

# Noise Management Update Kwinana Grain Terminal



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# Kwinana Grain Terminal

The Kwinana Grain Terminal is Western Australia's primary grain handling export facility, shipping more than half of the State's export grain.

- Opened in 1976 and receives grain from 120 country receival points
- Storage capacity of 1.1 million tonne
- In 2005 loaded 160 vessels
- Average throughput of 500,000 tonnes per month
- Receive grain at 4,000 tonne per hour predominately from rail
- 58 acre footprint with no buffer at our southern boundary
- Operate 7 days a week, 24 hours a day, 365 days a year with a two shift arrangement
- Load to ship between the hours of 07:30 hrs and 22:30 hrs. Extraordinary circumstances may result in loading outside of these hours (10 days in 2005)

# Historical noise issues

- Noise Compliance issues raised in late 1990's.
- Noise Management Plan implemented in 2000 that reduced noise emission levels by approximately 12 db.
  - Attenuators fitted to fans and dust houses
  - Fans placed on timers on horizontal storages & shipping gallery
  - All south facing windows on sealed shut
  - Alarm location and configurations changed
- Noise monitoring conducted at boundary by third party annually in 2000, 2001, 2002 and 2003. This monitoring confirmed compliance with noise regulations.

# Current noise management strategies

- 'Buy Quiet' policy in place since 2000.
- Regular plant maintenance schedule that factors in consideration of noise issues.
  - This includes conveyer roller replacements.
- Response plan for "*complaints*" that instigates immediate personal follow up if deemed appropriate.
- Kwinana Grain Terminal has held certification since 2004 to ISO14001 Environmental Management System.
  - As part of this certification ongoing projects are run to manage environmental impacts, including noise. This system is third party audited 6 monthly.
- Continued to implement strategies within the plant to reduce noise emissions such as two way radio receivers below ground to reduce the need to use PA system except in emergency situations.

# Impact of the KIC Cumulative Noise Study

- Report released July 2005. CBH Group sit as an associate member with representation on the EPC.
- August 2005 CBH commissioned Herring Storer to conduct barn owl monitoring to test KIC cumulative model and to identify any noise 'hot spots' that we could focus in on.
- Report confirmed the findings of the cumulative study and identified the above ground cross conveyers as having the largest impact on cumulative levels at the North Rockingham location.



# Future Noise Management Plan aims

- Assessment of 'Barn Owl' monitoring conducting immediately after KIC Cumulative Noise Report. Re run similar monitoring post any noise reduction work.
- 'Noise investigation' of cross conveyers planned for April (Herring Storer Acoustics to conduct).
- Scope of work includes identifying practicable solutions to noise reduction.
- Re evaluating previous noise management initiatives to assess the on going suitability.



# Outcomes we are pursuing

- Investigation of above ground cross conveyers and innovative noise reduction solutions generated.
- Second opinion of recommendations planned if required.
- Formalise into an action plan.
- Confident db can be squeezed from this area. At this stage we don't know how much.
- Intent to comply with current regulations.