



Invasive Work RAM Score \_\_\_\_\_

# SAFE WORK PERMIT

Galveston Bay Refinery

Permit No.:

## SECTION I - WORK AUTHORIZATION

Date: \_\_\_\_\_  
Time Issued: \_\_\_\_\_  A.M.  P.M.  
Time Expires: \_\_\_\_\_  A.M.  P.M.  
Permit Extended Until: \_\_\_\_\_  
Operator Relief Change:  
Name \_\_\_\_\_ Time \_\_\_\_\_

**Required Permits**  
 Cold Work  
 Hot Work  
 Confined Space Entry

**Permit User Representatives:**  
By signing this permit you are indicating that all workers covered by the permit have properly logged into the process area, and the contents of the permit will be communicated to them.  
**MPC Permit Writer:**  
By signing this permit you are indicating that the joint jobsite visit has been performed if applicable.

**Additional Forms** (Competent Person May Be Required)  N/A  
 Cutting Equipment  
 Excavation/Trenching  
 Hydro Blasting  
 Lead Removal  
 Critical Lift  
 Mobile Work Platform  
 Potential Asbestos Containing Material Removal  
 Supplied Airline Work  
 Expandable Plugs  
 Grating/Decking/Floor/Handrail Removal Form  
 Surface Prep on Live Equip  
 In-service Welding/Hot Tapping  
 Temporary/In-Service Repair  
 Vac/Pneumatic Truck  
 Exception/Variance #: \_\_\_\_\_  
 Other: \_\_\_\_\_

## EMERGENCY CONTACTS

Phone No.: **1911 or 1765**  
Radio: **Emergency Button**  
**\*Contact Owing Dept. in an emergency as well.**  
Owning Department Channel: \_\_\_\_\_  
Other Channel (if applicable): \_\_\_\_\_

## JOB INFORMATION

Exact Location: \_\_\_\_\_ (Unit Area, Equipment No., Etc.)  
Authorized Company/Contractor and Crafts: \_\_\_\_\_ (Company/Contractor and Crafts)  
Work Description (Purpose): \_\_\_\_\_  
Joint Job Site Visit Complete? (All blue lettered text items must be considered prior to work)  Yes  N/A (Not Required) Post Joint Job Site Visit Required?  Yes  No  
Potential Hazards/Chemicals: (SDS available upon request) \_\_\_\_\_ (Describe)  
Unit Process Safety Overview Required:  Yes  N/A

## JOB SITE PREPARATION (Check appropriate boxes) (\*See Section I - Job Site Preparation note on back to define an intrinsically safe device.)

**Equipment Lines/Valves**  
 Bleeder/Vents Tagged Open  
 Blinded  
 Closed Locked/Tagged  
 Drained & Depressured  
 Flushed and Cleaned  
 Disconnected  
 Pneumatic Energy Blinded  
 Blocked/Closed  
 Neutralized (list chemical)  
 Steam Tracing Not Isolated  
 Purged With (list): \_\_\_\_\_

**Vessels/Tanks**  
 Adequate Ventilation  
 Radiation Sources Removed or Isolated  
 Washed  
 Steamed  
 Neutralized (list chemical)

**Lockout/Tagout**  
 All Energy Sources Isolated  
 Keys Secured Inside Lockbox No.: \_\_\_\_\_  
 Owner's Lock Attached to Lockbox  
 Servicing Group's Lock(s) Attached to Lockbox  
 Battery Limit LOTO  
 Equipment Not Isolated  
 Not Applicable

**Electrical**  
 Electrical Equipment Still Energized  
 Power Feed LOTO & Tested (push start button)  
 Electrical Leads Disconnected  
 Fuses Pulled  
 12-Volt Lighting  
 110-Volt Lighting  
 GFCI Required  
 Proper Grounding/Bonding  
 Electrical Tracing Not Isolated

**General**  
 Other Work in Close Proximity  
 No Venting or Draining in Area  
 Hazards Signs Posted  
 Barricaded with tags on each side  
 JSA Completed and Attached  
 Closest Eyewash/Safety Shower Location: \_\_\_\_\_  
 Muster Point(s) and Wind Direction: \_\_\_\_\_  
 Hydrant Use Location (Requires PWR2/FD approval and ASM)  
 Discuss Multi-Craft Hazards  
 Non-Sparking Tools  
 X-Ray Precautions

Lead/Asbestos Tested  
 Adjacent Areas or Complexes Contacted  
 Other Precautions: \_\_\_\_\_

## PERSONAL PROTECTIVE EQUIPMENT & RELATED REQUIREMENTS Minimum Requirements: Eye protection with side shields, hearing protection, hard hat, personal H<sub>2</sub>S monitor, goggles (on Hard Hat), safety-toed footwear, and fire-retardant clothing are required to enter any process unit, tank dike or dock area. (\*See Section I - Personal Protective Equipment & Related Requirements note on back.)

**Additional PPE**  
 Double Hearing Protection  
 Goggles (worn)  
 Face Shield  
 Fall Protection  
 Gloves: \_\_\_\_\_  
 Boots: \_\_\_\_\_  
 Metatarsal Guards

Disposable Coveralls  
 High Visibility Clothing/Vest  
 FR Rain Suit  
 Asbestos PPE  
 Welders PPE  
 Electrical PPE (list class): \_\_\_\_\_  
 Chemical Clothing (list class): \_\_\_\_\_  
 Other: \_\_\_\_\_

**Chemical/Alky PPE**  
 Class A  
 Class B  
 Class C  
 Class D  
Notes: \_\_\_\_\_

**Supplied Air Respirators**  
 Sandblasting Hood  
 SCBA  
 Airline with Egress Bottle  
 Supplied Air 1/2 Mask  
 Bottle Watch Required (name listed on back)  
 Other: \_\_\_\_\_

**Cartridge Respirators**  Half Face  Full Face  
 Organic Vapor (e.g., Benzene)  
 Acid/Gas (e.g., SO<sub>2</sub>)  
 Particulate P-100 (e.g., Asbestos, Weld Fume, Lead, Silica)  
 Multi-Gas (e.g., Benzene, SO<sub>2</sub>, Ammonia)  
 Other: \_\_\_\_\_

**Minimum Respirator Requirements**  
Benzene:  
<0.5 ppm - No Respirator Required  
0.5-9.9 ppm - Half Face Piece  
10-50 ppm - Full Face Piece  
>50 ppm - Supplied Air Respirator  
H<sub>2</sub>S: >10 ppm - Reference H<sub>2</sub>S Policy  
CO: >25 ppm - Supplied Air Respirator

## SECTION II - HOT WORK N/A (\*See Section II note on back.) Fire Watch with Vest Required No Yes - Name identified on reverse side.

Safer Work Location Considered and Work Moved If Possible  
 Torch  
 Vehicle/Mobile Equipment  
 Welding  
 Electric Powered Tool  
 Battery Powered Tool  
 Pneumatic Impact Wrench  
 Welding Blanket or Shield (100% Spark Containment)  
 Sewers, Manholes and Vent Pipes within 35 Feet Covered/Sealed  
 Combustibles within 35 Feet Removed/Protected  
 No. of Attendants with Vests Required: \_\_\_\_\_ (name(s) written on back)  
 Charged Water Hose  
 Portable Fire Extinguisher  
 Continuous LEL Monitor  
 Fire Watch Required for 30 Minutes After Hot Work  
 Communication Procedure Established  
 Other: \_\_\_\_\_

## SECTION III - CONFINED SPACE PRECAUTIONS N/A Rescue personnel, air siren/radio, attendant(s) with vest, safety harnesses/life lines (unless life line waived by MPC Safety Dept.), and continuous air monitoring are always required in any confined space. Confined space entry status signage must be posted at any confined space's entry points.

Temperature (< 110°F)  
 Confined Space Reference Sheets Posted (if applicable)  
 Confined Space Hazards Discussed  
 Signs Posted  
 Forced Air Ventilation Required (grounded & bonded)  
 Vessel-specific Rescue Plan Required  
 Tripod & Winch (vertical entry > 5 feet)  
 Coordinate Multi-Craft Work  
 Inert Entry  
 Excavation(s) Greater Than 4 Feet  
 Ventilation Plan, if Welding (2000 cfm/welder or airline)  
 No. of Attendants with Vests Required: \_\_\_\_\_ (name(s) written on back)  
 Continuous Air Monitoring Device  
 Air Siren/Radio  
 Communications Procedures (Voice/Visual, Radio)  
 Temporary Connections have been Disconnected (except for N2 during Inert Confined Space Entry)  
 Explosion Proof Lighting Required  
 Safety Harness  
 Life Line  
 Safety Harness Waived by Safety Dept. (If yes, see CSE Tracking Log)  
 Life Line Waived by Safety Dept. (If yes, see CSE Tracking Log)  
 Other: \_\_\_\_\_

## SECTION IV - ATMOSPHERIC MONITORING N/A (\*See Section IV - Atmospheric Monitoring note on back.) Hot Work or Confined Space Entries shall begin within 2 hours of the initial gas check. A re-check is needed for work starting more than 2 hours past the initial gas check. Additional gas checks must continue to be taken at the job site and recorded at mid-shift on hard copy (minimum).

Time						
Oxygen (19.5 - 23.5%)	%	%	%	%	%	%
HW=0-10% LEL HW(CSE)=0% LEL	%	%	%	%	%	%
CO (<25 ppm)	ppm	ppm	ppm	ppm	ppm	ppm
H <sub>2</sub> S (<10 ppm)	ppm	ppm	ppm	ppm	ppm	ppm
Temperature (<110°F)	°F	°F	°F	°F	°F	°F
Benzene (<0.5 ppm)	ppm	ppm	ppm	ppm	ppm	ppm
Other: (< _____)						
Equipment No.:						
Last Calib. Date:						
Initials:						

**CONTINUOUS GAS/TOXICITY MONITORING REQUIRED**  Yes  No  
(Continuous monitoring is required in all confined spaces and most instrument analyzer buildings and all attended HW within 35 ft. of live process.)  
If Yes, check contaminant(s)/hazard(s) below:  
 Four-Gas Monitoring: O<sub>2</sub>, LEL, CO & H<sub>2</sub>S  
 Temperature Monitoring  
 Indicate exact location of sample point: \_\_\_\_\_  
 Other (list): \_\_\_\_\_

Other: (< \_\_\_\_\_)  
Other Permit Requirements, Precautions, or Notes: \_\_\_\_\_

**THIS PERMIT REFLECTS CONDITIONS AT THE TIME OF ISSUANCE. IF CONDITIONS CHANGE, STOP WORK AND NOTIFY THE OWNING DEPARTMENT.**

## SECTION V - REQUIRED SIGNATURES

Responsible Person	Print Name	First Signatures	Print Name	Work Extension Signature	SIGNATURE MATRIX				
					Cold Work	Hot Work	CSE	Excavations < 4' Deep	Excavations > or = 4' Deep
MPC Permit Writer					X	X	X	X	X
MPC Owning Department Supervision/Designee						X <sup>4</sup>	X <sup>3</sup>		X <sup>3</sup>
Permit User Representative					X	X	X	X	X
Permit User Supervisor/Designee						X <sup>4</sup>	X <sup>3</sup>		X <sup>3</sup>
MPC Contractor Coordinator							X <sup>2</sup>		X <sup>2</sup>
MPC/Contractor Competent Person								X	X
MPC Safety Representative							X <sup>3</sup>		X <sup>3</sup>

X<sup>2</sup>=Required if Contractor Involved and Initial Entry Only X<sup>3</sup>=Initial Entry Only X<sup>4</sup>=Required if burning, welding, or performing attended hot work on any lines and operating equipment not established as gas free

## SECTION VI - ADDITIONAL SIGNATURES Additional Permit User Representatives' Signatures are recorded after JJSV (when required) is completed to certify requirements specified have been communicated.

Name:	Craft:	Time: In	Out	Name:	Craft:	Time: In	Out

## SECTION VII - RETURN OF EQUIPMENT/WORK AREA - JOB COMPLETENESS

Communicate the status of the job to the Owning Department before signing off. The Owning Department reserves the right to request a Post Job Site visit.

Job Status:  Complete  Incomplete  Ongoing  
Personal & Craft Locks Removed?  Yes  No  N/A  
Cleanup Complete?  Yes  No  
Comments left in Debriefing Section (back)?  Yes (req'd for CS entry)  No  N/A  
Permit User Signature: \_\_\_\_\_ Time: \_\_\_\_\_  A.M.  P.M.  
 Post Joint Job Site Visit Completed (if requested by Owning Department)  
 Acceptance Denied. Reasoning: \_\_\_\_\_  
Owning Dept. Signature: \_\_\_\_\_ Time: \_\_\_\_\_  A.M.  P.M.

**INSTRUCTIONS TO COMPLETE THE WORK PERMIT**

"SG (Servicing Group)" or "OD (Owning Department)" are listed next to each section. This indicates responsibility for these sections of the permit.

<p><b>SG</b></p> <p><b>SG</b></p> <p><b>SG</b></p> <p><b>OD</b></p> <p><b>SG</b></p> <p><b>SG/OD</b></p> <p><b>OD</b></p> <p><b>OD</b></p> <p><b>OD</b></p> <p><b>SG/OD</b></p> <p><b>SG</b></p> <p><b>SG/OD</b></p> <p><b>OD</b></p> <p><b>SG/OD</b></p> <p><b>OD</b></p> <p><b>SG/OD</b></p> <p><b>OD</b></p> <p><b>SG</b></p> <p><b>SG/OD</b></p> <p><b>SG/OD</b></p> <p><b>OD</b></p>	<p><b>SECTION I - WORK AUTHORIZATION</b></p> <p>A. DATE: Enter the date the work is to begin.</p> <p>B. TIME ISSUED: Enter the time that the work is authorized to begin.</p> <p>C. TIME EXPIRES: Enter the time at which the permit expires.</p> <p>D. PERMIT EXTENSION: Enter permit extensions. If the original operator on shift is relieved then the relieving operator shall sign both copies of the permit. A determination as to the need for additional gas testing or revalidation is required.</p> <p>E. WORK ORDER NUMBER: Enter the work order number (if applicable).</p> <p>F. REQUIRED PERMITS: Check the appropriate box to identify applicable required permits.</p> <p>G. OPERATOR RELIEF CHANGE: Identify operator relief change as appropriate.</p> <p>H. ADDITIONAL PERMITS OR COMPETENT PERSONS: Check the appropriate box(es) to identify additional permits that must be attached to the hard copy of the permit.</p> <p>I. EMERGENCY CONTACTS: Enter emergency contact information. List Confined Space Rescue Team (if applicable) and their respective radio channels.</p> <p>J. EXACT LOCATION: Identify precisely where the permitted work is to be performed (i.e., unit area, equipment number, etc.).</p> <p>K. AUTHORIZED COMPANY/CONTRACTOR AND CRAFTS: Enter the name and craft of the company/contractor being given authorization to perform the work.</p> <p>L. WORK DESCRIPTION: List the specific work description of the work being authorized by the permit.</p> <p>M. JOINT JOB SITE VISIT: Check to indicate if a joint job site visit is completed/required. All blue lettered text items on permit must be considered prior to work.</p> <p>N. POTENTIAL HAZARDS/CHEMICALS: Identify all potential hazards and/or chemicals that may be encountered.</p> <p>O. JOB SITE PREPARATION: Check the appropriate boxes to indicate which preparatory actions have been taken to ensure that the equipment is ready for the work to be performed. Electricians should sign permit if performing a rack out or rack in. List any neutralizing chemicals used in the Potential Hazards/Chemicals Section.</p> <p><u>*Intrinsically Safe Device:</u> Electronic devices that are clearly identified as intrinsically safe with factory labeling as "Intrinsically Safe" or Explosion Proof" or labeled as approved for use in hazardous locations rated as Class I, Division I or II. Devices not identified as such will be treated as non-intrinsically safe, and are not allowed anywhere in the refinery except: roadways normally opened to traffic; office buildings, office trailers, warehouses, guard houses, maintenance shops, control rooms; external parking lots; and inside enclosed vehicles while the vehicle is stopped on roadways normally opened to traffic or parking lots.</p> <p>P. PERSONAL PROTECTIVE EQUIPMENT (PPE) &amp; RELATED REQUIREMENTS: Check the appropriate boxes to indicate which types of personal protective equipment must be worn in order for the job to be performed safely. Check multiple cartridge respirators if required (i.e. Multi-gas AND particulate to protect user from both hazards). Refer to the unit PPE matrix for specific requirements, as applicable.</p> <p>Q. PERSONAL PROTECTIVE EQUIPMENT (PPE) &amp; RELATED REQUIREMENTS: Check the appropriate boxes to indicate which types of personal protective equipment must be worn in order for the job to be performed safely. Check multiple cartridge respirators if required (i.e. Multi-gas AND particulate to protect user from both hazards).</p> <p><b>SECTION II - HOT WORK</b></p> <p>Check the appropriate box to indicate the type of hot work to be performed and the fire prevention requirements.</p> <p><u>*When hot work is performed in a confined space utilizing cutting torches or inert gases, and the work is stopped and the space vacated for more than 15 minutes, the torches and hoses (oxygen, acetylene, propane, argon, etc.) must be removed or the hoses disconnected from the regulators.</u></p>	<p><b>OD</b></p> <p><b>OD</b></p> <p><b>SG/OD</b></p> <p><b>SG</b></p> <p><b>SG/OD</b></p> <p><b>SG</b></p> <p><b>SG/OD</b></p>	<p><b>SECTION III - CONFINED SPACE PRECAUTIONS</b></p> <p>Check the appropriate boxes to indicate precautions that must be taken to ensure the confined space entry may be performed safely as per Refining Standard Practice -1127.</p> <p><b>SECTION IV - ATMOSPHERIC MONITORING</b></p> <p>Test results and the time taken shall be recorded in the appropriate sections and initialed by the person making the test. Record instrumentation identification number and date of last calibration. Check the box indicating whether or not atmospheric testing must be continuous. Conditions that require continuous monitoring include those identified in the Refining Standard Practice - 1127, Confined Space Entry.</p> <p><u>*If the LEL atmospheric concentration exceeds 0% (for non-confined space entry jobs only), the permit writer must describe the source of the flammable vapors and the control strategy in the "Other Permit Requirements, Precautions, or Notes," section on the front of this permit.</u></p> <p><b>SECTION V - REQUIRED SIGNATURES</b></p> <p>Obtain signatures from all applicable personnel as indicated to validate the conditions specified on the permit. Signatures should only be recorded after the joint job site visit has been completed.</p> <p><b>DEFINITIONS:</b></p> <p><b>MPC Permit Writer:</b> member of the MPC Owning Department who writes the permit. For non-process related construction the Construction Manager or Construction Supervisors will act as the Permit Writer.</p> <p><b>MPC Owning Department Supervision/Designee:</b> MPC Owning Department's Supervision; typically a Shift or Unit Supervisor. For non-process related construction the Construction Manager will act as the Owning Department Supervisor.</p> <p><b>Permit User Representative:</b> member of the servicing group who will be working from the permit or supervising the personnel working on the permit.</p> <p><b>Permit User Supervisor/Designee:</b> the person to whom the servicing group directly reports.</p> <p><b>MPC/Contractor Competent Person:</b> MPC person or Contractor who can identify existing and predictable hazards in and around the excavation, and who has the authority to take prompt and corrective measures to eliminate them. This person has also received specialized training to identify hazards associated with excavations, shoring and trenching.</p> <p><b>MPC Safety Representative:</b> a MPC (or MPC directly supervised) Safety Professional.</p> <p><b>SECTION VI - ADDITIONAL SIGNATURES</b></p> <p>Obtain signatures from all Permit User Representatives who have personnel working under the permit. All companies, crafts, or crews working under this permit need to have a representative signed in this section certifying that the requirements specified on the permit have been effectively communicated to members of their respective company, craft, or work crew. Signatures are required after the joint job site visit has been completed.</p> <p><b>SECTION VII - RETURN OF EQUIPMENT/WORK AREA - JOB COMPLETENESS</b></p> <p>Check the appropriate boxes to indicate the status of the job at the conclusion of the work permit. Indicate if the cleanup is completed. Indicate LOTO removal. Indicate whether there were problems associated with work or confined space entry and note any issues in the Debriefing Section at the bottom of this side of the permit. Obtain signatures from the servicing representative(s) and owning department to certify that the permit has been terminated. Record the time of signatures. Archive the Work Permit in accordance with the company's records retention policy. Account for any problems encountered. The Owning Department can deny the returned area or equipment if the permit's hard copy was not returned, if proper housekeeping did not occur, or for other significant problems with the permit.</p>
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**CONFINED SPACE ENTRANTS LOG** (Any supplemental logs must be turned in with Permit.)  Additional Entrants Log was used.

NAME	COMPANY	DATE	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT

**CONFINED SPACE ENTRY SUPERVISOR** (Transfer of entry supervisor duties must be logged below.)

PRINT NAME	SIGNATURE	COMPANY	DATE	ON	OFF	ON	OFF	ON	OFF

**FIRE WATCH, BOTTLE WATCH AND CONFINED SPACE ATTENDANT\*** Attendants: Identify any issues associated with work or confined space entry in the section below.

NAME	COMPANY	BOTTLE WATCH	FIRE WATCH	CONF. SPACE ATTENDANT	DATE	ON	OFF	ON	OFF	ON	OFF	ON	OFF

**\*Confined Space Attendant to place signage over manways when no attendant is on duty.**  
**\*\*Fire watch verifies that he/she remained on-site or was replaced by another fire watch for 30 minutes after the last spark was thrown at any breaks, lunch, and at job's end.**

**SERVICING REPRESENTATIVE DEBRIEFING NOTES** (If applicable, required for Confined Space Entries.)

**Attended hot work, fresh air work, or confined space entry never occurred during the permitted work scope.** (List reasoning below.)

Other problem encountered (Explain below.)

COMPANY/CRAFT	COMMENTS
	<input type="checkbox"/> No problems encountered during entry