

## MINE BLAST FUMES AND YOU

The information below is for the general community. For assessment of occupational risks, and health impacts of blast fumes for mine workers, please refer to the relevant occupational health service for advice.

### What are blast fumes?

Blasting is used to break up solid rock in open cut mines and quarries. Blast fumes are the gases that may be generated during blasting. Some of the gases are toxic and some are not. In terms of health impacts, the critical gases generated are oxides of nitrogen (NO<sub>x</sub>) - nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO).

Nitrogen dioxide gives blast gas plumes their characteristic reddish orange colour and pungent odour.

Gases produced during blasting usually disperse rapidly and pose no acute health risk. Under certain conditions the gas plume may persist and can affect nearby people or residents who are downwind of the blast site.



Picture: The Singleton Argus:

### What are the potential health effects from exposure?

Exposure to the fumes in a blast plume is usually very brief – seconds to minutes. For most people, any health effects from exposure to a blast plume are short lived.

Symptoms from high level exposure may include:

- Eye, nose and throat irritation and coughing
- Dizziness and headache
- Shortness of breath
- Wheezing or exacerbation of asthma

Serious lung inflammation (pulmonary oedema) has been known to develop several hours after exposure to very high levels of NO<sub>2</sub>.

### What should I do if I see a plume?

1. Avoid exposure to the plume. If you see a plume, do not enter it (this includes driving through it) and move out of the plume's path if possible. If at home, head indoors, close all doors and windows. If you are in a car, wind up windows and close vents until the plume passes.
2. If you find yourself in a plume, try to move out of it as quickly as possible.
3. If you have been exposed, use water to thoroughly wash eyes, and to clear your nose and throat.
4. If you experience respiratory symptoms you should seek immediate medical attention and inform the doctor of possible NO<sub>2</sub> exposure. Be alert for possible delayed breathing problems. If you are an asthmatic, use your reliever medicine.

### Who should I notify if I see a blast plume?

Throughout NSW blast fumes can be reported to the NSW Environment Protection Authority's environment line on **131 555**. In the Upper Hunter Valley, blast fumes should also be reported to the Department of Planning & Infrastructure compliance office on 6575 3405.