

# KENYA PETROLEUM REFINERIES LIMITED

Rev No.	Amendment	Page	Date	Review Date:	Controlled By: <b>HSEA</b>	Approved By: <b>OM</b>
0	First Issue	All	14/10/2002			
1	Review	All	14/11/2006			
2	a) To include updated PIPs. b) To include updated list of fire wardens. c) To include Emergency Assembly Point No 2 at Changamwe. d) To include ISO 14001 internal audit findings (Identification of Potential Emergencies) e) To include list of emergency radio holders.	19-42 14 18 3 9	28/09/2009	28/09/2012		
3	a) Include CFO in place of FM b) Suspension of alcohol testing during an emergency.	4,5,6, 9,14 11	29/04/2011	29/04/2014		
4	a) Delete Emergency Contacts List (Section 14) and list separately as Doc. No. HSE-40-01-01. b) Delete PIPs (Section 13) and list separately as Doc. No. HSE-40-01-02. c) Clarify role of Senior Fire Warden d) Include role of OHN in an emergency. e) Change HRO designation to ERTM, and CA to FM. f) Include fire wardens for Loading Bay and Power Plant. g) Include Section 13 - Testing of this procedure via drills h) Include Section 14 – References.	47 19 14 8 4, 14 14 19	30/04/2012	30/04/2015		
5	a) To include updated fire warden list, and emergency Organogram Deputies b) Include CEO role c) Change designations GM to COO, MHE to CM and MPO to PMM	14 4 6,7	06/05/2013	06/11/2016		

**Subject: EMERGENCY PROCEDURES**

**Procedure: HSE-40-01**

**Custodian: HSEA**

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**Rev. 7**

**Date: 16/07/2019**

**Page 1 of 20**

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**KENYA PETROLEUM REFINERIES LIMITED**

Rev 6	<p>a) To include updated Emergency Organogram; Roles and Responsibilities.</p> <p>b) Retain Fire Warden designations only, with names in attached appendix .</p>	<p>5 to 9 &amp; 12</p> <p>16</p>	11/05/2016	11/05/2019		
7	<p>a) To include Roles of CMK- Ag. GMK and OM as per KPC/KPRL Lease structure</p> <p>b) To change ERTM designation to HRAA</p>	<p>All</p> <p>7</p>	16/07/2019	16/07/2022		
	<p>c) Update of the Fire Wardens list</p> <p>d) Update of the Emergency Organization</p> <p>e) Change of roll from STA to OMSA</p>	<p>16</p> <p>4</p> <p>7</p>				
	<p>f) Change of roll from Commercial Manager (CM) to Supply &amp; Logistics Programmer</p> <p>g) Updated schedule of calling personnel</p>	<p>9</p> <p>10</p>				

**KENYA PETROLEUM REFINERIES LIMITED**

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 2 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

0. **CONTENTS**

<b><u>ITEM</u></b>	<b><u>PAGE NO.</u></b>
CONTROL PAGE .....	1
1. OBJECTIVE AND SCOPE .....	4
2. INTRODUCTION .....	4
3. IDENTIFICATION OF POTENTIAL EMERGENCIES .....	4
4. INCIDENT CATEGORISATION .....	4
5. EMERGENCY ORGANISATION.....	5
6. ROLES AND FUNCTIONS OF PERSONNEL IN AN EMERGENCY ...	6
7. GENERAL CALL IN PROCEDURE OUTSIDE NORMAL WORKING HOURS .....	10
8. FIRE FIGHTING PROCEDURES .....	12
9. ACTION TO BE TAKEN WHEN THE REFINERY EMERGENCY ALARM SOUNDS .....	14
10. TIER 3 EMERGENCY PLAN .....	17
11. ASSISTANCE OF LOCAL POLICE UNITS DURING EMERGENCIES	19
12. EMERGENCY ASSEMBLY POINTS .....	20
13. TEST OF EMERGENCY RESPONSE PREPAREDNESS .....	20
14. REFERENCES .....	20

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev.7</b>	<b>Date: 16/07/2019</b>	<b>Page 3 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## **1. OBJECTIVE AND SCOPE**

The objective of the Emergency Procedure is to document a rapid and effective response during an emergency, which may occur on site or off site, in order to avoid or minimize the consequences of the emergency. Key priorities for the response to the emergency are:

- Protection and rescue of human life;
- Contain and bring the incident under control;
- Render safe the areas affected;
- Protection of Hydrocarbon Stocks and Company Property;
- Safeguard the Environment and minimize the impact on the Neighborhood.

## **2. INTRODUCTION**

An emergency is a sudden unplanned situation or occurrence that has the potential to cause harm to human life, damage to property or environment and therefore requires immediate and coordinated countermeasures.

In our industry, there are many examples in which prompt action by individuals will control the incident and contain it before it develops into an emergency. However, incidents can arise which one person cannot deal with. In these circumstances help is required and if this help is to be effective, it must be pre-arranged, properly organized and implemented.

In the following pages we have set out to put in place basic framework for dealing with an emergency rapidly and effectively. It should always be borne in mind that prompt reporting and focused actions do much to minimize the effects from the onset. This is because, most emergencies start off as small in size requiring relatively lesser resources but can rapidly grow if not contained. Several potential scenarios have been identified that are potential emergencies and the appropriate countermeasures have been identified. These are discussed in detail as Pre-Incident Plans (PIPs) and are included as appendices.

## **3. IDENTIFICATION OF POTENTIAL EMERGENCIES**

HSEA and OM shall identify potential emergencies and accidents for which emergency preparedness and response procedures shall be established. The following avenues shall be used to identify the potential emergency situations and accidents:

- a) Pre-Incident Plans (PIPs).
- b) Learning from incidents on site and of companies of similar operations.
- c) Results of simulation exercises on site and of companies of similar operations.

## **4. INCIDENT CATEGORIZATION**

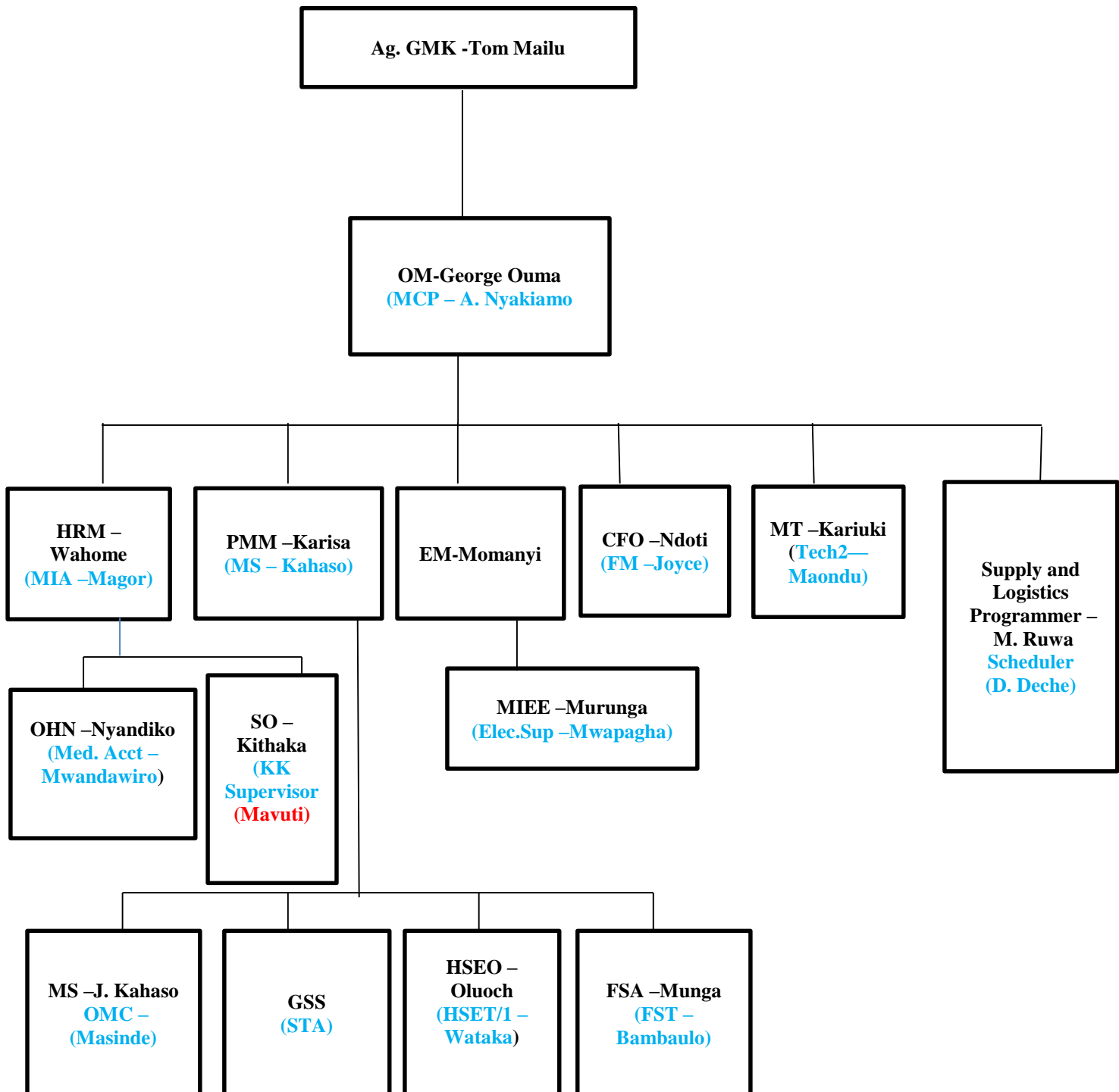
The Refinery and external emergencies are structured into three tiers. The tiers of emergencies and their appropriate responses are summarized in Table I with examples of type of incident covered in each tier.

Table I: Tiers of Emergency Response

<b><u>Incident Category</u></b>	<b><u>Response</u></b>
<b><u>Isolated emergency (Tier 1)</u></b> These are emergency incidents which can be dealt with by the on-shift personnel with the Refinery firefighting equipment or are injury cases requiring Ambulance assistance. GSS can declare Tier 1 emergency.	Mobilization of onsite resources including Fire Tenders. Evacuation, if required, of non-operating personnel to muster points. Medical evacuation if required. Call out as given in Table II.
<b><u>Local Emergency (Tier 2).</u></b> These are emergency incidents that may cause serious injuries, loss of life, fire or explosion with consequences limited to the Refinery, release of gas limited to the Refinery, off-site pipeline failure on lines controlled by KRPL. GSS can declare Tier 2 emergency. If there is doubt whether the emergency is Tier 1 or 2, a Tier 2 emergency shall be declared.	Mobilization of onsite resources including Fire Tenders and Municipal/Port Fire Brigade. Evacuation of non-operating personnel to muster points. Medical evacuation if required. Call out as given in Table II.
<b><u>Major Emergency (Tier 3).</u></b> These are emergency incidents that may cause serious injuries, loss of life, extensive damage to the assets or the environment, serious damage to off-site property or disruption off-site. This includes release of a large quantity of hazardous material to the environment; a large explosion or fire; or an escalating situation which could give rise to the above. Only a member of the Management Team can declare a Tier 3 emergency.	Mobilization of onsite resources including Fire Tenders and mobilization of the resources of Fire, Police, Ambulance and Local Authorities. Evacuation of non-operating personnel to muster points. Medical evacuation if required. Call out as given in Table II section 7.0.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 4 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

5. EMERGENCY ORGANISATION



NOTE: Alternate Responder in blue

## KENYA PETROLEUM REFINERIES LIMITED

In the absence of any of the above named personnel, the nominated deputy will assume the responsibilities and duties of the absent person. It is essential therefore that personnel make themselves familiar with their duties together with the duties of those they would deputize for. Apart from the above disposition, the normal line reporting relationships remain unchanged.

It should be noted that personnel called in may well be faced with considerable congestion on the access roads to the Refinery. Everyone must therefore exercise caution when proceeding to the Refinery under such conditions.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 5 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## **6. ROLES AND FUNCTIONS OF PERSONNEL DURING AN EMERGENCY**

The duties of key personnel in an emergency are shown below. All emergency responders who may be out of site or unable to respond to an emergency should confirm that there is someone to stand in their role should an emergency arise.

Other personnel, with no specific duties to perform in the event of an emergency, or who are not directly affected by the emergency, should remain at their normal place of work and carry on with their normal duties unless or until they receive specific instructions to the contrary. Such action will be of the greatest assistance in ensuring telephones remain manned, that unnecessary spectators do not gather at the site of the emergency and hinder those dealing with it and that the process of establishing the where- about and safety of personnel is not complicated.

### **Operations Manager (OM)**

**Responsibilities:** Control and co-ordinate emergency operations.

#### **Duties**

- Set up Emergency Control Centre at the KPRL Board Room or, if not accessible, other suitable location with communication facilities.
- Advise CEO, Ag. GMK, EM, HRM and MT of his presence on site and position of Emergency Control Centre if this is not the KPRL Board Room.
- Receive periodic reports of the current situation from, EM, HRM and MT. Inform Ag. GMK, CEO (KPRL Board) and Service Advisors of the incident and latest details of damage, casualties and effects on operations. Keep them informed of the current situation and further developments.
- Sight and approve in consultation with Ag. GMK release of information to the press, public, local authorities, employees and relatives.
- When and as appropriate, call press conference.
- Co-ordinate all efforts to re-establish normal operations.
- Co-ordinate the preparation of a full incident report. Appraise the effectiveness of the emergency plan and reflect any possible improvements in the appropriate Refinery Manuals.

### **Products Movement Manager (PMM)**

**Responsibilities:** The Products Movement Manager (PMM) is the Refinery Fire Chief. He is responsible for the deployment and control of all firefighting, operations and engineering activities, equipment and personnel; including outside support.

#### **Duties**

Reports to OM

- Report presence on site to OM and advise expected whereabouts.
- Establish contact with OM, MT and EM.
- Assess immediate situation and assume control of emergency site activities.
- Employ all Engineering/Operation resources and third party resources available to remedy the emergency situation and restore normal operations.
- Maintain contact with OM and MT.
- Provide OM and MT with information as available on damage, casualties, progress of remedial action and any further assistance required.
- On return to normal operation, prepare report. Appraise the effectiveness of the emergency measures.
- Recommend any change in Refinery Procedure Manuals which may be necessary or desirable.

### **Operations Duty Officer (ODO)**

**Responsibilities** Assist GSS to control the situation, until PMM arrives on site.

On arrival of PMM, the Operations Duty Officer will assume his designated responsibilities and duties in the emergency organization (see roles of PMM, MT, S&LP and HSEA)

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 6 of 20</b>
Uncontrolled when Printed. Controlled Copy on KPRL LAN				



**General Shift Supervisor (GSS)**

**Responsibilities:** To lead and control the front line Fire Fighting crew.

**Duties**

- Reports to PMM
- Assist PMM with firefighting and operational aspects of the emergency.

**Oil Movement Shift Assistant (OMSA)**

**Responsibilities** Assumes control of non-emergency terminal operations

**Duties**

Reports to PMM

- In charge of non-emergency plant areas.
- Maintain contact with the PMM and make adjustments to or shutdown running operations as instructed.

**Engineering Manager (EM)**

**Responsibilities:** Control use of all Engineering resources and support OM

**Duties**

- Report presence to OM and advise expected whereabouts.
- Establish contact with PMM and OM
- Assess immediate situation and establish engineering resources required.
- Make available required resources.
- Control use of resources in consultation with PMM and OM
- In consultation with OM and PMM arrange for transport and issue of materials.
- Arrange and ensure adequate resources are made available to cope with transport and materials requests.
- When emergency is over, assess time and cost involved in damage repair.
- Utilize all resources available to re-establish normal operation in close co-operation with OM and PMM
- When normal operation is established, prepare report.

**Human Resources Manager (HRM)**

**Responsibility:** Maintain and control all outside contacts with Police, Medical Services, Press and General Public.

**Duties**

- Set up information Centre in Conference Room, Telephone 3432708, or other suitable location with adequate communication should Conference room be inaccessible.
- Advise OM and MT of his presence on site and position of Information Centre, if not the Conference Room.
- Instruct switchboard that *only* essential calls are to be made from the Refinery area and ensure that all incoming enquiries are routed to the Information Centre.
- Seek and receive information from OM, and MT to enable preparation of reports to be released to press, local authorities, employees, public and next of kin.
- Maintain close contact with OM to determine timing and contents of reports to outside contacts.
- The HRM will also be the Public Relations Focal Point (PRFP). The key responsibilities of the PRFP are:

To liaise with the media, local population, assisting forces (Police, Fire Department, local administration) and special interest groups and provide the information about the Emergency situation.

To provide written press release, after approval by the Ag. GMK to the Media and other audience as required.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 7 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## KENYA PETROLEUM REFINERIES LIMITED

- Arranges and conducts observation tours of the emergency site with press and Government/Local Authority representatives.
- Arranges any photography.
- Prime contact for the liaison with Government Agencies for the release of information and obtaining the necessary requirements, Policies and Regulations.
- Ensures an adequate record is kept of Government Contacts and that a personal diary is maintained.

The procedure will be as follows:

- The Canteen will be the briefing site and will be equipped appropriately, i.e. overhead projector if required, sodas, etc.
- All media personnel Police, Special group representatives will be directed to the Canteen by Refinery Security.
- The PRFP will brief the entire assembled group and hand over copies of press release and any accompanying photographs.
- The PRFP will escort all those assembled out of the premises and/or to tour the site, including organizing permission for photographs.
- The PRFP will fax copies of the press release to all identified parties for notification.
- As more facts about the incident are gathered, further press releases will be issued.

### **Chief Finance Officer (CFO)**

**Responsibility:** Render assistance to OM and HRM and inform insurers.

#### **Duties**

- Report presence to OM and HRM.
- Assist OM with information to the KPRL Board, Shareholders and Service Advisors
- Assist HRM with information to the Police, Hospitals and Government/Local Authorities.
- Notify, as required, all Refinery bodies, Shareholder representatives, Directors, Insurers, Underwriters and Brokers.
- Liaise with Underwriters, Brokers and/or Loss Adjusters as required with notification and recording of any losses.
- Attend all meetings called by the OM and keep a record.
- In consultation with the HRM, arrange for supplies of refreshments and other requisites.

### **Manager Technology (MT)**

**Responsibility** Monitor all local communication and keep official log of events.

#### **Duties**

- Report to the OM or most senior person on site at the Emergency Control Centre.
- Monitor information flow in the Refinery on telephone and radio.
- Maintain log of all significant events during the emergency.
- Act as a liaison between Emergency Control Centre and Emergency site if required.
- Appraise the course of events during emergency and keep OM or his deputy informed.
- On establishment of normal operation, review events and make recommendations on procedural improvements.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 8 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## KENYA PETROLEUM REFINERIES LIMITED

### Supply and Logistics Programmer (S&LP)

**Responsibility:** Establish contact with and advise Refinery Users of the emergency.

#### **Duties**

- Report presence to OM or most senior person on site at the Emergency Control Centre and advise him of expected whereabouts.
- Establish contact with local Users and KPC Terminals/representatives.
- In co-operation with PMM, establish arrangements for any emergency pump-overs and/or emptying of pipelines which may be appropriate.
- Advise users as soon as possible of the effect of the emergency on product availability and oil imports and advise OM of impact on User Operations.
- Obtain the stocks situation from marketing terminals and advise appropriate hospitality arrangements. Keep this information updated.
- When emergency is over, prepare appropriate Refinery programme for resumption of normal operations.

### Manager Instrumentation Electrical Engineering (MIEE)

**Responsibility:** Communication with Kenya Power (KPLC) and to assist EM as required.

#### **Duties**

- On arrival report presence to EM and OM
- Establish contact with KPLC.
- Be the focal point for communication with KPLC.
- Assist EM as required.

### HSE Adviser and Fire & Safety Advisor

**Responsibilities:** Operation of Refinery firefighting equipment, liaison with emergency services and support PMM as required

#### **Duties**

- Report presence to OM and PMM
- Liaison with emergency services.
- Assist PMM as required.

### Security Officer

**Responsibilities:** Liaison with emergency services (Police and Local Administration) and to assist HRM as required.

#### **Duties**

- Report presence to OM, HRM and contact the Security Guard Supervisor.
- Inform Police and APs on site.
- Liaison with emergency services (Police and Local Administration).
- Notify Police and request assistance with traffic control, if required.
- Assist HRM as required.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 9 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

# KENYA PETROLEUM REFINERIES LIMITED

## Occupational Health Nurse (OHN)

**Responsibilities** To ensure that upon receiving the medical emergency alert, injured personnel get appropriate and quick medical attention to minimize consequences of injury or occupational illness and save their lives.

### Duties

- Upon receipt of the alert, the Occupational Health Nurse shall:
  - Inform the Company Medical Advisor by telephone;
  - Assess condition of casualty(ies) in the ambulance on arrival at the Dispensary;
  - Render medical treatment to casualty(ies);
  - Arrange hospitalization of casualty(ies) as required, using the Company Ambulance and, if required, the outside ambulance service(s);
  - Confirm by telephone with the Hospital(s) that the casualty(ies) sent by ambulance have been admitted.
  - Inform the Ag. GMK or, in his absence, the Management Team member on duty.

## **7.0 GENERAL CALL IN PROCEDURE OUTSIDE NORMAL WORKING HOURS**

For all emergencies, personnel shall be called in as given in Table I below. The GSS will instruct the Guard to call in personnel as required. Mobile and landline telephones will be used to call personnel on the Duty Rota and the Day Work Fire Crew. In addition to calling, SMS brief messages should be sent to all mobile phones with the message: ***“Fire at position x, please report urgently to the Refinery”***

Staff on call duty should never switch off their mobile phones but may choose to set it on vibrating profile when they are in a public place.

Telephone numbers of personnel on duty are displayed in the Guardroom and Control Room. In addition, the telephone list which is brought up to date at frequent intervals is readily available. Either should be used in an emergency.

All duty personnel called in will proceed to FSA office or their offices and collect their identifying Jacket, Safety Helmet and Safety Glasses before proceeding to taking up their allocated roles. (The identifying Jacket for the GSS is located in the GSS office).

Table II: Schedule of Calling in of Personnel

(Denotes person/services to be called in)

	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
<b>AG.GMK</b>		✓	✓
<b>OM</b>		✓	✓
<b>PMM</b>	✓	✓	✓
<b>FSA</b>	✓	✓	✓
<b>HSEO</b>	✓	✓	✓
<b>Day Work FIT</b>	✓	✓	✓
<b>Other Personnel on duty</b>	✓	✓	✓
<b>EM</b>		✓	✓
<b>CFO</b>		✓	✓
<b>HRM</b>		✓	✓
<b>MT</b>		✓	✓
<b>HME</b>		✓	✓
<b>MIEE</b>		✓	✓
<b>County/Port Fire Brigade</b>		✓	✓
<b>Ambulance Services</b>		✓	✓
<b>County Administration and Police</b>		✓	✓
<b>National Disaster Operations Center</b>			✓

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev 7</b>	<b>Date: 16/07/2019</b>	<b>Page 10 of 20</b>
Uncontrolled when Printed. Controlled Copy on KPRL LAN				

**The Emergency Control Center**

The Emergency Control Centre shall be the KPRL Board Room on the first floor of the office Administration Building. Should the KPRL Board Room not be accessible, the COO will nominate another suitable location with communication facilities.

<b><u>TELEPHONE</u></b>	Direct Line	3432708
	Internal	307

The Emergency Control Centre will have the following, with a second set as back up in FSA's office:

- Plot Plans of all Refinery Areas
- PEF's of all operational plants
- Schematic drawings of all Refinery utilities
- Copy of Refinery Emergency Procedures including all Pre-Incident Plans (PIPs)
- List of required telephone numbers and OSMAG Contacts
- Minimum of two radios capable of receiving KPRL and outside services channels.
- List of firefighting equipment.
- Site drainage drawings.

**Emergency Radios**

Minimum number of radios set aside for emergency response will be 15 distributed as below:

	<b>EMERGENCY RADIO HOLDERS</b>
1	CEO
2	Ag. GMK
3	OM
4	SUPPLY & LOGISTICS PROGRAMMER
5	HRM
6	EM
7	MT
8	CFO
9	HSEO
10	MIEE
11	FSA
12	Senior Fire Warden
13	OHN
14	Fire Station Technician
15	Fire Engine Driver

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 11 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## **8.0 FIRE FIGHTING PROCEDURES**

### **8.1 Roles**

#### **i. Refinery Fire Chief (PMM)**

The Product Movement Manager(PMM) is the Refinery Fire Chief. He is responsible for the deployment and control of all firefighting, operations and engineering activities, equipment and personnel, including outside support

#### **ii. Fire and Safety Advisor (FSA)**

He is responsible for the operation of Refinery firefighting equipment and liaison with outside support.

#### **iii. First Intervention Team (FIT)**

The FIT consists of the following members of each shift:

- |                            |   |
|----------------------------|---|
| a. FIT Leader              | General Shift Supervisor (GSS) on Duty                    |
| b. Fire Engine Driver      | Laboratory Technician                                     |
| c. Fire Pump Attendant     | Fixed Fire Pump Operator*                                 |
| d. Hydrant Valve Attendant | Fire Engine Driver  |
| e. Branch Men              | Oil Movements Operators and Guards** on FIT Team (5 or 6) |

\*The PMM will nominate for every shift the name of the Fixed Fire Pump Operator and his/her alternate. These names as Fixed Fire Pump Operator and Alternate Fixed Fire Pump Operator for every Shift will be displayed on a Notice Board in the Operators area of the Laboratory Building and updated whenever there are changes. The responsible person for updating this Notice Board will be PMM

\*\* The names of the Guards on the FIT Team, both for the Day and Night Shift, will be displayed on the Notice Board at the Guard Room. The responsible person for updating this Notice board is the Day Guard Supervisor

#### **Operators remaining to man the plants:**

Panels:	1 Panel Operator
Complex I:	1 Operator
Complex 2:	1 Operator
Utilities:	1 Operator
Oil Movements- Inside:	OMSA
Oil Movements- Port Reitz:	1 Operator
STA:	1

#### **(iv) Day Workers Fit Team**

There is also a Day Workers Fire Crew from the Workshop staff. The names of the Day Workers Fire Crew (with a nominated leader) are posted on the Day FIT Team Boards in the Workshop. The Fire Station Technician will participate in the firefighting effort as part of Day Workers' Fire Crew.

## **8.2 Emergency Alarm Calls**

Anyone who detects a fire, hydrocarbon leak, a serious injury or any other emergency shall proceed to the nearest fire alarm call out point and activate it or report by the quickest method (radio, telephone or in person) to the Control Room (extension 300) giving your name, location, source and nature of emergency. The person receiving the message shall immediately contact the GSS by radio or in person.

Alarm calls out points are located as follows:

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 12 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

# KENYA PETROLEUM REFINERIES LIMITED

Alarm	Location
01	Road No4. LPG storage area
02	Corner Road 7 and 8. blending area
03	Road 10 and 1 Intersection near the interceptor
04	Grease Plant. Bottom of staircase
05	Complex 2. near V2303
06	Complex 2 near F2101
07	Complex 1 near R1201
08	Sub 4. Entrance door
09	Main workshop. Bottom of staircase
10	Main building. Entrance foyer
11	KPC input tank farm. Outside instrumentation building
12	Port Reitz Office
13	CPP (Alarm in CPP area)

The Fire/Emergency alarm is a continuous 3-minute siren (which is tested at 07:45 hours every Wednesday).

When the Alarm sounds, the FIT will take the following actions

- i. GSS proceeds at once to the scene of the emergency with his “walkie-talkie” radio and the Pre-Incident Plan (PIP) relevant to the incident from **Document No. HSE-40-01-02 Pre-Incident Plans**. He leads the firefighting operations and will instruct the FIT team on how to deal with the fire on the basis of PIP document. GSS will instruct all personnel involved in the Emergency to switch to radio Channel 2, while all Operations personnel not involved in the emergency will stay on channel 1.
- ii. The Fixed Fire Pumps Operator (who must always carry a radio) will immediately:
 

Start Fire Water Pump P-2801. If necessary or if requested by the GSS, he should start the spare diesel driven pump P-615B. The electric driven pump, P-615A should start automatically when the siren is activated. Check that pump P615 A has started; if not then start the pump.  
Remain to attend the fire water pumps throughout the firefighting operation and monitor levels in T-606, advising the Control Room and Fire Chief if the level drops below 6 meters.
- iii. The Fire Engine Driver will report immediately to the Fire Station while carrying the Lab radio where he will contact the GSS. He will then proceed with the fire crew to the location if the fire is on the Refinery Process, blending areas or anywhere as reported.
- iv. The rest of the F I T will also proceed to the location if the fire as reported using the available fire trucks.
  - a. The Guard opens both Refinery outer gates and remains at the gate to ensure only authorized personnel enter the Refinery. Alcohol testing will be suspended during the emergency. The Refinery inner gates will remain closed and will only be opened for Refinery Personnel/Vehicles or Emergency vehicles from other services. The Guard at the outer gates will direct traffic and keep spectators away. Members of the Press and other Government officials should be directed to the Canteen from where a briefing will be issued by the Human Resource Manager or his nominee.
  - b. Day work Fire Crew Leader will go to the Guardroom to collect a radio, then go immediately to the Fire Station to man Tender No. 2, and report by radio to the GSS who will give further instructions, either to stay at the Fire Station or attend at the scene of the incident.

At the end of the emergency the siren will be sounded again for one minute.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 13 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

**9.0 ACTION TO BE TAKEN WHEN THE REFINERY EMERGENCY ALARM SOUNDS**

**(A) Background**

The purpose of this procedure is to define what action shall be taken by KPRL, Contractor personnel and visitors to the Refinery in the event of a major emergency.

The emergency evacuation procedure of non-operating personnel from the **Refinery Process and Oil Movements areas at Changamwe** in the event of a major incident is given section (B) below. The emergency evacuation procedure when the **Hydrogen Sulphide** alarm (in the Process areas) sounds is referred to in section (C) below (see PIP 2).

The emergency evacuation procedure of personnel from the **Main Office Building, the workshop, the Warehouse, the Training Center and Inspection offices** in the event of a major incident is given in section (D) below.

The emergency evacuation procedure of personnel from the **Canteen and Dispensary** areas in the event of a major incident is given in section (H) below.

The emergency evacuation procedure of personnel from the **Port Reitz Tank Farm** in the event of a major incident is given in section (J) below.

The procedure applies to all personnel within the KPRL sites, be they KPRL employees, contractor employees or visitors to the Refinery. All personnel working within the Refinery or visiting the Refinery should be aware of the evacuation procedure and their role in the procedure.

**(B) Evacuation procedure in the event of a major emergency within the Refinery Process and Oil Movement areas at Changamwe**

In the event of a major incident within the Refinery a monotone siren will sound which will continue for full three minutes. The siren is tested every Wednesday at 07:45 hrs.

On hearing the Refinery alarm all non-operations personnel working within the Process and Oil Movements areas will stop work, switch off all running equipment, ensure that the person working next to him /her has heard the alarm, leave site and walking across the wind make his/her way to the Emergency Assembly Point adjacent to the main gate.

If conditions allow all personnel will swipe out at the inner gate and a roll call will be carried out by a senior member of KPRL ensuring all personnel are accounted for. Any person not accounted for will be the subject of a search and rescue organized by a senior member of KPRL.

**Personnel will not leave the Emergency Assembly point until a senior member of KPRL instructs them to do so.**

When the emergency incident has subsided the Refinery monotone siren will be sounded for a full one 1 minute to signal all clear.

**(C) Hydrogen Sulphide Emergency Alarm**

See PIP 2 below, where the emergency evacuation is detailed.

**(D) Evacuation procedure in the event of a major emergency at main office building, Workshops, Warehouse, Training Center and Inspection offices areas**

**(i) Emergency alarms**

Emergency alarms are located in the entrance lobby to the main office and consist of:

- (a) Glass protected fire alarm button which sound the main Refinery fire siren to summon fire crews.
- (b) Electric switch which rings the main office building, Workshops, Warehouse, Training Centre and Inspection Offices emergency alarm hooter which is the signal to vacate these areas.
- (c) Manually operated alarm bell will be used if there is no electricity.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date 16/07/2019</b>	<b>Page 14 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				



## KENYA PETROLEUM REFINERIES LIMITED

When the main Refinery fire/emergency alarm siren sounds, people in the main offices, Workshops, Warehouse, Training Centre and Inspection Offices should remain alert but continue with their normal duties and must not go rushing off to look or even offer assistance at the scene of the emergency. If it is considered necessary to vacate the offices, Workshops, Warehouse, Training Centre and Inspection Offices, then the fire / emergency alarm hooter will be sounded by the security guard.

**(ii) On discovering fire**

- (a) Raise the alarm by shouting “Fire! Fire!” or use the emergency extension number and then attempt to extinguish the fire with the equipment available if it is safe to do so;
- (b) Inform guard room of the location of fire so they may direct the fire crew to the scene of the fire.

**(iii) When the alarm hooter sounds take the following actions: -**

- (a) Terminate any telephone conversation;
- (b) Switch off any electrical equipment you may have been using;
- (c) Pick up only personal, light weight belongings such as briefcase, handbag, etc.
- (d) Close all windows and doors but do not lock them.
- (e) Leave the building quickly in an orderly manner using, if necessary, the emergency exits as directed by the fire warden.

**Exits-Ground Floor, main office block: -**

Door number 116 near Manager Internal Auditor’s office.

Door number 213 near entrance to computer room.

**Exits-First Floor, main office block: -**

Large window on the staircase.

Door number 318 near the Refinery Scheduler’s office.

- (f) Walk, do not run, and proceed to the Emergency Assembly point, adjacent to the main gate.

**(g) REMAIN IN THE EMERGENCY ASSEMBLY AREA UNTIL GIVEN FURTHER INSTRUCTION BY SENIOR FIRE WARDEN PRESENT.** Do not leave the Refinery nor walk about the Refinery area and do not return to your office without permission.

**(E) (i) Senior Fire Warden**

The Senior Fire Warden is the MIA or in his absence the Office Services Supervisor(OSS). The Senior Fire Warden’s duties are:

- a) To be in charge of the Emergency Assembly Area. If the emergency designated area is in a hazardous location, in consultation with the OM nominate an alternative assembly area and direct personnel to the new area.
- b) Receive Fire Wardens’ check reports that the buildings have been properly evacuated and ensure no one returns to the buildings until they have been declared safe.
- c) Communicate to the people assembled on what has happened, what is happening, and urging calm and order.
- d) Organize roll call of the assembled people from each assembly point and account for persons so that if there are missing persons a search and rescue effort can be initiated by reporting to the incident manager (OM).
- e) For assembly points other than the Main Assembly point number 1, the Chief Fire Warden shall be represented by the Fire Warden at that area who shall undertake his duties at that assembly point including taking roll call and communicating to the assembled persons. Chief Fire Warden shall ensure that this is taking place at these assembly points as expected, and that assembled people are dismissed only upon his instruction after the “all clear” signal has been given.
- f) Liaise with PMM, OM or HRM for advice and assistance.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 15 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

# KENYA PETROLEUM REFINERIES LIMITED

## (ii) Fire Wardens

The following personnel are designated fire wardens for the areas indicated: -

	Senior Fire Warden (Overall)	MIA	OSS
1	Main Office Ground Floor	MIT	Accountant
2	Main Office 1 <sup>st</sup> Floor	Head Of Oil accounts	Oil Accountant
3	Annex Office Block	CPM	HPT
4	Workshop	Electrical Supervisor	Workshop Technician
5	Warehouse	Warehouse Supervisor	Asst. Engineer Projects & Tanks
6	Dispensary/ Canteen/ Operators Washrooms/ KRA Building/ Creativity room	Truck Loading Coordinator	Security Guard supervisor
7	New Laboratory 1 <sup>st</sup> Floor	MS	Lab Tech
8	New Laboratory Ground Floor	Lab Manager	Lab Supervisor
9	Training Room	OT	MII
10	Products Loading Bay	Loading Supervisor-	Duty Security Guard
11	Power Plant	Duty Security Guard	

Note: The list of designations and names of current holders as Fire Wardens is appended as HSE-40-01-04

Fire Wardens duties are to check that all personnel in their respective area leave the building quickly. They should carry out a systematic check of all offices and washrooms to ensure: -

- a) All personnel have left the building.
- b) Windows and doors are firmly shut.
- c) If time permits and if it safe to do so, check that all electrical equipment is switched off.
- d) Report to the Senior Fire Warden if the area is clear.

## (F) Telephone Operator

Manning of the Telephone Exchange in an emergency will be important to maintain communication. The operator should remain at his/her post whilst it is safe to do so.

The Main Office Ground Floor Fire Warden should ensure that conditions are safe for the telephone operator to remain at her post. He should report to the Senior Fire Warden whether the telephone exchange is safe and if it is manned. If the Telephone Exchange is considered to be unsafe, then switch out of the office and vacate.

## (G) Outside Normal Working Hours

Actions on discovering a fire and on hearing the fire alarms should be followed as above. There will be few, if any, designated fire wardens on site. The senior person on site must designate specific persons to act as fire wardens to ensure people are out of buildings; main doors are shut, and report back when checks are complete.

## (H) Evacuation procedure in the event of a major emergency at Canteen and Dispensary

### (i) Fire alarms

- (a) To evacuate the Canteen and Dispensary buildings, an alarm bell will sound. Alarm buttons are located in the canteen foyer and the dispensary reception.
- (b) To raise the alarm use the nearest alarm button located in the main office reception and call emergency telephone (ext.300).

### (ii) Action on hearing alarm

When the Refinery emergency alarm siren sounds, people in the canteen and the dispensary should remain alert but continue with their duties and must not go rushing off to look or even offer assistance at the scene of the emergency. If it is considered necessary to vacate the canteen and dispensary, the alarm bell will be sounded.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 16 of 20</b>
Uncontrolled when Printed. Controlled Copy on KPRL LAN				

**(iii) Actions on discovering a fire**

Should you discover a fire at the Canteen or Dispensary, raise the alarm by shouting “Fire! Fire!”, attempt to extinguish the fire by using fire extinguisher or whatever is available if it safe to do so.

- (a) If the fire is large or shows signs of becoming out of control, sound the evacuation alarm bell then proceed to main office to sound the Refinery fire siren and instruct guard at reception to summon fire crew.
- (b) Return to continue the firefighting if it is safe to do so

**(iv) When the alarm bell rings, persons in the Canteen and Dispensary must take the following precautions:**

- (a) Terminate any telephone conversations they may be having;
- (b) Switch off the any electrical appliances;
- (c) Collect only light weight personal belongings such as handbag, briefcases, etc.;
- (d) Windows should be closed but not locked;
- (e) Leave the building quickly in an orderly manner;
- (f) Walk, do not run, and proceed to the Emergency Assembly at the Main Car Park, adjacent to the main gate.
- (g) Remain at the Emergency Assembly Point until given further instructions. Do not leave the Refinery area and do not return to the building until you are given permission to do so by the senior fire warden.

**(I) Visitors**

In the event of an emergency whilst visitors are in the Refinery, the KPRL host will be responsible for the safe conduct of the persons to the Emergency Assembly point, adjacent to the main gate.

**(J) Evacuation from Port Reitz Tank farm**

At Port Reitz tank farm, the emergency alarm is raised by sounding the outdoor constant tone siren. The weekly test of one-minute duration is performed every Wednesday at 07.45 hours.

On hearing the alarm, all non-operations personnel will stop work, switch off all the equipment they may be using, ensure the person working next to them have heard the alarm and make their way to the Emergency Assembly point outside the control room. All personnel must stay at the Emergency Assembly point until directed by a senior member of KPRL that it is safe to go back to work.

**10.0 TIER 3 EMERGENCY PLAN**

**10.1 Background**

A Tier 3 emergency includes the occurrence of any of the following incidents:

- i. Very large fire.
- ii. Explosion.
- iii. Release of a toxic material in large quantities.
- iv. Severe spillage or flooding.
- v. A major disaster outside the Refinery area which gravely endangers the Refinery.

By its nature, a Tier 3 emergency will involve, directly or indirectly all company employees and the Community. The community gets involved if the incident leads to suspension or disruption of services e.g. roads, electricity mains in the immediate vicinity of the Refinery. The community could also get affected if the evacuation of parts of the neighborhoods becomes necessary. These types of emergencies also take up large proportions of other public services like Hospital bed spaces, Ambulance, Police and Fire Brigade.

Subsequently, the community may be affected if there is a significant reduction in the volumes of petroleum products from the Refinery.

Consequently, such incidents generate a strong need for public information ranging from official enquiries from the Government, Shareholders, Refinery Users, press, and other agencies.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 17 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## 10.2 **Objectives**

Most people associate such an emergency with injury or loss of life and severe damage to property. It should also be appreciated that profound shock, even disbelief, may well be the first reaction among those not directly affected by the incident, but who immediately may be required to take action and make critical decisions. It cannot be emphasized too strongly that in these circumstances, the decisions made and the action taken are more likely to be effective if the objectives of the plan are thoroughly understood. Secondly, the response to such an incident can only be effective if everybody knows what is required to be done. The Pre-Incident Plans have been prepared for this purpose and it is important that everybody is familiar with the contents. Drills and exercise will be conducted to ensure that all individuals fully understand what needs to be done and their specific role in event of an emergency. The overall response to such an emergency can be split into three broad phases as shown below.

### **Phase One**

#### **Immediate Actions**

- i. **Containment**
  - a) Identify where it has happened
  - b) Identify what has happened
  - c) Prevent it getting worse.
- ii. **Personnel**
  - a) Remove injured from emergency areas.
  - b) Check numbers.
  - c) Search for and find anyone not accounted for.
- iii. **Assistance**
  - a) Initiate call out immediately.
  - b) Call for outside assistance immediately, Fire Brigade, Ambulance, Doctor and Police.

### **Phase Two**

- i. **Urgent Actions**  
**Resources**
  - a) Maximize their use to minimize/eliminate emergency.
  - b) Control their use to maximize their effectiveness.
- ii. **Personnel**
  - a) Establish key personnel in their emergency functions.
  - b) Provide appropriate treatment for injured.

### **Phase Three**

#### **Subsequent Actions**

- i. **Reporting**
  - a) To own personnel and next of kin.
  - b) To parent ministry and service companies.
  - c) Press releases.
- ii. **Information**
  - a) Identify how it happened.
  - b) Ascertain damage.
  - c) Assess time to re-establish normal operation.
  - d) Assess total cost.
- iii. **Operation**
  - a) Re-establish normal operation.
- iv. **Review**
  - a) All relevant company instructions, Operating, Safety, Emergency, etc.
  - b) Amend instructions as required.
  - c) Issue final report.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 18 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

**11. ASSISTANCE OF LOCAL POLICE UNITS DURING EMERGENCIES**

**11.1 Fire Contained Inside Refinery Area**

During an emergency on the Refinery, the fewer non-skilled people present the better. All Contractors and visitors should be asked to leave the Refinery. The only direct assistance required is that from the Municipal and the Ports Fire brigade.

Police assistance could be for crowd control and security against unwanted visitors as the Refinery outer gates are left open during an emergency.

Other advantages of Police attendance is for Ambulance escort to the hospital in case of injuries, safe escort of key personnel called in from remote areas. Police radios can be used for communication if telephones fail although most members of the duty crew have mobile telephones.

**11.2 Fire Outside Refinery Areas**

This would involve a pipeline fire in which case the Police assistance would be important for crowd control and traffic control.

Police would also control any evacuation of civilians required if any building or dwelling are threatened.

**11.3 Line Fracture /Serious Leak of Pipelines Outside Refinery Areas**

See Document **HSE-40-01-02 Pre-Incident Plans** under PIP 13.

**11.4 Bomb Attack or Threats**

See Document **HSE-40-01-02 Pre-Incident Plans** under PIP 5.

**11.5 Militant Action by Own or Other Groups**

If militant action by own or outside groups threatens to cause disruption of or damage to the Refinery, then the local Police must be informed immediately.

Although the Refinery has a double wire fence around the perimeter, the most vulnerable area is by the KPLC sub-station near Magongo Road.

**11.6 Any Other Emergency on the Refinery that Threatens Neighbouring Buildings, Premises or Houses**

In the remote possibility of an emergency on the Refinery that could result in a spread outside of Refinery fences, the police must be informed immediately explaining exactly what the problem is and from where they can get safe access to the incident site.

**11.7 Call in of Police in Emergencies**

Main gate security guards have the contact number for all local police stations and contact should first be established through the guardroom.

Police units coming to the Refinery should always report initially to the main gate guard room to be directed to areas or persons involved in the incidents.

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 19 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

## **12.0 EMERGENCY ASSEMBLY POINTS**

The Emergency Assembly Points are:

**Emergency Assembly Point No. 1:** This is situated at the Main Car Park, adjacent to the main gate.

**Emergency Assembly Point No. 2:** This is situated outside Gate No. 10 to the Shamba and KPC Input Tankage Area.

**Emergency Assembly Point No. 3:** This is situated outside the Port Reitz Control Room.

The Emergency Assembly Points are sign posted.

People should evacuate to the Emergency Assembly Point nearest to them in the event of an emergency.

Note that the above Emergency Assembly Points are applicable to all persons at the Refinery, whether KPRL employees, Contractors or visitors. The KPRL person accompanying visitors is responsible for evacuating them to the Emergency Assembly Point.

For special activities, such as shutdowns, additional Emergency Assembly Points may be arranged for the duration of the activity. This will be communicated and sign posted.

## **12.1 ALCOHOL TESTING**

During the whole period of the emergency, all responders will be exempted from alcohol testing at the main gates and their immediate supervisors will be mandated to relieve them of their emergency duties where they deem the responder is incapable to perform his / her duties.

## **13.0 TEST OF EMERGENCY RESPONSE PREPAREDNESS**

An annual emergency drills program shall be drawn out by FSA before the start of each year based on the **Emergency Response Drills Frequency Table (Document No. HSE-40-01-03)**. Learning points from the drills will be incorporated in an updates of the procedure.

## **14.0 REFERENCES**

HSE-40-01-01	-	Emergency Contact Numbers
HSE-40-01-02	-	Pre-Incident Plans
HSE-40-01-03	-	Emergency Response Drills Frequency Table
HSE-40-01-04	-	List of Designations and Names of current holders as Fire Wardens
HSE-50-01	-	Medical Emergency Plan

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 20 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

<b>Subject: EMERGENCY PROCEDURES</b>		<b>Procedure: HSE-40-01</b>		
<b>Custodian: HSEA</b>	<b>Approved by: OM</b>	<b>Rev. 7</b>	<b>Date: 16/07/2019</b>	<b>Page 21 of 20</b>
<b>Uncontrolled when Printed. Controlled Copy on KPRL LAN</b>				

