



**PROJECT SEA DRAGON
STAGE 1 LEGUME GROW-OUT FACILITY
DRAFT ENVIRONMENTAL IMPACT STATEMENT**

**VOLUME 5 - APPENDICES
APPENDIX 5 - COMMITMENTS**

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1 COMMITMENTS

This Appendix includes a summary of the overall commitments, Project Sea Dragon Pty Ltd (the proponent) has made throughout the Draft Environmental Impact Statement (EIS) for the Stage 1 Legume Grow-out Facility (the Project). This commitments are in order of the volumes and chapters of the EIS.

1.1 GEOLOGY, GEOMORPHOLOGY AND SOILS

The proponent commits to the following actions to mitigate the risks to geology, geomorphology and soils during the construction, operation and decommissioning phases of the Project:

- Developing site specific Erosion and Sediment Control Plans prior to the commencement of construction.
- Supervising construction works and additional sampling, testing and analysis, where required, to confirm site conditions.
- Testing for potential acid sulfate soils (PASS) prior to any excavations below 2 m depth. Testing will also be undertaken where dark estuarine sands/clays encountered, regardless of depth.
- Preparing and implementing an Acid Sulfate Soil Management Procedure in the event that acid sulfate soils are encountered.
- Developing a detailed site Decommissioning and Rehabilitation Plan following Project approval.
- Trialling rehabilitation methods for pond and channel infrastructure to provide a proven rehabilitation method that is cost effective and practical, and achieves the rehabilitation aims.
- Ongoing liaison with nearby mineral projects to ensure cooperative co-existence.

1.2 MARINE AND ESTUARINE WATER

To mitigate the potential impacts on marine and estuarine waters during the construction and operation of the Project, the proponent commits to:

- Developing site specific Erosion and Sediment Control Plans prior to the commencement of construction.
- Monitoring bank erosion and scour rates around Project infrastructure on the coastal plain.
- Maintaining the rock blanket at the base of the discharge weir on Alligator Creek.
- Discharging on the ebb tide to minimise potential impacts on water quality in Alligator Creek.
- Designing and implementing a Water Quality Monitoring Program.

1.3 FRESHWATER

To manage the potential impacts on freshwater during the construction and operation of the Project, the proponent commits to:

- Avoiding construction in freshwater water bodies and major drainage lines to the greatest extent practical.
- Developing site specific Erosion and Sediment Control Plans prior to the commencement of construction.
- Designing suitable culvert crossings to maintain flow paths and avoid changes to flood patterns on the site.

- Designing and implementing a Water Quality Monitoring Program.

1.4 GROUNDWATER

The proponent commits to the following actions to mitigate potential impacts to groundwater as a result of the Project:

- Minimising excavation depths and managing flood impacts to avoid lowering groundwater and changing flow into and out of important recharge and discharge zones.
- Drawing potable water from the freshwater channel and Forsyth Creek Dam instead of existing bores to avoid impacts to pastoral operations bores and borefield areas.
- Preparing and implementing a monitoring program to provide early warning of potential groundwater issues. The monitoring program will include procedures for rapid response to identified leaks and other issues identified.

1.5 TERRESTRIAL FLORA

To manage and mitigate the potential impacts on terrestrial flora and vegetation during the construction and operation of the Project, the proponent commits to:

- Undertaking pre-construction surveys for the data deficient species *Ptilotus capitatus*, *Spermacoce gibba* and *Eleocharis acutangula*.
- Obtaining suitable vegetation clearing approvals prior to clearing being conducted.
- Preparing and implementing a site specific Vegetation Management Plan, including Vegetation Clearing Plans.
- Undertaking pre-construction weed surveys and develop a Weed Management Plan based on these surveys. The Weed Management Plan will incorporate weed washdown procedures and weed hygiene to minimise weed introduction and spread.
- Preparing a Bushfire Management Plan which takes into account recommended fire regimes for the near threatened species, *Turraea pubescens* and *Livistona lorophylla*.

1.6 TERRESTRIAL FAUNA AND AVIFAUNA

To manage and mitigate the potential impacts on terrestrial and avifauna during the construction and operation of the Project, the proponent commits to:

- Preparing and implementing a Fauna Management Plan for construction and operations.
- Preparing and implementing a site specific Vegetation Management Plan, including Vegetation Clearing Plans.
- Undertaking pre-clearance surveys in areas identified as potential habitat for threatened species, prior to commencement of clearing.
- Undertaking experimental trials to ascertain the effectiveness and potential impacts to avifauna as a result of bird predation management strategies

1.7 ESTUARINE AND MARINE ECOLOGY

To manage and mitigate the potential impacts on estuarine and marine ecology during the construction and operation of the Project, the proponent commits to:

- Developing site specific Erosion and Sediment Control Plans prior to the commencement of construction.
- Designing the intake structure to minimise the risk of entrainment and/or impingement of aquatic fauna. This includes:
 - positioning the pump in the deep waters of the channel, 9 m above the creek bed
 - designing the intake pump to have a target velocity of no more than 0.4 m/sec within 1 m radius of the mouth of the intake structure.
 - installing 100 mm aperture mesh grille over mouth of the intake structure
 - only intaking water from mid and high tides daily
- Discharging on the ebb tide to minimise potential impacts on water quality and therefore aquatic ecology in Alligator Creek.
- Installing mesh screens of suitable size over all pond outlets and inside monks during harvesting to prevent prawns from escaping to the external environment.
- Designing and implementing a Water Quality Monitoring Program.

1.8 FRESHWATER ECOLOGY

To manage the potential impacts on freshwater ecology during the construction and operation of the Project, the proponent commits to:

- Avoiding construction in freshwater water bodies and major drainage lines to the greatest extent practical.
- Developing site specific Erosion and Sediment Control Plans prior to the commencement of construction.
- Designing suitable culvert crossings to maintain flow paths and avoid changes to flood patterns on the site.

1.9 WASTE MANAGEMENT

The proponent commits to implementing the waste controls and mitigation measures:

- Adopting a waste hierarchy, prioritising avoidance, reduction, reuse, recycling and recovery, in order, over disposal, with an overall aim of waste minimisation.
- Providing for solid and liquid waste management infrastructure and procedures.
- Developing spill management and emergency preparedness and response procedures.
- Maintaining a hazardous materials register.
- Storing and disposing of chemicals according to manufacturer's instructions and state and commonwealth regulatory requirements

1.10 AIR QUALITY

While there are no anticipated impacts on any potentially sensitive receptors, the proponent commits to implementation of standard dust management and mitigation measures.

1.11 CLIMATE CHANGE

In order to reduce the Project's contribution to greenhouse gas emissions and climate change, the proponent commits to:

- Complying with the requirements of the *National Greenhouse and Energy Reporting Act 2007*, including all record keeping and reporting obligations.
- Implementing greenhouse gas abatement measures, wherever practicable, throughout the Project design

In order to manage the potential impacts of climate change on the Project, the proponent commits to:

- Designing and operating the facility to minimise the risks to the Project from climate change impacts including:
 - design of seawater intake structure to allow the intake pipes to be shifted as the bank erodes.
 - setback of weir structure 30 m back from Alligator Creek to allow for the existing bank erosion rates at that location
 - design of adequate scour protection around piles, discharge and intake structures as well as bunds around the farms and intake channels.

1.12 NOISE AND VIBRATION

While there are no anticipated impacts on any potentially sensitive receptors, the proponent commits to minimise noise by selecting equipment to minimise noise emissions. Machines found to produce excessive noise compared to industry best practice will be removed from the site or stood down until repairs or modifications can be made.

1.13 SOCIO-ECONOMIC

In relation to socio-economic, the proponent commits to:

- Establishing and implementing a Local Employment Policy and targets.
- Integrating local business and employment targets into NT and Australian Government Priority Project agreements.
- Establishing a Project Sea Dragon Local Community Reference Group for annual review of Project Sea Dragon social impacts and progress against targets and management actions.
- Developing a Community Grievance Policy.
- Establishing and implementing a private property Recreational Fishery Access Policy, balancing public access with cultural, heritage, environmental, biosecurity, safety and other farm management concerns.
- Opening and using an Industry Capability Network.
- Providing local industry briefings for potential suppliers and contractors.

- Developing local expenditure targets and work with suppliers and service providers to ensure local products and services can be provided cost-effectively.

1.14 HISTORIC AND CULTURAL HERITAGE

In relation to historic and cultural heritage, the proponent commits to:

- Developing an Indigenous Land Use Agreement (ILUA) with Traditional Owners.
- Obtaining Sacred Site Clearance Certificates from the Aboriginal Areas Protection Authority (AAPA).
- Developing and implementing a Heritage Management Plan and Cultural Heritage Management policy.
- Establish Traditional Owner Land Access Protocols as per ILUA.
- Establish Indigenous Employment, Training and Business Policy and Programs.
- Engaging Indigenous rangers to monitor and manage impacts of increased public or personnel on Legune Station.

1.15 HUMAN HEALTH AND SAFETY

The proponent commits to the preparation and implementation of a Health and Safety Plan to mitigate the risk of the Project on human health and safety. The Health and Safety Plan will include measures to manage and mitigate potential risks to personnel. It will also include detailed emergency plans and response procedures in the event of an emergency or accident. Responsibilities and liabilities in the event of an emergency or accident will be identified in the Health and Safety Plan.

1.16 TRAFFIC AND TRANSPORT

The following commitments are made in relation to traffic for the Project:

- Undertake consultation with the Shire of Wyndham - East Kimberley in regards to any required road or intersection upgrades on local roads (i.e. Stock Route Road, Research Station Road and Ivanhoe Road) on the route to the processing plant in Kununurra.
- Establishing, implementing and monitoring a Driver Safety and Fatigue Management Policy for employees and contractors.

1.17 AMENITY

To minimise potential impacts to the amenity of the area, the proponent commits to the installation of a gate at the entrance to Legune Access Road to prevent any unauthorised access.

1.18 ENVIRONMENTAL MANAGEMENT PLAN

A draft environmental management plan (EMP) has been prepared for the construction and operation of the Project. On approval of the Project, the Draft EMP will be updated to reflect approval requirements and to be a standalone document, and implemented on the Project site.