

Form

Referral of a proposal under s. 38 of the EP Act

PART A: PROPONENT AND REFERRER INFORMATION AND PROPOSAL DESCRIPTION				
Referrer information				
Who is referring this proposal?			<input type="checkbox"/> Proponent <input type="checkbox"/> Decision-making authority <input checked="" type="checkbox"/> Community member/third party	
Name (print) <i>Name of the person or organisation referring</i>		Signature		
Position		Organisation		
Email		Phone		
Address	Street No.	Street Name		
	Suburb	State	Postcode	
Date				
Does the referrer request that the EPA treat any part of the proposal information in the referral as confidential? <i>Provide confidential information in a separate attachment.</i>			<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does the referrer confirm that they consent to receive correspondence electronically?			<input type="checkbox"/> Yes <input type="checkbox"/> No	
Referral declaration for proponent and Authorised representative: I, declare that I am authorised to refer this proposal on behalf ofand further declare that the information contained in this form is true and not misleading. Date:				
Proponent information				
Name of the proponent/s <i>Include Trading Name if relevant</i>		Buru Energy Limited		
Australian Company Number(s)	<input type="checkbox"/>	71 130 651 437		
OR				
Australian Business Number(s)	<input checked="" type="checkbox"/>			
Pre-referral discussions				
Have you had pre-referral discussions with the EPA (including the EPA Services of DWER)?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p><i>If so, provide name, date, and overview of discussions.</i></p>	<p>Written correspondence from EPA Services received on 1 July 2022, notifying Buru Energy of the third-party referral and requesting additional information on the Rafael Seismic Survey.</p> <p>Buru Energy responded on 27 July 2022 with requested information.</p> <p>Further written correspondence from EPA Services received on 3 August 2022.</p> <p>Phone call with Manager – EIA North of EPA Services on 4 August 2022.</p> <p>Previous Third-Party Referral</p> <p>It should be noted that a third-party referred Buru Energy’s 2021 seismic survey campaign, which also included the Rafael seismic survey (DWERT64657).</p>
<p>Proposal information</p>	
<p>Proposal name</p>	<p>Rafael Seismic Survey</p>
<p>What is the proposal? (Include general description in the Instructions and template: How to identify the content of a proposal)</p>	<p>Temporary clearing to allow vehicle access to undertake a seismic survey within a 200 km² area (3D component) and along four standalone lines (approx. 60 km total length of which 47 km requires clearing; 2D component). Within the 3D area, lines will be cleared in a grid pattern, approx. 400 m apart.</p> <p>See attached Proposal Content Document for further information.</p>
<p>Have you provided electronic spatial data, maps, and figures in the appropriate format?</p>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p>Provided with Buru Energy’s written response on 27 July 2022.</p>
<p>What type of proposal is being referred?</p> <p><i>For significant amendment or derived proposal, provide the associated existing Ministerial statement number/s</i></p> <p><i>For a proposal under an assessed planning scheme, provide the scheme number and name</i></p>	<p><input type="checkbox"/> significant proposal. <i>Choose which type of significant proposal</i></p> <p><input checked="" type="checkbox"/> new proposal</p> <p><input type="checkbox"/> significant amendment (proposal only)</p> <p><input type="checkbox"/> significant amendment (conditions only)</p> <p><input type="checkbox"/> significant amendment (proposal and conditions)</p> <p><input type="checkbox"/> strategic proposal</p> <p><input type="checkbox"/> derived proposal</p> <p><input type="checkbox"/> proposals of a prescribed class</p> <p><input type="checkbox"/> proposal under an assessed planning scheme</p>

Proposal content: Complete the corresponding template (Proposal Content Document) from the [Instructions and template: How to identify the content of a proposal](#) for the type of proposal identified above. The completed form **must be** submitted with the referral.

Alternatives	There are no alternatives to undertaking the seismic survey that will provide the same level of geological information. Vegetation clearing is required to allow safe vehicle access during the survey. The geological information is required for Buru Energy to meet the requirements of its Petroleum Exploration Permits and to explore/ appraise the Rafael gas discovery.
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PART B: ASSESSMENT OF ENVIRONMENTAL IMPACTS

Environmental factors

<p>What are the likely significant environmental factors for this proposal?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Benthic Communities and Habitat <input type="checkbox"/> Coastal Processes <input type="checkbox"/> Marine Environmental Quality <input type="checkbox"/> Marine Fauna <input checked="" type="checkbox"/> Flora and Vegetation <input checked="" type="checkbox"/> Landforms <input type="checkbox"/> Subterranean Fauna <input type="checkbox"/> Terrestrial Environmental Quality <input checked="" type="checkbox"/> Terrestrial Fauna <input type="checkbox"/> Inland Waters <input type="checkbox"/> Air Quality <input type="checkbox"/> Greenhouse Gas Emissions <input checked="" type="checkbox"/> Social Surroundings <input type="checkbox"/> Human Health
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For **each** of the environmental factors identified above, complete the following table, or provide the information in a supplementary report

Potential environmental impacts – for each environmental factor

1	EPA policy and guidance	See Attachment 2 – Impact Assessment
2	Receiving environment	
3	Likely environmental impacts	
4	Application of the mitigation hierarchy	
5	Assessment and significance of residual impacts	
6	Likely environmental outcomes	

Holistic impact assessment

See Attachment 2 – Impact Assessment

Cumulative environmental impact assessment

See Attachment 2 – Impact Assessment

Consultation

Information on consultation undertaken was provided with Buru Energy’s written response on 27 July 2022.

Supporting documents	
Relevant sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058) (Attachment 3)	
Has the referrer provided survey information according to the Instructions and Form: IBSA Data Packages and/or the Instructions and form: IMSA Data Packages	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Conclusion	
As outlined in Buru Energy's written response on 27 July 2022 (Buru Ref: L3508), Buru Energy has determined that the Rafael Seismic Survey will not have a significant impact on the environment. This is the case when considering the survey individually as well as considering cumulative impacts.	

PART C: OTHER APPROVALS AND REGULATION	
Decision-making authorities and their approvals	
Provide a table list of the decision-making authorities, associated legislation or agreement regulating the activity and the specific approval required. (Example table at the end of form)	See Other Approvals table below.
Provide a summary of the statutory decision-making processes you consider can mitigate the potential impacts of the proposal on the environment. (Note: this should be a summary of the information provided in Part B section 2.4).	Under the <i>Petroleum and Geothermal Energy Resources (Environment) Regulations 2012</i> , Buru Energy is required to undertake petroleum activities in accordance with an approved Environment Plan. Under the aforementioned Regulations, the Environment Plan must demonstrate that all environmental risks have been reduced to levels that are acceptable and As Low As Reasonably Practicable (ALARP).
Tenure and Local Government approvals	
Location of proposal: a) street address, lot number, suburb, and nearest road intersection; or b) if remote, the nearest town and distance and direction from that town to the proposal site.	Approximately 80 km south of Derby, in petroleum Exploration Permits 428 and 457.
Name of the Local Government Authority in which the proposal is located.	Shire of Derby-West Kimberley
Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
What is the current land use on the property, and the extent (area in hectares) of the property?	Cattle grazing under pastoral lease. The Rafael Seismic Survey overlays the following pastoral leases, with approximate lease extents provided: <ul style="list-style-type: none"> • Yakka Munga (189,584 ha) • Lulugui/Myroodah (128,027 ha) • Dampier Downs (112,995 ha)

<p>Does the proponent have the legal access required for the implementation of all aspects of the proposal?</p> <p>If yes, provide details of legal access authorisations / agreements / tenure.</p> <p>If no, what authorisations / agreements / tenure is required and from whom?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Joint holder and operator of petroleum Exploration Permits 428 and 457, provides legal access.</p> <p>Heritage Protection Agreements in place with relevant Traditional Owner group (Nyikina Mangala). Heritage approval for the seismic survey was received on 10 December 2019. Buru Energy, as operator of the Buru/ Origin Joint Venture has also provided regular updates to the Nyikina Mangala through 2021 and 2022.</p> <p>Buru has consulted with the above pastoralists and has engaged with the pastoralists to minimise impacts of the seismic survey on pastoral activities. While land access agreements are not required for the permits or seismic survey, a land access deed is in place between Buru Energy and Yakka Munga pastoral station.</p>
Commonwealth Government approvals	
<p>Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Has the proposed action been referred? If yes, when was it referred and what is the reference number (EPBC No.)?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Date: _____</p> <p>EPBC No.: _____</p>
<p>If referred, has a decision been made on whether the proposed action is a controlled action? If 'yes', check the appropriate box and provide the decision in an attachment.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Decision – controlled action</p> <p><input type="checkbox"/> Decision – not a controlled action</p>
<p>If the proposal is determined to be a controlled action, do you request that this proposal be assessed under a Bilateral Agreement or as an accredited assessment?</p>	<p><input type="checkbox"/> Yes - Bilateral <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes - Accredited</p>
<p>Is approval required from other Commonwealth Government/s for any part of the proposal?</p> <p><i>If yes, describe.</i></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Approval:</p>
Decision-making authority referrals <u>ONLY</u>	

What approval/s, under your authority, are required for this proposal? <i>Please provide details.</i>	
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Other Approvals

Decision-making authority	Legislation or Agreement regulating the activity	Approval required (and specify which proposal element the approval is related to)	Whether and how statutory decision-making process can mitigate impacts on the environment? (Yes/No and summary of reasons. Include a separate line item for each relevant impact, and discuss how the EPA’s factor objective will be met)		
			Factor?	Mitigated?	How?
Department of Mines, Industry Regulation and Safety (DMIRS)	<i>Petroleum and Geothermal Energy Resources (Environment) Regulations 2012</i>	Environment Plan – covers entire proposal from mobilization and line clearing to rehabilitation monitoring.	Flora and Vegetation EPA Objective: To protect flora and vegetation so that biological diversity and ecological integrity are maintained.	Yes	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 1.1 (Introduction/ spread of weed species), Risk Event 1.2 (Disturbance of native flora species), Risk Event 1.6 (Ignition of a bush fire), Risk Event 1.8 (Incomplete Rehabilitation)
			Landforms EPA Objective: To maintain the variety and integrity of distinctive physical landforms so that environmental values are protected.	Yes	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 3.1 (Alteration of surface water flow), Risk Event 3.2 (Alteration of Dunes)
			Terrestrial Fauna EPA Objective: To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.	Yes	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 1.3 (Disturbance of conservation significant native fauna species), Risk Event 1.4 (Increase of livestock and/or feral fauna in the Activity area), Risk Event 1.6 (Ignition of a bush fire), Risk Event 1.8 (Incomplete Rehabilitation)
			Social Surroundings EPA Objective: To protect social surroundings from significant harm.	Yes	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 4.2 (Disruption of local landholders and other stakeholders), Risk Event 4.3 (Change of local aesthetics including noise, dust and light), Risk Event 5.1 (Disturbance of cultural heritage site/s or object/s)

Attachment 1

Proposal Content Document

Table 1: General proposal content description

Proposal title	Rafael Seismic Survey
Proponent name	Buru Energy Limited
Short description	<p>Seismic survey to image subsurface formations for the purpose of petroleum exploration.</p> <p>The seismic survey will take place within a 200 km² area (3D component) and along four standalone lines (approx. 60 km total length, 2D component). Note one of the 2D lines is located along an existing access track and therefore does not require clearing.</p> <p>Temporary clearing of vegetation is required to allow vehicle access. Within the 3D area, lines will be cleared in a grid pattern, approx. 400 m apart. Clearing is undertaken by raised blade scraping, which involves using a bulldozer blade to remove vegetation at ground level, with little or no disturbance to topsoil and vegetative matter below the ground surface.</p> <p>Following completion of the survey, the access tracks are left to naturally rehabilitate and are monitored. Buru Energy's experience has shown that rehabilitation typically occurs within four years.</p> <p>The land use in and surrounding the proposal area is cattle grazing under pastoral lease.</p>

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Temporary camp site	Figure 2 in <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).	Located at existing cleared area within the Development Envelope, likely Rafael 1 well site. See Section 3.1.2 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
Temporary seismic lines (access tracks)	As above.	Maximum of 437.25 ha as per Section 3.9.1 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).

		See Section 3.6 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
Construction elements		
Dozers undertaking raised blade scraping to establish temporary seismic lines	As above.	As above. Total lines requiring clearing of 1,147 km.
Surveying of seismic lines	As above.	As above.
Operational elements		
Vibroseis trucks (source for seismic survey)	As above.	Generate seismic source along 550 km of source lines within the 3D area, and along the 60 km of 2D lines (610 km total). See Section 3.7 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
Geophones (receivers for seismic survey)	As above.	Placed along 550 km of receiver lines within the 3D area, and along the 60 km of 2D lines (610 km). See Section 3.7 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
Treated sewage discharge	As above.	Estimated to be approx. 10.5 kL per day. See Section 3.9.3.1 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
Proposal elements with greenhouse gas emissions		
Combined Construction & Operation elements:		
Scope 1	Estimated to be less than 300 t CO _{2e} , based on total line length of 1,160 km. Based on total Scope 1 emissions for Buru Energy's 2021 seismic campaign, which resulted in emissions of approx. 0.23 t CO _{2e} per km.	
Scope 2	No Scope 2 emissions will be produced as no off-site energy source will be utilised. Onsite electricity generation emissions are captured in Scope 1 above.	
Scope 3	Considered to be negligible.	
Rehabilitation		
See Section 3.10 of <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058)		
Commissioning		
N/A		

Decommissioning		
N/A		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	Less than six months
	Mobilisation	Less than one month
	Construction phase	Less than two months
	Operations phase	Less than two months
	Demobilisation phase	Less than one month

** Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).*

Attachment 2

Impact Assessment

As required under Part B of the Section 38 Referral Form, this attachment provides the required information on potential environmental impacts, holistic impact assessment and cumulative impact assessment.

Potential Environmental Impacts

The following tables summarise the potential environmental impacts to each relevant environmental factor (Flora and Vegetation, Landforms, Terrestrial Fauna and Social Surroundings. Relevant Sections of the *Rafael Seismic Survey Environment Plan* (HSE-PLN-058) are cross-referenced, as this document provides a thorough assessment of potential environmental impacts.

Potential environmental impacts – Flora and Vegetation		
1	EPA policy and guidance	Environmental Factor Guideline: Flora and Vegetation (EPA 2016) Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016)
2	Receiving environment	See Sections 4.2.1 and 4.3.3 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
3	Likely environmental impacts	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 1.1 (Introduction/ spread of weed species), Risk Event 1.2 (Disturbance of native flora species), Risk Event 1.6 (Ignition of a bush fire), Risk Event 1.8 (Incomplete Rehabilitation).
4	Application of the mitigation hierarchy	
5	Assessment and significance of residual impacts	
6	Likely environmental outcomes	Temporary clearing of up to 437.25 ha of widely represented vegetation, which is expected to rehabilitate within four years. No significant impact on flora and vegetation.

Potential environmental impacts – Landforms		
1	EPA policy and guidance	Environmental Factor Guideline – Landforms (EPA 2018)
2	Receiving environment	See Section 4.1.4 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
3	Likely environmental impacts	

4	Application of the mitigation hierarchy	Refer to the following sections of <i>the Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 3.1 (Alteration of surface water flow), Risk Event 3.2 (Alteration of Dunes).
5	Assessment and significance of residual impacts	
6	Likely environmental outcomes	Clearing method minimises disturbance of root systems and therefore indirect impacts on landforms are reduced. Any alteration of dunes will be minor given controls in place. No significant impact on landforms.

Potential environmental impacts – Terrestrial Fauna

1	EPA policy and guidance	Environmental Factor Guideline: Terrestrial Fauna (EPA 2016) Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment (EPA 2020)
2	Receiving environment	See Section 4.2.3 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
3	Likely environmental impacts	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058): Section 5.5 (Risk Assessment Results): Risk Event 1.3 (Disturbance of conservation significant native fauna species), Risk Event 1.4 (Increase of livestock and/or feral fauna in the Activity area), Risk Event 1.6 (Ignition of a bush fire), Risk Event 1.8 (Incomplete Rehabilitation).
4	Application of the mitigation hierarchy	
5	Assessment and significance of residual impacts	
6	Likely environmental outcomes	Temporary alteration of widely represented fauna habitat, minor disturbance/displacement of fauna species due to presence of vehicles and machinery. No significant impact on terrestrial fauna.

Potential environmental impacts – Social Surroundings

1	EPA policy and guidance	Environmental Factor Guideline - Social Surroundings (EPA 2016)
2	Receiving environment	See Sections 4.3 and 4.4 of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-058).
3	Likely environmental impacts	Refer to the following sections of the <i>Rafael Seismic Survey Environment Plan</i> (HSE-PLN-
4	Application of the mitigation hierarchy	

5	Assessment and significance of residual impacts	058): Section 5.5 (Risk Assessment Results): Risk Event 4.2 (Disruption of local landholders and other stakeholders), Risk Event 4.3 (Change of local aesthetics including noise, dust and light), Risk Event 5.1 (Disturbance of cultural heritage site/s or object/s).
6	Likely environmental outcomes	Seismic survey undertaken with consent of relevant landholders. No significant impact on social surroundings.

Holistic Impact Assessment

Given the negligible impacts on the individual environmental factors outlined above, holistic impacts are considered similarly negligible. Buru Energy has refined its approach to undertaking seismic surveys over the years, resulting in a low impact approach that allows rapid natural rehabilitation of vegetation. As outlined below, Buru Energy (and its predecessor Arc Energy) has undertaken numerous seismic surveys since 2007. These surveys have been regularly monitored and assessed against rehabilitation completion criteria, which has demonstrated that there has been no lasting impact on the environment. This provides clear evidence that the proposed Rafael seismic survey will have no significant impact on the environment.

Cumulative Impact Assessment

While Buru Energy has no firm plans for any additional seismic surveys in the upcoming years, there is a notional survey in the vicinity of the Rafael seismic survey that is being considered (Salinas 3D). This survey would be adjacent to the Rafael 3D area and provide valuable information on the geology between Rafael and other prospects to the south.

To assess cumulative impacts, the total clearing resulting from the Rafael seismic survey, the potential Salinas 3D survey, and Buru Energy's 2021 seismic campaign is provided in **Table 1**.

Table 1 Cumulative clearing from recent and proposed activities

Name	Footprint (ha)
2021 Campaign	
Celestine 2D	275.4
Paradise 2D	14.56
Willare 2D	105.75
<i>Subtotal (2021 Campaign)</i>	<i>395.71</i>
Planned Activities	
Rafael Seismic Survey	438
<i>Subtotal (Planned)</i>	<i>438</i>
Potential Future Activities	
Salinas 3D	550
<i>Subtotal (Potential)</i>	<i>550</i>
Total	1,383.71 ha

For context in assessing cumulative impacts of the proposed Rafael seismic survey, information on Buru Energy’s previous seismic survey clearing has been compiled (**Table 2**). The amount cleared for each survey, when it was cleared, and when it was deemed to have met completion criteria is provided. This information has been used to calculate the amount of seismic clearing ‘open’ each year; that is, the area of vegetation cleared that year or prior, that had not yet reached rehabilitation completion criteria (**Table 3**).

Table 2 Clearing resulting from previous seismic surveys in the Canning Basin

Seismic Survey	Year Cleared	Year Criteria Met	Clearing (ha)
(Arc) Yulleroo 2D	2007	2015	168.75
(Arc) Paradise 2D	2007	2015	222.75
Bunda 3D	2009	2014	847.4
Paradise 2D	2009	2013	46.8
Yulleroo South 2D	2009	2015	153.45
Pijalinga 2D	2010	2014	185.85
Commodore East 2D	2011	2016	73.8
Yulleroo 3D	2011	2015	710.6
Athos 2D	2011	2015	135
Asgard 2D	2012	2014	158.85
Yakka Munga 2D	2012	2014	99.45
Ungani 3D	2013	2020	920
Frome Rocks 2D	2013	2018	160.2
Commodore West 2D	2014	2016	55.86
Mt Fenton 2D	2014	2016	51.63
Barbwire 2D	2014	2016	121.04
Mt Rosamund 2D	2014	2016	235.4
Jackaroo 2D/3D	2014	2019	1,505.07
Yakka Munga 3D	2015	2018	685.68
Rafael 2D	2015	2020	77.18
Kurrajong 3D	2015	2019	645.2
Celestine 2D	2021	-	275.4
Willare 2D	2021	-	105.75
Paradise 2D	2021	-	14.56
Total			7,655.67

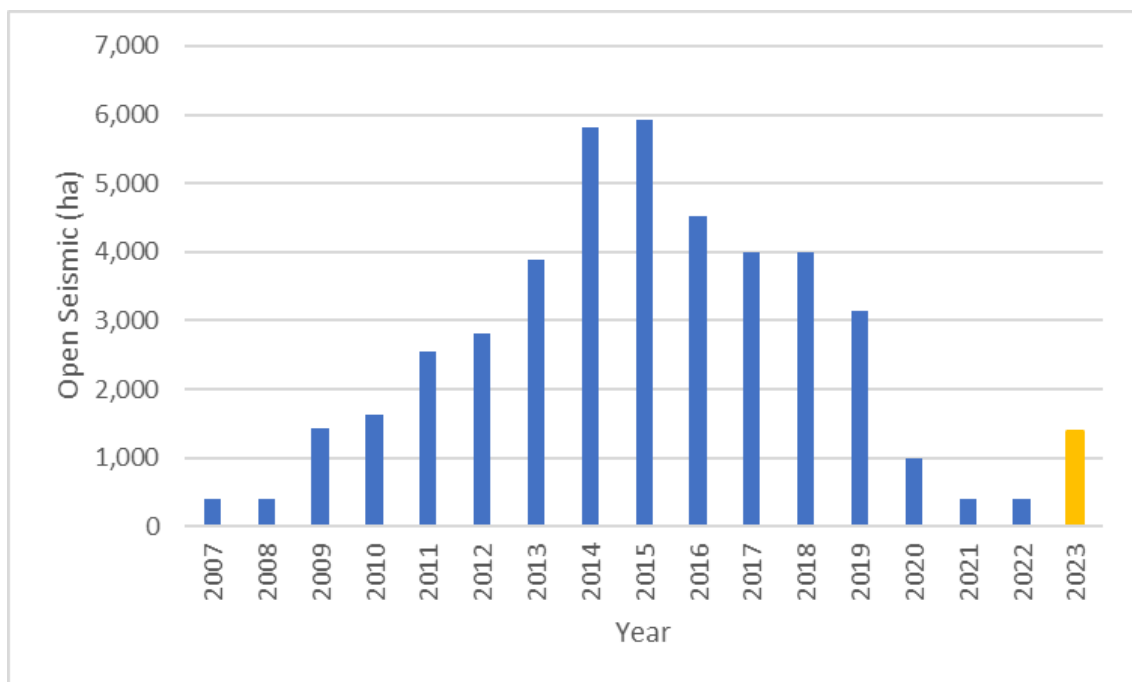
Table 3 Annual ‘open’ clearing as a result of seismic surveys

Year	Total Open (ha)
2007	391.5
2008	391.5
2009	1,439.15
2010	1,625
2011	2,544.4
2012	2,802.7
2013	3,882.9
2014	5,805.1
2015	5,921.61

Year	Total Open (ha)
2016	4,531.06
2017	3,993.33
2018	3,993.33
2019	3,147.45
2020	997.18
2021	395.71
2022	395.71

The analysis shows that while a total of 7,655.67 ha has been cleared for seismic surveys since 2007, the maximum amount of clearing 'open' was 5,921.61 ha (in 2015). This represented 0.07% of the Dampierland bioregion extent¹ (8,360,869 ha) and has not resulted in any lasting impacts to the region.

Conversely, the clearing proposed for the Rafael seismic survey, along with the 2021 seismic clearing and the notional Salinas 3D survey, will result in a total 'open' area of 1,383.71 ha (assuming the 2021 seismic surveys do not rehabilitate by the time the Rafael and Salinas surveys are undertaken). This is presented in Figure 1. Clearing of this area would represent 0.02% of the Dampierland bioregion extent. The clearing is therefore negligible relevant to the extent of the Dampierland bioregion.



Note: 2023 value assumes both Rafael and Salinas surveys are undertaken and 2021 lines have not rehabilitated

Figure 1 Area of 'open' seismic by year

Buru Energy does not consider that the cumulative impacts of the Rafael seismic survey and other seismic surveys constitute a significant impact due to:

- The clearing is low impact and temporary, expected to rehabilitate within four years.
- The clearing is negligible relevant to the extent of the Dampierland bioregion.

¹ Government of Western Australia. (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.

- Significantly higher amounts of clearing have previously been undertaken and recovered with no lasting impacts.

Rafael Field Development

Following the planned appraisal activities at the Rafael Gas Field (Rafael seismic survey and drilling of additional wells), a field development may be undertaken. Parallel to the appraisal activities, Buru Energy will be reviewing development concepts for the field. Once the development concept is understood and all necessary information has been collected, Buru Energy plans to refer the development to the EPA for assessment under Part IV of the *Environmental Protection Act 1986*.

Attachment 3

Rafael Seismic Survey Environment Plan (Relevant Sections)