



Port Waratah takes a long-term strategic view to ensure we continually improve our noise emissions over time. Focussing on areas of our site that have the best noise reduction opportunities for our neighbouring communities, we have developed a plan that delivers sustainable long-term noise improvements for the community and complements operational performance outcomes.

How we manage noise

An operating coal terminal is a noisy environment, therefore understanding how and where we generate noise is key to ensuring that we have effective controls in place to minimise potential impacts. These controls are incorporated into the design and operation of our equipment, as well as the scheduling of work, the systems and procedures that direct our daily operations and long-term noise improvement strategies.

Where it is commercially viable, the installation of low-noise specification equipment (i.e. conveyor drives, rollers, and coal transfer chutes), is standard practice at Port Waratah. We have incorporated best practice design principles to reduce offsite noise, such as the enclosure of transfer points, re-orientation of alarms and adjustment of alarms to minimise noise in offsite areas.

Our employees and contractors play a critical role in managing noise, therefore ongoing education and awareness training play an important part ensuring noise-related issues remain a focus area for our business and that our terminals are being operated and maintained effectively.

Regulatory compliance

Ongoing compliance is demonstrated through our noise monitoring programme which regularly assesses our performance against our noise criteria and long-term goals. Throughout 2020, we maintained full regulatory compliance with noise-related conditions specified in development consents. In the absence of regulatory criteria, we have developed internal noise goals to measure and monitor our performance. Our performance against set goals demonstrates improvement, with just two instances of night-time noise levels exceeding the relevant goal.

Continuous improvement

Good progress was achieved with the Carrington Terminal's multi-year Conveyor Drive Strategy. The strategy aims to reduce our noise impact in neighbouring communities by upgrading more than 30 drives over several years with lower noise replacements. In 2020, another set of primary and secondary stockyard conveyor drives were upgraded

in June, and the Reclaimer-1 boom drive was replaced in October. Since commencement in 2017, 17 drives have been upgraded, with a capital expenditure of more than \$4.5 million. In 2021, we plan to upgrade a further five drives with a budget of \$1.7 million.

The Kooragang Terminal continued implementation of its noise reduction strategy, focussing on a programme of 'hot-spot' monitoring of conveyor systems and the targeted replacement of higher noise-generating locations. Five conveyors with a total length exceeding 4.7km were assessed and segments with noise generating hot spots will be targeted for replacement in 2021.

Community feedback

Overall, the results from the Local Voices Community Anchor Survey show the management of noise at Port Waratah has improved. However, responses did indicate that perceived noise impacts were slightly higher than previous surveys. This trend will be closely assessed in future surveys in conjunction to the implementation of planned noise improvement initiatives throughout 2021.

KEEPING THINGS QUIET

Proactive strategies to ensure effective noise management outcomes

CASE STUDY

Carrington Real-time Noise Monitoring Technology

Since the Real-time Noise Monitoring Trial commenced at Carrington Terminal in 2019, we have successfully demonstrated the ability to identify 10 separate noise sources using the technology.

We also identified that noise from our Carrington Terminal operations does not dominate the local noise profile, and therefore it has been an ongoing challenge to develop a reliable method of identifying onsite noise issues impacting adjacent residential areas. The trial identified that while background noise does increase and decrease in line with the Terminal's operating status, the overall change in background noise is unlikely to be noticeable in residential areas in combination with other non-Port Waratah noise sources.

Throughout 2020, we focussed on trying to identify noises that may concern nearby neighbours, such as faulty idlers or alarms, as these noises typically have a higher pitch than normal operational noise. However, the practicality of this method proved to be challenging due to the variability in these types of noise.

In 2021, we will review the trial outcomes, looking at how we can consolidate learnings and drive improvement.

CARRINGTON CONVEYOR DRIVE STRATEGY



2020

3 TOTAL
SC8 Primary and Secondary Drives
Reclaimer 1 Boom Drive

SPEND \$976,000

2021 PLANNED

5 TOTAL
SC2 Primary and Secondary Drives
Stacker 3 Boom Drive
SC3 Primary and Secondary Drives

SPEND \$1,700,000