

## Environmental Program

# STORAGE AND USE OF HAZARDOUS MATERIALS, FUELS AND LUBRICANTS

## BBA-ENP-1000-1400-0007

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A0	27 April 2007	Draft for BBA review	IW		
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### Operational Control Tables

Table OCO 7.1 Storage and Use of Hazardous Materials, Fuels and Lubricants

## 1. Purpose and Scope

This Environmental Program describes the management measures for the Storage and Use of Hazardous Materials, Fuels and Lubricants 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. Protect the beneficial uses of air, land and water, and human ecological health, from the impacts of hazardous materials and dangerous goods.
2. Minimise chemical and fuel storage on-site.

## 3. Targets

1. Minimise chemical and fuel storage on-site. Ensure any hazardous materials and dangerous goods are adequately stored and managed.
2. Bunds installed and precautions taken to reduce the risk of spills.
3. Contingency plan implemented to handle spills, so that environmental damage is avoided.
4. Designated storage areas designed to ensure all spills are contained.
5. No discharge of hazardous materials or dangerous goods to waterways or soil.
6. All hazardous waste (asbestos, etc) management consistent with the requirements of Industrial Waste Management Policies, regulations and DTAE guidelines.

## 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.

In particular, the following requirements are relevant:

- Dangerous Goods Act 1998.
- Dangerous Goods (General) Regulations 1998.
- Workplace Health and Safety Act 1995
- Workplace Health and Safety Regulations 1998
- DTAE - Industrial Waste Management Policies.
- National Occupational Health & Safety Commission's List of Designated Hazardous Substances.

## 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:

Availability	Document Title
Standards Australia	AS 1940 The storage and handling of flammable and combustible liquids
Standards Australia	AS 4289 Oxygen and acetylene gas reticulation systems
Standards Australia	AS 4332 The storage and handling of gases in cylinders
EPA Victoria	Environment Protection Authority Publication 347 – Bunding Guidelines
EPA Victoria	Environment Protection Authority Publication 480 – Environmental Guidelines for Major Construction Sites
NOHSC	National Occupational Health & Safety Commission's - Approved Criteria for Classifying Hazardous Substances

## 6. Key Issues

Refer to:

- CEMP Appendix G – Environmental Risk Assessment.

This project involves a large and diverse range of stationary and mobile equipment which if not correctly maintained, serviced and refuelled can adversely impact the environment.

An added complexity is that a significant portion of the work will be carried out within the more sensitive marine environment.

The major potential risks are associated with hydrocarbon contamination of the freshwater environment (surface and groundwaters) and associated soil/land contamination, as well as marine waters.

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

- Protection of existing water and soil from contamination.
- The transportation, storage and handling of hazardous material and dangerous goods within the vicinity of existing waterways and residential properties.

## 7. Operational Controls

Environmental outcomes to be achieved include:

- Induction provides adequate information on hydrocarbon mitigation practices to contractors/employees.
- No significant contamination of soils, freshwater or the marine environment.

The operational controls for management of Hazardous Materials and Fuels during design and construction are set out below:

Table Reference	Title
OCO 7.1	Storage and Use of Hazardous Materials, Fuels and Lubricants

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

Prior to commencement of construction activities, emergency service organisations will be advised of the project and its emergency response procedures through the project's Emergency Response Plan.

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

- Unforeseen water and soil contamination due to a spill resulting from equipment or plant failure (ie. accidental rupture of tank, etc).
- Careless/negligent act leading to a spill.
- The bund design is insufficient for the maximum volume of material stored.

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- Unexpected ignition of flammable and combustible liquids during normal construction operations.
- Contamination of air, land and water, and human and ecological health, due to the incorrect separation and segregation of hazardous and dangerous substances.
- Traffic incident involving the transportation of bulk hazardous materials and dangerous substances.

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

- Control the source of the spill/breach.
- Assess the risk from the breach/spill, if required, DTAE will be informed.
- Implement temporary controls to contain the spill and implement cleanup.
- Dispose of products of clean up in accordance with DTAE requirements.
- Review the incident, construction method and control measures and take corrective action if necessary.
- As applicable, the modified methods and controls will be monitored to ensure they are effective and compliance has been achieved.
- Contingency measures shall be undertaken in accordance with the Emergency Response Plan, where applicable.

## 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 used for evaluating performance.

Refer to:

- BBA-CKL-1000-1400-007A Storage and Use of Hazardous Materials.

## 11. Reporting

Refer to:

CEMP Appendix K – Environmental Reporting Program.

## 12. Attachments

Not Used.