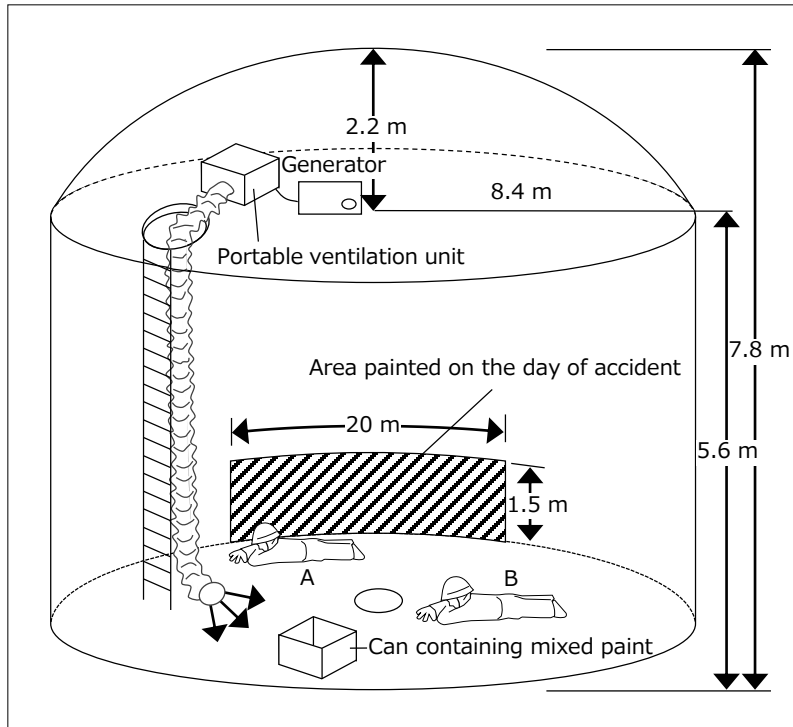


Case involving poisoning due to ventilation unit running out of fuel while applying waterproof paint to the interior of a water distribution tank



[Location of accident]

At the bottom of the interior wall inside a water distribution tank

[Cause of accident]

Two workers were using a mixture of epoxy resin and curing agent as a top coat to waterproof the interior wall of a water distribution tank. A ventilation unit was in operation, and the workers wore gas masks to protect against organic solvents while working. However, the generator used to power the ventilation unit ran out of fuel, causing the ventilation to shut down. The absorption canisters on the workers' gas masks had been in use beyond their breakthrough time, resulting in the workers losing consciousness and collapsing.

[Damage/injuries]

The two workers lying inside the tank were discovered the following day by a fellow worker. Both workers were rescued and regained consciousness but were hospitalized and diagnosed with organic solvent poisoning.

Extract from [Preventive measures]

[2] Delegate responsibility for ventilation systems and protective masks to conduct inspections and maintenance.



Riken Keiki Recommendations

Pay attention to changes in the working environment in poorly-ventilated locations. The risks involved are not just poisoning due to organic solvents, but also unforeseen carbon monoxide or hydrogen sulfide poisoning and accidents due to oxygen deficiency and combustible gases. We recommend using gas detectors to confirm the effectiveness of ventilation and wearing portable gas monitors to allow monitoring of work conditions.