

GILES CHEMICAL CORPORATION		
COMPANY PROCEDURE		
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Author: Paul Teleki	Title: Confined Space Entry Procedure	

### Safety:

Wear the appropriate PPE for the job; in most cases to clean the vessels rubber high boots and goggles Goggles are required.

### Purpose or Objective:

This procedure explains what the purpose of the Confined Space Entry Permit is, who the necessary participants are, what the different definitions are and finally what has to be done to obtain a entry permit and who has to sign it.

This procedure provides a means by which employees can be protected from the hazards associated with entry into permit required confined spaces and to develop guide lines by which employees shall enter such spaces.

The Reference is the North Carolina OSHA Standard for general industry; **29CFR 1910.146.**

### Procedure:

#### Confined Space Definitions

**Confined Space-** a space that meets all three of the following conditions:

1. Large enough for a person to bodily enter and perform work.
2. Has only means of entry/egress that requires a person to enter by means other normal walking, such as crawling, squatting, climbing, bending, or use of devices.
3. It is not designed for people to continually occupy the space.

**Non-Permit Space-** a confined space that does not contain any actual or potential hazards capable of causing death or serious physical harm.

**Permit required confined space- Permit space-** a confined space which has one or more of the following characteristics:

1. Contains or has the potential to contain hazardous atmosphere;
2. Contains a material which has the potential for engulfing an entrant;
3. Has an internal configuration that could trap or asphyxiate an entrant, such as inwardly converging walls or a floor that slopes downward and tapers to a small cross-section; and or
4. Contains any other recognized serious safety and/or health hazard.

**Persons involved; Attendant**, who is a trained person stationed outside the permit space that monitors the authorized entrant. **Entrant**, the trained individual who enters the Permit Space and the **Entry Supervisor**, the trained individual who is responsible who assures that conditions are right to enter the

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confined space, signs the Confined Space Permit, oversees the entire operation and terminates the entry and Permit.

Before a Confined Space Entry Permit can be signed the following conditions have to be met;

1. All Lock out have to be performed, all electrically and mechanically driven equipment like agitators , pumps, valves have to be locked out, tagged and tried ( to make sure that nothing can start)
2. All material supply lines have to be locked, tagged and tried, like acid, MgO, water, brine, steam, etc.
3. The confined Space has to be properly ventilated to make sure that oxygen level is adequate. When the confined space has several opening besides the one entry egress no oxygen level measurement is necessary after ventilation.
4. The air temperature in the Confined space has to be ambient or no higher then 90 degrees Fahrenheit ( 29 degrees Celsius)
5. The liquid at the bottom of the confined space has to be tested for Ph, has to be higher then 6 lower then 9.
6. In case of the crystallizers air samples have to be taken to assure the proper air mixture for breathing. ( Oxygen concentration between 19.5-23.5 percent)

When all conditions from above are met and verified by the Entry Supervisor, the Confined Space entry form will be signed by the Entry Supervisor and one copy posted at the work site. The Confined Space Entry Form will be filled out in duplicate.

Once the entry was performed and the job completed the entry form will be removed from the job site, however before the Permit is terminated the Entry Supervisor will verify that all lock outs are removed, the egress is buttoned up and the confined space is ready to be resume operation.

The final copy of the terminated Entry Permit will be filed with the Safety office. The Safety office will keep a separate file for the Confined Space Entry Permits.

The **Attendant** is required to stay on the job site (confined space) until all work is done or the Entrant is not in the confined space. The Attendant is constantly monitoring the well being of the Entrant and takes appropriate action based on need.

The Entry Supervisor has to monitor the Confined Space work as it progresses.

Confined Space which has to be entered on rare occasions ( less then once in three years) will be identified with a “ No Entry” sign and a special permit will be issued in case entry is required. At those times the same procedure as above has to be followed.

All Contractors who have to work or enter Confined Space have to have proof that their employees are trained on Confined Space Entry and have to follow the Confined Space Entry Procedure.

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## Confined Space Requiring Permit;

**Digester #1 and #2**

**Second Digesters #1 and #2**

**Brine Storage Tank**

**Brine Hold Tank**

**Mother Liquor Tank**

**Peco Tank**

**Mud Tanks**

**Crystallizer #1, #2, #3**

**Restricted Entry Confined Space (Need special permit if ever entered)**

**RiverWaterTank**

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## Confined Space Entry Permit

Confined Space to be entered:\_\_\_\_\_

Date of Entry:\_\_\_\_\_

Entrant:\_\_\_\_\_

Attendant:\_\_\_\_\_

Lock out verified; mechanical, electrical and material supply lines locked (Lock, Tag and Try):\_\_\_\_\_

Air temperature is verified:\_\_\_\_\_

Atmospheric oxygen verified (Crystallizers only):\_\_\_\_\_

Liquid Ph is verified:\_\_\_\_\_

Entry Supervisor and signature:\_\_\_\_\_

Date, time Entry Permit terminated:\_\_\_\_\_

Entry Supervisors and signature:\_\_\_\_\_

Note: Completed copy to be filed with the Safety Office

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**TRAINING DOCUMENTATION**

	EMPLOYEE	TITLE	SIGNATURE	DATE
1				
2				
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