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PAN ORIENT ENERGY (SIAM) LTD.

EMERGENCY RESPONSE MANUAL

Compiled by:
Various

Approved by:
Jeff Chisholm
General Manager

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PAN ORIENT THAILAND EMERGENCY RESPONSE

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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 27th, 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 & 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:

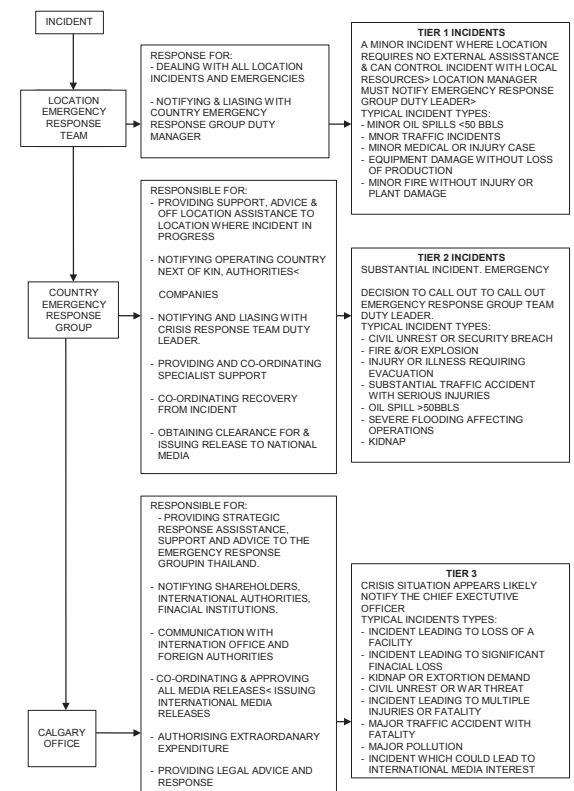
- A meeting with all Emergency Response Group (ERG) Members, including all positions identified within this document, is conducted annually to review and update the procedures.
- A database of all Pan Orient Energy (Siam) Ltd. personnel charged with emergency management responsibilities within this manual 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 & 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

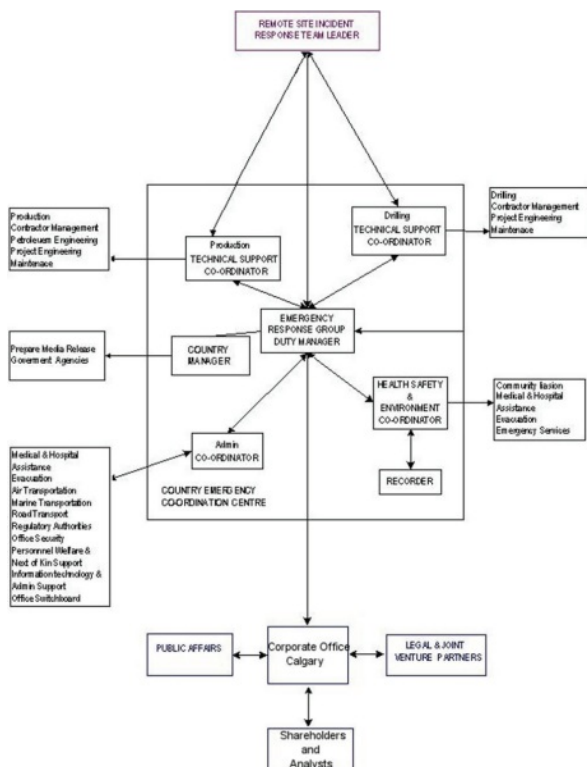
Emergency Response Group Leader	<ul style="list-style-type: none"> • Responsible for managing and co-ordinating the overall response of the ERG to the emergency situation. Reports to the General Manager and the Corporate Office. • Responsible for mobilising the ERG and Support personnel. • Responsible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

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

Production Foreman	<ul style="list-style-type: none"> • Reports to the IRT Leader and responsible to him/her for providing information and managing all human resources matters upcountry. • Responsible for arranging temporary accommodation, transportation and assistance for personnel being evacuated from emergency site if required. • Responsible for co-ordinating with the IRT Leader regarding onward travel for personnel being evacuated. • Responsible for communication with and notifying the next of kin of national Company employees as directed by IRT/ERG. • Responsible for providing information about all expatriate personnel at the emergency site to the IRT Co-ordinator. • Responsible for co-ordinating the arrangements for the disposal of fatalities. • Responsible for co-ordinating the office switchboard and reception.
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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"> • Where? • What facilities/vehicles are involved? • When? • What is happening? (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"> • Contained? • Potential to escalate? • Escalating? • Who is handling the response? • How is it going? • Who has legal control of the incident? 	
Accuracy and timeliness of information <ul style="list-style-type: none"> • How good is information? • Is it complete • Is it coming from the right sources? • How can it be improved? 	
Damage/ Loss <ul style="list-style-type: none"> • Installation • Equipment • Third Parties • Major • Minor 	
Drilling <ul style="list-style-type: none"> • Stopped • Delayed • Continuing 	
Company Involvement <ul style="list-style-type: none"> • Operator/ Non-operator 	
Casualties <ul style="list-style-type: none"> • Deaths • Injuries • Missing 	
Environmental <ul style="list-style-type: none"> • Oil Spill • Chemical Spill • Air Pollution • Quantity 	

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

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 17th Floor in the Rasa Tower II building. Fire Wardens have been appointed. All personnel must follow the instruction issued by a Fire Warden.

5.2.4 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.

5.2.2 Fire Wardens and Duties

	Name	Duty
Fire Warden	Khun Noppadon	Operations Manager
Alternate Fire Warden	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.

5.3 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"> - ERG Leader - HSE Co-ordinator - Administration Co-ordinator Bangkok - Drilling Operations Co-ordinator - Production Operations Co-ordinator 	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"> - The current situation - The political and operational background - If any contacts or demands have been made by the instigators. - Who is aware of the incident <ul style="list-style-type: none"> • Government • Security Forces/Police of country • Canadian Embassy/High Commission • Local employees • Relatives - What the country's policy is concerning negotiation with kidnappers etc. 	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"> - Is there positive evidence of kidnap? - How reliable is the available information? - Are the instigators known to be criminals, psychopaths or terrorists? - What are the likely future actions of the instigators? - What is the risk? <ul style="list-style-type: none"> • What threats have been made? Likely to be carried out? • Is there a threat to life - hostage or others? • Are other employees/families at risk? • What is the business risk? • What is the local Government likely to do if you negotiate? 	ERG
<ul style="list-style-type: none"> - Need for containment of information - Is containment of information possible, likely to last and appropriate? - What time scale may the Company have to work to? - What is likelihood rescue? - What attitude is local Government likely to take? - What are the immediate implications on operations? 	ERG

Kidnap And Extortion Checklist

	Responsibility
11. Confirm Company objectives <ul style="list-style-type: none"> - Remove threat to life - Display Company's determinations to show firm resolves and remain a responsible corporate citizen. 	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"> a. Response b. Control/secretcy c. Risk 	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"> - Who is to be the ultimate Decision Maker? - Who is to conduct any negotiations? - Who will make up the Negotiating team locally? - Is additional support required in Country? 	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"> - The current situation locally <ul style="list-style-type: none"> • Political • Security • Operational sites/equipment • And other offices - The current alert state - The expected rate of change in the situation - The immediate plans and intentions of the local management 	ERG
4. Confirm objectives: <ul style="list-style-type: none"> - Safety of and associated personnel and their families. - Safety of property and operations. - Maintenance, where possible, of good relationships with the host government. 	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"> - How reliable is the available information? - What is the threat to personnel and their families? - What is the threat to contractors and their families? - What is the threat to operations/equipment? - What are the threat to and other associated offices? - What are the implications of Company's relationships with the host Government? 	ERG
8. What is the likely change in events <ul style="list-style-type: none"> - in the next few hours. - over the next few days. - over the next two weeks and more. 	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"> - How is this to be done? - Who is leaving? - Where are they going? - What arrangements are being made by the IRT? - What arrangements need to be made by the ERG? - What is happening to active operations? - What is to happen to offices? - What is to happen to confidential documents? 	ERG
10. ERG makes necessary evacuation arrangements. If possible, keep HR ERG informed. <ul style="list-style-type: none"> - Flight bookings. - Charter aircraft. - Ship bookings. - Other transport. - Reception party at local arrival point. - Reception party in arrival Country - Accommodation at local arrival area. - Accommodation in arrival Country - Clothing, cash, immediate needs. - Keep Next-of-Kin or Expatriate based (extended) families informed. - Make necessary arrangements for families to meet evacuees. - Consider safety and welfare of any employees/contractors and families remaining in country. - Safety and welfare of national employees. - Protection of residences, offices and other property. 	Admin Co-ordinator
11. If no decision to evacuate yet, ERG should: <ul style="list-style-type: none"> - Consider arrangements that could be required - Conduct advance planning for transport, accommodation, greeting parties etc. - Keep families outside of affected country informed. - Keep employees updated. - Maintain communications with IRT. 	Admin Co-ordinator
12. Once evacuation has started: <ul style="list-style-type: none"> - Implement agreed actions. - Monitor evacuation progress. - Maintain communication with ERG as long as possible - Keep families informed - Keep employees informed - Provide PR advice to employees and family 	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"> - Impacts on Company's operations, image and liabilities - Impacts on trading, oil sales and cash flow. - Relationships with host government 	ERG
<ul style="list-style-type: none"> - Likelihood of commercial or other sanctions - Effect on the current and longer term trading position of the Company in the affected country. - How entry back into the country might be effected - Effects on employee morale (local, national, company wide) 	
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)

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

ATTACHMENT 11 – GENERAL NOTIFICATION

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

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
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 Location	No. Of Fatalities	No. Of Injuries	No. Of Illness
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			
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 ถักตักหรือไม่มี (ใช่/ไม่ใช่)	Is spill contained? (Yes/ No)
10. มีปฏิกิริยาปล่อยมลพิษสู่สิ่งแวดล้อมหรือไม่ (ใช่/ไม่ใช่)	Is spill being released into water body? (Yes/ No)
11. สภาพอากาศขณะเกิดเหตุ 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
Drilling Operations Technical Co-ordinator		
Name		
Production Operations Technical Co-ordinator		
Name		
HSE Co-ordinator		
Name		
Administration Co-ordinator Bangkok		
Name		
Production Foreman Kam Pheang Sean		
Name		
Recorder		
Name		
Reception		
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 ◆

Clear ◆ Voices ◆ Motor ◆

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:	<table border="1"> <tr> <td>a) Is the patient conscious</td> <td>Yes / No</td> </tr> <tr> <td>b) Is patient agitated/confused</td> <td>Yes / No</td> </tr> <tr> <td>c) Breathing problems</td> <td>Yes / No</td> </tr> <tr> <td>d) Significant bleeding</td> <td>Yes / No</td> </tr> <tr> <td>e) Chest pain</td> <td>Yes / No</td> </tr> <tr> <td>f) Burns</td> <td>Yes / No</td> </tr> <tr> <td>g) Fractures</td> <td>Yes / No</td> </tr> <tr> <td>h) Abdomen pain</td> <td>Yes / No</td> </tr> <tr> <td>i) Trauma</td> <td>Yes / No</td> </tr> <tr> <td>j) Fever</td> <td>Yes / No</td> </tr> <tr> <td>k) Vomiting/diarrhea/de-hydration</td> <td>Yes / No</td> </tr> <tr> <td>l) Multiple/Serious/Head injury</td> <td>Yes / No</td> </tr> </table>	a) Is the patient conscious	Yes / No	b) Is patient agitated/confused	Yes / No	c) Breathing problems	Yes / No	d) Significant bleeding	Yes / No	e) Chest pain	Yes / No	f) Burns	Yes / No	g) Fractures	Yes / No	h) Abdomen pain	Yes / No	i) Trauma	Yes / No	j) Fever	Yes / No	k) Vomiting/diarrhea/de-hydration	Yes / No	l) Multiple/Serious/Head injury	Yes / No
a) Is the patient conscious	Yes / No																									
b) Is patient agitated/confused	Yes / No																									
c) Breathing problems	Yes / No																									
d) Significant bleeding	Yes / No																									
e) Chest pain	Yes / No																									
f) Burns	Yes / No																									
g) Fractures	Yes / No																									
h) Abdomen pain	Yes / No																									
i) Trauma	Yes / No																									
j) Fever	Yes / No																									
k) Vomiting/diarrhea/de-hydration	Yes / No																									
l) Multiple/Serious/Head injury	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 st deg	2 nd deg	3 rd 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 ()	B dilated ()	C contracted ()	Left	A normal ()	B dilated ()	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?	If so, where?				Yes / No			
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
733/345 Phahonyothin 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
		DMF Office	DMF	HSE Group (Mr. Witawat)	02-794-3390	081-838-8917
		Drilling Rig Company	ELITE Drilling	Rig – Radio Room	-	085-4099-291
		Drilling Rig Company	ELITE Drilling	Rig Manager	-	083-132-8828
		Drilling Rig Company	ELITE Drilling	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
		Singkhla	074-334-609	-	02-512-1078	-
		Phnom Penh	055-759-6119	-	055-719101	-
		Logistics	Onshore Logistics	Managing Director	02-379-4388-1	081-855-6945
		Wireline Logging	Schumberger	Thailand Manager	02-937-8788	081-896-4251
		Wireline Logging	WMI Logistics	CEO	02-512-7079	081-826-1738

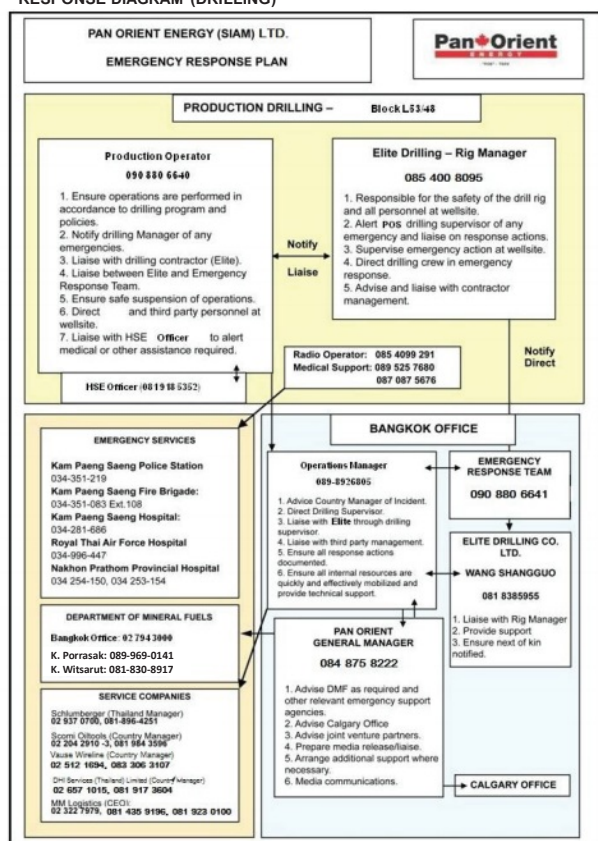
ATTACHEMENT 20B – KAM PAENG SAEN (L53/48) EMERGENCY CONTACT NUMBERS AND LOCAL EMERGENCY SERVICES

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

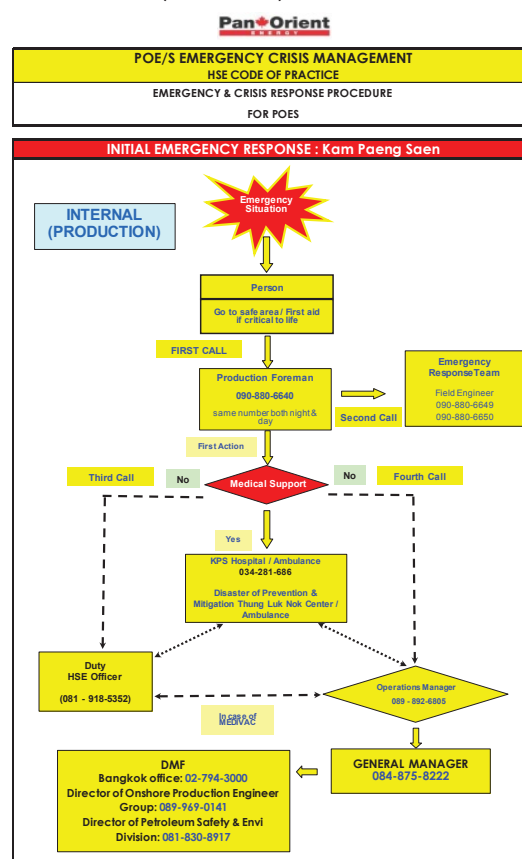
ATTACHEMENT 20B – KAM PAENG SAEN (L53/48) EMERGENCY CONTACT NUMBERS AND LOCAL EMERGENCY SERVICES (Continued)

Name	Contact Number	Distance from L53-A	Emergency Service Capabilities								
			No. of fire truck	Water truck	Foam	Hose	Fire extinguisher	SCBA	Fire Suit	Officer	Other equipment
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)



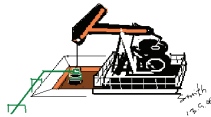


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PAN ORIENT ENERGY (SIAM) LTD.

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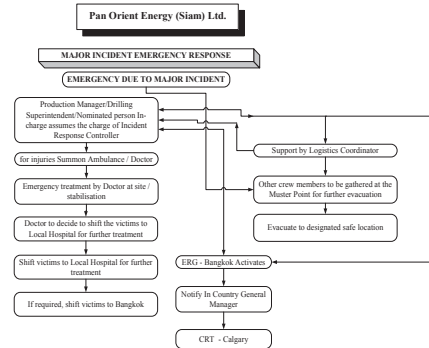
- A continuous alarm will be sounded for evacuation emergency.
- Incident management Team, employee and contractor are responsible to perform their roles as defined during emergencies.
- Evacuate to the designated safe assembly areas at site and the camp are (i.e.) Muster points
- Further evacuation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

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 16

Appendix 3

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 17

Appendix 3

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 19

Appendix 3

Pan Orient Energy (Siam) Ltd. Emergency Response Procedures 10

FIELD INFORMATION REQUIRED FOR PROPERTY OF 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.	

IMPORTANT TELEPHONE NUMBERS					
Organization	Service/Supplier	Position	Phone	Mobile	Fax
POES	Bangkok Office	General Manager	02-937-1138 x 23	02-875-8222	02-937-0841
		Operations Manager	02-937-1138 x 18	089-892-0885	089-892-0885
		Finance & Accounting Manager	02-937-1138 x 24	089-838-6569	02-937-0841
		Refinery Engineer		089-892-0838	
		Process-control, instrumentation & Inventory Supervisor	02-937-1138 x 19	02-937-0841	089-892-0846
		EPA & Government Liaison Coordinator	02-937-1138 x 420	081-923-2583	02-937-0841
		IT Officer	02-937-1138 x 112	02-937-0841	089-892-0607
		Field Operations Engineer		089-838-6447	02-937-0841
		Production Supervisor		089-838-6450	
		Production Foreman		089-838-6446	
Pan Orient	KPS Field	Production Helper		089-892-0841	
		HMV Officer		081-918-5352	
		Mechanics		084-752-5335	
		Electric & Instrument Engineer		089-880-6653	
		CFO	+1 403-294-1777 x 23	+1 403-294-1780	
		Onshore Production Engineer Group (Mr. Pernack)	02-794-3373	889-769-8141	02-794-3362
		HRM Group (Mr. Winarsat)	02-794-3390	881-838-8917	02-794-3362
		ELITE Drilling			
		Rig - Radio Room		085-899-2911	085-899-2911
		Rig Manager		083-132-8829	083-132-8829
POE Corporation	DMF Office	Medical Support		089-525-7480	
		President	02-538-2688-90	02-538-2688-91	02-538-2688-90
		Managing Director	02-538-2688-90	02-538-2688-91	02-538-2688-90
		Thailand Manager	02-455-0595	081-917-3044	081-917-3044
		International Logistics	02-284-2910-3	081-854-2377	02-284-2914
		South Offshore			
		Country Manager			
		Thailand Manager	02-455-0595	081-917-3044	081-917-3044
		Supply	02-512-1094, 512-3611	081-896-8666	081-896-8666
		Perforating	074-334-649	02-532-1698	02-532-1698
Drilling Fluids Supplier	Alamanni	Supply	065-226-221	065-226-221	065-226-221
		Logistics			
		Onshore Logistics			
		Managing Director	02-379-8300-01	081-855-6945	081-855-6945
		Logistics			
		Thailand Manager	02-357-4700	081-896-1251	02-537-8701
		Supply			
		Logistics			
		Thailand Manager			
		Supply			

EMERGENCY TIME LOG

Date: _____

Location:

IRT Member:

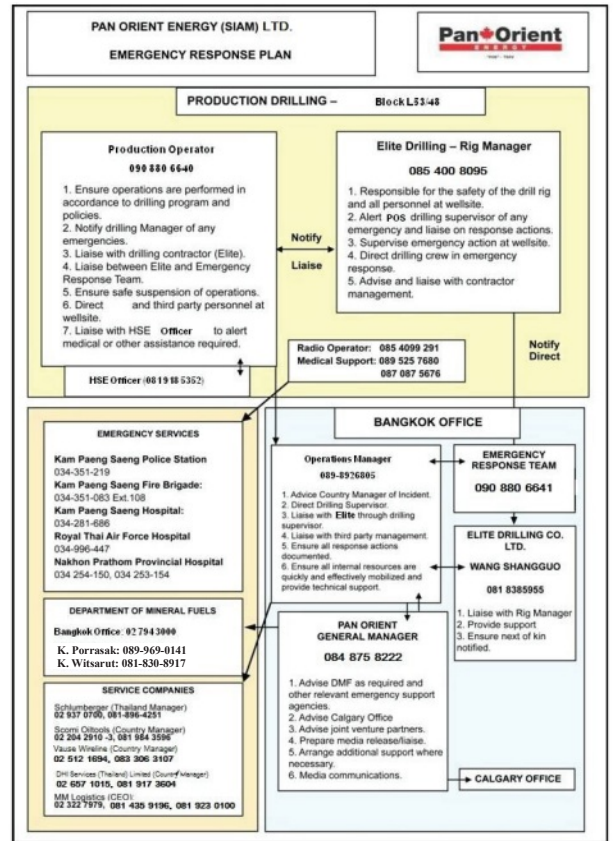
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**KAM PHAENG SEAN OPERATIONS
SUPPORT SERVICES EMERGENCY RESPONSE IMPORTANT TELEPHONE NUMBERS**

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



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

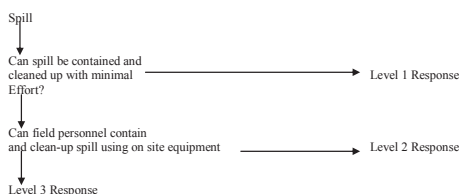
There are three levels of response relating to accidental discharges:

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.

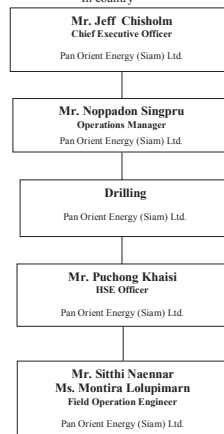
Communications

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

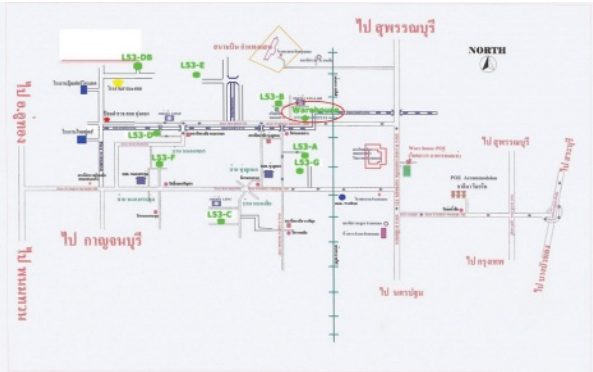
3.0 KAM PHAENG SEAN SITE DETAILS

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:

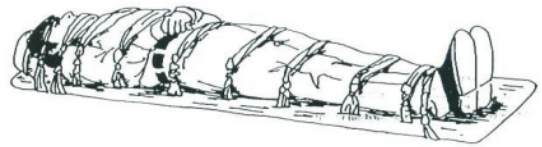
1. Fire or explosion
2. Serious traffic hazards
3. Risk of drowning
4. Exposure to severe weather conditions such as extreme heat or cold
5. Electricity injury
6. Pinning of the victim by machinery or vehicle (first aid can often be given in such cases until professional first aid people can remove the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



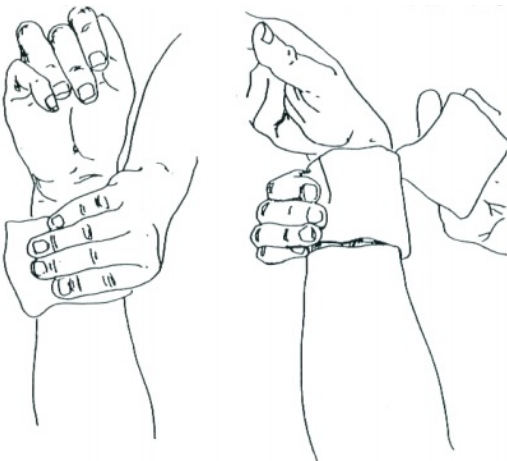
SEVERE BLEEDING

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

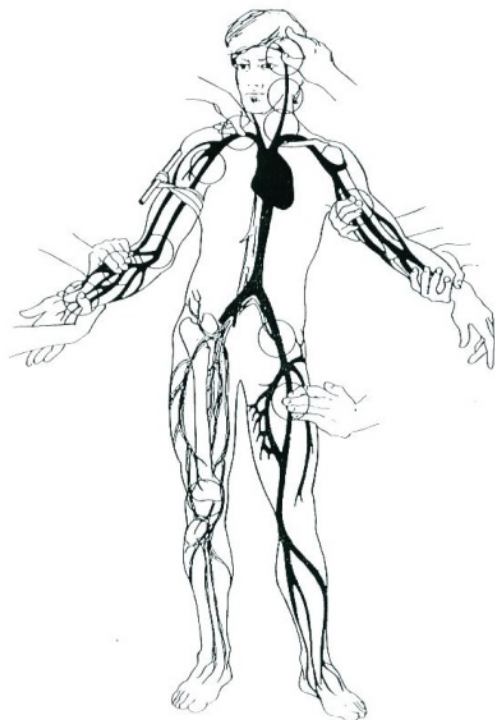
A person can bleed to death in less than one minute. The following are acceptable procedures to follow if severe bleeding occurs.

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.

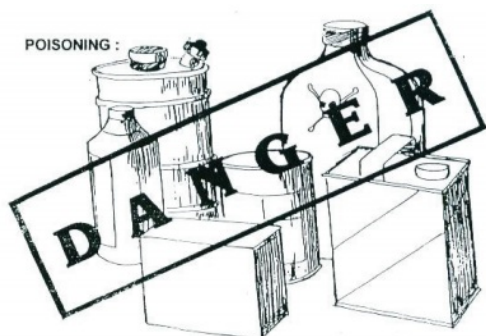
Arterial bleeding is bright red and flows in spurts. Control by using pressure either on the wound directly or on the nearest point in the direction of the heart.

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 enter is extremely important.

SNAKE BITE

When snake bits 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 bank should be no less than 1/4 to 1-1/2 inches wide. Tie the bank 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 bank 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 blood 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 face 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 heart action.

Cardiac arrest causes the victim to lose consciousness within seconds. IF CPR IS STARTED PROMPTLY 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.)
A. Airway	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. Breathing	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.		

C. Circulation	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
CPR Cycles	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.
Option for entrance of 2nd rescuer: "I know CPR. Can I help?"	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.	
Option for pulse return	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

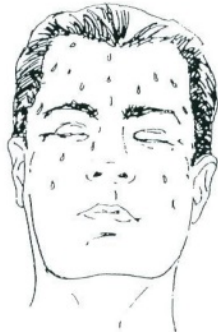
Symptoms:




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

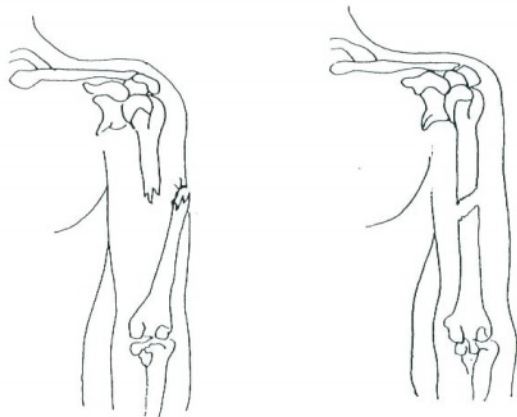
1. A compound fracture is a fracture with an open wound extending from the break to the outer skin.
2. A simple fracture is a break in a bone without an open wound.
3. A comminuted fracture is a bone broken in small pieces (shattered). The break can be closed or opened.

Signs and symptoms of a fracture include:

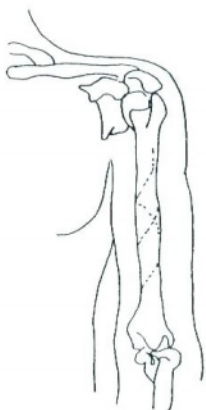
1. Swelling and numbness
2. Deformity
3. Tenderness to the touch and pain on motion.
4. Muscle spasms.

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 และตัวอย่าง
การตรวจสอบเครื่องจักรอุปกรณ์



Brio Orient PENGAWAS		HSE Wellsite Audit			Well Name (ชื่อบ่อ) :L53-A 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
แหล่งพลังงาน Power supply									
1	Power cord สายไฟ ตรวจดูว่ามีรอยฉีกขาด หรือไม่	✓							
2	Ground wire สายดิน มีการต่อกสายดิน และ สายไฟฟ้าแรงสายดินต้องไม่มีหลุด หรือมีการฉีกขาดของสายไฟ	✓							
3	Power plug extension ปลั๊กไฟ ตรวจดู ว่ามีรอยแตก หรือรอยไหม้ ปลั๊กกับเสาสีสม สอดกันแน่นสนิท	✓							
4	Cable tray รางสายไฟ ตรวจดูรางสายไฟต้อง ไม่มีบิดเบี้ยวหรือแบน สายไฟ ต้องวางอยู่บนรางไม่หลุดออกมาข้างนอก	✓							
หัวหลุม Wellhead									
5	Wellhead valve & stuffing box. วาล์วหัวหลุม ตรวจดูวาล์วต่างๆ และ สดฟัฟ่ง บ็อกส์ที่หัวหลุม ต้องไม่มีการรั่วซึม ปิดได้สนิท ด้านจับต่างๆ ต้องอยู่ครบ	✓							
6	Wellhead nameplate. มีป้ายบอกชื่อที่หัวหลุม	✓							
7	Sampling point จุดเก็บตัวอย่าง วาล์วปิดสนิทไม่มีการรั่วซึม และปิดรันทนน้ำมันและสกรูปกอยู่ตรงที่บ่งไว้เท่านั้นหรือไม่	✓							
8	Cellar grating ตะแกรงที่พื้นบ่อ มีการติดตั้งไว้ที่ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่มีใส่ชุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้วิ่งตกหล่น และควรตรวจดู รอยรั่วหรือสนิม	✓							
9	Mouse hole grating ตะแกรงที่พื้นเมาส์โฮล มีการติดตั้งไว้ที่ครบทุกหลุม หรือไม่ รวมทั้งหลุมที่ยังไม่มีใส่ชุดเจาะด้วย อันที่มีอยู่ก็ต้องปิดสนิท แข็งแรง ไม่มีรู ให้วิ่งตกหล่น และควรตรวจดู รอยรั่วหรือสนิม	✓							
10	Cellar หลุมใต้พื้นบ่อ มีช่องเหลว น้ำมันสกริป ขังอยู่หรือไม่ ระดับ ของเหลวหรือ น้ำมันขังสูงมากน้อยเท่าไร	✓							
11	Flow line piping ท่อผลิตมีการรั่วซึมหรือไม่ รอยต่อข้อต่อต่างๆ แน่นสนิทดีหรือไม่	✓							
12	Concrete bund รอบหัวหลุม well head	✓							
13	มี Hard barricade รอบ Beam pump	✓							
บริเวณ แทงค์ผลิต Storage tank area									
14	Storage tank แท็งค์ผลิต มีการรั่วซึมหรือไม่ มีมันไต่ มีราวจับ และ สายดินต่างๆ มีติดตั้งไว้และอยู่ในสภาพดี หรือไม่	✓							
15	Stack Storage tank ปล่องควันแท็งค์ผลิต ไร้งานไต่ดี หรือไม่	✓							
16	Storage tank Burner เบนธันเนอร์ ที่แท็งค์ผลิต ใช้งานได้ตามปกติ หรือไม่	✓							
17	Storage bundle แบงค่อนหรือรวมถังแก๊ส แท็งค์ผลิต มีครบทุกสายและ อยู่ในสภาพดีหรือไม่ ต้องไม่มีขาด การวางต้องแน่น และวางระนาบ เพื่อป้องกันน้ำมันไหลออกนอกถังแก๊ส	✓							
บริเวณโหลดน้ำมัน Loading Bay									
18	Ground rod แท็งค์และสายดินถูกติดตั้งไว้ถูกต้อง และไม่มีขาด หรือชำรุด	✓							

Pan-Orient พลังงาน				HSE Wellsite Audit			Well Name (ชื่อป่อ) :L53-A Date วันที่ 24 May 2022			Picture Progress	
รายการที่ต้องตรวจเช็ค Checklist				Good ปกติ	Broken ผิดปกติ	รายละเอียดการผิดปกติ (Detail)	การทำการแก้ไข Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After
37	Generator Drip Tray ถาดรองเครื่องขึ้นไฟ มีหรือไม่			✓							
38	Toilet ห้องน้ำอยู่ในสภาพใช้งานได้ดี สะอาด			✓							
39	Septic tank บ่อเกรอะอยู่ในสภาพใช้งานได้ดี ไม่มีการรั่วซึม			✓							
40	Tree Planting มีการปลูกต้นไม้รอบอาคารบริเวณ			✓							
41	ถังเก็บน้ำมัน หรือ สารเคมีที่ไม่ใช่แล้ว			✓							
42	ไม่มีหลุมขี้สูงโดยรอบ หลุมผลิต				X	หลุมขี้สูงโดยรอบ หลุมผลิต	จัดหาผู้รับเหมาดำเนินการตัดหลุม	Production/ HSE/ คุณ ปรียาภพฤกษ์	30-Jun-22		In-progress
43	Access road ถนนพื้นที่ในปอผลิต ไม่เสียหาย			✓							
44	Site Office cabin บริเวณรอบไม่มีขยะ ภายในสะอาด มีสายGrounding ประตูล็อคได้			✓							
45	Lightning system ระบบไฟส่องสว่าง มีเพียงพอสำหรับการปฏิบัติงานหรือไม่ หลอดไฟต่างๆ ใช้งานได้ดี ไม่ดับ หรือชำรุด			✓							
46	Main hole ตรวจสอบระดับของหลุม			✓							
47	สิ่งก่อสร้างหรืออุปกรณ์ที่ไม่ใช้งาน (ถังสารเคมีไม่มีที่สำหรับวางตั้ง)			✓							
48	ข้อต่อท่อที่มีดังรองรับที่อยู่นอกบริเวณเดินคอนกรีต ควรมีถาดรองรับ เพื่อป้องกันน้ำมันหกหรือไหลสู่พื้นดิน			✓							
อุปกรณ์ ความปลอดภัย Safety Equipment											
49	Fire Extinguisher ถังดับเพลิง อยู่ในสภาพพร้อมใช้งาน และตรวจสอบแรงดันจากเกจว่ามีอยู่ในระดับที่ใช้งานได้			✓							
50	First aid box & Eye washer ตู้ยาและ ที่ล้างตาฉุกเฉิน ต้องมียาและน้ำล้าง และอยู่ในสภาพพร้อมใช้งาน			✓							
51	Wind sock & Safety sign กรวยลม อยู่ในสภาพดีไม่ขาด ป้ายความปลอดภัยอยู่ในสภาพที่ดีไม่ชำรุดเสียหาย			✓							
52	PPE. พนักงานที่ปฏิบัติงานสวมใส่อุปกรณ์ความปลอดภัยครบ			✓							

<div><div><div><div>Pan</div><div>Orient</div></div><div>ENERGY</div></div><div>HSE Wellsite Audit</div></div>				Well Name (ชื่อป่อ) :L53-A Date วันที่ 24 May 2022			Picture Progress						
รายการที่ต้องตรวจเช็ค Checklist				Good ปกติ	Broken ผิดปกติ	รายละเอียดผลการผิดปกติ (Detail)	การทำการแก้ไข uTia Corrective actions required	ผู้รับผิดชอบ Respondent	เสร็จวันที่ Estimated close out date	Before	After		
53	Mobile phone โทรศัพท์มือถือต้องมีโทรศัพท์มือถือ			✓									
ความเสี่ยงที่จะเกิดอุบัติเหตุ Risk Assessment													
54													
55													
Audited by : Prawit S. Field Operator												Audited by : Thanakorn M Field Operations HSE Officer	

PM of Air Compressor		Checked	Remark
Date: 1/5/22			
Location: 153-A CR			
PM Period: 1 st			
Air Comp. No: ACP-05			
Capacity: 92.5			
Preparation for PM activities:			
A) Coordinate with production to stop air compressor.	/		
B) Observe any unusual of air compressor before stop.	/		
C) Stop air compressor, off mainbreaker.	/		
Comment:			
After stop:			
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:			
Final check:			
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: M. Ardy			
Date: 5/1/22			
Endorser: DSV			
Date: 5/1/22			

PM of Beam Pump		Checked	Remark
Date: 1/5/22			
Location: 153-A1			
PM Period: 1 st			
Pump No: BP-456-03			
Preparation for PM activities:			
A) Coordinate with production to shutdown beam pump.	/		
B) Observe any unusual of beam pump before shutdown.	/		
C) Stop beam pump, off mainbreaker, engage the positive stop pawl.	/		
Comment:			
After shutdown:			
A) Check all drive belts and pulley condition.	/		
B) Check brake, brake drum, brake cable.	/		
C) Check all bolts and retighten.	/		
D) Regrease all structural bearing.	/		
E) Check gear tooth condition.	/		
F) Check or change gear oil.	/		
G) Check gear box for leakage.	/		
H) Check crank pin lock nut for loosen.	/		
I) Regrease bearing motor.	/		
Comment:			
Final check:			
A) Check and clean beam pump, working area.	/		
B) Disengage the positive stop pawl.	/		
C) Coordinate with production to start beam pump.	/		
D) Start beam pump, check noise, leaks and load.	/		
Comment:			
Done by: M. Ardy			
Date: 1/5/22			
Endorser: DSV			
Date: 1/5/22			

PM of Beam Pump		Checked	Remark
Date:	1/5/22		
Location:	LS3-A2177		
PM Period:	1.5		
Pump No:	BP-640-04		
Preparation for PM activities:			
A) Coordinate with production to shutdown beam pump.	/		
B) Observe any unusual of beam pump before shutdown.	/		
C) Stop beam pump, off mainbreaker, engage the positive stop pawl.	/		
Comment:			
After shutdown:			
A) Check all drive belts and pulley condition.	/		
B) Check brake, brake drum, brake cable.	/		
C) Check all bolts and retighten.	/		
D) Regrease all structural bearing.	/		
E) Check gear tooth condition.	/		
F) Check or change gear oil.	/		
G) Check gear box for leakage.	/		
H) Check crank pin lock nut for loosen.	/		
I) Regrease bearing motor.	/		
Comment:			
Final check:			
A) Check and clean beam pump, working are.	/		
B) Disengage the positive stop pawl.	/		
C) Coordinate with production to start beam pump.	/		
D) Start beam pump, check noise, leaks and load.	/		
Comment:			
Done by: Mordant			
Date:	1/5/22		
Endorser:	000		
Date:	1/5/22		

PM of Beam Pump		Checked	Remark
Date:	1/5/22		
Location:	LS3-A2		
PM Period:	1.5		
Pump No:	BP-456-02		
Preparation for PM activities:			
A) Coordinate with production to shutdown beam pump.	/		
B) Observe any unusual of beam pump before shutdown.	/		
C) Stop beam pump, off mainbreaker, engage the positive stop pawl.	/		
Comment:			
After shutdown:			
A) Check all drive belts and pulley condition.	/		
B) Check brake, brake drum, brake cable.	/		
C) Check all bolts and retighten.	/		
D) Regrease all structural bearing.	/		
E) Check gear tooth condition.	/		
F) Check or change gear oil.	/		
G) Check gear box for leakage.	/		
H) Check crank pin lock nut for loosen.	/		
I) Regrease bearing motor.	/		
Comment:			
Final check:			
A) Check and clean beam pump, working are.	/		
B) Disengage the positive stop pawl.	/		
C) Coordinate with production to start beam pump.	/		
D) Start beam pump, check noise, leaks and load.	/		
Comment:			
Done by: Mordant			
Date:	1/5/22		
Endorser:	000		
Date:	1/5/22		

PM of Transfer Pump	Checked	Remark
Date: 11/5/22		
Location: L53-A-CIF		
PM Period: 1M		
Pump No: NEMO-		
Preparation for PM activities:		
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:		
After stop:		
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:		
Final check:		
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: Muxdohy		
Date: 11/5/22		
Endorser: [Signature]		
Date: 11/5/22		

PM Top Loading Arm	Checked	Remark
Date: 11/5/22		
Location: L53-A-CIF		
PM Period: 1M		
Equipment No: A-03		
Preparation for PM activities:		
A) Coordinate with production for PM top loading arm.	/	
B) Observe any unusual of top loading.	/	
C) Close discharge valve of loading pump.	/	
Comment:		
PM activities:		
A) Regrease all bearing.	/	
B) Check any leakage.	/	
C) Check all bolts and retighten.	/	
Comment:		
Final check:		
A) Check and clean top loading arm, working are.	/	
B) Open discharge valve of loading pump.	/	
C) Restore top loading arm to normal operation.	/	
Comment:		
Done by: Muxdohy		
Date: 11/5/22		
Endorser: [Signature]		
Date: 11/5/22		

PM of Chemical Injection Pump	Checked	Remark
Date: 1/5/22		
Location: L53-A-CAR		
PM Period: 1/4		
Pump No: 021-09		
Preparation for PM activities:		
A) Coordinate with production to stop chemical pump.	/	
B) Observe any unusual of chemical pump before stop.	/	
C) Stop chemical pump.	/	
Comment:		
After stop:		
A) Check all bolts and retighten.	/	
B) Check any leakage.	/	
C) Check or change lube oil.	/	
D) Visually check all condition.	/	
Comment:		
Final check:		
A) Check and clean chemical pump, working area.	/	
B) Coordinate with production to start chemical pump.	/	
C) Start chemical pump, check noise, leaks.	/	
Comment:		
Done by: Mordahy		
Date: 1/5/22		
Endorser: OAB		
Date: 1/5/22		

PM of Water Pump	Checked	Remark
Date: 1/5/22		
Location: L53-A-CAR		
PM Period: 1/4		
Equipment No: 021-01		
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: Mordahy		
Date: 1/5/22		
Endorser: OAB		
Date: 1/5/22		

PM of Heater Treater		Checked	Remark
Date:	1/5/22		
Location:	653-A CTF		
PM Period:	1M		
H/T No:	HT-6820-01		
Preparation for PM activities:			
A) Coordinate with production to work.			
B) Observe any unusual of H/T.	/		
C) Check temperature gauge.(°F)	150		
D) Check pressure gauge.(PSI)	15		
E) Stop burner and close gas supply valve.	/		
Comment:			
After stop:			
A) Check sight glass condition.	/		
B) Check pressure relief valve condition.	/		
C) Check drum valve condition.	/		
D) Check back pressure valve and gas pressure.(PSI)	15		
E) Check gas flow meter.	/		
F) Check water leg siphon condition.	/		
G) Check leakage and retighten bolts.	/		
H) Check and clean burner.	/		
I) Check and clean fire tube.	/		
Comment:			
Final check:			
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: 1/5/22			
Endorser: <i>[Signature]</i>			
Date: 1/5/22			

PM of Oil Storage Tank		Checked	Remark
Date:	1/5/22		
Location:	653-A CTF		
PM Period:	1M		
Tank No:	16-001		
Preparation for PM activities:			
A) Coordinate with production to work.			
B) Observe any unusual of oil storage tank.	/		
C) Check temperature gauge.(°F)	1040		
D) Stop burner and close gas supply valve.	/		
Comment:			
After stop:			
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:			
Final check:			
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: 1/5/22			
Endorser: <i>[Signature]</i>			
Date: 1/5/22			

PM of Oil Storage Tank	Checked	Remark
Date: 11/5/22		
Location: L53-ACAF		
PM Period: 14		
Tank No: 45-010		
Preparation for PM activities:		
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:		
After stop:		
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:		
Final check:		
A) Check and clean working area.	/	
B) Coordinate with production to operate burner.	/	
C) Check leakage and adjust fire.	/	
Comment:		
Done by: Mox Shoh		
Date: 11/5/22		
Endorser: 086		
Date: 11/5/22		

PM of Oil Storage Tank	Checked	Remark
Date: 11/5/22		
Location: L53-ACAF		
PM Period: 14		
Tank No: 45-010		
Preparation for PM activities:		
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:		
After stop:		
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:		
Final check:		
A) Check and clean working area.	/	
B) Coordinate with production to operate burner.	/	
C) Check leakage and adjust fire.	/	
Comment:		
Done by: Mox Shoh		
Date: 11/5/22		
Endorser: 086		
Date: 11/5/22		

PM of Oil Storage Tank		Checked	Remark
Date:	11/5/22		
Location:	253 - A 201		
PM Period:	1 hr		
Tank No:	115-0001		
Preparation for PM activities:			
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:			
After stop:			
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:			
Final check:			
A) Check and clean working area.			
B) Coordinate with production to operate burner.			
C) Check leakage and adjust fire.			
Comment:			
Done by:			
Date:			
Endorser:			
Date:			

PM of Oil Storage Tank		Checked	Remark
Date:	1/5/22		
Location:	659 - A CTR		
PM Period:	1 M		
Tank No:	9K-205		
Preparation for PM activities:			
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:			
After stop:			
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:			
Final check:			
A) Check and clean working area.			
B) Coordinate with production to operate burner.			
C) Check leakage and adjust fire.			
Comment:			
Done by: /horasdy			
Date: 1/5/22			
Endorser: 536			
Date: 1/5/22			

PM of Oil Storage Tank	Checked	Remark
Date: 11/5/22		
Location: 253-A CAP		
PM Period: 1 PM		
Tank No: 715-006		
Preparation for PM activities:		
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.	/	
Comment:		
After stop:		
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 arrestor.	/	
F) Reinstall burner housing to tank.	/	
G) Check leakage and retighten bolts.	/	
Comment:		
Final check:		
A) Check and clean working area.	/	
B) Coordinate with production to operate burner.	/	
C) Check leakage and adjust fire.	/	
Comment:		
Done by: /horati		
Date: 11/5/22		
Endorser: 008		
Date: 11/5/22		