

Community Engagement

Our community engagement philosophy aims to build long-term positive relationships and legacies in the communities where we operate and where our people live and work.

UNDERSTANDING OUR IMPACTS

We recognise that our business relies on and interacts with regional, rural and urban communities across Australia. As such, consistent and accountable feedback management continues to be an integral part of our community engagement.

In FY2016 we received a total of 218 community concerns, a decrease of 23% on FY2015. Reasons for this decrease include:

- continued emphasis on our employees being mindful of our operational impact on communities
- improved processes in our interactions with landholders
- the completion of a number of infrastructure construction projects.

We have improved our performance, with 93% of concerns resolved by the end of FY2016 (compared to 66% in FY2015). Table 6 shows the timeline for resolution of community concerns in FY2016.

As shown in Figure 35, the majority of the concerns raised in FY2016 related to:

- rail noise (mainly sounding of the klaxon or horn)
- rail corridor management (such as fencing and vegetation)
- air quality related issues (predominantly coal dust)
- on-road driver behaviour
- residual impacts from completed projects.

We outline our approach to engaging with the community on a number of these issues in this chapter.

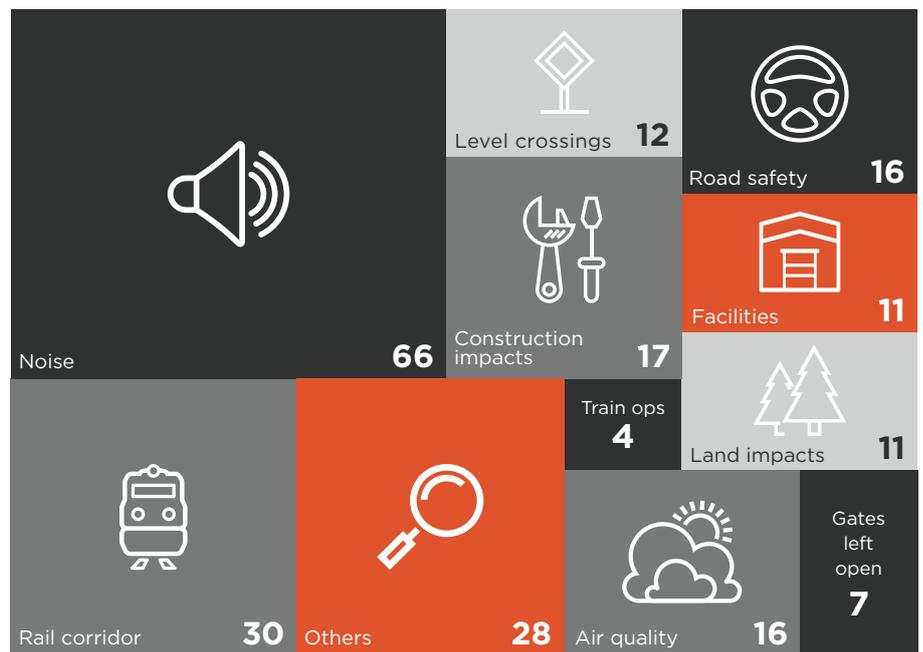


Figure 35: FY2016 Community concerns received.

Status of enquiry	Total	1-3 days	4-10 days	>10 days	% of total
Closed	202	136	35	31	93%
In progress	16	0	2	14	7%
Total	218	136	37	45	
% of total		62%	17%	21%	100%

Table 6: FY2016 Complaints performance.



RAIL CORRIDOR MANAGEMENT

We make continuous improvements in the CQCN rail corridor through a regular maintenance program, which seeks to improve the integrity and safety of the rail corridor. We engage with adjacent landholders to discuss and resolve issues about fencing, vegetation management, fire management and other geological impacts.

MANAGING RAIL NOISE

We seek to minimise noise from the operation of our rollingstock by working collaboratively with industry and government.

Noise associated with our activities can result from railway operation, maintenance, construction and depot operations. We seek to manage noise in a way that considers community concerns and complies with legal obligations.

The use of the klaxon (also referred to as the horn or whistle) is the source of the majority of noise complaints. However, sounding the klaxon is a critical safety requirement that must be adhered to by any train service travelling on any network and applies 24-hours a day, seven days a week. It ensures people or vehicles in the vicinity of a level crossing are aware of an approaching train. This also applies to warning bells at level crossings.

To be effective as a warning, the klaxon needs to be above ambient background noise levels. The length of time that a klaxon is sounded is stipulated by rail access agreements, balancing the need for a safety warning with consideration for residents close to the rail line. Additional warning may also be required where activities are occurring on or near the rail corridor.

What is Opacity Monitoring?

Opacity is a measure that enables the quantification of the dust emitted by a passing train. The average opacity for a single train is obtained by averaging the opacity readings over a three minute interval, starting when the first locomotive passed the monitoring station. The interval includes the time that the train takes to fully pass the monitoring station as well as time to record any residual dust.

Our train drivers are regularly monitored and assessed on these processes.

The rail regulators also undertake periodic audits of klaxon use. In addition, we investigate all concerns (complaints) received, including those relating to the usage of the train klaxon.

We also endeavour to minimise noise associated with maintenance and construction activities. In accordance with our community engagement commitment of 'no surprises', we inform impacted communities of activities that could be considered noisy. Actions taken on-site include locating noisy equipment away from residential areas, fitting of noise suppression equipment and ensuring that it is properly maintained, and coordinating activity during work hours wherever practical.

MANAGING COAL DUST

We seek to minimise coal dust emissions by working collaboratively with our supply chain partners.

In FY2016 we received 16 complaints about air quality through our community contacts. Nine of these related to coal dust. In seeking to address these complaints we have implemented a number of world-leading solutions to minimise our impact on local communities.

CENTRAL QUEENSLAND COAL NETWORK (CQCN).

Aurizon operates the CQCN where we work with our supply chain partners to minimise coal dust emissions through profiling and veneering of coal on the top of wagons, improved wagon loading practices and coal dust monitoring systems. While the impact of these mitigation practices is dependent on factors such as coal type and climatic conditions, through the implementation of these monitoring and mitigation practices, the coal supply chain has reduced airborne coal dust emissions by up to 75%⁹.

⁹ Connell Hatch, [Final Report, Environmental Evaluation of fugitive dust emissions from coal trains Goonyella, Blackwater and Moura Coal Rail Systems.](#)

As part of our ongoing commitment to minimise coal dust emissions, we installed an opacity monitoring point on each of the four rail systems in the CQCN in agreement with the Queensland Department of Environment and Heritage Protection (DEHP) (see Figure 37). The DEHP and Aurizon jointly agreed a three minute average reading of 5% opacity as the threshold level at which a passing train emits visually noticeable dust. The threshold of 5% opacity represents a measurable parameter that triggers an action to be taken to investigate and improve airborne dust emissions.

Figure 36 shows the rolling 12-months opacity data (exceedances) for the CQCN versus coal hauled. Despite record tonnes on the CQCN, exceedances of the 5% opacity level have declined significantly since veneering was completed on all loading stations by mid-2014. Despite this excellent performance we are committed to investigating each exceedance of the agreed DEHP opacity reading and working with our supply chain to understand why this has occurred and how it can be remedied.

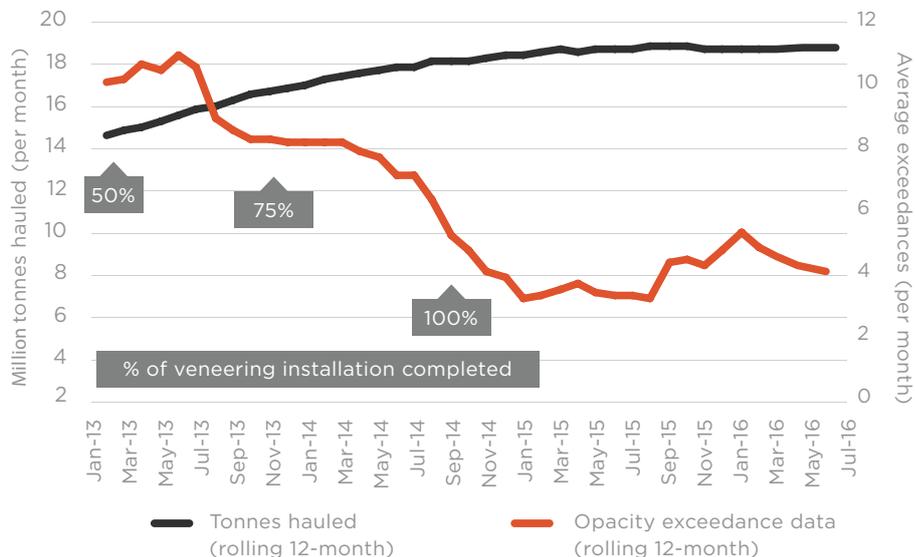


Figure 36: Opacity monitoring data vs. tonnes hauled in the CQCN.

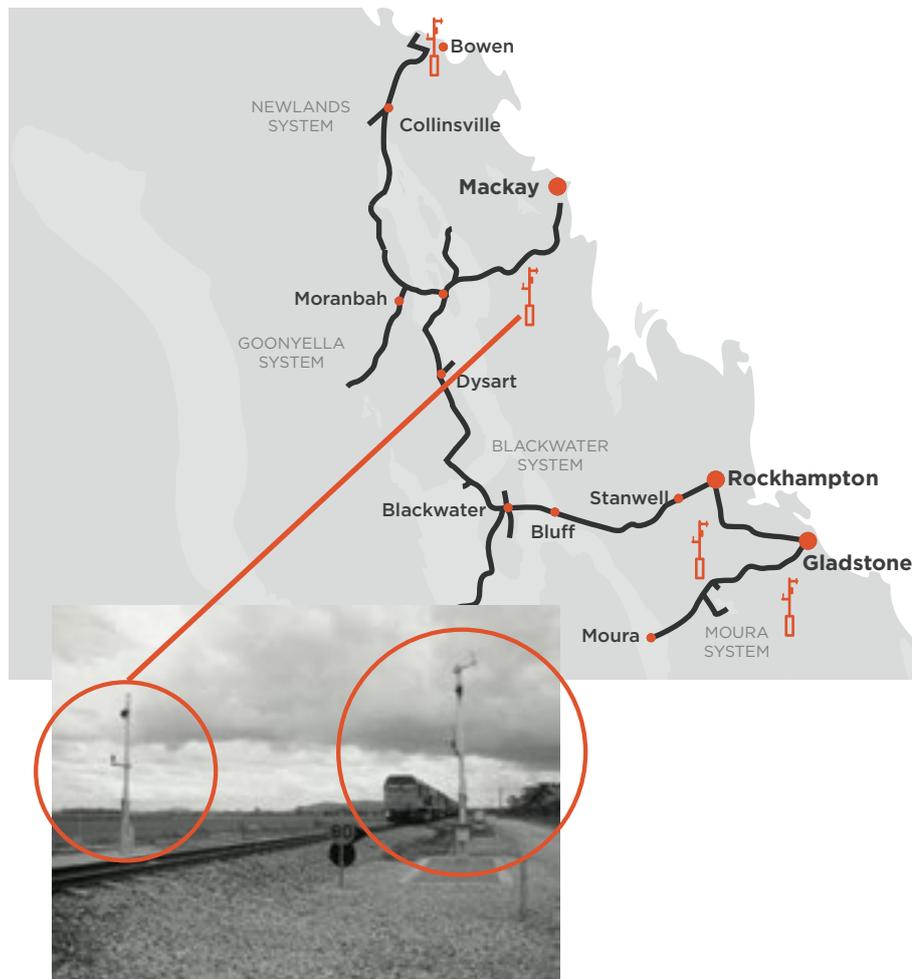


Figure 37: CQCN Opacity Monitoring station locations.

SOUTH WEST SYSTEM, QUEENSLAND

The South West System (SWS) comprises the Western and Metropolitan rail lines to the Port of Brisbane in Queensland. Aurizon has committed, along with the Queensland Resources Council led South West Systems Users Group (SWUG)¹⁰, to an additional 12 months of coal dust monitoring in the SWS. This is part of SWUG's South West System Coal Dust Management Plan, which also includes all three mines in the system voluntarily introducing veneering and profiling to reduce coal dust.

This monitoring is being undertaken by independent air quality scientists at the Department of Science, Information Technology and Innovation (DSITI)¹¹. Studies to date have demonstrated that, on average, coal makes up about 10% of black dust, which also contains soil, soot and black tyre rubber. The studies also demonstrate that coal dust emissions pre- and post-veneering were well within Queensland guidelines.

Following publication of the initial study, Queensland Health concluded that '...for people living along the corridor, the dust concentrations measured during the (2013) investigation are unlikely to result in any additional adverse health effects.'¹²

¹⁰ The South West Users Group comprises coal companies New Hope Group, Yancoala Australia and supply chain service providers Aurizon, Queensland Rail and Queensland Bulk Handling.

¹¹ DSITI was previously called the Department of Science, Information Technology, Innovation and the Arts (DSITIA).

¹² Western - Metropolitan Rail Systems Coal Dust Monitoring Program, Final Report, October 2013. DSITIA.

HUNTER VALLEY, NEW SOUTH WALES

We continue to work with our coal supply chain partners on coal dust management improvements associated with the haulage of coal on rail in New South Wales (NSW). This has included working with other operators to provide voluntary reports to the NSW Environment Protection Authority (EPA) on coal wagon doors and the associated design of coal wagons.

Aurizon was also an industry representative on the Lower Hunter Reference Group which released its final report in April 2016¹². This study was initiated by the NSW EPA in response to concerns about visible dust in the Lower Hunter. The dust deposition study focussed on identifying the major sources and composition of larger dust particles, visible to the human eye.

Sampling was completed over a 12-month period by AECOM, which found that deposited dust measured at 12 sites in the Lower Hunter region was below EPA criteria levels. Analysis of 72 dust samples found that soil or rock was the primary component, averaging 69%. Other components were coal 10%, rubber 4% and soot 3%¹³.

The EPA also released the findings of another major study which complemented the dust deposition study. This [Particle Characterisation Study](#) sampled fine particulates at four key sites and coarse particulates at two sites in the Hunter over a 12-month period. The findings of this study included:

- All sites had similar levels of particles across the year except Stockton which had higher levels of fine and coarse particles.
- Coarse particles were found to be highest at Stockton due to the fresh sea salt and further investigation is being undertaken to clarify the contribution of coal, which appears to contribute up to 10% of coarse particles.

Taken together, the studies show that levels of air particles and dust in the Lower Hunter region are good by world standards, but occasionally particle levels will spike as a result of industrial or seasonal weather patterns. The NSW EPA Chief Executive, Barry Buffier said that the findings were "a great outcome for the community"¹⁴.

We recognise our impacts extend beyond the physical influence of our operations and that we contribute by employing local residents, and purchasing goods and services from local suppliers (as described by our regional Economic Contribution Analysis published in our FY2015 Sustainability Report). We also seek to invest in the long-term future of communities with funds and information campaigns.

¹³ [Lower Hunter Dust Deposition Study Final Report, AECOM, February 2016.](#)

¹⁴ NSW EPA Media Release, 27 April 2016: [EPA to release findings of Lower Hunter Air Quality Studies.](#)

¹⁵ [The Cost of Violence Against Women and Their Children, March 2009,](#) The Department of Families, Housing, Community Services and Indigenous Affairs.

COMMUNITY GIVING

The [Community Giving Fund](#) was established to provide support to our communities in the areas of Health & Wellbeing, Community Safety, Environment, and Education. This biannual round of cash grants awards deserving charities and community groups with funds of up to \$20,000 to deliver critical initiatives and projects in the areas in which Aurizon operates. Since 2011, we are proud to say that we have helped over 220 charities and community groups around Australia.

In FY2016 the fund provided grants to 40 organisations. Some of these included:

- **Orange Sky Laundry.** Funding to fit-out a mobile, self-contained, 10-foot shipping container with six commercial laundry machines which can be taken to regional areas to provide free laundering services to the homeless, those affected by natural disasters, and remote Indigenous communities which otherwise would not have access to clean clothing.
- **WetlandCare Australia.** Funding to engage the residents of Maryland, NSW, in their environmental education project regarding the protection of water quality and biodiversity at Hexham Swamp, a significant migratory shorebird habitat.
- **Esperance Care Services (ECS).** Funding to purchase a new freezer to allow ECS to accept and store donations of frozen goods to supplement their food hampers for Emergency Relief.

In addition, through our Freight Assistance Program, we have transported food, clothing and books on behalf of the Salvation Army, Red Cross, Lifeline, St Vincent de Paul, Samaritan's Purse, Food Relief North Queensland, and the Anglican Diocese who provide these items to struggling families in Queensland communities.

We also regularly donate and raise funds for charities and, as part of our community investment program, work with some great local, regional and national partners who share our commitment to community programs. These include UN Women, the Clontarf Foundation, Australia's CEO Challenge Darkness to Daylight Challenge Run, Murri Carnival and the Newcastle Knights.

HELPING TO PUT AN END TO DOMESTIC AND FAMILY VIOLENCE

Domestic and family violence is a disturbing reality with long-lasting impacts on families, communities and workplaces. It has an estimated economic cost of approximately \$13.6 billion a year in Australia¹⁵. As a community we need to create an environment where speaking out is encouraged and viewed as the right and respectful thing to do. The size and demographic of our workforce has allowed us to inform a significant group within Aurizon and the community about the risks and consequences, and where support can be reached.

Aurizon has long been outspoken in advocating against domestic and family violence. For example, our MD & CEO is the Deputy Chair of the Queensland Premier's Domestic and Family Violence Implementation Council.





OUR AWARENESS OF SOCIAL IMPACT

In July 2016, Social Scaffolding, a leading Social Impact practitioner in Australia, reviewed the impact of Aurizon's Indigenous Employment and Engagement strategies.

The Indigenous Pre-Employment Program was highly successful, with 15 out of 20 of the participants securing a role with Aurizon. By investing in the program, Aurizon also delivered shared value for both the participants (through sustained employment), and for our business (through increased staff retention). Voluntary turnover for Indigenous employees has also reduced from 11.3% four years ago to 3.3% in FY2016 and is currently lower than overall voluntary turnover of 5%. As a result, staffing costs such as recruitment, training and other associated business costs should also reduce.

"Supporting 20 Indigenous people from Central Queensland to participate in a pre-employment program is not just good for these new employees and their families, but also makes good business sense for Aurizon."

Hugh Foley
Social Scaffolding

SOCIAL RETURN ON INVESTMENT (SROI)

Social Scaffolding conducted a condensed Social Return on Investment (SROI) analysis of Aurizon's 10-week Indigenous Pre-Employment Program to measure the outcomes for the participants. SROI is an internationally recognised methodology that seeks to evaluate the impact of a project, program or policy. SROI is a form of stakeholder-driven evaluation blended with cost-benefit analysis that seeks to understand and measure the value of social, economic,

KEY SOCIAL IMPACT OUTCOMES OF AURIZON'S INDIGENOUS PRE-EMPLOYMENT PROGRAM

Financial benefits. Higher wages and entering a career pathway with further opportunity for promotion.

Personal benefits. Increased wellbeing, self-esteem and being a positive role model in the community.

Future opportunities. All interviewed participants stated a high regard for the program and willingness to be ambassadors to recruit others. We will continue to review future opportunities for the program where a suitable number of job positions are available and external training funding can support the program.

cultural and environmental outcomes created by an organisation and the costs of creating them.

The Pre-Employment Program, which was designed and developed as part of Aurizon's [Reconciliation Action Plan \(RAP\)](#), was undertaken in August to October 2015. The SROI was developed through interviews with employees, management, the training organisation and new Indigenous employees involved in the training. These interviews and comparative data were relied upon to estimate the impacts and outcomes associated with the program.

Aurizon's investment in this program was approximately \$120,000 and included payment of wages to participants. At completion of the program 15 Indigenous women and men were able to secure full-time permanent employment with Aurizon. These outcomes are a significant contributor to the RAP goals of Aurizon.

A total investment in the program of \$378,000 (including Aurizon and Federal Government funding) is estimated by social scaffolding to create \$795,000 worth of value over four years, resulting in an SROI ratio of 2.1:1.

Therefore, for every \$1 invested in the program, \$2.10 of social value is created. As a result, a small incremental cost for training and development has created a far larger social and economic benefit to the Indigenous community. >>

Aurizon's Reconciliation Action Plan outlines a number of strategies to promote sustainable employment opportunities for Aboriginal and Torres Strait Island People.