



# CONFINED SPACE ENTRY PERMIT

## Confined Space Entry Program, Appendix C

PERMIT No. \_\_\_\_\_

### CONFINED SPACE IDENTIFICATION

*Section to be completed at the direction of the Equipment Owner or Entry Supervisor*

<b>Identification</b>	Facility / Area:		<b>Duration</b>	<b>Valid 1 shift up to 12 hours maximum</b>		<b>Work</b>	Mosaic Contact Info	
	Location:			Date:			Issued To:	
	Vessel or Equip. Name			Start Time:			Work To Be Performed:	
				End Time:				

### ACCEPTABLE ENTRY CONDITIONS

		Section to be completed by the Equipment Owner or Entry Supervisor and reviewed by the Work Group Representative			Field Verification			
		Y	N	N/A	Y	N	N/A	
<b>Lockout / Isolation</b>	1.	Entry is being performed by personnel familiar with plant operations and trained in Confined Space Entry? <b>IF YOU CANNOT ANSWER YES, STOP PERMIT PROCEDURE.</b>			<input type="checkbox"/>			
		2.	<input type="checkbox"/> Check if Single source of energy. <i>List single source equipment de-energized and locked out:</i> If <b>NOT</b> single source of energy: <input type="checkbox"/> <b>Attached</b> Approved equipment specific written LOTO procedure/checklist? <input type="checkbox"/> <b>Attached</b> Approved variance if deviation from equipment specific written LOTO procedure/checklist required? <input type="checkbox"/> <b>Attached</b> Approved non-routine LOTO procedure/checklist if no procedure exists?			<input type="checkbox"/>		<input type="checkbox"/>
		3a.	Are there interlocks that would allow the equipment to operate? If yes, list or attach steps taken to ensure field test has confirmed energy isolation.			<input type="checkbox"/>		<input type="checkbox"/>
		3b.	<input type="checkbox"/> Control room and <input type="checkbox"/> Field/remote start / stop switches tried? <b>Print names of personnel who tried remote and/or control room start / stop switches: Equipment Owner(s):</b> <b>Work Group Representative(s):</b>			<input type="checkbox"/>		<input type="checkbox"/>
	4.	Mechanical equipment is secured, blocked, to prevent movement?			<input type="checkbox"/>		<input type="checkbox"/>	
	5.	Material lines and material flows (granular materials, rock, rock slurry, etc.) are secured?			<input type="checkbox"/>		<input type="checkbox"/>	
	6.	Radioactive sources have been secured by qualified personnel?			<input type="checkbox"/>		<input type="checkbox"/>	
<b>Haz Mat</b>	7.	Hazardous Material lines are secured with (select one of the following): <input type="checkbox"/> Disconnected <input type="checkbox"/> Double block/bleed <input type="checkbox"/> Blinded <input type="checkbox"/> Other			<input type="checkbox"/>		<input type="checkbox"/>	
	8.	Confined Space cleaned of all hazardous materials? If not, what does it contain? _____			<input type="checkbox"/>	<input type="checkbox"/>		
<b>Additional Precautions</b>	9.	Dangerous overhead buildup removed or other precautions taken to protect entrants? If no, obtain additional approval from site EHS and document mitigating actions.			<input type="checkbox"/>	<input type="checkbox"/>		
	10.	Openings are physically guarded to prevent people / foreign objects falling into the Confined Space?			<input type="checkbox"/>		<input type="checkbox"/>	
	11.	Precautions are taken to protect any fall hazards that may be created during the work in the Confined Space?			<input type="checkbox"/>		<input type="checkbox"/>	
	12.	Confined space manways or openings that are intended for entry / exit are identified and unobstructed?			<input type="checkbox"/>		<input type="checkbox"/>	
	13.	Lighting is adequate for work being performed?			<input type="checkbox"/>		<input type="checkbox"/>	
	14.	Lighting & electrical equipment are either low voltage or protected by ground fault protectors?			<input type="checkbox"/>		<input type="checkbox"/>	
	15.	Heat Stress potential has been evaluated and controlled as necessary to ensure vessel temperature is below 120F?			<input type="checkbox"/>		<input type="checkbox"/>	
	16.	Natural ventilation is adequate for the type of work to be performed or adequate mechanical ventilation provided?			<input type="checkbox"/>		<input type="checkbox"/>	
	17.	Scaffolding constructed specifically for task provides safe access and has current inspection on the scaffold tag?			<input type="checkbox"/>		<input type="checkbox"/>	
	18.	Flammable/combustible materials used during work are controlled to prevent hot work exposure? (Barricade/Signs/Attendant)			<input type="checkbox"/>		<input type="checkbox"/>	
<b>Hot Work</b> <input type="checkbox"/> NA <input type="checkbox"/> Check applicable box	19.	Health risk and precautions associated with hazardous materials (e.g. lead, Hex Cr., asbestos, etc.) have been identified and addressed? If no, obtain additional approval from site EHS and document mitigating actions.			<input type="checkbox"/>	<input type="checkbox"/>		
	20.	5 foot or greater vertical entry; sloping floors, converging surfaces, or engulfment hazards such that an entrant can be trapped or asphyxiated are controlled?			<input type="checkbox"/>		<input type="checkbox"/>	
		21.	Is hot work to be performed in the confined space? If yes, complete hot work questions below. Verify area within 35 ft of routine hot work, including cracks, openings and holes where sparks may ignite materials, has been inspected, evaluated, and proper controls in place for fire risk? Fire protection equipment at the work site is adequate to handle emergencies or additional equipment is provided? List equipment available: _____ <input type="checkbox"/> High Risk Hot Work – Extended Fire Watch Required? <input type="checkbox"/> Continuous fire watch posted, instructed in duties and required to remain at job site during the work and for <b>60</b> mins after completion of the activity? <input type="checkbox"/> <b>60-minute</b> intermittent monitoring completed? <b>Fire Watch name and signature</b> _____			<input type="checkbox"/>	<input type="checkbox"/>	
			<input type="checkbox"/> If potential for combustibles or flammables vapors, atmospheric testing completed and documented in testing section #23? (NOTE: High Risk Hot work LEL shall be <1%) <b>Fire Watch Verification completed Supervisor or Designee name and signature</b> _____			<input type="checkbox"/>		<input type="checkbox"/>
<b>PPE</b>		If hot work is elevated, verify area within 50 feet horizontally and 5 feet vertically including cracks, openings and holes where sparks may ignite materials, has been inspected, evaluated, and proper controls in place for fire risk. Verify area has been evaluated for precautions to be taken such as relocating, shielding, covering, shutting down, or wetting down including all conditions listed below: <ul style="list-style-type: none"> <li>• Walls, ceilings, floors or partitions having combustible construction or coverings</li> <li>• Combustible materials on floors</li> <li>• All combustible or flammable vapors or gases</li> <li>• Ducts or conveyors that may convey sparks to other locations</li> <li>• Metal material or pipes that may transmit heat</li> <li>• Prohibited areas</li> </ul>			<input type="checkbox"/>		<input type="checkbox"/>	
	22.	Is additional PPE required to protect the entrants from hazards? Identify the additional PPE: <input type="checkbox"/> fall protection <input type="checkbox"/> respiratory protection <input type="checkbox"/> acid gloves <input type="checkbox"/> mono-goggles <input type="checkbox"/> burning / welding gear <input type="checkbox"/> acid jacket <input type="checkbox"/> encapsulated hood <input type="checkbox"/> face shields <input type="checkbox"/> rubber boots <input type="checkbox"/> acid pants <input type="checkbox"/> body harness (required) <input type="checkbox"/> full acid suit <input type="checkbox"/> hi temp acid suit (HRS) <input type="checkbox"/> other _____			<input type="checkbox"/>	<input type="checkbox"/>		
	23.	Initial atmospheric testing has been completed and levels are acceptable (per table below)? (NOTE: Initial atmospheric testing is required before entry into confined space.) Is continuous atmospheric testing required to ensure safe levels? Reference Appendix D for guidelines.			<input type="checkbox"/>	<input type="checkbox"/>		
<b>Atmospheric Testing</b>	Instrument serial no.:		Calibration current: <input type="checkbox"/> YES <input type="checkbox"/> NO		Functional Test: <input type="checkbox"/> Passed			
	<b>Contaminant</b>	<b>Acceptable range</b>	<b>Tests Needed</b>	<b>Reading / time</b>	<b>Reading / time</b>	<b>Reading / time</b>	<b>Reading / time</b>	<b>Reading / time</b>
	oxygen (O <sub>2</sub> )	19.5 –23.5%	Required					
	flammable / combustible	Less than 10% LEL	Required					
	ammonia (NH <sub>3</sub> )	25 PPM max.	<input type="checkbox"/>					
	carbon monoxide (CO)	35 PPM max.	<input type="checkbox"/>					
	hydrogen sulfide (H <sub>2</sub> S)	10 PPM max.	<input type="checkbox"/>					
	sulfur dioxide (SO <sub>2</sub> )	2 PPM max.	<input type="checkbox"/>					
nitrogen dioxide (NO <sub>2</sub> )	1 PPM max.	<input type="checkbox"/>						
Other: _____		<input type="checkbox"/>						
Atmosphere tested by (initial all tests): _____								

**My signature means that I have personally inspected and/or verified all items in the Confined Space Identification and Acceptable Entry Conditions sections above and that all specified precautions are complete.**

