

EMERGENCY RESPONSE PROCEDURE

Objective

The purpose of these emergency procedures is to ensure that any form of emergency that interrupts normal and safe working conditions in the plant can be dealt with quickly in a systematic manner. Operational procedures are spelt out to enable a coordinated plan of action to be carried out to control the emergency situation and restore it back to normal.

Scope

This procedure is applicable to all operations at LW Gastech and aims to:

- Control and or extinguish the fires;
- Contain leakage and spills in the event of a chemical incident;
- Effect the rescue and treatment of casualties;
- Safeguard human lives and
- Minimise damage to property and the environment.

Responsibility

This procedure is the responsibility of the Project Engineer.

Procedures

The following describes the process and condition for Emergency Response Procedure

Types of Emergency

The following are some of the most common situations that may lead to an EMERGENCY in the plant:

- Outbreak of fire
- Occurrence of fire
- Occurrence of serious accident and
- Damage to building and plant which endangers the safety of personnel

Responsibility

This procedure is the responsibility to the Project Engineer.

Reporting An Emergency

The person who discovered a fire or any emergency shall immediately inform the Factory Manager by using the auto dialing system-press Intercom, press flash, then press 204. giving him the exact location, type and seriousness of the emergency. The reporting person should proceed to fight the fire fighting appliances while waiting for assistance and arrival of the Factory Manager

Action During An Emergency

<u>Factory Manager</u>	<p>On receiving the information of an emergency, the Factory Manager shall immediately proceed to the scene of the incident to assess the seriousness of the emergency. If an emergency is confirmed, he shall:</p> <p>Immediately raise the alarm and inform all employees as follows: Location of Emergency Type of Emergency Seriousness of Emergency</p>
<u>Project Engineer</u>	<p>Upon being informed: Assume duties of the SITE COMMANDER (SC) Inform the Skudai Police (07 - 556 1222) & Larkin Fire Dept (07 - 221 2444) Format of Message: "Message from (name of person), LW Gastech, Taman Perindustrian JB Perdana, Skudai. Request help for (LPG fire, LPG gas leak etc.)" Put on the White Helmet with the SC mark and proceed to the Admin Office. Proceed to set up the Emergency Command Post. Issue evacuation order to Assistant Site Commander (ASC) if necessary. Hand over Emergency Command Post to Fire Dept. Nusajaya when they arrive at the plant.</p>
<u>Project Coordinator</u>	<p>Upon being informed: Assume duties of the Assistant Site Commander (ASC) Put on the White Helmet that has the ASC mark and proceed to find out the location of the emergency. Assistant who has assumed the roles as the Communication Co-ordinator. Organise and lead the assembled personnel, first aiders and fire fighters at the Emergency Mustering Area beside of reception lobby. Remain in constant contact with the Site Commander and continuously keep him informed of the situation.</p>
<u>Receptionist</u>	<p>Ensure no unauthorised visitors are allowed to enter the plant. There should be no communication to other external agencies except to Fire Dept.</p>
<u>Technician Director</u>	<p>Upon being informed: To organize 2 team of workshop worker to assume duties of Fire Fighters & First Aiders and immediately: Proceed to the Emergency Mustering Area beside of reception lobby, and wait for instructions from the Assistant Site Commander. All First Aiders will immediately proceed to collect the First Aid Boxes and report to the Assistant Site Commander at the Emergency Mustering Area beside of reception lobby to receive further instructions. The First Aiders will set up the First Aid Post at the Emergency Mustering Area beside of reception lobby to plan rescue and treat casualties.</p>

LPG Emergency Procedure

LPG Gas Leak

- 1) Avoid breathing vapour and contact with liquid or gas
- 2) Close emergent shutoff valve by pull esv cable
- 3) Whenever possible, close the upstream and downstream valves to stop the gas flow to the affected area.
However, never operate any valves within the vicinity: Turning the wrong valve could create an emergency in another area worse than the one at hand and further endanger life or property.
- 4) If the leak is indoors, open doors and window to increase ventilation.
- 5) If the leak is near building, close doors and windows and block off air vents to prevent the gas from getting into the building.
- 6) Move people from area. Move upwind
- 7) No smoking, naked lights and don't start the vehicle engine or other engines and/or operate electrical equipments
- 8) Prevent spillage or entering underground drain by banking with sand or earth
- 9) Phone fire brigade (insert telephone number of local fire station)
- 10) Phone (insert LPG distributor's name and all-hours number)
- 11) Isolate power at main switchboard.
- 12) If gas leakage out of control, evacuate area and warn against entry.

Fire Exposure

- 1) Close emergent shutoff valve by pull esv cable
- 2) If LPG is burning outside, DO NOT attempt to extinguish the fire. However, if life is in jeopardy, extinguish the gas fire with a dry chemical at the base of the flame, and wet the surrounding area with fog to prevent re-ignition.
- 3) Phone fire brigade and police (insert telephone number of local police and fire station)
- 3) Phone (insert LPG distributor's name and all-hours number)
- 4) Whenever possible, close the upstream and downstream valves to stop the gas flow to the affected area.
However, never operate any valves within the vicinity: Turning the wrong valve could create an emergency in another area worse than the one at hand and further endanger life or property.
4. Check for gas accumulation in nearby building and sewers. Burning gas will not normally explode, but if the gas source is underground, do not assume that all escaping gas is being consumed by the fire. Gas detection instruments are required to check in, under and around surrounding buildings for presence of gas.
- 5) Remove containers from vehicle not in area of fire, or remove other materials to prevent spread of fire
- 6) Move people from area. Move upwind
- 7) Isolate power at main switchboard.
- 8) Follow fire-fighting instructions
- 9) If fire gets out of control, evacuate area and warn against entry.

Tanker/Vehicle Accident

- 1) Shut off engine and any electrical equipment and leave "off" until vapour hazard is removed
- 2) Move people from area. Move upwind
- 3) Check for spills or leaks
- 4) Phone fire brigade and police, tell them location, material and owner. Indicate condition of vehicle and any damage observed
- 5) No smoking, naked lights and don't start the vehicle engine or other engines and/or operate electrical equipments
- 6) If fire gets out of control, evacuate area and warn against entry.

First Aid Procedure

Gassing

- 1) Remove patient to fresh air, lay down and rest
- 2) If patient is not breathing, make sure airway is clear and applies artificial respiration.
Oxygen may be given, but only under supervision of a trained person
- 3) Keep patient warm and
- 4) Call doctor at once or transport to doctor or hospital

Eyes

- 1) Hold eyes open and wash continuously with water for at least 15 minute and
- 2) Transport to doctor or hospital

Skin

- 1) Immediately wash affected area with water to prevent frostbite and
- 2) Transport to doctor or hospital

Emergency Control Points

The following Emergency Control Points are to be set up to coordinate the emergency operations as follows:

Emergency Mustering Area

The Emergency Mustering Area will be the open area beside of reception lobby.

First Aid Post

The First Aid Post will be set up in front of the Reception Counter.

Emergency Control Post

The Emergency Post will be set up at the Reception Area.

Evacuation

If the fire or gas leak is serious and may spread and get out of control, evacuation may be declared by the Site Commander. The evacuation route to be taken by plant personnel is by way of the nearest Emergency Gate. The SC and ASC shall ensure that all plant Personnel are safely evacuated to the Emergency Mustering Area.

Evacuation Procedures

The order to evacuate shall only be given by the Site Commander. When the order to evacuate is given by the Site Commander, the Assistant Site Commander shall immediately announce it over the loud hailer. The normal format of the Evacuation announcement is:

"Attention all employees. There is a major gas leak (or fire) at (location). Please remain calm. All employees except those involved in emergency services shall leave their work places immediately. Proceed to assemble at (location)"

The announcement should state clearly the location of gas leak or fire and the point of assembly.
In normal situation, the evacuation shall be at the Emergency Mustering Area beside of reception lobby.

Senior employees (pre designated) shall oversee the orderly movement of people during the evacuation. At the Emergency Mustering Area, employees should queue up orderly, according to their work sections. The senior employees would gather the Clock-in cards of all employees and the bin containing the contractor visitor pass. A roll call of all persons in the plant office will be performed. She would report to the Assistant Site Commander the result of the roll call. He shall liaise with the Site Commander on the likely whereabouts of any missing employee, visitor or contractor.