

NOTICE OF DECISION AND STATEMENT OF REASONS

Section 55 of the *Environment Protection Act 2019* (EP Act)

Regulations 57(2)(b) and 63 of the *Environment Protection Regulations 2020* (EP Regulations)

Name of proposed action	Phase 2 Expansion of the Arnhem Space Centre
Proponent	Equatorial Launch Australia Pty Ltd
NT EPA reference	EP2023/031
Nature of proposed action	Industrial
Description of proposed action	<p>Expansion of launch pads and associated facilities at the Arnhem Space Centre located on NT Portion 1646 approximately 20 km south of Nhulunbuy in the East Arnhem local government area.</p> <p>The proposed expansion includes:</p> <ul style="list-style-type: none"> • increased lease area to encompass mineral lease (ML) 31025 to utilise areas previously disturbed by mining operations • an additional 14 launch pads including supporting infrastructure such as: <ul style="list-style-type: none"> ○ mission support buildings ○ fuel storage and pumping facilities • 1500 ML capacity water dam • internal access roads • a directly affected area of approximately 250 – 300 ha • expansion of hardware recovery zone to encompass: <ul style="list-style-type: none"> ○ mainland Northern Territory and within 3 km of the NT coastline ○ Gulf of Carpentaria (marine only). <p>The Arnhem Space Centre is a multi-user commercial facility licensed under the <i>Commonwealth Space (Launches and Returns) Act 2018</i> (Space Act). The Space Act is administered by the Australian Space Agency. In addition to the facility being licensed, a permit under the Space Act is required prior to each launch from the facility.</p>
Decision	<p>Standard environmental impact assessment is required in accordance with section 55 of the EP Act and regulation 57(2)(b)(i) of the EP Regulations.</p> <p>Assessment by supplementary environmental report to be the method of environmental impact assessment in accordance with regulation 57(2)(b)(ii).</p>
Person authorised to make decision	Dr Paul Vogel AM – Chairperson, as delegate of the Northern Territory Environment Protection Authority (NT EPA)

Signature



Date of decision

9 January 2024

Matters considered under EP Regulation 56

The NT EPA has considered the following:

- the accepted referral (including the referral form, referral report and appendices)
- submissions received in relation to the referral information during the public consultation period 25 October to 22 November 2023.
 - government authority submissions received: 4
 - public submissions: 2

Consultation

The referral indicates that the proponent conducted engagement activities with various stakeholder groups including, but not limited to, the Northern Land Council, Aboriginal corporations (Gumatj, Dhimurru, Laynhapuy Homelands, Rirratjingu, Mimal, South East Arnhem Limited IPA, ARDS), Arafura Swamp Rangers, Nhulunbuy Town Board, Nhulunbuy Electorate, East Arnhem Land Tourism Association, East Arnhem Regional Council, Regional Economic Development Committee, Aboriginal Areas Protection Authority, and operators of the Gulkula Mine (refer to section 5 of the referral report for further detail).

Issues raised during the proponent’s consultation process include the need to obtain and comply with regulatory approvals, mitigate environmental impacts, and protect sacred sites and people.

Public and government authority submissions received by the NT EPA identified potential impacts and risks to terrestrial ecosystems, air quality, community and economy, and culture and heritage.

All submissions received by the NT EPA on the referral are available on the NT EPA website.

Statement of Reasons

Overview

The NT EPA considers that the proposed action has the potential to have a significant impact on environmental values associated with four environmental factors¹.

LAND	<ul style="list-style-type: none">• Terrestrial Ecosystems - The proposed action has the potential to significantly impact terrestrial ecosystems directly and cumulatively through:<ul style="list-style-type: none">• clearing of vegetation within the Gove Peninsula and north-east Arnhem coast Site of Conservation Significance². There is insufficient information about the area and condition of vegetation to be cleared. Therefore there is uncertainty about potential impacts from clearing:
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¹ [NT EPA Environmental factors and objectives](#)

² [Territory Stories - Gove Peninsula and north-east Arnhem coast \(nt.gov.au\)](#)

	<ul style="list-style-type: none"> ▪ on threatened fauna species including: <ul style="list-style-type: none"> • Black-footed tree-rat, • Common brushtail possum (north-western), • Partridge pigeon (eastern), • Northern brush-tailed phascogale, and • Fawn antechinus. ▪ on significant or sensitive vegetation (riparian vegetation, monsoon rainforest) and groundwater dependent ecosystems • payload landing and subsequent hardware recovery actions in the proposed “Zone A” recovery zone, which encompasses the mainland Northern Territory including coastal and marine areas within 3 km of the mainland coastline.
AIR	<ul style="list-style-type: none"> • Air quality – The proposed action has the potential to significantly impact on local and regional air quality through the combustion of rocket fuels and the subsequent burn up of rocket components during launch and re-entry resulting in the generation and emission of gaseous and solid contaminants. Potential receptors include the Gulkula ceremonial site, and homelands (permanently or temporarily occupied) south of the proposed launch facilities.
PEOPLE	<ul style="list-style-type: none"> • Community and economy – The proposed action has the potential to significantly impact on local and regional community and economic values due to: <ul style="list-style-type: none"> • the proximity of the Gulkula ceremonial site (<1 km) • temporary closures of the Central Arnhem Road or other limitations on freight, transport and other logistical services to the region • pressure on the local community resulting from increased visitor numbers in the lead up to, and during launches. <p>The referral report lists stakeholder consultation that has been undertaken. However, it is not clear that consultation, particularly with affected Aboriginal people, has been sufficient, or that all affected groups (e.g. those represented by the Central Land Council) have been consulted.</p> • Culture and heritage – A number of potential significant impacts on cultural and heritage values have been identified, resulting primarily from consultation with Aboriginal corporations representing the commercial interests of select traditional owners. The proposed action would have potential significant impacts on culture and heritage values: <ul style="list-style-type: none"> • in the vicinity of the space centre through the generation of noise and air emissions • within the recovery zones through payload landing and hardware recovery actions • at the Gulkula ceremonial site, through disruptions to the Garma Festival (including festival preparations) resulting from launches or launch preparations.

The NT EPA considered other environmental factors during its consideration of the referral; however, the impact on those factors is not significant.

Justification

A standard assessment by **supplementary environmental report** is required, having regard to:

- Regulation 59 (a) the significance of the potential impacts of the proposed action as described above.
- Regulation 59 (b) the need to improve the NT EPA's level of confidence in predicting potential significant impacts of the proposed action taking into account the extent and currency of existing knowledge, particularly in relation to:
- the potential impacts of rocket launches on air quality
 - the potential impacts of clearing on terrestrial ecosystems at the launch facility
- Regulation 59 (c) the level of confidence in the effectiveness of the proposed measures to avoid, mitigate, or manage potential significant environmental impacts with respect to:
- impacts from rocket exhaust on air quality
 - risks and impacts from falling debris in the expanded recovery zone
 - risks and impacts to Aboriginal sacred sites in the expanded recovery zone.
- Regulation 59 (d) the extent of community engagement with communities within vicinity of the proposal area and the expanded hardware recovery zones, including the Aboriginal custodians and their respective representative body.
- Regulation 59 (e) the capacity of the communities and individuals likely to be affected, to access and understand information about the proposal and its potential significant impacts, particularly in relation to the potential impacts from rocket launches, and payload landing and subsequent hardware recovery actions on the communities' values and interests.
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Conclusion

The NT EPA considers that the proposed action has the potential for significant impact on four environmental factors, and that environmental impact assessment is required. The method of assessment is an assessment by supplementary environmental report.

In making its decision under EP Regulation 57, the NT EPA has considered:

- the objects of the Act in section 3 of the EP Act
- the purpose of the environmental impact assessment process in section 42 of the EP Act
- the matters under regulation 56 of the EP Regulations
- the matters relevant to a consideration of the method of environmental impact assessment in regulation 59 of the EP Regulations.