



Safety Fact Sheet



SFS – Hazelwood Hazardous Materials/Fire

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Subject	Safety Fact Sheet – Hazelwood Hazardous Materials/Fire
Scope	This applies to all agencies/personnel deployed to and/or operating in Hazelwood hazardous materials/fire and should be read in conjunction with agency procedures.

Safety Information / Message

Introduction

Fires in open cut mines (such as Hazelwood) can burn for a number of weeks, creating complex health and safety issues specific to this environment. As part of the suite of plans specific to this incident type, Health Management and Decontamination Plans are put in place to manage the health and safety of all personnel on the fire ground.

One of predominant risks in this type of incident is from Carbon Monoxide, or CO, an odourless, colourless gas that can cause sudden illness and death. Exposures to high levels of Carbon Monoxide have significant health impacts.

Incident crew must undergo regular health monitoring of their CO levels to ensure they are within the safe level determined by a range of health professionals including the CFA Medical Officer and MFB Brigade Medical Officer.

In addition, gas detection units are utilised to monitor CO levels, so that defined safe operating practices can be adopted should certain CO levels be detected. Crews should operate on short rotating shifts to minimise any exposure from the CO.

NOTE:	See the Carbon Monoxide Information Sheet following.
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Crew Selection

Individuals, who are heavy smokers, have a history of cardiovascular or respiratory conditions should not be deployed to this incident. This is due to the increased physiological sensitivities that might be attributable from increased carbon monoxide levels in the open cut fire.

The increased presence of CO creates a risk to the foetus of pregnant women. Female fire-fighters who are pregnant or there is any chance they may be pregnant, should not attend this incident.

Individuals should also have 24hrs of clear time away from smoked logged incidents before attending this incident (e.g. prior deployments).

Crew Deployment

- Need to ensure if they have any of the medical conditions indicated they are advised not attend this incident.
- Participate in health monitoring throughout their deployment.
- Adhere to all safe operating practices and directions.

- Advise their crew leader if they identify any potential hazards.
- Take all due care as visibility at this incident may at times be restricted due to smoke logging, hence risks from vehicle, equipment and pedestrian movement are present.
- Ensure they maintain their hydration levels.

Personal Protective Equipment (PPE)

Goggles

Some fire fighters have been requiring eye washes due to the presence of particulates. Please ensure goggles are used at all times to protect your eyes from ash, dust and burning embers where the risk is present.


Wildfire goggles should be worn as they seal around the eye compared to the glasses style of eye protection.

P2 Particulate Masks

These masks should be worn at all times while fire fighting or working in the area impacted by smoke or airborne particulates.

The masks are designed to stop particles being inhaled past the filter.

During fire fighting, dust and smoke particles may clog the filters and result in difficulty in breathing.

	<p>Change masks on a regular basis or when breathing becomes restricted.</p>
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Hygiene

Due to the particular dirty operating environment at open cut fires, ensuring that correct hygiene practices are followed is vital.

Correct hygiene practices apply to all personnel working on the fire ground in RCCs, ICCs, and staging areas.

When working on this fire ground there are many potential sources of contamination hence individuals must ensure;

1.	Protective nitrile gloves should be worn under firefighting gloves (double gloving) where the risk of contamination is present. However nitrile gloves should not be worn during firefighting activities
2.	Regular use of antiseptic hand gels or soap and water to maintain good hygiene.
3.	They visually regularly inspect their skin and cover all open wounds with a water proof dressing and change the dressing regularly.
4.	Obtain first aid treatment immediately if you suffer an injury involving an open wound.
5.	Where the open wound cannot be appropriately covered or protected from potentially contaminated water or soil then advise your crew leader and seek alternate duties.
6.	<p>Thoroughly clean your hands prior to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Undertaking your health test and after deployment <input type="checkbox"/> Eating or drinking and after visiting the toilet.

Carbon Monoxide Information Sheet Hazelwood Open Cut Fire

Frequently Asked Questions

What is carbon monoxide?

Carbon monoxide, or CO, is an odorless, colorless gas that can cause sudden illness and death.

Where is CO found?

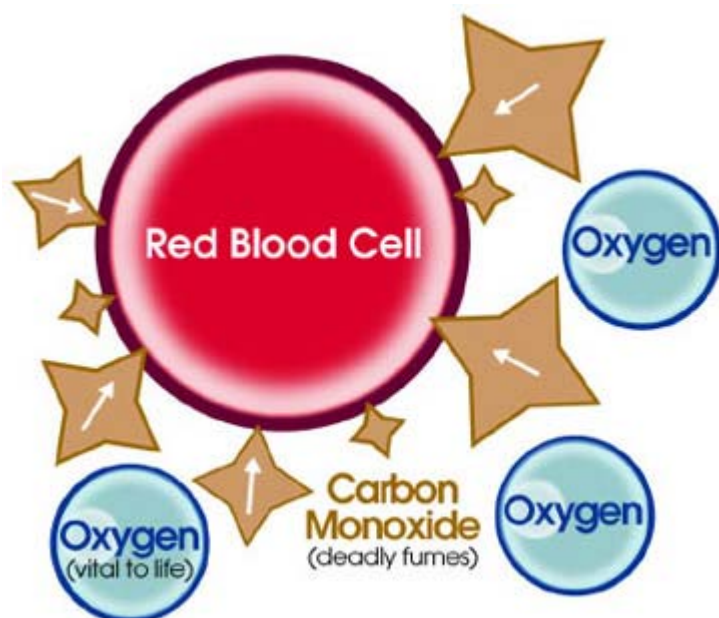
CO is found in combustion fumes, such as those produced by cars and trucks, small gasoline engines, and the current Hazelwood Open Cut fire. CO from these sources can build up in enclosed or semi-enclosed spaces. People and animals in these spaces can be poisoned by breathing excess level of CO.

What are the symptoms of CO poisoning?

The most common symptoms of CO poisoning are headache, dizziness, weakness, nausea, vomiting, chest pain, and confusion. High levels of CO inhalation can cause loss of consciousness and death. Unless suspected, CO poisoning can be difficult to diagnose because the symptoms mimic other illnesses. People who are sleeping or intoxicated can die from CO poisoning before ever experiencing symptoms.

How does CO poisoning work?

Red blood cells pick up CO quicker than they pick up oxygen. If there is a lot of CO in the air, the body may replace oxygen in blood with CO. This blocks oxygen from getting into the body, which can damage tissues and result in death. CO can also combine with proteins in tissues, destroying the tissues and causing injury and death.



Who is at risk from CO poisoning?

While everyone is at risk from carbon monoxide the following at risk groups should not be deployed to the Hazelwood Open Cut incident. Individuals who are heavy smokers, who have a history of cardiovascular or respiratory conditions which is due to the increased physiological sensitivities that might be attributable from the potential increased carbon monoxide levels at this incident.

In addition women who are pregnant or potentially pregnant should not be deployed to this incident as there is an increased risk to the foetus from high concentration levels of carbon monoxide. Male sperm is not impacted.

Expected Duration

Carbon monoxide gas leaves the body via the lungs and in fresh air it can take two to five hours for the individual to exhale about half of the inhaled carbon monoxide in their blood.

Post Deployment

While crews are given a health check before being released from this incident, if individuals develop symptoms of potential carbon monoxide poisoning such as headache, dizziness, weakness, nausea, vomiting, chest pain and confusion they should present to the emergency section of the local hospital. Individuals are advised to rest for 24 hours, avoid alcohol and ensure good hydration.

Individuals should advise relevant agency commanders who will ensure that the ICC is advised.

(Reference: Centres for Disease Control <http://www.cdc.gov/co/faqs.htm>)

NOTE:

For further information call (03) 9032-3600 or email sccvic.ohs@scc.vic.gov.au.
A signed copy of this document is held at SCC Records.

Revision History

Topic No	SFS.01.19
Topic Name	SFS - Open Cut Mine Fires
Procedure Owner	Fire Services Commissioner
Remote Copies	None
Revision Date	Amendment Detail
06/03/2014	This Safety Fact Sheet has been approved and issued from the State Controller

End of Topic

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