

Emergency Action Plan

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HSSE Procedure EPR-2
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I. PURPOSE

Provide instruction concerning the proper response to a unit upset or an emergency.

II. SCOPE

Emergency events, such as unit upsets, fires, spills or releases that have the potential to affect personnel within the Texas City Site.

III. EXCEPTIONS

Recognizing that an HSSE procedure cannot be written to manage every conceivable hazard and situation, a mechanism is needed to authorize exceptions. An exception does not negate or disregard the intent of a procedure; it is a means for developing, documenting and communicating an alternate hazard mitigation plan. Exceptions are written against specific requirements within a procedure; exceptions should be few and far between. All exception requests will be thoroughly reviewed, scrutinized, and challenged by the appropriate superintendent, manager and the HSSE Department.

Only the Texas City Business Unit Leader, the Texas City Process Safety Committee Chair, or their delegates may grant an exception to a procedure. Exceptions must be documented utilizing the Exception Request Form and filed with the HSSE Department. A copy of the approved Exception Request Form must be attached to the ATW posted at the job site (as applicable).

IV. EMERGENCY REPORTING

- A. Any person can report an emergency to the Security Operations Center (SOC) by dialing Ext. 1911 or 21911 on any plant telephone, or by using the "Emergency Button" on the plant radios.
- B. When reporting an emergency, provide as much information as possible, for example the type of incident, location, and any other facts that might assist emergency responders.

<p>NOTE Do not hang up until the person taking the call has confirmed they have the information.</p>
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- C. Operations personnel must react to emergencies with worker safety as their first priority. Depending upon the risk, actions may include

evacuating non-essential personnel, or contacting the SOC to sound the site fire alarm, or informing personnel.

- D. If the unit warble horn is sounded or a PA/radio announcement is made, the unit supervisor or designated alternate must immediately contact the SOC and then notify the System Supervisor or Process Coordinator. The SOC will announce on the ATG (all-call) channel that the affected unit is experiencing an upset; fire, spill, or release.

V. EMERGENCY RESPONSE AND EVACUATION

- A. During emergency unit shutdowns, emergency response personnel will close roads around the unit.
- B. Refinery units will sound their warbler horn to signal an evacuation. Chemical Plant units make a PA announcement to signal an evacuation. Infrastructure will make a radio announcement to signal an evacuation.
- C. When a unit warbler horn sounds or a PA/radio announcement is made to evacuate:
1. Essential unit personnel will follow unit specific instructions.
 2. Non-essential personnel in the affected unit or immediate area will evacuate crosswind and upwind and report to a safe Muster Point (Attachment 2).
 3. Personnel that hear a unit warbler horn or PA/radio announcement, but are not in the affected unit or immediate area will stop work until Operations or a Job Representative verifies conditions are safe and gives authorization to re-start work.
- D. When the Site Fire Alarm Sounds
1. If driving inside the plant:
 - a) Yield to emergency vehicles.
 - b) If in the immediate area affected by the incident, pull to the side of the road and shut off the engine. Make sure the vehicle does not obstruct the road and the vehicle is a safe distance from any incident hazards.
 - c) If necessary to leave the vehicle, leave the keys in ignition; evacuate on foot crosswind and upwind and report to a safe Muster Point.
 2. An Operations representative will meet the fire department on the upwind side of the unit and provide information relating to the incident.
 3. Essential unit personnel will follow unit specific instructions.

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4. Non-essential personnel site-wide will stop work and:
 - a) If inside the Affected Area as determined by fire code or PA/radio announcement, evacuate crosswind and upwind and report to a safe Muster Point.
 - b) If outside the Affected Area, check with Operations personnel for instructions.

<p>NOTE All personnel will remain at their Muster Point, until instructed otherwise by the OSC, Supervision or Job Representatives, so they can be accounted for without placing others responding at risk in a rescue effort.</p>
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5. The On-Scene Commander (OSC) will release units and zones affected by the emergency for normal operations. Once released, Operations will verify that conditions are safe and then give authorization to re-start work

E. Evacuation Alarms & Actions

1. Alarm Testing
 - a) Unit warbler horns will be tested using the one blast "Test or Resume" horn on Monday after the noon fire alarm test. The pass/fail results will be recorded in PRIDE.
 - b) The site fire alarm system will be tested utilizing the All-Clear on Sundays at 5:00 p.m. and the back-up system will be tested on Monday at noon.
 - c) Chemical Plant units will test their unit specific PA/Intercom on Monday after the noon fire alarm/PA test.
2. Evacuation of Non-Essential Personnel in the Immediate Area
Three blasts of the unit emergency warbler horn or an announcement on the PA/radio system. Non-essential personnel will evacuate crosswind and upwind and report to a safe Muster Point.
3. Total Unit Evacuation
Continuous blasts of the unit emergency warbler horn or an announcement on the PA/radio system announcement. All personnel will evacuate crosswind and upwind and report to a safe Muster Point.
4. Zone Evacuation

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The Emergency Response Organization will determine the need for a total or partial Zone evacuation of non-essential personnel. Units within the Zone that requires evacuation as determined by the On-Scene Commander will be asked to sound their three-blast warble horn or make a PA/radio system announcement.

5. Building Evacuation

When a building's local fire alarm sounds, occupants must evacuate the building and gather at the designated Building Assembly Area.

6. Accounting for Personnel

- a) Unit Only Alarm – Unit supervision / Job Reps are responsible for accounting for personnel. Operations will designate someone to take the sign-in book to the Muster Point to account for personnel. Non essential personnel will remain at the Muster Point until unit supervision or their job rep gives further instructions.
- b) Site-Wide Alarm – The Emergency Response Organization will take control of the scene which includes accounting for personnel at Muster Points.
- c) All personnel have a responsibility to check in with the person accounting for personnel.

VI. SHELTER-IN-PLACE

NOTE: If it is safe to do so, evacuation from an affected area is preferred over sheltering-in-place. Personnel must NEVER shelter to escape from a flammable or explosive vapor cloud.

- A. Toxic gas releases may require essential personnel to shelter-in-place. For shelter-in-place locations see Attachment 3.
 1. Operating Units
 - a) Essential operations personnel will return to the control room for instructions.
 - b) Operations personnel will advise the SOC via telephone, Ext. 21762, of any non-essential personnel in their unit control room.
 2. Buildings
 - a) Personnel in the building at the time the Shelter-in-Place alarm is sounded will remain in the building.

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- b) Building Monitors will advise the SOC via telephone at Ext. 21762 of all non-resident personnel in their building.
- B. The Building Monitor or person in charge of the building will activate the Shelter-in-Place system.
- C. Non-essential personnel who are outside should evacuate crosswind and upwind and report to a safe Muster Point.

VII. MEDICAL EMERGENCY

To request emergency medical assistance, personnel will use the "Emergency button" on the plant radios or dial Ext. 1911 or 21911 to contact the SOC. The caller will provide as much information as possible, for example the type of injury or illness, the location, and any other facts that might assist emergency responders.

VIII. ALL CLEAR

SOC Personnel will sound the All-Clear and announce the "all-clear" when instructed to do so by the On-Scene Commander.

IX. EVACUATION DRILLS

Emergency evacuation drills will be conducted annually for each unit and office building. The evacuation drills will be documented; the documentation will be sent to the Fire Chief.

- A. Unit supervision will conduct an evacuation drill annually for each shift.
- B. The Emergency Response Organization will evacuation conduct drills annually for each building.
- C. Prior to TAR or major capital project activity, TAR or project coordination supervision will review the evacuation plan with personnel assigned to that TAR or project. During the first and fourth weeks of a TAR or major capital project activity, TAR or project coordination supervision will conduct an evacuation drill with the assistance of unit Operations.

X. TRAINING

- A. All plant employees will be trained in this procedure annually through completion of EMRHAZ001, HAZWOPER I: First Responder, Awareness Level.
- B. The Security/Emergency Preparedness Director is responsible for ensuring the scheduling of plant emergency evacuation drills, coordination of the drills, and that they take place.

C. H. Maclean
Texas City Business Unit Leader

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Revision Log

Revision Date	Authority	Custodian	Revision Details
04-Jun-04	R. D. Hale	T. Halaska	Initial Version
14-Jul-04	D. L. Parus	T. Halaska	Updated titles for Business Unit Leader, Operations and System Supervisors.
06-Sep-05	C. H. Maclean	HSSE Department	Reduced and relocated muster points to the perimeter of the site; Simplified instructions for non-essential personnel; Created Building Assembly Areas.

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ATTACHMENT 1

DEFINITIONS

Building Evacuation - Total evacuation of a building (see Attachment 2 – *Muster Points, Zones and Building Assembly Areas*).

Building Assembly Area – An assembly area for building occupants designated by a red and white Building Assembly Area sign. See Attachment 2 for Building Assembly Areas.

Building Monitors - Persons who are responsible for coordinating evacuations and shelter-in-place for a building. See *Building Monitor Book* for detailed responsibilities.

Delivery Driver – Any person, typically unescorted by a BP employee, who drives a vehicle into the site for the purpose of providing products, services, materials, or equipment to a specific location or area, and who will exit the site as soon as their task is completed.

Emergency - An occurrence which results, or has the potential to result, in fire or uncontrolled release of a hazardous substance and involves an organized response effort by trained employees from outside of the immediate release area.

Essential Unit Personnel - Personnel involved in operational activities who are pre-designated to remain at their facilities during an evacuation.

Emergency Response Personnel - Personnel who have assigned responsibilities in the Texas City Site Emergency Response Organization.

Evacuation - To withdraw from a potentially hazardous environment to a safe muster point or designated assembly area located away from immediate danger. Evacuations may be called for on single or multiple units, buildings, or zones.

Immediate Area – The area adjacent to the incident that has the potential to be adversely affected by the incident.

Muster Points - Areas away from the immediate area of concern designated by a green and white Muster Point sign. See Attachment 2 for Muster Points.

Non-Essential Personnel – All personnel not having Emergency Response Organization assignments, personnel not involved in operational activities, visitors delivery drivers and contractors.

On-Scene Incident Commander (OSC) – The Lead Officer on the Emergency Response Team who will direct all site Emergency Responses. This person is located at the scene.

Security Operations Center (SOC) – The Security Operations Center is the primary focal point for all security and emergency response related communications. The SOC is located in Room 2116 of the Chemical Administration Building.

Shelter-in-Place Facility - Buildings that have been modified to reduce the risk of personnel exposure during a toxic vapor release. Refer to Attachment 3 for a list of shelter-in-place facilities.

Toxic Vapor or Gas - A vapor or gas that has the potential to cause adverse health effects if inhaled or absorbed into the body in sufficient concentrations.

Unit Control Rooms – Buildings, occupied by a limited number of essential unit personnel, which have been modified to reduce the risk of personnel exposure during a toxic vapor release.

Visitors - Any person who is escorted into the site by a BP employee and whose safety and conduct are the responsibility of that BP employee.

Zone Evacuation - A partial or total evacuation of all non-essential personnel from an area in the plant. The OSC will determine the boundaries that define the area. Refer to Attachment 2 for zone descriptions.

ATTACHMENT 2

MUSTER POINTS, ZONES AND BUILDING ASSEMBLY AREAS

A member of the Emergency Response Team (ERT) will report to the Muster Point in the affected Zone during an incident and assist with personnel accountability. The ERT representative will have communications with the IC/OSC and will relay information to personnel at the Muster Points.

MUSTER POINTS

All Muster Points will be located on the perimeter of the site. Recognized evacuation routes are established roadways. Remember to yield to emergency response traffic.

East Plant

- 1 South of the Medical Building
- 2 Gate 42 (Northeast corner of the refinery/contractor gate)
- 3 Gate 38 (Ave. I and East 9th)
- 4 Gate 197 (Ave. N and East 7th)
- 5 Gate 20 (South entrance into the Chemical Plant)

West Plant

- 6 29th Street Gate (Ave. B and West 5th)
- 7 Grant Ave. Gate (Ave. F and West 7th) Currently Muster Point #10
- 8 Gate 16 (Ave. K and West 6th)
- 5 Gate 20 (South entrance into the Chemical Plant)

Chemical Plant

- 9 Gate 11 (North entrance into the Refinery)
- 10 Chemical Plant Main Gate (West of the gate – Current Muster Point #28)
- 11 Gate 7 (Ave. F and North 11th)

Chemical Docks

- 12 East gate
- 13 West gate

Refinery Docks

- 14 Dock 32 Main Entrance (top of the hill)
- 15 Dock 37 (outside Dock 37 on road)

NOTE: Temporary Muster Points or Building Assembly Areas for TAR and/or major capital project are allowed by following the MOC process.

ZONES

The Texas City Site has been divided into four zones for the purpose of evacuation and/or shelter-in-place during emergency incidents.

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East Plant

All locations within the refinery East of Main Street. At Main Street and Ave. J the line will move to West 1st Street and then south to Ave. N.

West Plant

All locations within the refinery West of Main Street. At Main Street and Ave. J the line will move to West 1st Street and then south to Ave. N

Chemical Plant

All areas within the fence line of the Chemical Plant.

Chemical and Refinery Docks

The Chemical and Refinery docks are self defining.

BUILDING ASSEMBLY AREAS

Refinery Buildings

<u>Building</u>	<u>Assembly Area</u>
ACF WHSE	South West of OSUE Bldg.
Analyzer Bldg.	W. of Analyzer Bldg.
CDC	Parking Lot W. of CDC
CDCC	Parking Lot South of CDCC
Craft Bldg.	Parking lot North of WHSE
Garage	Garage Parking Lot
GOB	Parking lot South side GOB
LAB	Parking lot NW of LAB
Medical	Parking lot West of Medical
NOB	Parking lot South side GOB
OSUE Bldg.	South West of OSUE Bldg.
Shops	Parking lot South of Shops
SOB	Parking lot West of SOB
WHSE	Parking lot North of WHSE

Chemical Plant Buildings

<u>Building</u>	<u>Assembly Area</u>
Administration Bldg.	Parking lot S. of Admin. Bldg.
Carpenter Shop	East side of Maint. Lunchroom
Central Control Bldg.	Parking lot SE of Central Control Bldg.
Maintenance Shop/Warehouse	East side of Maint. Lunchroom
Operations Bldg.	Parking lot E. of Operations Bldg.
Poly B Office Building	Parking lot SE of Central Control Bldg.
PX-2 Maint. Shop	Gate #7
Tool Room Next to PX-3	Parking Lot E. of Operations Bldg.

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ATTACHMENT 3

SHELTER-IN-PLACE LOCATIONS

The following can be used as shelter-in-place locations:

Chemical Plant

Administration Building
Operations Building
Maintenance Building (designated areas only; refer to posted building diagram)
Central Control Building

Unit Control Rooms

No. 1 Paraxylene Unit Control Room (MCC not included)
No. 2 Paraxylene Unit/No. 1 Metaxylene Control Room
No. 3 Paraxylene Unit/No. 2 Metaxylene Control Room
Satellite PCU Control Room
Styrene Unit Control Room (includes MCC)
Dock House (downstairs restroom included)
Utilities Control Building

REFINERY

General Office Building
North Office Building
Medical Building
South Office Building
Main Warehouse - Safety Equipment Area only
Central Shop - First Floor office and Change rooms excluding hallways
Craft Training Building - Training Classroom 6 and two Building Maintenance rooms only
Garage - Lunchroom only
Main Gate
Analyzer Building – Excluding the open-bay shop areas
Laboratory
Fire Station - Office and Bunker Room

Unit Control Rooms

Cracking Division Control Center (CDCC)
FCCU#2
FCCU#3
Alky#2/Acid Plant
Alky#3
SRU
Cokers/RDU
PS #A/B
RHU Shelter

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Crude Control Center (RHU/CFHU)
Power Station #2
AU2/NDU/ISOM
UU #3/ARU/ULC
UU #4/DDU
ULC shelter
WIF
Oil Movements Control Center (OMCC)
Dock Supervisor Office and Dock Houses at each dock
Environmental Facility

Shelter-in-place facilities will meet the following requirements:

1. Ventilation/air conditioning systems or other systems that would force or induce outside air into the building must shut down. This will include the closing of dampers in outside air intakes. Some buildings re-circulate indoor air, while others have air-handling systems which shut down entirely.
2. Doors and windows must close and be able to maintain an adequate seal to minimize leakage.
3. An appropriately labeled switch must be available to occupants, which activates the shelter-in-place facility (outside air isolation) systems. In addition to the local switches, the General Office Building at the Refinery and Operations Building at the Chemical Plant have remote switches that can be activated by the Main Gate.
4. Building Monitors and alternates will be identified for each shelter-in-place facility. Supervisors of the area will serve as Building Monitors for the operating and maintenance buildings. The office buildings, (GOB, NOB, SOB, Medical, Administration Building, Operations Building, Maintenance Building, and Central Control Building) and unit control rooms, will have designated persons. The monitors should be familiar with the emergency response, evacuation and shelter-in-place procedures. Facilities and Services will be responsible for testing and maintaining the shelter-in-place facility systems on at least a monthly basis.
5. A site radio must be available in each shelter-in-place facility to receive emergency messages. The radio should be monitored immediately after any emergency alarm is sounded, as it will be used to communicate information regarding the incident.
6. Each shelter-in-place facility must have a building-specific, shelter-in-place procedure. For operating units, this procedure can be included in the Standard Operating Instructions covering unit emergency action plans. The shelter-in-place procedure should include a description of the building's shelter-in-place systems, a method to account for personnel, activation of the system, verification of system operation, a site plot plan, and intra-building communication of emergency information. The Building Monitor will be responsible for maintaining an up-to-date procedure.

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7. Sketches of each shelter-in-place building will be posted within the building. These sketches should identify the shelter-in-place areas within the building as well as all exits from the building in the event an evacuation is initiated.
8. In addition to the requirements above, unit control rooms must have emergency response equipment (i.e., chemical suits (where applicable), 30-min. SCBA's, 5-min. escape packs, supplied-air respirators, etc.).

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