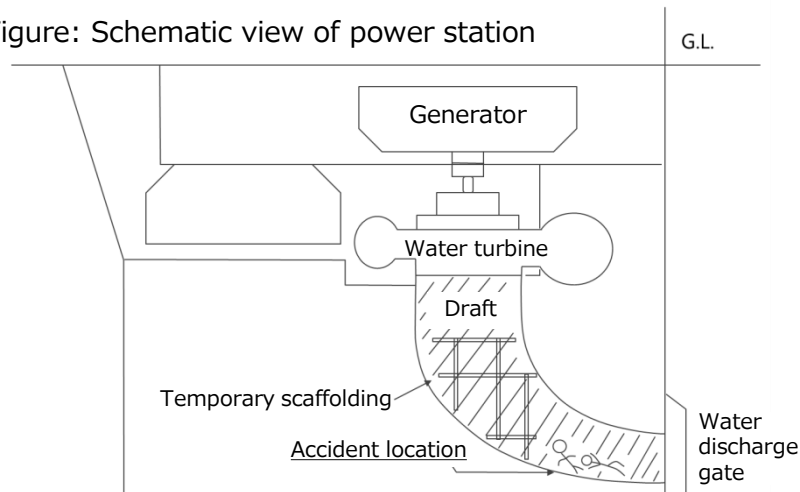


Case involving organic solvent poisoning during paint repair work at a hydroelectric power station

Figure: Schematic view of power station



[Location of accident]

Water channel (hereafter, "draft") leading to a water discharge gate for water exiting the water turbine at a hydroelectric power station

[Cause of accident]

The interior of the draft was repainted during periodic maintenance, but workers entered the draft to finish the painting work when unpainted and poorly painted locations were discovered. One worker collapsed inside the draft. The other was rendered immobile.

[Damage/injuries]

The workers were taken to the hospital for examination. Both were diagnosed with organic solvent poisoning.

Extract from [Preventive measures]

[5] Safety measures must be implemented to protect against anoxia, poisoning from specific chemical substances, and fire or explosion depending on the specific circumstances and the materials used at the work location.



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.