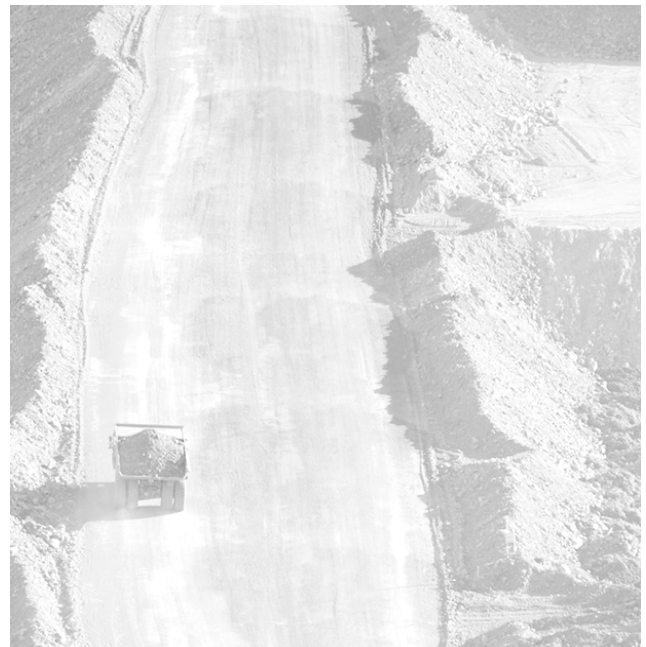


Environmental noise compass equipment used to monitor noise from different directions.

Yancoal manages two open cut mines in the Hunter Valley - Hunter Valley Operations and Mount Thorley Warkworth.

We recognise that our operations in the Hunter Valley generate noise and we have a strong commitment to continuous improvement in the area of noise management.

Minimising our impacts is a responsibility of all mine operations staff.



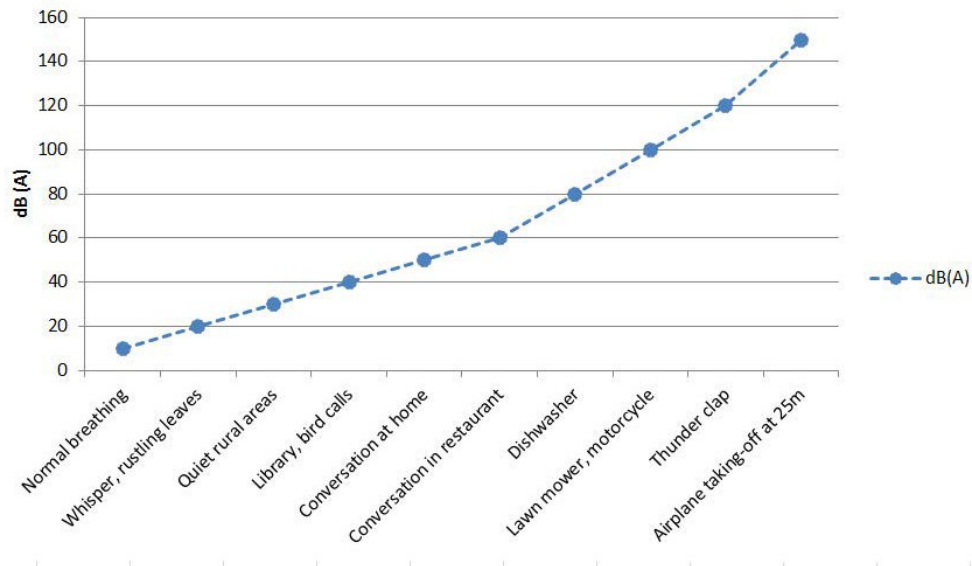
What is noise?

Noise consists of sounds that travel through the air as a series of waves, which are measured in decibels (dB).

Noise is also characterised according to loudness (amplitude) and pitch (frequency). These components can make noise less noticeable, for example the sound of an air conditioner; or more annoying, such as impulsive sounds like vehicle horns.

We experience a range of noises in everyday life, and these noises affect everyone differently. People who live in quiet areas will often sense an increase in noise more acutely than those living in louder environments.

Typical Noise Levels



What are the sources of noise at a mine?

Our Hunter Valley mines generally operate 24 hours a day, seven days a week. The main sources of noise are haul trucks, track noise from dozers, excavators, shovels, draglines, blasting, noise from Coal Handling Preparation Plants (CHPP's), and conveyors.

Noise is greatly influenced by weather conditions, particularly temperature, wind speed and direction. All of these elements affect the way that noise travels through the air and is experienced by people nearby. We carefully consider weather conditions when managing noise. Under certain conditions it is not uncommon for mining operations to be reduced or suspended to ensure noise emissions do not exceed noise limits for nearby sensitive receptors.



'Light horns' (orange beacon on the right) are used instead of sound horns to reduce noise from heavy

Minimising noise

We try to reduce noise from our operations in the following ways:

- Fitting heavy equipment, for example trucks, dozers, excavators and drills, with sound suppressing equipment (known as attenuation). This might include enclosing engine bays with insulation and fitting mufflers on exhausts;
- Proactive setup at the start of night shift operations. This means using sound attenuated (quiet) equipment in areas where risk of noise exposure is greatest;
- Adjusting mine activity for day and night conditions;
- Using real-time noise monitoring to ensure that noise levels are managed every night;
- Enclosing coal processing areas
- Educating employees about noise sensitivities and how they help manage noise at site
- Creating bunds or screens to insulate against noise
- Covering coal conveyors
- Using lights on loading units instead of audible horns
- Fitting noise insulation on shovel buckets



Haul truck being fitted with sound suppressing equipment

How do we measure noise?

We continuously measure noise generated by our operations to assess our performance against regulatory conditions and the effectiveness of our noise management strategies. We measure noise using a combination of attended (hand-held) and real-time noise monitoring in nearby community areas surrounding our operations.

Where noise levels are measured close to or in excess of the specified criteria, our operations are required to take steps to ensure that noise is minimised. Modifications to operations are generally undertaken according to the hierarchy of control, and include:

- Changing fleet types to sound attenuated fleet
- Changing haul routes
- Changing dump locations
- Reducing fleet numbers
- Shutting down tasks/mine site

In many instances, these changes are made proactively in anticipation of operating and weather conditions

Community Response Officers

We have three Community Response Officers (CROs) who support the real time monitoring networks for our Mount Thorley Warkworth (MTW) operations. Using hand held monitors, the CROs validate real time data recorded at our permanent monitoring stations.

Our CROs carry out noise measurements at several locations around MTW, including around the village of Bulga and Long Point areas. They monitor noise on weekdays, weekends and throughout the night.

CROs communicate constantly with the mine shift coordinator to help the site make changes to its operations if noise levels are rising, and to let them know whether the changes are working to reduce the noise levels in real time.

Our CROs also speak with community members who register concerns about noise. They log their complaints and inform them of what changes may be happening at site to minimise noise.



Handheld noise monitoring units used by our Community Response Officers

Working to compliance

Field measurements of environmental noise are complex and we engage specialised consultants to undertake assessments to ensure our compliance with our consent requirements. Compliance monitoring data is made publically available on a monthly basis on our website. Any measurements which exceed criteria are reported to the NSW Department of Planning and Environment, and are thoroughly investigated.

How is mining noise regulated?

In New South Wales, noise levels are regulated through the Protection of the Environment Operations Act 1997. Mining consents also require operations to manage, monitor and report noise levels.

Noise from mining operations is tightly regulated against standards adopted by the NSW Environment Protection Authority (EPA) and outlined in its Industrial Noise Policy. Blast Management Plans, based on the EPA guidelines, outline management and monitoring methods to minimise blasting impacts.

You can find out more about our noise management plans, blasting plans and annual environmental monitoring reports that we submit to government by visiting <https://insite.yancoal.com.au/> and searching 'documents'.



MTW Community Response Officer undertaking handheld noise monitoring near Bulga

How can I make a complaint or ask a question?

If you wish to lodge a complaint about noise from one of our operations, please contact us on our free call number 1800 656 892. Please indicate if you would like to be called back to discuss the matter further and a member of our environment team or shift coordinator will return your call.

Who looks after the monitoring equipment?

It is important that the real-time and hand held monitoring equipment is regularly calibrated and serviced to ensure they are providing accurate and reliable data. This is undertaken by locally based, specialist suppliers.

Am I able to receive sound proofing mitigation works for my home?

Under a mine's development consent some properties are prescribed mitigation rights, based on modelled environment factors (dust and/or noise). If you would like to know whether your property lies within a Yancoal Zone of Mitigation please call 1800 727 745.