



JFE

Using animations to reproduce fatal accidents for safety training

Award: Safety
Category: Safety training

Challenge

Unfortunately JFE has experienced some fatal accidents in the past. In order to prevent any recurrence of similar accidents, we created a guidebook showing the lessons learned from these past accidents. The guidebook was used to train new employees and contractors. However, we realised it was difficult for them to understand the lessons in a short period of time.

An example from the guidebook on lessons learned

Electrical Shock One fatal accident per page

(Kurashiki District) April 10, 2014

Victim suffered electric shock when approaching too close to energized conductor.

The diagram illustrates an electrical accident scene. It shows a duct with a bus bar and energized parts. A victim (Victim C) is shown approaching the energized part. Labels include: Discovered person (Leader A), Duct cover (Open), Duct cover (Not open), Location of electric shock (presumed), Bus bar, Duct, Removed cover area (Entered area), Energized part, Colored part Energized conductor, Circuit breaker, Disconnecting switch, and Victim C. A place where discovered is also marked.

(Situation) Victim suffered an electric shock when approaching too close to energized conductor in order to perform cleaning inside a duct.

(Cause) There was a discrepancy between the actual work area and the predetermined area secured for the work.

Countermeasure:

① Both the ordering party and the order-receiving party shall confirm the area secured for the work and the actual work area based on a document and start work accordingly.

An example from the JFE guidebook

Action

JFE created an animation which shows graphic moving images relating to five fatal accidents in the past. The DVD replays each accident and shows the lessons learnt. Each animation lasts just three minutes.

The following images are taken from an animation which shows a fatal accident in which the worker fell from a height. The animations are widely used in various training courses.



The accident is replayed to show how it occurred and the outcome

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Outcome

It is easier for trainees to understand why a fatal accident occurred and the lessons learnt from the incident. New employees and contractors can understand the information in a short period of time.

◆ 作業指示書への 作業範囲および危険区域の明確な記載



図面などによる
明確な指示

個々に判断を任せる
曖昧な指示

Lessons learnt from the accident are also included in the animation
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