VIC: safety alert issued following hot works quarry fire

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Category: Policy & legislation

Location: Victoria

WorkSafe Victoria recently issued a safety alert about the risks associated with hot works, after a hopper liner and screen caught fire at a quarry.

The fire started while bolts were being cut with an oxy-acetylene torch during maintenance activities, and emergency services were required to extinguish the fire.

Hot work is any work that has the potential to ignite nearby combustible, flammable or explosive material.

Common hot work tasks include welding, cutting, grinding and heat treatment, and hot work processes can create hazards such as:

- Fire: caused by heat, molten metal, sparks or direct contact with cutting or welding flames.
- Explosions: caused by the presence of gas, liquid vapors or suspended flammable dust.
- Toxic fumes: generated directly from the hot work process or through heat decomposition of nearby material(s).

These hazards create a serious risk to employees' health and safety that can lead to injury, illness and death.

For example, burns from heat radiation or contact with flames, sparks, molten metal or hot surfaces, and exposure to hazardous fumes.

Hot work processes have the potential to ignite fires that can travel beyond site boundaries, such as grass or bush fires.

Fires may also start well after the completion of any hot work activities due to residual heat.

The alert recommended a number of control measures when undertaking hot works:

- Identify any potentially flammable or combustible materials in the area, such as rubbish, dust, oils, grease, rubber, plastics, or other substances that could be potential fuel sources or generate dust explosions.
- Remove any flammable or combustible material in the area. If materials cannot be removed use flameproof covers or screens, or wet the materials down before and during the work.
- Ensure the area is adequately ventilated.
- Assign a designated fire watch person to monitor the hot work environment.
- Conduct post-work inspections for smouldering material prior to leaving the area. For example, before a
 break, at the end of a shift or at the completion of work.
- Ensure adequate firefighting equipment is available and ready for use.
- Identify and establish suitable exclusion zones for personnel and vehicles.
- Ensure employees are wearing appropriate non-flammable personal protective equipment.
- Establish and train all personnel on emergency and evacuation procedures.

Quarry operators must also be aware of any restrictions that apply during fire danger periods or total fire ban days.