



SECTION 1

CHAPTER 5

DEVELOPING AN EMERGENCY RESPONSE PLAN

Purpose

Under OSHA guidelines 1910.38 and as required by Gravity Oilfield Services, the following Emergency Response Plan is being implemented in order to ensure that employees be prepared in the event of an emergency including fire, tornados, toxic chemical release, hurricanes, H2S, well blowout, etc. Additionally, these plans have been developed to ensure prompt medical attention is obtained for employees regardless of their assigned work location.

Scope

This policy applies to all Company employees.

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Emergency Planning

Purpose This document describes the requirements for creating emergency plans.

Emergency plan Yard Management must assess the potential for and extent of emergency situations in their areas. They must work with HSE Coordinators to develop a written emergency plan that describes responses for all potential emergency situations as applicable to their business application. In accordance with 29 CFR 1910.38(f)(1-3) this plan, once developed for each yard, must be reviewed: with each company employee covered by the written plan, upon initial assignment of responsibilities and, when the assigned responsibilities change, when changes to the plan are made, and coordinated with all employees, and reviewed periodically in safety meetings.

Plan contents Written emergency plans must outline procedures for:

- responsibilities and duties in emergency situations
- notifying appropriate company personnel and maintaining communications
- coordinating and maintaining communications with local fire departments, the medical facilities, and other state and federal organizations
- handling hazardous spills or leaks
- handling fire or explosions involving hazardous substances
- handling accidents and other potential emergencies as applicable
- completing emergency drills
- reviewing and evaluating response procedures after drills and after emergencies
- list the contact information of all employees with assigned duties

Emergency Response Plan Information Location

- The Emergency Response Plan needs to be readily available and accessible to all employees for review as needed at the yard/facility
- Contact information will be provided to employees who may need additional information pertaining to the plan or to their respective duties



**Coordination
with local
authorities**

Emergency response planning and community right-to-know regulations require facilities to work with state emergency planning commissions, local emergency response committees and local fire departments to ensure the safety and well-being of the community in an emergency situation.

Facilities must:

- make sure that the local fire departments have current hazardous chemical lists
- furnish MSDS's as required
- report incidents involving hazardous or toxic spills or releases to regulatory agencies as required

**Reporting
emergencies**

All employees must be trained in:

- the potential for emergency situation in their work areas
- the detection of leaks, spills, fire hazards, and other abnormal conditions

Employees must report all leaks, spills, accidents, and other suspect conditions to their immediate supervisor. Each business line will follow their respective chain of command (Refer to the applicable phone call flowchart, reporting policy and guidelines).

Note: Some incidents must be reported to regulatory agencies, and the employer and employees involved can be subject to serious fines and penalties for failure to report such an incident.

**Personnel
response**

All employees must be knowledgeable of:

- the emergency plan
- procedures to respond to emergency situations
- what is expected of them in an emergency situation

Initial and refresher training must be provided to employees and/or first responders at the operations level who are assigned duties in emergency situations, such as:

- contacting proper authorities for spills
- first aid
- rescue
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The appropriate MSDS for a hazardous substance will contain information to heighten awareness to protect employees from exposure.

Working with emergency response teams

Yard Management/Supervisors/HSE Coordinators may be designated to the Emergency Response Team by the PIC (Person in Charge) of the responding emergency team. In these cases, Yard Management will be responsible for handling company business decisions on the scene.

Employees and/or first responders exposed to hazardous substances will be provided medical surveillance.

Drills

Emergency drills will be conducted quarterly (or more frequent depending on customer requirements) in all areas specific to rigs/equipment/facilities for monitoring the effectiveness of all existing emergency procedures and the availability of necessary emergency equipment.

Emergency response drills are a useful tool to evaluate the preparedness of area specific to rigs/equipment/facilities. Emergency response drills are mental exercises with a pre-defined emergency. These drills will be conducted quarterly with management, supervision and employee participation.

After a drill, evaluate the:

- personnel response
- outside assistance response
- availability of necessary equipment

Keep documentation of all drills that are completed.

Emergency Response Policy

Purpose	This document outlines the basic emergency response policy.
Identifying emergencies	Emergencies include any event, natural or manmade, that threatens the lives of employees or poses a possibility of damage or destruction of company property.
Yard Management/ Supervisor responsibility	<p>Yard Management/Supervisors will:</p> <ul style="list-style-type: none">● familiarize themselves with this plan● use it as a topic for discussion in monthly safety meetings <p>In emergencies, particularly where there is damage or injury, management/supervisors will take a headcount to determine whether employees are missing.</p>
Employee responsibility	<p>Employees are asked to:</p> <ul style="list-style-type: none">● use good judgment● be mindful of the situation and stay calm● avoid unnecessary risk or danger● as soon as possible, notify their immediate supervisor of the incident, number of injured employees if any, and any pertinent details relating to the emergency● follow the instructions of supervisors and civil authorities
Cooperating with civil authorities	<p>Once on the scene of an emergency, civil authorities will take charge and direct operations.</p> <p>Please cooperate with civil authorities during:</p> <ul style="list-style-type: none">● damage assessments● rescue operations● security operations● investigations of incidents involving fatalities or serious injuries



**Providing
Facility or
Location
Security**

Additional security may be required to protect company equipment and to keep unauthorized personnel out of the area after incidents involving:

- damage to facilities
- widespread destruction
- an evacuation

The Company encourages employees to accept this assignment and to work with civil authorities to maintain order and discipline.

**Handling the
media**

See "Communicating with the Media" in the *Reporting Incidents* chapter of this manual.

Identifying Escape Routes

Purpose To identify escape routes in order for employees to safely reach a muster area.

Yard Management/ Supervisor/ Safety Personnel responsibility

Yard Management/Supervisor/Safety Personnel will:

- determine, develop and post primary and secondary escape routes in visible areas at all facilities
 - designate primary and secondary muster areas, no closer than 75 feet of facility, to ensure all employees are accounted for
 - ensure all entrances and exits are clearly marked
 - ensure escape routes are identified and communicated on location for employees to reach a muster area
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Evacuating in the Event of an Emergency

Purpose This document covers the basic procedures for facilities/Rig evacuating in an emergency, including:

- making advance preparations
- determining when to evacuate
- preparing to evacuate
- evacuating
- returning to work

Making advance preparations for facility emergency evacuations Management will use the following procedure to prepare for emergency evacuations well in advance of the actual evacuation.

Step	Action
1	Establish a permanent key person list to: <ul style="list-style-type: none"> ● designate those employees who should visit the site ● determine who and what resources will be required to return operations to normal
2	Identify key business activities for the 5 to 10 working days after the event or emergency. Make preparations to support those activities in the potential absence of: <ul style="list-style-type: none"> ● communications ● computers ● buildings ● other facilities
3	Identify and remove key business records, both paper and electronic, to a safe on-site location or off-site location.
4	Support departments will develop contingency plans to support continued operations of the business unit in the absence of regular support facilities. These departments include: <ul style="list-style-type: none"> ● Administration ● Communications ● Information systems <p>IF more detailed procedures are required for various sites or groups, THEN develop them.</p>
5	Update notification and call lists quarterly or as staff members change.
6	Obtain all supplies and materials required for the evacuation.

Determining when to evacuate a facility

Evacuation should take place when an emergency arises. Emergencies may include fire, weather, bomb threats, hostage situations, flooding, or any other emergency that would put employees in eminent danger. Eminent danger means:

- A danger which is not normal for that occupation.
- A danger which a person is engaged in that occupation would not normally encounter

Preparing to evacuate

Use the following process to prepare for an evacuation.

Stage	Description
1	At Yard levels, HSE Coordinators will coordinate with the Yard Manager to prepare and secure company property.
2	Consult the Accounting and Human Resource departments to determine the steps to take to prepare for the protection of Company computers and related equipment.
3	Secure offices and other facilities
4	Provide all employees with an emergency telephone list containing alternate numbers for management and employees before abandoning the premises so that employees can communicate with the company personnel if office telephones are not operating.
5	Provide initial instructions for the employee’s return to work. Direct employees and staff members not identified as key personnel to stay at home and be available to travel to the site when directed to by on-site staff.

Return to work

After the evacuation period has expired, employees are expected to return to work on the next normally scheduled workday or as directed by their supervisors and civil authorities.

IF:

- you are unable to return to work due to high water, blocked roads, and/or damage to personal property; **OR**
- your Yard/Location has suffered severe damage,

THEN call your supervisor for instructions.

Handling Chemical Spills and Gas Leaks

Purpose This document outlines the safety recommendations for handling chemical spills and gas leaks.

Emergency response Chemical spills and gas leaks are usually local in nature. However, a serious incident can result in fires and explosions. Exercise extreme caution when dealing with chemicals and gases. Follow these guidelines.

Step	Action
1	Notify your supervisor at once of a chemical spill or gas leak.
2	The supervisor will: <ul style="list-style-type: none"> notify Yard Management Yard Management will: <ul style="list-style-type: none"> notify customer representative (if on location) and HSE Coordinator contact third party contractors to clean up spills or eliminate gas leaks complete spill report and follow the company’s reporting procedures and guidelines
3	Trained personnel will contain the spill or leak using the following procedure.

Containing spills Trained personnel will use the following procedure to contain spills or leaks.

Step	Action
1	Identify the substance spilled or gas that is leaking.
2	Shut off the source of the spill or leak if possible. IF there is a gas leak, THEN local gas utility companies may need to be called in to shut off the gas or provide assistance.
3	Turn off all electrical equipment
4	Seal off the area where the incident occurred and provide security.
5	Consult the materials Safety Data Sheet for the spilled substance to review specific hazards, emergency procedures, and protective measures.
6	Direct containment or clean-up of the spill to the responsible third party.

Responding to an Explosion

Purpose This document outlines the requirements for responding to an explosion.

Emergency response Explosions happen without warning but are usually localized. Fires often result from explosions. Employees must be alert to the possibilities of additional explosions or fires, particularly if natural gas or flammable substances are involved.

Follow this procedure.

Step	Action
1	Sound an alarm so all employees in the vicinity can take protective action and reach muster area safely. Remove injured persons only if it is safe to do so.
2	Call 9-1-1 or your local emergency number to report the fire as quickly as possible.
3	Notify area management and safety personnel.
4	Take appropriate action to fight the fire without excessive risk to self or others. (See the chapter on <i>Fire Protection</i> in this manual for more information.)
5	Provide security for the area as required.

Dealing with Tornadoes

Purpose This document outlines the safety recommendations for handling emergencies with tornadoes.

Emergency response Tornadoes are generally preceded by a tornado watch or warning issued by the National Weather Service.

Step	Action
1	<p>Buildings- Get under some sort of cover, such as a desk, table or heavy furniture. Stay away from windows.</p> <p>Locations- Move at right angles to the path of the tornado to avoid it. If there is no time to escape, move away from non-fixed objects and lie face down in a depression, ditch or ravine and draw your knees up under your body, covering the back of your head with your hands. This position helps prevent head injuries, the most common cause of death during tornadoes.</p>
2	<p>After the tornado passes:</p> <p>Buildings- get out of the building as soon as possible.</p> <p>Locations- convene at safe muster area, assess damage, and take head count.</p>
3	<p>IF there are injured personnel that can be removed from the area, THEN do so safely. Otherwise, protect seriously injured personnel from falling objects and alert the civil authorities of their location (call 911).</p> <p><u>Note:</u></p> <ul style="list-style-type: none"> ● Do not aggravate injuries. ● Do not search the wreckage for bodies or injured persons. Civil authorities will supervise rescue operations when they arrive
4	<p>As soon as possible, notify Yard Management and utilize the applicable line of business flow chart for further reporting.</p>
5	<p>IF requested by civil authorities or management, THEN employees may:</p> <ul style="list-style-type: none"> ● provide security to prevent looting ● protect undamaged equipment and tools ● assist the civil authorities in their rescue operations and investigations

Dealing with Hurricanes

Purpose This document outlines the safety recommendations for handling emergencies with hurricanes.

Hurricane alert phases The following table describes the different hurricane alert phases.

Phase 1 **Description** - A tropical depression, storm, or hurricane begins to form and is judged to have the potential to affect operations.
Action to Take – Initiate preparations for shutdown of the affected area.

Phase 2 **Description** – The hurricane is approaching operations and is judged to have a probability of affecting operations.
Actions to Take – Secure all equipment/facilities and evacuate non-essential personnel.

Phase 3 **Description** – The hurricane is judged as certain to have an effect on operations.
Actions to Take – Shut down operations and evacuate all personnel.

Emergency Response / Hurricane Preparations Hurricanes originate in tropical waters and may bring heavy rain, high winds and tides, and sometimes tornadoes. The Weather Bureau will broadcast major types of weather alerts. When you receive a warning of a potential hurricane, take these precautions:

Step	Action
1	Ensure that motor vehicles are in good running condition and have at least three-fourths of a tank of fuel. Note: It could be difficult to obtain fuel during evacuations in large, populated areas.
2	Drive carefully during an evacuation since risk is increased due to high winds, rain and traffic conditions.
3	Ensure the following emergency survival supplies are available: <ul style="list-style-type: none"> • Fire Extinguishers • Portable AM/FM radio with extra batteries • Three-day supply of non-perishable food/water for each person. • Blankets and First Aid supplies. • Flashlights with extra batteries. Note: If life threatening injuries or situations are experienced during the evacuation from high winds or flooding, contact authorities (call 911).

**In a Shelter
during a
Hurricane**

For individuals taking cover from a hurricane in a designated shelter, keep informed about the hurricane movement through radio and television advisories and remain in the shelter.

Warning: Do not travel during a hurricane. If the center (“eye”) of the hurricane passes directly over your location, a lull in the wind occurs that may last from five minutes to half an hour. Then the wind velocity increases in the reverse direction suddenly, perhaps with greater force. Remain in the shelter.

Responding to an Active Shooter

Purpose This document outlines the requirements for responding to an active shooter.

Emergency response Active Shooter situations happen without warning, are unpredictable and evolve quickly. An Active Shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area; in most cases, active shooters use firearms(s) and there is no pattern or method to their selection of victims. Typically, the immediate deployment of law enforcement is required to stop the shooting and mitigate harm to victims. Employees must be alert to the possibilities of an Active Shooter situation happening following emergency action Procedures (Run, Hide, Fight, Call 911).

Follow this procedure.

Step	Action
1	RUN, get out of area and to a safe location. Sound an alarm so all employees in the vicinity can take protective action and reach a safe area. Remove injured persons only if it is safe to do so.
2	Call 9-1-1 or your local emergency number to report the incident as quickly as possible.
3	Notify area management and safety personnel.
4	Take appropriate action to get yourself to a safe location. Do not take excessive risk to self or others.
5	Provide Law enforcement with as much detailed description as possible.

EMERGENCY RESPONSE PLAN

Emergency Response Coordinator

The Emergency Response Coordinator is the Yard Manager. _____ is responsible for ensuring the safety and health of employees and to reduce property damage during an emergency situation. This includes what type of response there should be to an emergency, deciding whether to evacuate all or part of the Yard/Location in response to a fire, when to move employees to a safe part of the Yard/Location site when severe weather threatens and notifying emergency services such as ambulance and fire department.

Safe Briefing Areas: Safe Area 1 - Prevailing wind (Up Wind).
Safe Area 2 - Cross wind side.

Response Personnel

Each Yard will have two or more employees assigned to ensure that all employees are following the directions issued. They are to assist in the evacuation of their Yard/Location, if one is needed. Response Personnel will take a head count of each employee of their Yard/Location at the evacuation site. The following groups will be represented:

- Yard Personnel
- Service Crew
- Drivers
- Lone Workers

Emergency Response Teams:

Yard Team

It is the function of this team to respond immediately to any fire or other emergency as directed. They will be trained in the use of fire extinguishers and will either make an attempt to put the fire out if it is in its beginning stages (incipient) and/or to begin evacuation of any affected employees from the area. They are also to notify the Yard Manager of the situation and then stand by for further instructions. They will also be called upon in the event of severe weather to assist in the evacuation of employees to the safe area.

EMERGENCY RESPONSE PROCEDURES

Fire Response

1. Employee:

Any employee, who notices a fire, sees or smells smoke, or otherwise suspects that a danger of fire is imminent, shall notify their Supervisor immediately. When contacting their supervisor, they should give the location of the affected area, what the nature of the fire is, if known, and their response to the emergency. They are to then stand by for further instructions.

2. Supervisor:

The Supervisor is to call 911 and respond to the location of the fire immediately. They will then make an assessment of the situation and if, in their view, the fire could cause possible harm to employees, they will begin evacuation of the area. If they believe that the fire is in its beginning stages (incipient) and may be readily controlled, they may begin initial fire extinguisher efforts and will remain on the scene and maintain control of the situation until instructed otherwise. If these efforts do not prevail and the fire turns to free burning stage, then the evacuation procedures will be activated. They will ensure that the ER Coordinator (Yard Manager) has been notified of the situation.

3. Yard Manager:

The Yard Manager will respond immediately to the location of the fire and direct any Emergency Response. In the event the fire is beyond the incipient stage, the Yard Manager will suspend fire fighting operations and will wait on the local fire department. If evacuation of the affected employees has not taken place yet, then the Yard Manager will ensure Emergency Evacuation Procedures for fire are followed. The Yard Manager is to remain on the scene until the fire has been extinguished or city fire team members have taken control or possession of the scene. They are to ensure that all employees have been accounted for in the evacuation area. They will then direct any post emergency clean up or containment efforts.

Severe Weather/Tornado/Hurricane Response

During periods where there is a possibility of severe weather, tornado, or hurricane, the Yard Manager will monitor local weather conditions through the use of radio, TV, or a weather notification service. When it is felt that a danger is imminent, then the Emergency Evacuation Plan for severe weather, tornadoes, or hurricanes will be activated. Any employee who notices unusual weather activity shall notify their Supervisor immediately.

Natural Gas Leak

In the event an employee notices a smell of natural gas, they are to notify their Supervisor immediately and evacuate. The Supervisor will notify the Yard Manager and respond to the vicinity of the leak. The Supervisor will maintain control of the situation, will evacuate employees from the affected area and notify the gas company to resolve the problem.

Power Outages

In the event of a power outage, all employees are to remain in their respective areas until it is visibly safe to vacate. Site specific emergency response efforts shall be developed with detail by the Yard Manager and HSE Coordinator.

Hydrogen Sulfide

More commonly known as H₂S, the gas has been tagged with other names due to its distinct odor. H₂S can be extremely dangerous if you are not prepared to deal with it. H₂S is dangerous because it is very common in our work environment, and it is often over-looked and dismissed. Exposure limits have been set for working around H₂S safely. In the event monitoring systems indicate limits of unsafe exposure, all employees must vacate and assemble at the muster area. A head count of employees will be taken to ensure each employee has reached the muster area safely. In the event an employee is overcome by H₂S, emergency response efforts must be initiated immediately by trained personnel. Notify authorities (call 911). **All un-trained personnel will never attempt to rescue persons that have been overcome by H₂S.** Each Yard, if applicable, will complete H₂S emergency response drills monthly to ensure all employees have been educated on their responsibilities of handling an H₂S emergency. (For more information see the chapter on “Hydrogen Sulfide”)

Derrick Rescue

In the event of an emergency in which the derrick worker is injured and unable to descend the derrick due to injuries or is unconscious, emergency response and rescue must be initiated immediately by trained personnel. Notify authorities (call 911). The primary concern of all rescue efforts will be to perform the rescue without injury to those performing the rescue or further injury to the individual that is being rescued. Safeguarding the well-being of all personnel must be stressed to all rescue personnel before any rescue efforts begin. **At no time shall any rescue be attempted without fall protection.** Rescue equipment should include (2) four-foot lanyards with double locking hooks on each end, a full body harness with a riding seat, and (2) ninety-foot lengths of rope to be used as taglines. These lines should have double locking hooks on one end. The two types of derrick rescue are as follows:

Rescue by ascending the ladder – Rescue personnel should wear a full body harness with a riding seat and use the dual lanyard ascent. Attach the winch line to the Dorsal Dee-Ring of the injured worker, lift to release the stop break of the self-retracting lifeline, and lower the injured worker to the ground, leaving the lifeline attached. Tag lines will be used to control the descent of the worker.

Rescue with hoist- In the event the rescue must be performed where the rescuer cannot reach the injured worker from the ladder or other work platform, the rescuer should wear a full body harness with a riding seat and be raised to the injured with the hoist. The rescuer can then attach a lanyard to the Dorsal Dee-Ring of the injured worker and both rescuer and injured can be lowered to the ground. Again, tag lines must be used to control descent.

Loss of Well Control

In the event that well control is lost during operations and safe attempts have been unsuccessful to re-gain control of the well, emergency evacuation efforts will be initiated. The job supervisor will ensure that all personnel on site will vacate to muster area a safe distance away from well to ensure the safety and well-being of all employees. Communication between job supervisor and company representative will determine the next course of action to bring the well under control. **All employees need to be mindful of their authority to slow down or shut down the operation if they believe it jeopardizes that safety of people, the environment, or property. NEVER re-enter a job site in imminent danger to save equipment.**

Emergency Drills

Emergency drills for H₂S and loss of well control (BOP) will be completed monthly by all affected employees. Documentation of these drills will be kept, and assessments will be made during these drills to determine if changes should be made. HSE Coordinators will periodically observe these drills to ensure proficiency and offer suggestions for improvement.