



PORT PROFILES

our
environment

noise quality



PORT of
TOWNSVILLE

Nexus North Queensland



Unreasonable noise levels or background noise can have an impact on many aspects of our daily life. Noise levels are affected by natural and anthropogenic sources including wind, rain, traffic, barking dogs, aircraft, neighbours, surrounding land use, pool pumps, air conditioners, stereos, televisions, radios, and power tools.

Port activities have the potential to generate noise through the movement of trains, trucks and heavy machinery, increased light traffic, construction activities, and general Port operations.

The Port community aims to enhance and protect the acoustic environmental values in the Port and the surrounding community. A noise monitoring program has been incorporated into the Port's long-term management strategy to identify potential problems and assess management initiatives.

The Port of Townsville provides a key gateway to shipping for North Queensland and is managed by the Townsville Port Authority (TPA), a Government-owned Corporation. The Port has a sea and land jurisdiction of over 400 square kilometres and has over 40 long-term tenants, handling a diverse range of products. Townsville Port Authority recognises that Port operations have the potential to impact on the surrounding environment and has identified environmental management as a core corporate responsibility. The TPA is committed to minimising and mitigating any impacts of Port activities on the surrounding community, ecological processes, or biological diversity.

Townsville/Thuringowa is one of Australia's largest and fastest growing tropical cities, experiencing high rates

of development and urban expansion. As the city grows and expands so too does the Port. The challenge is to ensure compatibility between residential encroachment and the growth of the Port.

Due to the industrial nature of the Port and its continual operation, the generation of noise and increased traffic along transport routes has the potential to impact upon surrounding areas and neighbouring residential and commercial properties. The Port of Townsville's ongoing noise monitoring program aims to ensure that noise generated by Port activities is within legislative guidelines. It also monitors the effectiveness of noise management initiatives throughout the Port, assists in land use planning, and monitors the impact of new developments.

noise monitoring program

Project-specific noise monitoring programs have been undertaken at the Port for a number of years. However, an ongoing noise monitoring program was developed and implemented in 2001 and incorporates recommendations and sites from the previous project-specific studies. In accordance with the environmental management responsibilities of the Port of Townsville, the noise monitoring program measures noise levels in and adjacent to the Port in an effort to:

- monitor compliance with internal and external noise quality standards and guidelines;
- determine noise sources contributing to any perceived or actual problem;
- observe long-term trends in noise levels at the Port of Townsville and surrounding areas;
- develop current contour maps of noise levels to assist with the development of strategies to alleviate the effects of noise on the community and to assist in Port planning;

- isolate and identify sources of high noise levels to allow implementation of appropriate management strategies.

Sampling is undertaken twice a year at over 20 sample sites in and around the Port of Townsville including transport corridors, residential, commercial, industrial, and recreational areas. Sampling is undertaken during the weekday and weekend for each site and at three separate time periods including; day (7am-6pm), evening (6pm-10pm) and night (10pm-7am).

Various environmental and audible noise characteristics are also recorded to ensure that external parameters such as wind speed and non-Port-related noise do not affect the interpretation of the results. The information provided by this program is utilised by the Authority's management team to determine whether noise mitigation measures are required. It is also used to assess existing initiatives and the impacts of new or existing developments.

noise mitigation

Noise mitigation measures vary depending on the source of the noise; in some cases it is a simple case of servicing or replacing noisy equipment, changing operating times, or altering practices to align with the surrounding acoustic environment. If the above measures are not viable, measures such as noise barriers in the form of built structures, earth mounds, or vegetation may be implemented, as may the re-routing of traffic or the relocation of noisy operations away from noise-sensitive areas.

to minimise impacts on the surrounding areas, meeting not only our statutory obligations, but also the Port's own high environmental performance objectives. The implementation of this program, in conjunction with other environmental strategies, ensures that all operations at the Port of Townsville are undertaken with a high regard for the environment and the community.

The noise monitoring program allows Townsville Port Authority



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