CONFINED SPACE SAFETY ASSESSMENT

Created: 8/3/2015

Revised: 8/3/2015

Space ID#:	1006	**Location:**	Miwaukee - Corporate HQ
Department/Area:	Building 2	**Assessor Name(s):**	James Smith
Confined Space Name:	Tank 51		
Associated Equipment:		**Assessment Date:**	8/3/2015
Space Classification:	PERMIT REQUIRED	**Space Type:**	Boiler
Confined Space Description:	Tank Interior		
Associated LO/TO Procedure:	Lockout Tank 51		

LOCKOUT-TAGOUT ENERGY SOURCES BEFORE PROCEEDING WITH CONFINED SPACE PROCEDURE

Is the space a Confined Space?

- [x] This space is large enough and so configured that an employee can bodily enter and perform assigned work.
- [x] This space has limited or restricted means for entry or exit.
- [x] This space is not designed for continuous employee occupancy.

Will the space require a Permit to enter (Permit Required Confined Space - PRCS)?

- [x] This space contains or has a potential to contain a hazardous atmosphere.
- [x] This space contains a material that has the potential for engulfing an entrant.
- [ ] This space has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section.
- [ ] This space is not designed for continuous employee occupancy.

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Space Hazard Assessment

#	Description of Hazard	Method of Protection	Verification
1	**Atmospheric hazards** Carbon Monoxide	Test for atmospheric hazards prior to entry. If alarm is detected, continuous forced air ventilation is required for 15 minutes prior to re-testing. Do not enter space until test is within acceptable range. Attendant must continuously monitor atmospheric hazards during work.	Ensure gas detector is properly calibrated and functional. Verify readings are within allowable levels.
2	**Hazardous energy** Electrical; Water	Follow lockout procedure prior to entering confined space.	Refer to lockout procedure for verification of zero-energy state.
3	**Crushing, engulfment or entrapment** Liquid	Attendent must never leave the confined space entry area.	If space contains an engulfment hazard, a permit is required.
4	**Fire or explosion** Flammable liquids, gases, vapors or solids	Continually verify atmospheric samples. Should the gas detector alarm, work must immediately stop and entrants must exit the space.	Ensure gas detector is properly calibrated and functional. Verify readings are within allowable levels.

Confined Space Labeling

Are Permit Required Space (PRCS) entry points signed properly? (i.e.“DANGER -- PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER”)	☑	Yes	☐	No
Are Non-Permit Confined Space (NPRCS) entry points signed per site policy? (i.e. “CAUTION -- CONFINED SPACE, FOLLOW REQUIRED ENTRY PROCEDURES”)	☐	Yes	☑	No
Are all Confined Spaces labeled with a unique identifier for inventory tracking purposes? (i.e. Confined Space ID#, Barcode, etc)	☐	Yes	☑	No

Reclassification/Alternate Entry Eligibility

Is this space eligible for Reclassification or Alternate Entry? No

- ☐ The space poses no actual or potential atmospheric hazards.
- ☐ All identified hazards within the space have been eliminated without entry into the space, and the non-atmospheric hazards remain eliminated.
- ☐ The hazards within the space or adjacent areas have not changed.
- ☐ No additional hazards are being introduced to the space by work activities.

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Declassification

The space cannot be declassified.

Reason:

Space Entry - Worker Classification

The following worker types perform entry into the assessed space:

Contractor

Tasks Completed in Space (as part of the assessment):

Tank Cleaning

Methods to Prevent Unauthorized Entry

Secured Covering

Personal Protective Equipment (PPE)

Ventilation Fan, Hard Hat, Eye/Face Protection, Boots, Gloves, Protective Clothing, Communication Equipment

Required Rescue Equipment

Communication device, Emergency escape apparatus, Mechanical means of rescue

REMINDER: ALWAYS FOLLOW CONFINED SPACE ENTRY REQUIREMENTS BEFORE PROCEEDING WITH WORK

Purpose:	The purpose of this confined space assessment is to help employees who are trained and understand the confined space program quickly and more confidently identify the equipment necessary and hazards present before entering a confined space. The steps below must be followed and used in conjunction with the written confined space program and permit system to ensure safety and full compliancy.

Confined Space ENTRY		
#	**TASK**	**DESCRIPTION**
1	**REVIEW & GATHER SAFETY DEVICES**	Review the confined space assessment to ensure all hazards are accounted for and the confined space has not been altered since its assessment. Check radios and other equipment being brought in to ensure it is functioning properly. Gather together the required equipment listed on the front side of the assessment. Some equipment may only be required if type of service work introduces additional hazards (i.e. Hot work or using chemicals will require a mechanical means of rescue). Ensure attendant has gathered and inspected any applicable emergency-support equipment.
2	**PREPARE SPACE**	Open main point of entry to confined space and utilize forced ventilation fan for at least 15 minutes prior to testing to evacuate any accumulated hazardous atmosphere that may have accumulated, or as needed based on air samples. Install guarding around point of entry to prevent falls. Block all vehicular and pedestrian traffic that may cause hazards to employees inside the confined space or entry/exit points.
3	**PRE-TEST**	Before an employee enters the space, the internal atmosphere must be tested with a calibrated direct-reading instrument for oxygen content, flammable gases and vapors and toxic gases and vapors. Note: Alarm should sound if Oxygen is less than 19.5% or greater than 23.5%, if combustible gas is greater than 10% of LEL, Carbon Monoxide greater than 25 PPM, Hydrogen Sulfide greater than 10 PPM, or Ammonia is greater than 25 PPM. Do not enter the space if an alarm sounds.
4	**FILE PERMIT**	Each person entering the confined space must sign the confined space entry permit. The confined space entry permit must be posted near the entrance to the confined space. Verify all PPE is being utilized. It is now acceptable to enter the confined space. Complete a Hot Work Permit separately if it is known that hot work (for example, riveting, welding, cutting, burning, and heating) is to be performed during entry.
5	**MONITOR**	Continuous air monitoring is recommended while the confined space is occupied. A gas meter should be worn by an employee in the confined space. Pre-entry retesting for air contaminants in the confined space atmosphere must be made after every work break. If the detector alarms, immediately exit the space until normal conditions are achieved.
6	**LOCKOUT-TAGOUT**	Follow proper Lockout-Tagout procedure(s) referenced on the front side of the assessment if the equipment poses a hazard to the type of service being performed.
7	**PERFORM SERVICE**	Perform service work. Upon servicing, if it is determined that hot work is to be performed (for example, riveting, welding, cutting, burning, and heating) a separate Hot Work Permit must be completed before continuing with service.
8	**LEAVE SAFE**	Ensure equipment is functioning properly or at a safe state to leave unattended. Remove all tools and equipment. Close doors, access covers, and any other points of entry that were moved or modified to enter space. Put confined space equipment back in its designated location. Be sure to provide completed permit(s) to the facility representative to keep on file.

Confined Space EXIT Scenarios		
#	**SCENARIO**	**DESCRIPTION OF REASON TO EXIT**
1	**ALARM**	Safely cease work/service and exit area if your personal gas alarm or facility alarm is activated or if the attendant requests that an exit is necessary.
2	**MEDICAL**	Safely cease work/service and exit area if you feel light headed, tired, experience irritation on skin or eyes, or other general discomfort. Notify Entry Supervisor before reentry.