

WCX3B – Noise and Diesel Emissions

April 2021

Our Activities and Noise

Our Noisy Activities

- Rock bolting Operations
- Road header Operations
- Activities in and around the Scrubber
- Jackhammering
- Working in and around Machinery
- Hammering and working with Hand tools

The Numbers

- If exposed to 85dB or above, you need to wear hearing protection



Consequences of NOT Wearing Hearing Protection

Prolonged exposure to loud noise can damage a person's hearing and can also have other negative effects such as;

- Inability to understand speech or communication issues
- Irritability
- Sleeping problems
- Negative psychological effects

Health effects associated with noise:

- Temporary or permanent hearing loss
- Tinnitus (constant ringing in ears)
- Physical and psychological stress



Hearing protection is mandatory in the tunnel and spoil sheds

Diesel Emissions – what are they?

Diesel Emissions include both gas and solid components

- Gas components include carbon monoxide, carbon dioxide, nitrogen monoxide, nitrogen dioxide and may also include hydrogen sulphide and sulphur dioxide
- The solid component includes a mixture of chemicals referred to as Diesel Particulate Matter (or DPM)
- Individual DPM particles are too small to see with the eye, but can be visible as a haze if allowed to build up



Diesel Emissions – Health effects

- Gaseous components of diesel emissions (particularly carbon monoxide) can be immediately dangerous to life or health
- Gaseous components can also cause lung/eye irritation
- The solid component of diesel emissions (DPM) can cause lung damage if exposure is not controlled
- Masks such as the disposable P2 respirators do filter out diesel particulate matter from the air.



Diesel Emissions – Controls

- Use electric plant/ tools where possible
- Restrict amount of diesel powered plant in each area
- Ensure the area is well ventilated to dilute the air
- Use scrubbers to remove diesel particulate from air
- Do not leave diesel plant idling underground
- Close doors and windows of plant and LV's
- Ensure all plant and LV's are emissions tested
- Wear respiratory protection in the tunnel and in the spoil sheds

