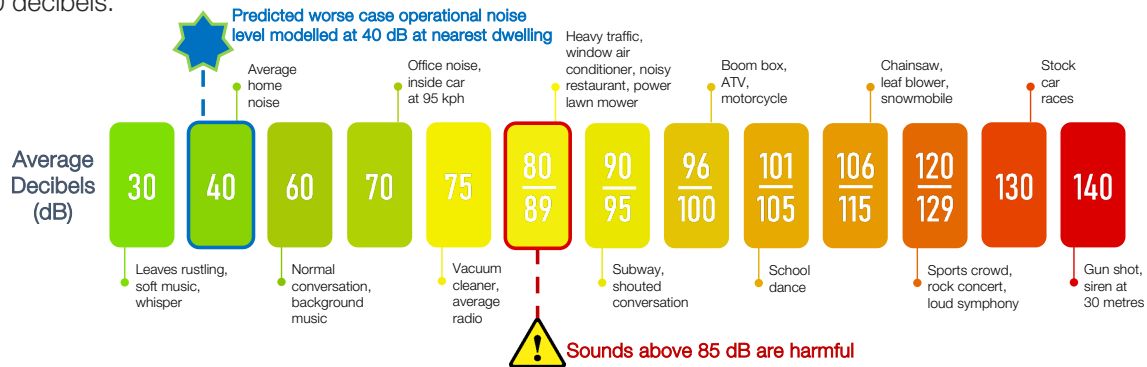


NOISE & VIBRATION

Noise & Vibration

A decibel (dBA) is a unit of measurement that indicates how loud a sound is. Humans can hear sounds between 0 and 140 decibels.



Receptors for Noise, Vibration and Air Quality

The nearest noise sensitive receivers (residences) to the site comprise isolated rural residences to the west and north, the nearest of which is in the order of 1,400 metres (west) from the site boundary.

Five dwellings are located within the site boundary, however; these are associated with the development, are unoccupied and therefore do not form part of the assessment.

Potential noise sources could include:

- Trucks
- Hoppers
- Generators
- Conveyors
- Dust extraction units
- Fans
- Cranes
- Stacking of grain bunkers
- Ship loaders
- Ships
- Construction equipment such as:
 - Cranes
 - Excavators and loaders
 - Generators
 - Piling

Noise Key Facts

- Noise goals are set in accordance with the EPA's Environment Protection (Noise) Policy 2007 (EPP) and are derived based on the land uses promoted by the Planning and Design Code.
- The highest predicted noise levels at the nearest occupied existing residence arising from site activity are 40 dB(A), in compliance with the day and night criteria applicable under the Policy.
- Vibration levels generated during operation are expected to be significantly lower in magnitude than those associated with the construction phase, and as such are not anticipated to be perceptible at the nearest sensitive location.
- Construction vibration is expected to be imperceptible at all vibration sensitive locations.
- Proposed operational noise criteria (as measured at the receiver):
 - 52dB(A) during DAY (7am-7pm)
 - 45dB(A) during NIGHT (7pm-7am)
- No legislation, policy or guidance documents specifying objective vibration criteria exist within South Australia.
 - General Environmental Duty of the Environment Protection Act 1993 outlines that *'all reasonable and practicable'* measures must be taken to prevent or minimise environmental harm arising from the project.
 - Guidance from AS 2670.2-1990: Evaluation of human exposure to whole-body vibration (AS 2670.2).
 - Vibration from quarry blasting is limited by Australian Standards 2187.2-2006 – Ground Vibration and Airblast Overpressure.

FAQ

Will there be any impacts to the marine environment from noise and vibration?

The Construction phase of the proposed port will result in the highest level of noise emissions that may impact marine fauna, due to the extent of piling works required.

Through the implementation of soft start procedures, safety observation zones to monitor movement of marine fauna, and shut down procedures where marine mammals are identified within 500 m of piling activities, it is not anticipated that any marine biota will be significantly affected by underwater noise emissions.

During operation, there will be noise from the conveyor, shiploader and equipment located on the jetty and wharf. As these noise sources do not have any direct connection to the water, there will be limited noise propagation into the water from these sources.



Noise logger at proposed Cape Hardy port site

In addition to the EIS Amendment Report being available for review and comment in the coming weeks, Iron Road's website holds a wealth of information on the history of the CEIP and the Cape Hardy port which can be found at www.ironroadlimited.com.au.

Should you have any questions or insights for the project team regarding Stage I, please contact Iron Road on 08 8214 4400 or email at its dedicated address: community@ironroadlimited.com.au