



**Tropical Timber  
Plantations Pty Ltd**

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**Beagle Bay *Big Tree*  
Country Plantation  
Project**

**ENVIRONMENTAL  
MANAGEMENT  
SYSTEM MANUAL**

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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **Environmental Policy**

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## Environmental Policy

Tropical Timber Plantations Pty Ltd embraces the international community's desire and objective to develop natural resources "in a way that meets the needs of the present, without compromising the ability of future generations to meet their own needs."<sup>1</sup>

Tropical Timber Plantations will continually strive to achieve excellence in implementing its policy by pursuing the highest standards in its environmental and social performance and through its business practices.

All Tropical Timber Plantations activities will be planned, implemented and monitored so that potentially adverse environmental impacts are prevented or minimised.

In order to achieve and maintain these standards, Tropical Timber Plantations will –

- Apply systematic management, environmental risk reduction and pollution prevention strategies as part of all operations in the short and long term;
- Strive for continual improvement in our activities;
- Comply with applicable legislation and other requirements;
- Establish environmental objectives and targets, implement management plans, monitor the effects of all activities and take the appropriate action to address adverse effects;
- Openly communicate with employees, the Beagle Bay community, government and the wider community in relation to environmental performance;
- Support the protection of special heritage sites and the cultural values of the peoples of the Dampier Peninsula; and
- Support and participate in community-based environmental projects and actively promote environmental awareness.

The Managing Director of Tropical Timber Plantations Pty Ltd is responsible to the Board of Directors of the company to effect the introduction and maintenance of this Policy which is to be reviewed annually.

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Naresh Patel  
Managing Director

1 December 2004

<sup>1</sup> UN Declaration on sustainability



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **Overview of Environmental Management System**

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## **INTRODUCTION TO THE EMS DOCUMENTATION MANUAL**

This manual is the primary document describing the Environmental Management System for Tropical Timber Plantations Pty Ltd (TTP) which is structured on AS/NZS ISO 14001 (1996). The manual outlines the way in which the company addresses each element of the international standard for an Environmental Management System, and gives reference to more detailed operating procedures which are part of this document.

This Manual and all of its revisions are subject to approval by the Plantation Manager. Ongoing review of this Manual will occur to ensure its continued effectiveness, with a full review at least annually.

"Issues" are controlled as follows;

- When **minor** changes are made, only the master electronic copy will be amended. No revised pages will be issued. (Examples of these minor changes are typographical errors, spelling errors etc).
- When **major** changes to the manual are made, a new issue of the manual will replace the previous and will include all minor changes noted above. (Examples of this are changes to policy or legislation, and changes to the way in which TTP addresses the elements of each standard.)

Only controlled copies will be updated. Controlled copies have front covers signed by the Plantation Manager. Personnel having access to electronic copies will be able to access the latest documents on a read only basis.

## **DOCUMENT STRUCTURE**

The EMS documentation structure is divided into four levels.

- ***Level 1: Environmental Policy***

The Environmental Policy encompasses the environmental performance aspirations of the company, and is the foundation of environmental management for TTP's Beagle Bay *Big Tree Country* Plantation Project. The Environmental Policy is available to the public on request.

- ***Level 2: EMS Procedures***

Management System Procedures address, where applicable, each of the elements (clauses) of the ISO 14001 standard. They describe how activities within the company are performed, detail what, when, where, who, and how various tasks are completed and what records of these activities and functions are kept.

- ***Level 3: EMS Work Instructions***

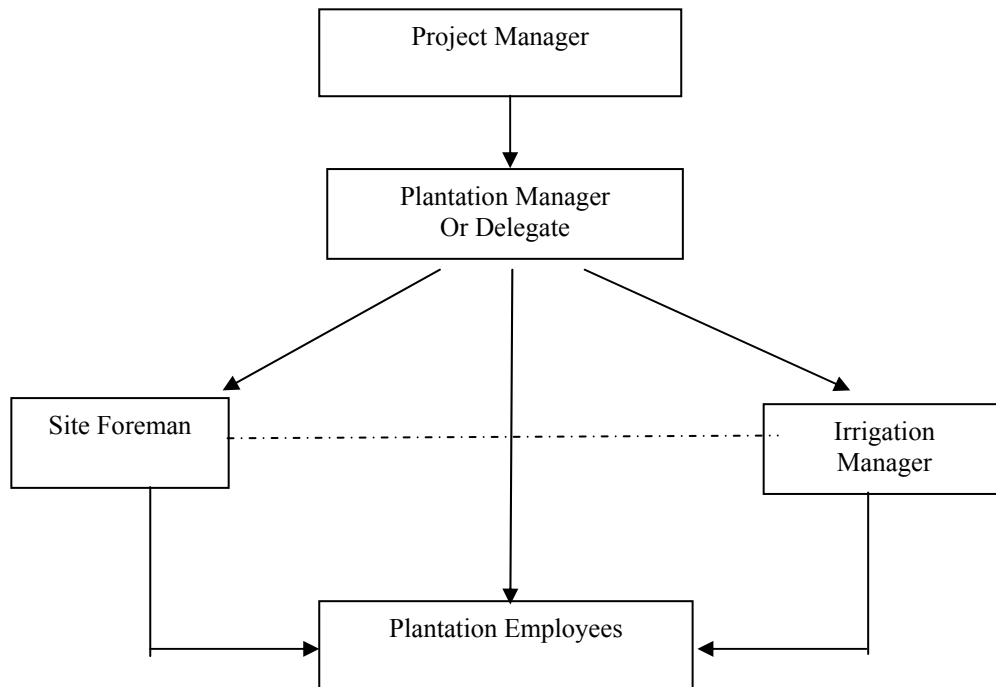
Where necessary Work Instructions are developed giving the detailed performance steps and the environmental considerations involved in carrying out a specific task.

- ***Level 4: Tools***

Supporting tools of the EMS and its documentation include forms and registers.



## MANAGEMENT COMMITMENT TO THE EMS



The Management of TTP is committed to its environmental policy and the management of environmental risks. Individual members of Management have embraced environmental responsibilities associated with their roles and authorities in the company.

## Management Roles & Responsibilities

### Manager – Tropical Timber Plantation

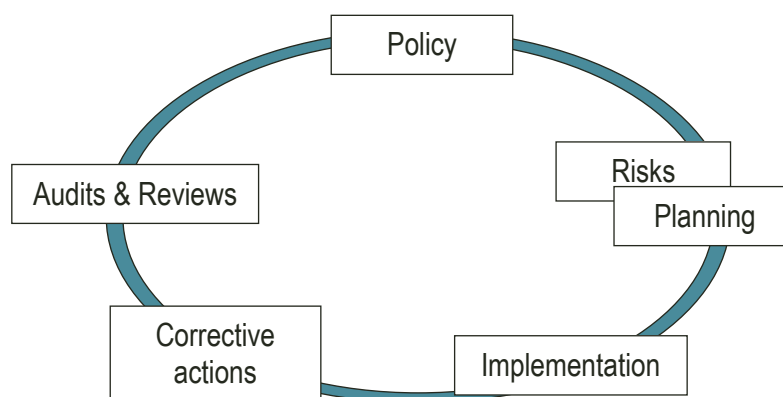
- Supports the implementation of the EMS;
- Undertakes management review of the EMS, including environmental objectives, targets and indicators;
- Ensures compliance with legal and other requirements relevant to the environmental aspects of TTP's activities;
- Ensures communication of significant environmental issues; and
- Provides resources essential to the implementation and control of the Environmental Management System.

### Plantation Manager or Delegate

- Implements, maintains, reviews and updates the EMS for the Beagle Bay *Big Tree Country* Plantation Project;
- Receives and forwards internal and external communications to the Manager;
- Provides assistance in the case of an emergency;
- Enforces prompt preventative and corrective action for non-conformances;
- Resolves disagreements pertaining to non-conformances;

- Undertakes management review of the EMS;
- Oversees the Environmental Performance at the site;
- Surveillance of the initiation of all ground-disturbing actions and supervision of works to ensure best practice environmental performance;
- Arranges for management review and internal audits;
- Ensures personnel training needs are being met;
- Controls all EMS records;
- Ensures that environmental hazard assessments are performed, and updates the *Risk Register* accordingly;
- Updates the *Obligations Register*, and clarifies any new legal issues or changes to existing regulations;
- Updates the *Register of Environmental Objectives, Targets and Indicators*;
- Clarifies legal and other environmental requirements; and
- Communicates all relevant environmental issues to employed personnel.

## THE ENVIRONMENTAL MANAGEMENT SYSTEM



### Planning

Legal and other requirements relevant to TTP's activities are identified ([P002 Legal and Other Requirements](#)) and documented in an obligations register. These requirements form an important component of TTP's risk management process, which involves the systematic identification of environmental aspects of its activities over which TTP has an influence ([P001 Environmental Aspects Procedure](#)). Risk assessment takes into consideration the potential for pollution, inability to achieve targets and non-compliance with legal or other requirements.

Significant risks are addressed through the setting of objectives and targets, and the implementation of management programs to meet these objectives and targets ([P003 Environmental Planning and Management Programs Procedure](#)). The risks associated with changes to process, plant, organisation, personnel or procedure are identified and managed in the same way ([P004 Change Management Procedure](#)).

## Implementation

To ensure that risk management requirements are effectively implemented, personnel who may have significant impact on the environment are experienced, qualified or trained to competency ([P005 Training Procedure](#)) in managing their environmental risks. Internal and external communication are maintained ([P006 Communications Procedure](#)) to facilitate discussions on risks and environmental performance.

Aspects associated with significant environmental risks have documented operational controls in place ([P008 Operational Control Procedure](#)) to minimise impacts arising from inconsistent work practices. These procedures together with all other documents ([P007 Document Control Procedure](#)) and records ([P012 Records Procedure](#)) essential to the environmental management system are maintained and controlled by the Plantation Manager or Delegate.

The potential for environmental emergency situations has been recognised. Such scenarios are identified by the Plantation Manager or Delegate and response and preparedness requirements addressed ([P009 Emergency Response and Preparedness Procedure](#)).

## Checking and Corrective Actions

Environmental performance is monitored at various levels ([P010 Monitoring Procedure](#)); through the reporting, investigation and analysis of incidents and non-conformances ([P011 Incident and Non-conformance Management Procedure](#)) and regular inspections and audits ([P013 Inspections and Audits Procedure](#)). Corrective actions are implemented to address the non-conformances.

## Management Review

Performance results are discussed at management level ([P014 Management Review Procedure](#)) to ascertain the appropriateness of the Policy, Objectives and targets, and the adequacy and effectiveness of elements of the EMS.

## Continual Improvement

The cyclic nature of the EMS structure described above facilitates continual improvement in TTP's environmental performance, and provides the mechanism for managing significant risks, achieving targets and complying with legal and other requirements.



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P001-Environmental Aspects Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify aspects and risks</b>	<p>Environmental aspects and risks of impacts will be identified in formal risk assessment sessions that are scheduled as part of the normal business planning cycle. Aspects include activities, products or services with potential / actual impacts on:</p> <ul style="list-style-type: none"> <li>Physical environment,</li> <li>Community and Company reputation,</li> <li>Legal and other compliance,</li> <li>Compliance with the intents of the Policy, and</li> <li>Achieving business objectives and targets.</li> </ul>	Plantation Manager or Delegate	<a href="#">P002 - Legal and Other Requirements</a>  <a href="#">WI001-Risk Assessment Work Instruction</a>
<b>Conduct task level risk assessments</b>	<p>Informal risk assessments will be conducted at task level prior to commencement of new activities. If risks are found to be unacceptable, the Plantation Manager or Delegate will be contacted before job can be undertaken.</p>	Supervisors	<a href="#">P012-Records Procedure</a>  <a href="#">F001-Job Safety and Environment Analysis Form</a>
<b>Document risks</b>	<p>Identified risks will be documented in the Risk Register.</p>	Plantation Manager or Delegate	R001-Risk Register
<b>Assess risks associated with change</b>	<p>The potential impacts and risks associated with changes and new projects will be assessed. These include:</p> <ul style="list-style-type: none"> <li>Significant incidents,</li> <li>Incident recurrence,</li> <li>Non-conformances, and</li> <li>Changes to Legal and other requirements, process, procedure, plant / equipment, organisation, personnel or business objectives.</li> </ul> <p>The risk register will be reviewed and revised as necessary.</p>	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>
<b>Manage Risks</b>	<p>If an identified risk is significant, risk reduction measures will be implemented. These include the setting of objectives and targets, and monitoring of progress of risk reduction programs.</p>	Plantation Manager or Delegate	<a href="#">P003-Environmental Planning and Management Programs Procedure</a>
<b>Communicate risks and management requirements</b>	<p>All personnel whose work may create significant impact on the environment will be trained in risk management techniques and practices.</p> <p>It is the responsibility of the supervisor to inform the Plantation Manager or Delegate of new personnel.</p>	<p>Plantation Manager or Delegate</p> <p>Supervisors</p>	<a href="#">P005-Training Procedure</a>  <a href="#">P006 – Communications Procedure</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P002-Legal and Other Requirements Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify requirements</b>	Legal and other requirements relevant to the environmental aspects of TTP's activities will be identified as part of government approval process. Requirements include relevant: <ul style="list-style-type: none"> <li>• Legislation and regulations,</li> <li>• Licenses and conditions,</li> <li>• Standards / Guidelines,</li> <li>• Codes of practice,</li> <li>• Local government by-laws, and</li> <li>• Non-legislative agreements.</li> </ul>	Plantation Manager or Delegate	
<b>Document requirements</b>	The information will be documented and maintained in the Obligations Register.	Plantation Manager or Delegate	R002- Obligations Register
<b>Communicate requirements</b>	Responsibilities for compliance with obligations will be communicated to relevant personnel.	Plantation Manager or Delegate	<a href="#">P006 – Communications Procedure</a>
<b>Notification of changes</b>	The Plantation Manager or Delegate will keep abreast of changes to legal and other requirements through communications with government bodies and subscription to legal update services and industry groups.	Plantation Manager or Delegate	
<b>Manage change</b>	Changes to legal and other requirements are managed and communicated as per Change Management procedure.  The Obligations Register will be updated as required.	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>
<b>Consider legal requirements in risk management</b>	The Obligations Register will be reviewed as part of risk management and management review.	Plantation Manager or Delegate	<a href="#">P001 - Environmental Aspect Procedure</a>  <a href="#">P014- Management Review Procedure</a>
<b>Monitoring compliance</b>	Compliance with legal and other requirements will be assessed during routine inspections and audits.	Plantation Manager or Delegate	<a href="#">P013 – Inspections and Audits</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P003-Environmental Planning and Management Programs Procedure**

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Step	Description	Responsibility	Documentation
<b>Timing</b>	The setting of environmental objectives and targets will be aligned with the normal business planning cycle.	Plantation Manager or Delegate	<a href="#">P001–Environmental Aspects Procedure</a>
<b>Establish environmental objectives and targets</b>	<p>Site Environmental Objectives and Targets will be set by senior management based on:</p> <ul style="list-style-type: none"> <li>• Reduction of significant environmental risks,</li> <li>• Compliance with legal and other requirements,</li> <li>• Pollution prevention, and</li> <li>• Continual improvement.</li> </ul> <p>Environmental Objectives and Targets will take into account technological options, financial, operational and business requirements and the views of stakeholders.</p> <p>Site Environmental Objectives and Targets will be communicated to each work area and where relevant, incorporated into work group plans and performance requirements.</p>	Plantation Manager or Delegate	<a href="#">P001–Environmental Aspects Procedure</a>  R002- Obligations Register  <a href="#">P006-Communications Procedure</a>
<b>Establish Management Programs</b>	<p>Site Environmental Objectives and targets will be addressed by management programs that outline the:</p> <ul style="list-style-type: none"> <li>• Responsibilities for achieving the targets,</li> <li>• Monitoring requirements, and</li> <li>• Time frame.</li> </ul>	Plantation Manager or Delegate	R003- Objectives, Targets and Management Programs Register
<b>Identify Training Needs</b>	Assessment of training required to achieve Objectives and Targets will be conducted and personnel training needs identified. Training sessions will be scheduled prior to commencement of related activity.	Plantation Manager or Delegate	<a href="#">P005-Training Procedure</a>
<b>New projects</b>	New developments or changes to scope of current projects will be reviewed for impact on management programs and the achievement of environmental targets as per Change Management Procedure.	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>  <a href="#">P014-Management Review Procedure</a>
<b>Monitor progress</b>	Compliance against management programs are monitored and reported to senior management on a regular basis.	Plantation Manager or Delegate	<a href="#">P013 – Inspections and Audits</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P004-Change Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify change</b>	<p>The potential impacts of changes will be assessed prior to change implementation. This includes changes to:</p> <ul style="list-style-type: none"> <li>• Plant / Equipment,</li> <li>• Process,</li> <li>• Procedure / work practice,</li> <li>• Organisation,</li> <li>• Personnel,</li> <li>• Business Objectives, and</li> <li>• Legal and Other Requirements.</li> </ul>	Plantation Manager or Delegate	<a href="#">P001– Environmental Aspects Procedure</a>
<b>Complete change review form</b>	The change control form will be completed and submitted to the Plantation Manager or Delegate for review.	Change Initiator	<a href="#">P012-Records Procedure</a> <a href="#">F002-Change Control Form</a>
<b>Review risk of change</b>	<p>Risks associated with the change will be assessed based on:</p> <ul style="list-style-type: none"> <li>• Potential for pollution,</li> <li>• Non-compliance with legal or other requirements, and</li> <li>• Risk of not achieving objectives and targets.</li> </ul> <p>A decision will be made on the acceptability of the proposed change, or additional risk control requirements where appropriate. The decision is made by the environmental personnel, based on their competence and experience.</p>	Plantation Manager or Delegate  Plantation Manager or Delegate	<a href="#">P001– Environmental Aspects Procedure</a>  <a href="#">WI001-Risk Assessment Work Instruction</a>
<b>Implement change</b>	Accepted changes will be implemented, in accordance with conditions placed by the environmental personnel. Changes will be communicated to all affected personnel. Completed change control forms will be managed as per records management procedure.	Change Initiator	<a href="#">P006- Communication Procedure</a> <a href="#">P012-Records Procedure</a>
<b>Update documentation</b>	<p>Where appropriate, documentation will be updated to reflect the changes. This may include updates to:</p> <ul style="list-style-type: none"> <li>• Procedures and work instructions,</li> <li>• Databases,</li> <li>• Risk register,</li> <li>• Obligations register, and</li> <li>• Training needs matrix.</li> </ul>	Change Initiator  Plantation Manager or Delegate	<a href="#">P007-Document Control Procedure</a>
<b>Monitor change</b>	Compliance with risk management requirements associated with change will be monitored by the Plantation Manager or Delegate during routine inspections and audits.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P005-Training Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify training Needs</b>	<p>Training needs of employees are identified based on the actual and potential significant impacts of their role. These include actual / potential impacts on</p> <ul style="list-style-type: none"> <li>• The physical environment,</li> <li>• Compliance with legal and other requirements,</li> <li>• Achieving objectives and targets,</li> <li>• Pollution prevention, and</li> <li>• Continual improvement.</li> </ul>	Plantation Manager or Delegate	<p><a href="#">P001–Environmental Aspects Procedure</a></p> <p>R002 – Obligations Register</p> <p>R003-Objectives &amp; Targets Register</p> <p>R004-Training Needs Matrix</p>
<b>Review training needs</b>	The training matrix is reviewed and revised prior to Construction, Operation and Decommissioning and managed as per Change Control Procedure.	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>
<b>Determine training channels</b>	<p>Delivery of information is dependent on the type of information, the receiving audience and the level of competence required. Communication may be in the form of formal presentations, informal toolbox discussions, posters and / or handbooks.</p> <p>Where demonstrated competency is a required outcome, a formal theory and / or practical test will be conducted.</p>	Plantation Manager or Delegate	<a href="#">P006-Communication Procedure</a>
<b>Develop training materials</b>	Appropriate training and assessment materials will be developed to address the training needs and delivery methods.	Plantation Manager or Delegate	
<b>Schedule training sessions</b>	Where possible, training sessions will be planned to address training needs associated with upcoming scheduled activities.	Plantation Manager or Delegate	<a href="#">P003-Environmental Planning and Management Programs Procedure</a>
<b>Conduct training</b>	Training will be conducted by the Plantation Manager or Delegate. Attendance will be taken and competency tests conducted where required.	Plantation Manager or Delegate	<p><a href="#">P012-Records Procedure</a></p> <p><a href="#">F003-Training Records Form</a></p>
<b>Maintain records</b>	Records of all formal training sessions and	Plantation Manager or	<a href="#">P012-Records</a>

Step	Description	Responsibility	Documentation
	competence test results will be maintained as per Records procedures.	Delegate	<a href="#">Procedure</a>
<b>Review training program</b>	The effectiveness of the training program will be reviewed as part of the environmental management system review / audit processes. The training needs matrix and training materials may be revised as part of continual improvement.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P006-Communications Procedure**

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Step	Description	Responsibility	Documentation
<b>Internal Communication</b>			
<b>Communication of Policy</b>	The TTP Environmental Policy will be communicated to all personnel during the site induction. A copy of the Policy document will be displayed in a prominent location on site.	Plantation Manager or Delegate	<a href="#">P005-Training Procedure</a>
<b>Management meetings</b>	<p>Internal communications regarding significant environmental issues will be conducted in regular management and team meetings. The sessions will include discussions and notifications of:</p> <ul style="list-style-type: none"> <li>• recent environmental incidents,</li> <li>• corrective actions,</li> <li>• audit and inspection outcomes,</li> <li>• EMS requirements / changes,</li> <li>• risks associated with changes,</li> <li>• legal and other requirements, and</li> <li>• environmental performance against management plans.</li> </ul> <p>Minutes of the meetings will be maintained as Records.</p> <p>In addition, regular reports will be provided to senior management detailing environmental progress against objectives and targets.</p>	Plantation Manager or Delegate	<a href="#">F004-Meeting Minutes Template</a>  <a href="#">P012-Records Procedure</a>
<b>Work group meetings</b>	<p>Current environmental topics will be discussed at work group level in toolbox meetings, pre-start talks and other informal sessions. Topics may include:</p> <ul style="list-style-type: none"> <li>• Lessons from environmental incidents,</li> <li>• Results of inspections / audits,</li> <li>• Relevant progress reports,</li> <li>• Impacts of changes on workgroup,</li> <li>• Information on new initiatives,</li> <li>• Information on risk management techniques, and</li> <li>• Changes to legal and other requirements</li> </ul>	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>
<b>Employee meetings</b>	<p>Regular meetings will be held with employees to discuss:</p> <ul style="list-style-type: none"> <li>• Results of inspections and audits of work areas,</li> <li>• Environmental management and performance,</li> <li>• Incidents / non-conformances and lessons,</li> <li>• Status of corrective actions,</li> <li>• Changes to procedures, standards or legal and other requirements, and</li> <li>• Other issues of concern.</li> </ul>	Plantation Manager or Delegate	<a href="#">F004-Meeting Minutes Template</a>  <a href="#">P012-Records Procedure</a>



Step	Description	Responsibility	Documentation
<b>Publications</b>	Environmental information will be also communicated via distribution of handbooks and publications, posters, memos, and e-mails.  See Appendix A for example Flora and Fauna / Weed Information Sheets.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>  Appendix A – Example Significant Flora / Fauna Information Sheet
<b>External Communication</b>			
<b>Communication of Environmental Policy</b>	The TTP Environmental Policy Document will be displayed in a prominent location on site, where visitors may view it and will be available to members of the public on request. Should TTP develop an internet website in the future, the Policy will also be posted on the website.	Plantation Manager or Delegate	
<b>Advisory communication</b>	External stakeholders include: <ul style="list-style-type: none"> <li>Community / Public,</li> <li>Government authorities / legislators, and</li> <li>Non government organisations.</li> </ul> Where communications will be advisory and actions are not required, the Plantation Manager or Delegate shall acknowledge receipt and transmittal of information to and from external stakeholders.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>  <a href="#">F006 - Document Transmittal Slip</a>
<b>Receiving external communication</b>	Where actions are required, details of external communications will be recorded in the Incident and Non-conformance form and directed to the attention of the Registered Plantation Manager.	All employees	<a href="#">P012-Records Procedure</a>  <a href="#">P011-Incident and Non-conformance Management Procedure</a>
<b>Address communication</b>	If the communication is of an environmental nature, or has the potential to impact on environmental performance, the Plantation Manager will assign the issue to a Delegate.	Plantation Manager or Delegate	<a href="#">Overview of Environmental Management System</a>  <a href="#">P012-Records Procedure</a>
<b>Investigate communication</b>	The communication shall be investigated as per Incident and Non-conformance Management, and corrective actions implemented.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>  <a href="#">P011-Incident and</a>

Step	Description	Responsibility	Documentation
			<a href="#">Non-conformance Procedure</a>
<b>Provide feedback</b>	Details on actions taken to address the concerns will be provided to the initiator of the communication by the Plantation Manager or delegate.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>
<b>Submit external communication</b>	<p>Communications to external parties, including government agencies will be submitted by the Registered Plantation Manager or Delegate only.</p> <p>Such communications may be required:</p> <ul style="list-style-type: none"> <li>• In an emergency situation,</li> <li>• After a breach of legal conditions has been realised,</li> <li>• To inform of a planned change in activities that may result in pollution, and</li> <li>• As part of performance / progress updates.</li> </ul>	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P007-Document Control Procedure**

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Step	Description	Responsibility	Documentation
<b>Hierarchy of documentation</b>	<p>The hierarchy of EMS documentation is as follows:</p> <ul style="list-style-type: none"> <li>• Environmental Policy <ul style="list-style-type: none"> <li>○ Procedures <ul style="list-style-type: none"> <li>▪ Work Instructions</li> </ul> </li> <li>• Registers and Forms</li> </ul> </li> </ul> <p>Each of the above will be controlled and maintained in accordance with this procedure.</p>	Plantation Manager or Delegate	<a href="#">Overview of Environmental Management System – Document Structure</a>
<b>List of documentation</b>	<p>A register of documents will be developed and maintained to track:</p> <ul style="list-style-type: none"> <li>• Distribution / Location</li> <li>• Issue dates</li> </ul>	Plantation Manager or Delegate	R007-Environmental Documents Register
<b>Review frequency</b>	<p>As a minimum, all documentation will be reviewed once every two years, and on an as needs basis, as part of incident / non-conformance corrective actions and change management.</p>	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>  <a href="#">P011-Incident and Non-conformance Procedure</a>  <a href="#">P013 – Inspections and Audits</a>  <a href="#">P014-Management Review Procedure</a>
<b>Initiating change</b>	<p>All new documentation and changes to existing documentation will be managed according to the Change Management Procedure. Changes to documents will be tracked on the electronic copies.</p>	Change initiator	<a href="#">P004-Change Management Procedure</a>
<b>Authorising change</b>	<p>All changes / new documentation will be reviewed and approved by the Environmental personnel before re-issue. An electronic copy of the superseded document will be saved on the server folder and record of approval will be kept.</p>	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>  R007-Environmental Documents Register

Step	Description	Responsibility	Documentation
<b>Control distribution</b>	<p>Documents will be controlled as protected soft copy versions, and held on the server for common access. The server will be backed up on a regular basis to protect against loss of information.</p> <p>Where server access is not available, controlled hard copies will be issued with a transmittal slip which will be completed and filed as part of records. Distribution will be recorded on the Document Register.</p>	Plantation Manager or Delegate	<p><a href="#">P012-Records Procedure</a></p> <p>R007-Environmental Documents Register</p> <p><a href="#">F006 - Document Transmittal Slip</a></p>
<b>New documentation</b>	New / amended documents will be communicated to personnel as routine internal communications.	Plantation Manager or Delegate	<a href="#">P006-Communications Procedure</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P008-Operational Control Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify risks</b>	Activities, products and services that may have significant impact on <ul style="list-style-type: none"> <li>the environment / community,</li> <li>compliance with legal and other requirements,</li> <li>compliance with Policy and business objectives, and</li> <li>continual improvement</li> </ul> will be identified and documented in the risk register.	Plantation Manager or Delegate	<a href="#">P001-Environmental Aspects Procedure</a>  R001-Risk Register  R002 – Obligations Register  R003 – Objectives & Targets Register  <a href="#">Environmental Policy</a>
<b>Document operational criteria</b>	Operational criteria for the control of significant risks will be documented in relevant procedures and work instructions. These documents will be referenced in the risk register.	Plantation Manager or Delegate	R001-Risk Register
<b>Informal documentation</b>	Risk control in job steps will be stipulated in Job Safety and Environment Analyses. These include the specific actions required for managing risks at task level.	Supervisors	<a href="#">P012-Records Procedure</a>  <a href="#">WI001 Risk Assessment Work Instruction</a>  <a href="#">F001- Job Safety &amp; Environment Analysis</a>
<b>Communication of procedures</b>	Procedures and requirements will be communicated to employees during induction and competence training sessions. Changes and updates to procedures and requirements will be communicated to employees as per Communications Procedure.	Plantation Manager or Delegate	<a href="#">P005 - Training Procedure</a>  <a href="#">P006-Communications Procedure</a>
<b>Monitor compliance</b>	Compliance with required procedures and practices will be monitored and assessed as part of routine inspections and audits.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits Procedure</a>
<b>Review of</b>	As a minimum, review of the effectiveness of	Plantation	

Step	Description	Responsibility	Documentation
<b>operational control</b>	operational control will take place once per year, and on an as-needs basis as part of non-conformance and incident corrective actions and change management.	Manager or Delegate	<a href="#">P004-Change Management Procedure</a>  <a href="#">P011-Incident and Non-conformance Procedure</a>  <a href="#">P014-Management Review Procedure</a>  R003 – Objectives & Targets Register





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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P009-Emergency Preparedness Response Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify emergency situations</b>	<p>Potential emergency situations will be identified in hazard analysis workshops conducted by the Plantation Manager or Delegate.</p> <p>(NB. Safety emergencies have been included in this Procedure as well as environmental emergencies as often the required response is similar / the same.)</p> <p>Emergency and abnormal situations include potential incidents resulting from:</p> <ul style="list-style-type: none"> <li>• Fatality,</li> <li>• Natural disasters / events,</li> <li>• Fire or explosion,</li> <li>• Electrical failures,</li> <li>• Shut downs,</li> <li>• Major equipment damage,</li> <li>• Spillage of environmentally hazardous materials,</li> <li>• Damage to cultural or heritage sites,</li> <li>• Disturbance to protected / rare flora or fauna,</li> <li>• Community complaint,</li> <li>• Major legal non-compliance such as breach of licence or permit conditions</li> <li>• Medical Emergencies, and</li> <li>• Sabotage</li> </ul>	Plantation Manager or Delegate	<p><a href="#">P001- Environmental Aspects Register</a></p> <p>R001- Risk Register</p> <p>R002 – Obligations Register</p>
<b>Assess impacts</b>	<p>The impacts of emergency and abnormal situations will be discussed; including the potential for and extent of environmental pollution, breach of legal conditions and the inability to achieve business targets.</p>	Plantation Manager or Delegate	<p><a href="#">P001- Environmental Aspects Register</a></p> <p>R001- Risk Register</p> <p>R002 – Obligations Register</p>
<b>Determine response</b>	<p>The appropriate response for each situation will be identified to minimise the impacts of the event. These include:</p> <ul style="list-style-type: none"> <li>• Emergency team response actions,</li> <li>• Response equipment,</li> <li>• Clean up requirements to minimise impact severity,</li> <li>• Public communication requirements, and</li> <li>• Involvement of local emergency units.</li> </ul>	Plantation Manager or Delegate	
<b>Document</b>		Plantation	Emergency

Step	Description	Responsibility	Documentation
<b>plan</b>	The emergency response plan will be developed by the Plantation Manager or Delegate in accordance with <i>Water Quality Protection Note – Chemical Spills Emergency Response Planning</i> (see Legal Obligations register).	Manager or Delegate	Response Plan R002-Obligations Register
<b>Training</b>	The Plantation Manager will ensure that relevant personnel are competent in emergency response. This will include a formal competence training program.	Plantation Manager or Delegate	<a href="#">P005 - Training Procedure</a>
<b>Testing</b>	The emergency response plan will be tested in drills as deemed appropriate based on risk of event occurrence. Learnings will be communicated to personnel as per the Communications Procedure.	Plantation Manager or Delegate	<a href="#">P006 - Communication Procedure</a>
<b>Post incident analysis</b>	<p>A post incident analysis will be conducted after an emergency event, or a drill. This analysis shall indicate:</p> <ul style="list-style-type: none"> <li>• The effectiveness of current emergency response procedures,</li> <li>• Adequacy of emergency response equipment,</li> <li>• Competence and skill level of personnel involved in emergency response, and</li> <li>• Effectiveness of internal and external communications.</li> </ul> <p>Deficiencies identified in the analysis will be addressed by appropriate corrective actions including the updating of the emergency response plan.</p>	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a> <a href="#">P005 - Training Procedure</a> <a href="#">P006 - Communication Procedure</a>
<b>Update plan</b>	The emergency response plan shall be reviewed and revised on a regular basis, and after the occurrence of an emergency event or drill.	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a> <a href="#">P011-Incident and Non-conformance Procedure</a> <a href="#">P013 – Inspections and Audits</a> <a href="#">P014- Management Review Procedure</a>

Step	Description	Responsibility	Documentation
<b>Compliance with requirements</b>	Employee compliance with the requirements of this procedure will be assessed during drills, post-incident reviews and audits.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits Procedure</a>



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P010-Monitoring Procedure**

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Step	Description	Responsibility	Documentation
<b>Monitoring environmental aspects</b>	<p>Management procedures associated with significant environmental risks will be reflected in the risk register.</p> <p>Monitoring of the following environmental aspects will take place:</p> <ul style="list-style-type: none"> <li>• Weed Infestation</li> <li>• Weed Hygiene</li> <li>• Ground water use</li> <li>• Ground water chemistry</li> <li>• Soil chemistry</li> <li>• Pesticide application rates</li> <li>• Fertiliser application rates</li> <li>• Planting and harvesting statistics</li> <li>• Significant Flora and Fauna sightings</li> <li>• Tree development and maintenance details</li> </ul>	Plantation Manager or Delegate	<p>R001-Risk Register</p> <p>R008-9, R011-13 Registers</p>
<b>Calibration of Monitoring Equipment</b>	<p>All monitoring equipment such as flow meters, will be calibrated to NATA standards and tested / maintained as required.</p> <p>All chemical analyses will be carried out by a NATA certified laboratory.</p>	Plantation Manager or Delegate	R008-9, R011-13 Registers
<b>Monitoring programs</b>	Each environmental management procedure details the monitoring requirements for measuring environmental performance.	Plantation Manager or Delegate	Environmental Management Procedures
<b>Performance measurement</b>	Monitoring of TTPs performance against environmental management requirements and compliance with legal and other requirements will occur as part of routine Inspections and Audits.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits Procedure</a>
<b>Monitoring results</b>	<p>Compliance with Environmental Management Programs / Actions for achieving objectives and targets will be tracked and reported in management meetings.</p> <p>Results from monitoring of environmental aspects will be recorded in the appropriate registers and reported in management meetings and to regulatory authorities as required.</p>	Plantation Manager or Delegate	<p>R003-Objectives, Targets and Management Programs Register</p> <p>R008-9, R011-13 Registers</p> <p><a href="#">P006-Communications Procedure</a></p>
<b>Records</b>	Records of information required to track	Plantation Manager or	<a href="#">P012-Records Procedure</a>

Step	Description	Responsibility	Documentation
	<p>environmental performance will be maintained as per Records Procedure.</p> <p>Environmental Aspect Monitoring records and calibration records will be also maintained as per Records Procedure.</p>	Delegate	
<b>Reporting progress</b>	<p>Results of environmental monitoring and overall environmental performance will be reported to senior management in regular meetings.</p> <p>Performance results will also be used as a basis for management review.</p>	Plantation Manager or Delegate	<p><a href="#">P006-Communications Procedure</a></p> <p><a href="#">P014-Management Review Procedure</a></p>
<b>Update register</b>	Data collected during monitoring will be managed in the appropriate registers.	Plantation Manager or Delegate	EMS Registers



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## **Beagle Bay Big Tree Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P011-Incident and Non- conformance Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Report incidents and non-conformance</b>	<p>All environmental incidents and non-conformances will be reported to the Plantation Manager via the Incident / Non-conformance Report Form, or through the Supervisor.</p> <p>Incidents and non-conformances will be raised:</p> <ul style="list-style-type: none"> <li>• During inspections and audits,</li> <li>• When an external complaint / communication is received,</li> <li>• When an incident occurs,</li> <li>• After an emergency situation, and</li> <li>• When a hazard / procedural non-compliance is observed.</li> </ul>	All employees	<p><a href="#">P006 - Communications Procedure</a></p> <p><a href="#">P009 - Emergency Response Procedure</a></p> <p><a href="#">P012-Records Procedure</a></p> <p><a href="#">P013 - Inspections &amp; Audit Procedure</a></p> <p><a href="#">F005-Incident / Non-conformance Report Form</a></p>
<b>Immediate corrective action</b>	<p>Immediate corrective actions will be taken to minimise the severity of the impacts of the incident or non-conformance.</p>	All employees	<p><a href="#">P009 - Emergency Response Procedure</a></p> <p><a href="#">F005-Incident / Non-conformance Report Form</a></p>
<b>Investigate incident / non-conformance</b>	<p>The investigation of the incident / non-conformance will be conducted by a competent person, as delegated by the Plantation Manager, to determine the:</p> <ul style="list-style-type: none"> <li>• Root causes of the event,</li> <li>• Contributing factors,</li> <li>• Remedial / corrective actions required, and</li> <li>• Preventive actions required.</li> </ul>	Plantation Manager or Delegate	<p><a href="#">F005-Incident / Non-conformance Report Form</a></p> <p><a href="#">P012-Records Procedure</a></p> <p><a href="#">P014 - Management Review Procedure</a></p>
<b>Determine corrective and preventive actions</b>	<p>Corrective and preventive actions will be proposed as part of the investigation. These actions will be:</p> <ul style="list-style-type: none"> <li>• Appropriate to the scale and nature of the incident / non-conformance, and</li> <li>• Aimed at minimising the impacts of the event.</li> </ul>	Plantation Manager or Delegate	<p><a href="#">F005-Incident / Non-conformance Report Form</a></p> <p><a href="#">P012-Records Procedure</a></p>
<b>Review investigation</b>	The incident / non-conformance investigation	Plantation Manager or	<a href="#">F005-Incident / Non-conformance</a>

Step	Description	Responsibility	Documentation
<b>results</b>	results will be forwarded to the Plantation Manager or Delegate for review and comments.	Delegate	<a href="#">Report Form</a>  <a href="#">P012-Records Procedure</a>
<b>Monitor corrective actions</b>	Corrective actions will be implemented and monitored by the Plantation Manager. Where appropriate, change control procedures will be implemented as part of corrective actions.	Plantation Manager or Delegate	<a href="#">P004-Change Control Procedure</a>  <a href="#">P013-Inspections and Audits Procedure</a>
<b>Assess corrective actions</b>	Compliance with and effectiveness of corrective actions will be assessed during routine inspections and audits.	Plantation Manager or Delegate	<a href="#">P013-Inspections and Audits Procedure</a>
<b>Records</b>	Incident / non-conformance reports and investigations will be managed as per Records Procedure.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>
<b>Update register</b>	A summary of all incidents and non conformance reports will be maintained.	Plantation Manager or Delegate	R010 Incident and Non-conformance Register



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P012-Records Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify records</b>	Records will be identified as information / data required for: <ul style="list-style-type: none"> <li>• Demonstrating compliance with AS/NZS ISO 14001 (1996),</li> <li>• Demonstrating procedural compliance,</li> <li>• Measuring environmental performance,</li> <li>• Capturing communication details,</li> <li>• Legal and other compliance, and</li> <li>• Future reference / hand over.</li> </ul>	Plantation Manager or Delegate	R02 – Obligations Register  <a href="#">Environmental Management System Forms</a>
<b>Types of records</b>	Records retained will include: <ul style="list-style-type: none"> <li>• Minutes of meetings,</li> <li>• Audit and inspection reports,</li> <li>• Change control requests,</li> <li>• Training attendance &amp; competency tests,</li> <li>• Incidents and non-conformance events, and</li> <li>• External communications.</li> </ul>	Plantation Manager or Delegate	<a href="#">P004 - Change Request Procedure</a>  <a href="#">P005 - Training Procedure</a>  <a href="#">P006 - Communications Procedure</a>  <a href="#">P011 - Incident &amp; Non-conformance Procedure</a>  <a href="#">P013 - Inspections &amp; Audits Procedure</a>  <a href="#">Environmental Management System Forms</a>
<b>Types of data</b>	Types of monitoring data collected and maintained as records will be as described in the individual environmental management procedures.	Plantation Manager or Delegate	See above
<b>Maintenance of records</b>	Records will be maintained by the Plantation Manager or Delegate in a manner that allows easy retrieval and association with the relevant environmental aspect/s.  Electronic records will be maintained on a server system that will be backed up on a regular basis. Hard copy records will be filed and protected against loss and deterioration.	Plantation Manager or Delegate	
<b>Locations of</b>		Plantation	

Step	Description	Responsibility	Documentation
<b>records</b>	A register of environmental records will be maintained to meet the requirements of this procedure.	Manager or Delegate	R006- Environmental Records Register



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P013-Inspection and Audits Procedure**

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Step	Description	Responsibility	Documentation
<b>Determine types of inspections and audits</b>	<p>Audits are conducted to determine an organisation's compliance with:</p> <ul style="list-style-type: none"> <li>• Its environmental policy,</li> <li>• Legal and other requirements,</li> <li>• Environmental management programs, and</li> <li>• AS/NZS ISO 14001, where applicable.</li> </ul> <p>The type of audits required will be determined by the scope of works involved.</p> <p>Inspections will be conducted to assess compliance of work areas with environmental management procedures and specific work instructions, completion of corrective actions, compliance with change control requirements, and management of task level risks.</p>	Plantation Manager or Delegate	<p><a href="#">P003 - Environmental Planning &amp; Management Programs Procedure</a></p> <p>R001 – Risk Register</p> <p>R002 – Obligations Register</p>
<b>Determine frequency of inspections and audits</b>	<p>Frequency of inspections / audits will be based on the significance of the environmental activities of the area, and history / risk of non-conformance / pollution.</p> <p>An internal Environmental Management Systems audit to AS/NZS ISO 14001 (1996) will be conducted at least annually to assess:</p> <ul style="list-style-type: none"> <li>• Compliance with AS/NZS ISO 14001 standards,</li> <li>• Compliance with planned environmental management activities,</li> <li>• Effectiveness of implementation, and</li> <li>• Quality of maintenance.</li> </ul>	Plantation Manager or Delegate	<p><a href="#">P003 - Environmental Planning &amp; Management Programs Procedure</a></p> <p>R001 – Risk Register</p> <p>R002 – Obligations Register</p>
<b>Develop schedule</b>	An inspection and audit schedule will be developed upon commission of the works. The schedule may be revised as required, such as in the event of incident / non-conformance recurrence.	Plantation Manager or Delegate	R005-Inspection / Audits Schedule
<b>Develop checklist</b>	<p>The inspection checklist will be established based on the area's significant environmental aspects, previous incidents and non-conformances, and other elements of concern determined by the Plantation Manager.</p> <p>The audit checklist will be developed by the Plantation Manager and the Auditor based on the type of audit being performed.</p> <p>Information collected prior to the audit will include:</p>	<p>Plantation Manager or Delegate</p> <p>Auditor</p>	<p><a href="#">F007 - Environmental Inspection Form</a></p> <p>R001 – Risk Register</p> <p>R002 – Obligations Register</p> <p>R010 – Incidents</p>

Step	Description	Responsibility	Documentation
<b>Develop checklist (continued)</b>	<ul style="list-style-type: none"> <li>• Risk register,</li> <li>• Legal and other obligations / conditions,</li> <li>• Environmental management plans and procedures,</li> <li>• Register of incidents and non-conformances,</li> <li>• Findings of previous audits,</li> <li>• Environmental objectives and targets, and</li> <li>• Environmental Management System documentation.</li> </ul>		and Non-Conformances Register
<b>Develop audit program</b>	An audit program will be developed to ensure availability of required personnel, and to address the components of the audit.	Plantation Manager or Delegate  Auditor	<a href="#">P003 - Environmental Planning &amp; Management Programs Procedure</a>
<b>Inform auditee</b>	<p>Auditee will be informed at least one week prior to the inspection / audit.</p> <p>Where relevant, the audit program is communicated to the auditee.</p>	Plantation Manager or Delegate  Auditor	<a href="#">P006 - Communications Procedure</a>  R005-Inspection / Audits Schedule
<b>Conduct inspections / audits</b>	<p>Inspections will be conducted by the Plantation Manager or a delegate.</p> <p>Audits will be conducted by competent auditors.</p> <p>Depending on the type of audit being conducted, auditors may be required to have demonstrated competency in:</p> <ul style="list-style-type: none"> <li>• Technical environmental aspects,</li> <li>• Environmental Management Systems (AS/NZS ISO 19011), and</li> <li>• Legal compliance auditing.</li> </ul> <p>Where major risks / non-compliances are identified during the inspection / audit, the supervision will be notified, and immediate corrective actions will be implemented to address the issue.</p>	Plantation Manager or Delegate  Auditor	
<b>Communicate findings</b>  <b>Communicate</b>	Findings will be verbally communicated to the auditee or Plantation Manager upon completion of the inspection / audit.	Plantation Manager or Delegate	<a href="#">P006 - Communications Procedure</a>  <a href="#">P012-Records</a>



Step	Description	Responsibility	Documentation
<b>findings (continued)</b>	A formal written report will be provided to the auditee or Plantation Manager within one week of the completion of the inspections / audits.	Auditor	<a href="#">Procedure</a>
<b>Address non-conformance</b>	<p>Non-conformances raised in inspections and audits will be addressed within a suitable timeframe. This will be negotiated with the Auditor / Inspector and depends on the severity and impacts of the non-conformance.</p> <p>Non-conformances will be investigated and managed as per Incident / Non-conformance Management Procedure.</p>	Auditee	<a href="#">P011-Incidents and Non-conformance Management Procedure</a>
<b>Report results</b>	Outcomes of inspections and audits will be reported to senior management as part of regular performance updates, as well as during management review sessions.	Plantation Manager or Delegate	<a href="#">P006-Communication Procedure</a> <a href="#">P012-Records Procedure</a> <a href="#">P014 - Management Review Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P014-Management Review Procedure**

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Step	Description	Responsibility	Documentation
<b>Management meetings</b>	The status of the Environmental Management System will be reviewed by management as part of regular management meetings.	Plantation Manager or Delegate	<a href="#">P006-Communications Procedure</a> <a href="#">P012-Records Procedure</a>
<b>Management information</b>	Information presented and reviewed at meetings will include: <ul style="list-style-type: none"> <li>• Recent incidents and complaints,</li> <li>• Inspection / Audit findings,</li> <li>• Progress against targets,</li> <li>• Status of corrective actions, and</li> <li>• Proposed changes (change management).</li> </ul>	Plantation Manager or Delegate	<a href="#">P006-Communications Procedure</a> <a href="#">P012-Records Procedure</a> <a href="#">F004-Meeting Minutes Template</a>
<b>Determine adequacy of EMS</b>	Based on the information presented, management will determine the effectiveness and appropriateness of the: <ul style="list-style-type: none"> <li>• Environmental Policy,</li> <li>• Environmental Management Procedures, and</li> <li>• Environmental Objectives and Targets.</li> </ul>	Plantation Manager or Delegate and Project Manager	<a href="#">Environmental Policy</a> <a href="#">Environmental Management Procedures</a>  R003 – Objectives & Targets Register
<b>Revision of EMS</b>	Changes to elements of the Environmental Management System will be managed according to the Change Management Procedure.	Plantation Manager or Delegate	<a href="#">P004-Change Management Procedure</a>
<b>Meeting minutes</b>	Minutes of the meeting will be taken and retained as records.	Administrative Assistant	<a href="#">P012-Records Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P015-Pesticide Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Definition</b>	Pesticides include fungicides, herbicides and insecticides.	NA	NA
<b>Purchase product</b>	<p>Chemicals used will be in accordance with <i>Health Act (1911) – Health (Pesticides) Regulations 1956</i>. Approval will be attained to use registered pesticides, if required.</p> <p>Only herbicides that are registered for use in plantations or have been permitted for use by the Australian Pesticides and Veterinary Medicines Authority will be used.</p> <p>Only biodegradable products will be used.</p> <p>Knock-down and pre-emergent herbicides will be used.</p> <p>Baiting and soluble pesticides will be used to control termites.</p> <p>Only products listed by the Agriculture Department will be used.</p> <p>A list of products used within the plantation will be maintained.</p>	Plantation Manager or Delegate	<p>R001 – Risk Register</p> <p>R013 - Pesticide Register</p> <p><a href="#">P012-Records Procedure</a></p>
<b>Storage</b>	<p>Pesticides will be stored in accordance with s15 of the <i>Health (Pesticides) Regulations 1956</i>.</p> <p>Storage will be within a secure, well-ventilated, covered area with measures in place to capture and contain potential spillages.</p> <p>Spill response equipment such as absorbent litter will be available in storeroom.</p> <p>Pesticides will be adequately labelled. Each chemical will have a legible Material Safety Data Sheet (MSDS).</p> <p>The minimum amount of chemicals necessary will be stored.</p> <p>Pesticide containers and secondary containment will be routinely checked.</p>	Plantation Manager or Delegate	<p><a href="#">F007 – Inspection Form</a></p> <p>R013 - Pesticide Register</p> <p><a href="#">P012-Records Procedure</a></p> <p><a href="#">P026 - Hydrocarbon/Chem' Spills Procedure</a></p>
<b>Determine</b>		Plantation	F007 –Inspection

Step	Description	Responsibility	Documentation
<b>frequency of application</b>	<p>Pesticides to be applied when trees are seedlings and most susceptible to termite attack and weed invasion / regrowth.</p> <p>Pre-emergent herbicides may be applied at the onset of the wet season if required.</p> <p>Weekly inspections of the plantation will identify the presence of pests and weed re-growth and trigger pesticide application.</p>	Manager or Delegate	<p>Form</p> <p>R013 - Pesticide Register</p>
<b>Application</b>	<p>Chemicals will be applied in accordance with the <i>Country Areas Water Supply Act 1947</i> and the DoE <i>Statewide Policy No. 2 – Pesticide Use in Public Drinking Water Source Areas</i>.</p> <p>Pesticides will be applied in accordance with guidelines on the approved labels for containers of the pesticide.</p> <p>Termite baits will be placed near ‘sentinel’ plants known to attract termites and in baiting stations on the perimeter of tree lots.</p> <p>Soluble pesticide will be injected into the irrigation system (chemigation). A spill kit will be present at the site of injection.</p>	Plantation Manager or Delegate	<p><a href="#">WI002 – Pesticide Application</a></p> <p>R013 - Pesticide Register</p> <p><a href="#">P026 - Hydrocarbon/Chemical Spills Procedure</a></p>
<b>Maintenance and cleaning of equipment</b>	<p>Pesticide application equipment will be tested and calibrated regularly to avoid over application and ensure proper working order.</p> <p>Chemigation equipment will be inspected and calibrated before the commencement and at the completion of each treatment.</p> <p>Equipment washdown will be undertaken in designated areas.</p> <p>Washdown water will be contained and treated to an appropriate standard before disposal.</p>	Plantation Manager or Delegate	<p><a href="#">P010 - Monitoring Procedure</a></p> <p>R013 Pesticide Register</p>
<b>Container Disposal</b>	<p>Empty pesticide containers are to be washed out and the container rendered unusable. Containers are not to be recycled.</p> <p>Empty drums will be returned to the manufacturer / supplier or removed by an</p>	Plantation Manager or Delegate	<p><a href="#">P025 - Waste &amp; Hydrocarbon/Chemical Management Procedure</a></p>

Step	Description	Responsibility	Documentation
	appropriate licensed contractor.  Pesticide containers will not be burnt.  Pesticide containers will not be buried.		
<b>Develop schedule</b>	An application schedule will be developed upon commencement of the plantation. The schedule may be revised as required, such as in the event of a noticeable decline in plant health.	Plantation Manager or Delegate	R013 Pesticide Register
<b>Monitor</b>	The health of the plantation will be monitored every second day.  Groundwater monitoring will be undertaken bi-annually.  Soil monitoring will be undertaken bi-annually.	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a>  <a href="#">P012-Records Procedure</a>  R012 Groundwater & Soil Monitoring Register
<b>Maintain records</b>	Details of pesticide application and equipment maintenance are managed as per Records Procedure.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>  R013 Pesticide Register
<b>Training</b>	Employees will be trained in handling, storage and application of pesticides.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P016-Fertiliser Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Purchase product</b>	<p>Fertilisers will be a combination of soluble and granulated slow release products.</p> <p>A list of acceptable products used within the plantation will be maintained.</p>	Plantation Manager or Delegate	<p>R001 – Risk Register</p> <p>R014 Fertiliser Register</p>
<b>Storage</b>	<p>Storage will be within covered sheds with sealed floors to keep the product dry and prevent contact with the ground.</p> <p>Soluble fertiliser containers will be regularly inspected to ensure there is no leakage.</p> <p>Fertilisers will be adequately labelled.</p> <p>Spill response equipment such as absorbent litter will be available in the storeroom.</p>	Plantation Manager or Delegate	<p><a href="#">F007 Inspection Form</a></p> <p>R014 Fertiliser Register</p> <p><a href="#">P012-Records Procedure</a></p> <p><a href="#">P026 - Hydrocarbon/Chemical Spills Procedure</a></p>
<b>Determine frequency of application</b>	<p>Application of fertiliser will be proportional to plant uptake capability.</p> <p>Soil sampling will be undertaken annually, with samples sent for laboratory analysis.</p> <p>Nutrient testing will occur twice a year until the nutrient cycle is closed.</p> <p>The application of fertiliser will be higher during the initial establishment phase.</p>	Plantation Manager or Delegate	<p><a href="#">F007 Inspection Form</a></p> <p>R014 Fertiliser Register</p> <p>R017 Tree Development &amp; Maintenance Register</p> <p><a href="#">P012-Records Procedure</a></p>
<b>Application</b>	<p>The use of fertilisers will be in accordance with the <i>Country Areas Water Supply Act 1947</i>.</p> <p>Fertiliser will be applied immediately after planting.</p> <p>Application will be timed appropriately to maximise plant uptake and minimise leaching and loss to the environment, i.e.. overnight and early morning.</p> <p>Fertilisers will not be applied when soils are saturated.</p> <p>Delivery of fertilisers via the irrigation system (fertigation) is the preferred method of application. The system design will ensure:</p>	Plantation Manager or Delegate	<p>WI003 Fertiliser Application Work Instruction</p> <p>R014 Fertiliser Register</p> <p><a href="#">P026 - Hydrocarbon/Chem Spills Procedure</a></p>

Step	Description	Responsibility	Documentation
<b>Application (continued)</b>	<ul style="list-style-type: none"> <li>No back-flow of nutrients into the water source;</li> <li>Accurate and uniform delivery; and</li> <li>Minimal risk of spillage.</li> </ul> <p>Injection will be conducted in an area where a spill kit is maintained and any potential spills can be completely contained.</p> <p>It is anticipated that fertilisers will not be used after the trees are five years old.</p>		
<b>Develop schedule</b>	An application schedule will be developed upon commencement of the plantation. The schedule may be revised as required, such as in the event of a noticeable decline in plant health.	Plantation Manager or Delegate	R014 Fertiliser Register
<b>Maintain records</b>	Details of fertiliser application are managed as per Records Procedure.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a> R014 Fertiliser Register
<b>Monitor</b>	<p>Visual inspection of crops will be undertaken to ensure adequate nutrient application.</p> <p>Groundwater monitoring of nutrient levels will be undertaken bi-annually.</p>	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a> R012 Groundwater & Soil Monitoring Register <a href="#">P012-Records Procedure</a>
<b>Research</b>	Ongoing research will be undertaken to optimise fertiliser usage. Best management practices will be adopted.	Plantation Manager or Delegate	R017 Tree Development & Maintenance Register
<b>Training</b>	Employees will be trained in handling, storage and the application of fertilisers.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P017-Land Clearing and Infrastructure Procedure**

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Step	Description	Responsibility	Documentation
<b>Pre approval</b>	A site disturbance permit is to be completed and approved prior to commencement of activities.	Plantation Manager or Delegate	R001 – Risk Register  R002 – Obligations Register  <a href="#">F009 Site Disturbance Permit</a>
<b>Site Preparation</b>	Any significant flora will be identified by flagging and avoided.  Clearing boundaries will be demarcated in the field using UV stabilised fluorescent flagging tape.  Flagging tape must be clearly visible and in intervals not exceeding 50 metres.	Plantation Manager or Delegate	<a href="#">P003 - Environmental Planning &amp; Management Procedure</a>  <a href="#">P022 - Flora &amp; Fauna Procedure</a>  R001 – Risk Register  R002 – Obligations Register  R016 – Flora & Fauna Register
<b>Clearing</b>	Earthworks will be undertaken outside the peak of wet season.  Clearing will be undertaken within defined areas.  No unauthorised clearing will occur.  Vehicles and machinery will use designated tracks / roads.  Clearing will be undertaken progressively.  Deep ripping will follow contours to minimise erosion.	Plantation Manager or Delegate	<a href="#">P022 - Flora &amp; Fauna Procedure</a>  R016 – Flora & Fauna Register

Step	Description	Responsibility	Documentation
<b>Clearing (continued)</b>	<p>Cleared vegetation is mulched and spread over cleared land, and lag between clearing and land use is short.</p> <p>Topsoil will not be stripped when wet as this can result in structure degradation and compaction.</p> <p>Firebreaks and wildlife corridors will be maintained around plantation plots.</p>		
<b>Infrastructure</b>	Paints and other visible materials used for infrastructure will be of appropriate colours to blend in with the surrounding environment.	Plantation Manager or Delegate	R001 – Risk Register
<b>Records</b>	<p>Records of the area disturbed and areas rehabilitated will be maintained.</p> <p>Land clearing records will be managed as per record procedure.</p>	Plantation Manager or Delegate	<p>R011 Rehabilitation Register</p> <p><a href="#">P012 Records Procedure</a></p>
<b>Training</b>	All employees will be inducted into the importance of minimisation of clearing and disturbance to natural vegetation.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P018-Irrigation Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Operation of irrigation system</b>	<p>Irrigation water will be pumped directly from the ground to irrigation stations via a pipeline. There will be five irrigation stations.</p> <p>Once tree crop is established, water will be applied by a trickle (dripper) irrigation system to each tree. The amount of water required will depend on the species, but will be approximately 15 L/tree/day, outside of the wet season.</p> <p>Where practicable, the bores will be operated over night and during the morning to reduce evaporation.</p> <p>Pumpage at each bore will be metered</p>	Irrigation Manager	<p><a href="#">P010 – Monitoring Procedure</a></p> <p>R002 Obligations Register</p> <p>R012 Groundwater &amp; Soil Monitoring Register</p>
<b>Maintenance of irrigation system</b>	<p>The irrigation system will be fully automated and incorporates sensors to detect leaks and line failures. The system is programmed to shut down if a fault is detected.</p> <p>Manual checks of the system will take place every few days. Maintenance will be carried out when required.</p> <p>Inspections will assess:</p> <ul style="list-style-type: none"> <li>Automated operation system;</li> <li>Pump operating pressure and the operation of all pressure relief valves;</li> <li>System pressures and pressure variation;</li> <li>Pressures at the sprinkler;</li> <li>Leaking pipes and sealing rings;</li> <li>The flow and operation of each dripper;</li> <li>Sprinkler system uniformity;</li> <li>Filtration; and</li> <li>Operation of fertigation and chemigation equipment.</li> </ul>	Irrigation Manager	<p><a href="#">F007 Inspection Form</a></p> <p>R012 Groundwater &amp; Soil Monitoring Register</p> <p><a href="#">P012-Records Procedure</a></p>
<b>Maintain records</b>	Details of groundwater use and irrigation system maintenance are managed as per Records Procedure.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>
<b>Research</b>	Research to optimise water use is undertaken and best management practices is adopted.	Plantation Manager or Delegate	<p><a href="#">P010 – Monitoring Procedure</a></p> <p>R012 Groundwater &amp;</p>

Step	Description	Responsibility	Documentation
			Soil Monitoring Register  R017 – Tree Development & Maintenance Register
<b>Training</b>	All employees will receive training in irrigation management practices.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>





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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P019-Planting & Tree Maintenance Procedure**

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Step	Description	Responsibility	Documentation								
Site preparation	<p>Site preparation will adhere to the <i>Soil and Land Conservation Act 1945</i>.</p> <p>Ripping will be aligned to the ground contours to control run-off and minimise erosion.</p> <p>Ripping will be undertaken to a depth of 1.5m.</p> <p>Irrigation lines will be laid out in rows at intervals suitable for each specific species, with drippers at pre-determined centres.</p> <p>A proportion of native mid to low storey vegetation will be allowed to regenerate within the plantation plots throughout cultivation.</p>	<p>Plantation Manager or Delegate</p> <p>Employees</p>	<p><a href="#">P017 – Land Clearing &amp; Infrastructure Procedure</a></p> <p><a href="#">P021- Weed Management Procedure</a></p> <p><a href="#">P022-Flora &amp; Fauna Register</a></p> <p>R001-Risk Register</p> <p>R002–Obligations Register</p> <p>R009–Weed Register</p> <p>R009–Weed Hygiene Register</p> <p>R016-Flora &amp; Fauna Register</p>								
Planting	<p>Trees will be sourced from the plantation nursery.</p> <p>9 x 100 ha plots will be established.</p> <p>Tree density will be:</p> <table><tr><td>Mahogany</td><td>625 trees/ha</td></tr><tr><td>Teak</td><td>1,000 trees/ha</td></tr><tr><td>Sandalwood</td><td>315 trees/ha</td></tr><tr><td>Sandalwood hosts</td><td>315 trees/ha</td></tr></table> <p>Planting will be undertaken by hand in three stages of 300 ha each. Planting will be performed in accordance with the Work Instruction.</p>	Mahogany	625 trees/ha	Teak	1,000 trees/ha	Sandalwood	315 trees/ha	Sandalwood hosts	315 trees/ha	<p>Employees</p>	<p><a href="#">WI004 Tree Planting &amp; Maintenance Work Instruction</a></p> <p>R015-Planting Harvest Register</p> <p>R018-Nursery Register</p>
Mahogany	625 trees/ha										
Teak	1,000 trees/ha										
Sandalwood	315 trees/ha										
Sandalwood hosts	315 trees/ha										
Post-planting and crop maintenance requirements	<p>Following planting, scheduled irrigation of the crop, complete with fertilisers and pesticides (if required), will be undertaken.</p>	<p>Employees</p>	<p><a href="#">P015-Pesticide Management Procedure</a></p>								

Step	Description	Responsibility	Documentation
<b>Post-planting and crop maintenance requirements (continued)</b>	<p>Clearwood and form pruning will be undertaken to prevent the occurrence of knots. Unwanted branches will be removed to encourage the development of long, straight trunks.</p> <p>Prunings will be mulched.</p> <p>Pruning will be undertaken in accordance with the Work Instruction.</p>		<p><a href="#">P016-Fertiliser Management Procedure</a></p> <p><a href="#">P018-Irrigation Management Procedure</a></p> <p><a href="#">P021-Weed Management Procedure</a></p> <p><a href="#">P022-Flora &amp; Fauna Procedure</a></p> <p><a href="#">P024-Fire Management Procedure</a></p> <p>R013 Pesticide Register</p> <p>R014 Fertiliser Register</p> <p>R009–Weed Register</p> <p>R009–Weed Hygiene Register</p> <p>R016-Flora &amp; Fauna Register</p>
<b>Maintain records</b>	<p>Height and diameter growth measurements of trees will be undertaken annually.</p> <p>Maintenance to trees will be recorded in the Tree Development &amp; Maintenance Register.</p> <p>Details of planting and maintenance activities will be managed as per record procedure.</p>	Plantation Manager or Delegate	<p>R017 Tree Development &amp; Maintenance Register</p> <p>R015 Planting &amp; Harvesting Register</p> <p><a href="#">P012-Records Procedure</a></p>

Step	Description	Responsibility	Documentation
<b>Monitoring</b>	The health of the trees will be monitored for nutrient deficiencies and the presence of pests/diseases.	Plantation Manager or Delegate	<a href="#">P010-Monitoring Procedure</a> <a href="#">F007 Inspection Form</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P020-Harvesting Procedure**

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Step	Description	Responsibility	Documentation
<b>Schedule</b>	<p>25% of Teak crops only will be harvested as thinnings when deemed appropriate (~ Years 6 to 8).</p> <p>The balance of the crops will be harvested at approximately Year 15 or progressively through to Year 25.</p>	Plantation Manager or Delegate	R015 Planting and Harvesting Register
<b>Tree selection</b>	<p>Selection criteria for crop trees includes:</p> <ul style="list-style-type: none"> <li>Form – straight, free from large branches, forks and malformations;</li> <li>Vigour – Biggest and healthiest trees</li> </ul> <p>(Dept of Agriculture, 1998a)</p>	Plantation Manager or Delegate	<a href="#">W1005-Tree Thinning &amp; Harvesting Work Instruction</a>
<b>Preparation</b>	Trees to be thinned will be demarcated with paint or flagging tape prior to the commencement of felling.	Plantation Manager or Delegate	<a href="#">W1005-Tree Thinning &amp; Harvesting Work Instruction</a>
<b>Tree Felling</b>	<p>Timber harvesting will comply with the provisions of the <i>Occupational Safety and Health Act 1984</i>, the <i>Conservation and Land Management Act 1984</i>, the <i>Forest Management Regulations 1993</i> and the <i>Safety Code for Western Australian Logging Operations</i>.</p> <p>Tree Felling will be undertaken by a mechanical harvester in accordance with the Work Instruction.</p>	<p>Plantation Manager or Delegate</p> <p>Employees</p>	<p><a href="#">W1005-Tree Thinning &amp; Harvesting Work Instruction</a></p> <p>R002- Obligations Register</p>
<b>Extraction</b>	<p>Logs will be loaded onto trailers or trucks using a backhoe with forks.</p> <p>Machinery will use designated tracks and roads.</p> <p>Hygiene methods will be employed to prevent the spread of pathogens, insects and weeds.</p> <p>Sawn timber will be containerised on site and transported by road train to the Port of Broome.</p>	<p>Plantation Manager or Delegate</p> <p>Employees</p>	<p><a href="#">W1005-Tree Thinning &amp; Harvesting Work Instruction</a></p> <p><a href="#">F008 Weed Hygiene Certificate</a></p> <p>R009 Weed Hygiene Register</p> <p>R015-Planting Harvest Register</p>

Step	Description	Responsibility	Documentation
<b>Post harvesting groundwork</b>	<p>Scarfed or partially scarfed trees will be removed.</p> <p>Debris generated by the harvesting operation will be cleared from roads, firebreaks and harvesting tracks and mulched.</p> <p>Groundwork will be undertaken to restore the integrity of the soil and remaining understorey vegetation.</p>	<p>Plantation Manager or Delegate</p> <p>Employees</p>	<p><a href="#">P023-Rehabilitation Procedure</a></p> <p>R011 Rehabilitation Register</p>
<b>Maintain records</b>	<p>Harvesting records will be managed as per the record procedure.</p>	<p>Plantation Manager or Delegate</p>	<p>R015 Planting &amp; Harvesting Register</p> <p><a href="#">P012-Records Procedure</a></p>
<b>Training</b>	<p>All personnel employed in timber harvesting operations will receive training in the operation of equipment and safety aspects.</p>	<p>Plantation Manager or Delegate</p>	<p><a href="#">P005 Training Procedure</a></p>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P021-Weed Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Weed identification</b>	A register will be maintained which provides information such as photographs, distribution, abundance and effective control measures of weed species identified within the Project area.	Plantation Manager or Delegate	R008 Weed Register
<b>Weed hygiene</b>	<p>A Mobilisation Weed Hygiene Certificate will be completed and authorised prior to the commencement of work in the plantation.</p> <p>Approval will require all earthmoving and construction equipment coming to site to be cleared of soil, vegetation, rock. Equipment will be cleaned prior to mobilisation.</p> <p>Areas known to contain weed infestations will be demarcated with flagging tape and quarantined.</p> <p>Failure to comply with hygiene procedures will be managed as per Incident and Non-conformance management procedure.</p>	Plantation Manager or Delegate	<p><a href="#">F008 Weed Hygiene Certificate</a></p> <p>R009-Weed Hygiene Register</p> <p><a href="#">P012-Records Procedure</a></p> <p><a href="#">P011 Incident and Non-conformance Management Procedure</a></p> <p><a href="#">F005 Incident and Non-conformance Report Form</a></p>
<b>Control</b>	<p>Chemicals used to control weeds will be in accordance with <i>Health Act (1911) - Health (Pesticides) Regulations 1956</i>.</p> <p>Herbicide application will be in accordance with the <i>Country Areas Water Supply Act 1947</i>.</p> <p>Knock-down herbicides will be used to control weeds and regrowth.</p> <p>Pre-emergents may be used at the onset of the wet season to prevent seed set.</p> <p>Physical removal and spot spraying of emergent weed species will be carried out when visual inspection deems necessary to gradually deplete seeds stocks and reduce or eliminate any new colonisation.</p>	Plantation Manager or Delegate	<p><a href="#">F008 Weed Hygiene Certificate</a></p> <p>R009-Weed Hygiene Register</p> <p>R013 Pesticide Register</p> <p><a href="#">WI002 Pesticide Application Work Instruction</a></p>

Step	Description	Responsibility	Documentation
<b>Control (continued)</b>	<p>The introduction of weeds will be prevented by using potting mix from mulched site material.</p> <p>Plants will be purchased from a nursery practising strict hygiene controls. Pots will be inspected for weeds on arrival, and treated if necessary.</p>		
<b>Monitor</b>	<p>The presence of weeds will be identified during routine inspections of the plantation and site nursery.</p>	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a>  <a href="#">P012-Records Procedure</a>
<b>Records</b>	<p>Records of weeds identified within the area will be retained and eradication will be undertaken as required.</p> <p>Weed Hygiene Certificates will be listed within the Weed Hygiene Register</p> <p>Weed records will be managed as per the Record Procedure.</p>	Plantation Manager or Delegate	<a href="#">R008 Weed Register</a>  R013 Pesticide Register  R009 Weed Hygiene Register  <a href="#">P012 Records Procedure</a>
<b>Training</b>	<p>All employees will undergo environmental training inclusive of weed identification, recording and management.</p> <p>All employees will be issued with Environmental and Declared Weed Information Sheets as part of the site induction. Sheets include:</p> <ul style="list-style-type: none"> <li>• Parkinsonia <i>Parkinsonia aculeata</i></li> <li>• <i>Sida acuta</i></li> <li>• Stinking Passion Flower <i>Passiflora foetida</i></li> </ul>	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P022-Flora and Fauna Procedure**

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Step	Description	Responsibility	Documentation
<b>Identify significant species</b>	<p>Any significant flora species (Declared Rare Flora and Priority Flora) within the plantation and adjacent areas will be demarcated and avoided where practicable.</p> <p>A register will be available to aid in the identification of significant flora and fauna.</p>	Plantation Manager or Delegate	<p>R001-Risk Register</p> <p>R002-Obligations Register</p> <p>R016 Significant Flora and Fauna Register</p>
<b>Protect flora and fauna species</b>	<p>Habitat corridors will be maintained around plantation plots to facilitate the regeneration of the native understorey and allow native fauna to utilise the area.</p> <p>A proportion of the native mid – low storey vegetation will be allowed to regenerate within the plantation plots to provide fauna microhabitat.</p> <p>Native fauna will not be disturbed, captured or intentionally harmed.</p> <p>The introduction of feral / domesticated animals will be prohibited.</p> <p>Firebreaks will be established around the perimeter of the plantation and plots.</p> <p>Feral fauna control will be undertaken in consultation with Department of Agriculture, if required.</p>	Plantation Manager or Delegate	<p><a href="#">P017 Land Clearing &amp; Infrastructure Register</a></p> <p><a href="#">P019 Planting and Tree Maintenance Procedure</a></p> <p><a href="#">P024 Fire Management Procedure</a></p>
<b>Monitor</b>	<p>The health and abundance of flora and fauna will be monitored during routine inspections of the plantation, through individual sightings.</p>	Plantation Manager or Delegate	<p><a href="#">F007 Inspection Form</a></p> <p><a href="#">P010-Monitoring Procedure</a></p> <p><a href="#">P012-Records Procedure</a></p> <p>R016 Significant Flora and Fauna Register</p>
<b>Records</b>		Plantation	

Step	Description	Responsibility	Documentation
	<p>Records of flora and fauna will be managed as per Records Procedure.</p> <p>Individual sightings of significant flora and fauna, weeds outbreaks, feral fauna and native animal injury/death will be reported and recorded in the Incident and Non-conformance Register.</p>	Manager or Delegate	<p><a href="#">P012 Records Procedure</a></p> <p><a href="#">P011 Incident &amp; Non-conformance Procedure</a></p> <p>R010 Incident &amp; Non-conformance Register</p>
<b>Training</b>	<p>All employees will undergo environmental training inclusive of significant flora and fauna identification and protection.</p> <p>All employees will be issued with significant flora and fauna information sheets as part of the site induction. Sheets will include:</p> <p><u>Significant Fauna</u></p> <ul style="list-style-type: none"> <li>• Gouldian Finch <i>Erythrura gouldiae</i></li> <li>• Bilby <i>Macrotis lagotis</i></li> <li>• Golden Bandicoot <i>Isodon auratus auratus</i></li> <li>• Painted Snipe <i>Rostratula benghalensis australis</i></li> <li>• Red Goshawk <i>Erythrotriorchis radiatus</i></li> <li>• Peregrine Falcon <i>Falco peregrinus</i></li> <li>• Gray Falcon <i>Falco hypoleucos</i></li> <li>• Bush Stone Curlew <i>Burhinus grallarius</i></li> <li>• Australian Bustard <i>Ardeotis australis</i></li> <li>• White-bellied Sea Eagle <i>Haliaeetus leucogaster</i></li> <li>• Yellow Wagtail <i>Motacilla flava</i></li> <li>• Oriental Cuckoo <i>Cuculus saturatus</i></li> <li>• Rainbow Bee-eater <i>Merops ornatus</i></li> <li>• Fork-tailed Swift <i>Apus pacificus</i></li> <li>• Significant Skink species <i>Lerista separanda</i></li> </ul> <p><u>Significant Plants</u></p> <ul style="list-style-type: none"> <li>• <i>Aphyllodium parvifolium</i></li> <li>• <i>Aphyllodium glossocarpum</i></li> <li>• <i>Glycine pindanica</i></li> <li>• <i>Nymphoides beaglensis</i></li> <li>• <i>Stylidium costulatum</i></li> <li>• <i>Phyllanthus aridus</i></li> <li>• <i>Triodia acutispicula</i></li> </ul>	Plantation Manager or Delegate	<p><a href="#">P005 Training Procedure</a></p> <p>Appendix A - Example Flora / Fauna Information Sheet</p>

Step	Description	Responsibility	Documentation



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P023-Rehabilitation Procedure**

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Step	Description	Responsibility	Documentation
<b>Regeneration</b>	The natural regeneration of native vegetation will be encouraged following tree thinning.	Plantation Manager or Delegate	<a href="#">P020-Harvesting Procedure</a>  <a href="#">WI005-Tree Thinning &amp; Harvesting Work Instruction</a>
<b>Closure Planning</b>	<p>Ongoing consultation with stakeholders regarding closure planning will be undertaken throughout the life of the project. Final land use will be determined via this consultation and the objectives stated in the Conceptual Closure Plan (ecologia, 2005).</p> <p>Steps for closure in the Conceptual Closure Plan are as follows:</p> <ul style="list-style-type: none"> <li>• Remove all plantation species and invasive weeds, including seed stock;</li> <li>• Establish self-perpetuating native vegetation cover;</li> <li>• Investigate, remediate and rehabilitate any contaminated sites;</li> <li>• Protect any Aboriginal Heritage sites from damage;</li> <li>• Re-create stable landforms that are resistant to erosion;</li> <li>• Close redundant bores in accordance with the DoE Standard for Decommissioning Test Holes, partially Completed Bores and Completed Bores;</li> <li>• Cap any active bores;</li> <li>• Implement monitoring programs; and</li> <li>• Ensure all areas and infrastructure are safe to the public.</li> </ul>	Project Manager or Delegate	Beagle Bay Big Tree Country Conceptual Closure Plan (Ecologia, 2005).
<b>Removal of Infrastructure</b>	<p>During project closure, infrastructure will be removed from site (in accordance with stakeholder consultation agreements) and cleared or contaminated lands will be rehabilitated.</p> <p>Unsealed roads and firebreaks will also be rehabilitated.</p>	Project Manager or Delegate	Beagle Bay Big Tree Country Conceptual Closure Plan (Ecologia, 2005).
<b>Rehabilitation</b>	Rehabilitation will be undertaken progressively following the harvesting of each plot.	Plantation Manager or Delegate	<a href="#">P021 Weed Management Procedure</a>



Step	Description	Responsibility	Documentation
	<p>Compacted surfaces will be ripped to approximately 300 mm unless subsurface conditions dictate otherwise;</p> <p>Local provenance seed and plants will be utilised in rehabilitation.</p> <p>Topsoil, vegetation debris and logs will be returned to areas which have been disturbed to assist in rehabilitation by providing microhabitats for recolonising flora and fauna.</p> <p>Local, native plants will be established by:</p> <ul style="list-style-type: none"> <li>• Propagules (seeds, lignotubers, corms, bulbs, rhizomes and roots) stored in the soil;</li> <li>• Sowing of seed;</li> <li>• Spreading harvested plants with bradysporous (seed retained on the plant in persistent woody capsules) onto rehabilitation areas;</li> <li>• Nursery-raised seedlings; and</li> <li>• Invasion from surrounding areas through wildlife and wind.</li> </ul> <p>Planting will be undertaken in accordance with the Planting &amp; Tree Maintenance Procedure and Work Instruction.</p> <p>Weed Management will be undertaken in accordance with Weed Management Procedure. Care will be taken in introducing any fertilisers, manures, organic mulch, non-local species (provenance from the wider area) to ensure that weeds are not introduced.</p> <p>All disturbed areas will be rehabilitated within 6 months of completion of the project following the removal of all structures and equipment, as per the project Conceptual Closure Plan (<i>ecologia</i> 2004).</p>		<p>R008-Weed Register</p> <p>R008-Weed Hygiene Register</p> <p>R011-Rehabilitation Register</p>
<b>Remediation</b>	Any contaminated land will be remediated in consultation with the DoE (as the regulating authority) and in accordance with any relevant Standards and Guidelines.	Plantation Manager or Delegate	R011-Rehabilitation Register
<b>Monitor</b>	The progression of rehabilitated areas will be monitored during routine inspections of the plantation.	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a>  <a href="#">P012-Records Procedure</a>

Step	Description	Responsibility	Documentation
<b>Remedial action</b>	<p>Areas displaying inadequate regrowth will receive remedial work such as:</p> <ul style="list-style-type: none"> <li>• Replanting failed or unsatisfactory areas;</li> <li>• Repairing any erosion problems;</li> <li>• maintenance of fire controls such as fire breaks;</li> <li>• Pest and weed control;</li> <li>• Control of feral animal populations;</li> <li>• Fertiliser application;</li> <li>• Watering plants in drier areas, especially in the establishment phase; and</li> <li>• Application of lime or gypsum to control pH and improve soil structure.</li> </ul>	Plantation Manager or Delegate	R011 Rehabilitation Register
<b>Records</b>	Records of the areas rehabilitated will be maintained and managed as per record procedure.	Plantation Manager or Delegate	<p>R011 Rehabilitation Register</p> <p><a href="#">P012 Records Procedure</a></p>
<b>Training</b>	All employees will undergo environmental training inclusive of rehabilitation processes.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **P024-Fire Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Fire prevention</b>	<p>The size of plantation compartments, firebreak specifications and harvesting equipment will comply with FESA <i>Guidelines for Plantation Fire Protection 2001</i>.</p> <p>Firebreaks will be established around the perimeter of the plantation and individual plantation plots to ensure access to the site and minimise the risk of fire.</p> <p>Firebreaks will be kept free of flammable material.</p> <p>Refuelling of machinery will not be permitted within the plantation tree plots.</p> <p>Roads, tracks and fire breaks will be maintained in a trafficable condition.</p>	Plantation Manager or Delegate	<p>R001-Risk Register</p> <p>R002-Obligations Register</p>
<b>Fire control</b>	<p>Water points will be established at densities consistent with the specification within <i>Guidelines for Plantation Fire Protection 2001</i>.</p> <p>The irrigation system will be designed and installed to provide for fire fighting capability.</p> <p>Fire fighting equipment will be present at a designated location on site.</p>	Plantation Manager or Delegate	<a href="#">P018-Irrigation Management Procedure</a>
<b>Fire Manual</b>	As the plantation becomes more established and the risk of fire increases, a comprehensive Fire Manual will be developed and communicated to all personnel. The manual will contain maps, contacts and work instructions for fire control.	Plantation Manager or Delegate	
<b>Fire safety inspections</b>	<p>Fire safety inspections will be carried out monthly.</p> <p>Firebreaks will be inspected monthly.</p> <p>Routine maintenance of fire fighting equipment will be undertaken bi-annually.</p>	Plantation Manager or Delegate	<p><a href="#">F007 Inspection Form</a></p> <p><a href="#">P010-Monitoring Procedure</a></p> <p><a href="#">P013-Inspections &amp; Audits Procedure</a></p> <p><a href="#">P012-Records Procedure</a></p>

Step	Description	Responsibility	Documentation
<b>Records</b>	Records of fire incidents will be maintained and managed as per record procedure.	Plantation Manager or Delegate	<a href="#">F005-Incident &amp; Non-conformance Form</a>
<b>Records</b>			R010 Incident & Non-conformance Register  <a href="#">P012 Records Procedure</a>
<b>Training</b>	<p>All employees will undergo environmental training inclusive of bushfire prevention and emergency response procedures.</p> <p>Tree maintenance and harvesting personnel will be trained in fire control to a standard acceptable to FESA.</p>	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P025-Waste and Hydrocarbon/Chemical Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Waste handling</b>	<p>Organic waste material will be mulched and composted. Waste timber will be chipped and recycled wherever possible. Putrescible and inert waste will be disposed of at the Beagle Bay landfill and hazardous waste will be disposed of at the Broome landfill.</p> <p>Rubbish containers will be carried in all vehicles and provided at all work sites.</p> <p>Where foodstuffs are being discarded, covered receptacles will be used to keep out animals.</p> <p>Sanitary facilities will be kept in a clean condition.</p> <p>Littering will not be permitted.</p> <p>Recycling will be undertaken where appropriate.</p> <p>Toxic and hazardous substances will be exported off site.</p>	Plantation Manager or Delegate	<p>R002 Obligations Register</p> <p><a href="#">P026-Hydrocarbon &amp; Chemical Spills Procedure</a></p>
<b>Hydrocarbon and chemical management</b>	<p>Fuel storage tanks will be located upon bunded walls.</p> <p>A permit to store dangerous goods will be acquired from DoIR.</p> <p>When dealing with chemicals and hydrocarbons, employees will ensure:</p> <ul style="list-style-type: none"> <li>• Surplus or waste chemicals and hydrocarbons are disposed of in an approved manner;</li> <li>• The storage of chemicals meets DoIR guidelines;</li> <li>• Hydrocarbon drums are adequately labelled and stored appropriately;</li> <li>• Equipment such as drip trays and vacuum pumps will be used when servicing equipment to contain any spillages and discharges;</li> <li>• Hydrocarbons and waste oils are captured and stored in bunded tanks and removed off site for safe disposal or recycling; and</li> <li>• Storage of fuels and oils complies with <i>AS 1940-1993: The Storage and Handling of Flammable and Combustible Liquids</i>.</li> </ul>	Plantation Manager or Delegate	<p>R002 Obligations Register</p> <p><a href="#">P026-Hydrocarbon &amp; Chemical Spills Procedure</a></p>

Step	Description	Responsibility	Documentation
<b>Recycling</b>	<p>Recycling facilities will be incorporated into the construction and operation of the plantation and accommodation facilities.</p> <p>Recyclable Type 1 and Type 2 inert waste will be stockpiled for recycling with an approved contractor.</p>	Plantation Manager or Delegate	No specified EMS documentation.
<b>Sewage treatment</b>	<p>Sewage disposal will be in accordance with the <i>Health (Treatment of Sewage and Disposal of Effluent and Liquid Waste) Regulations 1974</i>.</p> <p>Sewage will be treated using septic tanks and leach drains.</p> <p>The unit will be constructed by a licensed plumber using products from an approved manufacturer.</p> <p>The unit will be inspected prior to backfilling to ensure compliance with regulations.</p> <p>The system will not be used if it is not in a functional working order.</p>	Plantation Manager or Delegate	R002 Obligations Register
<b>Monitor</b>	<p>Housekeeping inspections will be undertaken weekly.</p> <p>Hydrocarbon and chemical drums, bunds and containers will be inspected for leakage on a weekly basis.</p>	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a>  <a href="#">P012-Records Procedure</a>
<b>Records</b>	Records will be managed as per record procedure.	Plantation Manager or Delegate	<a href="#">P012 Records Procedure</a>
<b>Training</b>	All employees will undergo environmental training inclusive of waste management, handling and storage of hydrocarbons and chemicals, and spill response procedures.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>





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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P026-Hydrocarbon and Chemical Spills Procedure**

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Step	Description	Responsibility	Documentation
<b>Spill identification</b>	<p>The spilled substance will be identified to ensure it is safe to proceed with cleanup.</p> <p>Emergency Services will be contacted if the spill involves hazardous chemicals.</p>	Plantation Manager or Delegate	<p><a href="#">P009-Emergency Response Procedure</a></p> <p><a href="#">P011-Incident &amp; Non-conformance Procedure</a></p>
<b>Spill containment</b>	<p>The spill will be contained and the leak stopped as soon as possible. This will include blocking the source of the spill and building dykes around the spill.</p> <p>Hydrocarbon spill response kits will be provided in maintenance and fuelling areas.</p> <p>If safe to do so, spills will be cleaned up using absorbent materials.</p>	Plantation Manager or Delegate	<p><a href="#">P009-Emergency Response Procedure</a></p> <p><a href="#">P011-Incident &amp; Non-conformance Procedure</a></p> <p><a href="#">F005-Incident &amp; Non-conformance Report Form</a></p>
<b>Disposal of contaminated material</b>	<p>Soaked absorbent material will be disposed of in prescribed waste bins, which will be removed off site for safe disposal.</p> <p>Soils contaminated with hydrocarbons will be excavated and disposed of.</p>	Plantation Manager or Delegate	<p><a href="#">P026-Hydrocarbon &amp; Chemical Spills Procedure</a></p>
<b>Emergency response</b>	<p>Spills greater than 205 litres will be considered significant and reported immediately to the Plantation Manager. Emergency personnel will be contacted to coordinate cleanup if required.</p> <p>Response procedures will be in accordance with the site Emergency Response Plan.</p>	Plantation Manager or Delegate	<p><a href="#">F005 Incident and Non-Conformance Report Form</a></p> <p><a href="#">P012-Records Procedure</a></p>
<b>Risk management</b>	<p>The likelihood of the spill recurring will be investigated and steps will be taken to prevent its recurrence.</p>	Plantation Manager or Delegate	<p><a href="#">P001 Environmental Aspect Procedures</a></p> <p><a href="#">P009 Emergency Preparedness Response</a></p>

Step	Description	Responsibility	Documentation
			<a href="#">Procedure</a>
<b>Reporting</b>	All spills will be reported as an Environmental Incident within 24 hours.	Plantation Manager or Delegate	<a href="#">F005 Incident and Non-Conformance Report Form</a>  <a href="#">P012-Records Procedure</a>
<b>Inspections</b>	Monthly inspections of waste management practices and storage of hydrocarbons and chemicals will be undertaken.	Plantation Manager or Delegate	<a href="#">F007 Inspection Form</a>  <a href="#">P012-Records Procedure</a>
<b>Records</b>	Incident / non-conformance reports and investigations will be managed as per Records Procedure.	Plantation Manager or Delegate	<a href="#">P012-Records Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **P027-Groundwater Management Procedure**

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Step	Description	Responsibility	Documentation
<b>Groundwater Licence Operating Strategy</b>	<p>Details of groundwater management commitments are provided in the project's Groundwater Licence Operating Strategy (GLOS) (Rockwater 2004).</p> <p>The GLOS will be adhered to until the expiry of the project's Groundwater Licence.</p>	Plantation Manager	Groundwater Licence Operating Strategy (GLOS) (Rockwater 2004)
<b>Groundwater Extraction</b>	<p>Groundwater for irrigation and camp water supply purposes will be drawn from five production bores. Each production bore will be fitted with a flow meter, calibrated to NATA standards.</p> <p>Twelve additional bores will be utilised for monitoring purposes.</p> <p>Groundwater extraction will be in accordance with GLOS commitments.</p> <p>Groundwater will not be pumped for irrigation purposes during the three months of the wet season, unless conditions are unseasonably dry.</p>	Plantation Manager	<a href="#">P018-Irrigation Management Procedure</a>
<b>Groundwater Quality</b>	<p>Fertiliser and agrochemicals will be applied and stored in accordance with the Fertiliser and Pesticide Management Procedures and Work Instructions.</p> <p>Hydrocarbon and chemical spills will be prevented / remediated in accordance with Waste, Hydrocarbon and Chemical Management Procedure, and the Hydrocarbon and Chemical Spills Procedure</p>	Plantation Manager	<a href="#">P015-Pesticide Management Procedure</a> <a href="#">WI002 Pesticide Application Work Instruction</a> <a href="#">P016-Fertiliser Management Procedure</a> <a href="#">WI003-Fertiliser Application Work Instruction</a> <a href="#">P018-Irrigation</a>

Step	Description	Responsibility	Documentation
			<a href="#">Management Procedure</a>  <a href="#">P025-Waste and Hydrocarbon/Chemical Management Procedure</a>  <a href="#">P026-Hydrocarbon &amp; Chemical Spills Procedure</a>
<b>Monitoring</b>	<p>Monitoring commitments specified in the GLOS include the following:</p> <p><u>Monthly:</u></p> <ul style="list-style-type: none"> <li>• pumpage from each production bore;</li> <li>• water levels in each production and monitoring bore; and</li> <li>• salinity (measured as electrical conductivity) of groundwater from production bores.</li> </ul> <p><u>Quarterly:</u></p> <ul style="list-style-type: none"> <li>• salinity profiles in TTM04.</li> </ul> <p><u>Annually:</u></p> <ul style="list-style-type: none"> <li>• major ion analysis of groundwater from each production bore;</li> <li>• audit of type, brand and application rates of fertilisers and agro-chemicals</li> </ul> <p><u>Three-yearly:</u></p> <ul style="list-style-type: none"> <li>• scan for herbicides and pesticides in TTM01 and one other production bore.</li> </ul>	Plantation Manager	<a href="#">P010 – Monitoring Procedure</a>  R002-Obligations Register  R006–Environmental Monitoring Records Register  R012-Groundwater and Soil Monitoring Register  R013-Pesticide Register  R014-Fertiliser Register
<b>Efficiency</b>	Ongoing research to optimise water use will be undertaken and best management practices will be adopted.	Plantation Manager or Delegate	R012 Groundwater & Soil Monitoring Register  R017 – Tree Development &

Step	Description	Responsibility	Documentation
			Maintenance Register
<b>Records</b>	Bore inventories, calibration records and groundwater monitoring results will be documented and retained.	Plantation Manager	<a href="#">P012-Records Procedure</a>  R-012 Groundwater and Soil Monitoring Register
<b>Reporting</b>	<p>A monitoring report will be submitted annually to DoE prior to the end of August. Report requirements are detailed in the GLOS.</p> <p>In the event that GLOS commitments are not being met, the Department of Environment will be advised.</p>	<p>Plantation Manager or Delegate</p> <p>Plantation Manager or Nominated TTP Representative</p>	Groundwater Licence Operating Strategy (GLOS) (Rockwater 2004)
<b>Training</b>	All employees will receive training in their legal obligations under the project's Groundwater Licence and project responsibilities stated within the GLOS.	Plantation Manager or Delegate	<a href="#">P005 Training Procedure</a>



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **WI001-Risk Assessment Work Instruction**

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## WI001 – RISK ASSESSMENT WORK INSTRUCTION

1. **Task Purpose:**
  - To identify HSEC aspects and impacts of TTPs activities.
2. **Work Instruction involves the following positions:**
  - Plantation Manger or Delegate
  - Supervisors
3. **Safety and/or Environmental Considerations:**
  - Nil
4. **Permits and/or clearance Certificates required:**
  - Nil
5. **PPE requirements:**
  - Nil
6. **Task steps**

Aspects and impacts of the business are identified in various situations. These can be proactive (task analysis sessions) or reactive (results from inspections / audits / incidents)

### 6.1. Determine Process flow

If risk assessment is being undertaken for a project or new development, identify the process flow of the project.

- This will include inputs and outputs of the project such as:
  - ⇒ Key process steps;
  - ⇒ Products;
  - ⇒ Energy / resources requirements;
  - ⇒ Waste generation;
  - ⇒ Discharge to land, air and water;
  - ⇒ Dust generation;
  - ⇒ Discharge off site;
  - ⇒ Containment requirements for oils, chemicals and water; and
  - ⇒ Sewerage production;
- List the activities involved at each stage of the process. This may include
  - ⇒ Planning;
  - ⇒ Maintenance;
  - ⇒ Inspections and Audits;
  - ⇒ Job Tasks; and
  - ⇒ Training.
- Determine the aspects and impacts of the activities.

## 6.2. Proactive identification of Aspects / Impacts

This information is applicable to the establishment of risk registers, JSAs, risk assessment for work instructions / steps and for Change Management risk reviews.

- Identify the activity and tasks being assessed.
  - ⇒ The activity / assignment is known as the aspect, and will typically consist of various tasks.
  - ⇒ For example:
    - Activity (aspect): Maintenance
      - Task: Engine oil replacement
      - Task: Tyre change out
- Conduct task analysis session.
  - ⇒ Involve personnel who will have valuable input into the process due to knowledge and experience.
  - ⇒ Ensure personnel who are responsible for performing the tasks are part of the session.
  - ⇒ Record all information throughout the session
- Break the task down to the sequential steps:
  - ⇒ Each task consists of steps, which will have to be identified and assessed for associated hazards.
  - ⇒ For example:
    - Task: Engine oil replacement
      - Step 1: Park vehicle
      - Step 2: Locate engine oil release valve
      - Step 3: Purge engine oil tank
- Identify the hazards associated with each step:
  - ⇒ There is often more than one hazard associated with each step.
  - ⇒ For example:
    - Step 3: Purge engine oil tank
      - Hazard: Chemical burns from hot oil
      - Hazard: Oil spillage
      - Hazard: Incorrect disposal of oily waste material
- Determine the possible impacts for each hazard
  - ⇒ Hazards may share similar impacts, but each of these will need to be identified to enable effective management of the hazard.
  - ⇒ For Example:
    - Hazard: Chemical burns from hot oil
      - Impact: Burns to skin
      - Impact: Burns to eyes resulting in vision impairment
      - Impact: Severe injury resulting in Lost Time or permanent disability
    - Hazard: Oil Spillage
      - Impact: Injury resulting from contact with oil
      - Impact: Contamination of soil
      - Impact: Contamination of water
      - Impact: Cost involved in oily waste disposal
      - Impact: Breach of license conditions if oil enters ground water.

- ⇒ Identify current effective controls
  - List all controls that are currently in place to minimise the hazard, or the severity of the impacts. This may include:
    - Training and awareness sessions;
    - Physical structures;
    - Management plans and processes;
    - Regular inspections, checks and audits;
    - Maintenance schedules;
    - Monitoring schedules;
    - Waste facilities that are correctly used; and
    - Documented Work Instructions that are used.
  - Do not include controls that are not effective, or not being used.

### 6.3. Reactive identification of Aspects / Impacts

- ⇒ Review details of previous incidents, accidents and non-conformances.
  - Assess hazard situation.
  - Estimate likelihood of occurrence by reviewing the number of recurrences.
  - Determine effectiveness of corrective / preventive actions that resulted.

### 6.4. Determining risk ranking of aspects

- ⇒ After identifying the aspects, impacts and control measures, assess the highest consequence severity ranking of the impacts using the Consequence Severity Table.
- ⇒ Determine the likelihood of the consequence realisation using the Likelihood table.
- ⇒ Using the Risk matrix, determine the risk level of the aspect.

**Table 1 – Consequence Severity Table**

Level		Consequences	
		Environmental/Nuisance	Non conformances
1	Insignificant	No discernible, adverse environmental impact.	Does not affect Policy or EMS.
2	Minor	Discernible effect on the environment but no adverse impact.	Does not conform with specifics of EMS but follows general intent of Policy.
3	Moderate	Measurable adverse impact on the environment (including public amenity).	Does not conform with Policy or EMS - not aware of requirements due to lack of training.
4	Major	Damage to an ecological system, or loss of public amenity resulting in a public complaint.	Does not conform with Policy or EMS - aware of requirements but no clear justification for actions.
5	Catastrophic	Significant damage to an ecological system, or adverse impact on public health.	Does not conform with Policy or EMS - deliberate avoidance on basis of time or cost.

**Table 2 – Likelihood Table**

Level		Likelihood
A	Almost certain	The incident is expected to occur most of the time, i.e. every time a job is carried out.
B	Likely	The incident will probably occur in most circumstances, i.e. in a job which is carried out regularly, the incident could occur weekly.
C	Moderate	The incident should occur at some time, i.e. in a job which is carried out regularly, the incident could occur quarterly.
D	Unlikely	The incident could occur at some time during the life of the project.
E	Rare	The incident may occur only in exceptional circumstances and may never happen.

**Table 3 – Risk Matrix**

		CONSEQUENCES				
		1	2	3	4	5
LIKELIHOOD		Insignificant	Minor	Moderate	Major	Catastrophic
A	Almost certain	S	S	H	H	H
B	Likely	M	S	S	H	H
C	Moderate	L	M	S	H	H
D	Unlikely	L	L	M	S	H
E	Rare	L	L	M	M	S

Where:

H	High impact	Senior management involvement and planning needed.
S	Significant impact	Senior management attention needed.
M	Moderate impact	Management responsibility must be specified.
L	Low impact	Manage by routine procedures.



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **WI002-Pesticide Application Work Instruction**

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## WI002 – PESTICIDE APPLICATION WORK INSTRUCTION

### PURPOSE

The purpose of this work instruction is to ensure that pesticide application is undertaken in a safe and environmentally friendly manner. The use of pesticides is controlled by the *Health Act (1911) - Health (Pesticides) Regulations 1956*.

Pesticide application will be carried out when the plants are young and vulnerable. Weekly inspections may also identify the need to eradicate pests and weeds.

Biodegradable pesticides are used rather than long life residual pesticides which can accumulate in areas outside the plantation and contaminate ecosystems.

### SCOPE

This work instruction applies to the application of herbicides, insecticides and fungicides within the TTPs Beagle Bay Big Tree Country Plantation Project.

### PRE TASK REQUIREMENTS

1. Check the weather forecast.

Weather will influence the effectiveness of the pesticide and its impact upon the environment. For example windy conditions or temperature inversions (cold air trapped between the land and warm air above) contribute to pesticide drift (DoE, 2001).

Applying pesticide before intense rainfall can result in a large loss of pesticide to the environment, particularly after the first rainfall event. The amount of loss decreases with each additional day between application and intense rainfall (DoE, 2001).

2. Select an appropriate chemical from R013 Pesticide Register to perform the required function.

Consideration should be given to:

- Area of application;
- Protection needed for person applying the chemical;
- Protection of wildlife that may come into contact with the sprayed area;
- Impacts on neighbouring areas;
- Run-off from the target area; and
- Fumes drifting from the target area

This information will be contained within the Material Safety Data Sheet for each chemical.

3. Familiarise yourself with the safety requirements of the chemical.
4. Notify people who may be in the vicinity of the treated area prior to commencing activity.

- \* If pesticides are being administered via the irrigation system (chemigation), information regarding estimated water delivery will be required prior to commencing the task to enable an accurate dilution factor to be determined.

### **TASK STEPS**

*Only appropriately trained operators should apply toxic chemicals.*

1. Apply protective clothing, if required, as a safeguard against exposure to chemicals.
2. Check pesticide containers and application equipment for damage / leakage.
3. Ensure sprayer nozzle is not blocked, damaged or open.
4. Chemical mixing is to be undertaken in a controlled environment where any spills can be readily contained.
5. Mix or dilute the chemicals according to the rates specified on the label.
6. Prepare enough pesticide for immediate use only.
7. Proceed to target area requiring pesticide application.
8. Ensure an even application is delivered to target area.
9. Clean equipment in designated washdown area where contaminated water can be contained.
10. Ensure a record of the treatment is entered into R013 Pesticide Register. Information required includes name of the chemical applied, concentration of chemical, the amount used and area treated.
11. If an accident occurs, advise the Supervisor and ensure F005 Incident and Non-conformance Report Form is completed.

### Chemigation

Operators of chemigation are required to undergo proper training in the setup and operation of equipment and the safe handling and use of chemicals.

If pesticide application is being made directly through the irrigating system, disregard Tasks 3, 7, 8 and 9.

### **Additional Tasks**

12. Chemigation equipment must be calibrated and inspected at the commencement and completion of each chemigation treatment.



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **WI003-Fertiliser Application Work Instruction**

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## **WI003 – FERTILISER APPLICATION WORK INSTRUCTION**

### **PURPOSE**

The purpose of this work instruction is to ensure that fertiliser application is undertaken in an appropriate, safe and environmentally friendly manner.

### **SUMMARY**

A granulated limestone and modified phosphorus rock mix will be spread over each plot prior to planting, at 1.5 tonnes per hectare. 150g of slow release fertiliser, will be dibbled adjacent to the root system of each tree immediately after planting and at Year 3. Additional supplements will be liquid fed to the plantation in Years 2 and 4 and when deemed necessary during plantation inspections.

### **SCOPE**

This work instruction applies to the application of fertilisers within the TTP Beagle Bay *Big Tree Country* Plantation Project.

### **PRE TASK REQUIREMENTS**

1. Check the weather forecast

Weather will influence the effectiveness of fertiliser and its impact upon the environment. Applying fertiliser before intense rainfall can result in a large loss to the environment, particularly after the first rainfall event. The amount of loss decreases with each additional day between application and intense rainfall (DoE, 2001).

2. Select an appropriate fertiliser from R014 Fertiliser Register to perform the required function.

Consideration should be given to:

- Area of application;
- Development stage of plantation; and
- Observed deficiencies within trees

- \* If fertilisers are being administered via the irrigation system, information regarding actual water delivery will be required prior to commencing the task to enable an accurate dilution factor to be determined.

### **TASK STEPS**

1. Check fertiliser containers / bags for damage or leakage.
2. Fertiliser mixing is to be undertaken in a controlled environment where any loss can be readily retrieved.
3. Mix fertilisers according to the rates specified on the label (Refer to Note at the end of this document).
4. Prepare enough for immediate use only.
5. Proceed to target area requiring fertiliser application.

6. Ensure an even application is delivered to target area. If using a dibbling device, ensure that the rod is completely inserted into the ground prior to pressing the lever and releasing the fertiliser adjacent to the root zone.
7. Clean equipment in designated washdown area where contaminated water can be contained.
8. Ensure a record of the treatment is entered into R014 Fertiliser Register. Information required includes a reason for application, name of the fertilisers applied, amount used and area treated.
9. If an accident occurs, advise the Site foreman and ensure F005 Incident and Non-conformance Report Form is completed.

### Fertigation

Operators of fertigation are required to undergo proper training in the setup and operation of equipment and the safe handling and use of chemicals.

If fertiliser application is being made directly through the irrigating system, disregard Tasks 3, 6, 7 and 9.

### Additional Tasks

10. Fertigation equipment must be cleaned, calibrated and inspected at the commencement and completion of each treatment.

### **NOTE:**

Some fertilisers must NOT be mixed together:

- Calcium Nitrate with any phosphates or sulphates;
- Magnesium sulphate with di- or mono- ammonium phosphate; and
- Phosphoric acid with iron, zinc, copper and manganese sulphates.



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **WI004-Tree Planting and Maintenance Work Instruction**

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## **WI004 – TREE PLANTING & MAINTENANCE WORK INSTRUCTION**

### **PURPOSE**

The purpose of this work instruction is to ensure that trees are handled and maintained in the correct manner. This will ensure the maximum survival rate of seedlings and the production of high quality wood.

### **SCOPE**

This work instruction applies to the planting and maintenance of trees within the TTPs Beagle Bay *Big Tree Country* Plantation Project.

### **PRE TASK REQUIREMENTS**

1. Ensure the plantation site has been appropriately prepared and is ready for planting, i.e.. weed eradication has been undertaken, surface has been deep ripped, drippers are working, lime / phosphorus mix applied.
2. Ensure the correct numbers of seedlings are available for the proposed area to be planted.
3. If host species are required, ensure the established tertiary host is of sufficient health.
4. Undertake a briefing on root spiral and j curve to enable the presence of these defects to be readily identified.

### **TASK STEPS - PLANTING**

1. Trees are to be located at every dripper. Density will be dependent upon tree species:

Mahogany	625 trees / ha	
Teak	1000 trees / ha	
Sandalwood	315 trees / ha	
Sandalwood hosts	315 trees /ha	(Rosewood, acacia, Sesbania)
2. Remove mulch from around each trickle line and prepare a hole larger than the plant pot at each dripper.
3. Remove seedling from nursery container by squeezing the sides and tapping on the bottom of the container.
4. Inspect the root system without disturbing the soil media. Check for root spiral or j curve in each tree. Trees with defective or poorly developed root systems are to be returned to the nursery.
5. Place one seedling into each prepared hole. If planting sandalwood, sequential planting is to be undertaken as directed by the Field Supervisor. If possible the seedling should be planted on the most shady side of the host, so that it may be offered some protection.
6. Fill each hole and surround the seedling with the soil previously removed. Soil should be mounded around the seedling in a crater-like (mound) shape to trap water that is delivered (see Plate 1 below).
7. Re-apply mulch.

8. Irrigate each plantation plot and re-check drippers are functioning properly.
9. Establish an identification number for each plot.



**Plate 1          Soil mounded into a water-trapping 'crater' around the seedling**

#### **PRE TASK REQUIREMENTS – PRUNING**

1. Attend a demonstration on pruning
2. Practise pruning prior to commencing on the plantation.
3. Ensure pruning equipment is clean and sharp.
4. Acquire safety equipment such as a helmet, face guard, eye protection and gloves.

#### **TASK STEPS - PRUNING**

The two main types of pruning are clearwood pruning and form pruning. Clearwood pruning aims to minimise the diameter of the knotty core within the trunk. Form pruning aims to correct the form of young trees by removing faults such as forks and large branches. (Department of Agriculture, 1998).

Pruning will be undertaken approximately 6 months after planting for 3 to 4 years, and when required, as identified during plantation inspections.

1. Form pruning shall not be done higher than the point on the stem where the diameter is 10cm, or no higher than 50% of the tree height.
2. Prune close to the trunk without damaging the collar (wrinkly wood around the base of the branch). The collar contains tissue which produce new wood cells. If it is removed or torn the pruning takes longer to heal, the tree is exposed to fungal attack and the quality of the wood is reduced.
3. Avoid leaving branch stubs on trees as it takes a long time to for the tree to grow over the stubs and they increase knotty core size.
4. In general, branches are to be removed prior to exceeding 2.5cm in diameter.
5. Branches should be removed whilst they are still alive and green.



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

#### **WI005-Tree Thinning and Harvesting Work Instruction**

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## WI005 – TREE THINNING & HARVESTING

### PURPOSE

The purpose of this work instruction is to ensure that tree felling is undertaken in the correct manner. This will ensure a high quality of wood is produced and profits are maximised.

### SCOPE

This work instruction applies to tree felling within the TTPs Beagle Bay *Big Tree Country* Plantation Project.

Tree thinning is only applicable to Teak *Tectona grandis*, approximately 6-8 years after planting.

### PRE TASK REQUIREMENTS

#### Thinning

1. Establish the current number of trees per hectare.
2. Calculate the density of crop trees to be retained.
3. Calculate the proportion of trees to be culled.
4. Select the crop trees and mark them with flagging tape.

#### Thinning & Harvesting

5. Ensure machine operators are in possession of a valid Operating Licence.
6. Ensure there are no unauthorised people within the area to be felled.
7. Ensure all people involved in felling operations are wearing safety apparatus, including earmuffs, safety glasses and hard hats.
8. Undertake a hygiene inspection of all machinery entering the plantation. Complete F008 Weed Hygiene Certificate.

### TASK STEPS

1. Check that each tree to be felled does not have any dead branches or debris that may be dislodged or branches interlocking with other trees that may cause the uprooting of another tree.
2. Trees will be felled and stripped using a mechanical harvester, which will be driven by an experienced and qualified operator.
3. The mechanical harvester will remove the tree crown and strip all branches, which will be fed directly into a portable mulching machine.
4. Trees (other than Sandalwood) will be cut at the stump and loaded onto trailers or trucks using a backhoe with forks.

5. Green Sandalwood timber is harvested by pulling the tree from the ground, taking the stump and the roots as well. Limbs and roots are harvested to a minimum diameter of 25mm due to there being very little heartwood in material smaller than this.
6. Stockpile and mulch logs with no commercial value.
7. Trim and crosscut remaining logs.
8. Transfer commercial logs to the sawmill using live feed rollers and saw into square edged lumber.
9. Place sawn timber in the drying area for several weeks for natural air drying.
10. Make up the timber into manageable sized bundles and load into 20' GP boxes using a forklift for trucking to the Port of Broome.
11. Ensure R015 Planting & Harvesting Register is completed throughout the harvesting process.





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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **WI006-Nursery Operations Work Instruction**

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## **WI006 – NURSERY OPERATIONS**

### **PURPOSE**

The purpose of this work instruction is to ensure that plants are nurtured in the correct manner. This will ensure the maximum survival rate of seedlings and the production of high quality wood.

### **SCOPE**

This work instruction applies to the nursery within the TTPs Beagle Bay *Big Tree Country* Plantation Project.

### **PRE TASK REQUIREMENTS**

1. Confirm the grower has undertaken sampling for pathogens, such as dieback and fusillarium, and performed regular inspections and treatment for weeds prior to shipment.
2. Confirm the grower has administered pathogen and weed control within the potting mix.
3. Undertake training on nursery operations, inclusive of potting techniques and root spiral / j curve identification.
4. Ensure supplier of any imported tissue cultures are certified by AQIS

### **TASK STEPS**

#### **Potting**

1. On arrival, place tubed seedlings onto benches within the shadehouse to allow each plant to adapt to its new environment.
2. Place the seedlings on a weed mat in the field, to harden-off.
3. Prepare for re-potting using a 6l bag.  $\frac{3}{4}$  fill each bag with potting mix. Potting mix will be made up on site using site mulch and river sand imported from Derby. The composition of the mix will be to Scott's Australia specifications and will include fertiliser and pathogen control, if required.
4. Place a small hole in the centre of the potting mix for plant insertion.
5. Carefully remove plants from tubes.
6. Inspect the root system of each plant to ensure it has a full root system without j-curve or root spiraling.
7. Place a single plant into the prepared hole within the 6l bag.
8. Top up each bag with potting mix.
9. Place each plant on a nursery trailer, hand water then transfer the trailer to the hardening off area.

### **Maintenance**

1. Visually inspect the tube stock within the nursery every day.
2. Record the presence of weeds, pathogens and plant vigour within R018 Nursery Register.
3. Notify the Nursery Supervisor of any noticeable decline in the plant's health.
4. Remedial action, such as pest control or fertiliser application, is to be initiated by the Nursery Supervisor.
5. If weeds are found to be present, physically remove the weeds, place in a sealed bag and dispose of within waste bins. If the weeds have gone to seed, apply pre-emergent to the soil in accordance with the manufacturer's specifications.
6. Pruning will be undertaken when required to improve the shape and form of plants.
7. Nursery plants will be automatically watered as required, subject to weather conditions.

### **Hygiene**

1. No pots are to be re-used unless all the soil has been removed, the pot has been thoroughly cleaned and sterilised in a chlorine bath.



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## **Beagle Bay *Big Tree* Country Plantation Project**

### **ENVIRONMENTAL MANAGEMENT SYSTEM**

### **Environmental Management System Forms**

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## F001 – JOB SAFETY AND ENVIRONMENT ANALYSIS

<b>Date:</b>	<b>Department/Work Area:</b>	<b>JSEA Team Members:</b>		
<b>Description of Job:</b>				

Consider environmental issues such as Type and disposal requirements for waste produced, Potential for spills, Clearing controls, Water / drainage management, Weed hygiene, Dust Management, Topsoil handling, and all other risks for breach legal / procedural requirements.

Task Steps	Potential Hazards	Control Measures	Risk Acceptable?	
			Yes	No If no, seek advice before commencing job
This JSEA was developed and reviewed by all members of the team involved in the task. Where risks were unacceptable, advice was sought before commencement of job.				
..... Supervisor – Print Name	..... Signature	..... Date		



## F002 – CHANGE CONTROL

<b>Change Initiator</b>		<b>Date</b>	
<b>Changes to</b>	<input type="checkbox"/> Plant / Equipment / Process	<input type="checkbox"/> Personnel	
	<input type="checkbox"/> Work Procedure / Instruction	<input type="checkbox"/> Business Objectives	
	<input type="checkbox"/> Organisation	<input type="checkbox"/> Other	
	<input type="checkbox"/> Legal or Other Requirements	<input type="checkbox"/>	

### Description of Change:

### Reason for Change

<input type="checkbox"/> Incident / Non-conformance Corrective Action <input type="checkbox"/> New legal or other requirement <input type="checkbox"/> Management of unacceptable risk	<b>Other :</b>
--	----------------

<b>Change requires</b>	<input type="checkbox"/> Risk Register Update	<input type="checkbox"/> Business Objectives Review
	<input type="checkbox"/> Training of Personnel	<input type="checkbox"/> Communication with External Stakeholders
	<input type="checkbox"/> Documentation Revision/Development	<input type="checkbox"/> Communication with Employees
	<input type="checkbox"/> Additional resource	<input type="checkbox"/> Other

### Action Plan

Actions Required	Responsible Person	Due Date

☐ Change not approved

**Reason:**

<b>Plantation Manager (Name)</b>	<b>Signature</b>	<b>Date</b>

☐ Change approved

This change is required to meet business and environmental objectives and targets and the intents of the TTP's Environmental Policy. Action plan addresses all requirements to manage the risks associated with this change.

<b>Plantation Manager (Name)</b>	<b>Signature</b>	<b>Date</b>





## F004 – MEETING MINUTES TEMPLATE

<b>Date:</b>	
<b>Venue:</b>	
<b>Attendees / Company:</b>	<b>Apologies / Company:</b>
<b>AGENDA</b>	<b>Responsible Person</b>
1. Progress Against Targets	
2. Incidents / Complaints	
3. Inspection / Audit Findings	
4. Corrective Actions Status	
5. Proposed Changes Status	
6. New Business	

### MINUTES

Items/Actions				
1. Progress Against Targets				
Targets	Actions	Responsible Person	Due Date	Status

2. Details of Incidents / Complaints and Corrective Actions	Responsible Person	Due Date

3. Details of Audit and Inspection findings and Corrective Actions	Responsible Person	Due Date

4. Corrective Action Status	Responsible Person	Due Date

5. Details of Proposed Changes / Change Control Requests	Responsible Person	Due Date






6. New Business	Responsible Person	Due Date



## F005 – INCIDENT AND NON-CONFORMANCE REPORT FORM

Record # \_\_\_\_\_

Sections 1-5: To be completed by initiator of this report

Section 1: Details of person reporting Incident / Non-conformance			
Name		Date of report	
Company		Plantation Manager	
Report type	<input type="checkbox"/> Env. Incident/'Near Miss' (Fill in Section	<input type="checkbox"/> Non-conformance (Fill in Section 3)	
	<input type="checkbox"/> External communication (Fill in Section 4)	<input type="checkbox"/> Other (Fill in Section 5)	

Section 2: Details of Environmental Incident			
Date of event		Location of event	
Employee involved		Was risk of incident previously known? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Description of incident:			
Immediate Actions taken			
Go to Section 6			

Section 3: Details of Environmental Non-conformance			
Source of Non-conformance	<input type="checkbox"/> Inspection on Employee	<input type="checkbox"/> Internal Audit on Self	
	<input type="checkbox"/> EMS Audit on Employee	<input type="checkbox"/> External Audit on Self	
	<input type="checkbox"/> Inspection on Self	<input type="checkbox"/> Other	
Description of non-conformance:			
Go to Section 6			

Section 4: Details of External Communication			
Source of Communication	<input type="checkbox"/> Public	<input type="checkbox"/> Interest Groups	
	<input type="checkbox"/> Government Agency	<input type="checkbox"/> Other (Specify):	
Communication was raised in	<input type="checkbox"/> Phone call	<input type="checkbox"/> Meeting	
	<input type="checkbox"/> Letter	<input type="checkbox"/> Other (Specify):	
Date of communication		Received by:	
Details of Stakeholder / Communication:			
Name of Person / Organisation:		Address:	
Telephone Number:		Fax Number:	
Description of issue / concern:			
Go to Section 6			



<b>Section 5: Other</b>
Details:
Go to Section 6


**Section 6: To be completed by Area Supervisor / Environmental Officer**

<b>Section 6: Investigation</b>		
Date of completion		Lead Investigator
<b>Contributing factors for incident / non-conformance</b>		
<input type="checkbox"/> Breach of existing procedures	<input type="checkbox"/> Lack of awareness , competence , skill	
<input type="checkbox"/> No existing procedure	<input type="checkbox"/> JSEA not conducted	
<input type="checkbox"/> Procedure / equipment not fit for purpose	<input type="checkbox"/> Miscommunication	
Root Causes:		
<b>Section 7: Corrective / Preventive Actions</b>		
Required changes include: (Use F002-Change Control Form)	<input type="checkbox"/> Risk Register Update	<input type="checkbox"/> Communication with External Stakeholders
	<input type="checkbox"/> Training of Personnel	<input type="checkbox"/> Business Objectives Review
	<input type="checkbox"/> Documentation Revision/Development	<input type="checkbox"/> Communication with Employees
	<input type="checkbox"/> Additional resource	<input type="checkbox"/> Other
<b>Corrective / Preventive Actions Required</b>	<b>Responsible Person</b>	<b>Due Date</b>

<b>Section 8: Incident / Non-conformance Close Out (To be completed only after all actions are completed)</b>		
We confirm that all actions from this incident / non-conformance have been adequately addressed.		
<b>Plantation Manager (Name)</b>	<b>Signature</b>	<b>Date</b>
<b>Environment Officer (Name)</b>	<b>Signature</b>	<b>Date</b>
<b>Recorded in R010 Incident and Non-conformance Register by (Name)</b>		<b>Date</b>



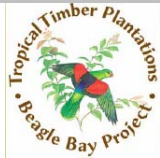
## F006 – ENVIRONMENTAL CONTROLLED DOCUMENT TRANSMITTAL SLIP

		<h3>Environmental Controlled Document Transmittal</h3>	
<b>Tropical Timber Plantations</b>			
<input type="checkbox"/> The attached document is <b>NEW</b> <input type="checkbox"/> The attached document is a <b>REVISION</b> of an existing document.			
<b>Document Title:</b>			
<b>Date of Issue:</b>			
<b>Revision Issue Number:</b>			
<b>Controlled Copy Number:</b>			
<b>Description of Change</b>		Changes to section number/s _____ pages Details: _____	
<b>Recipient Name</b>			
<b>Recipient Title</b>			
<b>Organisation/Department:</b>			
<b>Location:</b>			

Recipient to complete		
<p><i>Please tick the appropriate box:</i></p> <p><input type="checkbox"/> The complete document and/or pages as specified have been received. No duplicate pages were received.</p> <p><input type="checkbox"/> Removed obsolete document pages or whole document and destroyed them/it.</p> <p><input type="checkbox"/> Missing/Duplicate pages received were: _____</p>		
<b>Print Name</b>	<b>Signature</b>	<b>Date</b>
<p><i>Please return this document to:</i></p> <p><b>Environmental Officer</b>  <b>Beagle Bay Big Tree Country Plantation Project</b>  <b>Tropical Timber Plantations Pty Ltd</b>  <b>Tel:</b>  <b>Fax:</b></p>		



## F007 – ENVIRONMENTAL INSPECTION FORM

		<h1>Environmental Inspection Report</h1>		<b>Tropical Timber Plantations</b>
<i>Note: Bring along previous inspection record for verification of corrective actions</i>				
<b>Site</b>		<b>Inspection Date</b>		
<b>Location</b>		<b>Inspector/s</b>		
ASPECT	Action required (Yes or No)	Comments/Actions Required	Related non conformance	
<b>Landscape</b>				
Plantation / Tree health				
Erosion				
Rehabilitated Areas				
Weeds				
Native Flora / Vegetation				
Fauna				
Feral Animals				
Firebreaks				
Groundwater / Surface Water				
Aboriginal Heritage				
<b>Pollution Prevention</b>				
Pesticide containers				
Spillage of hazardous materials				
Waste Recycling				
Solid Waste				
Litter				
General house keeping				
<b>Environmental Management Systems</b>				
Procedures				
Incident Reports				
Inspections/Audits				
Records				
Awareness				
Training				
<b>Other</b>				
Irrigation System				
Fire fighting equipment				
<b>Actions from previous inspections have been addressed</b>				
<b>Non-conformance has been raised (Complete F005 Incident and Non Conformance Form)</b>				
<b>Update of Risk Register completed (if required)</b>				

<b>Date</b>	<b>Contractor</b>
<b>Contract #</b>	<b>Address</b>
<b>Purchase Order #</b>	<b>Phone</b>
<b>Location of Equipment Usage</b>	<b>Facsimile</b>
	<b>Site Contact</b>

F008-WEED HYGIENE CERTIFICATE



## **F009 - SITE DISTURBANCE PERMIT**

Date \_\_\_\_\_ Time \_\_\_\_\_ am/pm

### **TO BE FILLED IN BY APPLICANT**

Project Area \_\_\_\_\_

Location \_\_\_\_\_

Area of Disturbance (ha) \_\_\_\_\_

Originator/Contractor \_\_\_\_\_

### **Reason for Disturbance:**

- |  |   |
|--|---|
| <input type="checkbox"/> Plant new crop          | <input type="checkbox"/> Fence/pipeline disturbance |
| <input type="checkbox"/> Tree removal            | <input type="checkbox"/> Other                      |
| <input type="checkbox"/> Roadwork / Re-alignment |   |

Description of proposed activity (attach plan, maps &/or photos if appropriate)

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Plantation Manager / Environmental Officer \_\_\_\_\_ Date \_\_\_\_\_

### **TO BE FILLED IN BY ENVIRONMENTAL DEPARTMENT**

- ☐ Clearing boundary demarcated to standard
- ☐ Aboriginal sites demarcated
- ☐ Rare flora/fauna protected
- ☐ Adequate pollution prevention safeguards in place
- ☐ Dust/fibrous hazards mitigated
- ☐ Government approval, if required

Environmental Conditions \_\_\_\_\_

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Approved by \_\_\_\_\_ Date \_\_\_\_\_  
(Environmental Representative)

Signature \_\_\_\_\_

## REFERENCES

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## **APPENDIX A**

### **EXAMPLE SIGNIFICANT FLORA / FAUNA INFORMATION SHEET**

## PROTECTED WILDLIFE OF THE BEAGLE BAY AREA

### Gouldian Finch *Erythrura gouldiae*



#### Conservation Status

Gouldian Finch numbers have declined by 50% over the past 10 years.

There are less than 2,500 Gouldian Finches left

Australia: Environment Protection & Biodiversity Conservation Act 1999: **ENDANGERED**



Male black-headed gouldian finch (top right) and juvenile (middle left).

#### Description

##### *Adult birds:*

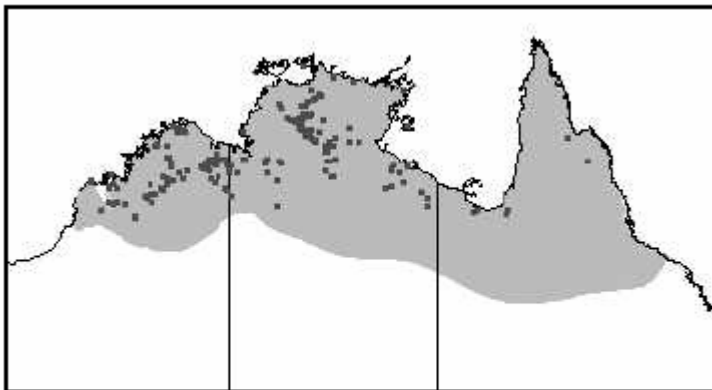
- Purple chest
- Yellow breast
- Green back
- Females more dull than males
- Black, red or yellow face.

##### *Juvenile birds:*

- Completely dull green

#### Habitat

- During the dry season and part of wet season, they live in Snappy Gum woodlands on hills.
- During the wet season they move into lowland drainage areas to feed upon perennial grasses.



Past (grey) and present (dark grey) distribution of the gouldian finch.

#### Threats

- Parasites (mites)
- Trapping for commercial sale
- Grazing of livestock
- Fire

#### What can I do?

- When working in potential habitat areas, keep clearing to a minimum and take precautions to prevent fires.
- Ensure that your work-station is fitted with fire-fighting equipment.
- When driving, stay on designated tracks.

#### What if I see a Gouldian Finch?

- Do not touch or go near the bird.
- Record the area, date and time of the sighting.
- Report the sighting to your project manager or delegate who will then report it to CALM.