

Hazardous Substances

Exposure to hazardous substances through inhalation, skin contact, or explosion.



Cause #	Cause description
1	Inhalation or skin exposure of hazardous substance.
2	Inappropriate or incorrect handling, storage, labelling, use, and transport of hazardous substances.
3	Deliberate intent to obtain hazardous substances for ill intent.
4	Mixing of incompatible chemicals causing an explosion or generating toxic gases.
5	Inadequate management of a disclosed medical condition or undisclosed medical condition (e.g. pregnancy).
6	Acute or chronic poisoning via inhalation or skin (including an allergic reaction) .
7	Allergic reaction to a hazardous substance.
8	Exposure to unknown hazardous substances from emerging technologies (e.g., lithium batteries).
9	Explosion or fire due to flammable substances being incorrect handling.
10	Asphyxiation due to exposure to an unbreathable atmosphere.
11	Impacted by an explosive atmosphere including silos, storage facilities.
12	Equipment failure.

Potential to interact with other fatal risks	
Critical risk	Potential interaction
Confined spaces	Impacted by an uncontrolled hazardous substance whilst in a confined space.

Preventive controls (reducing likelihood)	Critical/non critical	Cause #
(CC01) Atmospheric Testing and Monitoring conducted by SCU employees using a calibrated, bump tested device.	Critical	1 – 12
(CC02) Respiratory protection worn, in accordance with OEM requirements, where there is the potential to be exposed to a hazardous substance.	Critical	1 – 12
(CC03) Mandatory PPE , including: • Disposable coveralls suitable to the task • Face and hand wipes • Boot covers or gumboots suitable to prevent exposure to asbestos when potentially exposed to disturbed asbestos	Critical	6
Transportation of hazardous substances.	Non-Critical	2
Work areas designed and built for working with hazardous substances with fit for purpose equipment.	Non-Critical	1 – 12
(CC04) Fume cupboards and exhaust ventilation used to prevent exposure to chemicals.	Critical	1 – 12
Hazardous Chemicals stored segregated in appropriate storage with appropriate security.	Non-Critical	3
(CC05) Emergency stops and shut off valves installed on equipment (near chemical use or where chemicals are used within).	Critical	4, 9, 12
Spill and leak prevention including bunding.	Non-Critical	12
Containment measures including exhaust ventilation.	Non-Critical	4, 9, 11
Review of the database to ascertain the potential presence of hazardous substances before entering a premises, including up to date chemical Safety Data Sheets (SDS).	Non-Critical	1 – 12
Additional controls based on an Occupational hygiene risk assessment.	Non-Critical	1 – 12
Access to external assistance including e.g. police, emergency services, fire.	Non-Critical	1 – 12
Emergency plans, emergency equipment (e.g. eye wash stations, fire extinguishers).	Non-Critical	1 – 12
Mitigating controls (reducing consequence)	Critical/non critical	Cause #
Emergency plans, emergency equipment (e.g. eye wash stations, fire extinguishers).	Non-Critical	1 – 12