



# Tropicana Gold Project Operational Environmental Management Strategy

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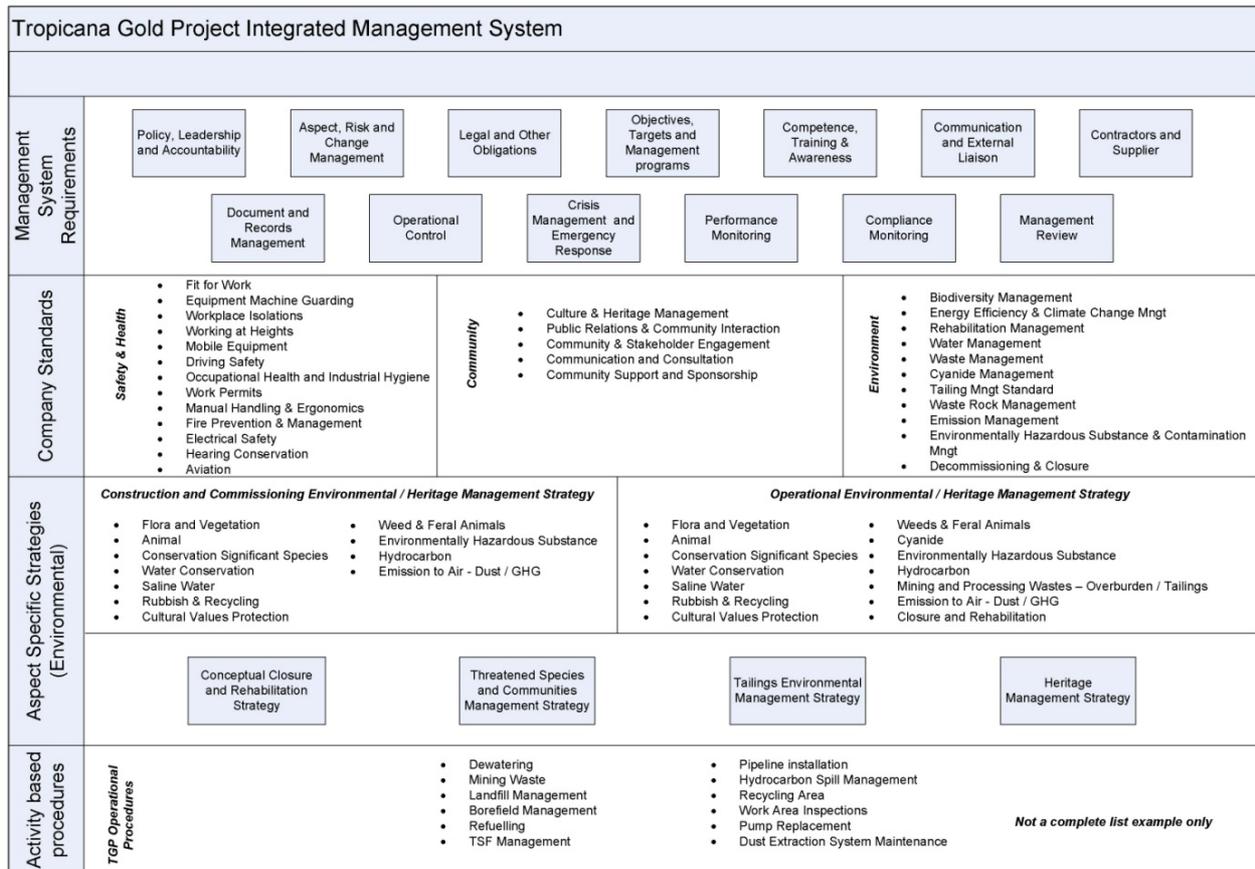
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## 1 OVERVIEW

The operational environmental management strategy (OEMS) contained within this document provides the framework for managing environmental issues during the operational phase of the Tropicana Gold Project (the Project). The OEMS forms part of the Project Integrated Management System (IMS) that ensures the effective management of all health, safety, environment, community and operational issues associated with the Project. AngloGold Ashanti Australia (AngloGold) on behalf of the Tropicana Joint Venture (the Joint Venture) has developed the IMS to effectively manage its activities associated with the Project located approximately 330 km east-north-east of Kalgoorlie. The Joint Venture is a partnership between AngloGold (AngloGold; 70 % stakeholder and manager) and Independence Group NL (30 % stakeholder).

The IMS (including the OEMS) established the framework and standards that must be achieved for all activities associated with the Project. It includes the development and management of policies, management strategies, procedures and reporting requirements.



**Figure 1 Tropicana Gold Project Integrated Management System**

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## 2 PURPOSE OF THE STRATEGY

The purpose of the OEMS is to:

- Provide an overall framework for environmental management for the Project;
- Identify key environmental aspects to be addressed in the strategy and the supporting procedures;
- Clearly articulate the management objective and strategies;
- Identify the monitoring and reporting requirements; and
- Performance indicator and targets.

## 3 SCOPE

This OEMS is applicable to all activities undertaken by the Project team within the Project management area. The Project Management area is defined as:

- The Operational Area;
- The Infrastructure Corridor/s; and
- Water Supply Area.

This document is focused on establishing the operational environmental management strategies for the Project, details on all other aspects of the Project IMS can be located in the Project Integrated Management System Manual.

This OEMS becomes active upon the completion of construction and commissioning at the Project. During construction and commissioning, environmental management onsite will be guided by the Construction Environmental Management System (CEMS).

## 4 BACKGROUND

The Project IMS framework of process and procedures used to ensure that an organisation can identify and manage all their activities to achieve the desired outcome, which in this case is best practise environmental management. The Project IMS has been designed around the requirement of the international environmental management and safety standards ISO14001 and OHSAS18001 respectively. ISO14001 and OHSAS18001 are based on the continuous improvement model of Plan, Do, Check, Act as illustrated in Figure 2 and more specifically in Figure 3.

Utilising a Plan – Do – Check – Act methodology the Project IMS contains the following elements:

- Planning
  - Aspects/impact register
  - Register of legal and other obligation
  - Clearly defined objectives and targets

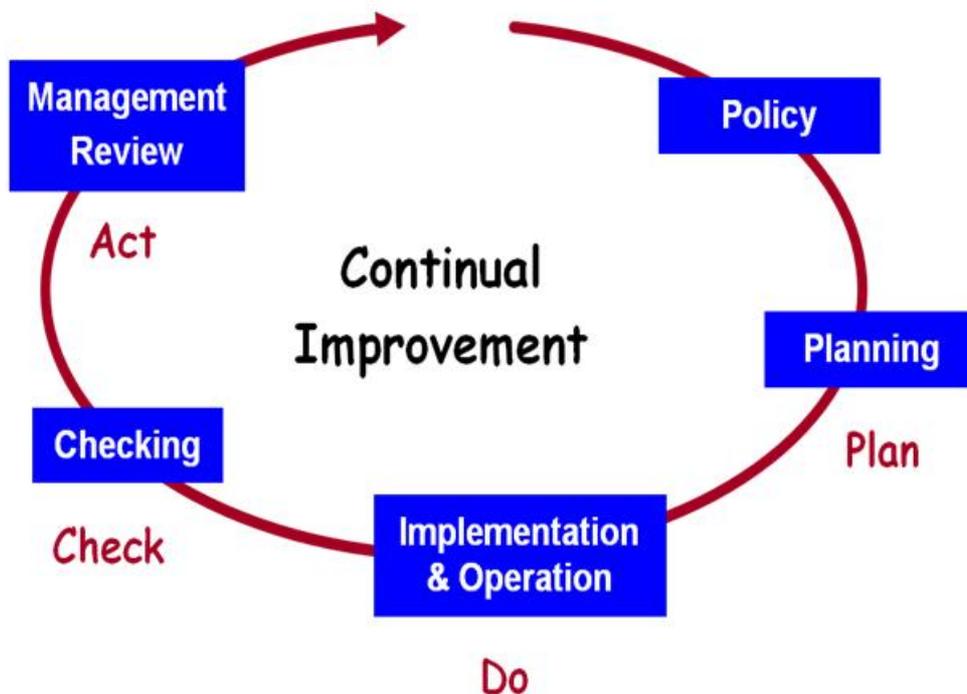
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- Doing
  - Providing the resources required to manage an IMS
  - Establishing roles, responsibilities and authorities
  - Providing training and awareness
  - Providing communication procedures
  - Providing emergency procedures
  - Preparing and controlling key documents
- Checking
  - Monitoring and measuring against objectives and targets
  - Dealing with non-conformities
  - Undertaking audits to an audit schedule
- Review
  - Periodically reviewing of the performance of each part of the IMS recognizing areas for improvement and feeding back into planning.



**Figure 2      Integrated Management System Cycle**

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## 5 RESPONSIBILITIES

Position	Responsibilities
Project Manager	<ul style="list-style-type: none"> <li>• Overall responsibility for developing the IMS</li> <li>• Responsible for ensuring the requirement of the OEMS are incorporated into all aspects of the Project.</li> </ul>
Line Managers	<ul style="list-style-type: none"> <li>• Ensures OEMS requirements are incorporated into applicable procedures or tasks.</li> <li>• Ensures implementation and regular review of relevant environmental management measures.</li> <li>• Liaises with environmental staff as required.</li> </ul>
Senior Environmental Specialist	<ul style="list-style-type: none"> <li>• Assist Line Management to incorporate OEMS requirements into designs, procedures and tasks.</li> <li>• Ensures IMS is prepared, implemented uniformly, revised and maintained.</li> <li>• Assesses the suitability and effectiveness of the IMS.</li> <li>• Ensures that contractors fulfil their contractual obligations relevant to Environment, Health and Safety.</li> <li>• Undertakes internal site Environment, Safety and Health audits.</li> <li>• Liaises with stakeholders.</li> <li>• Ensures implementation and regular review of management measures.</li> <li>• Contributes to the management of progressive rehabilitation and completion planning.</li> </ul>

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**6 ENVIRONMENTAL MANAGEMENT STRATEGIES**

This chapter outlines the potential areas of impact during the operation of the Project and the management strategies to be implemented. The potential areas of impact are activity based; Table 1 identifies the activities relevant to each Project aspect.

**Table 1 Areas of Impact Addressed in the Operational Environmental Management Strategy**

	Project Aspect														
	Access Rd	Water Supply Area / Pipeline	Pit	Tailings Storage Facility / Pipeline	Communication Corridor	Internal Roads	Quarry / Borrow Pits	Aerodrome	WML/ ROM/ Stockpiles	Processing Plant	Ancillary Buildings	Power Supply	Landfill	Water Dams	Village
Clearing			✓	✓		✓	✓								
Transport	✓					✓									
Rehabilitation		✓		✓		✓	✓		✓						
Onsite Invasive Flora and Fauna	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Earthworks, drill and blast			✓												
Internal traffic						✓		✓							
Dust	✓		✓	✓		✓	✓		✓	✓					
Groundwater		✓	✓										✓		
Wastes/ Disposal		✓	✓	✓				✓		✓	✓	✓	✓		
Hydrocarbon/ Controlled Water	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sewerage								✓		✓	✓				✓
Fire	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The following tables outline the management strategies developed to manage environmental issues throughout the operation of the Project. The tables are activity based and document the designed outcome, management strategies, performance indicators, monitoring requirements and reporting obligations.

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<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To maintain the abundance, diversity, broad scale geographic distribution and productivity of flora species, ecological communities and fauna habitat through the avoidance or management of adverse impacts from activities.</li> <li>To maintain the integrity, ecological functions and environmental values of soil and landform.</li> </ul>																														
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	Frequency will be determined based on weather conditions and level of activity	
	<ul style="list-style-type: none"> <li>If hypersaline water is used for dust suppression ensure that it does not impact on soil/growth medium stockpile</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>If hypersaline water is used for dust suppression ensure that controls are in place to prevent impacts on adjacent vegetation</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Instances of excessive dust (outside allowable or safe limits) to be report via the site incident reporting system</li> </ul>	As required. Reporting within 24 hr of incident
	<ul style="list-style-type: none"> <li>Limit cleared area to only what is necessary and rehabilitated surplus areas as soon as practical to reduce dust generation</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Non compliance with dust control strategies will be treated as an environmental incident and internally reported</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Ensure dust control systems installed within the crushing area are regularly maintained</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Dust management and saline water impacts will be included in the site environmental awareness program</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Location of conservation significant species and habitats will to be incorporated into site/project map and communicated to personnel working nearby to ensure protection</li> </ul>	Prior to clearing
	<ul style="list-style-type: none"> <li>To prevent sediment release from cleared area near drainage lines or surface water areas, ground disturbance work will be schedule to occur outside traditional high rainfall event time such as December – May. In area where there is still a possibility that sediment may be released sediment collection systems will be considered.</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Design the Operational Area surface water containment system to manage up to a 1:100ARI 72hr event to prevent the release of potentially contaminated water leaving the cleared area</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Manage dust to prevent environmental and safety issues while ensuring that soil resources and adjacent vegetation is not adversely affected</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Flora and fauna conservation will be included in the environmental awareness program</li> </ul>	Throughout project

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	Performance Indicator	Target
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Area of clearing</li> </ul>	<ul style="list-style-type: none"> <li>No breaches of internal Project clearing approvals and no clearing greater than statutory approvals.</li> </ul>
	<ul style="list-style-type: none"> <li>Ground disturbance and vegetation clearing procedure</li> </ul>	<ul style="list-style-type: none"> <li>100% compliance with the project clearing procedure</li> </ul>
	<ul style="list-style-type: none"> <li>Conservation significant species</li> </ul>	<ul style="list-style-type: none"> <li>No unapproved impact on known conservation significant species</li> </ul>
	<ul style="list-style-type: none"> <li>Available soil/sand and vegetation directly returned or stockpiled for later use</li> </ul>	<ul style="list-style-type: none"> <li>Quantity of soil stockpiled meets the identified rehabilitation requirements</li> </ul>
	<ul style="list-style-type: none"> <li>Discharge of water outside the approved clearing envelope that results in changed vegetation condition or composition</li> </ul>	<ul style="list-style-type: none"> <li>No change in vegetation condition or composition attributable to the Joint Venture activities</li> </ul>
	Actions	Frequency
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Regular inspections of clearing boundaries to ensure clearing is within approved areas as staged infrastructure progresses</li> </ul>	Opportunistically
	<ul style="list-style-type: none"> <li>Monitor vegetation condition and composition adjacent to the Project cleared area to assess changes. Monitoring method will be developed in consultation with relevant statutory authorities.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Soil/growth medium volumes will be monitored to ensure the volume necessary to meet rehabilitation requirements</li> </ul>	Annually
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Non-compliance with ground disturbance and vegetation clearing procedure will be reported internally</li> </ul>	Within 24 hr of observation
	<ul style="list-style-type: none"> <li>Cleared area information will be included in the site annual environmental report.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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**TRANSPORT**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To prevent the introduction and spread of invasive flora and fauna within the Project area.</li> <li>Ensure that the transport, disposal, handling and storage of environmentally hazardous substances are conducted in accordance with relevant legislation, guidelines and standards.</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Implement procedure/s for the management of invasive flora and fauna</li> <li>Undertake hygiene for invasive flora i.e. all machinery, vehicles and equipment will be cleaned before arrival on site or movement between sites to remove all dirt, seeds or vegetative material, and prior to entering an area free of invasive flora to prevent transfer of invasive flora from other regions.</li> <li>All other general equipment, including light vehicles, will be presented to site in a clean state, free from dirt and vegetation material</li> <li>The movement of vehicles and machinery shall be restricted to the limits of the area cleared, unless prior authorisation for off-track driving has been obtained</li> <li>Non compliance with the invasive flora and fauna procedure/s will be treated as a breach and will constitute an environmental incident</li> <li>No non-local plants will be allowed onsite</li> <li>Invasive flora and fauna management measure are to be discussed in environmental awareness sessions</li> <li>Ensure that all dangerous goods and environmentally hazardous substance are only transported by appropriate vehicles Licensed to carry Dangerous Goods.</li> <li>Emergency response plans will be periodically review and update to ensure that all Environmentally Hazardous Substances during transportation are addressed</li> </ul>	<p>Throughout project</p> <p>Prior to arrival of machinery on site.</p> <p>Cleaned prior to arrival of machinery on site.</p> <p>Throughout project.</p> <p>Throughout project.</p> <p>Throughout project.</p> <p>Throughout project.</p> <p>Throughout project</p> <p>Throughout project.</p>

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TRANSPORT		
	Performance Indicator	Target
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Introduction or spread of invasive flora other than those identified in flora surveys</li> </ul>	<ul style="list-style-type: none"> <li>No new invasive flora identified and no spread of invasive flora species into new area within or adjacent to the Joint Venture activities</li> </ul>
	<ul style="list-style-type: none"> <li>Invasive flora and fauna procedure/s</li> </ul>	<ul style="list-style-type: none"> <li>100% compliance with site procedures</li> </ul>
	<ul style="list-style-type: none"> <li>Environmentally Hazardous Substance transport</li> </ul>	<ul style="list-style-type: none"> <li>All substances brought to and from site comply with applicable statutory requirements</li> </ul>
	Actions	Frequency
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Invasive flora hygiene compliance to be monitored and reported</li> </ul>	At least quarterly
	<ul style="list-style-type: none"> <li>Monitor vegetation condition and composition adjacent to the Joint Venture cleared area to assess changes. Monitoring method will be developed in consultation with the relevant Statutory Authority/s</li> </ul>	Annually
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Incidents relating to failure in hygiene processes will be reported</li> </ul>	Within 24 hours of observation

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**REHABILITATION**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To ensure that rehabilitation achieves an acceptable standard compatible with the intended land use and consistent with approvals and other requirements.</li> <li>Progressively rehabilitate disturbed area as they become available.</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Ensure that soil/growth medium is recovered in accordance with the requirements of the ground disturbance and vegetation clearing procedure</li> </ul>	As required
	<ul style="list-style-type: none"> <li>Soil/growth medium will be applied immediately to areas being rehabilitated. Where this is not possible, soil/sand shall be stockpiled away from work areas for later use</li> </ul>	As required
	<ul style="list-style-type: none"> <li>Soil/growth medium will not be stripped or stockpiled in wet conditions</li> </ul>	As required. After rain
	<ul style="list-style-type: none"> <li>Soil/growth medium recovered for rehabilitation will not be exposed to hypersaline water</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Compacted areas will be deep-ripped and re-contoured to restore normal drainage patterns</li> </ul>	As required
	<ul style="list-style-type: none"> <li>Conduct rehabilitation progressively where appropriate</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Where necessary, stockpiled soil/growth medium will be re-vegetated with local native species to reduce wind and water erosion</li> </ul>	As required
	<b>Performance Indicator</b>	<b>Target</b>
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Soil/growth medium stockpiles appropriately constructed, placed and maintained</li> <li>Successful rehabilitation at closure</li> </ul>	<ul style="list-style-type: none"> <li>No stockpile requires re-handling prior to use and negligible loss of soil/growth medium through erosion</li> <li>Rehabilitation meet completion criteria and bonds relinquished</li> </ul>
	<b>Actions</b>	<b>Frequency</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Soil volumes will be monitored to ensure the volume available meet rehabilitation requirements</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Monitor vegetation establishment in rehabilitated areas. Monitoring technique to be developed in consultation with relevant statutory authorities.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Monitor rehabilitation area to assess ripping effectiveness</li> </ul>	As required following rain
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Rehabilitation activities will be reported annually via the site annually environmental report</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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**ONSITE INVASIVE FLORA AND FAUNA CONTROL**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To prevent the introduction and/or spread of invasive flora and fauna within the Project area.</li> <li>To maintain the abundance, diversity, geographic distribution and productivity of native flora and fauna species and ecosystems.</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Implement invasive flora and fauna management procedures/s</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Any new invasive flora infestation within the Project area will be reported and a management strategy developed and implemented</li> </ul>	As required.
	<ul style="list-style-type: none"> <li>Undertake invasive flora hygiene i.e. all machinery, vehicles and plant to be free of soil and vegetative matter upon arrival on site. An inspection of machinery/ vehicle/ plant will be conducted upon arrival on site to confirm</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Minimising soil disturbance during clearing</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Invasive flora infested areas to be clearly demarcated and soil/sand or borrow material collection will be avoided if possible. Where there is not possible potentially infested material will only be used in already infested areas.</li> </ul>	As required.
	<ul style="list-style-type: none"> <li>Soil/sand stockpiles contaminated with invasive flora are to be quarantined from uncontaminated/clean soil/s and stockpiles and identified accordingly. Invasive flora stockpiles shall be clearly signed in the field and identified on a site plan.</li> </ul>	As required.
	<ul style="list-style-type: none"> <li>Implement an invasive fauna recording system</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>All waste materials (particularly putrescible waste) shall be appropriately disposed of to prevent habituation by fauna</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>No employee or contractor will be allowed to bring pets or non-local native plants to the Project</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Maintenance of taps and other water infrastructure to prevent leaks resulting in fauna habituation</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>Landfill management will be designed to will prevent access by native and invasive fauna</li> </ul>	Throughout project
	<ul style="list-style-type: none"> <li>The feeding of invasive fauna will be banned</li> </ul>	Throughout project.

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**ONSITE INVASIVE FLORA AND FAUNA CONTROL**

	<ul style="list-style-type: none"> <li>Surface water will be prevented from ponding so as not to attract fauna.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Invasive flora and fauna eradication programs aimed to reduce impacts or individuals will be developed and implemented (in consultation with appropriate Statutory Authority)</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Support regional studies into invasive fauna populations across the region (GVD) with the aim of improving pest management</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Recreational activities by the Project team out of the approved Project area will not be permitted</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Invasive flora and fauna management measure are to be discussed in environmental awareness sessions</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>If landscaping material is required onsite it will be certified as disease and free of invasive flora</li> </ul>	Throughout project.
	<b>Performance Indicator</b>	<b>Target</b>
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Invasive flora and fauna management procedure/s</li> </ul>	<ul style="list-style-type: none"> <li>Development of/ and full compliance with these procedures</li> </ul>
	<ul style="list-style-type: none"> <li>Introduction or spread of invasive flora species</li> </ul>	<ul style="list-style-type: none"> <li>No new invasive flora species introduced and no new population of invasive flora will be created within the Project area</li> </ul>
	<ul style="list-style-type: none"> <li>Introduction of invasive fauna</li> </ul>	<ul style="list-style-type: none"> <li>No new invasive fauna will be introduced</li> </ul>
	<ul style="list-style-type: none"> <li>Spread of existing invasive fauna</li> </ul>	<ul style="list-style-type: none"> <li>No increase invasive fauna known within the Project</li> </ul>
	<ul style="list-style-type: none"> <li>Vehicle restriction</li> </ul>	<ul style="list-style-type: none"> <li>No unapproved vehicle traffic outside the Project area of disturbance</li> </ul>

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**ONSITE INVASIVE FLORA AND FAUNA CONTROL**

	<b>Actions</b>	<b>Frequency</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Soil volumes will be monitored to ensure the volume available meet rehabilitation requirements</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Monitor vegetation establishment in rehabilitated areas. Monitoring techniques to be developed in consultation with relevant statutory authorities.</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Monitor rehabilitation area to assess ripping effectiveness</li> </ul>	As required following rain
	<ul style="list-style-type: none"> <li>Monitor the distribution, abundance and density/cover of invasive flora populations</li> </ul>	Annually or after rainfall events during construction
	<ul style="list-style-type: none"> <li>Monitor the abundance of invasive fauna populations</li> </ul>	Annually
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Rehabilitation activities will be reported annually via the site annually environmental report</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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***Tropicana Gold Project***  
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**EARTHWORKS, DRILL AND BLAST**

**Management Objective**

- To ensure that fauna are not put under undue stress or death due to entrapment in excavated areas.
- To ensure that activities do not adversely affect Indigenous or European cultural sites and that any site disturbance complies with relevant legislation.
- To maintain the quality and quantity of surface water so that existing and potential environmental values, including ecosystem maintenance, are protected.
- To maintain the integrity, ecological functions and environmental values of drainage systems.
- To ensure that fauna are not put under undue stress or death due to noise, dust or vibration associated with pit works.
- To ensure that fauna and flora are not put under undue stress or death due to dust or sediment emissions.

	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	• Fauna management procedures will be implemented and fauna management will be incorporated in to all applicable activity procedures	Throughout project
	• Excavation and drill holes shall be covered, barricaded or otherwise capped to prevent fauna entrapment, where excavations need to be left open they will be inspected regularly and trapped fauna will be removed (Inspection frequency will be determine by the weather conditions)	As required.
	• Excavation associated with construction will remain open for the minimum time practicable and no more than 7 days. Excavation will be checked for fauna prior to backfill and trapped fauna will be removed	As required.
	• Trapped fauna within open trenches should be cleared and recorded by a suitably trained fauna-clearing person no later than three hours after sunrise. The clearing and recording shall be repeated before sunset.	Daily during construction.
	• Open trench lengths shall not exceed a length capable of being inspected and cleared by the fauna-clearing person.	During construction.
	• Relocated fauna will be relocated a minimum distance of 50 m from the trench	As required.
	• Fauna refuges and/or egress ramps should be placed in the trench at intervals not exceeding 50 metres.	During construction.

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<ul style="list-style-type: none"> <li>Procedures for capturing, relocating, handling, housing and caring for significant fauna will be established</li> </ul>	Throughout project.
<ul style="list-style-type: none"> <li>All deceased fauna will be removed from the trench to prevent further fauna entering (e.g. to scavenge)</li> </ul>	As required.
<ul style="list-style-type: none"> <li>A report on fauna management should be produced including; details of all fauna inspections; the number of fauna cleared from trenches; fauna interactions; fauna mortalities and all actions taken.</li> </ul>	Quarterly.
<ul style="list-style-type: none"> <li>Fauna deaths associated with Project activities will be recorded as an incident and if appropriate the specimen will be logged with the WA Museum</li> </ul>	Immediately - as required.
<ul style="list-style-type: none"> <li>Ensure that all known "No Go" areas are clearly demarcated and protected from damage prior to any earthmoving activities occur nearby</li> </ul>	As required.
<ul style="list-style-type: none"> <li>The discovery of any previously unrecorded heritage sites or artefacts will stop work and will be managed in accordance with the Heritage Management Plan and other applicable site procedures and the <i>Aboriginal Heritage Act 1972</i>.</li> </ul>	Immediate response.
<ul style="list-style-type: none"> <li>Clearing area will be clearly marked with pegs and flagging tape prior to the commencement of clearing activities</li> </ul>	As required.
<ul style="list-style-type: none"> <li>Dust will be managed to prevent environmental and safety issues while ensuring that soil resources and adjacent vegetation is not affected.</li> </ul>	Throughout project.
<ul style="list-style-type: none"> <li>Undertake visual inspections of construction areas to ensure dust control measures are implemented and effective</li> </ul>	Throughout project.
<ul style="list-style-type: none"> <li>Ensure that all survey water diversion drains are periodically inspected and maintained</li> </ul>	Throughout project
<ul style="list-style-type: none"> <li>All activities will be conducted in compliance with the <i>Environmental Protection (Noise) Regulation 1997</i> and <i>Mines Safety Inspections Regulations 1995</i></li> </ul>	Throughout project.
<ul style="list-style-type: none"> <li>Ensure all equipment is appropriately fitted, maintained or substituted with noise reduction devices if necessary, to comply with the Project noise levels</li> </ul>	Prior to arrival onsite.
<ul style="list-style-type: none"> <li>Hydrocarbon management will be incorporated in to all applicable activity procedures where hydrocarbon spill could occur. If required a site wide hydrocarbon management procedure will be developed</li> </ul>	Throughout project.

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INTEGRATED MANAGEMENT SYSTEM

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**EARTHWORKS, DRILL AND BLAST**

	Performance Indicators	Target
<b>Performance Indicators</b>	• Fauna mortalities	• No mortalities of conservation significant species
	• Cultural heritage site	• No heritage sites negatively affected by the Joint Venture activities
	• Area of clearing	• Zero unauthorised clearing and clearing no greater than the approved area.
	• Surface water management	• Surface water drainages and sediment collection point are regularly maintained
	• Dust	• No impact on vegetation adjacent to the Joint Venture activities directly attributable to dust
	• Contaminated Sites	• Any sites that area considered contained under the <i>Contaminated Sites Act 2003</i> are remediated to an acceptable level
	• Vibration	• No exceedance of allowable limit
	Actions	Frequency
<b>Monitoring</b>	• Monitor track establishment	Quarterly.
	• Regular inspections to ensure access roads/ paths are properly maintained and clearly marked	Monthly.
	• Monitor vegetation condition adjacent to the road to assess effectiveness of drain and dust management	Six-monthly
<b>Reporting</b>	• Major erosion events associated with road will be reported immediately	Within 24 hr of observation.
	• Unapproved access tracks shall be reported and investigated	Within 24 hr of observation.

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**INTERNAL TRAFFIC**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To maintain normal environmental function in the presence of vehicle traffic and associated infrastructure.</li> </ul>		
	<b>Actions</b>	<b>Timing</b>	
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Implement the traffic management plan and periodically review</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>All vehicles to stay on designated roads and tracks (unless otherwise approved) and to drive to defined speed limits</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>Restrict road speeds in conservation significant species habitats and sign posted</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>Restrict private vehicle access to site and prevent petrol vehicle use onsite</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>No off-road recreational activities by employee or contractors whilst on site</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>Prohibit off-road driving and movement of personnel outside of the area of disturbance, unless approved</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>Road kills of native fauna shall be removed from the road and reported via the site incident reporting system</li> </ul>	As required. Reporting within 24 hr of incident.	
	<ul style="list-style-type: none"> <li>Maintain road drains to prevent impacts from road run-off on adjacent vegetation</li> </ul>	As required.	
	<ul style="list-style-type: none"> <li>Manage dust to prevent environmental and safety issues while ensuring that soil resources and adjacent vegetation is not affected</li> </ul>	Throughout project.	
	<ul style="list-style-type: none"> <li>Off road / track driving restriction will be included in environmental awareness program</li> </ul>	Throughout project.	
		<ul style="list-style-type: none"> <li>Driver training to include information on conservation significant species issue and preferred habitats</li> </ul>	As required.
	<b>Performance Indicators</b>	<b>Target</b>	
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Vehicle restriction</li> </ul>	<ul style="list-style-type: none"> <li>No unauthorised off-track use</li> <li>No petrol vehicle onsite</li> </ul>	
	<ul style="list-style-type: none"> <li>Threatened fauna protection</li> </ul>	<ul style="list-style-type: none"> <li>No threatened fauna species injured / killed by vehicles</li> </ul>	
	<ul style="list-style-type: none"> <li>Traffic management</li> </ul>	<ul style="list-style-type: none"> <li>Traffic management plan developed and implement</li> </ul>	
	<ul style="list-style-type: none"> <li>Dust management</li> </ul>	<ul style="list-style-type: none"> <li>No impact on vegetation adjacent to the Joint Venture activities directly attributable to dust</li> </ul>	
	<ul style="list-style-type: none"> <li>Sediment control</li> </ul>	<ul style="list-style-type: none"> <li>No sediment release in to vegetation adjacent to roads and tracks</li> </ul>	

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**INTERNAL TRAFFIC**

	<b>Actions</b>	<b>Timing</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• Monitor track establishment</li> </ul>	Quarterly.
	<ul style="list-style-type: none"> <li>• Regular inspections to ensure access roads/paths are properly maintained and clearly marked</li> </ul>	Monthly.
	<ul style="list-style-type: none"> <li>• Monitor vegetation condition adjacent to road to assess effectiveness of drain and dust management</li> </ul>	Six-monthly.
<b>Reporting</b>	<ul style="list-style-type: none"> <li>• Major erosion events associated with road will be reported immediately</li> </ul>	Within 24 hr of observation.
	<ul style="list-style-type: none"> <li>• Unapproved access tracks shall be reported and investigated</li> </ul>	Within 24 hr of observation.

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**DUST MANAGEMENT**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>Reduce dust generation to prevent impacts on native flora and fauna and the general public and project staff</li> <li>Reduce dust generation to prevent adverse impacts outside the Project footprint</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Implement the requirement of the dust management procedure and ensure that all applicable operational procedures incorporate dust management strategies</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Dust control strategies will be used to manage dust generation in all areas. Frequency will be determined based on weather conditions and level of activity.</li> </ul>	As required.
	<ul style="list-style-type: none"> <li>If hypersaline water is used for dust suppression ensure that it does not impact on soil/growth medium stockpile</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>If hypersaline water is used for dust suppression ensure that controls are in place to prevent impacts on adjacent vegetation</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Instances of excessive dust (outside allowable or safe limits) to be report via the site incident reporting system</li> </ul>	As required. Reporting within 24 hr of incident.
	<ul style="list-style-type: none"> <li>Limit cleared area to only what is necessary and rehabilitated surplus areas as soon as practical to reduce dust generation</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Non compliance with dust control strategies will be treated as an environmental incident and internally reported</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure dust control systems installed within the crushing area are regularly maintained</li> </ul>	Throughout project.
	<b>Performance Indicators</b>	<b>Target</b>
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Dust management</li> </ul>	<ul style="list-style-type: none"> <li>No adverse impacts of dust (on vegetation, fauna or cultural heritage) outside the Disturbance Zone</li> <li>No work stoppages as a result of excessive dust</li> </ul>
	<ul style="list-style-type: none"> <li>Rehabilitation resource</li> </ul>	<ul style="list-style-type: none"> <li>No resource adversely affected by dust suppression methods</li> </ul>

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**DUST MANAGEMENT**

	<b>Actions</b>	<b>Timing</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Installation of dust monitors around the site.</li> </ul>	Construction.
	<ul style="list-style-type: none"> <li>Monitor dust emissions at environmentally sensitive areas (Dunes west of plant).</li> </ul>	Quarterly.
	<ul style="list-style-type: none"> <li>Monitor vegetation conditions adjacent to road to assess effectiveness of drain and dust management</li> </ul>	Six-monthly
	<ul style="list-style-type: none"> <li>Monitor ambient dust level at the village</li> </ul>	Quarterly.
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Any non-conformance with management strategies and any adverse impacts of dust will be reported. Reportable incidents in relation to dust management include:                             <ul style="list-style-type: none"> <li>Complaint from the public in relation to dust; and</li> <li>Adverse impact from dust on vegetation, fauna or cultural heritage outside of the Disturbance Zone.</li> </ul> </li> </ul>	Within 24 hr of observation.
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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**INTEGRATED MANAGEMENT SYSTEM**

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**GROUNDWATER, WATER STORAGE AND SURFACE WATER MANAGEMENT**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To maintain the quality and quantity of groundwater so that environmental values, including ecosystem maintenance, are protected.</li> <li>To ensure that emissions to groundwater do not adversely affect the environmental values.</li> <li>To avoid groundwater contamination.</li> <li>To maintain surface water flow and quality so that environmental values are protected</li> </ul>																														
	<table border="1" style="width:100%"> <thead> <tr> <th data-bbox="347 542 1780 590"><b>Actions</b></th> <th data-bbox="1780 542 2128 590"><b>Timing</b></th> </tr> </thead> <tbody> <tr> <td data-bbox="347 590 1780 638"> <ul style="list-style-type: none"> <li>Incorporate surface water management issue into applicable site operating procedures</li> </ul> </td> <td data-bbox="1780 590 2128 638">Throughout project.</td> </tr> <tr> <td data-bbox="347 638 1780 686"> <ul style="list-style-type: none"> <li>Implement water recycling practices</li> </ul> </td> <td data-bbox="1780 638 2128 686">Throughout project.</td> </tr> <tr> <td data-bbox="347 686 1780 734"> <ul style="list-style-type: none"> <li>Comply with conditions of the groundwater extraction licenses for each bore (or bore array)</li> </ul> </td> <td data-bbox="1780 686 2128 734">Throughout project.</td> </tr> <tr> <td data-bbox="347 734 1780 813"> <ul style="list-style-type: none"> <li>Audit flow meters, leakage detection systems, one-way valves and automatic cut-off systems on all production bores regular to ensure in good working order.</li> </ul> </td> <td data-bbox="1780 734 2128 813">Throughout project.</td> </tr> <tr> <td data-bbox="347 813 1780 893"> <ul style="list-style-type: none"> <li>Ensure that any change or expansion to the Operational Area surface water containment system are designed to manage up to a 1:100ARI 72 hr event to prevent the release of potentially contaminated water leaving the cleared area</li> </ul> </td> <td data-bbox="1780 813 2128 893">Throughout project.</td> </tr> <tr> <td data-bbox="347 893 1780 941"> <ul style="list-style-type: none"> <li>Protect water storage facilities from pollution (i.e. Turkey's nests) to minimise the need to extract unnecessary water.</li> </ul> </td> <td data-bbox="1780 893 2128 941">Throughout project.</td> </tr> <tr> <td data-bbox="347 941 1780 1021"> <ul style="list-style-type: none"> <li>Water storage facilities will be appropriately lined/ bunded to prevent leakage and impact on the adjacent environment (such as substrate/surface water/groundwater).</li> </ul> </td> <td data-bbox="1780 941 2128 1021">Throughout project.</td> </tr> <tr> <td data-bbox="347 1021 1780 1069"> <ul style="list-style-type: none"> <li>Waste water from the site Reverse Osmosis plant will be used in the Processing Plant</li> </ul> </td> <td data-bbox="1780 1021 2128 1069">Throughout project.</td> </tr> <tr> <td data-bbox="347 1069 1780 1117"> <ul style="list-style-type: none"> <li>Restrict animal access to water storage facilities (clean and recycled water)</li> </ul> </td> <td data-bbox="1780 1069 2128 1117">Throughout project.</td> </tr> <tr> <td data-bbox="347 1117 1780 1165"> <ul style="list-style-type: none"> <li>Include water storage facilities in weekly inspections for evidence of leakage, algal blooms and holes in fencing</li> </ul> </td> <td data-bbox="1780 1117 2128 1165">Throughout project.</td> </tr> <tr> <td data-bbox="347 1165 1780 1212"> <ul style="list-style-type: none"> <li>Ensure that all containment bunds are maintained to prevent the release of chemical / hydrocarbon spills</li> </ul> </td> <td data-bbox="1780 1165 2128 1212">Throughout project.</td> </tr> <tr> <td data-bbox="347 1212 1780 1260"> <ul style="list-style-type: none"> <li>Maintain all pipeline containment systems</li> </ul> </td> <td data-bbox="1780 1212 2128 1260">Throughout project.</td> </tr> <tr> <td data-bbox="347 1260 1780 1308"> <ul style="list-style-type: none"> <li>Sustainable water use and water contamination will be included in the sites environmental awareness program</li> </ul> </td> <td data-bbox="1780 1260 2128 1308">Throughout project.</td> </tr> <tr> <td data-bbox="347 1308 1780 1380"> <ul style="list-style-type: none"> <li>Inspect and maintain all clean and dirty water diversion system</li> </ul> </td> <td data-bbox="1780 1308 2128 1380">Throughout project.</td> </tr> </tbody> </table>	<b>Actions</b>	<b>Timing</b>	<ul 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INTEGRATED MANAGEMENT SYSTEM

***Tropicana Gold Project***  
***Operational Environmental Management Strategy***

**GROUNDWATER, WATER STORAGE AND SURFACE WATER MANAGEMENT**

	<b>Performance Indicators</b>	<b>Target</b>
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Groundwater quality</li> </ul>	<ul style="list-style-type: none"> <li>No change in groundwater quality outside historic ranges</li> </ul>
	<ul style="list-style-type: none"> <li>Sustainable abstraction</li> </ul>	<ul style="list-style-type: none"> <li>Abstraction rates at or below predicted sustainable abstraction rates and those allowed by the abstraction licence</li> </ul>
	<ul style="list-style-type: none"> <li>Fauna protection</li> </ul>	<ul style="list-style-type: none"> <li>No threatened fauna deaths in water storage facilities</li> </ul>
	<ul style="list-style-type: none"> <li>Surface water discharge</li> </ul>	<ul style="list-style-type: none"> <li>No discharge to the environment under normal operating conditions</li> </ul>
	<ul style="list-style-type: none"> <li>Contaminated Sites</li> </ul>	<ul style="list-style-type: none"> <li>No release of environmentally hazardous substances outside containment facilities</li> </ul>
	<ul style="list-style-type: none"> <li>Compliance</li> </ul>	<ul style="list-style-type: none"> <li>All activities undertaken in accordance with license conditions (e.g. DEC and DoW)</li> </ul>
	<b>Actions</b>	<b>Timing</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Flow meter reading</li> </ul>	Monthly
	<ul style="list-style-type: none"> <li>Inspections and monitoring of pipeline containment systems</li> </ul>	Monthly
	<ul style="list-style-type: none"> <li>Groundwater quality adjacent to the pit, processing area, tailings storage facility and production bores</li> </ul>	Monthly
	<ul style="list-style-type: none"> <li>Monitor vegetation condition within and adjacent to the water supply area/s and dewatering area</li> </ul>	Six-monthly
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Flow meter readings and water quality</li> </ul>	Annually
	<ul style="list-style-type: none"> <li>Non-compliance with requirements will be reported via the site incident reporting system</li> </ul>	Within 24 hr of observation.

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**Tropicana Gold Project**  
**Operational Environmental Management Strategy**

**WASTE GENERATION AND DISPOSAL**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To maintain the integrity, ecological function and values of the environment and to ensure that emissions do not adversely affect health, welfare and amenity of people and land use.</li> <li>Manage wastes in accordance with the Waste Hierarchy.</li> <li>All reasonable and practical measures to be taken to minimise generation of wastes and discharge into the environment.</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Ensure the requirements of the waste management procedure are followed and incorporated into all applicable operational activities</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Implement the waste hierarchy: avoidance, reuse, recycling, recovery of energy, treatment, containment and disposal</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Manage the project landfill to ensure requirements with rural landfill regulations and site licensing requirements</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>The landfill management will include the following controls:                             <ul style="list-style-type: none"> <li>Restrict onsite disposal to putrescible and non-recoverable waste</li> <li>Waste material will be regularly covered to prevent animal habituation and a windblown rubbish problem</li> <li>All waste oil or contaminated material will be disposed of</li> <li>Surface water will be diverted away from the landfill facility</li> </ul> </li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure waste skips and bins are managed to prevent windblown rubbish (lids, suitable located and emptied regularly)</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Rubbish will be covered/secured when being transported</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Waste stations will be established around the work areas, including all bin types required for appropriate segregation of all waste types generated in the area. All bins shall be clearly labelled.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Waste will be stored in a neat and orderly manner and clearly signed as waste materials</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Properly constructed cigarette butt containers to be provided around offices, crib rooms and workshops etc to prevent litter</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Industrial waste to be reused or recycled if practicable</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Hydrocarbon contaminated soil will be collected and disposed of or remediated at an approved site</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Controlled Wastes will be removed from site by an appropriately licensed operator to an approved waste disposal location</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Waste management will be included in the site environmental awareness program</li> </ul>	Throughout project.

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**Tropicana Gold Project**  
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**WASTE GENERATION AND DISPOSAL**

	Performance Indicators	Target
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Recyclable material</li> </ul>	<ul style="list-style-type: none"> <li>No economically recyclable material disposed of onsite</li> </ul>
	<ul style="list-style-type: none"> <li>Contaminated material</li> </ul>	<ul style="list-style-type: none"> <li>No contaminated material will be disposed off in the onsite landfill</li> </ul>
	<ul style="list-style-type: none"> <li>Controlled Waste</li> </ul>	<ul style="list-style-type: none"> <li>All Controlled Waste leaving site will be transported via a license operator in accordance with the <i>Environmental Protection (Controlled Waste) Regulations</i></li> </ul>
	<ul style="list-style-type: none"> <li>Waste management</li> </ul>	<ul style="list-style-type: none"> <li>All waste will be disposed off in accordance with the site waste management procedure and waste disposal hierarchy</li> </ul>
	<ul style="list-style-type: none"> <li>Spill</li> </ul>	<ul style="list-style-type: none"> <li>No spills outside the containment facilities</li> </ul>
	Actions	Timing
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Landfill and recycling facilities will be audit and inspected</li> </ul>	Weekly and monthly respectively
	<ul style="list-style-type: none"> <li>Volumes of recyclable material leaving site</li> </ul>	Monthly or as required
	<ul style="list-style-type: none"> <li>Volume of Controlled Waste leaving site</li> </ul>	As required
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Non-conformances with procedures / Environmental Incidents</li> </ul>	Quarterly and annually
	<ul style="list-style-type: none"> <li>Waste disposal statistics</li> </ul>	Quarterly and annually
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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**Tropicana Gold Project**  
**Operational Environmental Management Strategy**

**ENVIRONMENTALLY HAZARDOUS SUBSTANCES**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>• Ensure all environmental hazardous substances are stored in a manner that meets the requirements of legislation and guidelines, reflects industry best practice, and minimises the risk to the environment.</li> <li>• Ensure environmental hazardous substances are transported on, and to, site in a manner that reduces the risk of environmental pollution arising from an accident or incident and in accordance with the <i>Dangerous Goods (Road and Rail) Regulations 1999</i>.</li> <li>• Ensure that the use and disposal of environmental hazardous substances does not cause pollution to the environment.</li> </ul>																				
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**ENVIRONMENTALLY HAZARDOUS SUBSTANCES**

	<ul style="list-style-type: none"> <li>As a minimum, ensure that bulk storage facilities meet specifications of Australian Standard 1940</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Maintain bunding protection systems to reduce the likelihood of damage by vehicle / equipment</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure that re-fuelling bays (including double skinned tanks) contain all spills through the use of concrete aprons, suitable lining or dedicated drainage</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure that environmentally hazardous substance storage vessels (e.g. drums &amp; chemical cabinets) are sealed and any spillage contained when being transported around site.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Contain, and appropriately treat, contaminated or potentially contaminated stormwater that collects in storage bunds, prior to release to the environment. All treated water must meet legal requirements and discharge limits.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure that all drains, valves or discharge point associated with containment facilities are secured at all time and only appropriately trained or authorized personnel are able to open and release the contents area.</li> </ul>	Throughout project.
	<p><b>Chemical and Hydrocarbon Use and Disposal</b></p> <ul style="list-style-type: none"> <li>Follow all relevant environmental controls and disposal conditions identified in the material safety data sheet or MSDS.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Dispose of hydrocarbon contaminated material from any site at a licensed facility. Where the material has been assessed as Controlled Waste, it shall be transported and disposed of by a licensed operator.</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure that all field servicing vehicle use double skinned tank or equivalent containment system</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Store all equipment(e.g. chainsaws, welders, small generators) that hold &lt;10 L of hydrocarbon or chemical in a containment area when not being used</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Controlled Waste shall be separated from general waste and stored in an appropriately designated area and transported from site for disposal via a licensed contractor</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>The storage, transport and disposal of environmentally hazardous substances and Controlled Waste will be included in the site environmental awareness program</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>A tracking system will be established to manage waste disposal receipts as verification of type and amount of Controlled Waste, waste oil and oily materials removed from site</li> </ul>	Throughout project.

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INTEGRATED MANAGEMENT SYSTEM

***Tropicana Gold Project***  
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**ENVIRONMENTALLY HAZARDOUS SUBSTANCES**

	Performance Indicators	Target
<b>Performance Indicators</b>	<ul style="list-style-type: none"> <li>Incident recording</li> </ul>	<ul style="list-style-type: none"> <li>All spills, accidents and incidents are reported</li> </ul>
	<ul style="list-style-type: none"> <li>Dangerous Goods and Controlled Waste transport</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with the Dangerous Goods Act and <i>Environmental Protection (Controlled Waste) Regulations 2004</i></li> </ul>
	<ul style="list-style-type: none"> <li>Bunding</li> </ul>	<ul style="list-style-type: none"> <li>All substances banded and no significant releases of environmentally hazardous substances in accordance with Australian Standard</li> </ul>
	<ul style="list-style-type: none"> <li>Emergency Response</li> </ul>	<ul style="list-style-type: none"> <li>Emergency response plans incorporate requirements for the management of larger spills on or off site.</li> </ul>
	<ul style="list-style-type: none"> <li>Storage</li> </ul>	<ul style="list-style-type: none"> <li>All environmentally hazardous substances are stored onsite to prevent impacts on the environment</li> </ul>
	Actions	Timing
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Monitoring of spills through the site incident tracking system and follow-up inspections</li> </ul>	Monthly
	<ul style="list-style-type: none"> <li>Confirmation that transport contractors meet licensing requirements and have appropriate spill equipment</li> </ul>	Prior to arriving onsite
	<ul style="list-style-type: none"> <li>Dangerous goods storage area inspections are to be carried out to ensure structural integrity, safety and compliance with regulations and licences</li> </ul>	Annually
<b>Reporting</b>	<ul style="list-style-type: none"> <li>Report any area discovered as a contaminated site via the site incident reporting system</li> </ul>	Within 24 hr of observation.
	<ul style="list-style-type: none"> <li>Report all releases of environmentally hazardous substance via the site incident reporting system</li> </ul>	Immediately.
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required.

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FIRE		
<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To prevent fire occurring as a result of operational activities.</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>An emergency response system will be established and firefighting equipment will be available at all times</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>No unauthorised open fires permitted onsite</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Fire breaks shall be established around the site in agreement with the Department of Environment and Conservation and FESA</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>All flammable materials will be stored as specified by the manufacturer of the product and in accordance with the <i>Dangerous Goods Safety Act 2004</i></li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>All fuels and chemicals to be stored in bunded areas, with a surrounding buffer zone, that has appropriate drainage systems in accordance with Australian Standards and the DG Licence</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Ensure that dry vegetation material does not build up on equipment involved in vegetation clearing increasing the risk of fires</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>All vehicles to remain on dedicated routes, unless an off-track driving authorisation has been obtained</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Policies will be established onsite to ensure the effective management of cigarette butts and litter to reduce the risk of fire</li> </ul>	Throughout project.
	<b>Performance Indicators</b>	<b>Target</b>
<ul style="list-style-type: none"> <li>Fire management</li> </ul>	<ul style="list-style-type: none"> <li>No fires as a direct result of the Project activities</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Test emergency response procedure to monitor the site preparedness</li> </ul>	Quarterly
<b>Reporting</b>	<ul style="list-style-type: none"> <li>All fires occurring within and around the footprint are to be report via the site incident reporting system</li> </ul>	Immediately
	<ul style="list-style-type: none"> <li>All fires will be investigated to prevent re-occurrence</li> </ul>	As required

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***Tropicana Gold Project***  
***Operational Environmental Management Strategy***

**SEWAGE**

<b>Management Objective</b>	<ul style="list-style-type: none"> <li>To ensure that sewage waste are managed to prevent impact on water sources</li> </ul>	
	<b>Actions</b>	<b>Timing</b>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>Ensure sewage management facilities, septic tanks and/ or leach drains are inspected regularly and meet the relevant authorities requirements (Local Council, Department of Health, Department of Environment and Conservation)</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Facilities will be managed in a manner that complies with legislative conditions, prevents pollution and preserves the amenity of the area</li> </ul>	Throughout project.
	<ul style="list-style-type: none"> <li>Evaluate reuse options</li> </ul>	Throughout project.
	<b>Performance Indicators</b>	<b>Target</b>
	<ul style="list-style-type: none"> <li>Facility Management</li> </ul>	<ul style="list-style-type: none"> <li>No overtopping of facilities</li> <li>No impact on local water sources</li> </ul>
	<b>Actions</b>	<b>Timing</b>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Inspect facilities to ensure load capacity and evidence of releases</li> </ul>	Monthly
<b>Reporting</b>	<ul style="list-style-type: none"> <li>All wastewater spills or leak to be reported via the site incident reporting system regardless of volume</li> </ul>	Within 24 hr of observation.
	<ul style="list-style-type: none"> <li>Reporting to government agencies or relevant authorities as required</li> </ul>	As required

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