

RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

1.0 OBJECTIVE, SCOPE AND CONTENTS OF ON-SITE EMERGENCY PLANNING

Objectives of Emergency planning are to maximize the resource utilization and made combined efforts towards emergency operations, which includes:

- To localize the emergency and if possible eliminate it.
- To minimize the effect of accidents on people and property.
- To take remedial measures immediately and control it with minimum damage.
- To keep the required emergency equipment in stock at right places and ensure that they are in working condition.
- To keep the concerned personnel fully trained in the use of emergency equipment.
- To give immediate warning to the surrounding localities in case of an emergency situation arising.
- To mobilize transport and medical treatment of the injured.
- To arrange for rescue, treatment of casualties and communicate to relatives.
- To safe guard the people.
- To render necessary help to concerned.

1.0.1 Emergency:

A major emergency in any situation is one, which has the potential to cause serious injury or loss of life, which may cause extensive damage to the structure in the vicinity, environment and human resources available. This could result in serious disruption to normal operation both inside and outside the premises. Depending on the magnitude of the emergency, services of the outside agencies may also be required for supplementing the internal effort to effectively handle the emergency and to contain the damage.

Emergency Medical facilities:

First aid will be made available at different places of the building. Arrangements of medicines will be maintained in the Emergency Medical Centre. Breathing apparatus and other emergency medical equipment will be provided and maintained both in constructional phase as well as in operational phase.

1.1 HEALTH AND SAFETY MEASURES FOR THE LABOURERS

- **Building and structures:** No walls, galleries, stair-ways, floor, platform, staging or structure whether of permanent or temporary character will be constructed in such manner as to cause risk or bodily injury.
- **Child Labourers:** No child labourers will be allowed to work during Construction and Operational phase.
- **Service platforms:** whenever practicable and demanded service platforms and gangways will be provided for overhead shafting, and when required by him this will be securely fence with guard rails and toe boards.
- **Belts, etc:** All belt will be regularly examined to ensure that the joints are safe and the belts are proper tension.
- **Helmets:** Helmets will be provided to the workers for safe guarding themselves against any head injuries.
- **Machinery:** No machineries are equipments will be situated, Operated or maintained in such a manner as to cause risk of bodily injury.
- **Methods of work:** No process of work will be carried out in such a manner as to cause risk of bodily injury.
- **Electricity:** No electricity installation will be provided during construction so as to be dangers to human body or safety.
- **Medical Check-up:** Medical examination for every labourer will be done by certified surgeon at least once in 3 months.
- **First aid:** On-site first aid facility will be made available always for any emergency treatment.

1.2 EMERGENCY ACTION PLANS

1.2.1 Emergency Action plan for Cylinder Fire:

When filled container containing LPG is involved in fire, internal pressure if not relieved, will build up above 70 kg/sqcm and ultimately rupture the container. Rupture weak by direct flame impingement. Ruptured containers can be propelled at distance by jet action.

If container's pressure is not raised upto 70 Kg/sqcm leakage from screwed valve joint can occur due to different expansion of steel and brass.

Ignition of the escaping gas would aggravate the fire but release of fire reduces the possibility of rupture.

No attempt should be made to extinguish the burning gas but the container under fire and other containers in vicinity should be kept cool by water spray.

If the gas leakage does not ignite, the container should be approached from top and removed to the place of safety away from, the source of ignition.

1.2.2 Emergency action plan for Electric Fire:

Disconnect the electric supply of the affected areas.

Attempt to extinguish fire with the help of CO₂, DCP

If the fire is not extinguished, extinguish by spraying water with fog nozzle after ensuring complete isolation of electric circuit.

1.2.3 Emergency Action Plan for Oil Fire:

Attempt to extinguish fire with the help of DCP.

If the fire is not controlled, use water foam to blanket the fire and further action is to be taken.

1.2.4 Emergency action plan for Medical Aid:

Emergency action plan for Electric Shock Casualties:

Electric shock results in irreversible damage to brain cell begins followed by deterioration of the organs.

Rescue and first aid:

Do first aid quickly and without fuss and panic.

Switch off the supply if this can be done at once.

If not possible use a dry stick, dry cloth or other non-conductor to separate the victim from electrical contact.

The rescuer must avoid receiving shock himself by wearing gloves or using a jacket to pull the victim. Always keep in mind that delay in rescue and resuscitation may be fatal.

1.3 NATURAL HAZARDS:

1.3.1 Emergency Action Plan for earthquakes:

The site falls under the zone III as per the seismic zone map of India and indicating Moderate damage risk zone. When first tremors are sensed during an earthquake, all people should evacuate buildings and assemble at safe place/open place away from structures, walls and falling objects.

Emergency services should be contacted for assistance.

After the status is restored, people should inspect all the facilities for rescue, first aid and damage control activities, damage assessment, cleanup, restoration and recovery.

1.3.2 Emergency Action Plan for Bomb Threat

When bomb threat call is received the following measures are to be taken.

Information the message to the highest local police authority and seek their assistance for patrolling and security need.

Request the Local Fire Brigade to position at least one fire tender at the location immediately.

Keep the concerned department at the regional level informed with the development at regular intervals.

Alert the local Govt. / private hospitals and seek their help for providing ambulances if necessary.

In the Location premises:

Keep the Fire hydrant System/all fire fighting and personal protective Equipment in readiness.

Have through inspection of the location for any suspected dangerous object.

Organize security cell for round the clock observation of the premises.

If the Suspected object is found:

In case of finding of suspected article , do not disturb its position, but the area around it should be cordoned off to a distance of 100 meters and more depending upon the gravity of situation.

Call the Police immediately, who on reaching the site will decide suitable action for defusing and disposal of the suspected object.

Evolution of thick bellowing smoke is an indication of impending explosion and in such a case, with draw or evacuates all people from the spot, which has been identified.

As a general measure, regulate the movement of the strangers inside the premises and restrict their entry with permits.