Mines Safety Bulletin No. 111

Subject: When can a confined space be reclassified?

Date: 19 June 2014

Background

Recent safety inspections by the Department of Mines and Petroleum have revealed that a number of sites have reclassified, or declassified, their confined spaces to non-confined spaces. While the process of reclassification is possible under the definition of Australian Standard AS 2865 *Confined spaces*, the Department has identified several cases of unsafe and hence non-compliant practices. It is extremely important that reclassification of confined spaces is undertaken with full consideration of all inherent and introduced hazards, and the risks associated with these spaces.

Note: In this bulletin, the terms reclassify and declassify are used interchangeably.

A confined space is a description of physical characteristics of a workspace not intended or designed for human occupancy. Confined spaces may be hazardous as a result of insufficient oxygen, toxic or poisonous air, or an explosive atmosphere. These hazards may not be obvious as some gases are odourless and colourless.

Confined spaces may also have physical hazards that cause a worker to fall, be crushed or buried, or drown. It is critical that tasks completed inside or around the confined spaces are managed appropriately to prevent harm or injury.

Any entry to a confined space must meet all the mandatory requirements set out in AS 2865. If not managed appropriately, entry to confined spaces can be extremely hazardous. The risk is even greater if a confined space is improperly reclassified as there is a general perception that once a confined space is reclassified the risks are eliminated - this may not be the case. For instance, irrespective of whether a space has been reclassified or not, toxic gases may be released from sludge or residue; or hazardous atmospheres may slowly build up over time inside the space, such as toxic carbon dioxide gas being produced as a steel vessel rusts.

While atmospheric hazards or engulfment are the major cause of serious injury and fatalities in confined spaces, other hazardous conditions may be present during entry or exit, or introduced by tasks being conducted inside the space.

Hazardous services associated with a vessel or confined space are a further factor that must be eliminated when reclassifying confined spaces. They include hydraulic, pneumatic, electrical, chemical, mechanical, thermal and other types of energy.

This bulletin provides a set of requirements for the Western Australian mining industry to follow when reclassifying a confined space.

Summary of hazard

Some mine sites have incorrectly reclassified their confined spaces to non-confined spaces.

Contributory factors

When reclassifying confined spaces:

- AS 2865 Confined spaces is not always followed
- a safe system of work is not always maintained.

Actions required

Mine operators are reminded of the importance of developing safe systems of work that identify hazards and risk controls for work in and around confined spaces.

- Ensure any processes used to reclassify a confined space comply with the requirements and principles detailed in this bulletin.
- Ensure a safe system of work is in place and maintained, and arrangements for the use, cleaning and maintenance of plant do not expose employees to hazards, as imposed by the general duty of care requirements of section 9 of the *Mines Safety and Inspection Act 1994*.

For a confined space to be reclassified as a non-confined space:

Eliminate all inherent hazards, including asphyxiation, fire or explosion, and engulfment.

Note: The control or temporary elimination of inherent hazards alone is not sufficient to reclassify a confined space.

Remove all hazardous services.

For example, physically isolate devices with stored energy or reduce them to a zero-energy condition and disconnect from their power sources.

 Identify and eliminate or mitigate all other reasonably foreseeable hazards associated with the confined space and the tasks being conducted.

For example, complete a risk assessment for all tasks or activities to be conducted inside or around the confined space, and implement a safe system of work.

Significantly change the physical characteristics of the space.

For example, eliminate the enclosed or partially enclosed nature of the vessel, such that a safe atmospheric condition is maintained without the need for any risk control measures (e.g. forced ventilation).

For example, modify any restricted entry and exit to improve access and reduce emergency response time.

Note: Vessels such as classified plant and pressure vessels are unlikely to be reclassified because they cannot be structurally modified. These vessels will remain confined spaces.

Further information

Visit www.dmp.wa.gov.au/ResourcesSafety for information on occupational safety and health in the resources sector.

This Mines Safety Bulletin was approved for release by the State Mining Engineer on 19 June 2014