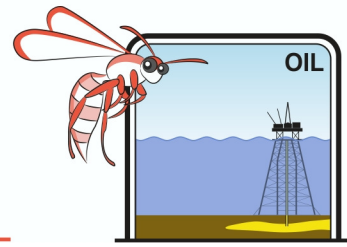
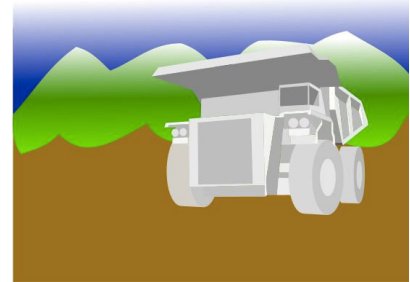


Safety In The Oil & Gas Industry - Teacher Notes



Humans are a major resource for any industry. Most trades people and professionals are well over twenty years old before they begin to become employable. A broken piece of machinery may take weeks to replace. An appropriately trained human may take longer. It is more profitable to maintain the health and safety of personnel than to have to find trained replacements and retrain them in company specific requirements.

Interesting fact *In Western Australian mines and open cuts, some companies' dump truck drivers use the right hand side of the road whilst others use the left. Large companies use specific types and makes of equipment. Difficulty in finding jobs can be partly put down to experience with specific equipment rather than lack of general experience.*



Companies require personnel to have MARCSTA training (Mining and Resource Contractors Safety Training Association) before being considered for on-site employment. This not for profit registered training organisation provides quality comprehensive safety and health programs for organisations contracting to the mining industry.

Workers involved in construction are required to have a “White Card” (formerly a blue card) in construction safety before they can enter a site.

Beyond the front office all on-site staff wear personal protective equipment (PPE) such as helmets, overalls, goggles and gloves when in the workspace. Safety officers check that PPE is present, worn and well maintained. Regular safety drills are carried out to ensure people can be expected to react in a specific way to a specific problem. Everyone is responsible for theirs and other's safety. Bonuses are often awarded for accident free periods. If accidents occur they have to be reported to the Department of Mines and Petroleum who will send investigation officers to investigate major incidents
<http://www.dmp.wa.gov.au/6694.aspx>



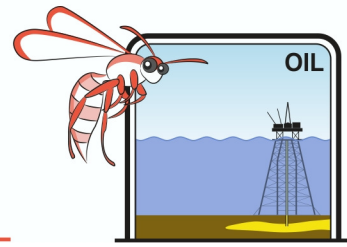
Even if you only visit a mine site, there is a mandatory safety induction lecture and often you cannot leave the vehicle you travel in unless it is to visit the office. All travelling has to be accompanied by a safety vehicle with flag and two-way contact.



Care for the health of their employees extends in many cases to supporting healthy eating and exercising strategies in worksites. Many large company messes have colour-coded labels indicating which foods to eat a lot of and which to only eat a little. Random breathalysing is not uncommon. Wet messes (areas serving alcohol) commonly serve light beer and wine in restricted quantities.

Trained safety personnel are always present and have plans for dealing with possible incidents.

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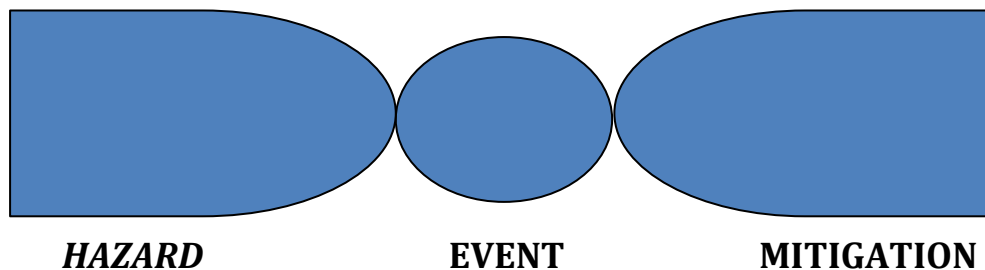


In the oil and gas industry, personnel are trained to:

1. Spot the **HAZARD**.
2. Take measures both physical and behavioural to prevent the event that the hazard might have caused (**TRAINING**).
3. **MITIGATE** effects of the event if it occurs.
4. **Have a successful outcome**

The third step is necessary because humans can make serious mistakes. There are tales of people thinking they could safely enter gas filled rooms if they just held their breath or dropping tools into conveyor belts and reaching down to retrieve them.

They call this approach the “Safety Bow Tie”.



Students may need to know that “mitigate” means lessen, moderate or diminish.

An example could be:

HAZARD Hole in floor

TRAINING Spot the hazard. Isolate, erect barriers, erect signs, PPE shoes with non-slip soles, hard hat for head protection. Notify Safety Officer to organise repair.

EVENT Someone accidentally slips into the hole

MITIGATION Safety officer notices event and organises First Aid to worker. Hole is isolated and scheduled for repair.

OUTCOME Source of danger removed and worker supported to return to work.

The worksheet encourages students to see if they can organise a “Safety Bow Tie” for an event that might happen at school. Suggestions would be:

- A hole appears in the play area at lunch time
- A kindergarten kid pulls a piece of fence down on themselves
- The climbing frame starts to wobble
- There is a broken glass on the classroom floor
- Somehow, a toddler has got into the school swimming pool