



Blina Oilfield Care and Maintenance Environment Plan: Summary Document

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1. INTRODUCTION

Buru Energy Limited (Company) is an Australian ASX listed company engaged in oil and gas exploration in the Kimberley region of Western Australia in an area known in geological terms as the Canning Superbasin. The Company is committed to minimising the environmental impact of its operations and plans all of its operations to ensure that they are undertaken in an environmentally sustainable manner. The Company is continually looking for opportunities to improve its operating practices.

Blina Oilfield is located on Petroleum Production Licences L 6 R1, L 8 R1 and L 17 and includes wells and facilities at Blina, Sundown, Boundary, Lloyd, West Terrace, Meda and Erskine. The Blina Oilfield was discovered in 1983 when oil was found in a geological formation known as the Lennard Shelf at about 1,500 m below ground level. The Company took over operation of the Blina Oilfield from Arc Energy when the Company was established in 2008, and suspended production in February 2013. Since this date, the field has been in care and maintenance with progressive decommissioning and rehabilitation being undertaken.

The Company has developed the *Blina Oilfield Care and Maintenance Environment Plan* (HSE-PLN-008) (Environment Plan) to identify the potential environmental impacts associated with Care and Maintenance Activities at the Blina Oilfield, and set out the mitigation and management measures to ensure that environmental impacts and risks are As Low As Reasonably Practicable (ALARP). This summary document provides an overview of the Activities that will occur and summarises the mitigation and management measures in the Environment Plan.

1.1. Contact Details

Operations Lead

Buru Energy Limited

Phone: +61 8 9215 1800

Fax: +61 8 9215 1899

Email: info@buruenergy.com

2. OVERVIEW OF ACTIVITY

A summary of the infrastructure present and history of the Blina Oilfield is given in Table 1. The location of the Activity area is shown in Figure 1.

Table 1: Infrastructure and history of Blina Oilfield.

Facility	Satellite Wells	Well Status	Storage	Oil Field	Discovery Date	Production Date
Blina	Blina 1-6	Shut-in	Battery	Blina	May 1981	Sept. 1983
Sundown	Sundown 1-5	Shut-in	Battery	Sundown	Nov. 1982	July 1984
Meda	Lloyd 1, 3	Shut-in	Battery	Lloyd	July 1987	Aug. 1987
	West Terrace 1, 2	Shut-in		West Terrace		June 1985
	Boundary 1	Shut-in		Boundary	Aug. 1990	Dec. 1990
Erskine	N/A	N/A	Terminal	N/A	N/A	N/A

N/A: Not applicable

Following suspension in February 2013, the Blina Oilfield is currently in a Care and Maintenance phase.

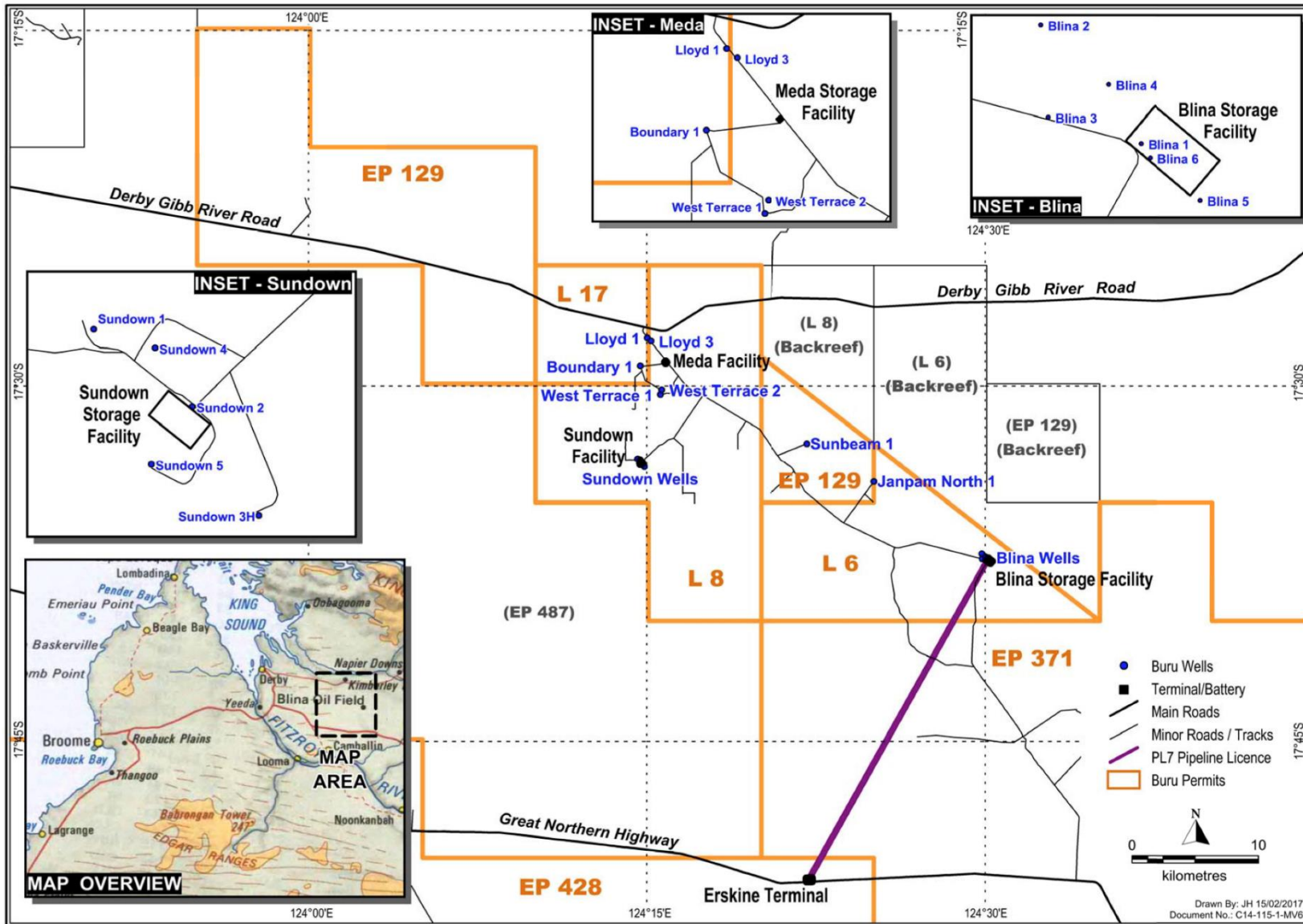


Figure 1: Location of the Blina Oilfield facilities.

2.1. Infrastructure Removal

Any waste oil currently stored in tanks at the Blina Oilfield will be from storage for reuse/recycling or disposal at a licensed waste disposal facility. Transport of waste oils will be in accordance with the *Environmental Protection (Controlled Waste) Regulations 2004*, the *Dangerous Goods Safety Act 2004* and *Dangerous Goods Safety Regulations 2007*.

Beneficial use or recycling options will be sought for infrastructure and materials prior to disposal.

If the surface infrastructure and other scrap materials are determined to be unsuitable for reuse or recycling, they will be transported to a licensed waste disposal facility.

2.2. Progressive Rehabilitation

All interceptor and evaporation ponds have been stabilised for rehabilitation. The Company will continue to monitor vegetation regrowth of the rehabilitated ponds. If regrowth is not adequately progressing naturally, reseedling may be undertaken.

The Company may rehabilitate other areas, that are no longer of use (e.g. sections of well sites). All progressive rehabilitation will be undertaken in accordance with Company *Rehabilitation Operations Procedure* (HSE-PRO-025).

2.3. Inspections and Maintenance

2.3.1. Regular Inspections and Maintenance

The Company undertakes a risk-based approach to scheduling care and maintenance operations, in accordance with Well Management Plans approved under the *Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015*.

2.3.2. Monthly

The wells and facilities are generally visually inspected monthly (access dependent) in accordance with the Company *Blina Oilfield Care and Maintenance: Security & Environment Checklist* (HSE-FRM-022). If any issues are detected, these will be maintained at the time or scheduled for maintenance.

2.3.3. Six-Monthly

In addition to monthly visual inspections, well integrity checks are undertaken every six months. Well integrity checks are undertaken in accordance with the relevant Well Management Plan under the *Petroleum and Geothermal Energy Resources (Resource Management and Administration) Regulations 2015*.

2.3.4. Annual and Biennial

The PL 7 pipeline route is driven at least annually to visually inspect the route, including for vegetation regrowth and presence of signage.

The Company has a contractor undertake annual checks of the PL 7 pipeline's cathodic protection system. Similarly, the contractor undertakes integrity inspections of the storage tanks every two years.

3. ENVIRONMENTAL IMPACTS AND MANAGEMENT MEASURES

The Activities will be confined to the Activity area. A summary of the existing environmental characteristics of the Activity area, potential impacts that could result from the Activity and the risk of these potential impacts occurring is provided in Table 2. Included in this table are also the management and mitigation measures that form part of the implementation strategy to minimise environmental risk.

Table 2: Summary of the existing environment and potential impacts associated with the Activity.

Environmental characteristic	Description	Potential Impact	Management Measures	Risk	Implementation Strategy
Ground water	Results of laboratory analysis of groundwater taken from the environmental monitoring bore at Sundown and the bore at Blina indicate that COPC in the bore water at both locations is below ANZECC Stockwater Guideline values with the exception of TDS at the Sundown monitoring bore. Similar results have also been recorded for surface water samples with elevated TDS levels previously recorded for Blina and Sundown produced formation water including within the Interceptor Ponds.	Disturbance of ground water.	<ul style="list-style-type: none"> Integrity of all storage tanks across the Blina Oilfield assessed. Transport of waste oil in accordance with <i>Load Out of Crude at Blina Oilfield Procedure</i> (OP-PR-005). Controlled wastes will be removed and transported in accordance with relevant legislation. Spill kits available. Immediate containment, clean-up and remediation, as required, of spills. Refuelling undertaken in accordance with <i>Refuelling Procedure</i> (HSE-PR-011). Ponds remediated to blend in with the surrounding topography and contoured. Suitably qualified contractors engaged for operations. Monthly visual inspections and checks of infrastructure and equipment will be undertaken. Annual checks of cathodic protection system. Rectification of any issues identified during periodic checks of the oilfield. Maintenance of Company access tracks sufficient to maintain safe access to Operational areas. 	Given the mitigation and management measures that will be implemented significant groundwater contamination unlikely.	<ul style="list-style-type: none"> Continual monitoring during transfer of waste oil. Company Representative to ensure all environmental incidents are reported. Company Representative to ensure no clearing or disturbance outside of the Activity area. Contractor to ensure compliance with the <i>Dangerous Goods Safety Regulations 2007</i> for transport of Controlled Waste and Dangerous Goods, where required. Visual inspection of Activity areas following clean-up of activity areas. Internal environmental audits. DMP Environment Branch notified in writing following completion of remediation operations.
Landforms and surface water	<p>The Blina Oilfield is located within the Lennard River catchment with the PL 7 pipeline crossing into the Fitzroy River catchment area. These catchments are characterised by landscapes dominated by pindan soils with occasional rocky outcrops, breakaways and associated local drainages.</p> <p>The geomorphology of the Blina area is characterised by dune and swale systems, which include rain-fed claypans in swales that are truncated drainage lines between dunes and intersected by creek lines and tributaries of the Lennard River system.</p> <p>There are no permanent watercourses in the Blina Oilfield area. There is no direct surface connectivity between the Activity area and surrounding landscape.</p>	<p>Exacerbated erosion.</p> <p>Disturbance of fauna habitat.</p> <p>Contamination of surface water.</p>	<ul style="list-style-type: none"> Operations will be limited to existing disturbed areas. Rehabilitation monitoring within the Activity area. Fire management measures to be implemented. Prior to entering the Activity area, earthmoving machinery will be checked for weed material. Any soil from outside sources will be weed-free. Only seed of native flora species will be collected and utilised for rehabilitation of remediated areas. Any seed collected will be in accordance with a DPAW Commercial Purposes licence. 	Through the implementation of management measures, it is unlikely that the Activity will have a significant impact on landforms and surface water.	<ul style="list-style-type: none"> Visual inspection of Activity areas following clean-up of activity areas. Internal environmental audits. DMP Environment Branch notified in writing following completion of remediation operations. Company Environmental Representative to ensure corrective actions for weeds are implemented, as required.
Vegetation and Flora	<p>The Activity area is located in the Dampierland subregion of the Fitzroy Trough Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and within four vegetation units (64, 744, 745, 755) which are widespread across the region.</p> <p>Four species of Declared Rare Flora (DRF) are known to occur within the Kimberley region. During an on-ground survey undertaken in 2007, no Declared Rare Flora or Priority Flora species were recorded.</p>	Loss of native flora species including competition by weed species.	<ul style="list-style-type: none"> Operations will be limited to existing disturbed areas. Vehicles comply with the <i>Travel Management Procedure</i> (HSE-PRO-002). Waste managed and monitored in accordance with the <i>Waste Management Procedure</i> (HSE-PRO-005). Records of waste type and volume kept. 	Through the implementation of management measures, it is unlikely that the Activity will have a significant impact on flora and vegetation.	<ul style="list-style-type: none"> Visual inspection of Activity areas following clean-up of activity areas. Internal environmental audits. DMP Environment Branch notified in writing following completion of remediation operations. Company Environmental Representative to ensure corrective actions for weeds are implemented, as required.
Fauna	<p>On-ground surveys were undertaken in 2008 and 2015. During the surveys, five species of conservation significance were observed: the Great Egret (<i>Ardea alba</i>), Australian Bustard (<i>Ardeotis australis</i>), Picetorella Mannikin (<i>Heteromunia pectoralis</i>), Rainbow Bee-eater (<i>Merops ornatus</i>) and Fresh Water Crocodile (<i>Crocodylus johnstoni</i>).</p> <p>Habitat is well represented in surrounding region.</p> <p>Four introduced fauna species were identified during the on-ground surveys (cattle, dog, cat and horse).</p>	<p>Loss of a local population of a conservation significant fauna species.</p> <p>Disturbance of fauna.</p>	<ul style="list-style-type: none"> Operations will be limited to existing disturbed areas. Vehicles comply with the <i>Travel Management Procedure</i> (HSE-PRO-002). Waste managed and monitored in accordance with the <i>Waste Management Procedure</i> (HSE-PRO-005). Records of waste type and volume kept. 	Given that vegetation associations in the Activity area are locally widespread, it is unlikely that the Activity will significantly impact fauna.	<ul style="list-style-type: none"> Contractor to ensure compliance with the <i>Dangerous Goods Safety Regulations 2007</i> for transport of Controlled Waste and Dangerous Goods, where required. Visual inspection of Activity areas following clean-up of activity areas. Internal environmental audits. DMP Environment Branch notified in writing following completion of remediation operations.
Cultural Heritage and Community	<p>The Activity area is located on the Blina Pastoral Station. Land use is dominated by open range pasture grazing of beef stock. The closest town is Derby which is located approximately 105 km southeast of the oilfield. There are no Aboriginal communities within 40 km of the Activity area.</p> <p>No registered Department of Aboriginal Affairs sites are located within the Activity area. The closest registered heritage site is approximately 29 km to the northwest.</p>	<p>Loss of environmental values associated with LUG or heritage site.</p> <p>Disturbance of stock.</p> <p>Disturbance of local station or community residents.</p>	<ul style="list-style-type: none"> On-going consultation with local landholders and other stakeholders regarding the Activities. Vehicles will comply with <i>Travel Management Procedure</i> (HSE-PRO-002). Vehicle and personnel access limited to the existing access tracks and facility areas. Fences and gates around the facilities and wells closed and locked. Signage at the well site gate. On-going consultation with local landholders, traditional owners and other stakeholders. 	Given the limited use of the Activity area by the local community and the implementation of the management measures, impacts to the community are unlikely.	<ul style="list-style-type: none"> Contractor to ensure compliance with the <i>Dangerous Goods Safety Regulations 2007</i> for transport of Controlled Waste and Dangerous Goods, where required. Visual inspection of Activity areas following clean-up of activity areas. Internal environmental audits. DMP Environment Branch notified in writing following completion of remediation operations.

3.1. Communication and Consultation

The Company has engaged in communication and consultation with relevant stakeholders as summarised in the Environment Plan. As the Activity area is located within a sparsely populated region with limited settlement, transport or communications infrastructure, relevant stakeholders are limited to government departments, traditional owners and pastoralists. The stakeholders consulted with to date include:

- Department of Water;
- Department of Environment Regulation;
- Blina Pastoral Station;
- Bunaba Traditional Owners; and
- Warrwa Traditional Owners.

These stakeholders have been consulted via phone, written notices and face-to-face meetings.

No issues have been raised in relation to the Activity through the consultation process. The Company will continue to communicate with stakeholders and consult during all phases of the Activity, on a formal and informal basis, and by email, letter, face-to-face and telephone.