



## NOISE MANAGEMENT

Esperance Port Sea and Land (EPSL) operates 24 hours a day, 7 days a week. Noise is generated by activities within the Esperance Port premise and from the Port Access Corridor (PAC).



Above: An iron ore train leaving the Esperance Rail Yard.

### What are the noise sources from the Port related to iron ore handling?

The major sources of noise associated with the iron ore handling at the Esperance Port include unloading of the iron ore at the rotary car dumper, operation of the conveyor system, handling of iron ore within the iron ore storage sheds and dust extraction equipment operating to maintain iron ore storage sheds at negative pressure to control dust.

### Recent noise reduction actions:

EPSL and Mineworks have reduced noise from front end loaders operating in the iron ore storage sheds. Self adjusting reversing alarms have been fitted along with exhaust systems that reduce both noise and exhaust emissions. Australian Railroad Group (ARG) and WestNet Rail are also committed to reducing overall noise emissions, including the idling of locomotive engines.

### Will there be an increase in noise from the Esperance Port's iron ore circuit if the proposal is approved?

Most noise sources from the iron ore circuit have already been fully enclosed (including conveyors, transfer stations, loading sheds, conveyor drives) and have noise attenuation lining. Combined with operational practices that are already considerable of noise impacts, the level of noise from the iron ore circuit is not anticipated to increase with the increased throughput to 11.5 Million tonnes per annum (Mtpa).

### Will there be an increased rail noise impact to residents?

In 2009, specialist noise consultants Lloyd George Acoustics Pty Ltd assessed the noise impact of the proposal to increase export of iron ore from Esperance Port to 11.5Mtpa. It concluded that the proposal would result in lower noise emissions at locations along the rail line and at residential areas by the replacement of L-class locomotives with quieter Q-class and AC-class locomotives.

The quieter locomotives are predicted to reduce noise levels adjacent to the PAC by 4-6 decibels (dB). At residential locations, maximum and average noise levels are expected to reduce by 2.2-3.1dB and 1.3-2.3dB, respectively. This is despite train noise being audible for approximately 3 minutes longer, per train. This predicted outcome is a direct result of the proposed reconfiguration of trains, involving substitution of the older, noisier L-class locomotive with quieter Q-class and AC-class locomotives specifically suited for this task.



Above: Rotary car dumper in the process of unloading a wagon.

### OVERVIEW

- Noise from the handling of iron ore at the Esperance Port is not anticipated to increase.
- The proposal to increase throughput to 11.5Mtpa is anticipated to result in lower overall noise levels at locations along the rail line and at residential areas.
- Overall reductions in noise levels from the rail transport of iron ore are achieved by the replacement of the older, noisier locomotives.