in order for them to carry out their responsibilities safely and effectively. This requires not only professional, technical and personal skills but also the necessary HS&E awareness to ensure that the role is carried out without endangering the individual, others, property or the environment.

Competence assurance is an ongoing process and begins prior to recruitment and selection and continues throughout an individual's employment with the Company. It comprises of a number of elements:

- the individual's job description which defines the activities to be carried out;
- the individual's competence profile, i.e. competence levels required to conduct those activities and responsibilities against the performance standards required by the Company;
- the individual's competence assessment, i.e. validation of skills, on-the-job assessment, performance appraisal, signed off by the line manager;
- the development and maintenance of an individual's competence, i.e. training, re-validation, updating.

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#### Management goals for competency for employees and contractors

- the clear understanding by all employees of the work to be carried out using their job descriptions, which include accountability to others, responsibility to others, main tasks, HSE responsibilities, qualifications and experience, and personal attributes;
- developing levels of competence against each task and responsibility within the job description;
- conducting competence assessment on a regular basis, using on-the-job assessment, satisfactory completion of training, performance appraisal;
- ensuring that each employee is involved throughout the competence assurance process and understands and resolves any areas of competence shortfall;
- developing an individual training and development plan linked to competence development needs, including on-the-job training, professional training schemes, training using the procedures and equipment supplier training;
- maintaining the required competence level by re-validation, updating skills to take account of advancing technologies, refresher training and exercises/drills, as appropriate;
- maintaining a record of the competence assurance process for each individual and documenting all findings.

#### Management performance standards for competence:

- implementation of job descriptions and required competence levels;
- documentation confirming competence level achievement;
- documentation up to date and signed off by line management.

#### Management responsibility for competency for employees and contractors:

- General Manager / Operations Manager

For The Company's employees the respective line manager is accountable for their development and training to ensure that they are competent before assigning them responsibilities.

### 3.7 Management of Contractors

The Company utilizes specialist contractors and materials suppliers to carry out certain operations and for the supply of equipment. The processes of hiring and managing contractors to ensure that The Company's HSE policy is complied with will depend on the tasks to be performed and the hazards posed. Safety critical tasks and equipment will be targeted as being crucial for management to address Pan Orient Energy's contract procedures will be followed for contract placement.

The relevant manager responsible for hiring the contractor will assess whether the tasks, or equipment, being tendered for, are safety critical. If they are assessed as such, then the tender document will insist on the following management goals being achieved:

#### The management goals for contractor management are to:

- assess whether the contractor has a Safety Management System that complies with The Management of Health and Safety Regulations and is capable of being interfaced with the Company SMS;
- assess the contractor's safety management system for standards that are commensurate with

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- the level of risk to be imported;
- assess the level of contractor compliance with their own procedures;
- assess the commitment of the contractor management to HS&E; according to "Contractor Safety" procedure POE-02-032.
- approve / qualify contractors meeting the required standards;
- determine the on-going performance of the contractor;
- provide a database of information on contracting companies for future use.

### 3.8 Procurement of Equipment and Services from Contractors and Suppliers

As part of the SMS policy and procedures on procurement, The Company only purchases approved equipment from qualified suppliers. The requisitioning manager is responsible for the relevant technical specifications and information, safety and quality assurance requirements, delivery programme and vendor pre-qualification.

The management goals for the procurement of equipment and materials are to:

- ensure that The Company safety procedures Contractor Safety (POE-02-032) are complied with throughout the procurement process;
- purchase only approved equipment from qualified suppliers against specification and performance standards.

**Management performance standards for the management of contractors and procurement of equipment:**

- standards and procedures for selecting and monitoring contractors are in place and that they are being utilized effectively;
- effective and suitable arrangements are used for controlling purchasing of equipment and materials.

**Management responsibility for the management of contractors and procurement of equipment:**

- Operations Manager/ Inventory/Warehouse Supervisor

### 3.9 Workforce Involvement and Communication

(See Section 4.3 for detail on managing HSE communication.)

#### Involvement in Procedures and Work Instructions

Involving the workforce in the development of procedures and work instructions is crucial to their relevance and utilization. Wherever possible, line managers, including supervisors will consult with their colleagues and the Operations Manager, during the preparation of procedures and work instructions.

#### Involvement in Incident Reporting and Investigation

In line with the Company policy and objectives, employees at all levels may be required to be involved in the investigation of incidents per Accident investigation report procedure (POE-02-016). The level of involvement is defined in the investigation procedure but in all cases maximum use will be made of specialist employee knowledge when identifying direct and indirect causes of incidents and determining the actions to prevent recurrence.

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#### Involvement in Management Safety Meetings

See section 4.3 for The Company policy and performance standards for safety meetings.

#### Involvement in Pre-Job Discussions

The objective of these meetings is to ensure that all members of a work team understand the hazards, controls (PTW etc.) procedures, work instructions, are familiar with the work environment, have the correct tools and equipment and are competent to carry out the work.

#### Involvement in SMS Inspections and Audits

The inspections and audits required by the SMS (see Section 5) require the participation of the workforce to demonstrate their understanding of the system. The quality of audit reports relies on accurate feedback from the workforce. It should be recognized as a positive exercise, as the results of these audits provide the basis for performance improvement.

### 3.10 Document Control, Review and Update

#### Maintenance of SMS Documentation

In order to ensure that the content of the SMS is maintained current with regard to legislation, industry standards and company requirements, the SMS documentation is controlled. The Company SMS document structure is shown in Appendix 2 and the master SMS document listing is contained in Appendix 3. The custodian for the SMS overall is, on behalf of the Chief Executive Officer, the General Manager, Operations Manager.

#### Management Goals

- SMS documentation is maintained in accordance with HSE document control procedures; (POE-02-034)
- revisions are originated, reviewed and approved at the appropriate level;
- documentation is issued in a controlled manner;
- the SMS documentation complies with current legislation.

#### Review and Update

- Requests to amend the SMS should be addressed to Operations Manager and will be approved by the Chief Executive Officer and/or General Manager during the annual review of the SMS.

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## Section 4: Planning and Implementation

Planning and implementation of the Safety Management System is integrated into the management of the normal business activities of the Company. The listing of the main risk generating activities, typical of any upstream oil operating company, are summarized below. These activities will be managed by utilizing the controls and standards referred to in the Business Processes Listings contained in Appendix 1. The controls and standards listed there represent the Company's corporate policy for managing the activities and thereby for reducing the risks to as low as reasonably practicable.

A number of specific management activities that relate to health, safety and environmental issues are included below the business processes in this section.

### 4.1 Pan Orient Energy Business Processes

#### Managing Seismic Operations

The following summarizes the activities that would be undertaken by the Company in connection with seismic operations:

- prepare for seismic operations;
- execute seismic operations.

#### Managing Exploration, Appraisal and Development Well Operations

The following summarizes the activities that are undertaken by the Company in connection with exploration and appraisal drilling operations:

- well design and planning;
- prepare drilling facilities and worksite;
- well construction and handover (or abandonment);
- management of well equipment and materials;
- selection and management of contractors;
- logistics management;
- environmental and waste management;

#### Managing Facilities Design and Installation

The following summarizes the activities that are undertaken by the Company in connection with the development of existing or new field(s):

- prepare field development plan and a basis for design;
- prepare a field development specification and implementation plan;
- preparation of detailed design;
- procure and control material, equipment and services;
- construct and commission facilities.

#### Managing Production Operations

The following summarizes the activities that are undertaken by The Company in connection with production operations:

- plan and execute field activities;

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- manage well performance;
- manage tanker operations;
- plan and execute inspection and maintenance;
- procure and control materials, equipment and services;
- modify facilities;
- provide health, welfare and emergency services;
- environmental and waste management;
- manage office and warehouse facilities;
- abandonment and decommissioning.

#### Managing Production Well Intervention Operations

- well programme design, planning and execution.

Within each of these business processes there are numerous activities that generate hazard potential and the requirement to manage the risks. These are managed by the introduction of written controls, either generic standards or project-specific procedures. All of the controls are controlled documents under the SMS (see Appendix 3 for the master listing). The general principles of the risk management process are described in Section 4.2.

### 4.2 Hazard and Risk Management

Pan Orient Energy requires that risk assessments be undertaken to ensure that it complies with any relevant statutory provisions and thereby reduce the risks so far as reasonably practicable.

#### The Risk Management Process

Risk management consists of the following activities:

##### Hazard Identification, Risk Assessment, Control and Mitigation

##### Identifying the Hazards

A hazard is defined as something with the potential to cause harm. The techniques used to identify hazards depend on the nature and complexity of the operation or activity. They could range from observation and recording to the use of specialist techniques such as HAZOP/ HAZID.

##### Assessing the Risk

- Risk is defined as the likelihood that the harm from a particular hazard may occur. The level of risk is dependent on the frequency of exposure to the hazard, the potential severity and the probability that the hazard will be realised.

##### Managing Risk

Eliminating the risk is the preferred option. If risk cannot be eliminated, then reducing the risk to an acceptable level will be achieved through the identification and **implementation** of control measures.

##### Mitigation Measures

In the event of failure to manage risk then contingency plans are developed to minimize loss.

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**The management goals for risk management are:**

- to carry out hazard identification and risk assessments at work sites; by area supervisors/ manager with advising from HS department.
- to ensure hazard identification and risk assessment is carried out by personnel with appropriate training and experience;
- to establish acceptable levels of risk;
- to prioritize the identified hazards by the risks presented;
- to develop achievable action plans for the reduction of risk;
- to measure progress against the action plans;
- to review the assessments when conditions significantly change;
- to develop contingency plans to deal with emergency events.

**The management performance standards for risk management:**

- completion of hazard identification, risk assessment and development of controls for business processes and specific projects/assets;
- evidence of an effective approach to and implementation of controls;
- evidence of hazard identification and risk assessment in the design of new facilities or equipment;
- effective contingency plans.

**Management responsibility for risk management:**

- General Manager/ Operations Manager

#### 4.3 HSE Communication

Efficient communication, both up and down the organization, is essential for the SMS and other management systems to function effectively. The communication structure is designed not only for the passage of information but to motivate people through their involvement and understanding. It is recognized that well motivated employees will contribute more towards the overall success of the Company.

##### 4.3.1 Safety Consultation

**The management goals for safety consultation are:**

- to arrange a consultation;
- to provide the information required under regulations.

**The performance standards for safety meetings are:**

- HSE Committee meeting procedure POE-02-034 in placed and functioning effectively;
- information required under regulations is provided to the workforce.

##### 4.3.2 Management Safety Meetings

Safety meetings are essential for assessing HSE performance, for involving the workforce and as a means of expressing management commitment to the safety culture. The following formal meetings will be held. The purposes of the meetings are to review health, safety and environmental performance and to seek improvements.

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##### Site Management Safety Meetings

The site management meetings will be held Bi-monthly at Kam Phaeng Sean, and will follow a structured process chaired by the Operations Manager. The meetings will be minuted and the actions arising will be recorded, with responsibilities for the actions identified. The Operations Manager will collate the actions and assigned responsibilities register.

##### Corporate Safety Meetings

Corporate safety management meetings will be held every 6 months and will be chaired by the **Chief Executive Officer**. The meeting will be minuted and the actions arising will be recorded with responsibilities for the actions identified. The Operations Manager will collate the actions and assigned responsibilities on an action register.

**The management goals for safety meetings are:**

- to review safety performance and assess results;
- to produce and maintain an SMS improvement plan;
- to provide the necessary resources to implement the improvement plan;
- to maintain effective communication with all employees and contractor staff.

**The performance standards for safety meetings are:**

- agenda produced and circulated prior to each meeting;
- minutes produced and circulated within 5 working days;
- action list produced by Operations Manager and updated before next meeting.

**Management responsibility for safety meeting:**

- General Managers/ Operations Manager

##### 4.3.3 Worksite Pre-Job Discussions

Effective communication on the worksite involving the entire workforce is a major component of incident prevention. Pre-job discussions should address the work to be undertaken, the identified hazards, precautions and controls. Significant topics or identified problem areas may be the subjects of further discussion especially if there is an impact on company standards or procedures.

**The management goals for worksite discussion are:**

- to ensure a satisfactory level of understanding of the work to be undertaken;
- to ensure that all hazards have been identified and that adequate controls and follow up are in place;
- to ensure that PPE and the equipment are fit for purpose for the work;
- to ensure that the permit to work system is being complied with;
- to ensure that the Emergency duty roster are updated.

**The performance standards for work site discussions:**

- full understanding of the work to be undertaken;
- all hazards have been identified and that adequate controls and follow up are in place;
- PPE and the equipment are fit for purpose for the work;
- the permit to work system is being complied with;

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- Emergency duty roster are updated.

**Management responsibility for worksite discussion:**

- General Manager/ Operations Manager

##### 4.3.4 Hazard Reporting by the Workforce

Any hazard perceived by any employee can be raised to the area Operations Manager and HSE Officer. This system provides the workforce with an effective mechanism for communicating to management any hazards or occurrences that are perceived. The Operations Manager will ensure that matters are addressed by the appropriate manager. Valid feedback will always be given to the originator.

**The management goals for hazard reporting are:**

- to provide a credible hazard reporting and communication system;
- to ensure a rapid response to all hazard information.

**Responsibility for hazard reporting All Employees Responsibility for hazard report collation and dissemination Operations Manager**

##### 4.3.5 Safety Alerts and Safety Information

The company communicates important HSE information through the issue of Safety Alerts and by maintaining an up to date library with relevant safety information at its main sites. Safety Alerts are issued by the HSE Safety Officer from information supplied by personnel from any of The Company's locations or from government or trade associations. If applicable, the information may be incorporated into processes, procedures or working instructions, safety board.

**The management goals for safety alerts and safety information are:**

- to communicate critical health and safety information to all relevant personnel and locations;
- to amend company processes and procedures based on the alerts;
- to make available up to date health, safety and environmental information.

**Management performance standard for safety alerts**

- the timely issue and distribution of safety alerts;
- the timely update of safety and environmental information.

**Management responsibility for Safety alerts and Safety Information: Operations Manager**

#### 4.4 Occupational Health Standards

##### 4.4.1 Employee Occupational Health Standards

All employees are subject to health surveillance by the Company. The process begins at the employment stage and periodic examinations are carried out at appropriate intervals.

Program of Health Check up per POE-02-018

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- Pre-employment Health Checkup
- Annual Health Check up
- Comply by local laws

**The management goals for health surveillance are to:**

- comply with company and legislative standards;
- maintain a program of periodic medical examinations;
- ensure professional medical attention is available to all company location.
- Maintain First Aid Station with qualify personal and medicine by laws

**The management performance standards for health surveillance are:**

- employees health is monitored and appropriate assistance provided throughout their employment;
- appropriate medical records and results of health monitoring are maintained.

**Management responsibility for Occupational Health standards:**

- Operations Manager

##### 4.4.2 Substance Abuse

The potential of substance abuse is recognized by the Company. Management will place the emphasis on initially identifying that a problem exists and then working with the employee to resolve the problem. Continued abuse in the workplace however, will be handled under the disciplinary procedure.

**The management goals for substance abuse are to:**

- actively discourage substance abuse in the workplace;
- proactively identify potential abuse and provide counseling.

**The management performance standards for substance abuse are:**

- the elimination of substance abuse at the workplace.

**Management responsibility for substance abuse:**

- Operations Manager

##### 4.4.3 Control of Substances Hazardous to Health

The company is committed to eliminating, or controlling, the risks arising from the use of any substance that presents a health risk to employees. To do this all such substances in use will be identified and the risks arising will be evaluated. Controls will then be put in place to reduce that risk to an acceptable level.

Although The Company provides suitable personal protective equipment per Personal Protective Equipment POE-02-013 for use by employees this is not considered to be the primary control measure. Elimination or substitution with a less harmful substance is the preferred management option.

The Operations Manager is responsible for implementing all the necessary precautions and controls and for ensuring that the product has been assessed and any hazards/risks evaluated.

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#### The management goals are:

- to carry out assessments at all company sites;
- to produce data sheets for all the identified substances;
- to implement controls to reduce the risk to an acceptable level (in order of preference), by:
  - substitution of safer products;
  - personal protective equipment;
  - instructions and pre job briefings prior to use of hazardous substances;
  - hazard identification, risk assessment and implementation of control measures;
- to monitor the effectiveness of the control procedures;
- to provide health hazard, risk and control measures information to employees.

#### Management performance standards

- assessments carried out at all company sites;
- data sheets available for all the identified substances;
- controls are implemented to reduce the risk to an acceptable level;
- employees are aware of the health hazard, risk and control measures.

#### Management responsibility for Control of Substances Hazardous to Health :

- Operations Manager

#### 4.5 Standards and Procedures

Clear, concise, well understood procedures, guidelines and controls are essential to reduce injury to people, damage to plant and equipment and the environment.

For standards and procedures to be effective they must follow a standard format, be developed and updated by the personnel who will eventually use them. They must always be easily accessible and up to date.

Pan Orient Energy management standards and procedures are covered in section 4.1. Document management is covered by Section 3.10

#### 4.6 Equipment Examination

The Company will ensure that examination of certain equipment and operations is carried out by competent persons, as required. The examinations can be carried out by competent persons employed by the Company or by a nominated contractor. The well examiner must be independent of the line management. A separate written scheme for these examinations will be in place for each site and will comply with the relevant regulatory guidance.

#### The management goals for examination are to:

- set up an examination scheme for the equipment or operation;
- ensure that all the appropriate equipment is identified and subject to examination;
- maintain records of examination;
- ensure any reported defects are acted upon.

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#### 4.9 Managing Working Time

All the Company's sites will ensure that the requirements of the Working Time Regulations are complied with by ensuring that staff does not work excessive hours without their agreement.

#### The management goals for managing working time are to:

- To comply with the Working Time Regulations.

#### Performance standards for working time management

- Regulatory compliance achieved.

#### 4.10 Managing First Aid

All company locations will have suitable first aid equipment and facilities available in compliance with the First Aid at Work Regulations.

#### The management first aid goals are to:

- identify and provide sufficient, trained, first-aiders; by comply per Health and Safety Training requirement procedure POE 02-031 as a minimum.
- identify the appropriate first aid equipment and facilities required;
- provide the equipment and facilities;
- maintain first aid equipment and facilities in a safe and efficient condition.

#### First aid provision performance standards

- sufficient, trained, first-aiders provided;
- appropriate first aid equipment and facilities provided;
- equipment and facilities provided;
- first aid equipment and facilities maintained in a safe and efficient condition.

#### Management responsibility for Managing First Aid:

- Operations Manager

#### 4.11 Managing Incident Reporting and Investigation

Incident reporting and investigation positively contribute to the process of accident prevention. Pan Orient Energy management will be involved in the process of investigation, dependent upon the severity or potential severity of the incident, in order to identify the underlying causes and to implement actions to prevent recurrence.

#### Reporting and Investigation Procedure

Employees are required to report all accidents and incidents in which they are involved to their line manager/ supervisor. These include injury to personnel, damage to plant and equipment, harm to the environment and near misses. Accurate and timely reporting is essential to ensure effective follow-up.

Following the initial report, the formal company incident reporting and investigation procedures POE 02-016 are followed.

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#### Management performance standards for examination

- examination schemes in place;
- all the equipment has been identified and is subject to examination;
- records of examination are maintained;
- all defects have been acted upon.

#### Management responsibility for Equipment Examination:

- Operations Manager

#### 4.7 Maintenance System

The Company will ensure that all equipment which presents a risk to employees, other facilities or to the environment is in a safe and efficient condition. The company operates a maintenance system that identifies the level of maintenance that is required, including the frequency and maintains records of all maintenance carried out.

#### The management maintenance goals are to:

- identify which equipment is subject to planned maintenance;
- provide defined maintenance routines for the equipment;
- maintain such equipment in a safe and efficient condition;
- maintain records of all maintenance carried out.

#### Maintenance management performance standards

- all safety critical equipment in a safe and efficient condition;
- up to date records of all equipment requiring maintenance are maintained;
- up to date maintenance routines, including frequencies are available;
- up to date maintenance records are available.

#### Management responsibility for Maintenance Systems:

- Operations Manager

#### 4.8 Permit To Work System

The Company's Permit to Work system must be utilized for risk operations. It provides for a written instruction from the person in charge of the area to the person carrying out the work. The permit to work records where, when and how the work is to be executed, identifies hazards, any additional precautions and the control measures and requires that the site and plant/equipment status be recorded on close out of the work.

#### The management goals for the permit to work system are to:

- provide a level of control for high risk operations;
- ensure all personnel who may be affected by the work are aware and involved;
- monitor compliance with the permit to work system through audit.
- Comply with Work Permit Procedure (POE 02-023).

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Significant accidents and incidents are reviewed at the Management Safety Meetings.

#### The management goals for accident reporting and investigation are to:

- to encourage the reporting of all accidents, incidents and near misses;
- to investigate all reported accidents and incidents at a level commensurate with their potential;
- to develop realistic, achievable recommendations to prevent recurrence;
- to communicate the findings of investigations to all interested parties to prevent recurrence;
- to provide a database of information for performance measurement.

#### The management performance standards for accident reporting and investigation are:

- the timely provision of data on incident occurrence and incident reports;
- the full completion of investigations, determining root causes;
- high quality investigation report;
- follow up recommendations prevent any recurrence.

#### Management responsibility for accident reporting and investigation:

- Operations Manager

#### 4.12 Contingency Planning and Emergency Response

The Company recognizes that even with the implementation of an effective management system there is always the potential for incidents to occur. At all sites, management will identify high-risk scenarios, develop emergency response plans and train employees to provide an effective response should it be required. Emergency procedures POE 02-015 and contingency plans will be regularly updated and exercises carried out in order to maximize their effectiveness.

Separate emergency plans will be prepared for major operations, such as well operations, that involve a significant change to normal site operations.

A corporate emergency response procedure will also be in place to ensure that emergency communications can be established with senior management.

#### The management emergency response goals are to:

- identify potential emergency scenarios associated with all Pan Orient Energy operations;
- provide easily understood procedures to be followed by personnel at all sites;
- ensure sufficient trained personnel and resources are available to support the control of an incident.

#### Emergency Response Training

Emergency response information is provided to employees during induction. Specific training per POE 02-031 health and Safety Training Requirement will be given relating to the site where an employee is likely to work and emergency response training given when new plans are issued or if plans are amended.

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The emergency response training management goals are to:

- provide a competent response to emergencies;
- to evaluate the effectiveness of response to an emergency.

Emergency response management performance standards:

- availability of clear and concise contingency plans and emergency procedures at all sites;
- sufficient training carried out for identified personnel;
- exercises are planned and carried out regularly;
- documented debriefing and feedback leads to improvements in plans and procedures.

Management responsibility for Emergency Response Plan:

- General Manager/ Operations Manager

#### 4.13 Managing Engineering Design and Construction Change

A design review process will be in place at all company sites which will ensure compliance with all regulatory requirements, codes and standards. Design reviews, held during the various stages of a project, may generate changes to the original design; these are managed using the plant modification procedures.

The management goals for design change control are:

- to ensure all potential hazards connected with a project or design change have been identified;
- to control changes and obtain the necessary approvals before the change is implemented;
- to check the design and consider whether any of the conditions which may occur from either a malfunction or operation, have the potential to cause a hazard to people working on the location or to the installation/equipment;
- to check the precautions incorporated in the design are sufficient;
- to ensure the safety engineering of the design meets the requirements of legislation and any inspection scheme;
- to ensure that the original design has not been compromised by changes at design stage;
- to ensure any operating manual addresses all the safety aspects required by changes.

Performance Standards:

- roles, responsibilities and reporting lines are clearly identified for managing changes;
- design reviews identify the hazards and changes required to mitigate risk;
- design changes are undertaken in accord with the plant modification procedure.

Management Responsibility for Managing Engineering Design and Construction Change

- General Manager/ Operations Manager

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## Section 5: Performance Measurement

Measurement is essential for improving health safety and environment performance. Measurement of performance is achieved by pro-active and reactive monitoring to provide information for feedback and correction.

### 5.1 Active Safety Monitoring

#### Planned Inspections

Planned inspections will be carried out at each site in accordance with a pre-arranged schedule and an inspection checklist. These will be carried out by the line manager responsible for the site. The condition of plant and equipment is measured against pre-determined standards. In this way sequential inspections become comparable and the results can be utilized as a performance indicator. Non-compliance with standards generates nonconformance reports, which are prioritized for action.

The management goals for planned inspections are:

- to establish the condition standards for plant and equipment;
- to measure the level of compliance to the standards;
- to involve employees in the development of standards and in measuring compliance;
- to record and collate inspection records;
- to provide a valid indicator in respect of safety management performance.
- to comply on facility Safety Inspection Procedure (POE-02-026).

#### Safety Meetings Follow Up

Safety meetings and pre-job discussions provide a performance indication of the effectiveness of the SMS.

The management goals for active monitoring are:

- to measure the level of compliance to standards;
- to record and analyze the outputs from monitoring;
- to ensure that follow-up action is taken.

### 5.2 Reactive Monitoring

#### Statistical Reports

The HS Manager and Area Manager record and analyses the statistics on all accidents, damage to plant and equipment, harm to the environment and near misses. Following each accident or incident report the causes of incidents are reviewed to provide an incident as to where increased emphasis or effort needs to be placed.

Incidents are assessed by the HS Manager and Area Manager for their potential severity to identify the level of risk associated with the incident potential.

Incident frequency rate statistics are compiled using conventional frequency rate calculations.

The management goals for reactive monitoring are:

- to provide company performance indicators for safety management against incident and

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potential incident occurrence;

- to identify the root causes of accidents and incidents;
- to identify areas where resources should be directed to prevent recurrence;
- to identify procedural deficiencies that can be addressed to prevent recurrence.

Management performance standards for active and reactive monitoring:

- confirmation that the programme of inspections is being met and reports issued;
- confirmation that the schedule of safety meetings is being met;
- quality of safety meeting minutes and defined actions;
- compilation of on-going incident statistics and identification of trends;
- issue of annual report on monitoring;
- completion of corrective actions following inspection, audit and incident investigation.

Management responsibility for active and reactive monitoring:

- Operations Manager

## Section 6: Reviewing Health and Safety Performance

Review and audit of the SMS provides the feedback loop as identified on the management model in Section 1.3.

### 6.1 Management Performance Review

The overall company health and safety performance is reviewed by collecting evidence from various sources:

- results of audits
- assessment of active and reactive monitoring activities
- feedback from employees
- new legislation.

The evidence is used to feedback into the SMS any changes required to improve performance.

The goals for management review are to:

- review all HS performance indicators and other relevant information;
- identify areas requiring additional resource or redirection of emphasis;
- review Company HS objectives and amend these as necessary.

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## Section 7: SMS Audits

Auditing is a structured process of collecting independent information on the efficiency, effectiveness and reliability of the total health, safety management system and drawing up plans for corrective action. Auditing is not a substitution for the other essential parts of the SMS.

Auditing seeks to establish:

- that the appropriate management arrangements are in place;
- adequate risk control systems exist and are implemented;
- appropriate workplace precautions are in place.

#### Authority and Responsibility

The HSE Officer is responsible for the development of audit programme with advising by the Operations Manager.

#### Audit Frequency

The scope and frequency of internal (and external) audits will be determined according to specific needs and risk rated priorities.

The management goals for auditing the SMS are to:

- determine and report the level of compliance to the SMS standards and procedures;
- determine the level of understanding by employees of the contents of the SMS;
- provide performance indicators as to achievement in the implementation of the SMS which will contribute towards the improvement process;
- recommend remedial action where necessary.

### 7.1 SMS Improvement Plans

SMS improvement plans are generated during safety management review meetings. These provide the detailed actions to be implemented to improve company safety and environmental performance. The implementation of the plans is the responsibility of the **Chief Executive Officer** who reports to the Board of Directors. They are monitored on his behalf by the Health and Safety Manager.

The management goals for improvement plans are to:

- provide an action plan for the improvement of the SMS;
  - what is to be achieved
  - who will do it
  - when will it be completed by
- provide a single reference point for the improvement of the SMS.

The management performance standards for improvement plans are:

- development of an SMS audit plan;
- completion of the annual SMS audit plan;
- completion of the SMS management review;
- generation of management improvement plans with clear objectives, tasks and timescales.

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