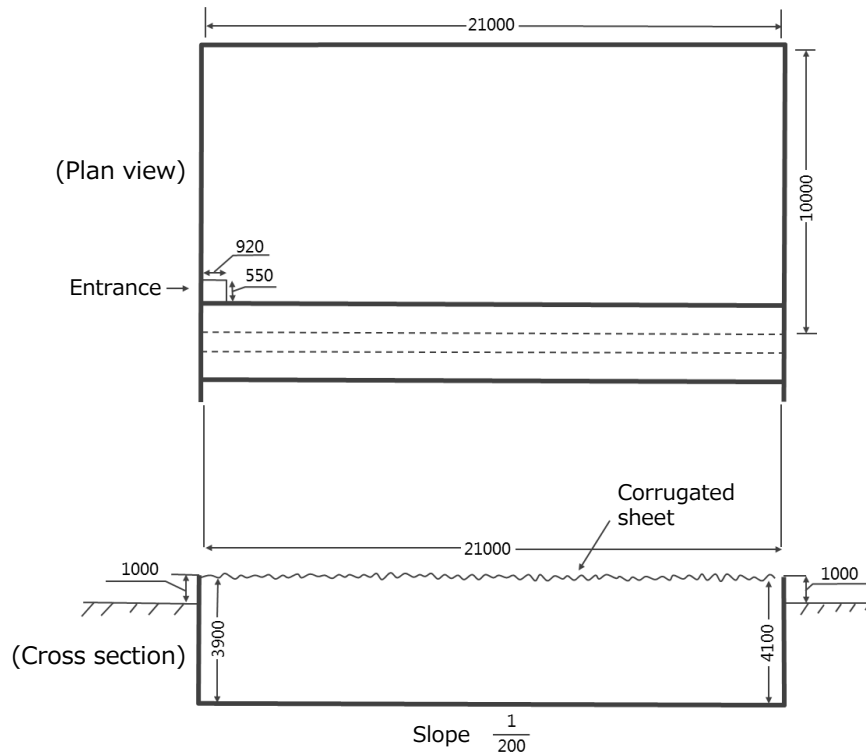


Case involving hydrogen sulfide poisoning during sludge removal inside a thermoelectric power station



[Location of accident]

Inside a circulating water receiving tank within a thermoelectric power station

[Cause of accident]

A worker inhaled hydrogen sulfide rising from sludge while removing the sludge from a circulating water receiving tank. The worker immediately lost consciousness and collapsed. Another worker who entered the tank to rescue the victim also inhaled hydrogen sulfide, lost consciousness, and collapsed.

[Damage/injuries]

Workers wearing oxygen tanks and breathing apparatus entered the tank and rescued the two victims.

The hydrogen sulfide concentration measured at the same location where it had been measured before work began exceeded 100 ppm.

Extract from [Preventive measures]

- [1] Provide ventilation to cap concentrations of hydrogen sulfide in the air at 10 ppm.



Riken Keiki Recommendations

Pay attention to changes in the working environment in poorly-ventilated locations. The risks involved are not just hydrogen sulfide poisoning, but also accidents due to unforeseen 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.