

# Environmental Program

## NOISE AND VIBRATION CONTROL

### BBA-ENP-1000-1400-0010

Revision	Date	Revision Description	Prepared	Reviewed	Approved
A0	27 April 2007	Draft for BBA review	IW		
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### Operational Control Tables

Table OCO 10.1 Noise and Vibration Control

## 1. Purpose and Scope

This Environmental Program describes construction Noise and Vibration Control measures to minimise the impact of the design and construction of the Gunns pulp mill.

This Environmental Program forms part of the Bell Bay Alliance (BBA) Construction Environmental Management Plan (CEMP) and must be read in conjunction with the CEMP.

## 2. Objectives

1. Manage construction noise and vibration impacts.

## 3. Targets

1. Management of night noise and dust suppression during construction.
2. Vibration levels must not exceed 2mm/s (PPV) at heritage buildings, 10mm/s (PPV) at residential buildings and 25mm/s (PPV) at commercial or industrial buildings.
3. Minimise noise from equipment, plant, vehicles and project infrastructure.
4. Undertake sufficient noise monitoring to evaluate conformance with the Noise and Vibration Environmental Program.
5. Minimise community noise and vibration complaints during construction.

## 4. Regulatory and Contractual Requirements

Refer to:

- CEMP Appendix B – Environmental Legislation Register
- CEMP Appendix C – Approvals Matrix
- CEMP Appendix D - Environmental Licences Register
- CEMP Appendix F – Environmental Commitments
- CEMP Environmental Obligations Register: GNS-OBL-1000-1400-001.

## 5. Technical Documents

The following background studies, research documents and assessments have been used to identify the key environmental aspects:

Reference	Document Title
<a href="http://www.gunnspulpmill.com.au/iis/">http://www.gunnspulpmill.com.au/iis/</a>	Bell Bay Pulp Mill Draft IIS and Appendices

The following technical documents have been used to assist in identifying appropriate operational controls:

<b>Availability</b>	<b>Document Title</b>
Standards Australia	AS1055 Environmental Noise
Standards Australia	AS2436 Construction Sites, Noise Control
Standards Australia	AS2659 Part 1 Guide to the use of sound measuring equipment - Portable sound level meters
EPA Victoria	Environment Protection Authority Publication 480 – Environmental Guidelines for Major Construction Sites
EPA Victoria	Environment Protection Authority Publication TG 302/92 – Noise Control Guidelines
DTAE Tasmania	Tasmanian Noise Measurement Procedures Manual
DTAE Tasmania	Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2004

## 6. Key Issues

Refer to:

- CEMP Appendix G – Environmental Risk Assessment

The technical documents and the environmental risk assessment have identified the following key issues:

- Earthworks
- Wharf works and associated piling activities
- Trench establishment and trench excavation
- Tamar Estuary crossing of water supply pipeline
- Construction traffic
- General construction out of normal hours.

Areas of general sensitivity relating to noise and vibration, include:

- Residential and commercial properties within close proximity to the construction footprint.

Equipment must satisfy the requirements of the Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2004.

Noise measurements must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

## 7. Operational Controls

The operational controls for management of noise and vibration during design and construction are set out below:

<b>Table</b>	<b>Title</b>
OCO 10.1	Noise and Vibration Control

The operational controls include requirements and responsibilities for:

- Consultation
- Approval requirements
- Design of permanent works
- Design of temporary works
- Construction activities
- Commissioning and handover.

## 8. Site Environmental Plans

- Refer to SEP Register.

Site Environmental Plans (SEPs) detail practical environmental management measures to be implemented at specific worksites to minimise potential impacts of construction activity on the environment and community. They are designed to provide more site specific detail than is included in the Environmental Program and Operational Control tables.

The information contained in the SEPs is presented in tabular drawing format. This is to make them easy for use by all BBA site personnel, consultants and subcontractors.

The controls set out in the SEPs are drawn from the Environmental Programs.

## 9. Contingency Management

The environmental risk assessment has identified the following circumstances which could occur outside normal operating conditions:

- Subsurface material (rock) resulting in the use of alternative construction methods (hammering, blasting, etc) within residential areas.
- Inadequate modelling and noise attenuation design to meet performance targets.
- Unforeseen property damage and community complaints resulting from inadequate construction methodologies or activities at site compounds.

If these circumstances occur, the following contingency measures will be implemented:

- The activity in that area will be modified or stopped.
- Any resident known to be affected will be informed of remedial measures.
- If required, the DTAE will be informed.
- The construction method and control measures will be reviewed and modified if necessary.
- The modified methods and controls will be monitored to ensure compliance has been achieved.

## 10. Evaluating Performance

The Operational Controls, together with the SEPs are used as the basis for the evaluating performance.

Refer to:

- CEMP Appendix H – Construction Monitoring Plan
- CEMP Appendix I – Internal Environmental Audit Schedule
- CEMP Appendix J – External Environmental Audit Schedule.

Environmental Checklists are for evaluating performance.

Refer to:

- BBA-CKL-1000-1400-010A Noise and Vibration Control.

## 11. Reporting

Refer to:

CEMP Appendix K – Environmental Reporting Program

## 12. Attachments

Not Used.