

LNG - Work in LNG containment pit

SWP-108

1.0 Purpose

To establish guidelines for safety of workers when working in the liquefied natural gas (LNG) containment pit.

The LNG containment pit is not a confined space; however, configuration of the pit requires that extra precautions must be taken to enter.

2.0 Personal protective equipment (PPE)

Also see SWP-103; LNG Personal protective equipment.

- 2.1 The following is the minimum required PPE that must be worn at WGO:
 - Safety headwear; Class E, type II;
 - Safety footwear with dielectric rating;
 - Safety eyewear with side shields;
 - Personal gas detector; bumped and calibrated; and
 - Hearing PPE (as req'd).

2.2 Observe posted PPE signage.



2.3 Personal gas monitors

Also see SWP-100 – LNG General Site Rules; section 5.0, Personal gas detectors.

- Workers are required to wear personal gas monitors in all areas; and, at all times, when working at WGO.
- Prior to use, personal gas monitors must be:
 - Bumped-tested;
 - 'Zeroed' in fresh air; and,
 - o 'Peaks' cleared.
- Personal gas monitors must be calibrated within 30 days of use.
- All workers must be trained and deemed competent to use the personal gas monitors.

2.4 Other PPE

Other PPE that may be required in the containment pit includes, but is not limited to, the following:

- Clothing adequate for the weather conditions encountered;
- Hand protection (gloves);

- Fall protection PPE;
- Barricades or flagging tape to restrict entry.

3.0 Guidelines

3.1 The LNG containment pit is (electrical area) classification Class I; Zone 2. See Appendix A - YEC LNG Area Classification (Class I; Zone 2).

Power tools, cameras, cell phones, flame producing tools (solder, oxyacetylene torch etc.) and hand tools that can cause a spark (steel shovels, hammers etc.) can only be used in the Class I, Zone II area when a YEC Hot Work permit is completed and approved by Operations.

Also see SWP-044; Hot Work and Permit.

3.2 Entry/work in the containment pit

- Must be performed using the "buddy" system; where at least one other worker is present and in contact with the worker in the pit.
- A rescue plan must be developed prior to entering the containment pit.
- A reliable means of communication must be available for work in the containment pit.
- The method of communication must be tested and operational prior to the commencement of work.
- Communication devices must be intrinsically safe.

4.0 Responsibilities

- 4.1 Extended Leadership Team (ELT), Senior Leadership Team (SLT), and Project Managers
 Are responsible to ensure that:
 - Access to LNG containment pit is controlled.
 - All work in LNG containment pit is authorized.
 - All workers entering the LNG containment pit are trained and competent to perform the tasks assigned.
 - All workers entering the LNG containment pit are trained and competent to use personal gas monitors.
 - Equipment isolation is performed in accordance with established YEC LOTO procedures.
 - Ensure that workers use the safety equipment necessary to safely perform the work in the LNG containment pit.
 - Ensure workers complete the appropriate hazard assessment (JSA) and rescue plan prior to entering the LNG containment pit.

4.2 Workers

Are responsible to ensure that:

- Work in LNG containment pit is authorized.
- Work in LNG containment pit is completed in accordance with all applicable YEC safe work practices, procedures, and programs.

- A hazard assessment and rescue plan are completed and reviewed by all workers.
- Personal gas monitors are calibrated (within the last 30 days) and bump tested (daily).
- Inspect tools and equipment prior to use.
- Have appropriate PPE for the work.
- Inspect PPE prior to use.
- Communication method(s) are in place and tested for operation.

5.0 Reference documents

- YEC SWP-100; LNG General Site Rules.
- YEC SWP-103; LNG PPE.
- YEC SWP-044; Hot Work & Permit.

Appendix A – YEC LNG Area Classification (Class I; Zone 2)

