

# **Permit-Required Confined Space Entry Program**

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# Training Requirements

All personnel assigned to a permit-required confined space entry at SSC, regardless of their job task, must be trained for confined space entry. This includes entrants, attendants, entry supervisors, and rescue personnel. It is the responsibility of the employer to provide ***proof of training and certification*** prior to any entries.

**NO EXCEPTIONS TO THIS  
REQUIREMENT!**

# What is a Confined Space?

A space that is:

- Large enough to enter and perform work
- Limited in the way of entry or exit
- Not designed for continuous occupancy

**It Must Be All 3 to be a confined space**



# Examples of Confined Spaces

- Tanks
- Utility Manholes
- Boilers
- Furnaces
- Sewers
- Silos
- Hoppers
- Trenches
- Vaults
- Pipes
- Tunnels
- Ducts
- Bins
- Pits

# What is a Permit-Required Confined Space?

A Confined Space that contains one or more hazards:

- Actual or potential hazardous atmosphere
- Materials that could engulf entrant
- Internal shape that could trap entrant
- Other serious hazards



# What Is A Reclassified Confined Space?

**A Permit-Required Confined Space may be reclassified (downgraded) to a non-permitted confined space by the Cognizant Safety Organization if:**

- The Permitted Space does not pose any atmospheric hazards
- Any other hazards are eliminated (not just controlled) without entry.

The space may be entered without a permit after reclassification.

# Hazard Elimination vs. Hazard Control

- There is a significant difference between **“Hazard Elimination”** and **“Hazard Control”**.
- If the space contains no hazards, an entrant is in no danger.
- If hazards are controlled rather than removed, an entrant could be in danger upon failure of a control system.
- Simply controlling hazards does not meet the criteria for reclassification.

# Permitted Space Reclassification

The form used is SSC-821, filled out  
by the Cognizant Safety Office

National Aeronautics and Space Administration John C. Stennis Space Center Bilbo Space Center, MS 39219-6000		PERMIT REQUIRED CONFINED SPACE RECLASSIFICATION FORM		
<p>To reclassify a permit required confined space to a non-permit required space and allow entry without the application of confined space work requirements, this form must be completed to verify that no actual or potential atmospheric hazards exist and all hazards and potential hazards within the space have been identified and completely eliminated. The reclassification is valid only for the duration of the job. The space must be evacuated and reevaluated if any hazards develop during the entry. Once returned to normal service, the confined space reclassification is no longer valid and the confined space is considered to be permit required.</p> <p>All hazards must be eliminated to authorize reclassification. The implementation of hazard control measures such as respiratory protection or forced air ventilation requires the immediate reclassification from non-permit required to permit required, including all the safeguards inherent in that system.</p> <p>Confined Space Location: _____ Purpose of Entry: _____</p> <p>Check which of the following two conditions apply to the reclassification:</p> <p><input type="checkbox"/> Verification that the permit required confined space poses no potential or actual atmospheric hazards and that all hazards within the space have been eliminated without entry into the confined space.</p> <p><input type="checkbox"/> It was necessary to enter the permit required confined space to eliminate all hazards or verify that all hazards have been eliminated utilizing an approved confined space work permit and following all permit requirements.</p>				
<b>PREPARATION MEASURES TAKEN AND VERIFIED TO ELIMINATE HAZARDS</b>				
		YES	N/A	
1. Contents of the confined space have been removed to eliminate the hazard		<input type="checkbox"/>	<input type="checkbox"/>	
2. All chemical, utility, and outlet lines are isolated in a manner that eliminates hazards		<input type="checkbox"/>	<input type="checkbox"/>	
3. Lockout/tagout is implemented so as to eliminate hazards		<input type="checkbox"/>	<input type="checkbox"/>	
4. All walking surface slip and trip hazards are eliminated		<input type="checkbox"/>	<input type="checkbox"/>	
5. Atmospheric testing of oxygen level, LEL, and toxic concentrations have been conducted and it is verified that no actual or potential hazards exist (Document Readings Below)		<input type="checkbox"/>	<input type="checkbox"/>	
6. All man way and access opening obstruction hazards have been eliminated		<input type="checkbox"/>	<input type="checkbox"/>	
7. All sharp edges have been removed or guarded to eliminate hazards		<input type="checkbox"/>	<input type="checkbox"/>	
8. Physical barriers or barricades with tags are installed to eliminate potential hazards from objects or weather entering the space		<input type="checkbox"/>	<input type="checkbox"/>	
<b>LIST OTHER MEASURES TAKEN AND VERIFIED TO IDENTIFY AND ELIMINATE HAZARDS</b>				
<b>DESCRIBE THE STRATEGY NECESSARY TO IDENTIFY HAZARDS THAT DEVELOP DURING ENTRY</b>				
<b>LIST ATMOSPHERIC MONITORING RESULTS FROM STEP 5 ABOVE</b>				
Agent	Limit	Test Results	Test Time	Tester's Initials
Oxygen	19.5% - 23.5%			
Flammables	>0% L F L			
Hydrogen Sulfide (H <sub>2</sub> S)	0 PPM			
Carbon Monoxide (CO)	0 PPM			
Other:				
I verify that all hazards have been eliminated and reclassify the above space as a non-permit required confined space.				
Cognizant Safety Office Representative: _____			Date: _____	

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# Safe Atmosphere Verification Tag Usage

- Commonly known as the “Green Tag” is used to show a verification has been completed
- Used during reclassification of Permit-Required Confined Spaces. This tag must be hung near the entry site.

**SAFE  
ATMOSPHERE  
VERIFICATION  
TAG**

 National Aeronautics and  
Space Administration  
John C. Stennis Space Center

DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

The above location has been checked  
and is verified to be safe for  
hot work/entry until \_\_\_\_\_  
on this date.

NOTES: \_\_\_\_\_

Signature: \_\_\_\_\_

SSC-579 (03/95)

# Notifications

- **Fire Department/Rescue**

Should be notified 24 hours prior to entry to make determination on standby. Allows time for inspection of site/equipment and scheduling personnel

# When Opening a Space ...

The atmosphere inside a closed space may be hazardous to personnel opening the space.

- Be prepared to sample during the initial opening.
- Sample before cover is completely removed, using a “wand” or remote tubing if possible.
- Ventilate, ventilate, ventilate ...

# Permit-Required Confined Space Entry Procedure

- Isolate the space
- Ventilate the space
- Conduct a job specific safety meeting prior to entry
- Complete the permit
- Test the atmosphere
- Enter the space

# **Job Specific Safety Meeting**

- **The Entire Crew Must Attend**
- **Review Hazards of Entry and Work**
- **Review Required PPE/Equipment**
- **Review Procedure for Contacting Rescue**

# What is Considered Entry?

- The act where a person intentionally passes through an opening into a permit-required confined space
- **Any part of the body** passing through the opening is considered entry

# **The Confined Space Team**

## **Entry Supervisor**

- Employee responsible for coordinating all aspects of confined space entry

## **Attendant**

- The employee who remains outside the space to monitor the entrant(s), guards against unauthorized entry, warns entrants of unusual conditions, and alerts rescue in the event of an emergency

## **Entrant**

- The employee authorized to enter the confined space and perform work

# Role of the Entry Supervisor

- Determines acceptable entry conditions
- Authorizes entry and oversee operations
- Terminates entry if hazardous conditions develop
- Conducts pre-entry briefing
- Determines that entry operations remain consistent with entry permit



# Role of the Attendant

- Monitors activities inside and outside space
- Remains outside the space until relieved by another attendant
- Maintains the entry log for entrants
- Assists in non-entry rescues



# Role of the Attendant

The role of attendant can be performed by an entry supervisor, or another authorized person, as long as the person is trained and equipped to perform an attendant's duties.

The attendant cannot be an entrant.

# Role of the Authorized Entrant

- Enters confined spaces
- Knows hazards and symptoms of exposure
- Understands the PPE and equipment and how to use it
- Communicates with attendant as necessary

# Rescue Procedures

Rescue and emergency services can be performed by:

- SSC rescue team (Fire Department)
- Contractor's rescue services



# **Non-SSC Rescue Services**

Non-SSC Rescue Service providers may be employed only with concurrence from the SSC Fire Department.

Should a contractor want their employees to act as a rescue team, all equipment, training, and rescue plans must be reviewed and approved by the SSC Fire Department prior to entry activities.

# Complete the Permit

- Permit must be correctly and completely filled out prior to entry
- Can only be activated by the **Entry Supervisor's signature to be valid**
- No entry without a valid permit
- Permits are valid for no more than 12 hours
- When work is completed the permit must be forwarded to Safety (copies are okay)
- Cancelled permits are kept on file for 1 year
- Only the **Entry Supervisor's signature can cancel** the permit

# Questions/Discussion

