
Subject:

Development Number 932/P007/19 - SouthernLaunch.Space Pty Ltd (Southern Launch)

To The State Commission Assessment Panel (SCAP) of South Australia,

I have worked in the telecommunications and space sector for over 30 years and nothing could be more important than Australia developing its own sovereign access to space. I think it's telling that it will be South Australia that got Australia's first access to space in the 50s at Woomera and now more than 70 years later it will be South Australia that gets us back there.

We need your support now more than ever to advance our country and take part in this ballooning, multi billion dollar new economic opportunity that the new race for space presents. Failure to maximise our country's potential in this area will be nothing less than a disaster of public policy, unrivalled in our nation's history.

This project must immediately proceed. There is no reason, be it financial, environmental or otherwise that should stop this development from occurring post haste.

I hope the SA Planning Commission can see not only the value this opportunity presents to the taxpayer of South Australia, but to the importance of Australia as a nation and our future as an advanced space participant.

I fully support Southern Launches application.

Yours Sincerely,

Submission on Application

Whalers Way Orbital Launch Complex Proposal

Overall, I like the proposal. It looks similar to other small-medium rocket launch facilities around the world. There are some areas of the proposal that I believe requires addressing.

Reliance on diesel generators for electricity

The proposal describes using diesel generators for electricity eventually transitioning to Solar panels and battery storage. I believe that Southern Launch should be bold and commence with renewable energy for the following reasons:

- Reducing CO2 site emissions.
- Reducing fire risk.
- Zero cost after installation.
- Reducing transport costs.
- Utilising locally produced electricity rather than imported fuel.
- Site E is close enough to local utilities for a solar and battery system to be connected to the grid so that excess electricity can be sold off on days when generation exceeds consumption.
- Opportunity for staff and visitor electric vehicle charging.

Wildlife Management

Venomous and non-venomous reptiles like to shelter inside anything that they can squeeze into. All ground support equipment and buildings need to be either totally enclosed or open enough that if an animal were to shelter inside that the animal would easily be detectable and removable.

Possoms will make home in any structure above 2 meters high. All structures need to be sealed, especially between walls and roof surfaces and at the end of roller door cylinders.

The dams at the launch sites will attract fauna, to reduce the risk of bird strike it would be advisable to use loud sirens before launches to scare wildlife away from the vehicle.

At least one range safety officer should be trained in the identification capture, restraint and relocation of all wildlife on site especially reptiles and birds.

**Submission on Application
Development Act 1993**

Section 46B – Environmental Impact Statement – Major Development

Applicant: **SouthernLaunch.Space Pty Ltd**
 Development Number: 932/P007/19
 Nature of Development: **Whalers Way Orbital Launch Complex Proposal**
 Assessment Level: Environmental Impact Statement
 Subject Land: Lot 101 Right Whale Road, Sleaford

Name:
 Contact Number:
 Email:
 Postal address
 My interests are: A private citizen with expertise in landscape quality assessment and visual impact assessment.

Nature of concern

The aspects of the proposal I wish to make comment on are pages 497 – 514 of the EIS and Appendix Z, Landscape Character and Probable Visual Effect Assessment, Consultants report by Warwick Keates of Wax Design, dated 21 February, 2021.

Warwick Keates provides an excellent assessment of the likely visual impact of the proposal on the coastal landscape. I agree with much of his assessment. However, I take issue with his downplaying the landscape significance of the Whalers Way landscape.

Coastal Viewscapes Survey

I carried out an assessment of coastal landscape quality of the entire South Australian coast in 2005 (*Coastal Viewscapes of South Australia*, prepared for the Coast Protection Branch of the SA Dept for Environment and Heritage - Available from [Projects - The science of scenery \(scenicolutions.world\)](http://Projects - The science of scenery (scenicolutions.world))).

The landscape was rated on a 1 (low) to 10 (high) scale. The ratings were derived from ratings by 2,200 participants. Ratings on individual scenes ranged from 3.38 (saphires near Whyalla) to 8.65 (Admiralty Arch, Kangaroo Island).

The highest rated section of the coast for all of South Australia was the coast adjacent to Whalers Way followed by Cape Catastrophe – Cape Tournefort coast south of Port Lincoln. These rated 8 – 8.25 which is exceptionally high on the landscape scale. Very few areas in the rest of South Australia reach this level. Therefore **Whalers Way is South Australia's highest rated coastal landscape in terms of its scenic quality.**

Based on Keates' assessment, Section 4.2 of the EIS states:

The landscape of the Eyre Peninsula, including the Whalers Way Peninsula, received a moderate to high ranking in terms of the scenic quality. Figure 17 illustrates the landscape quality variance of Eyre Peninsula and the proposed location of the Project and represents landscape quality values of 7 to 8. In the case of the Project, **the existing landscape quality has a moderate to high scenic value** due to the coastal location and cliffs. Consequently, development of the proposed sites within this scenic landscape character **may potentially impact on the visual amenity of the area.**

I consider that this understates very significantly the likely visual impact of the proposed development. It should state that **the existing landscape has a high to very high scenic value.**

My concern is the visual prominence of the high structures and buildings on Sites A and B. These include buildings with heights of 10 m and a lattice structure for the water tanks of 23 m. Such structures will stand out in the otherwise natural area and will be visible from the Whalers Way access road around the coast. Sites A and B are approximately 300 metres from the coastal road. Site A is positioned on an elevated plateau. Keates' maps of the Zone of Visual Impact indicate that the structures on both of the sites will be visible for considerable distances.

Site A is also close to the access road to Theakstone Crevasse, a 13 m deep gash in the coast. The Crevasse is a well-known local attraction and many people using the Whalers Way road to end their visit at the Crevasse.

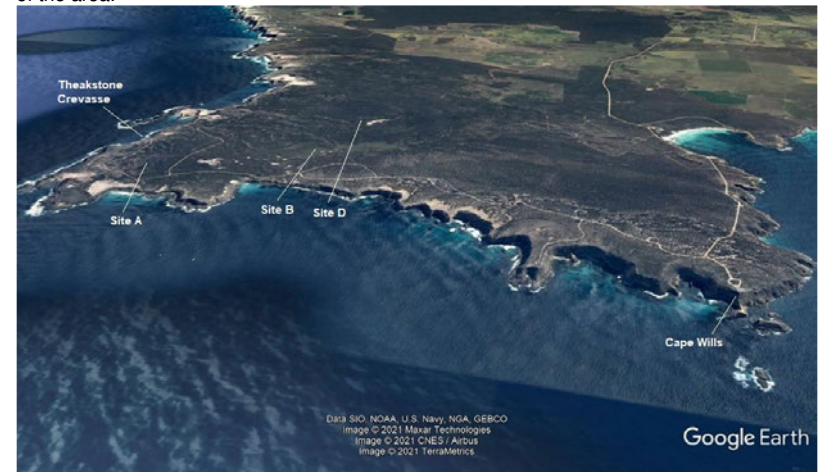
Coastal Development Survey

As part of the Coastal Viewscapes project, I carried out a second survey of the visual impact of developments using scenes with and without a coastal development including housing, aquaculture and marinas. The survey, with 1659 participants, found that the presence of development lowered the rating of scenic quality by around two units. A scene rated 8.5 would thus be lowered to 6.5 with the presence of a development. Interestingly the impact was independent of how high the scenic quality was, it was a uniform two units across all levels of scenic quality.

It would therefore be expected that the presence of the launch structures near Whalers Way would reduce the landscape quality from over 8 to around 6 which is a very significant loss.

Photographs

The following Google Earth image together with the photos illustrate the scenic significance of the area.



Source: Google Earth

Whalers Way showing the proposed launch sites



Cliffs at Cape Wills. Rating 8.32 and 8.16



Looking west along coast towards Sites A and B in distance



Coast near Theakstone Crevasse
(prior to Cathedral wind farm being installed
on the distant cliffs)

Theakstone Crevasse



PROPOSED ALTERNATIVE

Although I have not visited Whalers Way in recent years, I am familiar with the area.

Relocating Sites A and B slightly inland would allay my concern of their visual impact in their currently proposed location.

I propose that they be located in the vicinity of Site D, further inland from the coast. According to Keates' report, Site D is located in a shallow basin, some 5 – 6 metres below the surrounding ridges. Although not perfect, their greater distance from the coast, more than one km, together with their lower location and the surrounding natural vegetation will serve to reduce their visual impact to a more acceptable level.

I believe that this is justified on the basis of the extremely high scenic quality of the Whalers Way coast.

The coast of South Australia, particularly that along southern and western Eyre Peninsula, is among the State's most significant landscape resources and is of tremendous appeal to tourists and visitors from interstate and overseas. Degrading these landscapes through the construction of the launch structures is very likely to impact their tourism value.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	N/A
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I assert that the EIS has well demonstrated the enormous long term Economic and State and Regional Development benefits that will flow from this exciting development.
I have visited Whalers Way several times and submit that the EIS has thoroughly and sensitively addressed the important Environmental risks that any development would entail. I assert that the residual risk following the outlined mitigations is very low. Indeed years of unmanaged recreational and other activities on this site have left it in less than pristine condition and this EIS proposes to remedy a significant part of that pre-existing damage.
I believe this is a project of vital importance to the State and Region's development and, having examined and been satisfied by the EIS, fully support this Development.

Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Subject:

FW: Whalers Way Orbital Launch Complex

OFFICIAL

State Planning Commission - Representations Planning and Land Use Services Attorney General's Department
• spcreps@sa.gov.au Level 5, 50 Flinders Street, Adelaide SA 5000 • PO Box 1815, Adelaide SA 5001 • DX 171

I have read the brochure that came in my post box this week. I have a few questions:

1. Why is Whalers Way so important to use as a launch location and not existing rocket launch sites around Australia (which don't impact on Flora or Fauna)
2. How do you propose to "protect" and "improve" the existence of the local flora and fauna. I am not familiar with rocket launches improving or protecting any nature.
3. Will public consultation make any difference to your decision to go ahead with this site especially if there is an overwhelming rejection of the proposal.
4. Southern Right Whales have only started to increase in numbers around this area - what research have you conducted to ensure the continued migration of the whales in our area which is a huge tourism attraction and all natural.
5. I have not seen many whales impacted in other rocket sites (as these are in the desert areas of the world).
6. You say you are committed to a space hub for Port Lincoln and the Lower Eyre Peninsula - for what reason and why now? Are you talking about jobs? If you are committed, does that mean that the public consultation is just lip service to appease any protocols?

Yours Sincerely

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
✓	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I support this project because offers a suitable base for launch activities within South Australia. It is proximate to the space industry in Adelaide, which is a burgeoning hub amid a growing national and international industry. A launch complex at Whalers Way can act as a key to open local industry (both in Adelaide and the region) towards space activities and technologies. Because develops in space offer benefits across multiple industries - including agriculture, mining, communications, and disaster-management - it is a great companion to regional Australia, in terms of employment, revenue, tourism, technology solutions, and lifestyle. I therefore support this project as beneficial to South Australia and specifically to the Eyre Peninsula.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u> *
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

My family, consisting of three married sons involved with their own agricultural properties "Benmatar" of Dave & my young adult 12 grandchildren of this area,
 ALL Fully support the proposed Whalers Way Orbital Launch Complex. The meeting last night covered all aspects of possible community concerns and, with great patience. This provides possible employment for my grandchildren returning home after completing college. We are all excited & hoping the approval

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

goes through sooner than later
Sincerely

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	Space Nerd & Enthusiast.

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I think the EIS is Great.
Everyone I know is in
Support of this Project
Launch the Rockets Already!
Q

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="radio"/> Owner of local property
	<input type="radio"/> Occupier of local property
	<input type="radio"/> A representative of a company/other organisation affected by the proposal
	<input type="radio"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<p>AS a nearly lifelong resident of Port Lincoln & someone that has also worked for a decade in the local aquaculture industry, I 100% support the Research & project development of the Southern Launch here in Port Lincoln. The potential for increase of community engagement & increase in local industry significantly has a hugely positive impact on our town. I believe the opportunities this proposed development will provide for our community will be far the better in long term economic benefits.</p>

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 40B – Environmental Impact Statement – Major Development

Applicant: Southern Launch Space Pty Ltd
Development Number: 932P007.10
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 1101 Knight Industrial Estate, Strathairney
Phone Number: 1800 752 664
Close Date: 18 September 2021

Name:	
Contact number:	
Email:	
Postal address:	
Affected property (if different from postal address):	
You may be contacted by your nominated contact or another or further consultation or notification of a decision	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanGA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

PLEASE FIND ATTACHED PAGES (5)

Scan and email to sp0000@2020.gcs.gov.au or post to Minister for Planning and Local Government, GPO Box 1816, Adelaide SA 5000

1. Site Location for Southern Launch

Due to opposition of the site location for Southern Launch at Whalers Way I submit the following proposal for an alternative site, approximately The same distance for Port Lincoln based on the following:

- Whalers Way has been an iconic tourism location for over 50 years. As per the EIS presented by Southern Launch, the site will eventually be closed for tourism and local recreation based on their figures of up to 36 launches annually as the enterprise grows. This is based on their figures of requiring 3-5 weeks to set up and dismantle pre and post launch. 36 launches x 3 weeks = 108 weeks. Other tourism business may be impacted upon by the closure.
- The adjacent high use Fishery Bay / Beach and Sleaford Bay recreational zones may be impacted upon due to heavy vehicles utilising the same roads as visitors wishing to access these locations. The roads will require significant upgrades and additional maintenance which will be the responsibility of the District Council of Lower Eyre Peninsula and its rate payers in negotiation with the proponents.
- The area under proposal for Southern Launch is subject to a Heritage Agreement to the South Australian Heritage Act of 1978 on the Certificate Title 6456368 with exemptions for small parcels to be utilised by Southern Launch.
- The area is relatively undisturbed and has not been grazed for at least 50 years thus making it high value native flora and habitat to fauna species of which some have rated conservation values.

I wish to submit for your consideration the site known as **Shoal Point** as an alternative location for Southern Launch Operations.

This is based on the following:

The entire operation will exist on Government land that is managed by SA Water which currently prohibits access by the public, therefore no closures or impacts to existing high value tourist and local recreational sites will be required.

Shoal Point can maintain the 3 kilometre safety envelope as shown on the attached map. This being distances from existing high value critical infrastructure.

- A. Distance from the location to the nearest SA Water pumping station - 3.67 kms
- B. Distance from the location to the main SA Water infrastructure located at "Uley" - 6.1 kms
- C. Distance from the location to the next closest SA water pumping station - 4.75 kms
- D. Distance from the location to the boundary of the parcel of land utilised by the Wind Farm - 5.83 kms
- E. Distance from the location to the closest wind generator tower - 6.57 kms

I believe this location should be considered with the following in mind:

- This location continues to allow for the development of a satellite launching facility in line with the South Australian Government support for the establishment of a major component of the Space Industry in South Australia and the associated employment opportunities, without necessitating compromise to high valued tourism locations, recreational locations and to native flora and fauna in a Heritage listed area.
- The location I have shown still meets the criteria of being close to Port Lincoln thus providing for the same requirements listed by the proponents for its staff and its overall operations and the benefits it will bring to the town and the state.
- The location still meets the criteria of allowing for a North South trajectory for successful operations while still meeting the requirements as laid out for a 3 km safety zone and for marine and air traffic safety.
- The location will allow for higher degree of safe vehicle access to a launch site that will not compromise shared road usage and safety for existing tourism operations, general public usage and adjoining land holders.
- An existing network of access road and tracks currently exist to service SA Water infrastructure that has no access to the general public or tourism operations and is not the responsibility of the District Council or its ratepayers.
- The road distance of the site from Port Lincoln is relatively similar to the Whalers Way site however most of it can be on the road / track network as described above with agreements made between the proponent and the South Australian Government that will minimise responsibility to the District Council and its limited ratepayer base.
- The area has no Heritage Agreement and appears to be a more degraded parcel of land than the Heritage listed parcel of Whalers Way, as can be seen by the relatively current aerial / photo map attached (14/4/20).
- The location is not within the adjacent Coffin Bay National Park. The boundary of this park is approx 6.5 kms to the north west of the proposed site location.
- The location can potentially be considered as a compromise to assist in negating the current existing opposition to the Whalers Way site thus dividing the community, while still allowing for the development of the facility and the proposed employment opportunities this will bring to the town / state.
- There may be an argument against this location in that the area I have shown is within a Water Reserve that supplies water to a considerable part of Lower Eyre Peninsula and the risk of contamination may exist. However, I point out that the Whalers Way location exists on the same aquifer system and the Government has accepted the proponents ability to negate the risk of contamination, therefore the same acceptance would apply to the SA water land.
- I realise the proponents have spent considerable sums of money in selecting this site at Whalers Way, however much of the base data collected could be transferred to the site at Shoal Point as the geo-structure is within the same geological zone, thus minimising costs in testing for relocation.

Part 2. Water

The proponent advised at the recent public information session held in Port Lincoln that approximately 150,000 litres for water would be required during launching operations.

There was no mention of the amount of water that will be required to upgrade and maintain roads.

The proponent advised that water would be trucked in from Port Lincoln, but it was not stated if this water will be fresh water that will come from the existing town water supplies or from another source.

If the launch site reaches its proposed 36 launches per year in the future, this potentially could be approx 5,400,000 litres of water for the launches and an unknown amount of water for road upgrades and maintenance, fire fighting purposes other operational usage.

Port Lincoln and towns of the Lower Eyre Peninsula have a very limited water supply from the Uley Wanilla Basin and even smaller from the Lincoln Basin. It is of such concern that SA Water has purchased land for the construction of a proposed water desalination plant in the Sleaford Bay area.

I wish to submit my concerns relating to the matter of the long term water security for Port Lincoln and surrounding towns and the potential utilisation of large amounts of the limited water supply for a private venture.

- Where will the amount of water as describe above come from? Will it come from already rapidly depleting aquifer systems.
- If another source of water is to be used, i.e., sea water, what mitigation will be in place to prevent salt contamination to road side vegetation and to the adjacent areas as listed under the Heritage Agreement.
- If large dams are going to be constructed to collect runoff water, where will these be located. If on site, will they be on the Heritage Land exemptions or will additional exemptions be granted.
- If the proposed desalination plant is to be used to supply the water, will the proponents be required to pay for the water as would the residents of the towns.
- The trucking in of such large amounts of water as outlined by the proponents will put the existing road network under considerable duress. How will the overall road management to ensure safety for other road users, the road surface, signage etc be undertaken and by whom? Who will be responsible for the financial cost.

Part 3. Base Environmental Data Collection

From discussions with proponent staff and SA Govt staff at the recent information session I attended, I gathered that to date very limited environmental base data has been collected to enable short, medium and long term assessments to be credible for future environmental assessments to be compared with.

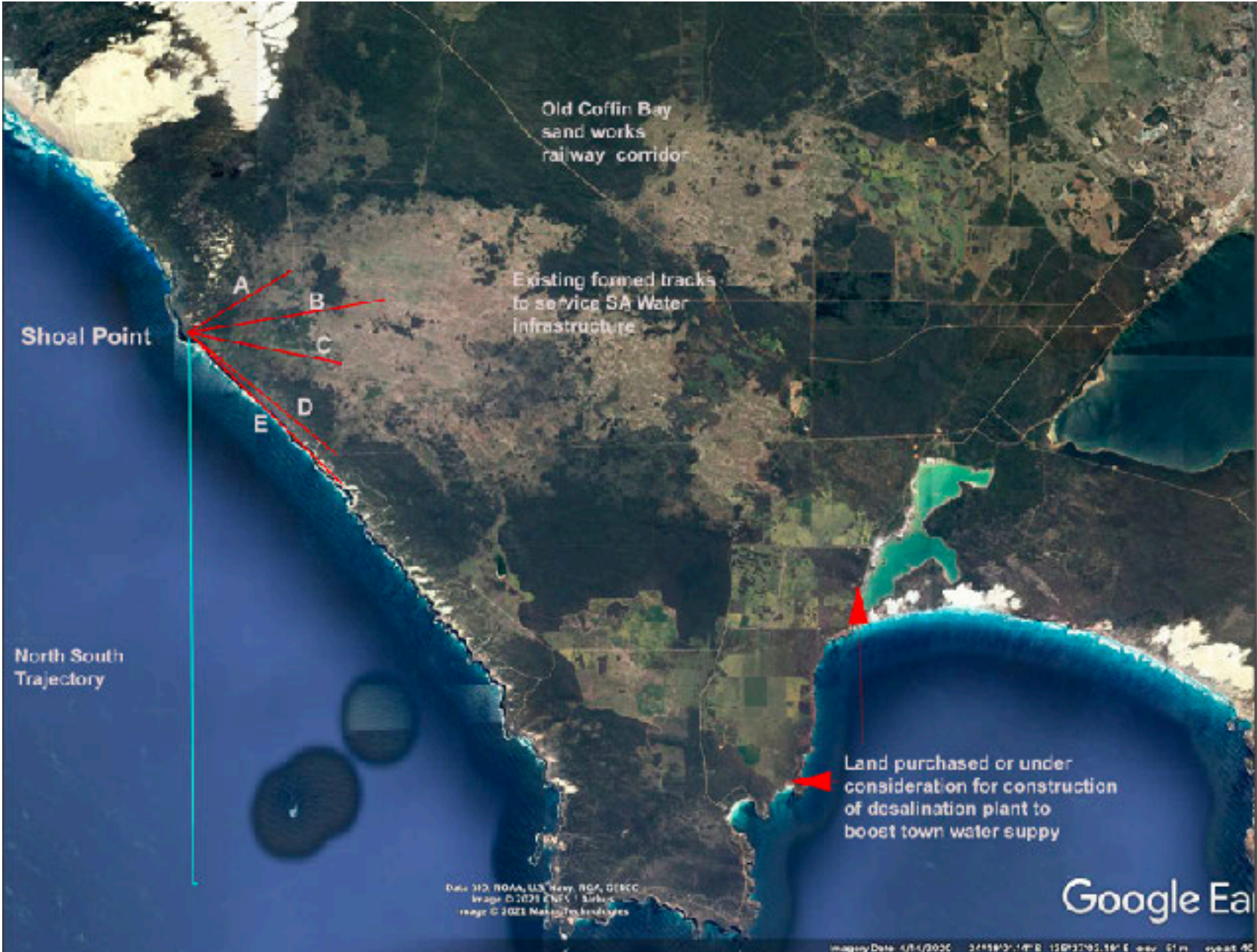
I would like to raise the issue in relation to this base data being collected prior to the commencement of operations on what is essentially land placed under a Heritage Agreement with small parcels of exempted sites.

For example:

New Zealand Fur Seal populations at Cape Wiles and on the adjacent Liguana Island which are both very close to the trajectory path of the rocket launches. The movements of the Osprey at the Ospreys Nest adjacent to the site.

Photo monitoring points being established at all of the proposed locations that have been identified as launch sites, at the operations centre, water storage sites and at other identified operational locations i.e storage sheds. Also monitoring at various places along the internal and external road network in potentially higher risk erosion or inundation determined areas. This should be done prior to operations commencing to determine if wind erosion, water erosion and later to determine if flame damage and chemical leaching is impacting on the sites so that remedial action can be undertaken prior to any significant long term impacts. Without photographic evidence of the current condition of these sites, it will be hard to credibly ascertain if there are any issues that need addressing as they arise and if existing staff knowledge leaves.

The identification, distribution, mapping and photo monitoring of any protected flora and the overall condition of the habitat.



SouthernLaunch.Space Pty Ltd
932/P007/19
Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

I am a resident of Port Lincoln, I am in receipt of the Environmental Impact Statement for the Southern Launch Project, which I have read, and I attended the public consultation session at the Port Lincoln Hotel on Tuesday 24th August. My first comment relates to the efficacy of the Public Consultation Session which although well attended with a capacity crowd was poorly managed. A small group of people had obviously attended both sessions and were determined to monopolise the discussion. Little effort was made to facilitate the meeting so that a reasonable cross section of the interested persons had the opportunity to ask questions. Far too much time was spent by staff of the Proponent making jokes about who would answer which question.

With what I consider to be inadequate opportunity to engage at the public consultation I submit the following statements and views for consideration in relation to the proposal as I understand it.

Section 2 Project Justification

I understand the business drivers for the project. As a consumer of satellite technology I fully comprehend why this is a good opportunity for the State and for Southern Launch. Projects of this type have a habit of not delivering on the proposed outcomes in terms particularly of employment, so I just don't believe the figures. I do believe absolutely that Whalers Way is the wrong location for it which I will elaborate on below.

Section 3 Project Site and Locality

The project site is subject to a Heritage Agreement – that alone should be sufficient to discount it as a rocket launch site.

Currently the site is largely undeveloped apart from tracks and areas for tourism activity. It is fair to say the site has been badly degraded where the tourism activity has been allowed and while I don't have a magic wand my preference would be for the land to be bought by Government as a National Park given the endangered bird life of the area. The lack of care taken of the site by the current landowners should not be seen as an invitation to further damage an important and fragile environment. Despite the absolutely appalling state of the facilities, it does attract tourists and locals to the natural beauty of the area. There is no doubt in my mind that with proper management it would attract many more visitors.

It must be clear from the existing roads (tracks) that this is not an environment that will tolerate heavy vehicles and machinery without significant damage.

The proposed site is very close to Port Lincoln's most popular beach. Fisheries Bay is a place of tranquillity where families go to enjoy the beach, surf and camp. To be relaxing on the beach and having rockets at around 140 decibels launching nearby is not my idea of a relaxing afternoon.

SouthernLaunch.Space Pty Ltd
932/P007/19
Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

I note that the EIS references Sleaford Bay as a proposed site for a desalination plant – fortunately SA Water realised that was not appropriate and have moved on.

5. Project Description

This is no small project and would in fact be – at least in Regional South Australia terms – a major facility. I note that the proposal includes not just two launch pads (and perhaps up to 6) but Administration areas, storage facilities, security and visitor facilities. All requiring access tracks...surely, they mean roads. Then there are the helicopter pads, water tanks, water capture and treatment systems, and so it goes on. This is a big, noisy, disruptive and environmentally damaging facility proposed to be built on an area considered worthy of Heritage listing. Once it's gone there is no going back.

The idea of 30 and 25 tonne excavators, backhoes, scrapers and again the list goes on ripping up what is a pristine environment makes less sense to me than drilling for oil in the Bight – this is just madness.

I concur with the residents of Sleaford Bay and Fisheries Bay who say that this is a major disruption to their lifestyle. I also believe that with the activity required it will be a major disruption to the people of all the Lower Eyre Peninsula. There is no train line, there is no major highway to transport all the goods required it would add significantly to the road risk already putting our transport systems under pressure since the removal of the grain train. If this project were to be approved Government would need to budget for major transport and infrastructure upgrades from Port Augusta to Port Lincoln.

Of serious concern also is the water requirements of the project. I note the statements around water deluge and storage. These are not small matters, there are environmental risks with the deluge I feel quite certain that the deluges will contain chemicals and toxins dangerous to the marine and terrestrial environment.

6 Project Operations and Management

While I have no doubt that the actual launching of a rocket is a carefully planned and executed process the impact that each launch will have on any wildlife that has not already fled the area is unimaginable. Migratory Southern Right Whales are common between July and September in the area, a colony of Pointy Nosed Seals has taken up residence near Redbanks and will be foraging in the area, endangered Australian Sea lions breeding on Liguna Island will be impacted as will Eastern Osprey, White-Bellied Sea-Eagles, Southern Emu Wrens and Western Whipbirds – ALL ENDANGERED!!

7 Effect on Native Vegetation

I just don't know enough to comment specifically on terrestrial or marine vegetation, but I cannot for one minute accept that the impact of such a major chemical using facility could be anything but damaging.

SouthernLaunch.Space Pty Ltd
932/P007/19
Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

As someone who has studied birds for more than 30 years, a citizen scientist and a registered bird tour guide I am certain that the loss of habitat will have a major impact on the diversity and volume of birds in the area. In equal or perhaps even greater part the risk to bird life from the disturbance of large machinery and 40-60 people in the location regularly will be catastrophic to birdlife.

8 Noise and Vibration Impacts

I am gobsmacked that the terrestrial biodiversity assessment was a “desktop assessment” using various public resources. Field surveys followed over two-to-three-day periods – not enough to adequately assess the presence of migratory birds that arrive late in October and leave around March/April each year for Siberia.

The Southern Emu Wren and the Western Whipbird are masters at hiding so having an accurate indicator of the presence of these species can only be built through years of visits and an intimate knowledge of the environment and the birds’ habits. The researchers used calls to attract a call back – that alone used over any extended period of time would stress the birds particularly in breeding seasons – so already there is an impact.

There is no doubt in my mind based on everything I have learnt over 30 years that the impact on the Southern Emu Wren and the Western Whipbird will be significant. The actual rocket launch would likely be “the last straw” the impact of an industrial facility will have lasting negative effects.

The effect of noise on birds generally has been well described at 8.5.6.1 – birds will flee, birds will abandon nests. There is no way to mitigate against that and therefore Whalers Way should not be approved for rocket launching activity.

9 Effect on Native Fauna

This is the area of greatest concern to me. I have been studying Eastern Osprey for the past 4 years including in 2020 being part of the research approval to fit the first Satellite Tracker on an Eastern Osprey and to band three fledglings.

Eastern Osprey and White-Bellied Sea-Eagles are reported (Dennis and Detmar) to be in decline in South Australia. The Government of South Australia through the Department of Environment and Water have established a Osprey and WBSE Recovery Project to stem the decline. A significant factor for Osprey has been the loss of nest sites due to development.

White-bellied Sea-Eagles do nest in the Whalers Way area and forage right along the coast. They also nest on the nearby off-shore Islands and this project puts the nesting pairs significantly at risk.

Eastern Osprey have three abandoned nest sites in the vicinity of the proposed facility. What we know from our observations and from overseas experience is that Osprey will sometimes abandon a nest site – perhaps one of the pair dies but they can and do return to

SouthernLaunch.Space Pty Ltd
932/P007/19

Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

abandoned sites. An example of this currently is occurring at the nest near the Oyster Lease in Coffin Bay. That nest has not been used for at least five years but this year a pair are nesting on the site. They have been observed repairing the nest, copulating and are expected to have eggs very soon. There is every chance that as more successful fledging's happen from the Port Lincoln Barge nest site a new pair will once again use the Whalers Way nests. One of the banded chicks from 2019 (Calypso) is regularly seen at Tulka along with two other Osprey (1 male and 1 female) these appear to be young Osprey and there is every likelihood that in 12-24 months when they pair up and start looking for a nest site that Whalers Way will be an opportunity for them to nest.

I note that your EIS claims that the nests at Whalers Way have been abandoned due to human activity. It is the view of those involved with the Port Lincoln Osprey Nest that Eastern Osprey can and do habituate to human beings. It is very evident from the tracking of "Solly" the satellite tracked bird from 2020 that she prefers locations where humans are present spending much of her time in the township of Streaky Bay and Eba Anchorage. So to claim that the Whalers Way nest have been abandoned because of tourist in the area is in my view not correct and most certainly does not allow for the conclusion that birds would not use the nest sites in future. Noise from heavy machinery and sonic booms from rocket launches would almost certainly mean the nests were lost.

10 Introduced plant and animal species

Just the sheer volume of traffic that would be accessing the site must increase the risk particularly of introduced plants species to the area.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u> ✓
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

26/8/2021
I have filled out this submission in support of Southern Launch and its facilities & proposals.
It will be of major benefit to Port Lincoln & South Australia in the way of employment and the general economy. The positive roll-on effects of skilled labour will also be a benefit as will the tourist attraction & show casing Port Lincoln and surrounds internationally.
I hope to see launches commence in the near future & wish Southern Launch a successful and long lasting enterprise.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Number 932/P007/19
Whalers Way Orbital Launch Complex Proposal
Environmental Impact Statement

I have read the environmental impact statement in detail and I feel the area of most concern are the pages relating to noise modelling impacts of the threatened fauna in the area. Specifically, the Southern Emu Wren which is listed as vulnerable.

The Southern Emu Wren (SEW), as mentioned in the EIS, is one of 5 critical populations in the western regions of SA and is limited in range to suitable habitat which is predominantly very low dense coastal wind pruned heath. There is a very thin band of this suitable vegetation hugging the coast and it is limited in size by the changing vegetation associations further inland and by the cliffs towards the coast.

This band of suitable habitat for the SEW lies directly in the path of launch site A and to a lesser extent site B. I find this a remarkable failure to limit not only the habitat destruction which is a critical component of this species survival, but also the potential noise impacts on the population dynamics.

I'd like to explore the EIS noise modellings and the potential impacts in detail:

The EIS mentions that the Federal Aviation Administration defines a 'significant impact' due to aviation noise as a noise greater than a DNL (day night average sound level) of 65dB and compares this with 3 residential houses (house sites A, B and C) where the levels are estimated at 63dB. However, the modelling and mapping also suggests that at the proposed launch sites a level of 135dB at the epicentre would be reached. The EIS also suggests that a threshold of 140dB identified by AECOM is the permanent hearing damage threshold for wildlife.

The reason I mention this is because most larger birds are able to rapidly move away from a source of noise/stress by flight. The SEW, however, almost invariably goes to ground simply because they are a small wren with feeble flight characteristics (Pizzey and Knight 2013) and tend to rely on crypsis and camouflage as their main defence against stress/threat. With a potential permanent hearing damage threshold of 135-140dB in close proximity to the launch pad and no means of escaping effectively, it is highly probable that these individuals could suffer permanent hearing damage if they remain in close proximity.

Other generalised noise impacts in those areas (launch sites A and B) of not only construction, but the proposed wildlife scaring gas guns, the estimated 56 cars a day to those sites on launch days and, as mentioned before, the expected 135dB rocket noises will have a major and detrimental impact on the long term viability of these local populations.

To put this in some perspective. I recently recorded a pair of very rare birds in the Mt Lofty Ranges. (This record is on the Biodiversity data base of SA). I saw these birds regularly when I visited the site, until a singular habitat/noise disturbance took place. They have not been seen since. My point being that it is unknown how dramatically or irreversibly any impact might have on birds, especially these smaller vulnerable species. Therefore at a bare

minimum, every effort should be made to preserve the status quo and not to increase the threatening processes.

I understand that there will be test launches to record the impact of potential disturbance and noise on these species but I am gravely concerned that; 1. there are no existing documents or known examples you can draw upon to assess the impacts without subjecting these populations to noise disturbance and, 2. potentially impacting a known population to experimental disturbance with the outcome of possibly displacing that population. I therefore strongly object to the testing process.

I also strongly disagree with the site locations as outlined in your proposal, more specifically launch site A where the highest densities of SEW have been recorded, both recently and historically. I would also like to point out that in the EIS there was no mention of the possible impacts to threatened bird species from a perspective of their pairing, mating and recruitment (ie breeding seasons).

To pair, a bird needs to display, either physically or by call and usually both. They also need suitable habitat for nest building. And for incubation, time is needed with an essential lack of disturbance, stress, noise, distraction or predation.

Unless the proposed facility is closed during critical breeding seasons of SEW (September to January) then it is highly likely there will be adverse effects to the recruitment of this vulnerable species in the proposed locations, especially at site A. It is also worth mentioning that the same harmful impacts applies to several other vulnerable species that spatially overlap launch site A like the White Bellied Sea Eagle (breeding May to August), Osprey (breeding April to July) and the Western Whip Bird (breeding July to November).

I would also like to mention that I find the process of changing land use from Heritage agreement and private conservation to a private development with the incumbent SEB offsets very erroneous and disappointing. A heritage agreement by its very nature is meant to protect land for conservation purposes in perpetuity. This area is critical for the long term survival of the SEW.

And whilst I agree with the 'in principal' SEB offset components of this project and the remediation after vegetation removal, I can see absolutely no environmental benefit in placing a rocket launching facility on top of a known location for a vulnerable species such as the Southern Emu Wren, especially at launch site A. In fact, it is abundantly obvious that the two are diametrically opposed. Unfortunately, I therefore see this proposal as an abject failure in terms of critical conservation aspirations and outcomes towards the Southern Emu Wren.

Commentary on Southern Launch's E I S – Submission by Private Citizens -

The Proposal for establishing the Launching Station at Whalers Way is wholly supported.

Geographically-advantageous Location of the Whalers Way Launch Site: This location has the geographical attributes favouring polar and sun-synchronous orbits, as detailed in the EIS submission. When the project eventuates at this site, these attributes will be of increasing attraction to the space industry.

Educational Benefit: The attraction will be enormous for the public of Australia, and particularly for our youth, should they be given their chance to observe any rocket launch. Attaining mastery of the Physical, Mathematical and Scientific disciplines has a curious way of becoming a life-long passion. Just one launch could turn an ordinary life into one with greater purpose and drive.

Economic Benefit: These have been addressed in the EIS. Revenue of Southern Launch would need to be directed into upgrading arterial roads. This is foreshadowed in the EIS.

Environmental Shock: The measures of noise and vibration cannot possibly compare with those of the natural effects of atmospheric electrical discharges. **In short, no-one wishes to compete with nature's own lightning.** The isoceraunic statistics for this area are obtainable from BOM. While working for ETSA as a distribution engineer and manager, it became necessary to quantify the exposure of the Eyre Peninsula Distribution System to lightning outages. The result was compellingly large. **Lightning strikes to the order of 10 000 (and more) cloud-to-earth discharges and cloud-to-cloud flashes occur over the peninsula in a remarkably short period, perhaps 3 years.** These strikes were not confined to dry summers and dry bush, but were also sea-borne. Winter storms have been equally injurious, this being relevant to the argument, for the winter-migrating right whales continue to congregate at the Head of the Bight. Such is the energy released and shock transmitted that exposed human, sea and animal forms have no refuge. **One can only guess at the task of quantifying the loss of faculty within the natural world of sea, land and bird life that happen to be caught by those strikes.**

The environmental brief disruption caused by a rocket launch has been, and is about to be well measured and documented. **This data can hardly compare with the frequency and size of nature's energy releases.** The whole-of-life animal, sea and bird kingdom has dealt with electrical storms since time immemorial. In particular, loss of hearing by right whales might be necessarily measurable for this study. But **commonsense shouts loudly that loss of faculty on animal, avian and sea life, caused by rocket launch, has to be many levels below that caused by the immensity of lightning.**

Quantifying bushfire propensity by rocket launch failure is estimable, statistically, and by actual count. This aspect is well catered for in the proponent's submission.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development



Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	(A private citizen)
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

A: WATER USAGE - PORT LINCOLN REMS ON GROUND WATER FROM NEARBY ULEY BASIN, AN EXTRA 6 MILLION+ LITRES PER ANNUM WILL PUT EXTRA STRAIN ON OUR WATER SUPPLY

B: NO SHOWN PROPOSAL FOR EXTRACTION OF CONTAMINATED WATER FROM DAMS CONSTRUCTED ON SITE, WHERE WILL THIS WATER END UP WHEN THESE ON SITE DAMS ARE FULL? ALSO A COMBINATION OF CLAY AND POLYMER IS NOT A PERMANENT SEEP PROOF COMBINATION, CREATING A POSSIBLE CONTAMINATION OF PORT LINCOLN'S ONLY WATER SUPPLY

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

C: PORT LINCOLN'S ONLY NATURAL DISASTER CONCERN IS FROM FIRE, OUR CFS IS ALL VOLUNTEERS, MOSTLY FARMERS, WHO DON'T HAVE TIME OR PATIENCE TO FIGHT DELIBERATELY LIT FIRES FROM THIS ~~SIGHT~~ SITE. IT IS ALSO VERY DENSE SCRUBLAND THAT BORDERS ON NATIONAL PARKS!!

D: PORT LINCOLN WILL SEE VERY LITTLE JOB OPPORTUNITIES FROM THIS PROPOSAL.

E: FUNDING – IS THIS AUSTRALIAN OR OVERSEAS CONTROLLED FUNDING??

F: EMISSIONS – AN EXTRA 1.6-2% OF THE STATES TOTAL, DIRECTLY OVER 2 OF THE STATES MOST PRISTINE NATIONAL PARKS!

G: PROPOSED DESALINATION PLANT CREATING MORE ENVIRONMENTAL IMPACT WITH NO BENEFIT TO PORT LINCOLN ITSELF.

H: THE SITE ALSO BORDERS EYRE PENINSULA'S ONLY MAJOR POPULATION OF KOALAS, THE ROAD SERVICING THE ROCKET SITE TRAVERSES DIRECTLY THROUGH THIS KOALA HABITAT, AT THE PEAK OF THE ROCKET SITE'S OPERATION THIS WILL MEAN 2-3 THOUSAND TRUCKS TRAVELLING THIS ROUTE PUTTING THESE POOR ANIMALS IN GREATER INCREASED DANGER.

I: NO PROVISIONS FOR MAINTAINING ROAD TO SITE WHICH HAS ALREADY HAD MAJOR DETERIORATION FROM SITE'S HEAVY TRAFFIC.

Address

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,



TREVOR PROW

49 YORK ST 5606

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="radio"/> Owner of local property
	<input checked="" type="radio"/> Occupier of local property
	<input type="radio"/> A representative of a company/other organisation affected by the proposal
	<input checked="" type="radio"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Please see attached Letter.

Dear minister .

The location of the Southern Launch Rocket launching facility currently testing at Whalers Way near Port Lincoln is wrong with respect to so many considerations. Many of these issues have not been adequately assessed.

As residents of lot 35 Fishery bay (1190 Fishery Bay Road Sleaford SA) and with our home land sharing an immediate boundary with Southern Launch rocket facility, my son Tobias Threadgold and I are appealing for the development of a rocket launching facility by Southern Launch at the area known as Whalers Way to cease operation for the following reasons:

Please consider that any impact study already undertaken cannot be valid without years of extensive observation , the things i talk about in this submission are more glossary than comprehensive , the considerations are far to complex to truly convey here, and too variable with weather/seasonal changes , this includes assessment of noise level as disturbance , eg. the sound of the waves on rocks of the coast near the rocket range often sound like booming thunder at Fishery Bay , the atmospheric conditions often create an amplification effect of sound , even the shuddering of the waves crashing sometime transmits to the area of my/house, but this is all soft and continuous in the distance , but if rockets launch in the same condition then the sound will be absolutely terrifying for the animals and birds , and also it will be very unsettling to myself and my Son and his future family , also the sound will travel to all areas of the district therefore noise assesment must be done in all conditions and at many locations of the district .

I am not a proffesional writer , please allow un-proffesional presentation and lets all consider as people with intelligent reasoning and compassion not statistical facts alone . also please forgive the repeating of some comments . i am sure you will get the essence of concerns .. and please let this be discussed further .

thankyou for taking the time to read and consider this correspondence

1

*This area and the surrounding area is zoned COASTAL PROTECTION(CONSERVATION) /HERITAGE LISTED () as is the surrounding area also the area is heritage listed. There is NO PRECEDENT of a coastal protection (conservation) zone in this area being converted to industrial zone. Our home land adjoining the proposed rocket range is zoned coastal protection (conservation) and residential, it is wrong to allow an industrial zone in these circumstances.

the following comments are copied from a past interview with Lloyd Damp (CEO of Southern Launch)

*"And you can't be within a protected area – you can't go and convert a national park into a rocket launch site. "

*(As stated above the rocket range is sited on coastal PROTECTION land which is also heritage listed . and adjoining coastal protection residential propertys , the re-zoning to industrial is without precident and unfair and inequitable to the residents of the area who have had all applied restrictions of coastal protection zoning . as well as believing the local zoning rules are to be applied for people for all time and as such we the residents of the area haver developed our plans and invested time and finances for ourselves and our families for the living condition to which we are accustomed and believe would be securely maintained .

2

I/we(myself and my Son) have lived here for 30 yrs with all restrictions of development of coastal conservation this is what we have believed is to be rulings applied to all of the area. If this rocket facility is not ceased the disruption to our condition and status of living of which we are accustomed will be severely disrupted by regular excessive noise , toxic fumes, smoke and other rocket exhaust gasses,(there is no proof of future rockets to be launched will never emitt any toxic gases , no matter what regulation applies it is undeniable that over an extended period of time there will be an accumulation of chemical residue deposited on the surrounding area , including my/our home property also increasingly heavy vehicle traffic and dust from road making etc. will be an overwhelming intrusion .

Neighbourhood Disturbances Statement

A neighbourhood nuisance is any adverse effect on an amenity value of an area that interferes or is likely to interfere, unreasonably with the enjoyment of the area by persons occupying a place within, or lawfully resorting to the area.

Nuisance can be in the form of dust, odour, noise, smoke, fumes, aerosols, vibration and insanitary or unsightly conditions from domestic, commercial and industrial premises.

For an activity to be considered a nuisance, it must unreasonably interfere with your ability to undertake the normal activities that you would reasonably expect to be able to do.

3

Water Use

The suggested catchment dam for water supply for this facility will obviously require a pumped supply if obtained locally there will be detrimental effect on the water tables, (DEWNR, 2017) including leaching of toxic chemicals into the aquifers and sea.

“Within the Southern Basin PWA, the Uley South Public Water Supply consumptive pool has been reserved exclusively for the purpose of providing public water supply. Licensed groundwater extractions occur predominantly from the fresh groundwater lenses within the Quaternary limestone aquifer. In 2015-16, metered extractions from Uley South totalled 5344 ML, which represents a 4% increase from both the previous water-use year and the five-year average annual extraction. This volume of extractions equates to 73% of the total allocation limit for the Uley South consumptive pool and accounts for 96% of the total licensed extractions within the Southern Basins PWA.” (DEWNR, 2017, p. 2).

DEWNR (2017). Southern Basins PWA Uley South 2016 Groundwater level and salinity status report, Government of South Australia, Department of Environment, Water and Natural Resources, Adelaide. This area has aquifers which we all use domestically , it is impossible to ensure there will NEVER be any contaminants leaching to the aquifers.

4

The area of Whalers Way is very rare and fragile. To consider any form of detriment to this area is very irresponsible. The noise, toxic exhaust chemical fallout, and the very presence of a busy industrial operation with all the imposed risk of fire and contamination will obviously be very harmful to the entire surrounding environment.

The endangered species of the area include:

Western whipbird

Southern emu wren

Australian sea lion

Southern Right whale

Migratory species include:

Osprey

White bellied sea eagle

Southern Right whale

5

The effects of toxic fallout will without doubt be very harmful to all life in the area, there are many delicate fauna and flora here as well as Kangaroos, emus, a very diverse bird population etc. As well as humans living here. Is the welfare of Australian native flora and fauna and that of Australian citizens There can be no assurance of the safety of exhaust emissions of future rockets (any emission will eventually accumulate , and over time become harmful to all living organisms including the people living close to the rocket

range . Also there can be assurance of no occurrence of accidents , therefore the rocket range should be in a location with a substantial area of no population and no substantial amount of flora and fauna especially highly flammable , impenetrable scrub with residential properties adjoining and houses in very close proximity .

6

We (My Son and I) have a family of Kangaroos living close to our house, we have observed them daily for 28 years. We see how very afraid of sudden noise and disturbance they really are; we have witnessed them leave the area when a major disturbance occurred approximately 6 years ago. These were animals who were in a very ideal situation with permanent food and water and yet they still abandoned the area. Six years later there is only just now a new family of Kangaroos tentatively repopulating the same area, they are extremely sensitive to sudden noises and disturbances. The kangaroos are currently birthing Joeys. please see the attached photos all within 20 mtrs of our house , the entire area is a habitat for many such animals.

The birds here also are accustomed to the sanctuary of quiet, now they are nesting, if scared away, even if eventually returning, the eggs or chicks will die if left unattended for too long.

7

As i suggested before all of South Australia has been promoted as Clean/Green and is very desired by international visitors. To blemish one of the main destinations with this industrial rocket launching facility is harmful to the many businesses that are supported by the Clean green seeking visitors ,after covid travel restrictions are lifted the visitor trade will resume and grow especially while other areas of the world are losing or have lost the natural beauty places. Is that not of

national importance? This rocket launching facility would be far better sited in a remote unpopulated area of low environmental status, and develop it to the full potential including educational facility, accommodation village, and tours. It would then create an entirely new attraction for high tech loving visitors. The clean/green loving visitors want the SA GREAT pristine image. It is ridiculously irresponsible to pollute one of the most pristine natural environments with an industrial development! After Covid travel restrictions ease there will be an influx of visitors seeking to escape their industrial noisy home land and find respite in our S.A. GREAT paradise, this will be a very lucrative income for all businesses across Eyre Peninsula, let the 2 attractions have their own identity and visitor destination not many will want both in the same place and neither can flourish in that way. I have friends in China, Japan and Scotland, they are all appalled at the proposed rocket launching facility at Whalers Way !! SA GREAT reputation is being tarnished.

Also the Asian market for tuna and all of EP seafood is supported with the belief the tuna come from unblemished waters, Japanese and Asian people are extremely selective, This rocket range will likely be very damaging to the reputation.

8

The only way this rocket facility will employ any reasonable number of people will be if it grows to large proportions in which case it is definitely in the wrong place.

9

This area will very likely become a military target is this not of national importance?

10

The home property I share with my son is immediately adjoining the area occupied by Southern Launch.

There has been no consideration or consultation with us with regard to the obvious potential event of toxic exhaust chemicals being deposited on our home land other than to state the rockets are approved, without comment on what will potentially develop.

The terrible stressful noises and industrial activity that will be surrounding our home is a severe intrusion, and is already causing me/us great anxiety. In fact the stress is exacerbating my health issues of high blood pressure and heart condition (under care of a cardiologist and stress under care of a Doctor), it is irresponsible to allow this intrusion on an unwilling local population of residents. This rocket range is crushing many people with anxiety, anger and disbelief, not just immediate residents but in surrounding towns as well.

Is the deliberate allowance of potentially toxic and potentially cancer causing agents being deposited on local flora and fauna and Australian citizens their home and home land not of national importance?? Again there can be no guarantee no emissions of future rockets will not contain any harmful elements at all, over some years these contaminants even if minor or miniscule will accumulate, as rockets become larger the surrounding areas will receive contamination. And again, there can be no assurance that there will not be an accident, today 15 September 2001 an attempt to launch resulted in a malfunction 1 of the 4 boosters /engines of the rocket, if this occurred after it launched there would be very high potential of a fatal accident, the adjoining residents would be

at extreme risk of death , in the very least the resultant crash would be catastrophic to the environment and very high potential of a fire in dense impenetrable scrub surrounding residential properties , no fire action plan will be effective in the event of a bush fire if it is the impenetrable scrub surrounding the range .

11

Noise pollution

The Noise Policy controls the level of noise exposure that should not be exceeded for people living near industrial and other non-domestic premises.

Ideally, factories and houses should not be located near each other; however, when they are, both have to accept restrictions. Noise levels that should not be exceeded for both day and night have been set for premises operating in different areas, for example, lower noise levels apply to factories operating in a residential area than to those in an industrial area. This allows a balance between the needs of industry and housing.

The maximum permissible noise levels listed here are used as a guide in deciding whether the general environmental duty has been met. When assessing a complaint about noise from industrial or non-domestic premises, the authorised officer will take into account other factors such as other contributors to the ambient noise in the area, the reasonable and practicable measures available for noise reduction, the financial implications of those measures, and their likely success.

Land use category	Noise levels not to exceed in dB(A)*	
	7 am–10 pm	10 pm–7 am
Rural Living	47	40
Residential	52	45
Rural Industry	57	50
Light Industry	57	50
Commercial	62	55
General Industrial	65	55
Special Industry	70	60

* Measured according to the Noise Policy at any place, other than the premises from which the noise emanates, where a person lives or works.

Where different land uses for the noise source and the noise receiver interface, or where council development plans indicate a mixed use zone, the noise levels are averaged to give a noise level to be met at the noise receiver.

Where to get help

A range of local, state and Australian government bodies are responsible for managing problems arising from different types of noise. A chart detailing those responsibilities is included in the EPA publication, *Guidelines for the use of the Environment Protection (Noise) Policy 2007*.

12

Also as Cape Canaveral have very extensive nautical safety /exclusion zones during launches, why has nothing been mentioned about exclusion zones for larger rockets when/if they/this facility doesn't relocate as it should ! the following is a comment that seems to indicate that even if the rockets proposed for Whalers Way facility are smaller , there will still be a need for an extensive exclusion zone , this will be disturbing to the fishing industry

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under authority in 46 U.S.C. 70034. The Captain of the Port Jacksonville (COTP) has determined that potential hazards associated with a space vehicle launch, on August 27, 2020, will be a safety concern for anyone within a 240 square nautical mile (nm) area seaward of Cape Canaveral, FL. This rule is needed to protect personnel, vessels, and the marine environment in the navigable waters within the safety zone during launch.

13 cont.

While it is understood that the rockets proposed for the Whalers Way range are to be up to 30 mtrs high and the Cape Canaveral rockets are much larger , there will still be a nautical exclusion zone over an area frequented by commercial fishing boats and recreational boating including local and travelling yachts , the following comment made by Lloyd Damp is an indication of the intention to expand the range , with that the already imposing nautical exclusion zone will increase dramatically .

WATER TRAFFIC RESTRICTIONS

SOUTHERN EYRE PENINSULA

Notice is given that pursuant to Section 26 of the *Harbors and Navigation Act 1993*, the Department for Infrastructure and Transport has granted an Aquatic Activity Licence to SouthernLaunch.Space Pty. Ltd. during the conduct of up to three Rocket Launches from the Whalers Way Orbital Launch Complex across three launch campaigns totalling up to 15 notified launch occasions from Sunday 05/09/2021 to Friday 31/12/2021 as follows:

An area of water south of D'Anville Bay and Fishery Bay.

Bounded on the West side by a line between the shore at (34° 53' 27.0"S, 135° 36' 12.2"E) to (34° 56' 15.4"S, 135° 33' 32.8"E) and on to (35° 00' 00.0"S, 135°34'7.00"E).

On the East side by a line between the shore at (34°55'24.37"S 135°41'17.95"E) to (34° 56' 30.0"S 135° 43' 22.3"E) and on to (35° 00' 00.0"S 135° 135°45'6.87"E).

On the Southern side by Longitude line 35° 00' 00.0"S

For safety reasons, vessels and persons other than those participating in the event are prohibited from entering the above area of water on the notified launch occasions from Sunday 5th of September 2021 until Friday 31st of December 2021.

Boating and surfing access to Fisheries Bay and White Point will remain open at all times.

SouthernLaunch.Space Pty. Ltd.

14

The following comment by Lloyd Damp CEO indicates the intention to expand the range to enormous proportion

"When it comes to a more critical time in the lead up to launch we will blocking off 440 kilometres of air space down range. It gives you an idea of what this vehicle is capable of doing." (any area below the flight path will be at risk)

If we just look at going to the Moon as the end goal, besides planting the Australian flag on the moon, which I think would be awesome, the impact it will have for us here on Earth is astronomical.

So what time scale are we talking about here? The next decade? In our lifetime? The next 100 years?

Honestly, I believe that we could do this in probably five years – send something to map out the resources on the Moon.

Obviously large rockets are proposed . and the nautical exclusion zone will be very substantial . as will the risk to surrounding residents .

as an indication of what to expect as potential exclusion zone as the range expands operation the following is a comment from a Cape Canaveral internet site(not intended to be an accurate comparison , but rather an indication that the exclusion zone will indeed expand

III. Legal Authority and Need for Rule

The Coast Guard is issuing this rule under authority in 46 U.S.C. 70034. The Captain of the Port Jacksonville (COTP) has determined that potential hazards associated with a space vehicle launch, on August 27, 2020, will be a safety concern for anyone within a 240 square nautical mile (nm) area seaward of Cape Canaveral, FL. This rule is needed to protect personnel, vessels, and the marine environment in the navigable waters within the safety zone during launch.

15

Kooniba area was chosen for test launching by Southern launch and promises of much benefit for the local residents and 1st nation people of the area , it seems logical to find an unpopulated area of low environmental diversity and sensitivity and establish a permanent rocket range with view of expanding to globally recognised proportion , with that there would be an opportunity to establish accommodation /village safe viewing areas tours etc. and create an entirely new focus of attraction for visitors seeking the more high tech destinations of Australia , S.A .GREAT promotes South Australia as clean/green with wineries , beaches, unblemished nature zones etc. It is irresponsible to blemish the reputation with a rocket range amongst one of the most pristine beautiful coastal protected areas , an area already loved by international visitors , as well as Whalers Way the entire lower Eyre peninsula is desired as a destination , for people seeking to escape the industrial atmosphere of their home places , and Rocket Range 'village' would be an addition not a blemish. After covid travel restrictions ease there will be a flood influx of international visitors seeking the SA GREAT clean/green image , and also there could be a new genre of visitor attraction .

16

As the immediate adjoining neighbour i/we have had no consideration ,. despite the fact that when a few years ago an application for approval of tourist accommodation cabins to be established in the area all local residents likely to be impacted by the development were given an opportunity by council to approve or disapprove of the development , however when a rocket launching facility applied for approval to convert coastal protection/heritage listed land adjoining residential property and establish a rocket launching facility the local residents were not given the option of approval or disapproval , although there is clearly a precedent of this .. I/we request response from and contact with the Prime Minister and the Minister of Planning , and in order to discuss my/our concerns . please allow my/our rights of safety and status quo of dwelling as Australian citizens and residents of the area .

Yours sincerely

The very first issue to be addressed , and should not have been proceeded past in the early stages is the fact that the entire area of the proposed rocket range and the surrounding area is zoned coastal protection with some being also heritage listed . The residents of the area of coastal protection are all bound to the restrictions that apply to property zoned coastal protection . It is unfair and inequitable to the residents who have lived with these restrictions since the impementation of coastal protection zoning of the area. . I contacted the State planning authority to challenge this permit of rezoning ,, the response i received indicates a grossly unjust vioation of the zoning laws and also the rights and status of the people who own property with coastal protection zone restrictions . Are the laws not equally applied to ALL citizens ?? The following comment is an extract from the formal response of the S.P.A.which is also included in full in the attachment

The current zoning of the land (under the Code), whilst relevant and will be taken into account in the assessment, does not form the primary assessment criteria, as bespoke development guidelines (which are far more extensive and prescriptive than matters considered by the Code) were previously settled by the Commission, and have guided the preparation of the EIS. This is the most rigorous and highest level of assessment in the SA Planning system.

bespoke

[bɪˈspəʊk]

ADJECTIVE

BRITISH

made for a particular customer or user.

"a bespoke suit" · "bespoke kitchens" · "bespoke software systems" · "group tours and bespoke itineraries"

making or selling bespoke goods, especially clothing.

"the bespoke tailors of Savile Row"

No consideration should justify a specially created development guideline to permit even a temporary re-zoning from coastal protection /heritage property to industrial, adjoining coastal protection /residential property There is no precedent of this occuring within the coastal protection zoned area . Also there is precedent of the DCLEP inviting residents of the area to espress comment of approval or disaproval for an application to develope accommadation cabins on a coastal property sited nth end of Fishery bay as the developement would potentially impact on our status of dwelling, however no similar opportunity was offered with regard to a rocket launching range receiving approval to operate within our neighbourhood .

Also we,the residents, have accustomed and acclimatised to the existing status of coastal protection zoning rules , we have prepared for a future with this status applied , as our families have also planned and invested in establishing their future with all considerations based on the existing status , in fact some have actually purchased their coastal protection zoned property with the status as the main factor, we all could have established next to an industrial property decades ago , and now we have had an industrial zoning propery imposed upon us within our coastal protection zoned neighbourhood, with the industrial zoned property adjoining the coastal protection/residential property which is home to my Son and I .

In summary I say the original temporary approval for rezoning a property from

coastal protection/heritage to industrial was executed in violation of the constitutional rights of the residents in the area as well as being a blatantly wrongfull action .

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

	I vote in favour of this project.
①	Living in a world rapidly + increasingly reliant on cyber technology, it makes sense to support the developing systems in the form of satellites, to support those systems.
	This is our reality now.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

② I believe this project will bring work
an business opportunities to the people
of the Eyre Peninsula, specifically
Port Lincoln

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle): <input checked="" type="checkbox"/>	Owner of local property
<input type="checkbox"/>	Occupier of local property
<input type="checkbox"/>	A representative of a company/other organisation affected by the proposal
<input type="checkbox"/>	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent’s Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

The site chosen by Southern Launch at Whalersway is an appropriate and excellent choice for the planned orbital launch.

The Whalers Way site means the rocket will be launched over the ocean having low impact on air and maritime traffic & those craft will be notified by a government release of any areas that would be affected by the launch.

Port Lincoln is only 35 miles from the site so access to industry is an important benefit. There is also a good airport and harbour available. Accommodation & hotels save also a useful addition.

I am highly in favour of the project as it would bring a lot of employment and businesses to Port Lincoln. The opportunity of new jobs into the future would also be a welcome boost for our young people looking for work.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input type="checkbox"/> Occupier of local property
	<input type="checkbox"/> A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I fully support Southern Launch developing a space launching site at Whalers Bay. I know that the environmental impact on flora & fauna will be minimal & in fact improve biodiversity. I trust the research done & State environmental authorities approval. It is wonderful that South Australians are showing initiative & drive towards independence from the rest of the world.

Whalers Way is far enough away from the residents of Port Lincoln but close enough to facilities such as the airport, shops, accommodation, & various business.

The beautiful & coastal scenery will not be impacted & perhaps the roads upgraded to carry extra traffic.

Whenever we have taken our visitors to our favorite sites there have been hardly any other cars only 1 or 2.

Submission on Application
 Development Act 1993
 Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	<input checked="" type="radio"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="radio"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

As a young citizen of Pt Lincoln, I believe this will be good for the community as for jobs and exposure. Also being a first time mum I believe its good for education & jobs.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I have chosen to live in a quiet + remote part of South Australia. My property is close to the road. I am concerned that during the construction phase 12 semi trailers and 15 SUVs will be passing my home per day and once completed Southern Launch will ~~ma~~ add 15 semi trailers and 56 vehicles per day to the traffic past my home (quoted today by a Southern Launch representative). Noise, pollution, dust, privacy, safety are all concerning to me. Wildlife is also at risk from increased traffic. This is an isolated, natural area that cannot become an industrial site!

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u> ✓ who knows this is a very
Other:	precious environment that gives us great pleasure as well as the home for many animals & plants.

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Concerns * Major fire risk - heritage listed conservation area - surrounded by huge scrubs areas outside Whalers Way - dry & hot in summer.
 * Major threat to tourism & fishing industry
 * A wonderful peaceful relaxing area for locals - famous for surfing, camping.
 * & great for mental health.
 * Serenity will be spoilt destroyed by fuel tankers, oxidizer deliveries, crane movements, septic tank vehicles & so on (dangerous road conditions)
 * destruction of habitat for endangered species - plant & animal
 * land clearance (plants, eco-systems) for launch & helicopter pads, & for buildings etc.

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed, .

AGD:Attorney-General
Rocket Launch EP.
Thank You For Your Email.

The Hon. Vicki Chapman

Parliament House

30.08.21

Dear Ms Chapman,

Eyre Peninsula's iconic reputation as a pristine natural environment attracts both locals who appreciate the world they live in and visitors alike. This has been a boon for businesses in the current covid crisis.

On the endangered list are Osprey – original numbers depleted due to settlement and human habitat. However, thanks to a dedicated band of conservationists, the Osprey look to be adapting to this new environment in a surprisingly positive way. Your government is supporting this in a constructive and helpful manner.

My farming family have always voted Liberal, as the values have meshed with our beliefs. However if development at the cost of wildlife and environment is about to be considered in our region our support will have to change.

Rocket launches will impact on wildlife. I am disappointed it has already been authorised as an introduction.

Please reconsider this inappropriate act of vandalism to the wildlife and environment and give the critters and birds a fair go.

Opposition to Major Space Development

Dear Minister Chapman,

(I have included my full name and address for authenticity.)

I, _____ of _____, am writing to **oppose** the major development at Eyre Peninsula's tourist attraction Whalers Way, proposed by Southern Launch Space Pty Ltd., This area on the southern tip of the Eyre Peninsula is one of Environmental, Geological and Historical significance.

For example,

- The **ancient rocky coastline** is believed to be one of the oldest rock formations in South Australia, aged at 130 million years old.
- Traditional lands** of the Bungala people for over 30,000 years.
- **Mathew Flinders** first sighted this area in 1802, where 8 of his crew perished.
- **Whaling station** existed here from 1837-1841.
- Declared a **Historical Reserve and Wilderness Sanctuary** in 1969.
- **Number of threatened species**, including Whibley and Chalky Wattle, due to land clearing for grazing and infrastructure.
- **loss of Biodiversity** due to land clearing.
- Extreme **risk of Bushfire** due to high fine surface fuel load and potential danger to surrounding vegetation and wildlife.

Whalers Way should be left as it is now, a spectacular and dramatic historic 4WD drive! With some of the most amazing coastal views in the state.

To: AGD:Attorney-General
Subject: Southern Launch Location Opposition
Attachments: Thank You For Your Email.

Good morning Attorney General,

As a concerned local resident I wish to make you aware of a couple of genuine concerns of my own which I share with a majority of local and non-local land users which I have been in discussions with in recent months.

Having worked for a state government department in the vicinity of the proposed Southern Launch work area in the past I have a substantial understanding of the fragility of this unique and pristine ecosystem. One example of potential irreparable damage of catastrophic proportion is the contamination of the regions potable water supply, which is already a scarce commodity in this area. Within the catchment area it is SA Water policy to not use any herbicide other than glyphosate due to its low toxicity and unlikelihood of contamination of water aquifers.

This raises serious concerns as two of the compounds released into atmosphere as a result of burning rocket hydrocarbon fuels are aluminium oxide and hydrochloric acid. How is this going to be allowed directly over the Uley water catchment areas? Who is going to be responsible once the inevitable occurs? Given that Southern Launch is a relatively low revenue company and given that a Taiwanese company is conducting the launches. The potential damage to the water supply WILL be catastrophic!

Also the local mayor is directly employed by Southern Launch as "range operations manager" and his last company was involved with the environmental sustainability report as a consultant with the drilling in the Bight for another foreign company Equinor. My opinion is he clearly shows no regard for the local pristine coastline that most of us call home, lifestyle and our next generations home and lifestyle.

I urge you to greatly consider overturning the recent approval for the commercial rocket launch given by Christian Porter on the 23rd August 2021.

This is one of those situations that once the damage is done it will be too late.

There is many groups locally that are opposed to the location, with legal services have been utilised for their support and advice.

I appreciate your time.

I look forward to your response.

5 September 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

From:

Sent: Tuesday, 7 September 2021 8:03 AM

To: SA Planning Commission <saplanningcommission@sa.gov.au>

Subject: Whalers Way Orbital Launch Complex Proposal – Development Number 932/P007/19

To the Secretary of the State Planning Commission,
Regarding Whalers Way Orbital Launch Complex Proposal – Development Number 932/P007/19

My name is _____, I surf and I'm an optimist.

I've always avoided making fear-based decisions. "What if something goes wrong?" is living in fear of a worst-case scenario which may never happen and reduces one's opportunities to grow, learn and experience life to its fullest.

However, when contemplating a rocket launching facility at Whaler's Way and the potential risks involved it is clear the environmental damage could be irreversible.

I'm certain you are aware of the points other community members are making regarding the potential noise pollution, impact on the flora, marine life, whale migratory, bird life to name a few. There's also the possibility of poisoned groundwater or industry started bush fires potentially wiping out the local Koala population at Mikkira Station. I agree with all these points but will focus my letter on community mental health.

I've been working in community services and the mental health industry for 9 years now, I currently work with people with mental illness and the rehabilitation process. I routinely take people to Fishery Bay and Whaler's Way area as part of a holistic approach which includes nature therapy.

I've seen firsthand how being close to the ocean and nature has improved a client's immediate mental state. On one occasion recently a client was extremely agitated, bordering on hospitalization. A coworker and I took them to Fishery Beach, we walked and enjoyed the natural beauty and over time our client calmed down and hospitalization was avoided. On the drive home we discussed how the client changed their state and it was evident that time in nature was their catalyst for change.

We are already dealing with a mental health epidemic in this country, if there were permanent damage to the Waler's Way area this option would not be available.

Families, surfers, fishermen, divers, hikers and a wide variety of others enjoy this coastline, probably without directly thinking about the relation between their recreational activities and maintaining their mental health.

I can only speak for myself, but I guarantee my mental health would suffer greatly if damage occurred to the bushlands and coastline around Whaler's Way.

Putting aside the considerable potential financial and environmental loss, what about the potential impact on a community's mental health?

There are many of us here that love this coast, these are not hollow words. We feel a deep connection to the coast and land, we care for it, we pick up rubbish, and we treat it with respect because it provides wellbeing for us.

I believe if our coast and surrounding bushlands were damaged our community would suffer grief and loss and the rocket launching facility would be directly responsible for decline in mental health of a community.

To summarize the threats are potentially irreversible for the environment, the tourism industry and the local community, a rocket launching facility should never happen at this location.

Thank you for your time.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	All of the above

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

The aspects that are of concern are as follows
Exclusion from Port Lincolns most popular recreation beach to the public is unacceptable. It is a place for the community to relax and is heavily used both in summer and winter. Most weekends in summer will see upwards of twenty families a day using this space, this is not including tourists. The beach quite often has over fifty cars parked on it while people enjoy the ocean.
In this tech heavy age it is vital that children have safe spaces to enjoy nature. Fisheries beach is a safe swimming beach that is protected from major swells and gives a chance for kids to learn to surf and swim, this is why it is so popular.
My business has occasion to take clients and their children to Fisheries to see wildlife and enjoy the ocean. Being restricted from accessing the beach will cause financial losses.
The disruption to the local wildlife is unacceptable.
The Emu Wren population is located directly where the land is to be cleared to enable this project to go ahead. A secretive bird that will stop breeding if disturbed needs to be protected by us and not just pushed aside for progress. Its the small things in life that enrich it for all of us. The wren is on the endangered list and the population at Whalers Way is actually of significant size approx 300 birds.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property YES
	Occupier of local property YES
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<p>The Whalers Way Orbital Launch Complex proposal development risks significant environmental consequences within a heritage and nature conservation/protected area. The developer's Environmental Impact Statement (EIS) does not adequately address 1) nationally significant native vegetation, 2) sound pollution & environmental pollution impact on endangered and threatened species (significant birdlife in direct impact zone (Southern Emu-Wren and White-fronted whipbird) nor does it address other threatened species (Seal Eagle and Osprey), whale sanctuary impact not adequately addressed by Whale migration experts), 3) major bushfire risk area inadequately addressed (previously catastrophic events with increasing risk due to climate change) 4) ecotourism & recreational impact (surfing, fishing, thriving pristine, green/clean reputation attracts economy for seafood, grain, livestock, tourism) , PTO</p>

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

5) pollution in the atmosphere impacting rainwater quality for surrounding properties (including the township of Tulka), 6) pollution of the water table (Uley Basin Groundwater - that provides the water for the Eyre Peninsula), 7) impact on fishing and marine activities (potentially increasing as the Rocket business progresses) 8) impact on the running of the major shipping lane (occupational health and safety -the proposed radio monitoring will not protect vessels if things do not go to plan), 9) massively increased semi-trailer impact (25 per day) on the local Tulka & Port Lincoln community commute (increased pollution, danger on the roads, pollution, noise), 10) a place of cultural significance to the Nauo people (Aboriginal Elders have raised their concerns about conservation, - not adequately addressed) and 11) the use of water and energy when the planet is in the midst of a scientifically proven international climate crisis.

As a local Tulka resident, it is difficult not to become emotional about this industrial development in a place of Aboriginal cultural significance AND one of South Australia's most fragile, wild, pristine and rich ecological environments (on land and sea). In fact, it is this very passion to protect and share with tourists that moves us to protest. The world needs more wild and healthy places! However, from a purely logical perspective, the 11 issues above are not adequately addressed in the IEP (many errors of omission (facts relating to the inappropriate and vulnerable site are overlooked to suit the agenda of the developer).

It is not too late to fix these mistakes and stop the progression of this ill-considered site for this particular industrial venture, before permanent damage and irrefutable hardship to local flora, fauna and communities is obvious for all to see.

From:
Sent: Monday, 13 September 2021 8:30 PM
To: DIT:SPC Reps
Subject: HIGHLY IMPORTANT - Reject the Whalers Way Orbital Launch Complex proposal

To Whom It May Concern:

The Whalers Way Orbital Launch Complex development risks significant environmental consequences within a heritage listed nature conservation/protected area. It is difficult not to become emotional about the choice of site for this industrial development in one of South Australia's most fragile, wild, pristine and rich ecological environments (on land and sea). However, to approve an industrial venture in a sensitive area zoned for conservation is not logical. The developers need to find a more suitable site for this venture.

The developer's Environmental Impact Statement (IES) does not adequately address;

- 1) Nationally significant native vegetation.
- 2) Sound pollution & environmental pollution impact on endangered and threatened species (significant birdlife, whale sanctuary).
- 3) Major bushfire risk area not adequately addressed (historic catastrophic events & increasing in risk due to climate change).
- 4) A place of cultural significance to the Nauo & Barngarla traditional owners (Aboriginal Elders have raised their concerns about conservation).
- 5) Ecotourism & recreational impact (thriving pristine, green/clean reputation attracts economy for surfing, seafood, grain, livestock, tourism).
- 6) Pollution in the atmosphere impacting rainwater quality for surrounding properties (including the township of Tulka).
- 7) Pollution of the water table (Uley Basin Groundwater - that provides the water for the Eyre Peninsula).
- 8) Impact on fishing and marine activities (potentially increasing as the Rocket business progresses).
- 9) Impact on the running of the major shipping lane (occupational health and safety - the proposed radio monitoring will be difficult to protect vessels if things do not go to plan),
- 10) Massively increased semi-trailer impact (25 per day) on the local Tulka & Port Lincoln commute. Use of fire trucks, emergency services and police vehicles (tax and rate payers expense for a private company). Safety & road transport issues (large contingent of young people use this road).

We as locals do not consent to this proceeding and request that this proposal be immediately scrapped.

The aspects of the proposal I wish to make comments on are:-

Environmental Impacts (Assessment Requirements 1, 2 & 3)

Economic Risks (Assessment Requirement 5) and

Spent launch vehicle management (Assessment Requirement 13).

Environmental Impacts and Spent launch vehicle management

My comments here are based around comparisons with two other launch sites which have relevance to this assessment – NASA Kennedy Space Centre (KSC) on the east coast of Florida and Rocket Lab (RL) launch site on Kaitorete Spit, Mahia New Zealand.

KSC is of course a much larger operational site than is proposed here, but the impacts of that site have very similar environmental concerns with the Whalers Way proposal. KSC is located on the Atlantic coast of the USA on the Indian River Lagoon system, with the land and lagoon areas approximately 564 sq. km. Only a very small part of the total acreage of KSC has been designated for NASA operational and industrial use with Merritt Island Wildlife Refuge and the Canaveral National Seashore being within its boundaries. NASA operational control consists of only 17 sq. km. (approx. 3% of total area) of which only 70% (less than 12 sq.km.) are actual facilities, roads etc. with the remaining undeveloped areas dedicated safety zones or held in reserve.

Wildlife reserves and launch sites have been proven to work well together and the agreements NASA entered into in the 1970's to preserve and protect these areas have shown how successful this can be. Controlling access to the site and managing the area responsibly have created a far better environment than what would have been otherwise the case.

I have had the opportunity to sail from the Great Lakes on the Canadian border down the Erie Canal, the Hudson River to New York and then followed the Intracoastal Waterway down to Florida and the Bahamas. On that trip we passed and anchored in Indian River and I can personally vouch for the vibrancy of the native vegetation and wildlife reserves in that area. It was on that trip I saw a manatee (dugong) which was listed as endangered in the 1970s, when there were only several hundred left. In 2017, the US Secretary of the Interior announced the federal reclassification of the manatee from endangered to threatened, citing a substantial increase in the total population. Like Australia with its whales, the concern for large marine mammals in the USA is not the activities of KSC but collisions and harassment from watercraft.

The RL site on Mahia Peninsular again has similar constraints being within the Mahia Peninsular Scenic Reserve and surrounded by a number of protected marine environments. Their launch paths also follow similar ones proposed here and it seems reasonable to me that the assessment and conclusions reached in NZ could well be informative here. Many of the relevant documents are in the public domain as background information and I am sure that contact has already been made with the relevant NZ bodies to enquire as to how this is working in practice.

RL first launched to orbit in Jan 2018 which was less than a year after their EIS assessment. So they are already almost 4 years ahead of where we are now and, like the Whalers Way proposal, they are launching similar small rockets and small payloads on demand. NZ assessed all the nominated risks to be manageable and approved the launch site, which should be a good indication that we are capable of achieving the same.

Also, while NASA has arguably the best documentation to consult regarding spent launch vehicle management (such as the Final Environmental Assessment for Multi-Use of Launch Complexes 39A and 39B) this may be an overkill and is easily available online, so I will not refer to it here. What may be of more relevance is the 2018 report by NZ on potential jettisoned material from space launches from Mahia by RL.

On Page 1 in their opening statement they noted *“Given the minor or less than minor environmental impacts of space vehicles launches, there is likely to be no difference in environmental outcomes between the different options considered. Compared to the status quo, the options proposed are likely to reduce costs to businesses and improve the economic benefits to New Zealand from the development of a space launch industry.”*

They go on to recommend Option A using Sustainable Management, to classify it as a permitted activity, subject to conditions. I noted from the references that the underlying 2017 report assessing the ecological risk considered a splashdown of 40 tonnes of debris. I will let Southern Launch correct me if I am wrong, but this seems to be an extraordinary amount of debris for the rockets we are talking about. However, despite this the conclusion in the ecology report from 2017 (and the previous one from 2016) was *“the risk to all ecosystem components from a single 40 tonne deposit of debris was low. This is attributed to the consequence from a single splashdown of 40 tonnes of debris at any point being considered ‘not severe’”* (Point 48, Page 11).

Media reports in NZ infer that a review may be done after 100 launches to verify that this assessment (amongst others) is confirmed. Something like this seems sensible in our scenario and would be a means to validate any or all of the agreed Assessment Requirements. This may be time based (e.g. after 5 years) and would not require stopping launches. I feel sure that Southern Launch would be amenable to some sort of review over time and I will leave them to comment.

To conclude on these comments, I note that Southern Launch have shown an understanding in their EIS on positive steps they can make in Conservation Values of the broader peninsular area and to local Native Flora and Fauna. They should be encouraged to do so and I am sure agreements can be reached (as KSC did and RL have in NZ) to ensure they are good tenants and uphold those commitments.

Whalers Way, it would appear, has been somewhat neglected over the years and suffered in the consequence. However, a launch site like this would attract increased local, national and international attention on the area and its surroundings; which may in turn lead to increased resources in caring for the entire area.

Economic Risks

My comments here will mainly focus on the NZ experience with RL, as this directly correlates to the Whalers Way proposal.

In considering the economic impact of the potential development of a rocket industry in NZ an independent research group (sapere) produced a report identifying and quantifying the benefits and generated a base case for a 20 year period. The benefits identified were considerable in scope and resulted in a base case result (in total) of \$600 - \$1,550 million.

I am aware that an SACES independent report has been done here in SA for Whalers Way and while this is not publicly available I am aware from media reports of some of its conclusions. Based on a 10 year projection (NZ used a 20 year baseline) I understand they concluded an impact of 60 to 568 jobs and \$35 to \$318.4 million for each rocket manufacturer that uses the facility. I further understand that a Korean company has already signed up with Southern Launch for launches next year, in addition to the Taiwan company currently testing. Both reports are strongly in favour of the economic benefits to be realised and points to a positive outcome for SA. I would also like to point out that RL (only 3 years down the track) are now very successful and have opened a second spaceport in the US to accommodate northern hemisphere and USA military launches.

To again conclude these comments on a personal observation, I should note that I emigrated to South Australia at the age of 25 hoping to possibly get into the space industry on the back of what had occurred at Woomera. That was 45 years ago so was not as silly as it sounds now. Not only did I not get into any space industry I had difficulty gaining employment in the SA IT industry, for which I was eminently qualified, but the demand in SA was very low. I therefore moved to Melbourne where demand was much higher and was an independent IT contractor for 4 years before moving back to Adelaide when I could negotiate a position with an IT company. I worked independently again for the last 10 years before my retirement, but it had taken 30 years for Adelaide to get to the position where that was easily possible.

This situation was repeated with our eldest son who has a degree from Adelaide Uni, Honours from Melbourne Uni and an MBA from Sydney Uni. He had to leave for Melbourne and later Sydney to obtain gainful employment. He is currently in a position to return to Adelaide, particularly as he has an 11 year old son who he would like to be educated here.

We actually have two 11 – 12 year old grandsons and I have no wish to see history repeat itself for a 3rd time in my family. State demographics show clearly that many other families in SA have met with this same situation. This is a great opportunity for this next generation and I firmly believe that a space industry is achievable by this nation and particularly by this state.

I was 17 when Aldrin and Armstrong walked on the moon – have you any idea what that did to a son of a coal miner. I became the first in my family to get a degree. Can you imagine what my grandsons will feel, when in 5 or 6 years when they are 17, they watch Australia launch its own rockets and satellites – right here in their own backyard.

SA cannot allow another generation to pack its bags and live somewhere else, especially as this generation is different and unlike previous ones, they will not come back. We must grasp this opportunity now, to ensure we have the modern industries and technologies in SA which future generations will want to work in and to study.

I thank you for the opportunity to express my views.

Regards,

Submission on Application
 Development Act 1993
 Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Really concerned about the chemicals entering the air and forming into clouds which then is possibly dropt back into the sea and or the natural landscape.

Also concerned about the impact these rockets may have on the whales in the area and the impact may only be known when its too late.

It will effect tourism as visits will be restricted when a launch is to take place.

Im also worried about fire hazards from the burn off of unused fuels. Is it a target for a terrorist attack is another concern.

Greenhouse emissions are predicted at 1.6% of SA's annual emissions I believe. Aren't we promising to keep our greenhouse emissions as low as possible.

Traffic through Port Lincoln and along the 10 kms of gravel

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

road to the launch site will be a huge impact. Our wildlife is already under threat in Australia as a whole particularly due to the devastating bushfires. Our native wildlife will not understand what is proposed to be on the road to the launch site the extra traffic, alot of our wildlife will be injured or killed

The water usage is another of my concerns with a water deluge of what approx 150,000 Litres per medium launches to absorb heat and sound. This water is apparently going to be sourced from Port Lincoln's already limited water supply.

Collecting storm water wont cut it to limit the Port Lincoln's usage as we are in a drought and we dont experience that much rain. Different matter if we lived in a high rainfall area.

I am very concerned about the possible impacts on the whalers bay proposed Orbital Launch Complex and my written & posted submission is to be taken as seriously as one undertaken via email

Thank you for your time

Kind regards

From:
Sent:
To: AGD:Attorney-General
Subject: Southern Launch proposal
Attachments: Thank You For Your Email.

To whom it may concern,

I would like to voice my concerns regarding the proposed Southern Launch site at Whalers Way. Whalers Way is a beautiful and special but also fragile environment, home to unique flora and fauna both on land and in the surrounding ocean. This proposal places this environment at significant risk of air, noise and physical pollution. This area is rich in biodiversity and attracts vast numbers of tourists from all over the world. This generates income for the state and local area, and this celebration of nature is at risk through this rocket launching proposal. Furthermore, there is considerable risk to the Lower Eyre Peninsula's water catchment. This area is already a fire risk area, and if this proposal were to go ahead, this fire risk would be greatly exacerbated. Other concerns include increased traffic on the Fishery's Bay road and the subsequent deterioration, risk to wildlife, as well as increased heavy traffic in the local area. Long term prosperity for the state and our regions should be both a responsibility and a priority from our government, and this proposal threatens this notion as well as our unique nature.

I hope you will consider these above concerns and do what is right for this area.

Kind regards,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
✓	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

This submission is made on behalf of Peninsula Pedallers Inc., a Port Lincoln-based cycling group, affiliated with Bicycle SA. I am the Secretary / Treasurer of this organisation.

We are concerned about the heightened risk to cyclists posed by the marked increase in heavy vehicle traffic along the sealed Proper Bay road, both during the construction phase and on-going once rocket launches are a regular occurrence.

This is an issue that the Environmental Impact Statement has failed to address in either the Transport and Access Impact Assessment or Effects on Human Populations analysis.

The sealed road from Port Lincoln to the Fishery Bay road intersection is by far the most popular cycling route in the district for local residents and visitors alike. This is due to the relative safety of the route, with only very occasional heavy vehicle traffic beyond the Port Lincoln city limit, as well as the pleasant bush and coastal vistas. My estimate is that about 60 to 80 cyclists ride part (e.g. into the Lincoln National Park) or all of this route (to the end of the bitumen at Sleaford) on a regular basis, enjoying the excellent recreational and healthy amenity that this route provides.

With the projected 12 heavy vehicle round trips per day during construction, dropping back to 5 per day when the facility is fully operational, and the associated increase in light vehicle traffic, the potential for an accident with a cyclist is unfortunately magnified. The number of crests and sweeping bends on the road impeding sight lines for overtaking and oncoming traffic adds further danger to cyclists on this route.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

The sealed roadway is only 6.5 m wide, and the apron on both sides is generally in poor condition, with a 10 to 15 cm drop-off along much of the route, posing an additional hazard to cyclists attempting to hug the edge of the seal. The condition of the apron can be expected to deteriorate further when vehicles passing a heavily laden 19 m semi-trailer travelling in the opposite direction move over to the far left of the roadway.

As a cyclist, the prospect of being overtaken by a 19 m long semi-trailer travelling at 100 km/hr on a 6.5 m wide roadway is not something I look forward to. And I fear that this may be a deterrent to cyclists riding this route, especially less experienced or confident riders, resulting in the loss of a great amenity that we now enjoy.

Our members have suggested a number of measures for consideration to protect their safety and enjoyment while continuing to cycle on this route:

- Repairing cracked and pot-holed sections, that force cyclists to move away from the edge of the road.
- Widening the sealed roadway to a minimum of 8 m, and repairing the aprons, or further widening the road to accommodate designated bike lanes along the full length.
- A maximum speed limit of 80 km/hour for semi-trailers.
- Limitations to days and times of heavy vehicle movements.
- Advance notification of heavy vehicle movements to alert cyclists.
- Heavy vehicles to be escorted to alert cyclists and other road users.
- Provision of alternative good quality shared use (walking and cycling) trails in the area, e.g. on the former BHP tram line to Coffin Bay.

We would be happy to meet with representatives of the project proponents to discuss these measures and any other steps that we can identify to improve safety and convenience for all road users.



Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
✓	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

A major concern that I have with this proposal is the bushfire risk.

Lower Eyre Peninsula and Port Lincoln have a very sad history of bushfire disasters. Locating the rocket launch facility in a highly vegetated area is courting further disaster, especially in view of the nature of the operation, with highly combustible fuels to be transported, stored and used at the site.

A fire started at the site could very easily and rapidly spread through the vast expanse of mallee vegetation and grassland to the north and east of the site, through neighbouring farms and then into the Sleaford Mere and Lincoln Conservation Parks and eventually the Lincoln National Park and Memory Cove Wilderness Protection Area. The isolated nature of the area and limited road access would provide little opportunity to contain a fire under the right weather conditions, e.g. similar to those experienced in the "Wangary Bushfire" in 2005. It should also be noted that the transport route to the site is mainly through dense mallee vegetation, as well as cleared farmland, posing the risk of a fire starting from an accident during combustible fuel transport.

Assurances are given in the Environment Impact Statement that the "riskarising from a catastrophic event on the range or during a launch event is considered to be minimal". Reference is made to the Whalers Way Emergency Management Plan and Risk Register (Appendix AB), but these documents have not been made available to the public, so no objective scrutiny of the safety measures can be undertaken. Why have these documents been withheld?

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Some questions I have:

- The bushfire season on Lower Eyre Peninsula generally runs from November 1 to around April 15, with the option to be extended if conditions warrant. Restrictions are placed on what fire risk activities landholders can undertake in this period. Will rocket launches and other operational procedures be permitted in this period?
- Under what forecast weather conditions will rocket launches be not permitted, e.g. Severe, Extreme or Catastrophic fire conditions, Fire Ban days?
- Reference is made to local CFS units being present leading up to and during any launch procedure. I query how realistic and effective this approach will be, given that CFS units are largely operated by volunteers, many of whom are farmers or local landholders. How much time and how often will these people be able to take on these responsibilities? How far afield are these units likely to be drawn from, potentially leaving their own properties and farms unprotected?

An essential component of the bushfire risk analysis should be consideration of the potential consequences of a fire being started by the operation of the Whalers Way rocket launch facility. I could find no evidence in the EIS that the potentially extreme consequences of a fire event have been factored into the analysis.

I believe that we have too much to lose in terms of farmland and infrastructure, bushland, parks and water reserves, livelihood and even lives, to put all this at risk of a catastrophic bushfire stemming from the rocket launch facility at Whalers Way.

8 September 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Re: Whalers Way Orbital Launch Complex Proposal, Development number: 932/P007/19

Dear Minister Chapman,

I am writing in opposition to the proposed Southern Launch Space Pty Ltd (SLS) facility within Whalers Way Sanctuary, on the southern tip of Eyre Peninsula, and designated by the Minister as a Major Development.

I have worked for conservation in the public sector for 45 years and am aware of the fragility and resilience of natural systems. My efforts in conservation earned me the Public Service Medal in 2020. I have spent considerable time in Lincoln and Coffin Bay National Parks, Sleaford Bay and the Eyre Peninsular south coast environment including Whalers Way Sanctuary.

Having attended two public meetings at Port Lincoln, one by SLS on 24.8.21, one by locals in opposition to the proposal on 29.8.21 and reading the Environmental Impact Statement (EIS) and original Environment Protection and Biodiversity Conservation Act (EPBC) submission, I am far from convinced that SLS are providing open and complete information to the public or government.

I strongly oppose the SLS proposal for the following reasons:

1. Nature of a dirty business.

1.1 SLS plan to dump the launch engines into the ocean. There has been an enormous effort to educate the fishing industry. PIRSA's "*Adopt a Beach Program*" is strongly supported by the Australian Bluefin Tuna industry (Ref 1). The Fisheries Research and Development Corporation regularly advocates for cleaner seas (Ref 2). The Federal Department of Industry, Science, Energy and Resources strongly advocates a reduce, reuse and recycle policy (Ref 3). Other Government agencies, Councils and NGO's all support a reduce, reuse and recycle, ethic. SLS seem to be a company oblivious to current standards and ethics.

1.2 The satellites that are proposed to be launched will only be in orbit for two to three years before they are burnt up in the atmosphere. I do not think this sort of dirty, wasteful business is one that many South Australians want to be involved in, especially those with an environmental conscience.

1.3 "*Hapith I is Taiwan's first domestic rocket and Tispace is the first commercial space launcher. The company planned to test the Hapis vehicle from a Taiwanese launch site, but the site was abandoned due to legal issues*" (Ref4). Why won't Taiwan launch its own Hapith Rockets? Is it partly due to the polluting and carcinogenic SBR (Styrene Butadiene Rubber) solid grain fuels? Or are they more concerned for wildlife and the environment?

2. Conservation Values Impacted.

2.1 Listed species impacted.

2.1.1 The Eyre Peninsula Southern Emu-wren (EPSEW), is a small bird confined to southern Eyre Peninsula, South Australia. It is listed as Vulnerable under the EPBC Act 1999 and Endangered in SA under the National Parks and Wildlife Act (NPW) 1972. The stated reasons for listing are its occurrence at relatively few locations and restricted area of occupancy (Pickett 2004a, 2004b). Contraction and fragmentation of its former range has been caused primarily by habitat loss due to extensive land clearance.

“The Habitat Management Guidelines for the Eyre Peninsula Southern Emu-wren outlines activities being implemented by DEH aimed at EPSEW recovery, including comprehensive population and habitat surveys, recovery planning, population monitoring, and strategic planning for habitat re-establishment” (Ref 5). Marcus Pickett also states that populations at Duck Lake Rd and in the Koppio Hills were destroyed by wildfire in 2005. Wildfire, clearance and habitat fragmentation are major risks to EPSEWs. A related Kangaroo Island Population was decimated by the recent fires losing 60 percent in numbers.

The EPSEW population at Whalers Way Sanctuary has its epicentre and stronghold around proposed Launch Site A. Ideas of habitat destruction anywhere near this site need to be abandoned. Thinking that paying money into the SEB fund will offset the loss here is ludicrous. This beautiful, reclusive, little bird deserves our protection.

2.1.2 There are a number of rare raptors found on the Sleaford and Whalers Way Coast. I have seen White Bellied Sea Eagles, Osprey and Black Falcons. Osprey and White Bellied Sea Eagles have nest sites in the area. Due to a decline in both these species in recent time these nests have been abandoned, but it is established that such nests can and do get used again once population numbers allow. An Osprey nest in Coffin Bay, recently reused, provides a local precedent for this.

“The population of both species have declined in recent decades in SA and are further threatened by apparent continued habitat loss and degradation. Consequently, it is essential that remaining breeding habitat of the White-Bellied Sea-Eagles and Eastern Osprey be specifically protected and managed to minimise disturbance and to maximise productivity.” T. E. Dennis et.al. (Ref 6)

An industrial rocket launching site will markedly reduce the chance of these species repopulating the nesting sites and use of this wilderness coast generally. With only 50 breeding pairs of Osprey in South Australia currently, and a major effort on Yorke Peninsula to build and install artificial nesting sites being rolled out, it is entirely inappropriate to be now allowing further nesting sites to be rendered unusable.

2.1.3 Other rated species recorded nearby include: Peregrine Falcons, Sooty Oyster Catchers, Purple Gaped Honey Eaters, Elegant Parrots, Rock Parrots. Diamond Firetails, Fairy Terns, Hooded Plovers, Western Whip Birds, Painted Button Quails, Yellow-Tailed Black Cockatoos, Southern Right Whales, and Australian Sea Lions.

2.1.4 The EIS prepared by SLS does not mention terrestrial mammals or reptiles, beyond a few species seen on cursory surveys. Species like Echidnas, Pygmy Possums, Goannas (including the vulnerable Heath Goanna), sleepy lizards, the many species of snakes and geckos. These species are all very difficult to protect from dams and excavations, the proposed chain wire fences and floating membrane will not protect them. The polythene plastic dam liners are very slippery and get very hot in the summer, small animals are unable to escape, and they fry. Bats were not mentioned either, these are attracted to lights and will suffer deafness, along with most animals, from extreme noise levels purported in the EIS to be 140 decibels.

2.1.5 There is no management consideration given to the devastating fungal disease *Phytophthora cinnamomi* in the EIS. All plant and equipment, especially earth working machinery absolutely needs to be cleaned with fungicides prior to entering and before leaving the site.

2.2 Noise Mitigation and Management Strategies for Fauna

2.2.1 The Noise Mitigation strategies mentioned in the EIS only include bird scaring guns. This means more noise for longer, this is a lazy concept. Options including drones, bird of prey silhouettes and hunting screeches of predatory birds and alarm calls of local species are not discussed. There is no discussion of mitigation strategies for reptiles or mammals.

2.2.2 Liguanea Island (Lincoln National Park), 3.6 km away on or near the flight path of the proposed rockets. The Island has a breeding colonies of Australian Sea Lions and birds including Cape Barron Geese, Rock Parrots and Short Tailed Shearwaters. The Sea Lions are Nationally Endangered and SA rated as Vulnerable. There is a well-established local tourist enterprise involving tours to swim with Sea Lions. Noise and risk of catastrophic rocket failure is likely to impact this population significantly. Statistically 5 to 8% of rocket launches are failures, a high proportion of these are catastrophic (Ref 6).

2.2.3 Whalers Way Sanctuary, as the name implies, is home to Southern Right Whales, occasional passing Humpback Whales, and other species. The whales can arrive in May and stay until November, they calve and breed along the coast. Populations are slowly increasing. Dolphins and Long Nosed Fur Seals also frequent the waters.

“Studies investigating whale-watching boats and the inner ears of marine mammals could soon provide new insight into the effects of noisier oceans on cetaceans – dolphins, whales and porpoises – who depend on their hearing for navigating, finding food and communicating underwater.” S. Ceurstemont Horizon EU research and Innovation Magazine (Ref 8).

The EIS states the noise levels can reach 140 Decibels, many, many times a year. These noise levels will likely deafen animals, close to, or on the surface. Sound is vitally important to all these species and the risk of deafening them is unacceptable.

2.2.4 Machinery such as helicopters, generators, trucks, and others will also add to the noise and disturbance load, impacting wildlife and the ambience of Whalers Way, Sleaford, and the National Parks.

2.3 Vegetation and Heritage Values

2.3.1 A recent Whalers Way Sanctuary visitor permit gives the following description:“In addition to its spectacular and often unique features – during the winter months wildflowers are in profusion and in fact, the display of flora is equal to any in Australia. Besides the many coastal species, there exists several types of orchid and fringe lily also a dwarf native pine and small rare wattle, which may be seen by the observant...” The industrialisation and destruction of these habitat should not happen.

2.3.2. Whalers Way Sanctuary has a current Heritage Agreement. The EIS states: “Pending the amendment of the Heritage Agreement, the proposed development will not conflict with the agreement and will be located outside of areas to which the Heritage Agreement applies.” This is Orwellian newspeak. Change the law and the law doesn’t apply. Heritage agreements are only granted to properties that meet certain criteria, to revoke an agreement, even in part is reprehensible.

2.3.3 There are a number of Threatened Plant Species found close to or on the proposed site, these include: Port Lincoln Guinea-flower, Scaly Poa, Alcock's Wattle, Tate's Grass-tree, Mount Lindsay Mallee, Hidden Leek-orchid, and the Metallic Sun-orchid. Some are difficult to identify and or only found in good seasons. These species need protection, clearing, concreting, earth works, plastic lining, building... increase, disturbance, weeds, soil pathogens, risks and destruction.

3. Size, aesthetics and public impacts.

3.1 Size

SLS propose an immediate clearance area of 23.76 Hectares. This is equivalent, if seen from Parliament House in Adelaide, to an area reaching from North Terrace, beyond Hindley Street to Currie Street and from Morphett Street across King William Street to Gawler Place, or over 30 football fields. This is a significant clearance, to bulldoze an area this large would be a travesty. Fire protection works around these sites will multiply the footprint.

3.2 Fire

3.2.1 Fire is not discussed in the EIS, and SLS executive would not discuss it at the public meeting due to alleged security concerns? The EIS does mention some infrastructure, and the need to use local CFS brigades to provide fire cover, however detailed information is not provided. As we have seen uncontrolled bushfires in this region has devastating impacts for wildlife, water and power supply, farming, and people. A rocket launching facility with fuels, vehicle movements, prescribed burning, slashing etc. constitutes an unacceptable increased risk. Should the fire spread to the Jussieu Peninsula, to Tulka or Port Lincoln township, it would likely do so unchecked. As was seen during Kangaroo Island fires in steep coastal environments can be very difficult to control. Local farms and properties could well be adversely impacted. The local community is familiar with the devastating results of bushfire and its long term impacts, further fire events will compound the existing trauma.

3.2.2 If a launch facility is built, fire prevention activities will need to be undertaken around the site. Annual A zone clearance will require slashing and prescribed burning, more than doubling the footprint of the facility and vastly increase weed incursion. Further B zone work every 5 years or so will exacerbate and broaden these impacts, enormously degrading the ecological value and integrity of the Whalers Way Sanctuary.

3.3 Visual impact and reduced access

3.3.1 Whalers Way Sanctuary is a wonderful place to observe wildlife, seals, whales, dolphins, kangaroos and emus, there is a profusion of birdlife, oceanic, coastal and bush birds are all seen in the coastal mallee, heath and from the cliffs. Point Carnot, Theakstone's Crevasse, Cape Wiles and other cliff top vantages provide views that strike fear to your core, with the turbulent, crashing and wild seas. It has been a popular wilderness to explore by locals and tourists for generations. The visual impact of a rocket launching site will greatly alter the tourist experience from a wilderness experience to an industrial one, if there is to be much access at all.

3.3.2 The EIS succumbs to photo manipulation to portray a degraded Whalers Way Sanctuary. True the owners of Sanctuary have invested very little in site and visitor management recently. Generally the land is ecologically diverse and in very good condition. I strongly believe there has been an attempt by SLS to skew the discussion and make the sanctuary look considerably worse than it is. If implemented, the SLS proposal will significantly degrade the values of the sanctuary, while severely limiting public access.

3.3.3 The EIS claims that the road network is adequate. Construction activity and up to 42 launches a year (proposed by SLS, other companies may add to this) will put an enormous strain on the already

poor, unsealed road infrastructure. This will increase maintenance costs, and disadvantage Councils, tourists and locals accessing the nearby, and very popular, Fishery Bay.

3.3.4 Port Lincoln is a major grain shipping, fishing, and tourist boating harbour. The SLS proposal requires closing coastal and ocean access under flight paths 40 times or more per year. All closures need to be within clear weather windows, when boating and shipping also prefer access. These closures will have substantial negative impacts on all of these industries.

3.3.5 The 33 turbines at Cathedral Rocks wind farm, along with SA Water's proposed desalination plant at Sleaford or near Fisheries Beach, have impacts on the wilderness value of the region. The southern end of Eyre Peninsular with Coffin Bay and Lincoln National Parks, SA Water's holdings in the Lincoln Basin, and Whalers Way Sanctuary currently provide a large contiguous block of high value native vegetation. To continue the cuts of a thousand, will destroy its connectivity.

I understand that South Australia can gain something economically and strategically by investing in the space industry. This should not come at great ecological cost and I firmly believe that this is the wrong place, and that these destructive, dirty and wasteful operators are the wrong partners for South Australia.

I strongly oppose SLS's proposal.

Yours Sincerely

References

1. https://pir.sa.gov.au/aquaculture/monitoring_and_assessment/adopt_a_beach_program
2. <https://www.frdc.com.au/media-publications/fish/FISH-Vol-27-1/Taking-on-the-plastic-problem>
3. <https://www.energy.gov.au/households/reducing-waste>
4. <https://californianewstimes.com/taiwan-innovative-space-will-conduct-a-test-launch-of-its-hapith-i-rocket-in-australia-later-this-year-techcrunch/495406/>
5. https://www.researchgate.net/publication/237480275_Habitat_Management_Guidelines_for_the_Eyre_Peninsula_Southern_Emu-wren
6. [T. E. Dennis et.al. South Australian Ornithologist Volume 37 - Part 1 - March – 2011.](#)
7. <https://space.stackexchange.com/questions/8566/what-is-the-success-failure-ratio-of-space-bound-rockets>
8. <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/noisier-waters-linked-behaviour-change-hearing-loss-whales>

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

I lead a group of 4 women on road bikes twice a week on Proper Bay Road where we have been riding for the last 7 years. We are extremely concerned with the heavy traffic on what has been the ONLY "safe" road to cycle in Port Lincoln. The road as is is already very narrow, there are NO shoulders to allow for cars to overtake safely. We have had some close calls on the "S" bend and stretch to Tulka with cars driving at 100k/h. The road has innumerable pot holes which force cyclists towards middle of road. The speed limit is too high and should be dropped to max 80 k/h. I really don't see an option of sharing the road the way it is with trucks it will just become too unsafe for cyclists. The only alternative would be the construction of a cycling path (bitumized) alongside the road and taking cyclists to the National Park entrance where it is safe

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

to ride.

Thank you for providing the opportunity for the Eyre Peninsula Landscape Board (the board) to provide comment on the Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement.

The *Landscape South Australia Act 2019* (the LSA Act) is the key framework for managing the state's land, water, pest plants and animals, and biodiversity across the state.

The Eyre Peninsula Landscape Plan 2021 - 2026 has the relevant priorities of:

Biodiversity, with focus areas being:

- *Protecting and restoring prioritised coastal habitats;*
- *Maintain and enhance biodiversity in prioritised ecosystems*

As well as Pest Plants and Animals, with focus areas being:

- *Supporting landowners to control prioritised pest plants and animals*
- *Collaborating to reduce threats from impact-causing native species*

The board wish to make the following comments.

1. The Environmental Impact Statement confirms the project is:
 - considered to have the potential to have a significant impact to the Western Whipbird (eastern).
 - likely to have a significant impact to the Southern Emu-wren (Eyre Peninsula).

The board therefore recommends the applicant undertakes more:

- surveys to establish the total population size and extent of both these species on Lot 101 Right Whale Road, Sleaford and in other areas where both these species exist to better inform this assessment
- research to better define what the indirect impacts such as noise during construction works and rocket launch operations may have on where these species choose to nest and feed.
- Implement measures throughout the construction phase and rocket launch operations to minimise any adverse impacts on these species.

2. The board is supportive of a Weeds and Pests Sub-plan to be developed as a component of the CEMP and OEMP in accordance with the Development Act, the NV Act and Landscape Act recommendations.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: Southern Launch Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	[Redacted]
Contact number:	[Redacted]
Email:	[Redacted]
Postal Address:	[Redacted]
Affected property (if different from postal address)	[Redacted]
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="radio"/> Owner of local property
	<input type="radio"/> Occupier of local property
	<input type="radio"/> A representative of a company/other organisation affected by the proposal
	<input checked="" type="radio"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Along with many areas of concern, which include; risk of bushfire, traffic and pollution, public access and impact on wildlife, I'd like to comment on 'degradation of Wilderness Areas' regarding this project.

I am concerned that allowing this project to go ahead in Whalers Way may open the flood gates to further developments in and along this sensitive coastline. Allowing this to happen in Whalers Way is clearly setting precedence that coastal conservation and heritage agreements can be disregarded.

Growing up on the Eyre Peninsula, I have formed a very special bond with this part of the coastline as a Surfer, Outdoor Educator, recreational user and steward for the environment.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

I have always held the idea that a wilderness corridor between Port Lincoln NP and Coffins Bay NP would be vital in enhancing and protecting the biodiversity of the Lower Eyre Peninsula and ensuring we have wilderness areas for our future generations to enjoy and benefit from.

The climate councils latest direction states the need to take a far bolder approach to conservation of wilderness areas to ensure our species and ecosystems are as resilient as possible to the worsening extreme weather - due to climate change. They also state that creating and connecting new existing habitats will be necessary.

I, myself, am not against Orbital Launch development in SA. I think investing in this industry is important for SA, and Australia alike, I just don't agree on doing so in Whalers Way area.

Thank you,
Kelly Thorpe

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input type="checkbox"/>
	A private citizen <input type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Have you consulted with the people of Port Lincoln & wider Eyre Peninsula to find out how they feel about a CFS unit and a SAPOL unit that they pay for being tied up for a private business on every rocket launch day?
I have not been consulted and I don't want the resources in my community to be used by Southern Launch.
Can you clarify that the community are aware of this and agree to a CFS unit

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000.

* SAPOL unit being used by Southern Launch each launch day.
 Are CFS volunteers happy to volunteer their services?

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact <u>number</u> :	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am concerned firstly by the lack of any data or control measures in Appendix O or AA on the heightened level of noise caused by rotary wing aircraft on approach to and from the Whalers Way Launch Facility.
In the 13 km N to NE of this facility exists properties containing livestock that are known to spook when rotary winged aircraft fly over too low, the effects can lead to livestock panicking and impacting with fences and other farm infrastructure causing injury or death to the livestock, damage to infrastructure and fences, and in limited circumstances injury to persons in the direct vicinity of the livestock.
The area around Fisheries and Sleaford Bay are known for being one of the breeding waters for the Southern Right Whale. Appendix S states that "Southern right whales very close to shore during the launch may be exposed to sound levels approaching the threshold for temporary hearing loss, but could avoid the noise by submerging for less than two minutes." I have to question whether this is considered a control measure and if not then what procedures are Southern Launch willing to undertake to prevent the disorientation and potential 'beaching' of the whales.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

<p>Considering the two recent postponements to the test launch from Whalers Way due to high winds and the nearby Cathedral Rocks Wind Farm that relies on these winds. I have to question why Whalers Way is deemed at all suitable for this endeavour.</p>
<p>Given the amount of emergency services that are deployed to Whalers Way on the day of a test launch, what happens when there is a car accident, bushfire or other event that requires local emergency services. Are more police, fire services or ambulances going to be sent to Port Lincoln? Are the emergency services already at Whalers Way going to be able to respond to an event away from Whalers? Or is Port Lincoln expected to operate with a reduced amount of emergency services?</p>
<p>In Appendix W the predominant wind direction on the wind rose in figure 10 is shown as coming from the SE and the data is from 2009 or 12 years ago. There is a lack of modeling for these seasonal wind changes on the dispersion of particulate (PM2.5) or HCl. What is the effect of these chemicals landing in rainwater tanks and dams in the area?</p>
<p>Also is the water usage of this facility sustainable, over the past few years water levels in the area have dropped with the nearby Uley basin being of particular concern.</p>
<p>The single listed bore in the area of the launch facility, unit 6028-1573 (drillhole 11812, permit 11242) is reported as having no drillers or lithological reports, this is at least partially false. There are no logs on WaterConnect but there are the historical documents on SARIG including a Drillers Well Construction Report for drill hole 11812. This bore was completed by air drilling for 1 hour on the 1/09/1983 by SM Juett of what is now Underdale Drillers. This document does indeed have the lithology to the full depth of this bore which is 30m. This document was found in the SARIG website through WaterConnect within 10 minutes.</p>
<p>Fishery Bay Road is often prone to disrepair and conditions are not conducive to large volumes of traffic. As of the last few years the District Council of Lower Eyre Peninsula have struggled to economically source materials for the road, and as a result the road has fallen into neglect. Are Southern Launch going to compensate the DCLEP for the increased use of the road or otherwise invest capital in its upkeep. Proper Bay Road, south of the locality of Tulka is a corridor for the movement of native wildlife including but not restricted to kangaroos, emu, snakes and Shingleback (Sleepy) lizards, this corridor also extends to Fishery Bay. As evidenced by the increased level of traffic during the construction of the Cathedral Rocks Wind Farm, a large number of these animals will inevitably be killed.</p>
<p>Fishery Bay Rd is commonly used for the movement of livestock between properties. With increased levels of traffic and without the proper due care the results of a conflict between these two activities could be disastrous.</p>

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	Whalers Way & surrounds
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am personally concerned with a number of aspects of the proposed Whalers Way Orbital Launch Complex. Primary issues include air pollution, deaf endangered birds, the whales, the ecotourism, the local homes, the water table, global warming, the rainwater quality, bushfires, shipping lane, potential military target, fishing industry.
Please protect our very own little slice of paradise and encourage the government to invest money into ecotourism, sustainable fishing and renewable energy.
Specifically I am concerned with the proximity to the whales in the vicinity of the launch site. There have been whales here continuously this season evident by photography of local residents. Southern Launch have advised they monitor for whales however how does the activity in the area not affect the whales and continual air movements monitoring their movements. Additionally I am concerned about the numerous other wildlife species within the area. This is such a precious area within our State, already affected by the existing wind turbines and now this. As a local, we have always been able to have access to Whalers Way and it is a huge tourism aspect however it has been closed off for some time now. with 36 proposed launches, the set up time and deconstruction time either side of the launches, it is evident locals will be denied access now. If we are unable to be within a certain distance of the site during these times, how can the wildlife be considered during these times. There are already launch sites in the State, why can't these be used?

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

EIS Whalers Way Orbital Launch Complex, Development 932/P007/19

Submission

I find that the proposed development, if permitted, is likely to have a significant impact on the potential survival of two birds, recognised as Endangered under the National Parks and Wildlife Act (NPWA), namely:

Eyre Peninsula Southern Emuwren *Stipiturus malachurus parimeda*, and

Eyre Peninsula White-bellied Whipbird [Western Whipbird (eastern)] *Psophodes leucogaster leucogaster*

Should the proposed development be allowed it is also likely to have a significant impact on other threatened birds present in the area that are listed under the Act, namely:

(Eastern) Osprey *Pandion haliaetus cristatus* (Endangered),

White-bellied Sea Eagle *Haliaeetus leucogaster* (Endangered),

Diamond Firetail *Stagonopleura guttata* (Vulnerable),

Rock Parrot *Neophema petrophila* (Rare), and

Shy Heathwren *Hylacola cauta* (Rare).

The EIS document

On Matters of National Environmental Significance (Appendix P 7.2), the proposed development is reported likely to have a significant impact on the Eyre Peninsula Southern Emuwren (EPSEW) and to have the potential to have a significant impact on the Eyre Peninsula Western Whipbird (EPWW). Yet it is concluded that the proposal is unlikely to interfere with the recovery of either. The error is a presumption that the impact is simply the consequence of clearance of 23.76 ha of pertinent native vegetation, some of it critical, that area misleadingly referred to as the Project Area.

In reality the Project Area comprises much of the property that is the site of the proposed Whalers Way Orbital Launch Complex (WWOLC), some 2,640 ha of outstanding coastal landscape that is also of inestimable biodiversity value to South Australia. The proposal is to transform the property into an industrial area involving continuing use of heavy machinery and launching rockets on an almost weekly basis. The extreme noise effect is shown to cover a substantial portion of the property thus inhibiting and perhaps eliminating reproduction in the threatened birds over a wide area, the resulting population fragmentation contributing to the likelihood of their extinction.

The EIS refers to known threats to EPSEW and EPWW and finds them mainly from wildfire and habitat clearance. Wildfire will likely be an increasing threat with climate change, and the present extent of loss of habitat will continue to cause biodiversity loss into the future as our 'extinction debt'. Land development is also listed and the WWOLC itself is now recognised as an additional threatening process for both of the endangered Eyre Peninsula landbirds (van Weenen et al 2021, Verdon et al. 2021).

The assessment of potential impact on EPSEW and EPWW is based on the three-day Targeted Fauna Survey conducted over mostly subcoastal 350 ha of the 2,600 ha development site (Appendix P 4.2). While its findings were positive in detecting both taxa extensively in the area, the consultants

candidly admitted that “to further document and more accurately assess the population extent and distribution of both species would require many weeks of field survey work.” They wound up their report with equal frankness: “What is inconclusive is the potential impacts of further fragmentation and disturbance that is associated with the construction, infrastructure upgrades and operation of the project.” This uncertainty is acknowledged in the Executive Summary (5.2.3.), there being “no clear consensus on outcome”, with “the long term effects unknown.”

In summary, it is not possible to predict the future of these two endangered birds if the proposal is allowed to proceed.

1. Eyre Peninsula Southern Emuwren (EPSEW).

The Endangered (NPWA) EPSEW is presently listed Vulnerable under national legislation (EPBC Act), but its Recovery Plan (DAWE) recommends amendment to Endangered, as it is now categorised in the Action Plan for Australian Birds 2020 (Garnett and Baker 2021).

The EPSEW was investigated in a series of surveys (e. g. Pickett 2002, 2009) and a recovery program was prepared (Pickett and Te 2012). It had declined historically from habitat loss and is now found only in fragmented remnants. Its population, under 1,000 in 2002, is likely further diminished but has not been reassessed. Fire is a major threat. Habitat fragmentation precludes recolonisation and limits genetic exchange. Pickett and Te observed the particular importance of populations near Kellidie Bay, D’Anville Bay, Whalers Way, Fishery Bay and in Lincoln National Park, and stressed the need to maintain and improve connectivity between these crucial areas.

The proposed development involves limited clearance of habitat but major continuing disturbance, including intense intermittent noise, in a critical portion of the bird’s range, where increased protection and improved connectivity are key to its survival. As a consequence the proposed rocket launch facility is recognised as a compounding threat to the survival of the EPSEW (van Weenen *et al.* 2021).

Until there is evidence of recovery of this endangered taxon it should not be subjected to additional threatening activities.

2. Eyre Peninsula White-bellied Whipbird [Western Whipbird (eastern)] (EPWW).

The Endangered (NPWA) EPWW is presently listed as Vulnerable under national legislation (EPBC Act) but categorised Endangered in the Action Plan for Australian Birds 2020 (as Mallee Whipbird *Psophodes nigrogularis leucogaster*, Verdon *et al.*, 2021).

The EPWW is one of four former populations of the Western Whipbird (eastern) in two presently named subspecies. Since the 2019-20 Kangaroo Island bushfires, subspecies *P. l. lashmari* is considered Endangered (Garnett and Baker 2021). The other subspecies *P. l. leucogaster* is extinct in Victoria and possibly so in eastern SA. An extant population on southern Yorke Peninsula is genetically divergent from all others (Burbidge *et al.* 2017) and is declining (personal information). The EPWW is therefore unique and of even greater conservation concern than acknowledged at present.

On the basis of widely varying cited densities, Garnett *et al.* (2011) judged the EPWW's population as about 5000 and its conservation status as Vulnerable. Now Verdon *et al.* (2021) suggest a total of only 1300 for both peninsulas combined and a conservation status of Endangered. Realistically there has never been a good estimate of the population size of the EPWW (S Garnett pers. comm.). The risk to the EPWW from fire is increasing (Verdon *et al.* 2021); the largest remnant in Lincoln National Park was impacted by fire in 2015-16 but is reported to be recovering. Records are clustered in three main areas, near the base of Coffin Bay Peninsula, D'Anville Bay-Whalers Way and Lincoln NP. Their conservation is dependent on all three subpopulations and maintaining connectivity between them. The rocket launch proposal is in the middle and is therefore an additional threat to the survival of the EPWW (Verdon *et al.* 2021). In addition to direct reduction in habitat it would expose the EPWW to perpetual disturbance, including intermittent intense noise.

We have no knowledge of the effect of noise on whipbirds but they can be predicted to be highly sensitive, given that their characteristic vocalisation is so prominent an aspect of their behavioural ecology. They have vanished from vast areas and continue to decline elsewhere for reasons that are little understood. Inexplicably extinct in Victoria, probably extinct in eastern South Australia, declining on the Yorke and Eyre Peninsulas, halved by a single fire event on Kangaroo Island, the species as a whole appears headed for extinction unless these trends are reversed. If WWOLC is permitted to proceed it might prove to be the final insult that sends it to oblivion.

Threat abatement

The two endangered Eyre Peninsula populations require concerted action if they are to recover. Small populations and fragmentation threaten their survival; wildfire and the disturbances associated with development are the chief threatening processes. The rocket launch proposal is sited in a critical locality where its impacts will cause population decline and exacerbate fragmentation. The facility should never have been contemplated in such a crucial place for biodiversity conservation in South Australia, given its importance to these and other threatened species, including birds and their communities.

If this development is allowed, two actions must be taken; to measure its impact and to ameliorate any adverse consequences. Baseline surveys in two categories must therefore be undertaken before the development proceeds. First, a comprehensive census of both species in the immediate proximity of the development; second a full survey across their entire distribution to allow for a realistic estimate of population size. Both studies should be carried out by consultants independent of the developer and the results made freely available to the public. Ongoing monitoring in both categories should also be implemented.

The other essential action is to maintain and improve connectivity between presently isolated populations. This requires restoration and reconstitution of suitable habitat, together with the research upon which it must be based. An initial requirement will be to identify suitable intervening land for the purpose, some of it presently under Government management, notably for water extraction. There are few records of either species on this land, evidently because its vegetation constitutes unsuitable habitat. The reasons for that are unclear but excessive grazing pressure by stock and kangaroos is cited. Alternatively, it is possible that continued water extraction has affected soil structure and vegetation communities.

In summary, positive action is needed to develop an effective recovery program for both birds, whether the rocket launch proposal proceeds or not. Should it do so, these measures become urgent.

Coastal raptors

The following notes are provided by Terry Dennis, raptor researcher and author.

The Cape Wiles/Cape Carnot complex (Whalers Way) lies within one of three sub-regions identified in SA as retaining significant breeding habitat for the White-bellied Sea Eagle and Osprey

Past management of Whalers Way has involved unconstrained coastal recreation leading to degradation of breeding refuge quality and foraging habitats and inevitably to population decline. Both White-bellied Sea Eagle and Osprey territory desertions are clearly linked to uncontrolled human activity near nest sites.

An Osprey nest site c 2 km west of Cape Wiles was promoted as a tourism feature when Whalers Way was first developed in the 1970s, with an access road and carpark on the cliff above. The nest was subsequently abandoned and remains inactive. Another nest was established on one of the islands opposite and below the Cape Wiles lookout in about 2006 and was active in 2009-10 but found to be abandoned during the 2015-16 surveys with no record of use since.

With sensitive redevelopment limiting approach distances, both former nest sites retain a high probability of re-occupation.

There is a long-abandoned White-bellied Sea Eagle nest site on the north-western face of the most easterly of the two islands off Cape Wiles. The currently occupied sea eagle territory in Whalers Way is centred in a sub-optimal location, well known to local amateur photographers and within 400m of the main access road and therefore rated as High Disturbance. Another sea eagle territory is centred on Liguanea Island, c 4 kms south of Cape Carnot.

The proposed development and increased activity at Whalers Way, which would include the unknown impacts of extreme noise events, can only serve to exacerbate the habitat degradation processes.

In recognition of the documented population declines for both these species, the prospect of industrial development being permitted over yet another stretch of critical habitat must be regarded as grossly irresponsible.

Other birds

The EIS provides abundant evidence that the Whalers Way property has exceptional biodiversity, including 25 fauna species listed under the EPBC Act and 11 under the NPW Act. Six birds included in NPWA Schedules were recorded during the Targeted Fauna Survey and an additional species Shy Heathwren is also present (personal observation).

Summary

The environmental consequences of the proposed development at Whalers Way are unacceptable. They include the potential to hasten the extinction of two endangered birds whose protection is supposedly effectively maintained through State and National Biodiversity Conservation Law. The precarious status of the two birds is of national environmental significance but their management is a South Australian responsibility. In addition, two coastal raptors, whose South Australian populations continue to decline, face an increased risk of local extinction if the development were to be permitted. The site of the proposed WWOLC, nominally protected by broad planning and specific

environment and heritage legislation, has exceptional avian biodiversity values that have only been partially revealed by the EIS. Only an alternative site should be considered for an orbital satellite launching facility. It should not be permitted at Whalers Way.

References

- Burbidge, A.H., Joseph, L., Toon, A., White, L.C., McGuire, A. and Austin, J.J. (2017) *Emu* 117, 254–263.
- DELWP (2016) *National Recovery Plan for the Mallee Emu-Wren* etc. Australian Government, Canberra.
- Garnett, S.T. and Baker, G.B. (2021). *The Action Plan for Australian Birds 2020*. CSIRO Publishing (for release December 2021).
- Garnett, S.T., Szabo, J.K. and Dutson, G. (2011). *The Action Plan for Australian Birds 2010*. CSIRO Publishing.
- Pickett, M. (2002). *Status review and action plan for the Eyre Peninsula Southern Emu-wren*. Department for Environment and Heritage.
- Pickett, M. (2009). *Eyre Peninsula Southern Emu-wren 2009 survey*. Report prepared for the Department for Environment & Heritage, Canberra.
- Pickett, M. and Te, T. (2012). *Draft National Recovery Plan for the Eyre Peninsula Southern Emu-wren*. DEWNR, SA.
- van Weenen, J., Copley, P. and, Garnett, S.T. (2021). Eyre Peninsula Southern Emu-wren. In *The Action Plan for Australian Birds 2020*.
- Verdon, S.J., Hodder, G., Hedger, C., Ireland, L., Clarke, R.H., Todd, M.K., Wilkins, P., Carpenter, G.A., Boulton, R.H., Menkhorst, P.W. and Garnett, S.T. (2021) Mallee Whipbird. In *The Action Plan for Australian Birds 2020*.

The aspects of the proposal we wish to comment on are

- The significant change of land use
- The risk that there will be adverse environmental changes at the site despite the regulators efforts to prevent them
- That the State (in this "matter of State significance") may be pressured to give undue weight to the proponents arguments once trial launches are made and once expensive site developments commence.

We have been to Whalers Way several times, although not recently and attended a public information session about the proposals and this decision making process. One of us has read parts of the EIS and we have discussed these matters with relatives, friends and colleagues. Our views are mainly derived from the Terrestrial Ecological Assessment, Appendix P.

Change of land use; In planning terms approval to change land use from wilderness area to an industrial/rocket launch site would be beyond common sense. This site is a step back from a wilderness area, another step back from a Park or Reserve. It is however freehold land to be protected by an existing State Heritage agreement because of its flora and fauna values.

The Precautionary Principle should apply here – if we don't know what effects the proposals would have on the site, then it should be refused. At this time it has not been refused, - we can understand why three trial launches have approval in the short term, and we agree that the region and the State are likely to benefit from this new technology and industry. What we are concerned about is the need to protect this particular site where the ecological values are so high.

Effective regulation; Another reality check for land use planners is the concept of 'average management'. The proposals in this case and their possible adverse effects are anything but 'average', so special conditions will no doubt be written into any approval. We have not seen an Environmental Management Plan yet but that would be where the special conditions would go. Our concern is that despite their best intentions the proponents, systems operators, contractors and managers will all finish up with an 'average' level of site management –and that will not be good enough to prevent adverse environmental effects.

Trial launches; These will create opportunities to gather and analyse information, including some about noise and the behaviour of the existing birds and animals, local residents and visitors. We presume that the proponents will be required to measure the changes that occur during the trial period so that there are answers to the questions being raised. It may be that after the three trial launches it will be concluded that full development can proceed.

Our view however, is that over the longer term (5 or 10 years?) the combined adverse effects of the developments and operations on Whip Bird and Emu Wren populations can not be avoided. Should the regulator take this view then the application should be refused.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Southern Launch.Space Pty Ltd
932/P007/19
Whalers Way Orbital Launch Complex Proposal Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

To Whom It May Concern:

My name is . I have been a resident of Port Lincoln for 57 years. I have been involved with the fishing industry (abalone, tuna, prawn) and while in that industry had reason to have worked hard up on the coast of the area in question.

I was for a 9-year period involved with Conservation and Land Management and hold a Cert 4 qualification in this field. I often worked in the neighbouring Cathedral Rocks Windfarm managing feral weeds and vermin.

I have in the past been involved with the Tourist Industry and still occasionally help out a local Tourist Operator.

I am now a professional photographer and regularly frequent this amazingly photographic area, Whalers Way. I can say quite confidently, I am familiar with the area.

My concerns with the project being in Whalers Way, an area under a Heritage Agreement are many and varied.

1. It is home to several endangered, rare and vulnerable native Australian wildlife species. A few of significance are
The Australian Sealion which, in this area, litters the rocky coastline of Liguana Island just offshore from and in the trajectory path of any rockets launched from this site. They also haul out at an unnamed rocky outcrop to the south of Cape Wiles, a kilometre or two to the East of the launch site.

We seasonally have the Southern Right Whales frequent these waters. Sleaford Bay, 10 kilometres to the northeast of the launch site is a recognised migration route “rest up” for these whales on their way to the Head of the Bight to give birth to the calves and mate. Quite often, and ever so more frequently, the whales spend time in this area, (Sleaford Bay) with their young before the long swim back to Antarctic waters. There is a lot of photographic evidence that they regularly swim under the cliffs of the launch site, which is coincidentally named Blue Whale Bay, up the west coast only to be spotted again at Sleaford Bay several days to a week later. At this time of the year, they would be “In the area” of the launch site often. Southern Launch has committed to holding off any launch if whales are “In the area”.

There are a number of endangered bird species which have managed to survive in the Whalers Way area.

The Southern Emu Wren, an elusive and secretive little bird survives in a small colony very near one of the proposed launch sites. Bird watchers nationally and internationally request finding these birds to tick off their list, more often than not without success they are so rare. Unless the specific site is changed or this project is moved to another location completely, this small outpost will most certainly be lost due to vegetation clearance, industrial activity, human and vehicular movements and noise, occasionally a LOT of noise.

The White Bellied Sea Eagles nest in the area and the Eastern Osprey while not using historic nest sites at the moment is still seen regularly along the coast of Whalers Way. There is evidence of these birds (Eastern Osprey) returning to these at present abandoned nests many years later given the required environmental conditions.

The reality is that with the increased heavy vehicle activity, increased human presence (workers), drone use and obviously the associated noise and resultant sonic boom from any rocket launch, the preferred remote and desolate home of the above-mentioned wildlife becomes far less accommodating to their requirements. I can't definitively predict an outcome but then neither can Southern Launch. My best guess is that the wildlife will not respond favourably to their altered environment.

2. Having worked in the area, on land and at sea, I see the choice of this site to be poorly considered. It's exposure to the elements, in particular the regular fresh to strong winds and the occasional extreme winds with resultant salt spray and dust storms it will experience in both summer and winter may cause the postponement of any scheduled launch. Salt spray and dust is a bad combination for almost anything with moving parts. With the technology required for a project such as this, it would most certainly be a nightmare.

The neighbouring Cathedral Rocks Windfarm, immediately to the north of Whalers Way, (the launch site) has their turbines shut down a great deal of the time due to the blustery winds they experience as the breeze from certain points of the compass hits the cliff line and creates irregular blustery turbulence. The present launch site will experience the exact same conditions as the windfarm in similar wind directions.

3. There is a very real bushfire hazard. While the obvious potential for a stray flame/spark would be from the actual launch, yes, I understand it will be flooded with water, the simple fact is that the industrial, vehicular and human activity will be so much greater than has been experienced in the past. Hot brakes, hot exhausts, cigarettes, grinders, welding, incinerators etc, all contribute to wildfires. Having been under a Heritage Agreement for many years, the fuel load is immense. You could possibly argue that the vegetation is stunted around the launch site and would be less of a hazard. Most Australian native vegetation has a high oil content, Eucalyptus oil, Tea tree oil etc. Several of these high oil content species are endemic to this area and represent the bulk of the native vegetation growing here.

The fact that much of it IS stunted only gives weight to my previous point re the wind conditions experienced in the Whalers Way area.

4. The water needed to run this facility has been quoted to be 30 million litres for stage 1 alone. Lower Eyre Peninsula has a genuine water supply issue as is. Where will this water come from? Southern launch intends to build a dam to supply their future needs. With Port Lincoln (closest major town to Whalers Way) experiencing an average annual rainfall of 18 inches in the old scale, any dam will take a long time to fill and then there is the issue of evaporation.

With the huge volume of water required in the “Deluge” process per launch AND reportedly 30 plus rockets a year, most of that water must be coming from the already struggling general water supply.

Yes, a desal plant is in the pipeline but that is obviously years away.

5. Geologically the area is Limestone over a granite base. The high cliffs are all limestone and the whole area is prone to sink holes. There is a major collapse, which encompasses the entire roadway on the old tourist road which is now closed off. There is further evidence of underground hollows by viewing the massive cave structures on the coastline just north of Cape Carnot, very near site B.

With the added vibrations created from the increased heavy vehicle usage, the intense vibrations from the rocket launch as well as the sonic boom, there is potential for another sink hole to appear anywhere at any time.

6. I find the idea of just dumping the spent rockets into the ocean absurd. This is yesterday’s technology. SpaceX have their space vehicles return to the pad after the mission.

If Port Lincoln locals were to fill up a tuna boat with rubbish 30 odd times a year, head out to sea and dump it, I don’t believe it would be accepted by any government department, or the community.

There are issues with the sonic boom, there are issues with their EIS, so much of which is incomplete, view “4.5 Report Clarifications”, “assumptions have been made”, “impacts not calculated”.

It doesn’t fill one with confidence in their competence and the genuine nature of their intentions.

A major local tourist attraction, (yes, the facilities are abysmal, read non-existent) is shut down for how long? Southern Launch have stated they will offer guided tours of the facility once built.

What about the amazing wilderness and its majestic coastal scenery where during the gales of winter you can drive down to Cape Carnot, car buffeted by the howling winds, wipers on to clear the salt spray from the windscreen and witness the full force of the Southern Ocean erupting over the oldest rock on Earth?

What about the incredible aqua marine rock pools the instafamous love and post with hundreds of thousands of likes dragging people from the far flung reaches of the globe here, to Port Lincoln, SOUTH AYSTRALIA just to witness the insane natural beauty of these pools while delighting in the abundant non endangered kangaroo, emu, reptile and bird populations?

Whalers Way is under a Heritage Agreement between the Government of the day and the landowner deserving of so much more than to be surrounded by a 2-metre

fence with 3 strands of barbed wire on top (in the report) and off limits to the locals and money spending tourists alike.

The adjoining Cathedral Rocks windfarm has equally spectacular scenery and would attract tourists and locals if open and the SA Waters lands immediately to the north of the windfarm would also be a terrific attraction. Both enterprises refuse to allow this to happen due to Occ Health and Safety regs plus the insurance aspect.

Neither have rocket fuel bunkers or potentially top-secret rockets/weapons so in reality the proposed guided tours by Southern Launch are not that likely to go ahead adding yet another nail to the coffin for the local tourism operators and a lesser experience for those tourists that do venture down our way.

I am a proud South Australian. I love the region I live in, Lower Eyre Peninsula. I know we need new employment opportunities and new money streams for the state coffers BUT this project needs to go somewhere else.

The Whalers Way area is an incredible natural wonder. The stunning Limestone cliffs and majestic coastal scenery with its' azure blue waters, the opportunity to see some of nature's rare and endangered creatures while traveling through a wilderness dodging snakes, sleepy lizards, kangaroo and emus is a world class experience enjoyed by international billionaires who fly in by private jet, movie stars and us commoners to boot.

It is home to the OLDEST ROCK on EARTH!

Did I mention it's also a photographers dream with its diversity of wildlife, flora, scenery and incredibly dramatic, constantly changing weather conditions.

Southern Launches project would restrict access to this area for all.

This is the wrong place for this project.

Finally and selfishly I imagine, as a photographer and as a person with a passion for wilderness and the accompanying wildlife, one of many thousands I might add, I find it difficult to accept that one of our region's most scenically spectacular

Development 932/P007/19 - Whalers Way Orbital Launch Complex, EIS submission

Being aware that others have made detailed submissions highlighting likely threats (immediate and ongoing) to the integrity of remnant biodiversity extant in the Whalers Way Heritage Agreement Area; and specifically to threatened bird species at risk of habitat degradation/loss inherent with the proposed industrial development; the aim of this submission is to simply:

- a) state opposition to the proposed development at that location; and
- b) provide specific and succinct comments regarding the conservation issues associated with two threatened bird species – the Osprey and the White-bellied Sea Eagle.

The proposed development, in every phase of its implementation and operation, would inevitably result in substantial increased (industrial) activity at Whalers Way; this aspect alone, added to the unknown impacts of regular extreme noise events, can only serve to exacerbate the habitat degradation processes already affecting these and several other threatened bird species, which, due to landscape-scale habitat loss coincident with agricultural development across Eyre Peninsula, now only occur in isolated remnant populations, including in the subject location (Whalers Way Heritage Area).

Some facts and comments (source Refs. (#))

- With small, geographically isolated and declining populations, both the Osprey and the White-bellied Sea Eagle were listed as *Endangered* in South Australia in 2008⁽⁵⁾ (*vide* National Parks and Wildlife Act);
- both are recognised *Sentinel Species*, by which to measure coastal ecosystem health and stability⁽⁴⁾, in the draft Osprey and White-bellied Sea Eagle Recovery Plan currently being formulated for these species by the Dept. Environment and Water;
- studies in Australia of these and of closely related species around the world, unequivocally link negative breeding outcomes being directly associated with ever increasing human activities encroaching into breeding refuge habitats^(3, 6, 8,9, 10);
- the Cape Wiles/Carnot complex lies central within one of three sub-regions identified in SA as retaining significant breeding habitat for both species⁽⁵⁾;
- in recognition of the documented population declines for both these species^(1,2), the prospect of this industrial development being permitted over yet another stretch of critical coastline habitat can only amplify the risk of further declines;

The Osprey in SA; and in Whalers Way ...

- Comprehensive surveys of Osprey habitat across all coastal regions of South Australia were completed in 2008–10 and in 2015–17; comparison of survey results revealed a significant decline of 26% in the breeding population over the period between surveys; the steepest

declines were in the west of the state where the number of occupied territories decreased from 33 in 2010 to 22 in 2017, a decline of 33%⁽¹⁾;

- former Osprey nest sites at and near Cape Wiles have been subjected to inappropriate tourism focus in the past and subsequently, although Osprey were recorded in the area during the 2015 survey⁽¹⁾ neither nest was active then and both structures were found derelict in 2020; however, with threat abatement management there is a high probability of re-occupation (ie. there is spatial opportunity, as the nearest occupied territories are ~15km to the east in Lincoln National Park and ~35kms north west in Coffin Bay Nat Pk⁽¹⁾);
- NB it is not clear in Appendix R if consultant surveys were adequately comprehensive to discount the possibility that Ospreys (eg. from Cape Wiles) may have established alternative nest site(s) on the coastline peripheral to the long-standing territories mentioned above.

The White-bellied Sea Eagle in SA; and in Whalers Way ...

- Studies of White-bellied Sea Eagle productivity outcomes on Kangaroo Island (and northern New South Wales) confirmed anthropogenic causal linkages to low fecundity levels, high rates of nest failure, and disturbance related displacement of pairs to sub-optimal habitats⁽⁶⁾;
- comprehensive surveys of White-bellied Sea Eagle habitat across all regions of South Australia undertaken in 2008–10 and in 2015–17, confirmed:
 - a breeding population of around 70-75 territorial pairs⁽²⁾;
 - significant displacement and a decline of ~22% has occurred in the number of mainland-based territories in recent decades⁽²⁾;
 - the greater majority of territories (81%) now confined to offshore island habitats⁽²⁾;
- the now long-abandoned sea eagle nest site on the north-western face of the most easterly island off Cape Wiles is likely to have been abandoned coincident with opening Whalers Way to tourism in the 1970s, likely resulting in the currently occupied (July '21) sub-optimal territory location – a cause-and-effect scenario typical of what has occurred at many of abandoned mainland territories in South Australia's open coastal landscapes;
- significantly, another sea eagle territory at risk is centred on Liguanea Island, 3.7kms south of Cape Carnot (NB Liguanea Is. also has Australian Sea Lion and Long-nosed Fur Seal Colonies).

In view of:

- a) the evidence provided here to indicate a substantial risk of further habitat degradation/loss for these iconic *Sentinel Species* inherent in the proposed Orbital Launch Complex development at Whalers Way;
- b) b) submissions from others detailing the risk to other threatened birdlife species and their habitat (ie. the Eyre Peninsula sub-species of the Southern Emuwren and Western Whipbird

(both listed as *Endangered* in SA); the Diamond Firetail (*Vulnerable*); and the Shy Heathwren and Rock Parrot (*Rare*); and

- c) c) the strong community understanding and expectation that as a matter of principle, Heritage Agreement Areas would be sacrosanct from industrial development;

Therefore the Planning Commission should disallow the development at this location and to direct the proponents to identify an alternative site(s) for consideration.

References used

1. Detmar, S. A. and Dennis, T. E. (2018). A review of Osprey distribution and population stability in South Australia. *South Australian Ornithologist* **43**, 38–54.
2. Dennis, T. E. and Detmar, S. A. (2018). A review of White-bellied Sea Eagle distribution and population stability over time in South Australia. *South Australian Ornithologist* **43**, 55–72.
3. Debus, S. J. S., Baker, G., Owner, D. and Nottidge, B. 2014. Responses of White-bellied Sea Eagles *Haliaeetus leucogaster* to encroaching human activities at nest sites. *Corella* **38**: 53–62.
4. Dennis, T. E., Detmar, S. A. and Paterson, C. 2015. The White-bellied Sea Eagle as a key indicator species by which to measure the health and stability of coastal biodiversity in South Australia. Unpub. Discussion Paper available online at http://www.naturalresources.sa.gov.au/kangarooisland/coast-and-marine/coastal-birds/Coastal_raptors
5. Dennis, T. E., Detmar, S. A., Brooks, A. V. and Dennis, H. M. 2011a. Distribution and status of the White-bellied Sea Eagle *Haliaeetus leucogaster* and Osprey *Pandion cristatus* populations in South Australia. *South Australian Ornithologist* **37**: 1–16 (erratum and corrigenda *SAO* **38**: p40).
6. Dennis, T. E., McIntosh, R. R. and Shaughnessy, P. D. 2011b. Effects of human disturbance on productivity of White-bellied Sea Eagles *Haliaeetus leucogaster*. *Emu – Austral Ornithology* **111**: 179–185.
7. Dennis, T. E. and Lashmar, A. F. C. 1996. Distribution and abundance of White-bellied Sea Eagles in South Australia. *Corella* **20**: 93-102.
8. Grubb, T. G, and King, R. M. 1991. Assessing human disturbance of breeding Bald Eagles with classification tree models. *Journal of Wildlife Management* **55**: 500–511.
9. Richardson, C. T. and Miller, C. K. 1997. Recommendations for protecting raptors from human disturbance: a review. *Wildlife Society Bulletin* **25**: 634-638.
10. Romin, L. A., and Muck, J. A. 2002. Guidelines for raptor protection from human and land use disturbances. U.S. Fish and Wildlife Service, Utah Field Office: Salt Lake City, Utah.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input type="checkbox"/>
	A private citizen <input type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<p>You say that the Fishing Industry have been consulted and members of the industry have agreed to collect debris from the ocean (Tulka Information session 5/9/21).</p> <p>I would like to see this in writing. How willing are fishermen to interrupt their work to collect your debris?</p> <p>If the fishermen do not pick it up, will it all be left in the ocean.</p> <p>Is the debris biodegradable and what effect will it have on ocean life?</p>

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Will it be washed up on the beaches? If so, are you planning to pick it up?

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input type="checkbox"/>
	A private citizen <input type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I read on the Southern Launch website that the company is sponsoring research to contribute to the body of knowledge on the lower EP's florat fauna.

Can you provide evidence of this commitment? Who is undertaking the research + what will it involve? What is the budget for this research?

I read that SL are committing to entice local raptors to nest in whalers way. Is the noise from the rockets safe for these birds and will they feel safe to nest in the launch site area?

How are SL enticing the raptors? What is the plan and who is involved? Can we see evidence of actual commitment?

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

When will the work begin and how will the success of the plan be measured?

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
You may be contacted by your nominated method of contact for further clarification or notification of a decision.	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input type="checkbox"/>
	A private citizen <input type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Our family and friends often go to the rockpools in Whalers Way to swim. When we have visitors we take them to swim there. We usually walk from the Right Point / Fishery Bay car park.
The rockpools are quite famous on Instagram & have given the area a lot of publicity and have attracted lots of visitors - not usually the type who go on guided tours (the only groups who will be able to access them once SA are in operation). Sometimes in summer there are up to 10 different groups there each day. Will this area be permanently blocked off to us?

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Are Tourism SA aware of this? I am fairly sure the rockpools have featured in their ads and on their social media accounts.

It is a big loss to our area that this beautiful + tourists natural attraction + popular destination, the rockpools are blocked off to us!

10 August 2021

The Hon Vickie Chapman MP
Minister for Planning
GPO Box 464 Parliament House
Adelaide SA 5001 Australia
AttorneyGeneral@sa.gov.au

Dear Minister Chapman,

I am writing in opposition to the Whalers Way Orbital Launch Complex proposed by SouthernLaunch.Space Pty Ltd and designated by the Minister as a major development.

This development risks significant environmental consequences within a heritage listed conservation area. There are real and pressing concerns about threatened species, sensitive receivers and coastal erosion that have not been adequately addressed in the developer's Environmental Impact Statement (EIS).

This is an area of nationally significant native vegetation. The risk of bushfire is ever present and the consequence of fire on this landscape devastating. The developer's bushfire mitigation strategies are inadequate and not fit for purpose, and do not address the severity of this issue nor the extent of the risks posed.

The region already boasts a thriving economy based on a clean and green image, and reaps significant benefits from sustainable fishing and tourism. Both these industries are expected to continue grow into the future. These established businesses deserve the government's support in the face of this serious threat to their livelihood.

At a time when the Intergovernmental Panel on Climate Change (IPCC) is warning the world of the dangers of climate change, and at a time when the safeguarding and preservation of the natural world is recognised as of fundamental importance to mitigating the consequences of global heating, it is unconscionable to be allowing a heritage listed environmental sanctuary and threatened species' habitat to be destroyed in favour of experimental and unprecedented industrial development.

The risks of catastrophic bushfire, coastal erosion, water table contamination and habitat loss are too severe to risk.

I urge you to put the interests of South Australians and our right to a preserved and protected natural landscape ahead of the commercial interests of developers and private business, and refuse approval to the Whalers Way Orbital Launch Complex.

Signed,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

1 I STRONGLY OPPOSE THE SOUTHERN LAUNCH ROCKET LAUNCH ORBITAL
2 COMPLEX SITE DEVELOPMENT. (SOUTHERN LAUNCH - 'S L.' IN THIS DOC) ^{I KNOW AS}
3 UNCONTROLLABLE BUSHFIRES ARE A CLEAR & PRESENT DANGER TO ALL
4 IN THE REGION, THIS IS AN UNACCEPTABLE RISK TO LOCAL RESIDENTS.
5 WATER CONTAMINATION FROM SEEPAGE DOWN INTO OUR ULEY BASIN
6 DRINKING SUPPLY IS AN UNACCEPTABLE RISK & HEALTH DANGER.
7 PRISTINE WILDERNESS HERITAGE LAND SITE OF WHALERS WAY
8 CONTAINS TOO MANY THREATENED & ENDANGERED SPECIES, THE
9 FLORA & FAUNA, BIRDS & MARINE LIFE NEED PROTECTION URGENTLY.
10 SOUTHERN RIGHT WHALES & HUMPBACK WHALES ARE RESTING
11 & BREEDING WITHIN ONLY SEVERAL KM'S IN THE ADJOINING SLEAFORD
12 BAY. THEY HAVE BEEN PRESENT FOR WEEKS.* WHY IS THIS LAUNCH ALLOWED?
13 S.L. SKIPPED OVER SEVERAL POWERPOINT SLIDES, AT S.L. INFO SESSION ^{1st}
14 HELD AT PORT LINCOLN HOTEL, 24/08/21. TRANSPARENCY & FULL DISCLOSURE

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

FROM SOUTHERN LAUNCH (S.L.) HAS NOT BEEN DEMONSTRATED
OR ACHIEVED. CLEARLY DUE PROCESS HAS NOT BEEN FOLLOWED.

7 TOO MANY LOCAL RESIDENTS APPEAR TO NOT BE AWARE OF THE
FOUR STAGE MAJOR COMPLEX FACILITY PROPOSAL PENDING, OR
EVEN THE FULL ENVIRONMENTAL IMPACT TO THE LOCALIZED
AREA AND REGION.

8 CRITICAL INFORMATION HAS BEEN OMITTED, THEREFORE BY
SOUTHERN LAUNCH AT THE PORT LINCOLN HOTEL INFO SESSION
AND THIS IS DEMONSTRATED & EVIDENT BY THE AMOUNT OF LOCAL
RESIDENTS WHO CLEARLY HAVE INDICATED TO MYSELF, OTHERS
AND ON SOCIAL MEDIA THEY ARE UNAWARE, CONFUSED, UPSET
AND ANGRY, YET FAR TOO MANY LOCAL RESIDENTS APPEAR TO
ME AND HAVE DEMONSTRATED & INDICATED TO MYSELF AND OTHERS
THEY ARE EXTREMELY APPREHENSIVE ABOUT SPEAKING OUT IN
OPPOSITION TO THIS S.L. MAJOR DEVELOPMENT.

9 I PUT TO YOU, THAT THERE ARE MANY SCARED RESIDENTS WHO
FEEL LET DOWN IN THIS TOWNSHIP OF PORT LINCOLN. I PUT TO
YOU THAT A PERCENTAGE OF LOCAL RESIDENTS ARE FRIGHTENED
OF LOSING THEIR JOBS, OF LOSING THEIR EMPLOYMENT DUE
TO OPPOSING A MAJOR DEVELOPMENT THAT CLEARLY BENEFITS
A LIMITED FEW STAKEHOLDERS AND SHAREHOLDERS PRIMARILY.

10 SOUTHERN LAUNCH SPACE PTY LTD IS SEEKING TO RUIN A
PRISTINE WILDERNESS HUGE AREA IN THE GOAL TO PROFIT
IMMENSELY. THIS IS UNACCEPTABLE.

11 NATURE OWNS A PRISTINE WILDERNESS AREA, NOT
A BUNCH OF BUSINESSMEN OR CORPORATE, GOVERNMENT.

12 PROTECT THE WHALES. PROTECT THE WESTERN WHIPBIRD.

13 PROTECT THE SOUTHERN EMU WREN, PROTECT THE SEALS.

14 PROTECT THE FRAGILE ECO-SYSTEM, PROTECT FLORA & FAUNA.

15 PROTECT THE LOCAL RESIDENTS FROM A POISONED WATER SUPPLY.

16 PROTECT EVERYTHING AND EVERYBODY FROM A POISONED LANDSCAPE

17 HOW DARE YOU ALLOW THIS DANGEROUS ROCKET LAUNCH
FACILITY SITE TO BE CONSIDERED HERE.

18 WHO IS ADVOCATING FOR THE LOCAL RESIDENTS WHO OPPOSE
THE S.L. DEVELOPMENT? WHERE ARE THE GOVERNMENT
REPRESENTATIVES SUPPORTING & ADVOCATING OR ASSISTING THE
RESIDENTS WHO OPPOSE THIS S.L. DEVELOPMENT?

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

- 19 WHO IS ADVOCATING FOR THE MIGRATORY ROUTE OF THE WHALES?
- 20 WHERE IS THE GOVERNMENT DIVISION REPRESENTATIVES?
- 21 SITE D PROPOSAL - DIGGING OUT A HUGE HOLE IN THE GROUND, TO USE THE ROCKS AS PAVING MATERIAL TO EXPAND ROADS AND THEN TURNING IT INTO A 30 MEGALITRE DAM WITH CHEMICALS IS UNACCEPTABLE
- 22 THIS REGION IS THE WRONG PLACE TO BUILD A ROCKET LAUNCH SITE. PORT LINCOLN TOWNSHIP OF APPROX 17,000 RESIDENTS IS ONLY APPROX 30 KMS BY ROAD, & CLOSER THAN THAT, AS "THE CROW FLIES". A ROCKET LAUNCH SITE IS A CLEAR & PRESENT DANGER TO TOO MANY PEOPLE, INCLUDING RURAL FISHERIES BAY AREA RESIDENTS. ROCKETS REGULARLY MIS-FIRE.
- 23 CYCLISTS ARE IN DIRECT DANGER OF BEING INJURED, HAIRED OR KILLED BY THE EVER INCREASING TRAFFIC & SEMI TRAILER VEHICLES ALONG PROPER BAY ROAD.
- 24 I WOULD SUGGEST THAT PARKING 19 metre SEMI-TRAILER VEHICLES NEXT TO A FUEL BUND & ANOTHER NEXT TO AN OXIDISER BUND IS NOT SAFE BEST PRACTISE. ROCKETS CAN EXPLODE.
- 25 WHALES WAY IS BETTER SUITED TO ECO-TOURISM, GREEN ENERGY THAT IS FAR LESS INVASIVE, FAR LOWER IMPACT ON THE ENVIRONMENT. WHY A DESTRUCTIVE, DANGEROUS ROCKET LAUNCH SITE WITH AN END GAME TO LAUNCH BIGGER & BIGGER ROCKETS? WHY BUILD IT HERE, WHEN THERE IS AN ABUNDANCE OF WASTELAND, ARID, BARREN AREAS AVAILABLE THAT ARE SIMILAR TO THE LOCATION OF eg. WOOMERA?
- 26 A ROCKET LAUNCH SITE FACILITY IS TOO CLOSE AT WHALES WAY, TOO CLOSE TO FAR TOO MANY PEOPLE. WHY HAS THIS DANGEROUS DEVELOPMENT BEEN POSITIONED SO CLOSE TO SO MANY PEOPLE? BECAUSE IT'S CHEAPER FOR SOUTHERN LAUNCH PTY LTD IS NO ARGUMENT WORTH ENTERTAINING.
- 27 THE RESIDENTS LIVE HERE BECAUSE ITS A SAFE ZONE. NOW, THE GOVERNMENT APPEARS TO BE SUPPORTING PUTTING LOWER EYRE PENINSULA RESIDENTS & THE ENVIRONMENT IN A HIGH RISK ZONE AS A TARGET LOCATION IN A POTENTIAL GLOBAL CONFLICT.
- 28 WHALES SUFFERING IS UNACCEPTABLE. ROCKET LAUNCH DECIBAL LEVELS CAUSING 'TEMPORARY' HEARING DAMAGE TO SURFACE MAMMALS, & FRIGHTENING SEALS ON LIGUANEA ISLAND & CAPE WILES SEALS IS UNACCEPTABLE. SHAME ON GOVERNMENT. SHAME. SHAME.

SHAME.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

1. The potential for a failed launch and the danger it poses to the surrounding community
- Understandably if all the rocket launches go exactly to plan, the danger it places on our neighbouring property is rather minimal. However the potential for a failed launch is very real and the repercussions that has is immense. If cars were incapable of having crashes driving would be a safe activity however that is not the case, so we have placed seat belts in them to ensure maximum safety - I don't believe there is a way that maximum safety can be ensured in the event of a failed launch. The potential for fire is my biggest concern in terms of safety. Whalers Way is hard to access, and in the event of a fire it would be extremely hard to keep under control. This would result in our property being at great risk as the likelihood is that the wind would blow the fire in our direction, with no way of intersecting it due to thick shrubbery.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:

Contact number:

Email:

Postal Address:

Affected property (if different from postal address) 94 Right Whale Rd SLEAFORD SA 5607

You may be contacted by your nominated method of contact for further clarification or notification of a decision.

My interests are (tick or circle):

- Owner of local property
- Occupier of local property
- A representative of a company/other organisation affected by the proposal
- A private citizen

Other:

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

Whalers Way is a awe-inspiring, fragile frontier coastline south of Port Lincoln, surrounded on ALL sides by native Australian bush land, nesting sea eagles & whales with calves.

This area of pristine wildlife that is daily visited by community & visitors, would be impacted beyond repair by development of a rocket launch facility. The proposed industrial site, with rocket fuel storage facilities, poses a significant bushfire risk. Whalers way, and nearby Fishery Bay, are frequented daily by Eyre Peninsula residents and is a tourism hotspot. Access to these locations would be restricted. This area experiences are huge level on wind. So much so, that there is actually a Wind farm complex set in this area.

The proposed rockets launched will be over the habitat protection zone, which is home to the endangered Australian Sea Lion, long nose fur seals and 70 other animal species, including Sothern Right Whales. Rocket debris will be discharged into the ocean. Decibel levels will be loud enough to cause temporary hearing damage to mammals on the surface, frighten seals on Liguanea Island and Cape Wiles.

Water: A water deluge of 150,000 litres is required for medium launches to absorb heat and sound. This water is apparently being sourced from Port Lincoln cities limited water supply. Much of this water becomes a cloud of chemical laden steam which will drift with the prevailing wind onto land and ocean. Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

From:
Sent:
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Sent: Tuesday, 14 September 2021 11:23 AM
To: DIT:SPC Reps
Subject: Southern launch development

I support the whalers way launch complex project

From:
Sent: Tuesday, 14 September 2021 11:30 AM
To: DIT:SPC Reps
Subject: Supporting whalers launch

Hey guys

I support the whalers way launch complex project

Cheers

To:
Subject:

Tuesday, 14 September 2021 11:35 AM
DIT:SPC Reps
Southern Launch Development

To whom it may concern, I support the whalers way launch complex project.

Sent: Tuesday, 14 September 2021 11:37 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

To:
Subject:

Tuesday, 14 September 2021 11:38 AM
DIT:SPC Reps
Southern Launch Development

I support the Whalers Way rocket launch development

Regards

Sent: Tuesday, 14 September 2021 11:42 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development

Kind regards,

Sent: Tuesday, 14 September 2021 11:48 AM
To: DIT:SPC Reps
Subject: Southern Launch Facility

I support this going ahead

Sent: Tuesday, 14 September 2021 12:13 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way launch development.

This email is confidential, and is for the intended recipient only. Access, disclosure, copying, distribution, or reliance on any of it by anyone outside the intended recipient organisation is prohibited and may be a criminal offence. Please delete if obtained in error and email confirmation to the sender. The views expressed in this email are not necessarily the views of the University of Tasmania, unless clearly intended otherwise.

From:
Sent: Tuesday, 14 September 2021 12:16 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

Hello,

I support the whalers way launch complex project.

Kind regards,

From:
Sent: Tuesday, 14 September 2021 12:36 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I Karen Dawson support the Whalers Way rocket launch development.

Regards,

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal
	A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

I am concerned that Whalers Way, our awe-inspiring and fragile natural coastline, will become an industrial site.
I am particularly concerned for the wildlife- their habitat will be detrimentally affected by the clearing of hectares of land. They will be at further risk from increased traffic, noise, pollution and debris created by the rocket launch.
The fact that Southern Launch will have 15 semi trailers per week and 56 SUVs per day going past my family's home (as quoted by a Souther Launch representative) also worries me. We have chosen to live in a quiet and remote part of South Australia and I fear that choice is being taken away from us.
Our family and friends often go to the rockpools in Whalers Way to swim and enjoy this beautiful natural wonder. When we have visitors we always take them to swim there. In recent years these rockpools have become a very popular tourist destination and when there I often meet people who have travelled from interstate or overseas (before COVID). I am so disappointed to learn that access to these rockpools will be restricted once Southern Launch are in operation. I am sure this will affect Port Lincoln's tourism industry and reputation as a pristine coastal destination.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Sent: Tuesday, 14 September 2021 12:47 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development. Regards

Sent: Tuesday, 14 September 2021 12:56 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way Rocket Launch Development.

Regards

Sent: Tuesday, 14 September 2021 1:00 PM
To: DIT:SPC Reps
Subject: Southern launch development

I support the whalers way rocket launch development

Sent: Tuesday, 14 September 2021 1:11 PM
To: DIT:SPC Reps
Subject: Whalers Way rocke

To whom it may concern,
support the Whalers Way rocket launch development
Regards

Sent: Tuesday, 14 September 2021 1:04 PM
To: DIT:SPC Reps
Subject: Whalers Way Orbital Launch Complex

I support the whalers way project at Port Lincoln.

Kind regards,

Sent: Tuesday, 14 September 2021 3:41 PM
To: Webb, Lee (AGD)
Subject: FW: Urgent: stop the proposed high risk rocket launch facility at whalers Way

OFFICIAL

Sent: Tuesday, 14 September 2021 1:23 PM
To: DIT:SPC Reps <spcreps@sa.gov.au>
Subject: Urgent: stop the proposed high risk rocket launch facility at whalers Way

Dear Sir/madam

I am writing to express my concern about a proposal to build a permanent rocket launching facility at Whalers Way, on the very southern tip of Eyre Peninsula.

Details revealed in the recently-released Environmental Impact Statement (EIS) confirm the widely held view that a dedicated conservation area is not the right place for such a large, industrial development.

One important reason but there are many more, is that Whalers Way is home to a range of threatened species, including the Southern Emu-Wren (Eyre Peninsula). The high fire risk is another.

Please recognize the important value of the endangered species that need protection from such development and avoid further catastrophic development decisions.

Sincerely

Sent: Tuesday, 14 September 2021 3:42 PM
To: Webb, Lee (AGD)
Subject: FW: Rocket launching site Whalers Way EIS

OFFICIAL

Sent: Tuesday, 14 September 2021 1:32 PM
To: DIT:SPC Reps <spcreps@sa.gov.au>
Subject: Rocket launching site Whalers Way EIS

Submission:

I spent a week in the Port Lincoln, Lincoln NP and Whalers Way this year. The whole area is unique, stunning and varied, and home to vast marine and land ecological families.

I am aware that the Whalers Way is on private land, with a high conservation value. I know that it has been in the family for generations, and appreciate their protection of it during that time. However, a space launching station should not be constructed on that property.

The noise, vibrations, land clearing, roadways, increased visitation by land and air – will all not only detract from the area, but impact the natural landscape, fauna (especially birds) and the enjoyment of visitors to the wider peninsula.

I do hope the plan for a rocket launching site is shelved, for the reasons I've outlined, and I am sure for a range of scientific reasons that I cannot expand upon.

Yours faithfully

Sent: Tuesday, 14 September 2021 2:04 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I wholeheartedly support the Whalers Way rocket launch development.

SA in space sounds very cool.

--

warm regards

This email and any attached files are confidential and intended solely for the intended recipient(s). If you are not the named recipient you should not read, distribute, copy or alter this email. Any views or opinions expressed in this email are those of the author and do not represent those of the company. Warning: Although precautions have been taken to make sure no viruses are present in this email, the company and the individual cannot accept responsibility for any loss or damage that arise from the use of this email or attachments

Sent: Tuesday, 14 September 2021 3:02 PM
To: DIT:SPC Reps
Subject: Southern Launch development

Hello

I support the whalers way launch complex project.

Thanks

Sent: Tuesday, 14 September 2021 3:02 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way Launch Complex Project.

Sent: Tuesday, 14 September 2021 2:57 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the whalers way launch complex project

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<u>A private citizen</u>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Shocking decision to put such an organisation in the middle of a much loved conservation area.

① p43 per tourist doc - No access for tourists during construction.
No access to tourists either side of rocket launch

② p46 per Traffic - "safe passage of dangerous goods delivered to launch site may be deemed to be a high risk activity"

③ In caveat filed by Coates in Pt.L. : p 31 - company not even required to repair damage

In every submitted document there are outrageous examples such as these - this private company should NOT be permitted to operate in this area.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="radio"/> A private citizen
Other:	5 th generation local

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<p>① Migrating Whales, other marine life, birdlife and native animals. ② Camping, tours, day trippers. ③ Roads, traffic. ④ Water. ⑤ Wind farms. ⑥ Local economy. ⑦ Launch schedules and warnings. ⑧ Fire ban period/permits. ⑨ Weather and Dangers. ⑩ Rocket debris and recovery drop zones. ⑪ Bushfires.</p> <p>① Whales; have given great joy to the public and memories. Every local has a story of those experiences. I am horrified someone suggested whales can just submerge to avoid noise. Native animals will avoid and escape the noise and traffic and move into farmland.</p>
--

- ② Camping: in the area will be at the Wim of St John Launch. As well as putting off concerned travellers who come to enjoy the peace and quiet of Fishery Bay.
 - ③ Roads & Traffic: Who will make the repairs to the Fishery Bay Road? This should be maintained and upgraded by Southern Launch. With Port Lincoln and surrounds needing upgrades to roads then where will the funds come from.
 - ④ Water: Two types of this major commodity exist in Lower Eyre Peninsula, underground basin's and privately collected in tanks off roofs. Limestone is the filter for groundwater, luckily no one drinks that. So my concern is the closeness of the launch facility to Uley Artesian Basin.
 - ⑤ Wind Farms: First time they operated winds gusts exceeded the average and damaged the brakes on the gearbox and alternators. Consequently modifications and shutdown devices were fitted. My concern is with the Whalers way cliff top position damage could occur from freak winds.
 - ⑥ Local Economy: Port Lincoln is setup to service the fishing industry. There are mobile tradesmen to handle repairs. Southern Launch will get out of towners to fill the gap.
 - ⑦ Weather & dangers: This will be a big obstacle, as southern ocean delivers very changeable wind. If launches are tried in summer the rockets pose a fire risk. N.W. and S.W. winds pose the greatest threat to Port Lincoln and outlying areas and a fire or spark carried in the wind will burn towards Pt Lincoln. Rockets are a fire risk.
 - ⑧ Rocket Debris and drop zones: the cost to the Local Fishing Industry cannot stop for a launch event. If they have to navigate around the drop zone it will be an added cost they will not want.
- Whalers way should have been a National Park and not privately owned. The area is too iconic for rockets.**

Sent: Tuesday, 14 September 2021 5:44 PM
To: DIT:SPC Reps
Subject: Southern launch development

I support the whalers way launch complex project

2021/09/14 14:00:00

From:

Tuesday, 14 September 2021 6:00 PM

Sent:

DIT:SPC Reps

To:

Southern Launch Development

Subject:

Support for Whalers Way

To whom it may concerns

Please find my support for the Whalers Way rocket launch development useful

Regards

W. Tom

10/24/21 1:44 (A:GTM)

Sent: Tuesday, 14 September 2021 6:17 PM
To: DIT:SPC Reps
Subject: Southern Launch development

I support the Whalers Way rocket launch development it shuts tomorrow and is incredibly important.
Thank you

John M. ...

...

Sent: Tuesday, 14 September 2021 8:51 PM
To: DIT:SPC Reps
Subject: Southern launch development

I support the Whalers Way rocket launch development.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: Southern Launch Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	<input checked="" type="checkbox"/> Owner of local property
	<input checked="" type="checkbox"/> Occupier of local property
	A representative of a company/other organisation affected by the proposal
	<input checked="" type="checkbox"/> A private citizen
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

<p>I oppose the Whalers Way proposal from the Southern Launch Rocket Launch Orbital Complex Site Development.</p> <ul style="list-style-type: none"> • I protest on behalf of Fauna + Flora! • I strongly oppose this site from Weapon Craft and Environmental (Oceandalism). • Port Lincoln & surrounding residents - Do not need this kind of tourism. — Im all for Defence - to keep our beautiful country safe - BUT NOT AT WHALERS WAY or CEDUNA (Remembering Oov Marine Parks). • Risking the EP from future world unrest of becoming a target - A future location by all accounts be on someones radar - communications take out. • BUSHFIRES - • POLLUTION - Hurting the endangered species - WHALES - The scheduled launch was scheduled to happen 1 km from our visiting Humpback & baby & Southern Right Whales & babies at Sleaford - no leave - • Rockets explode - go off target.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B - Environmental Impact Statement - Major Development

- whatever way, Ashery Bay residents - what rights - if any will they have - bullies -
- How reputable is Southern Launch - Taiwanese - really! - considering few interest with China - First in the world. - Lets hope there are no mishaps.
- DO NOT WANT THE 4 STAGE FACILITY TO GO AHEAD.
- SEND TO WOOMERA - or similar
- we have aquaculture industries that is the life source of our region - coupled with Agriculture - Rockets
- Rockets don't fit with our towns future. -
- You cant allow yourselves to poison our industries when in 5 years time the whole world will look at Australia & want a piece of your paradise - Our Clean & Green image, produce, resources, innovation.
- Here a stretch of a third world country do do you rockets.
- "A COVERT OPERATION - ITS OUSTANDINGLY SUSPICIOUS THAT A LOT OF PEOPLE DON'T KNOW WHATS GOING ON."
- I BELIEVE WE ARE NOT FULLY INFORMED - INFO SESSION WAS NOT FULLY TRANSPARENT
- WHY?
- our space station was present Friday for the launch to be sure the rocket didnt go sideways.

How much money & what is on the table for our EP. Residents do want such poisoning. - we did not agree to this - Covid was not an advantageous time to sneak this thro.

PRIME MINISTER - SCOTT MORRISON - when you called out China - I believe you were the first in the world to demand - "How did this (Covid) start?" (your gut (I think) demanded answers). I thought that was so honestly brave (& stupid) but I was so proud to be Australian. So you see I'm taking your lead - speaking up for once and saying this isn't right. Thanks Mr Morrison, hoping my children will be proud and take a leaf from my book & stand up and speak their truth & have the strength to fight the good fight in their future when the need be. -

HANDS OFF - Please dont destroy our paradise.

I dont see many jobs being created - Some yes - (More than Eco Tourism ??) Im not sure. - we are an excellent example of country people with integrity & gumption

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

but not this one - we do not wish here.

Subject: FW: Submission for Development of Whalers Way Orbital Launch
Attachments: SUBMISSION ANGELA.pdf

Sent: Tuesday, 14 September 2021 9:24 PM
To: DIT:SPC Reps <spcreps@sa.gov.au>
Subject: Submission for Development of Whalers Way Orbital Launch

I am writing in opposition to the proposed Whalers Way Orbital Launch Complex. There are many reasons why this development should not be approved to go ahead.

Our world is facing ever increasing catastrophe from climate change and the exploitation of our environment and the latest IPCC Climate Change report contains dire warnings for our earth, and humanity, if something is not done soon to address the climate emergency we are facing. For too long has our government been inactive on this issue, and subsidised the wrong industries, with devastating consequences for the environment. To allow private companies to destroy our environment for profit is no longer an option if we are to cultivate a sustainable existence with nature. We must take responsibility for our actions, accept responsibility for the damage we have already done, and take IMMEDIATE steps to repair the damage, and most importantly, protect what remains. To not do so is to our own detriment, because without the earth, without biodiversity, without nature, what do we have?

The science is clear that the natural world must be preserved and we must commit NOW to protecting our remaining wilderness. Over 77% of the earth's surface has been modified by human use. We need to take action now to stop industrial scale developments like this from ruining what precious remaining wilderness we have.

For those of you not familiar with Whalers Way, this area is a heritage listed conservation area at the very most southern tip of the Eyre Peninsula. You literally cannot go any further south from here and as such it is incredibly remote. Electricity stops more than 5km up the road. There are no power lines down here, there is no mains water or any infrastructure of that sort. In its own way this area is unique, similar to the Daintree where the power stops at the river. Beyond that is wild, uninterrupted wilderness and it should remain so.

Whalers Way is home to many endangered creatures such as Australian Sea Lions, Osprey, Sea Eagles, Southern Emu-wrens, Western Whipbirds, Koalas and many more. Migratory Southern Right Whales are regularly seen in the waters around Whalers Way. This area is incredibly beautiful and is treasured by locals and tourists alike. How many places can you go to where there are just 360 degree views of uninterrupted wilderness? No houses, no buildings, no power lines, no development at all. Just nature. This is so precious in the world today and we need to realise that before it is too late. This is what people want, this is what the tourists will come to see, this is what we must protect!

So far I have spoken from the heart about why I feel it is so wrong to allow this development to go ahead. I would like to also bring to your attention the following issues I have after reading Southern Launches EIS statement.

Whalers Way is accessed via Fishery Bay Road, a 12km dirt road used by residents, locals from the surrounding area and Port Lincoln as well as tourists to the area. Fishery Bay is located just before Whalers Way and this area is a favourite spot of many. Countless families frequent the beach as it is one of the best swimming beaches close to Port Lincoln; surfers frequent the area on a daily basis due to the good waves at each point. There is a large free camping ground directly before the beach that people use almost every single day.

Fishery Bay road barely copes with the amount of traffic it has now. It would not be unusual for 50 cars to come and go over a day: surfers, beach goers, tourists visiting Whalers Way (before the rocket test launching started), cyclists, young kids just going for a drive or out to camp, plus

a daily school pick up and drop off service.. On weekends and good weather Fishery Bay is lined with cars.

Fishery Bay road has not been adequately addressed in the proposal. “ Some additional maintenance such as more frequent grading” (Appendix AA p47) will not address the very real, very significant risk of loss of life due to the increased traffic and trucks that will be on this road should the proposal go ahead.

In the last two weeks I have had 3 almost crashes with semi-trailers who have been bringing stuff out for Southern Launches test rockets. Fishery Bay road is less than 7 metres wide in places, there are crests and blind corners, parts of the road drop several feet directly at the edge. It is littered with potholes and these have increased dramatically in just the last few weeks, leading to very dangerous driving conditions. Please see attached photos. There are regularly emus, kangaroos and koalas crossing the road and creating more hazards for road users.

Sections of Right Whale Road (which leads from the end of Fishery Bay Road to Whalers Way) are less than 6 meters wide. Parts of this road are less than 10 metres from the edge of fragile cliffs. There have already been large boulders of cliff fall with all the increased traffic. Please see attached photos. They estimate there will be 1400 heavy vehicles accessing the site in the first 6 months alone (Appendix AA page 41) What will this do to our roads? What will this do to these fragile cliffs? What if there are people on the beach when one of these cliff edges collapses from all the increased weight on it?

This road was graded in June and is already in a terrible state with all the increased heavy vehicle traffic. My photos were taken on the 5th September, less than three months since grading! It is neither fair nor reasonable that the upkeep of this road should fall to rate and tax payers to support a private company operating for profit. It is not fair to all the residents who have to drive this road to work every day that their cars should have to suffer all the extra wear and tear created by Southern Launches traffic. Please note all this damage has been caused only by this temporary development, and it already shows what an impact this development will have.

How is it possible to allow such a huge increase in traffic, especially 19m semi-trailers, and not consider the safety of the people who use this road every day? I have approached the District Council of Lower Eyre Peninsula about my safety concerns and was advised they had no comment on any of the issues I attempted to talk to them about. This is unacceptable! Will it take someone to lose their life before the government makes Southern Launch address this issue? Because if nothing is done about Fishery Bay Road then it will only be a matter of time before someone dies as a direct result of this development not addressing the road access issues.

In the Raptor Assessment that Southern Launch were required to do, in addition to their Terrestrial Assessment, they were told to get a coastal raptor expert, which they did not. They used an ecologist, Dr Zeta Bull, who professes herself that she “is not a raptor expert” (Appendix R page 1). Her advice is also backed up by information provided by local bird watcher Mike Damp (Appendix R page 9). Mike Damp is Southern Launches CEO’s father! How is this ok? How is this not a conflict of interest? How can any report from any of the company’s employees be taken for consideration on the environmental impact, as they are almost certainly completely biased. What should be noted is that raptor expert Terry Dennis, who is misrepresented as

being involved in the report (Appendix R page 1) has said that “both osprey nest sites retain a high probability of re-occupation” and also “the prospect of industrial development being permitted over yet another stretch of critical habitat must be regarded as grossly irresponsible”. This information was conveniently left out of their coastal raptor report!

I also would like to bring to the attention of the panel their negligence in assessing the applications supporting the temporary change of land use that was approved. More than half the supporting submissions were staff, family members and close friends and associates of Southern Launch. Once again I ask how can this be? How were those supporting submissions not stricken from the record for a conflict of interests? How were they considered of the same significance as the opposing detailed submissions from some of the state’s top nature conservation societies and experts? I ask you to fairly assess the supporting submissions for the major development and to discount ALL submissions done by people who will directly or indirectly benefit from this proposal.

In the Marine Ecological Assessment Southern Launch use the argument “southern right whales may be exposed to sound levels approaching the threshold for temporary hearing loss, but could avoid the noise by submerging for less than two minutes” (Appendix S p6). What sort of scientific argument is this? Is our government actually going to accept this as a satisfactory argument as to why the whales will not be affected?

Furthermore Southern Launch, at the community information session held at the Port Lincoln Hotel on August 24th, told everyone they would not launch if whales were “in the area”. On Friday September 10th Southern Right Whales and their calves were present in Sleaford Bay, less than 4km from their launch site. This can be confirmed from multiple sources. We raised this issue with them at the gate and were given no response. Later that day their media release advised that there were no whales in their “exclusion zone” therefore they would have launched if conditions were ok. This is a direct misrepresentation of the facts to the community. “in the area” was portrayed to the people of Port Lincoln as completely different from “in their exclusion zone”, which only runs from Cape Wiles to Cape Carnot (approximately). That means if whales are present in Sleaford Bay and even Fishery Bay they will still launch, putting this creature at significant risk of temporary hearing loss. It is also completely different to what everyone at their community consultation was led to believe.

In all the photos in the EIS Whalers Way is portrayed to look like a barren coastline, another deliberately misleading portrayal of the facts. I have provided photos, some taken as close as 200m but all taken less than 1000m from the proposed launch site, B and site D to show a more accurate view of this place and what will be cleared should this proposal go ahead. Whalers Way comprises large unburnt native vegetation with magnificent old growth Mallee trees. To let 26 hectares of this area be cleared for a rocket launching facility is an abomination and a severe breach of the conservation rules that protect this area and that our government should uphold and enforce.

In summary the EIS released by Southern Launch is beyond a joke. It makes a mockery of our environmental laws and systems supposedly in place to protect South Australia’s remaining wilderness areas. Their arguments are invalid; they have completely misrepresented information to suit their own agenda, and have already been shown to have a complete disregard for our environment and the animals that call it home.

I call on the South Australian Government to act now to protect this incredibly precious and important area, to stand up and start fighting for what is right, to make the right decisions now to protect the future of our children. Do not let this development go ahead!

All photos provided are my own photos.

Road photos taken September 5th 2021

Vegetation photos taken August 14th 2021.

All photos of vegetation are taken within a 1km radius of launch site B and Site D. By no means is this a conclusive representation of all vegetation, merely a small representation of the land that will be cleared should this proposal go ahead.



The boulder that has broken off the clifftops and fallen onto Fishery Bay Beach. I frequent this beach almost daily and this boulder broke away from the cliff above and fell sometime between September 1st and September 5th. Photo taken September 7th 2021

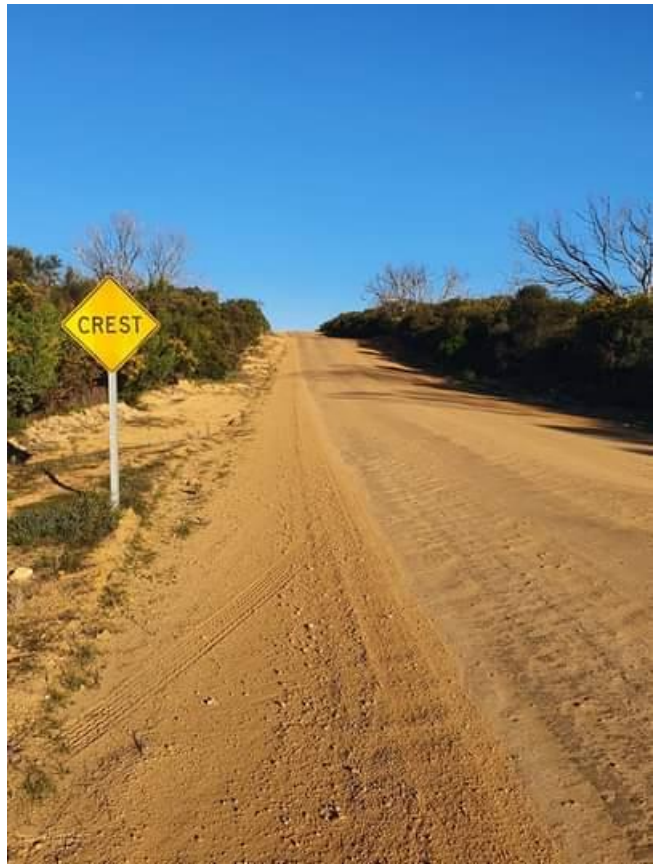


Cliff Top where the boulder has recently been dislodged. Photo taken September 7th 2021.



Corner of Right Point Rd and Fishery Bay Road.







Massive potholes over road



Washed out section of road. Please note if you were to come around this corner at the same time as a truck you would not be able to avoid hitting this hole, which is deep enough to cause significant damage to your car, or potentially even cause you to crash.





Drop off of several feet on side of narrow corner





School Bus picking up school children from side of road. There are multiple pickups with children waiting right on the verge of the road for the bus to come past, and again being dropped off in the afternoon on the side of the road. Due to the low density of traffic local residents are used to travelling these roads, especially in the early morning; these children are often left unaccompanied.







This road has many blind driveways, not all signposted either.



Broken drain pipe at bottom of Right Whale Rd. This has gotten significantly worse in the last few weeks due to increased traffic.

















Sent: Tuesday, 14 September 2021 9:45 PM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Subject:
Attachments:

FW: submission Whalers Way Orbital Launch Complex
submission Bailey.docx

Sent: Tuesday, 14 September 2021 10:41 PM
To: DIT:SPC Reps <spcreps@sa.gov.au>
Subject: submission Whalers Way Orbital Launch Complex

Section 46B – Environmental Impact Statement – Major Development
Submission on Application
Development Act 1993
Environmental Impact Statement – Major Development
Applicant:
Development Number:
Nature of Development:
Assessment Level:
Subject Land:
Phone Number:
Close Date:

SouthernLaunch, Space Pty Ltd
932/P007/19
Whalers Way Orbital Launch Complex Proposal
Environmental Impact Statement
Lot 101 Right Whale Road, Sleaford
1800 752 664
16 September 2021

Name:	[Redacted]
Contact number:	[Redacted]
Email:	[Redacted]
Postal Address:	[Redacted]
Affected property (if different from postal address)	94 RIGHT WHALE ROAD SLEAFORD SA 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property
	Occupier of local property
	A representative of a company/other organisation affected by the proposal
	A private citizen <input checked="" type="checkbox"/>
Other:	

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

Please see attachment for submission opposing this development.

I am writing in opposition to the proposed rocket launching facility at Whalers Way. I grew up visiting this area, the Theakstones have kept it pretty much the same as it was 100 years ago, this land is old and beautiful, and raw, and full of life. I have lost count of how many days I have sat in there watching the birds, listening to the waves, watching the sea lions frolicking in the waters. This place is precious to so many people just the way it is. We don't want it to change, we want it left alone and preserved just how it is. Look after the animals and birds that call this place home, preserve its peaceful tranquillity so the birds can communicate and live happily.

Why do we need a rocket launch here? We don't!

I would also like to voice my concerns on how this is being managed as it seems the safety of recreational users of this area has not been considered. I live a quiet peaceful life and very rarely spend time with people or in town. On Friday September 10th as I do quite regularly I took my boat down to Fishery Bay and launched, completely unaware that anything was taking place that day. I took my boat out around cape wiles and cape carnot out to Red Banks which is one of my favourite fishing spots, where I did some fishing. Around 10am I came back near to Cape Wiles and did some more fishing before returning to the beach and then heading home early in the afternoon.

It was only when I was visited by a friend that I found out that a rocket was supposed to have been launched that day and there was an exclusion zone in place. Well I didn't see a single person, no boats came up to me, and there was no one to tell me that this area was unsafe for me to go into. What would have happened if they had launched that rocket on top of me? I could have been killed. How was I supposed to know that I couldn't do what I have done for years before hand? Why was there no one there to stop me from putting myself unknowingly in danger. If this is the level of security they have in place then this is very worrying indeed.

Sent: Tuesday, 14 September 2021 10:54
To: PMDIT:SPC Reps
Subject: Southern launch development

I support the whalers way launch complex project!

Sent: Wednesday, 15 September 2021 7:01 AM
To: DIT:SPC Reps
Subject: Southern Launch Development [SEC=OFFICIAL]

OFFICIAL

To Whom....

I support the Whalers Way rocket launch development!

Very respectfully,

Sent: Wednesday, 15 September 2021 8:18 AM
To: DIT:SPC Reps

I am writing to you to express my concerns over the rocket launch that is going ahead at whalers way south Australia. I can't understand how it is possible for this to go ahead! As I write this..there is currently at least 2 mums and 2 baby whales out there..and aparently the rocket is due for 1st launch at 10am! It was said in the beginning that the rockets wouldn't go off if the whales were there! Well they are there..and have been for a couple of months! If this happens today those whales will go deaf for 2 minutes and lose their sence of direction and will not be able to find thir pods!

Who approved the go ahead for this? Why here? Why do the whales and tge rest of our wildlife/ sea creatures that live in our beautiful.. untouched until now..coastline! This is outrageous and unfathomable that it can go ahead!!

It was never properly advertised in the beginning to notify the town of pt lincoln or the whole if the west coast! It needs to be stopped!! It like whoever is responsible for this didn't want the wider community to find out!

Extremely disappointed and worried about the future of our beautiful coastline and the marine life of the West Coast! 😞

Minister for Planning and Local Government

Attention: Robert Kleiman, Manager, State Assessment Planning and Land Use Services Attorney-General's Department

GPO Box 1815 ADELAIDE SA 5000

14th September 2021

Dear Minister,

I am a local resident living 10 km from the proposed launch facility. My background is in wildlife ecology and have worked as a field officer for 35 years. I also have provided maintenance on the University of WA ACORN radar station at Cape Wiles (Whalers Way) monthly for several years and know the area very well.

About two years ago, Southern Launch representative Mike Damp had several meetings with me in which he outlined their proposed rocket range. Initially I had no concern regarding the proposed launching of rockets described as, small environmentally friendly rockets (less than 6 meters long), but I raised concerns how Southern Launch could manage the impacts on wildlife, specifically Australian Sealions that breed and give birth on Liguana Island and other sites near to the Launch facility at Cap Island, Curta Rocks and Williams Island. I also had concerns for the whale species that breed between Sleaford Bay and Red Banks at Whalers Way and other State and Nationally listed endangered and threatened species I know occur in the area.

After reading their referral to the Australian Government and EIS submitted to the South Australian government, I have concluded that Southern Launch have provided a substandard EIS and have provided misleading information to the Government and the public.

The proposed launch facility location is not appropriate and is in the wrong place. It will not be in the best interests of the wildlife that rely on the site, not in the best interest for our long-term future.

It is illogical and highly deficient to me that the EIS process does not consider at all, that a variety of different types of rockets, size of rockets and fuels may be launched on this site and each rocket will have a different environmental and social impact.

It should be noted that Southern Launch has also submitted a referral to the Australian Government as they consider their proposal is a controlled action under the EPBC Act and they expect to have a significant impact on a number of Nationally listed wildlife species.

Summary

The proposed launch sites are located within an ecological hot spot. Five state listed Endangered species, eleven Nationally threatened, endangered, CITES or ICUN listed species occur on the

proposed launch sites or immediately offshore from the launch trajectories. A further twenty four state listed vulnerable and rare wildlife species occur in this area.

Both proposed launch site A and B will be launching rockets over significant Australian Sea lion breeding sites on Liguana island and close to haul out sites at Cape Wiles. The 2021/9013 - Whalers Way Orbital Launch Complex Referral to the Australian Government, identifies that their proposal will have a significant impact on several Nationally listed species.

Proposed Launch site A, if it is developed, will have a significant impact on Southern Emu Wrens. All the wrens will be displaced if the site is cleared and if they are able to re-establish adjacent to the cleared site, they would most certainly die because of rocket exhaust and noise.

Sound and vibration from the launching of rockets may have a significant impact on several whale species that are regularly sited and recorded in this area. Whales species that have been previously recorded are breeding populations of Southern Right Whale whale, Pygmy Right whale, Killer whale, False Killer whale, Long Finned Pilot whale, Hector's Beaked whale, Fin Whale, Sperm Whale, Common dolphin, Bottle Nosed dolphin. (Great Australian Bight Research Program, Goldsworthy, S. D., Mackay, A. I., Bilgmann, K., Möller, L. M., Parra, G. J., Gill, P., Bailleul, F., Shaughnessy, P., Reinhold, S.-L. and Rogers, P. (2017).

The area adjacent to Liguana island is the aggregation site for the ICUN and CITES listed Great White Shark. (Residency and Local Connectivity of White Sharks at Liguanea Island: A Second Aggregation Site in South Australia? RL Robbins^{1,*}, M. Enarson¹, RW Bradford², WD Robbins³ and AG Fox¹)

The sound travelling within 10 km of the launch site, through the sea, offshore from the launch site may be greater than 80 decibels (hearing protection required in humans) (80 dB re 20 uPa in water) and at the same time in the 100 Hz range, which is the vocalisation and navigation range for most species of whales. Sound waves intensify as they travel through water and these sound waves may have a significant impact in the species listed. (Acoustic impact evaluation and management Summary, NOPSEMA N-04750-IP1765 Revision No 2 December 2018)

A rocket failure within 10 km of the launch site would have the potential to have devastating impact on the Sea Lion and Long Nosed Fur seal populations.

The waters immediately offshore from the launch site are deep (30-100 meters). Large schools of juvenile, critically endangered ICUN and CITES listed Southern Blue Fin Tuna, aggregate immediately offshore, from the launch site, then pass through this area further East along the coast, in October to January each year. Many tuna become resident and remain at Liguana Island and the Cabbage patch 30 km South of the launch site. (David Farlam pers com).

Liguana Island

The island is a granite outcrop with steep sides and no sandy beaches. It is hard to access and difficult to survey marine mammals due to the crevassed rocks where seal haul out. Seals and sea lions were surveyed in about 1997 by National Parks and Wildlife Service, SA, Australian Sea Lions pups were recorded at the time. (Data archived)(David Farlam pers comms.) (Cape Barren geese, rock parrots and short tailed shearwaters were recorded as breeding on the island.)

In the 2013/14 season 17 Australian Sea Lions pups were recorded and the end of the 2014/15 season 25 pups were recorded. (Maintaining the monitoring of pup production at key Australian sea lion colonies in South Australia, Goldsworthy, SD, etal)

Acoustic impact of rocket launches

Appendix S ,Whalers Way Orbital Launch Complex Marine Ecological Assessment

Page 6

Refers to noise impacts. The modelled noise impacts to marine mammal species in the air and under the water are inaccurate and understated.

One reference is made to acoustic studies in marine mammals, in the northern hemisphere(Kodiak Island, Alaska). No references have been made in relation to studies of acoustic effects on marine mammals in close proximity to existing rocket launch facilities in the Southern Hemisphere.

No research has been provided that affects the sound propagation from rocket launches, including rocket launch angle, water temperature, water depth, sea state, wind direction and wave direction and frequency. Some of this information is generated and available from the University of Western Australia, ACORN radar station at Cape Wiles(Whalers Way) and Kangaroo Island.

This information is crucial in determining the potential impacts on marine mammals and sharks.

Page 41

The operational noise modelling in the referral is ambiguous and makes no reference to actual noise levels recorded and expected from current rocket launch sites in New Zealand and the Northern hemisphere launch facilities, such as Kodiak Island. Further research may assist Southern Launch in providing more accurate information to determine the actual noise levels to expect out to 10 km from the launch site on the land and ocean , without the need to test launch Hapith 1 rockets.

Page 42 4.4.2 Pinnipeds

From the referral, “ Therefore no impact is expected on the hearing of ASL or LNFS on Liguanea Island, or LNFS hauled-out at Cape Wiles, where LAmx and SEL values are less than 100 and 115 dBA, respectively (Figure 11).”

The statement above is misleading and not conclusive. The reference to Southall et al 2019 used modelling and predictive data to present information. This information and the AECOM 2021 modelling cannot be used to suggest there will be no impact on marine mammals from rocket launch noise and vibration.

F6 Southern Emu Wren habitat pdf.

It is very clear that the habitat of Launch site A is a hot spot for Southern Emu Wrens. Launch site A should not be considered as a site for a rocket launching platform.

Section 2.6.1 Neophoca

Female Sea lions nurse their pups for 18 months not 1-3 months as stated in the referral. After pupping, females are only receptive to becoming pregnant for about 7 days if they miss this breeding period it is 3 years before they can conceive again.

Debris from rockets into the marine environment

Reference has been made to the NIWA report from New Zealand. NIWA approved the Rocket Lab launch facility but have recommended that a review is undertaken of available data on actual launch trajectories and the generation of debris after 50 launches. This is especially important as NIWA were unable to conclude there would be no impact from rocket debris. Rockets being launched from the Southern Launch facility, may fall continuously into the same area of the Southern Ocean impacting the same benthic zone and should the rockets float, wash up on the same coastline.

No mention is made in the referral by Southern Launch of the Hapith 1 type rocket. For the past two years Southern Launch (Mike Damp pers comm) stated to local residents that the size of the rockets was small and provided images of less than 6-meter long rockets. They also stated that the infrastructure needed to manage and fire these rockets would have a small footprint. These small and non-recoverable rockets would after launching their payload and fall back into the sea and sink.

Hapith 1 rocket

The Hapith 1 rocket is 10m long and 2 meters in diameter . It is a cheap to develop and run but an inefficient hybrid rocket that burns ABS plastic as its primary fuel for flight. ABS plastic is the same material as Lego bricks are made from. When ABS is burnt in a rocket it produces gases including carbon monoxide and Hydrogen Cyanide (toxic) but it also breaks down the plastic into its constituent compounds, acrylonitrile-butadiene-styrene, all three compounds are known to be carcinogenic when burnt at temperatures at or above 400 °C (typical hybrid rocket nozzle temperatures are above this temperature)(Thermal Analysis of a Hybrid Rocket Propulsion System for Interplanetary CubeSats), ABS can decompose into its constituents, butadiene (carcinogenic to humans), acrylonitrile (possibly carcinogenic to humans), and styrene (reasonably anticipated to be a human carcinogen). (Richard Dennison, BIO, Published: July 29, 2014)

Hybrid rockets including those that burn ABS plastics, produce significant unburned materials are ejected from the nozzle, (Conference Paper *in* Journal of Propulsion and Power · July 2014 DOI: 10.2514/6.2014-3751)

In animal and human controlled studies, the uptake of styrene has been found to be rapid (WHO Regional Office for Europe, Copenhagen, Denmark, 2000)

It is reasonable to assume that plastic particles from repeated rocket launches, have the propensity to fall onto Liguana island and bio accumulate in the coastal waters. ABS plastic is not water soluble and will remain in the environment.

The Hapith 1 rocket has not been launched or fully tested by its manufacturer and is therefore an experimental rocket.

EIS Appendix W Air Quality Impact Assessment makes no reference to Hybrid rockets or the Hapith 1 rocket. Appendix W needs to be revised to include air quality data for specific rockets.

Baseline data and replicate sampling

Mammals

Southern launch has not provided baseline data on marine mammal occurrence or a population survey of the Australian Sealion (state listed as vulnerable, nationally listed as endangered), Long nosed fur seal and Cape Barren Goose (SA state listed as rare) that reside and breed on Liguana Island. There is no mention in the EIS to replicate on ground surveys before and after launch or the real time monitoring of the effect of launches on the resident species. The estimated decline in the number of mature Australian Sea Lions is over 50 percent over three generations, this is one reason they are listed as Endangered.

Birds

The base line data for the Southern Emu Wren for site A is limited and further surveys are required for site A and the rest of the area under lease. Limited information has been provided for other listed species including the White Bellied Sea Eagle, White Bellied Whip Bird, Eastern Osprey.

Jacobs report page 16 from the referral states, "Based on this it is considered the project is unlikely to substantially modify, destroy or isolate an area of important habitat." Two of the nests for White Bellied Sea Eagle or Osprey are within 2 km of the launch sites. It is ridiculous to infer that the birds will have no problem using these nests or establishing nests in the future with regular launches and related launch activity.

The nests have been described as abandoned but coastal raptor maintain several nests each year and only use nests where the environment provide favourable conditions (ample food for chicks and seasonal weather) for nesting to occur.

The White Bellied Sea Eagle, Osprey, Peregrine Falcon and Little Falcon have been observed to hunt and roost along the entire whalers way coastline and inland from the proposed launch site. (David Farlam pers com.)

Reptiles

There is no mention of listed reptile species or evidence of surveys in the EIS.

Plants

There is no mention of listed plant species or evidence of surveys in the EIS.

Great White Sharks

The area adjacent to Liguana island is the aggregation site for the ICUN and CITES listed Great White Shark. There is no mention of sharks in the EIS or referral to the EPBC Act.

Launch site alternatives

Southern launch should investigate one of the alternative launch sites at their disposal from which they can launch the larger rockets that they now propose to be allowed from their launch facility, small to medium lift rockets up to 40 meters in length. I understand that there are other sites in South Australia that are suitable for polar and sun synchronous launches, refer to Appendix M part 1 figure 4.1 and 4.2. If Southern Launch wish to continue to develop a launch facility on property owners land at Whalers Way, then the site should be located further inland on agricultural land. (figure 1). (also refer EIS Appendix M figure 4.4, hypothetical site 1)

This site location would not affect the ability for polar and sun synchronous lunches and would reduce the impact on listed species, bushfire risk, serviceability and security of the launch site and allow continued access to whalers way conservation land as a tourist destination for most of the year.



Figure 1 Red dropped pin indicates an alternative launch site.

Conclusion

Southern Launch have demonstrated to me that they are willing to accept any company that is wishing to launch rockets, the size and type of the rocket they will accept is not a limiting factor. No approvals should be considered as the information presented by Southern Launch does not demonstrate that the launching of rockets will not have a significant impact on State and Nationally listed bird, mammal, and shark species. In this case use of modelling data is not sufficient to demonstrate that the development of the launch sites and the launching of rockets will not have a significant impact on State and Nationally listed species.

This site is not appropriate for launching rockets and should not be considered for rockets larger than 6 meters in length. Site A must not be considered as a suitable launch site as it will impact on Southern Emu Wren and White Bellied Whip Bird habitat.

References

Long-term evidence of noise-induced permanent threshold shift in a harbor seal (*Phoca vitulina*)

J Acoust Soc Am. 2019 Oct;146(4):2552.doi: 10.1121/1.5129379.

Colleen Reichmuth¹, Jillian M Sills¹, Jason Mulsow², Asila Ghoul¹

Dorian S. Houser, When Is Temporary Threshold Shift Injurious to Marine Mammals?

J. Mar. Sci. Eng. 2021, 9(7), 757; <https://doi.org/10.3390/jmse9070757>

Sixty years of launch vehicle acoustics

Caroline Parsons Lubert

Citation: Proc. Mtgs. Acoust. **31**, 040004 (2017); doi: 10.1121/2.0000704

View online: <https://doi.org/10.1121/2.0000704>

View Table of Contents: <https://asa.scitation.org/toc/pma/31/1>

Published by the Acoustical Society of America

Environmental Impact Statement/Overseas Environmental Impact Statement Atlantic Fleet Training and Testing

Atlantic Fleet Training and Testing Draft EIS/OEIS June 2017

Seismic surveys reduce cetacean sightings across a large marine ecosystem

A. S. Kavanagh^{1,3,4*}, M. Nykänen^{1,2,4}, W. Hunt¹, N. Richardson¹ & M. J. Jessopp^{1,2*}

Greenpeace “ Impact of seismic testing on fisheries and the marine environment”

Submission 13

[https://www.aph.gov.au/Parliamentary Business/Committees/OnlineSubmission](https://www.aph.gov.au/Parliamentary_Business/Committees/OnlineSubmission)

Thursday 21 November, 2019

Underwater Sound and Vibration from Offshore Petroleum Activities and their Potential Effects on Marine Fauna: An Australian Perspective

Chandra Salgado Kent, Robert D. McCauley, Alec Duncan, Christine Erbe, Alexander Gavrilov, Klaus Lucke, and Iain Parnum

Centre for Marine Science and Technology (CMST), Curtin University, GPO Box U 1987 Perth 6845, WA
April 2016

Acoustic impact evaluation and management Summary

NOPSEMA N-04750-IP1765 Revision No 2 December 2018

Residency and Local Connectivity of White Sharks at Liguanea Island: A Second Aggregation Site in South Australia?

RL Robbins^{1,*}, M. Enarson¹, RW Bradford², WD Robbins³ and AG Fox¹

1 Fox Shark Research Foundation, 73 Ninth Avenue, Joslin, South Australia 5070; 2 CSIRO, Oceans and Atmosphere Flagship, GPO Box 1538, Hobart, Tasmania, Australia 7001; 3 Wildlife Marine, Perth, Western Australia 6020

NIWA (2017), Ecological Risk Assessment of the impact of debris from space launches on the marine environment. Report prepared for the New Zealand Ministry for the Environment by the National Institute of Water and Atmospheric Research.

Marine Mammal Noise Exposure Criteria: Updated Scientific Recommendations for Residual Hearing Effects Aquatic Mammals 2019, 45(2), 125-232, DOI 10.1578/AM.45.2.2019.125 Brandon L. Southall,¹ 2 James J. Finneran,³ Colleen Reichmuth,² Paul E. Nachtigall,⁴ Darlene R. Ketten,⁵ 6 Ann E. Bowles,⁷ William T. Ellison,⁸ Douglas P. Nowacek,⁹ 10 and Peter L. Tyack⁵, 11

Potential Impact of USAF Atmospheric Interceptor Technology (ait) Launches from the Kodiak Launch Complex, Kodiak Island, Alaska. Monitoring of Noise Levels During the Launch of Ait-2

Bowles, A. HSWRI Noise Monitoring, ait-2. Final Report. For permission to cite, contact USAF Space and Missile Systems Center

Comparing Hydroxyl Terminated Polybutadiene and Acrylonitrile Butadiene Styrene as Hybrid Rocket Fuels Stephen A. Whitmore,* Zachary W. Peterson,[†] and Shannon D. Eilers[†] Utah State University, Logan, Utah 84322

Great Australian Bight Research Program, Goldsworthy, S. D., Mackay, A. I., Bilgmann, K., Möller, L. M., Parra, G. J., Gill, P., Bailleul, F., Shaughnessy, P., Reinhold, S.-L. and Rogers, P. (2017). Status, distribution and abundance of iconic species and apex predators in the Great Australian Bight. Final report GABRP Project 4.1. GABRP Research Report Series Number 15, 227 pp.

High Regression Rate Hybrid Rocket Fuel Grains with Helical Port Structures

Conference Paper *in* Journal of Propulsion and Power · July 2014, DOI: 10.2514/6.2014-3751, Stephen A. Whitmore, Utah State University

National Academy of Sciences strongly affirms science showing styrene is a human carcinogen

Richard Dennison, BIO, Published: July 29, 2014

Emissions of Ultrafine Particles and Volatile Organic Compounds from Commercially Available Desktop Three-Dimensional Printers with Multiple Filaments Parham Azimi,[†] Dan Zhao,[†] Claire Pouzet,^{†,‡} Neil E. Crain,[§] and Brent Stephens*,[†] [†] Department of Civil, Architectural and Environmental Engineering, Illinois Institute of Technology, Chicago, Illinois 60616, United States [‡] Ecole des Ingenieurs de la Ville de Paris, 80 Rue Rebeval, 75019 Paris, France [§] Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin, Austin, Texas 78712, United States *S Supporting Informatio

WHO Regional Office for Europe, Copenhagen, Denmark, 2000

Chapter 5.12 Styrene, air quality guideline second edition.

Kodiak Launch Complex, Alaska Environmental Monitoring Studies September 1999 *ait-2* Launch
ENRI ENVIRONMENT AND NATURAL RESOURCES INSTITUTE UNIVERSITY OF ALASKA ANCHORAGE
707 A Street, Suite 101, Anchorage, AK 99501 • (907) 257-2700

Maintaining the monitoring of pup production at key Australian sea lion colonies in South Australia

Goldsworthy, SD, Mackay, AI, Shaughnessy, PD and Holman, D (2015). (2014/15. Final report to the Australian Marine Mammal Centre. South Australian Research and Development Institute (Aquatic Sciences), Adelaide. SARDI Publication No. F2010/000665-5. SARDI Research Report Series No. 871. 73pp.



Long Nosed Fur Seal and Australian Sea Lion haul out site at Cape Wiles Whalers Way



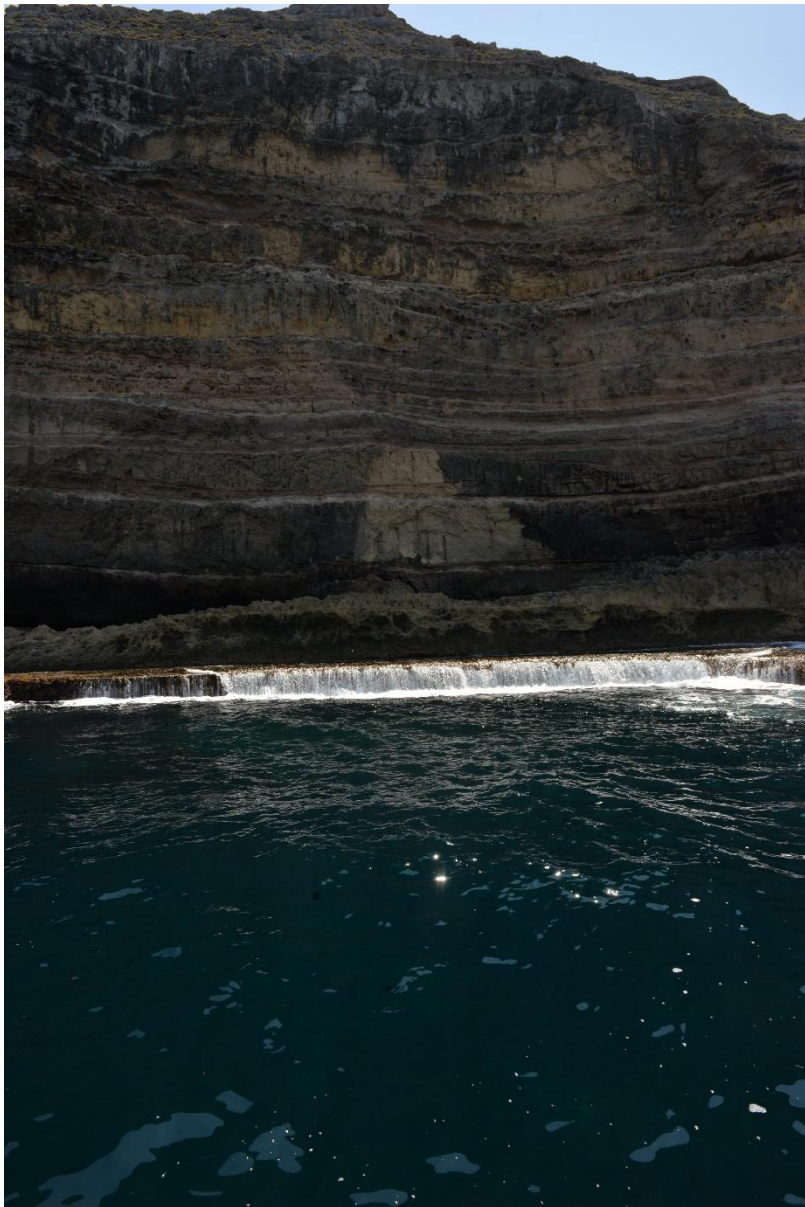
Typical coastal haul out and feeding habitat of Fur seals



Long Nosed Fur Seals hauled out on the coast directly below the cliffs in line with the proposed rocket flight path



Long Nosed Fur seal feeding directly below and south of the proposed rocket flight path



These rock ledges are the coastal feeding habitat for Southern Right Whale, Long Nosed Fur seals and Australian Sea Lions. This site is directly in line with the proposed rocket trajectory.

Sent: Wednesday, 15 September 2021 8:19 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

"I support the Whalers Way rocket launch development. "
It shuts tomorrow and is incredibly important. Thank you.

Sent: Wednesday, 15 September 2021 9:15 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development



Sent: Wednesday, 15 September 2021 8:56 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Sent: Wednesday, 15 September 2021 9:18 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development.

Sent: Wednesday, 15 September 2021 9:27 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch and Development.
Regards

Sent: Wednesday, 15 September 2021 9:40 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

Importance: High

To whom it may concern:

I support the Whalers Way rocket launch development.

!:

Sent: Wednesday, 15 September 2021 9:41 AM
To: DIT:SPC Reps
Subject: Southern Launch Development

I support the Whalers Way rocket launch development. This is an important industrial and commercial opportunity for the state and the country. Also, Australia needs embrace advanced technology and science and inspire the next generation of workers in those fields.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:

Contact number:

Email:

Postal Address:

Affected property (if different from postal address) 94 Right Whale Rd SLEAFORD SA 5607

You may be contacted by your nominated method of contact for further clarification or notification of a decision.

My interests are (tick or circle):

- Owner of local property
- Occupier of local property
- A representative of a company/other organisation affected by the proposal
- A private citizen**

Other:

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

I have significant concerns with the plans for **36 launches per year** (within 5 years) With each launch needing 3-4 weeks to set up, and dismantle, it is plain that there will be very little scope for any visits, and certainly no visits that are not part of a "guided tour". No more individual or family trips.

Fisheries is a significant site for my family. My sister committed suicide in 2009. Her ashes are scattered at Fisheries and each year we come to this space and celebrate her life. My husband and I were also married at this site in February and would hate not to be able to celebrate our union on this sacred space to us each year.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	40 Right Whale Rd, Sleaford 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	Nearest Sensitive Receptor. <input checked="" type="checkbox"/>

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

As an adjoining neighbour and landowner at Whalers Way I am totally against this major development proposal in the "Conservation Zone". My reasons are numerous and cover many environmental impacts including: bushfire risk, noise pollution, endangered species and habitat vulnerability and damage to the local infrastructure - road works in particular. All these and other issues have been highlighted and covered in detail by my family. I have included in this submission a short video highlighting various issues which are of the utmost importance to me.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

TRANSCRIPT OF ORAL SUBMISSION

Good afternoon. My name is . I am the nearest sensitive receptor.

I was born in 1944 in the north of England, during World War Two, at a time when England was under siege and air raids, and bombings were a common occurrence. Raised by a single father, in poor living conditions and with an inadequate diet, I suffered from rheumatic fever as a young child and have permanent scarring on my heart as a result. I became blind in one eye after attempts to supplement me with UV light as a child, and have dealt with the consequences of poor eyesight ever since.

As a result of these conditions, I grew up with significant trauma, both physical and psychological. I have a nervous disposition, and I suffer from psoriasis and rheumatoid arthritis, which have been linked to increased levels of stress and anxiety. I have a heart valve after major heart surgery 20 years ago to replace my aortic valve, and I now take daily medications for several chronic, life-long conditions.

I am under strict doctor's order to avoid stress, anxiety and upsetting situations which may impact negatively upon my health.

At 50 years of age, I moved to Fishery Bay, which is adjacent to Whalers Way, disillusioned with the world, suffering from complex family problems and emotional trauma, with my pregnant wife, a toddler, and our two dogs. At the time the property was nothing but a bush block on 75 acres, with no amenities and no structures other than a tin boat shed.

25 years later and after having worked endlessly to develop a self-sufficient environment under extreme conditions (details available), I today live in a 75 acre paradise collectively built by my family and myself. We are totally off grid and self-sufficient in water, fuel (wood), sewage and electricity. We enjoy a kilometre beach frontage and a pristine environment where an array of birds and animals are frequent visitors due to the preservation and restoration of the natural vegetation on our property.

We are the Taylor family of Fishery Bay. Together in our family we have an engineer, a social worker, a doctor, a lawyer, physiologist, an artistic designer, concreter and a builder. We live in peace and tranquillity as proud South Australians and care deeply for our natural environment and the world that surrounds us and provides for us.

We are not throwing this away. It will be handed down through my children and immediate family as, hopefully, a continued nature paradise and sustainable, environmentally conscious home for many generations, to live and enjoy just as I have done and continue to do so.

The peaceful and tranquil environment that I have created here for my family must not in any way be compromised or jeopardised by future rocket launching plans in Whalers

Way. There is no electromagnetic radiation over our property (or the neighbours'), no light pollution, no sound disturbances, and no highly flammable material. Rocket launching will bring all of this.

My nervous disposition, my chronic illnesses, and my subconscious memories of the trauma and stress of my childhood are all part of who I am, and all combine to make me anxious, uncomfortable and, quite frankly, frightened of having rocket launches next door. This is not the peaceful retirement that I have worked so hard for.

In the last month, I have had to endure the following:

- Heavy vehicles thundering up the little fragile gravel road;
- Security guards shining big lights onto our property;
- My daughters being manhandled for making enquiries at the gate to Whalers Way;
- Low-flying helicopters, et cetera, along the security checks;
- Big noisy generators thumping across the hillsides – heaven help the tiny little birds, and the whales;
- Suggestions of sabotage by the police;
- And, would you believe, a 1 metre long, half a metre thick, big slab of limestone that fell off the edge of the road, which is 10 metres from the edge of the cliffs, down to the beach 30 metres below.

Even though I may be old, white, English and male, my story and my vulnerabilities should carry the same weight as the vulnerability of any other species, whether plant, bird, fish or rock that exists in Whalers Way. These vulnerabilities, as well as the vulnerability of all the minerals, the plants and the animals I share my life with, far outstrips and outweighs any supposed benefit of rocket launching.

As someone who has chosen to call South Australia home, I have always been proud of the way our state government has stood up for the environment. And I hope and pray that the Minister will come to the same conclusion as me. This paradise is too precious to have its future risked for a few spurious and unnecessary rockets.

I say NO TO THE ROCKETS. Thank you.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	40 Right Whale Road Sleaford 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	Nearest sensitive receiver <input checked="" type="checkbox"/>

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

The Applicants have prepared their Environmental Impact Statement under the excellent guidelines of the State Planning Commission. They had at least 12 months and lots of money to employ experts to prepare reports under the specific directions that they requested. The summaries to these reports do not necessarily reflect the detail embedded in them.

The Community has been given 30 days, from August 5, to find out, read and dissect, and then make informed comment about this EIS and the development proposal, without access to money or planning feedback. How is this fair?

Appendices AB and AC have been redacted so the community are unable to make any comment on these critical reports relating to security and emergency management, including bushfire mitigation strategies.

Subsequently the applicants have a right of response, but the community has no recourse to examine and comment on this response, to see if it is as spurious as some of their appendix summaries.

Alongside this process, has been a separate development application to run 3 test launches, supposedly to inform the EIS. However, the consultation process will have closed before these tests have been run, so again the community has no opportunity to make informed comment in relation to this data.

As "nearest sensitive receivers" our family has not been approached about what form these tests on us will take, and in fact as neighbours only 3km from the site we have been given no consideration about the effects this proposal is going to have on our physical, mental, emotional and spiritual wellbeing, and indeed, on our entire future here.

We purchased our property adjacent to the proposed development site nearly 30 years ago, because it was in the conservation zone, (known then as rural coastal), and the development restrictions have prevented us from doing anything that does not comply with the nature of the conservation zone regulations. We deliberately chose this particular place because it is isolated, coastal, off-grid, down a narrow country unsealed road, and away from artificial light, noise and electromagnetic frequencies.

It is beyond belief that after investing all our time and money, for the past 3 decades, into this property, with a well-planned future for our family, we now face the possibility that a complete outsider, with no connection to this place, can come blazing in with a plan that completely flies in the face of every aspect of the conservation zone that we have abided by all this time.

Scan and email to spreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

The natural wonder that is Whalers Way is home to a collection of rare and endangered mammals and birds, as well as a substantial stand of remnant mallee. It is a much loved place of wilderness by locals and visitors who regularly return to experience the unique environment, and the benefits that flow from such an experience.

It is again beyond belief that an early analysis of this development proposal did not alert the then minister to the many critical and insurmountable impacts that this proposal would present. Not least of these is the importance of a “clean green” image to the already prosperous industries of Lower Eyre Peninsula and Port Lincoln. It is nothing short of folly to suggest that this proposal, which threatens to destroy this image in the minds of visitors and customers, can adequately compensate.

This submission is about the Environmental Impacts of the development proposal. Thus may I remark that submissions that support space or space “jobs” are not relevant, as this is not what we have been asked to consider. Rather we have been asked to assess the EIS and comment on the potential impacts on the environment. Each of these impacts in isolation is bad enough in itself, but when all of them are taken into account as a whole scenario, it is an impending disaster waiting to happen.

Many experts will have provided in depth submissions as to the critical environmental impacts of this proposal. Our family has analysed the EIS and compiled summaries which I attach to this submission.

In summary I would like to point out the misrepresentation that has been a pernicious aspect of Southern Launch’s conduct both at the local level, and also in the political arena, both State and Federal.

When addressing the Senate Standing Committee into Industry, Innovation, Science and Resources, they state : “we facilitate space and test launches from the following locations: Whalers Way Orbital Launch Complex, designed to launch small and nano satellites into polar orbit, “ This was made when there was no approval, and the EIS had not been released, nor had the temporary launch pad even been considered by Plan SA. This statement, repeated many times in local media and at boardroom meetings and presentations, has led members of Government and the public alike to believe that this complex is an actual fact, when of course, it does not yet even have approval. He also entirely misrepresents the sites by stating that they “are located in environments with suitable weather for launches to take place in every month of the year.” (Jan 2021)

This misrepresentation has been most alarming, as I would suggest that the majority of the local community were under the false impression that the proposed rockets would be “tiny”, which in a layman’s eyes, meant “tiny”, ie nothing to worry about. When these same people become aware that the smallest rocket is 10 metres and the largest are to be 30 metres and over 100 tonnes, they usually change their mind about its validity immediately. I suggest that this has been a deliberate tactic on behalf of the proponents to mislead the public.

In his address to the Senate Standing Committee, Mr Damp says “In developing Australia's space industry, Australia must invest in becoming a strategic, sovereign and globally-engaged space power, with a highly capable domestic space industry”. If the government, and SouthernLaunch are serious about this industry, then a suitable site needs to be found, which fully caters for a viable space future, with plenty of opportunity to expand and develop as future technologies develop.

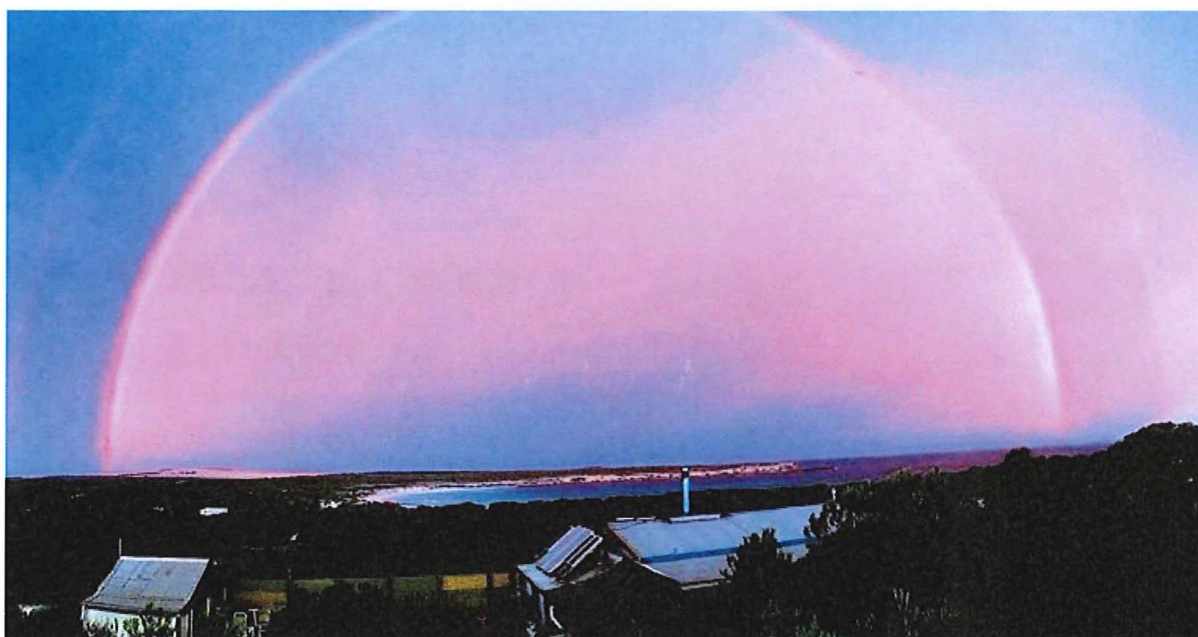
The current proposed site in no way fits this criteria.

I urge the Honourable Minister to oppose the development proposal at Whalers Way

See Summaries attached.

Also attached is a confidential letter addressed to Vicki Chapman.

LETTER TO THE HONOURABLE Mrs VICKI CHAPMAN



Dear Vicki

This photo has not been altered in any way; it was taken by my youngest son, who was quick enough to run up the hill behind our small house at Fishery Bay one summer afternoon, five or six years ago, as a thunderstorm came through. The changes in the light and dark and colour in the sky and surrounding environment had me mesmerised, and left to me there would have been no photo.

The sheer natural beauty of Sleaford Bay and hinterland is hardly conveyable by word or image. This is why people continue to come back to the area, and why local people are so protective.

After we arrived nearly 30 years ago, it did not take us long to realise that this was a very special place in the hearts and minds of a lot of people. Quite rightly, it was zoned Coastal Conservation by the DCLEP in 2015, after much consultation with the people of Lower Eyre Peninsula.

Whalers Way itself had been declared a Heritage Area in the 80's, and is called a private sanctuary. I must have been about 12 when our family used to bring our caravan to Eyre Peninsula, where we could take advantage of the remoteness for a few days and unwind. Whalers Way was a favourite spot. When my husband, Ian, and I were lucky enough to purchase our 75 acres with views overlooking the bay, we made a commitment to each other that we would respect the fragility of the coastal environment, and live as carefully and mindfully as possible.

Vicki, you grew up in the country, so you would surely understand some of the hardships that come with living in an isolated and remote area. Combine this with no money, small children, separated family, no water, power, or infrastructure; it would take a book to describe the extraordinary hardships and difficulties we encountered along our journey this nearly three decades.

Why would we do this, you might ask?

I have always been a passionate supporter of solar energy, and still have the solar panel I purchased in 1981. It actually still works, but there is barely any comparison to the solar power of today. But in the 90s when we came here, it was still very expensive, and it was exceedingly difficult to convince anybody let alone governments that this would be the way of the future. Now we have a thriving renewable industry, with South Australia often producing more renewable energy than we use. I am a great supporter of technology, when used wisely, and have seen first-hand how it has helped to advance the renewable energy sector.

I am also someone who is extremely sensitive to noise, light, and smell, as well as to electromagnetic frequencies. Settling here in this remote place allowed me to pursue my long term goals of a healing centre, where people who needed a respite from the 21st century "hustle and bustle" noise and vibration could come for a few days, or longer by negotiation, to allow themselves to heal.

I am a qualified counsellor and social worker, well versed in alternative healing modalities, and have in fact, on a non-profit basis, engaged in this practice throughout the time we have been here. I regularly run meditation groups here, and we have been available on many occasions when a displaced person needed a space to reflect in peace. In 2006 I completed Cert 1V in Tourism Operations, during which time I started to design how the business would look. (see App a). We took out a business name, but we have not yet been in a position to trade.

Recently, I have begun to see this plan more broadly as a plan for our whole family, as our children have become adults, and as the world has maintained its trajectory towards an alarming future. When our son and his fiancé, who have recently completed medicine and now work as young doctors, began to show an interest in integrative healing, we knew we had been on the right path. (App c)

In fact all our children now have considerable skills and qualifications, and as a family we are only now beginning to realise this long term business goal, and to feel that our sacrifices have been worth it. We have done all this in harmony with the nature of the conservation zone, so much so that we often get visitors saying they had no idea we were here.

We believe that our business model will prove a valuable asset to a well-designed and managed eco-tourism plan for this area. We are only at the planning stage, but we would be hoping to provide some low key accommodation and a basic medical clinic. Currently under the zoning we are likely to have to argue with council about approvals, so we are just letting it sit until we are ready. Whenever that is, it will be in line with the nature of the zone, and will enhance the already very profitable tourism business that currently relies on Whalers Way as a drawcard.

It seems to me to be extraordinarily unfair that a situation like this can be allowed to develop. No account was taken of the very profitable industries that already exist in this area. The fishing, farming and tourism industries rely and depend on the "clean, green" image that this pristine environment, currently largely free of industrial noise and pollution, offers as a marketing optic. Port Lincoln calls itself the "Seafood Capital". A brief look at any tourist brochure for the industry, not to mention the government's own strategic plans, emphasises the wilderness space as a key driver of the visitor economy.

This industry currently generates \$400 million in regional expenditure on Eyre Peninsula, (govt. figures) and directly provides 1,700 jobs. On economic terms alone, destroying Whalers Way, one of the major drawcards on the visitor itinerary, and replacing it with something that will at very best generate about an eighth of that return in 10 years, seems like a very bad idea. On social terms, the potential destruction of a favourite place of recreation and solace, is hard to come to terms with, and is generating some very emotional scenes in homes across the region at the moment.

On this point, my conversations with local Aboriginal people clearly show me that these people have not had their concerns addressed and are extremely unhappy about the development. It directly affects their connection to the land and sea, and their totem the whale, and they will be requesting more time to put their own submissions in to you. The Nauo, Barngala, Wirangu, Mirning and Kokatha peoples all appear to have had seasonal gatherings at Whalers Way, and it is vital that these people be heard.

Our life, and that of our family, has been totally disrupted as we attempt to deal with this monstrous proposal. We have as a family devoted many hours to deciphering the EIS, compiling referenced summaries, and making these available so that people can make informed decisions. I am told that someone is paying a lawyer \$500 an hour to do this work. We have done it for nothing other than our dedication to protect this wild place for the animals that depend on it, and for the people who love it.

I am an active member of the Port Lincoln Community, and currently serve on the Diocesan Synod of the Anglican Church, and the Diocesan Council of the Anglican Mothers Union. Before I was rudely interrupted in May with the alarming letter from Plan SA of the test proposal, I was busy helping to start up a branch of a wonderful charity, Quickest Warmth, (app b), that is currently serving the Northern suburbs of Adelaide. It saddens me to think that I have had to leave this project, just as it was gaining momentum, in order to fully devote myself to this cause.

While I am concerned about the greenhouse effects of this proposal, I do understand the interest that space generates in the minds of many. I myself am quite content to gaze at the night sky in all its majesty and wonder, and Whalers Way/Fishery Bay offers an exceptional opportunity to do this. The light pollution alone in this development would spoil this experience. For those who wish to go further, I urge them to think more broadly about what the future of space might look like.

Instead of destroying an already profitable region, why not think about creating a future space town, a bit like mining companies have had to do, where the industry can really grow and develop into something exciting that can embrace science and tourism, and engage with the indigenous community with an eye to future technological developments that we cannot probably imagine right now.

May I suggest that the empty promises and publicity stunts of this small start-up company should be seen for what they actually are, and that rather than enhance the future of space development in this State, this development could very well set it back. It is apparent from the EIS and also becoming obvious with the testing process, that the company's predicted business model of 36 orbital launches a year in 5 years' time, is highly unlikely, due to the considerable complexities of trying to

coordinate such issues as weather conditions, whale migration, aviation and marine exclusion zones, bushfire, and so on. In addition, the impossibility of predicting an accurate launch time makes any suggestion of tourists watching the launch quite untenable as a business proposition.

Whilst the proponents make much of their plans to conduct conservation initiatives, I make the point that the \$2.2 million of taxpayers' money that the government recently handed to Southern Launch could have gone a long way towards helping with such issues as erosion control, Osprey breeding, decent facilities and so on, in Whalers Way. Instead that money has largely been wasted on a test that should never have been given planning consent in the first instance.

Finally, may I say that giving a rural population like that of Lower Eyre Peninsula barely 30 days to respond to a 3500 page document that is extremely dense, with summaries that don't actually reflect the detail, when the developers have had over a year and much consultation with government agencies, hardly seems like a fair and equitable process, when so many people stand to lose from this development, but have no way of really finding out until it is too late. Not only that, SouthernLaunch have an opportunity to respond, as if they have not already had a chance to address everything that should have been addressed, but the community do not then have a right of reply.

Many concerned citizens, some of them experts, and some who are desperately worried about the long term effects of this impending disaster, will have written submissions covering much ground, and there is no need for me to go into any more detail here. I will attach all our summaries but I am sure you will do your own reading. It may seem unnecessary to point out, but it concerns me that many apparent supporters actually have no idea what they are supporting, due to the clever media spin that the company is very good at, and the fact that in a country town news like this often takes years to filter through enough for people to really understand the implications I feel that those that have taken the time to oppose this development with detailed analysis, should be given more weight than those who have simply parroted something about it being good for jobs.

In summary, this proposal has left us feeling absolutely devastated. We cannot believe that all our hard work and sacrifice may be for nothing. We are angry that we bought a property in a conservation zone in good faith, with every right to expect that this would continue into the next generation and beyond. We have been treated like laboratory rats as "nearest sensitive receivers" in the test proposal, without so much as a by your leave from anybody. Our business model, which will add benefit to this area while preserving the nature of the conservation zone, has never even been given a hearing. Our own sensitivities have been entirely overlooked.

Nevertheless, if it was just about us, I don't feel that I would have had the energy to oppose this. However, this is about much more than us. It is about all the people who love to come out to this area and experience its qualities; its tranquillity nature in all its wild glory, the waves, the surf, the beach, the cliffs, the whales, the heritage, the night sky, in essence, the sense of being part of a creation that is far bigger and older and deeper than we are. This is so important to people today, when it is becoming more and more difficult to find places like this.

I urge you with my deepest conviction, to protect Whalers Way from this short sighted and manifestly unsuitable development proposal. Please do not approve this development.

Yours sincerely

MOTHERS' UNION REPORT FOR COMBINED CHURCH MEETING AUG 2021

This past year Mothers' Union has continued with the theme of "Building Hope and Confidence". Looking back over the year definitely reinforces how, with prayer and God's Grace, a small group of people working together are able to achieve much more than they could ever have imagined on their own.

It was in June 2020 that we first started to think about the possibility of bringing the Quickest Warmth Project to Port Lincoln, so at our first meeting in July, having received a "yes please" from Rev Prue O'Donovan, we began working out how we would do this.

Sunday Aug 9 was Mary Sumner Day, so with Rev Steve's blessing we held our celebration service at 10.30 that day, attended by some of our congregation, and some visitors. It was lovely to have Nel's daughter, Athena, to play the piano, and we were able to use the newly set-up digital display to show some short clips from the MU website. Afterwards some of us went out to the Port Lincoln Hotel, for coffee, which then stretched into lunch.

In August we also delivered COTA postcards to Matthew Flinders home, Pioneer Village, and Tumby Bay residents. Those who received a postcard were asked to write to someone in their lives about the experience of being isolated during "Lockdown", and to post the card back to COTA, where they are to be made into a display. We look forward to being able to view this display when it tours the regions.

Our much loved member, Gwen Richardson, passed away at 96, so our Sept service became a memorial service. During morning tea we watched the Funeral via video link in the Parish Centre.

October saw much celebration and joy as Reta Coffee was officially admitted as a Mothers Union member, after being a financial member for over 10 years, and Rosemary received her 25 year service badge. Rev Steve ran a lovely service, Judy Pearce played the organ, and Ian Taylor played his guitar. 8 of us went to the Peacock Gardens for lunch. We also received news, at long last, that the money we had sent to MU in Mandalay, had finally been received, and was being used to conduct sewing training online for 20 young women.

Our November meeting was cancelled due to a sudden lockdown, which also saw the garden stall, which we were assisting with in lieu of the Strawberry Fete, postponed. We went ahead with this in December and were delighted with the outcome, which raised \$1400 for the church.

In December we held a service of Praise and Thanksgiving, and were delighted to welcome Vicki as a new financial member. We ended the year by agreeing to promote the Quickest Warmth idea into the new year.

In 2021 we have been working through our MU Prayer and Service book starting in Feb with Form 1, Christian Discipleship. At our meeting we set a date for bringing Rev Prue to Port Lincoln, to coincide with our Lady Day festival on March 25. Then we went to the Peacock Inn to celebrate Bev Woodroffe's 80th birthday.

A number of things came together then on March 25th to make Lady Day a memorable occasion. Not only did we welcome Rev Prue and Rev Bart O'Donovan, but we also had Bishop John and Gavin and Lily Tyndale attend the service. \$250 was raised for the Quickest Warmth Project. Rev Prue gave the address, and Ian played and sang for us. 10 guests enjoyed a fish and chip lunch box from the Pantry.

At 2pm Prue spoke to a community meeting of about 40 people, about how we might envisage the Quickest Warmth Project in our region. At afternoon tea, people answered questionnaire, and everyone went home with a personal gift.

In April and May we continued to work on this project, and then with the help of Raelene Sampson, and donations from the congregation and Terry Whites Pharmacy, we were able to deliver our first packs; 6 towel packs for West Coast Youth, and 8 prison discharge packs to OARS. Following on from that, in June, we delivered a dozen toiletry bags and 5 adult activity packs to the Port Lincoln Hospital, and 3 winter warmth packs to the women's shelter.

Finally, in June we held our annual Wave of prayer service. Nel has continued in her role as Diocesan Overseas Links coordinator, and was able to supply prayer updates for some of our links, as well as for Myanmar and Fiji.

We would like to thank everyone for their support, and especially Rev Steve for his deep prayers for our children and families throughout the year.

(App. c)

Affidavit

Mark appropriate section below with an 'x'

I [] swear on oath / [x] do truly and solemnly affirm that:

Set out text in separate numbered paragraphs
If the affidavit relates to an application, identify the application and state the material facts relevant to the application

1. I, Isaac Taylor, a graduate of Adelaide University's bachelor of medicine/surgery, would like to state my intentions of developing an integrative health clinic at my family property at 40 Right Whale Road, Sleaford.

This would be the achievement of a longer than life goal, started by my parents' commitment to a low impact, low toxic load lifestyle when they began developing this property, and their ethos of changing the world by changing the individual. These aspirations have driven my own study of Medicine, with a view to deepen my understanding of the science behind humans and planetary health, which now has me poised to deliver holistic health care in a truly unique location.

I have personally undertaken placements in similar health clinics, most notably the The Health Lodge in Byron Bay, and have attended conferences from the Australian College of Environmental and Nutritional Medicine, to further this goal. It has illustrated how this model of healthcare is truly impactful and effective, and that it is a financially successful model also.

At a time when our healthcare systems are bursting to the point of collapse, a fundamental shift towards maintaining health, rather than just preventing disease, is crucial for the future of our people and our planet.

The development of Southern Launch's international rocket launching facility within 5 kilometers of our proposed business site would be disastrous to this business plan. Currently, the proposed location of this business is 5 kilometers from the nearest mains electrical supply, and experiences minimal noise pollution and no airborne pollutant contamination is present from any type of industry. These are three cornerstone principles upon which our business model sits, enabling an escape from the toxic load of metropolitan life.

Southern Launch's proposal would see Stage 3 mains power supply erected right through our location. It will drastically increase heavy traffic in the area. It will add the pollutant load of industry to the air, not to mention the aerosolized chemical pollutants associated with regular combustion of rocket propellant in a close proximity.

It would render our business model obsolete, and prevent the development of a truly unique healthcare facility that would provide a service the local population so desperately need. As such, Southern Launch's proposal simply cannot go ahead.

Yours

sincerely

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	
Contact number:	
Email:	
Postal Address:	
Affected property (if different from postal address)	40 Right Whale Road Sleaford 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	Nearest sensitive receiver <input checked="" type="checkbox"/>

**Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).

The aspects of the proposal I wish to make comment on are (add pages as required):

The Applicants have prepared their Environmental Impact Statement under the excellent guidelines of the State Planning Commission. They had at least 12 months and lots of money to employ experts to prepare reports under the specific directions that they requested. The summaries to these reports do not necessarily reflect the detail embedded in them.

The Community has been given 30 days, from August 5, to find out, read and dissect, and then make informed comment about this EIS and the development proposal, without access to money or planning feedback. How is this fair?

Appendices AB and AC have been redacted so the community are unable to make any comment on these critical reports relating to security and emergency management, including bushfire mitigation strategies.

Subsequently the applicants have a right of response, but the community has no recourse to examine and comment on this response, to see if it is as spurious as some of their appendix summaries.

Alongside this process, has been a separate development application to run 3 test launches, supposedly to inform the EIS. However, the consultation process will have closed before these tests have been run, so again the community has no opportunity to make informed comment in relation to this data .

As "nearest sensitive receivers" our family has not been approached about what form these tests on us will take, and in fact as neighbours only 3km from the site we have been given no consideration about the effects this proposal is going to have on our physical, mental, emotional and spiritual wellbeing, and indeed, on our entire future here.

We purchased our property adjacent to the proposed development site nearly 30 years ago, because it was in the conservation zone, (known then as rural coastal), and the development restrictions have prevented us from doing anything that does not comply with the nature of the conservation zone regulations. We deliberately chose this particular place because it is isolated, coastal, off-grid, down a narrow country unsealed road, and away from artificial light, noise and electromagnetic frequencies.

It is beyond belief that after investing all our time and money, for the past 3 decades, into this property, with a well-planned future for our family, we now face the possibility that a complete outsider, with no connection to this place, can come blazing in with a plan that completely flies in the face of every aspect of the conservation zone that we have abided by all this time.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

Appendix AA Traffic Impact Assessment

Prepared by : WGA Wallbridge Gilbert Aztec 3/06/2021

6.1 ANTICIPATED VEHICLE TYPES (pg 38)

Access Tracks for commercial vehicles are to be designed to cater for 19 metre semi-trailer vehicles (2 commercial vehicles per day peak).

The following vehicles would be expected to be used during operations:

- 19m Semi Trailer for rockets/launch vehicle and other component deliveries.
- Small rigid vehicle (SRV) for smaller package deliveries and septic removal.
- Forklifts to unload and move containers. Forklift activities may occur at locations around the site. Accordingly, pavements and access to buildings to be designed to accommodate this.
- 19m Semi Trailer (sealed tanker) liquid fuel deliveries (oxidiser, launch vehicle fuel, generator fuel etc).
- Maintenance Vehicles i.e. for mechanical and access track maintenance/repairs.
- Cranes.
- Passenger vehicles and 4WD vehicles.

A number of major circulation flows and accessibility requirements will need to be considered. These will include:

- Vehicular access to the site.
- Vehicular access within the site during regular operations.

- Access for emergency vehicles and others in times of need.
- The “flow” of the operational process on the site and the structures required to support it.
- Safe functional access within and around structures for activities to occur (within the Assembly Building for example, and around the Launch site)
- Accessibility to buildings for people with disabilities.
- Security requirements and the impact on circulation

6.3 VEHICLE MOVEMENTS DURING OPERATIONS pg 42

It is assumed that these vehicles generate 2 trips per vehicle.

The facility is expected to generate the following types of vehicles and volumes during typical operations:

- 20 passenger cars / 4WDs entering and leaving the site IE 40 vehicle trips per day
- 4 maintenance staff cars / 4WDs / small rigid trucks entering and leaving the site IE 8 vehicle trips per day
- The equivalent of 1 semi-trailer and 3 small rigid trucks entering and leaving the sites IE 8 freight vehicles trips per day

The total peak vehicle trips on the access track (excluding tourist traffic) are predicted to be 56 vehicles per day with 8% commercial traffic

Vehicle movement generators for the launch site include: Page 10

- Launch Vehicle Fuel delivery (3 per week)
- Oxidiser delivery (3 per week)

- Generator Fuel delivery (1 per week)
- Septic Tank Pump Out (1 per week)
- Launch Vehicle transport to site (1 per week)
- Crane movements (3 per week)

Two vehicle parking spaces for delivery vehicles, one adjacent to the fuel bund and one adjacent to the oxidiser bund, will be of concrete construction.

5. ROAD ACCESS NETWORK pg14

Between Port Lincoln, Whalers Way is serviced by the arterial and local road network. The route that is expected to be followed from Whalers Way consists of the following roads/network:

- Mortlock Terrace / Yandra Terrace onto Western Approach Road (Sealed Arterial Road DIT Maintained – 2200 vehicles/day 21.5% Commercial Traffic). Approximately 3km length.
- Pine Freezers Road (Sealed Connector Road, DC Lower Eyre Peninsula Maintained, traffic volume unknown). Pine Freezers Road has a rail crossing midway along its length. The rail crossing is at right angles to the road and presents no issues for 19m Semi Trailer access. Approximately 800m length.
- Investigator Road (Sealed Connector Road, DC Lower Eyre Peninsula Maintained, traffic volume unknown). Approximately 2km length.
- Proper Bay Road (Sealed Connector/Local Road, DC Lower Eyre Peninsula Maintained, traffic volume unknown). Approximately 13km length.

- Fishery Bay Road (Unsealed Local Road, DC Lower Eyre Peninsula Maintained, traffic volume unknown).
Approximately 12km length.

The traffic volumes on the DC Lower Eyre Peninsula road network are unknown, but generally reduce significantly the further south the roads are located. It can be assumed that Fishery Bay Road, being unsealed is likely to have traffic volumes of less than 150 vehicles per day, therefore the additional traffic introduced by the launch facility operations will have the most impact on this section of total network.

7. PUBLIC ACCESS ARRANGEMENTS page 43

The facility will need to be (sic) exclude the general public through security measures.

The nature of the development will mean that tourist and recreational access will be more limited once operations commence.

Once operations commence, unescorted tourist and visitor access to the site will be more limited and better managed.

This should result in a reduction in vehicles on the site associated with tourist and visitor access

These tourist and recreational movements... will be restricted when a launch is to take place.

APPENDIX N - ECONOMICS

The nature of the development will mean that tourist and recreational access "will be more limited" once operations commence (Appendix AA – Traffic Impact Assessment, p.43)

The estimated gross ongoing impact on economic activity of Southern Launch's ongoing operations would be to *decrease* real GSP by \$0.3 million in 2020/21 (Appendix N - Economic Analysis, p.ii)

Assessed over the full 10 year analysis period, the gross impact on GSP (including all capital works) has a present value of \$35.4 million (Appendix N – Economic Analysis, p.ii)

This compares to the current \$400 million, and estimated \$500 million by 2030, which tourism brings to the Lower Eyre Peninsula annually (SATC Corporate Affairs Research and Insights, p.1)

The average gross impact on employment over the 10 year analysis period (including one-off impacts and increased business visitors) is expected to be **59.7 FTE positions** (Appendix N – Economic Analysis, p.ii)

The average gross impact on employment from direct, production and consumption impacts (including one-off costs) over the 10 year analysis period is estimated to be **76.1 FTE positions** (Appendix N – Economic Analysis, p.9)

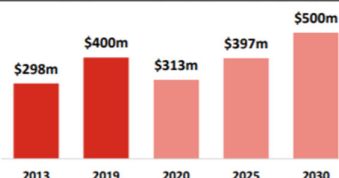
Some additional maintenance "such as more frequent grading" will likely be required on Fishery Bay Road to "cater for the additional proposed traffic volumes" (Appendix AA, p.47)

Prepared by the South Australian Tourism Commission, December 2019

OVERVIEW

ALL DATA BASED ON THE ANNUAL AVERAGE FOR THE 3 YEARS TO THE YEAR END DECEMBER 2019 AND RELATES TO DATA PRIOR TO COVID-19 RESTRICTIONS

- Currently the Eyre Peninsula contributes \$400 million to the December 2019 South Australian expenditure of \$8.1 billion.
- The Eyre Peninsula has achieved their \$313 million 2020 target and 80 per cent of their 2030 target of \$500 million.



Annual Visitor Summary December 2017 - December 2019

ORIGIN					
	Intrastate	Interstate	Total Domestic	International	Total visits
Overnight Visits	332,000	118,000	450,000	20,000	470,000
%	74%	26%	96%	4%	100%
Nights	1,194,000	617,000	1,811,000	151,000	1,961,000
%	66%	34%	92%	8%	100%
Average Length of Stay	4	5	4	8	4
Domestic Day Trips					
Average Annual Day Trips to Eyre Peninsula					524,000
PURPOSE					
	Holiday	VFR	Business	Other	Total
Overnight Visits	208,000	122,000	117,000	29,000	470,000
%	44%	26%	25%	6%	100%
Nights	953,000	514,000	398,000	96,000	1,961,000
%	49%	26%	20%	5%	100%
Average Length of Stay	5	4	3	3	4
Expenditure					
Average Annual Expenditure	\$ 192,000,000	\$ 44,000,000	\$ 94,000,000	\$ 70,000,000	\$ 400,000,000

- 96 per cent of the Eyre Peninsula visitors are **Domestic** visitors and 4 per cent are **International** visitors.
- **Domestically**, 74 per cent of visitors are from within the state compared to 26 per cent from Interstate.

Table A.2 Estimated impacts on economic output of Southern Launch's civilian launch operations, direct, production and consumption impacts, \$million

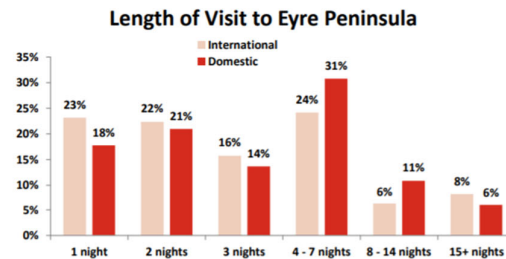
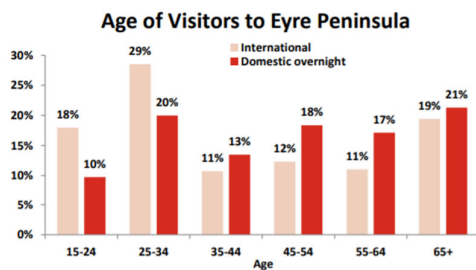
Financial year	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30
Direct and production impacts										
GSP impact of ongoing operations (\$million)	-0.3	3.5	3.3	3.8	5.1	5.6	5.5	5.5	5.5	5.5
GSP impact of construction costs (\$million)	2.0	0.6								
GSP impact of business visitor expenditure (\$million)		0.9	1.2	1.4	1.9	2.0	2.0	1.9	1.9	1.9
Consumption impacts										
GSP impact of ongoing operations (\$million)	1.6	1.7	1.5	1.8	2.4	2.6	2.6	2.6	2.6	2.6
GSP impact of construction costs (\$million)	0.9	0.3								
GSP impact of business visitor expenditure (\$million)		0.4	0.6	0.6	0.9	1.0	0.9	0.9	0.9	0.9
Total gross impact on Gross State Product (\$million) incl. consumption impacts	4.1	7.4	6.7	7.6	10.3	11.2	11.0	11.0	10.9	10.8
Present value of GSP impact over period (\$million) incl. consumption impacts	53.4									

Note: Impact on Gross State Product is expressed in real 2018/19 values.

Decibel scale	<p>The decibel scale is logarithmic in order to produce a better representation of the response of the human ear.</p> <p>A three decibel increase in the sound pressure level corresponds to a doubling in sound energy. An increase or decrease of three decibels is typically considered to be the smallest change in sound level that a listener can detect. A change of five decibels, however, is clearly noticeable.</p> <p>A 10 dB increase in the sound pressure level corresponds to a perceived doubling in volume. This increase is typically perceived to sound twice as loud.</p> <p>The table below shows the sound pressure level that would be typically experienced when exposed to different sources:</p>	
	<p>0 dB(A) Threshold of human hearing 30 dB(A) A quiet country park 40 dB(A) Whisper in a library 50 dB(A) Open office space 70 dB(A) Inside a car on a freeway 80 dB(A) Outboard motor 90 dB(A) Heavy truck pass-by 100 dB(A) Jack hammer / subway train 110 dB(A) Rock concert 115 dB(A) Limit of sound permitted in industry 120 dB(A) 747 take off at 250 metres</p>	

Prepared by the South Australian Tourism Commission, December 2019

VISITOR PROFILE

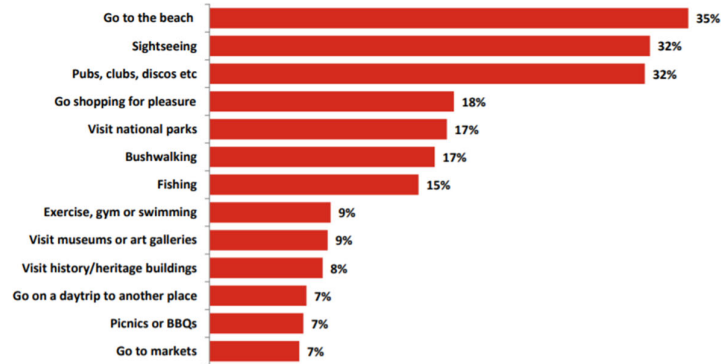


- **International** visitors peak in the 25-34 age group at 29 per cent.
- **Domestically** age is pretty consistent, with 56 per cent of visitors over the age of 45.

- 47 per cent of **International** visitors prefer to stay 1 - 2 nights on the Eyre Peninsula.
- 26 per cent of **Domestic** visitors stay between 4-7 nights.

VISITOR ACTIVITIES

Domestic Visitor Activities in Eyre Peninsula



- The most popular activity when coming to the Eyre Peninsula is to eat out or visits friend or relatives.
- Other popular activities include going to the beach, visiting wineries, going to the markets and undertaking cultural experiences.

REGIONAL TOURISM SATELLITE ACCOUNT INFORMATION

In 2017-18, the tourism industry contributed an estimated \$412 million to the Eyre Peninsula regional economy and directly employed approximately 1,700 people.

Employment

- 1,700 jobs for people employed directly by the tourism industry, 600 indirect jobs and a total employment impact of 2,300 people.

Tourism output

- \$206 million and \$207 million in direct and indirect tourism output, and \$412 million in total tourism output.

Gross Value Added (GVA)

- \$110 million and \$88 million in direct and indirect tourism GVA, and \$198 million in total tourism GVA.

Gross Regional Product (GRP)

- \$117 million and \$100 million in direct and indirect tourism GRP and \$217 million in total tourism GRP.

REGIONAL INSIGHTS

Interstate

- Coast and seafood the cornerstones of appeal.
- Unique experiences around interaction with aquatic wildlife very appealing.

Intrastate

- Similar appeals to interstate with marine wildlife, scenery and seafood all clear winners.

International

- Viewing and engaging with local wildlife (both sea and land) hold strong appeal for the Eyre Peninsula.
- Uncrowded beaches also appeal.
- Dining on seafood higher for the eastern markets.

Regional Visitor Strategy Priorities

- The opportunity for the Eyre Peninsula is to capitalise on its pristine nature, immersive wildlife experiences and coastal lifestyle, to drive increased overnight stays from international and domestic visitors.

APPENDIX O - NOISE ASSESSMENT

AECOM Australia Pty Ltd 21-Dec-2020

The sensitive receptors identified within the Project study area include nearby wildlife (assessed separately) and residences approximately 2.5 kilometres from the closest Project launch site. (pg 3 Exec Summary)

Noise from launches and stationary rocket testing are predicted to temporarily alter the quiet setting of the natural environment with noise briefly above the measured ambient level at distances further than five kilometres from the launch.

This sudden noise increase is likely to cause a disturbance to residents at nearby properties, particularly if launches were to occur at night. Noise produced by the rocket is expected to be loudest during the initial thrust at ground level (15 – 30 seconds) and gradually reduce as the engines decrease power while the vehicle ascends away from noise sensitive areas (1 – 2 minutes).

In humans, noise impacts can include annoyance, sleep disturbance, productivity loss and negative health effects. In wildlife, impacts may include changes in behaviour and physical harm, which have the potential to adversely impact sensitive wildlife populations. (pg 6)

Noise from the operation of the launch facility would include industrial noise from the Project Area including generator noise, vehicle movements and other typical operational noise. (pg 25)

- Day to day operation of the facility would require generators supporting office buildings, dams, workshops and launch facilities. (97 dB)
- Workshop activities would be similar to those at a mechanical workshop. (114dB)
- Noise from the launch vehicle erector has been assumed to be similar to that of a large mobile crane. (98dB)

Page 27

Maximum sound power of rocket	Notional sound power level of 140 dB(A) based on Southern Launch specifications.
Launch vehicle	<p>Maximum thrust at lift off of launch vehicle of ~1,200KN is assumed.</p> <p>The Falcon v1.1 launch vehicle was selected from the RUMBLE database due to the similar levels of thrust to the maximum assumed. This is considered a conservative assumption as Southern Launch would typically launch much smaller rockets.</p>

Number of launches	Maximum of one launch per week with up to 36 per year. A launch could be undertaken during day or night-time hours. Accordingly, assumed launch numbers have been assumed to be spread evenly between day (7am to 10pm) and night (10pm to 7am).
Launch testing (Site A)	Typically, prior to each launch of a liquid propellant rocket there would be single a “stack test” involving the first stage engine firing for approximately 10 to 15 seconds. This would take place with the rocket clamped down on the pad and the water sound suppression system operating. Solid rockets would not have any pre-launch firing tests. It has been assumed that rocket testing would be undertaken up to 10 times per year between 7am and 10pm only.

5.1 page 29

Sensitive receptors



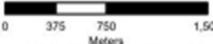


There are no dwellings immediately adjacent to the proposed Project Area. There are a number of (approximately three) residential dwellings located to the north-east of the study area at Fishery Beach (See Figure 2). The nearest residential noise sensitive receptors to the launch and infrastructure sites are shown in Table 15.

Table 15 Sensitive receptors near launch activities

Location	Residential
Site A	~4.5km
Site B	~3.5km

AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



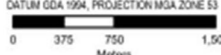




PROJECT ID 60627263 CREATED BY LDE LAST MODIFIED EVANS12 18 DEC 2020	 www.aecom.com	L_{max} Noise Levels 85 dBA 105 dBA 125 dBA 90 dBA 110 dBA 130 dBA 95 dBA 115 dBA 135 dBA 100 dBA 120 dBA	CALCULATED L_{max} NOISE LEVELS FOR A ROCKET LAUNCH AT LAUNCH SITE A
 DATUM GDA 1994, PROJECTION MGA ZONE 53  Scale 1:40,000 (when printed at A4)	Features  Construction Zones  Residential Locations	Client: Southern Launch Whalers Way Orbital Launch Complex - Environmental Assessment Report: Noise Assessment	

A4 size

AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



PROJECT ID 60627263 CREATED BY LDE LAST MODIFIED EVANS12 18 DEC 2020	 www.aecom.com	L_{max} Noise Levels 85 dBA 90 dBA 95 dBA 100 dBA 105 dBA 110 dBA 115 dBA 120 dBA 125 dBA 130 dBA 135 dBA	CALCULATED L_{AMAX} NOISE LEVELS FOR A ROCKET LAUNCH AT LAUNCH SITE B
 DATUM GDA 1994, PROJECTION MGA ZONE 53  Scale 1:40,000 (when printed at A4)	Features  Construction Zones  Residential Locations	Client: Southern Launch Whalers Way Orbital Launch Complex - Environmental Assessment Report: Noise Assessment	

A4 size

AECOM does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECOM shall bear no responsibility or liability for any errors, faults, defects, or omissions in the information.



PROJECT ID 60627263 CREATED BY LDE LAST MODIFIED EVANS12 18 DEC 2020		Sound Exposure Level 105 dBA — 120 dBA 110 dBA — 125 dBA 115 dBA — 130 dBA	CALCULATED SINGLE LAUNCH SOUND EXPOSURE LEVEL AT SITE B
 DATUM GDA 1994, PROJECTION MGA ZONE 53 Scale 1:40,000 (when printed at A4)	Features Residential Locations Construction Zones	Client: Southern Launch Whalers Way Orbital Launch Complex - Environmental Assessment Report: Noise Assessment	Figure 6

A4 size

The external levels transferring to the inside a typical residential building during a launch would likely be high enough to disturb sleep. Noise during a day

launch or test may also be at an annoying outdoor level for a brief period (less than one minute) before ambient levels returned to normal. For context, a comparable level of sound could be experienced by standing close to a train passby or below an aircraft flyover at low altitude.

Page 44

The potential impact from sonic booms has been determined by comparing the impact of other launch facilities with a similar planned azimuth, trajectory and rocket size. The audible component of a sonic boom may sound similar to a single distant thunder clap. Exposure to this sound in a quiet environment could cause an unexpected disturbance to sensitive receptors.

... the overpressure produced by the sonic boom is not expected to exceed the assessment criteria of 133 dB(L) on land.

Appendix P page 76

Noise Source Type	Hearing Damage	Temporary Threshold Shift (TTS)	Masking
Single impulse (e.g., starter's pistol 6" from the ear)	140 dBA	NA	NA
Multiple impulse (e.g. jackhammer, pile driver)	125 dBA	NA	Ambient dBA
Mammals	110 dBA	NA	Ambient dBA
Non-strike continuous (e.g. construction noise)	None	93 dBA	Ambient dBA

Appendix_P Page 77

Noise from launches and stationary rocket testing are predicted to temporarily alter the quiet setting of the natural environment with noise briefly above the measured ambient level at distances further than five kilometres from the launch.

The Southern Emu Wren, Western Whipbird (eastern)

and other protected species that inhabit the areas close to the launch site are at greatest risk increased stress, adverse behaviour reactions and physiological impacts. Coastal species are predicted to generally be exposed to low levels of noise however a brief adverse behavioural response is likely.

No wildlife is predicted to be exposed levels above the permanent hearing damage threshold of 140 dB(A). This would be unlikely, as sound pressure levels of this magnitude are likely to be limited to the launch site only.

Information from the studies reviewed could not confirm whether long term behavioural changes would be caused by launch vehicles or if the birds in this area would habituate to the sound of launches and testing.

App_P Page 78

Studies of terrestrial mammals have shown that noise levels of 120 dBA can damage mammals' ears, and levels at 95 dBA can cause temporary loss of hearing acuity (Wyle, 2003). It is likely that the possible impacts to mammals would be similar to birds noting that mammals would be unable to move away from the noise being produced as quickly and may be exposed to higher levels for longer.

The potential impact from sonic booms has been determined by comparing the impact of other launch facilities with a similar planned azimuth, trajectory and rocket size.

Hence, the overpressure produced by the sonic boom is not expected to exceed the assessment criteria of 133 dBL on land. The audible component of a sonic boom may sound similar to a single distant thunderclap that could result in a short-duration startle response.

App R page 6

- Noise level maximum of 130-140 dB (at one of two project launch sites) for approximately one minute, once or twice every year (for

larger launch vehicles) and much lower dB for smaller launch vehicles (once every 3-4 weeks) up to maximum of 36 launches per year.

- Mitigation measures such as scare gun (120 dB) used prior to launch times to remove sensitive fauna from immediate noise zone (see below)

PM2.5 Fallout

Environmental toxin and pollutant associated with human mortality sprayed over lower Eyre Peninsular.

Huge deposition on fragile coastal ecosystem.

The average for most Australian cities annually is less than 25.

Whilst the level at the nearest receptor is at 5 ug/m³, note that this area has a baseline PM2.5 reading of nothing. So it could be argued it's a 500% increase in baseline levels.



INFRASTRUCTURE ASSESSMENT – APPENDIX P

Launch Site A

The launch facility at Site A is intended to cater for larger conventional launch vehicles of greater than 30 tonnes up to over 100 tonnes, and from 9m – 30 m in height, **Launch Site B**

The launch facility at Site B is intended to cater for larger conventional launch vehicles

from micro-sized, less than 10 tonnes, up to approximately 50 tonnes.

Launch Site A and Launch Site B will include Assembly Buildings

(temporary and permanent)

approximately 48 m by 24 m with a minimum 7.0 m internal clear height with internal crane facilities to allow the design vehicle to enter the building for internal unloading

Diesel and / or Hydrogen Fuel Cell Powered **Generators**; operating 10 hours a day, 6 days a week.

Helicopter Pad(s); lidar pads and radar pads

Water Tanks; 150,000 litre tank elevated on a 20 m tower

Water Capture and Treatment Systems;

Water Deluge System: Primarily, the water deluge system reduces noise impact by generating water droplets. The water droplets interact with the generated sound waves and convert them to heat energy through the water being turned to steam.

Secondly, the water deluge reduces the heat impact on surrounding concrete and infrastructure.

Detention Basin The basin will capture all storm water and all launch deluge water. The basin will be capable of being automatically refilled from the main dam at Infrastructure Site D, once developed. The basin will be lined with polymer dam lining and will be fenced.

Launch Pads Launch vehicles may be up to 30 m tall with a mass of 100 tonnes at Launch Site A and 50 tonnes at launch Site B. It is envisaged that the launch pad concrete will be tied into the flame trench concrete

Removable Launch Pad Sections There are to be three concrete platforms which can be craned into and out of position over the flame trench. Each platform is to be wide enough to fit over the trench and four metres long.

Flame Trench The flame trench is to be 5 m wide and 35 m long. All deluge water over the launch pad should naturally flow into the flame trench to ensure

capture.

Flare Stack The flare stack will allow for the disposal of surplus fuels by burning off.

Cold Box Surplus oxidisers will be disposed of into the cold box

Fuels Oxidisers and Chemicals which cannot be disposed of in the flare stack or cold box will be trucked off-site by a by a licensed contractor in accordance with regulatory requirements.

Lightning Rods;

Anemometer

Towers;

Lighting

Engine test stands;

Propellant (Liquid, Hybrid and Solid

Fuels) Storage; Secure Block Houses;

Launch Bunker reinforced building for up to seven staff with kitchen and toilet facilities It will be sealed and will feature air filtration systems.

Blast Walls Blast walls are to be constructed at the fuel bund, oxidiser bund and launch bunker

Bundling (for Blast Wave Deflection);

Fuel and oxidised bunds are concrete bunded areas where the tanks storing the fuels will be located.

Fibre Optic and Satellite

Communication Systems; High Voltage

Power Lines

Fences and Gates A perimeter fence is to be 2000 mm tall wire mesh topped with three strands of barbed wire.

1200 mm tall tubular steel edge protection fencing is required around the flame trench

Site Security IP closed-circuit television (CCTV) is to cover the site entrances and throughout the site. All buildings and structures are to be alarmed.

Commercial Vehicle access and Parking

Two parking spaces for delivery vehicle designed to cater for 19 m semi-trailer vehicles, one next to the fuel bund and one next to the oxidiser bund, of concrete construction

Infrastructure Site D

Site D will start off being a quarry, where rubble will be extracted to build up and expand the roads. Once the rubble has been used, it will become a 30 megalitre dam, lined and fully fenced with a 2m high wire mesh fence topped with 3 strands of barbed wire to prevent animals using it. The plan is to then have a pumping station to pump this water to sites A, E and eventually C.

NATIVE VEGETATION - APPENDIX Q

COASTAL VEGETATION

The land is subject to a Native Vegetation Heritage Agreement under the *Native Vegetation Act 1991* (p.3, Appendix R).

Key conservation areas adjacent to the site include:

- The Lincoln National Park
- Cathedral Rocks wind farm
- Thorny Passage Marine Park
- State Heritage Listed former Fishery Bay Whaling Station

The West Coast Mintbush (*Prostanthera calycina*) is protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). and is likely to occur within the project area (p.9, Appendix P)

A further three State listed flora species protected under South Australian *National Parks and Wildlife Act 1972* (NPW Act) were likely to occur within the project area, including (p.9, Appendix P)

- Alcock's Wattle (*Acacia alcockii*) – rare under the NPW Act
- Port Lincoln Guinea-Flower (*Hibbertia cinerea*) – rare under the NPW Act
- Western Daddy-long-legs (*Caladenia bicalliata ssp. bicalliata*) – rare under the NPW Act

Southern Launch will clear 23.76 hectares of native vegetation, which will be offset by a \$915,078.45 contribution to "credit providers within the region" (p.10, Appendix P)

Where impacts to native vegetation, threatened flora and fauna species cannot be avoided by the project, they will be "offset through state and or Commonwealth requirements" (p.11, Appendix P)

Summary of proposed clearance

Purpose of clearance	Southern Launch is proposing to construct the Whalers Way Orbital Launch Complex. The Project consists of the design and delivery of two separate types of facilities including supporting infrastructure. The two separate facilities will constitute the initial development of the Whalers Way Orbital Launch Complex (WWOLC). The site will need to be prepared to accept the facility including appropriate supporting infrastructure
Native Vegetation Regulation	Regulation 12(27) – Major projects,
Description of the vegetation under application	Coastal heath and Low Mallee. All project sites are located within low coastal mixed mallee with average canopy heights between 0.5 and 2m tall. Soils are grey sand and limestone. Cover ranges from 50% to 90%. Known habitat for nationally threatened fauna species Southern Emu-wren and Western Whip bird.
Total proposed clearance - area (ha) and number of trees	23.73 hectares including the following: Launch Site A, Launch Site B, Infrastructure Site D and Range Control Site E and associated access tracks – 18.54 ha. Whalers Way Road Upgrade – 5.19 ha.
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay or State Significant Native Vegetation Overlay

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	N/A
	Area (ha)	23.73
	Total biodiversity Score	1250.4217
Seriously at variance with principle 1(b), 1(c) or 1 (d)		Seriously at variance with principle 1a and 1b. At variance with 1e
Risk assessment outcome		Level 4

What is the process?

There are four levels of risk, depending on the significance of the vegetation proposed to be cleared. Level 1 poses a very low risk to biodiversity, and **Level 4 poses a high risk to biodiversity.**

To assess the level of risk of a proposal, the NVC considers the:

- size of the clearance (area of clearance or number of trees to be cleared)
- presence of threatened species or communities (representing three of the 'Principles of Clearance' from the Act).

Criteria for assessing and approving applications are shown in the **risk assessment fact sheet**.

The information that must be provided by the proponent, level of oversight, and obligations imposed, are proportionate to the likely impact on biodiversity of the clearance.

Through this process, we can ensure the majority of our efforts are placed on activities that pose a high or medium risk to native vegetation.

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Native species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
A	1	24	1	0	0.1	74.53	3.34	248.93	1			261.38	\$182,171.07	\$10,019.41
A	2	18	1	0	0.1	60.51	0.23	13.92	1			14.61	\$10,184.90	\$560.17
A	3	22	1	0	0.1	66.23	1.54	101.99	1			107.09	\$74,640.97	\$4,105.25
B	1	16	1	0	0.1	51.65	0.58	29.96	1			31.45	\$21,923.01	\$1,205.77
B	6	24	1	0	0.1	70.84	0.4	28.34	1			29.75	\$20,736.73	\$1,140.52
B	3	24	1	0	0.1	53.43	4.06	216.93	1			227.77	\$158,749.74	\$8,731.24
Site B-D track	1	22	1	0	0.1	51.65	0.1	5.17	1			5.42	\$3,779.83	\$207.89
Site B-D track	3	12	1	0	0.1	55.71	0.62	34.54	1			36.27	\$25,277.07	\$1,390.24
D	1	22	1	0	0.1	62.72	0.29	18.19	1			19.10	\$13,310.85	\$732.10
D	3	12	1	0	0.1	38.97	1.41	54.95	1			57.70	\$40,211.60	\$2,211.64
D	5	12	1	0	0.1	30.66	4.92	150.85	1			158.39	\$110,392.38	\$6,071.58
Site D Northern Access	2	18	1	0	0.1	55.89	0.11	6.15	1			6.46	\$4,499.13	\$247.45
Site D Northern Access	3	12	1	0	0.1	50.23	0.22	11.05	1			11.60	\$8,087.00	\$444.79
E	4	20	1	0	0.1	57.41	0.75	43.06	1			45.21	\$31,510.16	\$1,733.06
WWRA	1	24	1	0	0.1	72.38	0.63	45.60	1			47.88	\$33,370.36	\$1,835.37
WWRA	2	18	1	0	0.1	55.89	0.40	22.36	1			23.47	\$16,360.48	\$899.83
WWRA	3	16	1	0	0.1	51.89	0.51	26.46	1			27.79	\$19,366.70	\$1,065.17
WWRA	6	14	1	0	0.1	45.86	0.45	20.64	1			21.67	\$15,102.48	\$830.64
WWRA	4	18	1	0	0.1	53.55	3.20	171.36	1			179.93	\$125,403.97	\$6,897.22
						Total	23.76	1250.4217				1312.94	\$915,078.45	\$50,329.31

Insert additional rows into the table as required.

Principle of clearance	Considerations
<p>Principle 1a - it comprises a high level of diversity of plant species</p>	<p>Relevant information</p> <p>The number of plant species recorded (native and introduced) for each vegetation association</p> <p>The plant diversity scores for 10 of the 26 sites assessed within Whalers Way were >20 points meaning they were seriously at variance with this principle.</p> <p>The remaining 16 sites were between 10 and 20 points being at variance with this principle.</p>
	<p>Assessment against the principles Seriously at Variance:</p> <ul style="list-style-type: none"> • Site A1 and 3 • Site B3 and 6 • Site B-D Access 1 and 5 • Site D1 • Block D access 1 and 7 • Whalers Way Road 1 <p>At Variance:</p> <ul style="list-style-type: none"> • All remaining sites.
	<p>Moderating factors that may be considered by the NVC</p> <p>The proposed clearance equates to approximately 1.5% of HA</p>
<p>Principle 1b - significance as a habitat for wildlife</p>	<p>Relevant information</p> <p>The Whalers Way area is under a current Heritage Agreement and constitutes an intact vegetation community. The area has numerous landforms and vegetation associations present and forms a link in a chain of a number of reserves and national parks in the southern Eyre Peninsula. The area has records for over 120 fauna species within 10km of the project site. The site directly provides critical habitat for two nationally threatened terrestrial species and at least 12 terrestrial species at state level.</p> <p>The following nationally threatened species are known to use the Project area for some or all their habitat requirements:</p> <ul style="list-style-type: none"> • Southern Emu Wren • Western Whip Bird <p>A further nine species listed as migratory/marine at federal level or of state conservation significance are known to, likely to or will possibly utilise the habitat present within the project areas.</p> <p>All areas subsequently resulted in a threatened fauna score of 0.1.</p>
	<p>Assessment against the principles</p> <p>The threatened fauna score for associations within the project site scored greater than 0.05 points making clearance of vegetation within all project area seriously at variance with this principle.</p>
	<p>Moderating factors that may be considered by the NVC</p> <p>There are no moderating factors relating to the presence of Southern Emu Wren and Western Whip bird. Some species such as Rock Parrot may be considered locally common only.</p>
<p>Principle 1c - plants of a rare, vulnerable or endangered species</p>	<p>Relevant information</p> <p>No threatened flora species were recorded within the Project site areas directly or in other sites surrounding the project areas. There are historical records for a number of species including:</p> <ul style="list-style-type: none"> • Xanthorrhoea semiplana ssp. tatei • Eucalyptus gilleni • Hibbertia crinita • Acacia alcockii <p>These records are all in similar locations and not recorded within the project area when checked for accuracy. There is some genuine doubt about the integrity of many of these records given the descriptions of record locations do not match the actual location and the specific habitat is not suitable for these species. Other species without records but more likely</p>

	<p>to be present based on habitat preferences such as <i>Prostanthera calycina</i> were also not recoded despite targeted searches within the project areas and within areas of preferred habitat.</p>
--	--

ENDANGERED SPECIES - APPENDIX R

COASTAL RAPTOR

Southern Launch were advised to obtain an assessment by a suitably qualified coastal raptor expert.

In reply, they engaged Dr Zeta Bull, who confesses she is "not a qualified coastal raptor expert" (p.1, Appendix R, Coastal Raptor Assessment). They also engaged Larry Bebbington, an "independent consultant" (p.1, Appendix R).

Regarding the raptors in question, their report concluded that "significant impacts following construction and during operation of the project were not anticipated". However, this report is disputed by other raptor experts in the field.

Noise modelling is likely to range from 140 dB for the largest rockets (100 tonne), to 120dB for "smaller" rockets (50 tonne) (p.3, Appendix R).

This level of noise is likened to that of a "large aeroplane" (p.3, Appendix R). At other times than launching, the noise is likened to that of a "small warehouse" (p.3, Appendix R).

Mitigation measures include a "scare gun" (120 dB) prior to launch times to "remove sensitive fauna from the immediate noise zone", as well as "flame trench and water deluge systems". (p.5, Appendix R).

A noise level of 93dB will cause "temporary threshold shift" in birds (p.16, Appendix R).

130dB is the threshold of pain to humans at close proximity (p.17, Appendix R).

Audible Bird Scaring Devices (Scare Gun)

The maximum accumulated peak level (APL) for these devices is 118dB under South Australian law (p.5, Appendix R).

SouthernLaunch will use a device that generates "approximately 120 dB" from dawn until launch on launch days (42 times a year) (p.5 and 17, Appendix R).

ANTICIPATED NOISE

Southern Launch anticipate the noise levels/ impacts to be as follow:

1. Construction level noise for approximately 8 months, 6 days a week between 7 am and 6 pm. This may cause "communication impacts to birds" within 2 kilometres of the works (p.16, Appendix R.)

2. Operations noise of 63dB for an average of 4 hours per day, 5 days a week (p.16, Appendix R).

3. Launch noises for approximately 60 seconds, every 3 weeks. This noise will reach a maximum level of 130-140 dB, the equivalent of an airplane take-off at 25 metres (p.17, Appendix R).

This noise will reach Osprey nest site 1 at 98dB and nest site 2 at 105 dB, enough to cause temporary hearing loss and habitat disruption (p.17, Appendix R).

THE EASTERN OSPREY

The Eastern Osprey is listed as endangered under the South Australian *National Parks and Wildlife Act 1972* (p.6, Appendix R).

Recent surveys undertaken in South Australia have revealed a decline in population for the Osprey, including in western South Australia (p.6, Appendix R).

This population is considered "unstable" (p.6, Appendix R).

Whalers Way has known Osprey territories that were still occupied during the most recent surveys (p.7, Appendix R).

The Osprey is known to form long-term pair bonds and use the same nesting locations over long time periods (p.7, Appendix R).

Known threats to the Osprey include (p.7 and 16, Appendix R):

- Human Disturbance
- Habitat Degradation
- Vegetation clearance
- Fire
- Development

Southern Launch acknowledge that Osprey have "historically" been present in the immediate region (p.8, Appendix R).

Active nests are also known to occur between Whalers Way and Port Lincoln (p.8, Appendix R).

"Bird enthusiast Mike Damp claims the nests have not been active for about 5 years" (p.9, Appendix R).

Southern Launch proposed sites range from 2 to 4 kilometres from the known nest sites at Whalers Way (p.9, Appendix R).

The South Australian government recommend a minimum of 2 kilometres distance during core breeding periods to avoid human induced disturbance impacts (p.9, Appendix R).

The AECOM preliminary significant impact assessment considered that no significant residual impact to the Eastern Osprey was anticipated "based on anecdotal evidence that the nest was considered inactive" (p.15, Appendix R).

However, one individual Osprey was recorded flying over the project site during vegetation assessment. Based on this, it was considered at least one pair with an established territory may be impacted by the project (p.15, Appendix R).

Southern Launch acknowledge that coastline habitat is important for this species, and there are Ospreys present in the area" (p.15, Appendix R).

"The project aims to reduce public access, particularly to the cliff top tracks and osprey viewing areas" (p.16, Appendix R).

While this project is "not considered to directly impact the habitat" of local Ospreys, "noise impacts are expected" (p.16, Appendix R.)

The specific location is "not key to the whole SA population" (p.17, Appendix R).

WHITE BELLIED SEA EAGLE

The White-bellied Sea Eagle is listed as Endangered under the *SA National Parks and Wildlife Act 1972* (p.17, Appendix R).

Population of the White-bellied Sea Eagle is in decline in South Australia (p.18, Appendix R).

Disturbance during critical phases of breeding are known to result in nest failures and displacement to sub-optimal habitats (p.18, Appendix R).

Any disturbance during their nesting period, particularly overhead, may cause the Eagles to abandon their nest (p.19, Appendix R).

White-bellied Sea Eagles have regularly been reported in the Whalers Way region, and flying overhead, including a known nest site around 5 kilometres to the east of the launch sites (p.19, Appendix R).

On Kangaroo Island, it was recommended to avoid construction activities between May and December for 1 kilometre inland from a known WBSE nest, and develop an exclusion zone at other times with local wildlife specialists (p.21, Appendix R).

It is considered "highly unlikely" that launch activities would cause disturbance to WBSE nests (p.21, Appendix R).

To minimise impacts on nests and territories, construction should only occur from mid-January to May, outside of critical breeding times of mid-May to mid-September (p.21, Appendix R).

Southern Launch aim to restrict public access, as well as moving coastal roads inland, which would "reduce the amount of human disturbance at the sites" (p.24, Appendix R).

Table 1: Summary of all Eastern Osprey records near Whalers Way

Year (s)	Number of records	Number of Osprey	Location / comments	Source
1970, 1971, 1975	4	Not counted	1.8 km WSW of Lincoln National Park (LNP)	BOBSA
1982	1	Not counted	5.5 km SSW of LNP	BOBSA
1/09/1999	1	1	6.4 km SSE of Sleaford / HA 148 / Fishery Bay	BOBSA
14-28/09/1999	3	Not counted	Sleaford Bay, LNP, Whalers Way (8.3 k SSW of Sleaford / HA 152)	Birdlife
28/09/2000	1	Not counted	Wanna - Lincoln NP	Birdlife
24/07/2001	1	1	5.1 km SSW of Lincoln National Park / Wanna	BOBSA
20/01/2001	1	Not counted	Whalers Way (8.3 k SSW of Sleaford / HA 152)	Birdlife
30/08/2002 – 28/10/2002	3	Not counted	SSW of LNP (One Apostle Rock, Wanna Bay, Wanna Head	Birdlife
18/09/2004	1	Not counted	Whalers Way / 8.1 km SSE of Sleaford / HA 148	Birdlife
113-15/12/2004	2	1 then 2 (days apart)	7.5 km SSE of Sleaford (Fishery Bay) / 7.2 km SSW of Sleaford (Red Banks Beach	BOBSA
1/10/2006	1	Not counted	10 km SSE of Sleaford / Cape Wilas	Birdlife
29/12/2006	1	Not counted	1.9 km WSW of LNP	BOBSA
2008	1	1	2.4 km NNE of Tulka	BOBSA
20/01/2009	1	1	4.3 km SSE of Sleaford	BOBSA

8

Jacobs

Memorandum

Whaler's Way Raptors

12/08/2009	1	Not counted	2.8 km NNE of Tulka / Proper Bay	Birdlife
15/07/2010	1	Not counted	9.8 km SSE of Sleaford (Whalers Way to Cape Wilas)	Birdlife
15-19/08/2011; 17/10 and 17/11 2011	4	Not counted	Whalers Way (2), Proper Bay, Wanna Car Park	Birdlife
16-17/09/2014	2	Not counted	Pt Lincoln FF (1.9 km NNE of Tulka); Whalers Way (HA 152)	Birdlife
2015	1	Not counted	NNW of LNP	Birdlife
2016	1	1	0.4 km NNE of Tulka	BOBSA
2017	1	Not counted	0.7 km SW of Tulka	Birdlife
2018	1	1	5.5 km SSW of Lincoln National Park / very exposed rugged coastline	BOBSA

Table 3: DEW concerns and response

DEW concerns	Response
Public access to fauna	The project aims to reduce public access to fauna, particularly along the coast line reducing line of site disturbance if WBSE or Osprey nests develop / return to the coastline
Light spill impacts (national pollution guidelines, 2020 Version 1.0)	Out of scope for this memo, being addressed elsewhere
AECOM 2020a report only considers two species in detail, more information is required regarding other bird species and specific impacts associated with desertion of site, startle response.	More detailed information about the WBSE and Osprey provided here.
Coastal Raptors (Osprey and White-bellied Sea Eagles) – these species have be identified as occurring in the area but have not been assessed, these species are known to be sensitive to disturbance and are likely to be impacted by the proposal, therefore a detailed assessment should be undertaken by a suitably qualified coastal raptor expert and included in the report	This memo provides more detail and has been prepared by an associate ecologist with over 16 years consulting experience and a PhD, which is considered appropriate for EIS submission.
Suggested review of Caton et al 2011, Dennis and Clancy 2014, Detmar and Dennis 2018, Dennis and Detmar 2018.	Reviews (as appropriate) discussed in this memo.
Suggest likelihood of occurrence information was out of date or needs to be re-assessed.	Agreed and discussed in this memo.
Suggested more detail be provided regarding the Osprey nest near Cape Carnot (1km from the nearest launch site? – based on commentary in the initial submission p.52, 6.4.2) And that White-Bellied Sea Eagle be discussed as well.	Discussed in this memo and additional information provided by site visit (Larry Bebbington). The nearest nest site is Site 2 which is immediately west of Black Lookout which is 2 km from Pad B. There is no known nest at Cape Carnot.

Six threatened bird species were recorded, including (p.9, Appendix P)

- Diamond Firetail – Vulnerable NPW Act
- Eastern Osprey – Migratory and Marine EPBC Act; Endangered NPW Act
- Rock Parrot – Rare NPW Act
- Southern Emu-wren – Vulnerable EPBC Act; Endangered NPW Act
- Western Whipbird – Vulnerable EPBC Act; Endangered NPW Act
- White-bellied Sea Eagle – Marine EPBC Act; Endangered NPW Act

Impacts of the project include (p.9, Appendix P):

- Clearing of native vegetation
- Degradation of adjacent vegetation
- Fauna species injury or mortality
- Disturbance to breeding and foraging habitat
- Displacement of species from invasion of weed and pest species
- Edge effects
- Habitat fragmentation
- Barrier effects
- Dust and light
- Noise
- Contamination of surface water (chemical spills)
- Increased fire risk

MARINE LIFE - APPENDIX S

Southern Launch have advised in their Environmental Impact Statement (EIS) that the potential marine impact zone (PMIZ) extends for 1000km from the launch site over the Southern Ocean within an arc between bearings 145 degrees and 265 degrees (page 5, appendix S, Southern Launch EIS).

“The PMIZ (potential marine impact zone) overlaps the south-eastern corner of the Thorny Passage Marine Park, which includes a Habitat Protection Zone containing Liguanea Island” (page 5, appendix S, Southern Launch EIS). Over 70 different species of animals exist in the PMIZ (page33, appendix S, Southern Launch EIS).

Liguanea Island is 5-8kms south of WWOLC. Liguanea Island is home to...

- A breeding colony of **threatened Australian sea lions** (the 5th largest breeding colony in the Spencer Gulf)
 - “The Australian sea lion (ASL) *Neophoca cinerea* is currently listed as Vulnerable under the South Australian National Parks and Wildlife Act 1972 (NPW Act 1972) and Endangered under the EPBC Act 1999”
 - Estimated pup counts were 30 in 19901 (Gales et al. 1994), 43 in 2004 (Shaughnessy et al. 2005), 25 in 2015 (Goldsworthy et al. 2015) and 27 in 2019 (Goldsworthy 2020). (page 15, appendix S, Southern Launch EIS)
- A breeding colony of long-nosed fur seals
- A breeding colony of Short-tailed Shearwater (Mutton Bird)
- A breeding colony of Crested Tern (bird)

(page 5, appendix S, Southern Launch EIS)

Orbital rockets, after releasing the satellites, will fall back to earth at approx. 500km from the launch site. Suborbital rockets will fall back to earth within 3-8km from the launch site. Southern Launch has stated that **“debris from failed launches with Polar and Sun-synchronous trajectories has the potential to impact Liguanea Island.”** (page 5, appendix S, Southern Launch EIS).

“The rockets can be classified according to their payload capacity, namely micro (< 150 kg), mini (150–500 kg) and small (500–20002 kg). It is expected that only two of 36 rockets launched annually would be of the small class, with more than half being near the lower end, i.e. an order of magnitude smaller, and the rest

being about a third of the payload size range.” (page 33, appendix S, Southern Launch EIS).

Southern Launch have identified that an **“air burst, which results in the launch vehicle breaking up into a number of pieces and landing over a large area, would have an average frequency of Long-Nosed Fur Seals and Australian Sea Lion casualties of one every 3,375 and 194,470 launches, respectively, for small rockets”** (page 5, appendix S, Southern Launch EIS).

“An air burst over Liguanea Island would be a very rare event that could result in mortalities but there would be negligible impact at subpopulation level.” (page 6, appendix S, Southern Launch EIS).

“Within the Southern Ocean, including the waters of the Thorny Passage Marine Park surrounding Liguanea Island, there may be occasional debris strike impacts on individual animals on the sea surface but no impact at population level.” (page 6, appendix S, Southern Launch EIS).

Noise Levels

“The maximum instantaneous sound pressure level during a launch would be 125 dBA₄ at the closest shoreline to either launch site, less than 95 and 100 dBA at Cape Wiles for launches from Site A and Site B, respectively, and about 95 dBA at the northern end of Liguanea Island (slightly higher for Site A launches) (Figure 11, AECOM 2020).” (page 41, appendix S, EIS)

Birds will suffer permanent hearing loss at 140dBA and temporary hearing loss and behavioural change at 93dBA. **“There may be temporary hearing loss or behavioural impacts on birds using sections of the mainland coastline near the launch sites.”** (page 41, appendix S, EIS). **The endangered Southern emu wren is located right at the launch site.**

“Noise from launches would temporarily alter the quiet setting of the natural environment for one to two minutes during launches. The maximum **instantaneous sound pressure level (airborne) would be 90–95 dBA** at the northern end of Liguanea Island. **This is close to the threshold at which temporary hearing loss may occur for birds”** on the island. (page 6, appendix S, Southern Launch EIS).

“Impacts on pinniped behaviour are the primary concern with regard to rocket launches. Marine mammal reactions to rocket launches are highly variable and may be attributable to the species, age, time of year, air temperature and potential habituation to noise. **Seals may flush into the water when frightened, with pups being trampled or separated from their mothers in the process.**” (page 6, appendix S, Southern Launch EIS).

“**Southern right whales** very close to shore during the launch **may be exposed to sound levels approaching the threshold for temporary hearing loss, but could avoid the noise by submerging for less than two minutes.**” (page 6, appendix S, Southern Launch EIS)

“**Other debris impacts, including ingestion by marine fauna, crushing or smothering of biota, emission of toxic contaminants, noise from debris striking the sea surface and provision of habitat would be highly localised.**” (page 6, appendix S, Southern Launch EIS)

Toxic Contaminants of Rocket Debris

“**All component materials are inert and harmless to the marine environment except lithium (within batteries) and copper (within electrical wiring)**” (page 40, appendix S, Southern Launch EIS).

“**Copper fragments would sink to the seafloor where their slow dissolution may have long-term local effects on sediment infauna**” (page 40, appendix S, Southern Launch EIS).

“**Lithium ion batteries** (about the size of two car batteries in volume) would likely rupture on impact with the sea surface or at depth. Lithium is already elevated in seawater and is not toxic, **but would react with seawater and in sufficient quantity could cause alkaline conditions with localised, short term toxic effects**” (page 40-41, appendix S, Southern Launch EIS).

Crushing or smothering of benthic organisms

“Sessile organisms may be impacted by larger items of debris or accumulations of fragments settling on the seafloor, but the descent of such debris is expected to be slow enough for mobile fauna to avoid (NIWA 2017). **Fragile biota may be damaged or destroyed**, and feeding or respiration may be inhibited.” (page 41, appendix S, Southern Launch EIS)

Ingestion of debris

“The breakup of rocket debris during re-entry or on impact with the sea surface would **create particles small enough to be ingested by most biota**, but will likely sink fast enough to avoid airbreathing fauna.” (page 41, appendix S, Southern Launch EIS)

WATER AND CONTAMINATION – APPENDIX V

WATER

Southern Launch's Facility will have a huge impact on local water harvesting and usage as well as contributing greatly to water and environmental chemical contamination of the local and surrounding environment. Here's what they plan to do...

From Southern Launch's Environmental Impact Statement (EIS) – appendix V Design Stage Water Environmental Management Plan

- Construction of a Dam – holding 17-30 mega litres of water (17-30 million litres) (page 4, appendix V, Southern Launch EIS)
- Plans to harvest over 17 million litres of water from **“run off from the surrounding undeveloped land”** and will **“be trucked in from Port Lincoln's water supply”** Andrew Curran, Southern Launch General Manager of Infrastructure. (page 4, page 18, appendix V, Southern Launch EIS)

Each rocket launch will require between 50,000 - 70,000L of water. Andrew Curran stated that **“we will need more water and will actually probably use around 150,000 L of water per launch.”** – Southern Launch Info Session, 24th August.

This water will be used as deluge water – meaning the **“water will be released at high flow into the rocket exhausts from a 70KL overhead tank to adsorb sound, heat and energy, which might otherwise damage the rocket and launching facility.”** (page 6, appendix V, Southern Launch, EIS)

This amount of water usage, along with their 30 million litre dam is a significant amount of water from a town that regularly has water rations.

CONTAMINATION

Southern Launch have advised us that the three main chemical contaminants will be

1. Hydrochloric acid
2. Unburnt hydrocarbons – including polycyclic aromatic hydrocarbons
3. Aluminium oxide

“The key chemicals of environmental concern identified in the literature review were HCl (which form hydrochloric acid when dissolved in water), carbon black (which may contain a traces of PAHs) and aluminum oxide (Al₂O₃).” (page 23, appendix V, Southern Launch EIS)

Southern Launch have created a diagram to show how the harmful propellant gases will be released into the atmosphere – when launched, the "heated ground cloud" of atomised and/vaporised water deluge will mix with the atmosphere, here the chemical contaminants will **"mix with the water and fall/rain out at some distance from the launch site"** (page 6, appendix V, Southern Launch EIS). Literally raining hydrochloric acid on surrounding areas, including Port Lincoln Township.

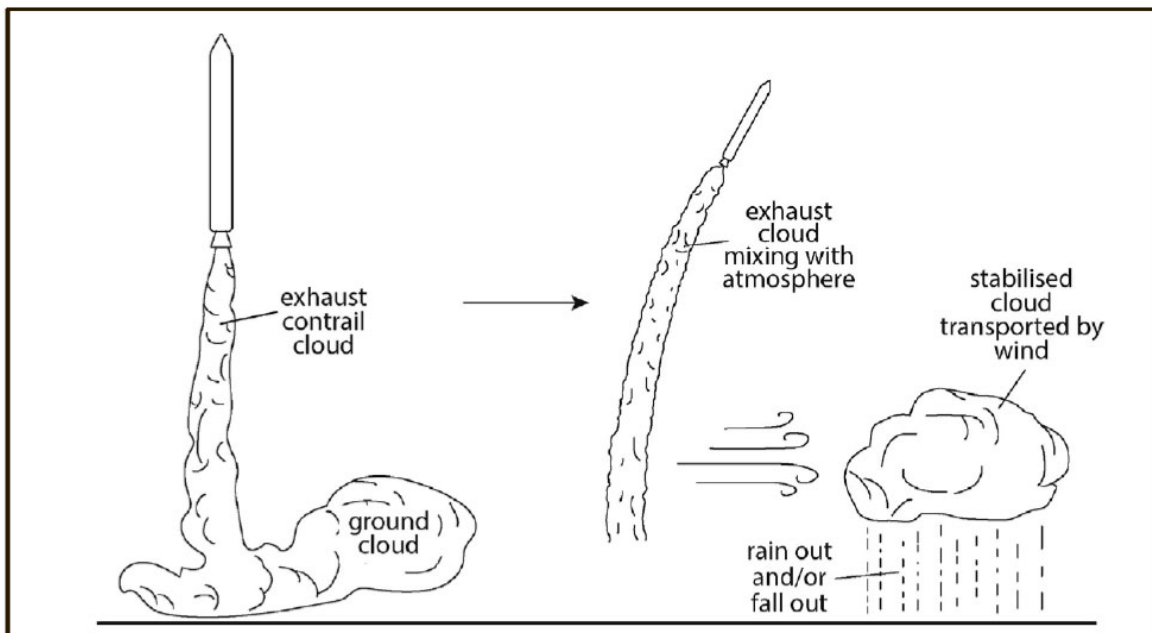


Figure 4 – Ground Cloud Schematic

IMAGE: page 6, appendix V, design stage water environmental management plan, Southern Launch EIS

They predict 30% of the released contaminants per launch will become the "ground cloud". The other 70% of released contaminants will be trapped in the water that will then get recycled for the next launch – over time this will increase the concentration of these contaminants getting into the atmosphere and raining over Port Lincoln (page 6, page 18, appendix V, Southern Launch EIS).

“Some chemicals present in the rocket exhaust may be transferred to the deluge water, potentially causing contamination of water collected in the launch site stormwater detention basin.” (page 6, appendix V, Southern Launch, EIS)

Furthermore, they have predicted in their EIS that there will be 812 kilolitres of water evaporation along with over 7700 kilolitres of run off from contaminated water storage sites in their facility – leeching these chemicals into the natural environment (page 18, appendix V, Southern Launch EIS).

Southern Launch have even admitted that "although there is some published data relating to these emissions and other (lower level) contaminants present in rocket exhaust were identified in the literature, NO QUANTITATIVE information regarding the portioning of exhaust products between vapors and (aqueous) liquid phase was found in the literature, with exception of comments that most of the hydrochloric acid produced was expected to be absorbed into atomized water droplets suspended in the ground cloud. Most of the dissolved hydrochloric acid and an unknown proportion of the soot (carbon black) produced are expected to migrate with the ground cloud and fall/rain out at some distance from the launch site." (page 23, appendix V, Southern Launch EIS).

Table 4 – Major Constituents of Rocket Exhaust

Propellants	Main Exhaust Products
Solid Fuel e.g. hydroxyl terminated polybutadiene (HTPB), Ammonium Perchlorate (Al NH ₄ ClO ₄)/Al Powder	HCl, H ₂ O, CO ₂ , CO, NO _x , Al ₂ O ₃ , Soot
Hybrid e.g. hydroxyl terminated polybutadiene (HTPB), Liquid Oxygen (LOX)	H ₂ O, CO ₂ , CO, NO _x , OH, Soot
Liquid Hydrocarbon Fuel e.g. 'Kerosene' (DP-1) and Liquid Oxygen (LOX)	H ₂ O, CO ₂ , CO, NO _x , OH, Soot
Cryogenic Hydrogen Fuel Liquid Hydrogen (LH ₂), Liquid Oxygen LOX),	H ₂ O, CO ₂ , NO _x , OH

IMAGE: page 20, appendix V, Southern Launch EIS

Data presented by Southern Launch in their EIS states that 12 launches has been recorded to produce 2.5 tonnes of soot! Southern Launch have stated that "depending on how much of the soot stays within the launch site, a process of soot removal collection, storage, classification and appropriate disposal may be required, so that it does not accumulate in the ponds" (page 24, appendix V, Southern Launch EIS).

Southern Launch have stated that **“installation of groundwater monitoring wells and groundwater monitoring is not recommended at this stage since risks to groundwater are considered to be low subject to implementation of surface water management measures which will mitigate the risk of waterborne contaminants migrating from the launch site(s).”** (page 25, appendix V, Southern Launch EIS). Therefore, we won't know the amount these chemicals are leeching into our environment.

Southern Launch also admit that they have not been able to estimate the potential of contaminants into the water from fuels, lubricants, cleaners, fire fighting foams handled in a launch (page 25, appendix V, Southern Launch EIS).

AIR QUALITY ASSESSMENT - APPENDIX W

Rocket Fuels

Southern Launch's rockets will use either regular Liquid fuel, OR a solid fuel. Each have different emission profiles:

Liquid RP1 Kerosene fuel emissions:

CO – Carbon Monoxide

NO₂ – Nitrogen Oxides as Nitrogen Dioxide

Particulate Matter 2.5

Solid Fuel Engines – “green fuel”

Hydrogen Chloride – reacts with water vapour in the atmosphere to become Hydrochloric Acid

Particulate matter 2.5

Reference – Appendix W Page 10

What is PM_{2.5} – environmental pollutant heavily associated with all cause mortality and environmental degradation. It's essentially the soot released by power plants. The EPA is currently being sued for its refusal to update its air quality standards to reflect decades of research indicating PM_{2.5} is a critical environmental toxin.

- Current “safe” standard 35ug/m³ – common in developing cities

-WHO guideline to reduce pollution related deaths:

PM_{2.5} - 25ug/m³ per 24 hour periodassociated with lowest level at which all-cause mortality increases.

References:

WHO Air Quality Guidelines pg 11

**Air quality
category**

**PM_{2.5} µg/m³ averaged over
1 hour**

**PM_{2.5} µg/m³ averaged over
24 hours**



Good

Less than 25

Less than 12.5

Fair

25–50

12.5–25

Poor

50–100

25–50

Very poor

100–300

50–150

**Extremely
poor**

More than 300

More than 150

(Environment Protection Authority Victoria <https://www.epa.vic.gov.au/for-community/environmental-information/air-quality/pm25-particles-in-the-air>)

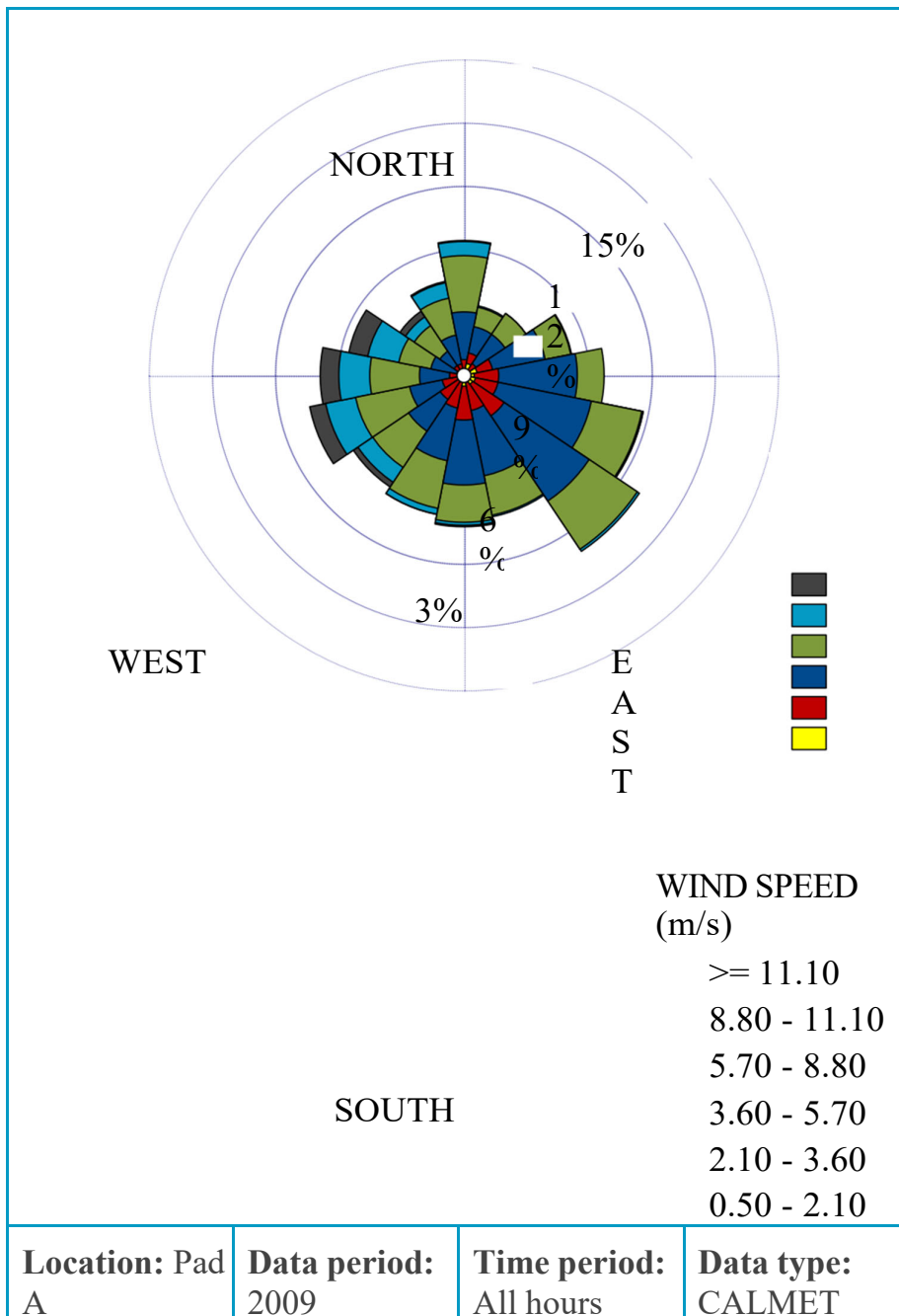
Issues with Modelling

- While extensive data has been computationally modelled, it's not based on any real site data as none exists. Furthermore, the Appendix states:

1. Full details on the rocket information and data cannot be provided due commercial agreements between Southern Launch and the clients they have early agreements with. (Appendix W, Pg 12)
2. Emissions data available for the proposed rocket types, and also for air quality assessments of rocket launch facilities in general, is very limited. As such emission rates were estimated based on available emissions data and scaled based on exhaust and fuel consumption rates. (Appendix W, Pg 12)
3. "The emissions estimation was based on a conservative selection of emissions data" – with no explanation of what this conservative selection excludes. (Appendix W, Pg 12)
4. Issues with wind models used in the data. See below:

Wind Data

Figure 10 Wind Rose Project Site 2009



Average wind speed: 5.53 m/s	Calm wind frequency: 0.42%
---------------------------------	----------------------------

(Appendix W, Appendix A, pg 2 of 6)

“On an annual basis (**Figure 10**) the prevailing wind direction is from the southeast. The critical wind direction fore exposure of the nearest sensitive receptors is from the southwest. (Appendix W, Appendix A, pg 3 of 6)

The nearest sensitive receptors are not located downwind in any prevailing wind direction,“ (Appendix W, pg 8) despite clear evidence of the second most prevailing wind direction coming from the South West, including the strongest winds of the year.

They then use this incorrect wind distribution data for the following graphs.

Toxicity levels for relevant emission

Table 3 Air EPP Maximum Ground Level Concentration Assessment Criteria (SA, 2016)

Pollutant	Classification	Averaging time	Maximum ground level concentration	Comment
CO	Toxicity	1 hour	31,240 $\mu\text{g}/\text{m}^3$	
		8 hours	11,250 $\mu\text{g}/\text{m}^3$	Not relevant to include considering short term duration of emission events.
NO ₂	Toxicity	1 hour	250 $\mu\text{g}/\text{m}^3$	
		12 months	60 $\mu\text{g}/\text{m}^3$	Not relevant to include considering short term duration of emission events.
HCl	Toxicity	3 minutes	270 $\mu\text{g}/\text{m}^3$	
PM _{2.5}	Toxicity	24 hours	25 $\mu\text{g}/\text{m}^3$	Contribution to 24 hour average calculated from maximum predicted ground level concentration.
		12 months	8 $\mu\text{g}/\text{m}^3$	Not relevant to include considering short term duration of emission events.

(Appendix W, Pg 12)

- Questionable models based on pure estimations of actual values, in a field where very little data already exists.
- Blatantly ignoring their wind data to claim “no prevailing wind towards nearest sensitive receptors”, despite their own data indicating that there will be.
- Pouring environmental toxins all over an untouched wilderness INCLUDING into the water supply for the surrounding residents and even Port Lincoln itself.
- No liability for the potential for serious human health impact in relation to the enormous increase of air pollutants in the region.

Hydrogen Chloride Fallout

Graph below shows the fallout of Hydrochloric Acid from a Single Launch Scenario. A literal industrial cleaning acid being sprayed all over the southern tip of Eyre Peninsula.

Whalers Way site is 5x above the safe ground level concentration at all locations.

Huge amounts being deposited onto the coast line and into the oceans.

PM2.5 Fallout

Environmental toxin and pollutant associated with human mortality sprayed over lower Eyre Peninsular.

Huge deposition on fragile coastal ecosystem.

The average for most Australian cities annually is less than 25.

Whilst the level at the nearest receptor is at 5 ug/m³, note that this area has a baseline PM2.5 reading of nothing. So it could be argued it's a 500% increase in baseline levels.

Figure 5 Results for HCl for Launch Scenario (Appendix W, Pg 18)

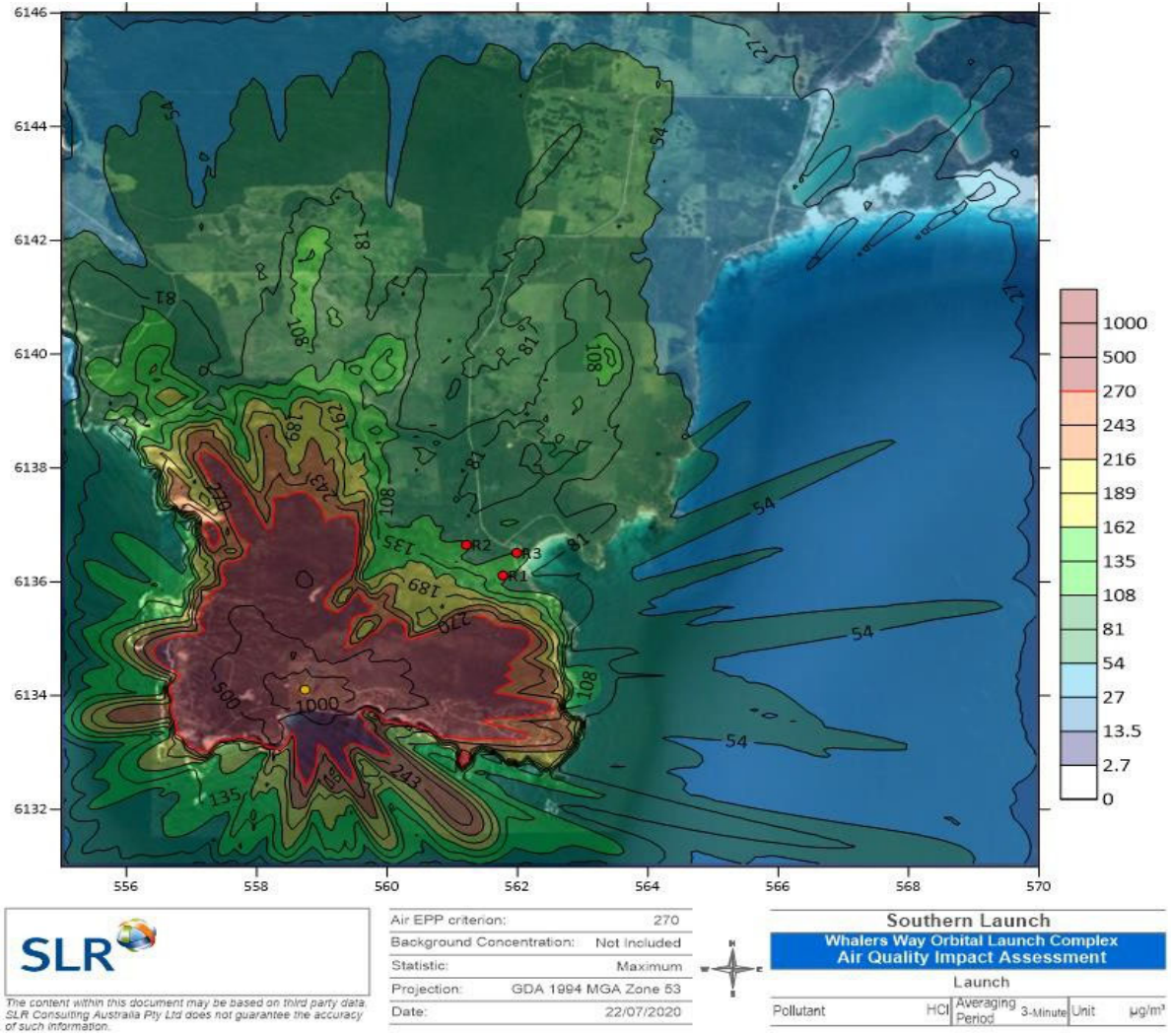


Figure 6 Results for PM2.5 for Launch Scenario (Appendix W, Pg 19)

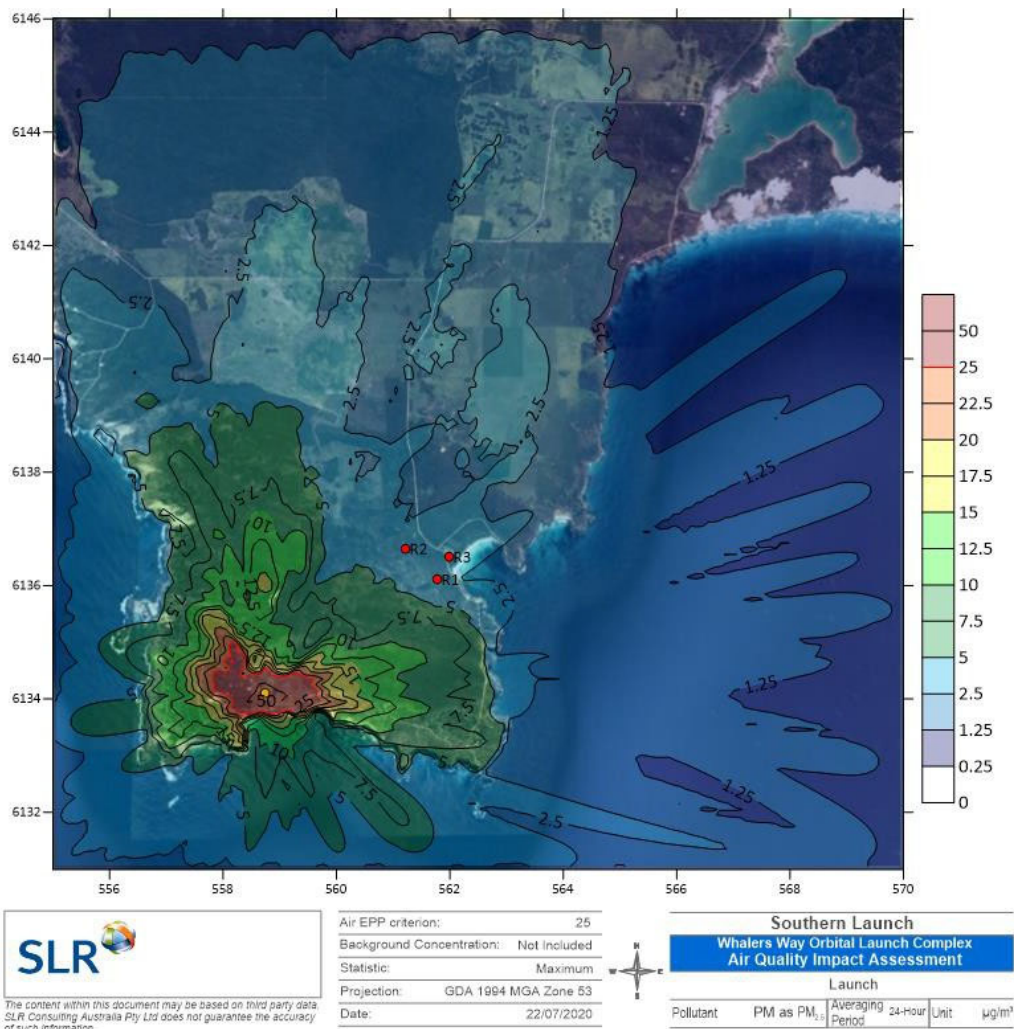


Figure 9 Results for PM2.5 for Engine Test Scenario (Appendix W, Pg 26)

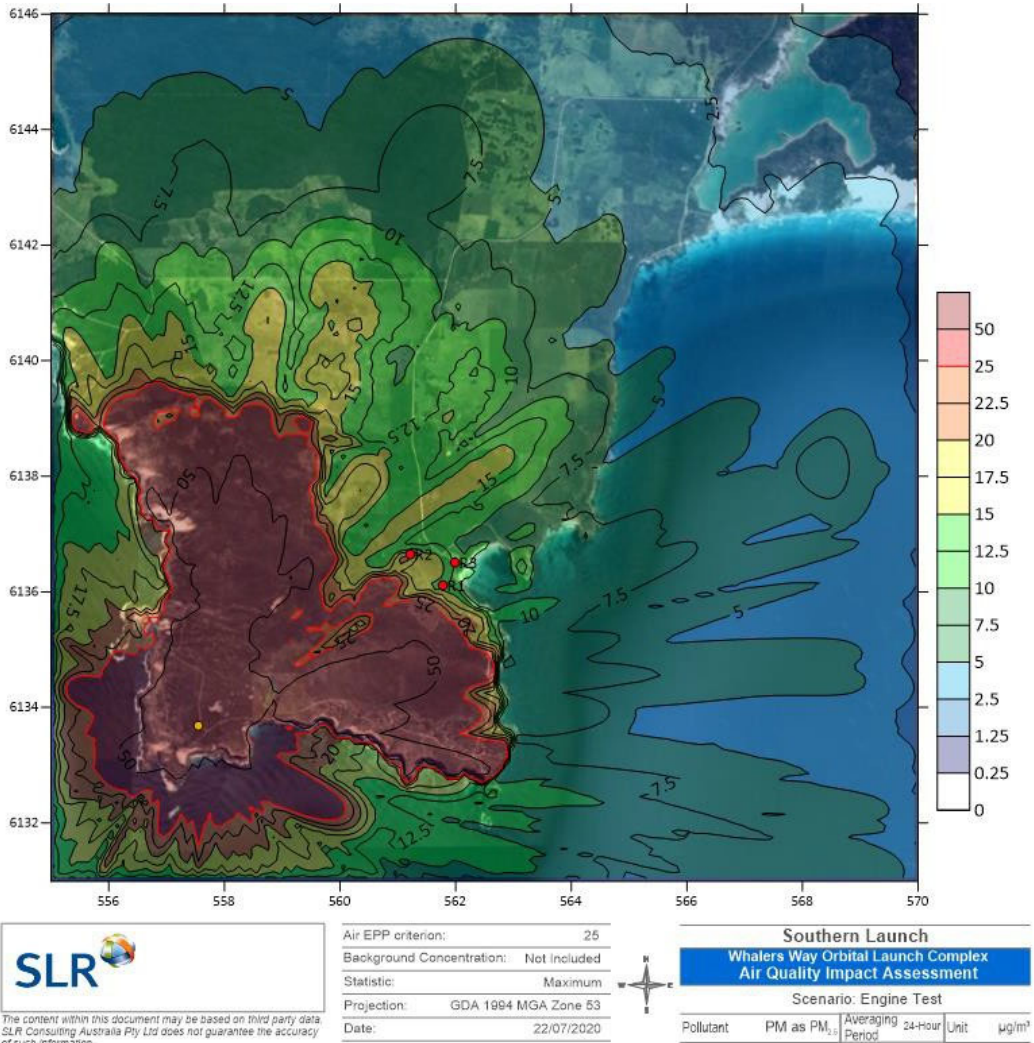


Figure 7 Results for CO for Engine Test Scenario (Appendix W, Pg 24)

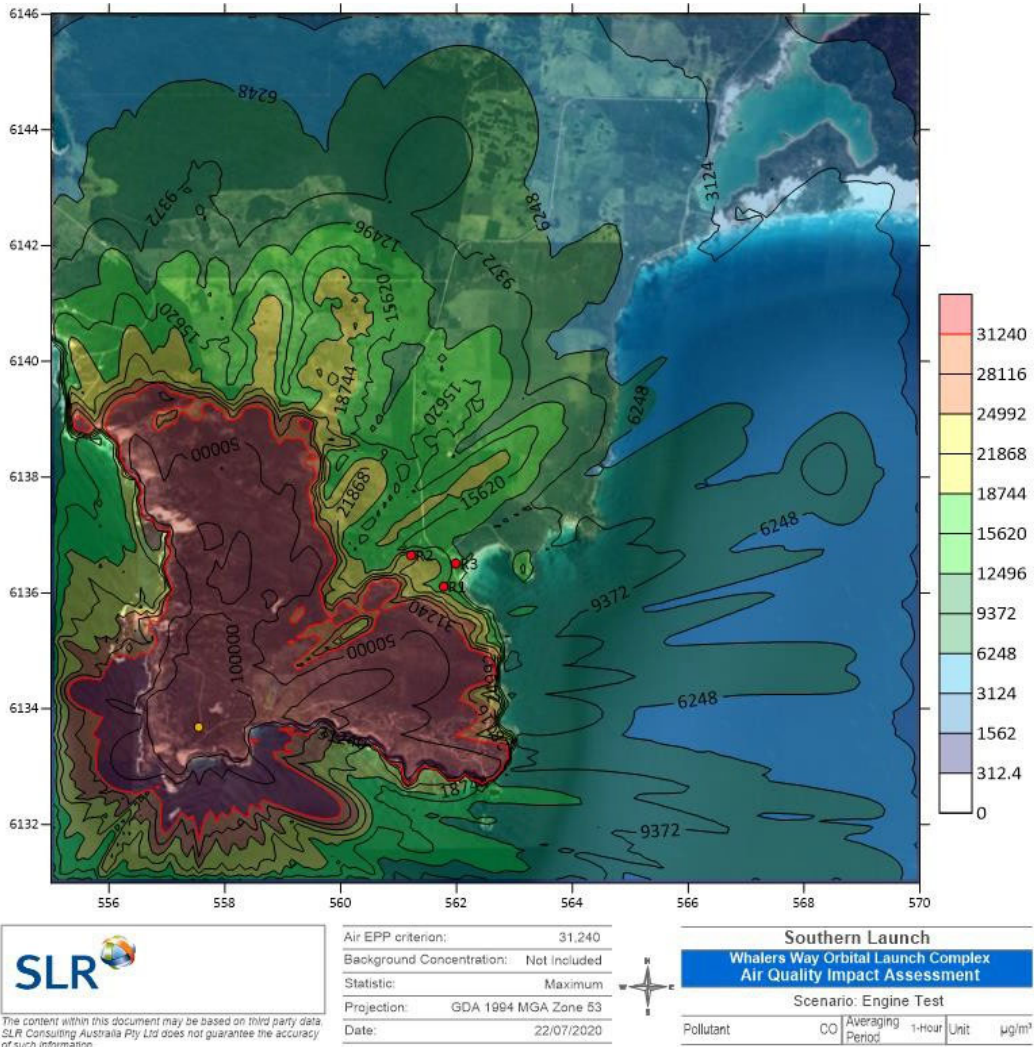
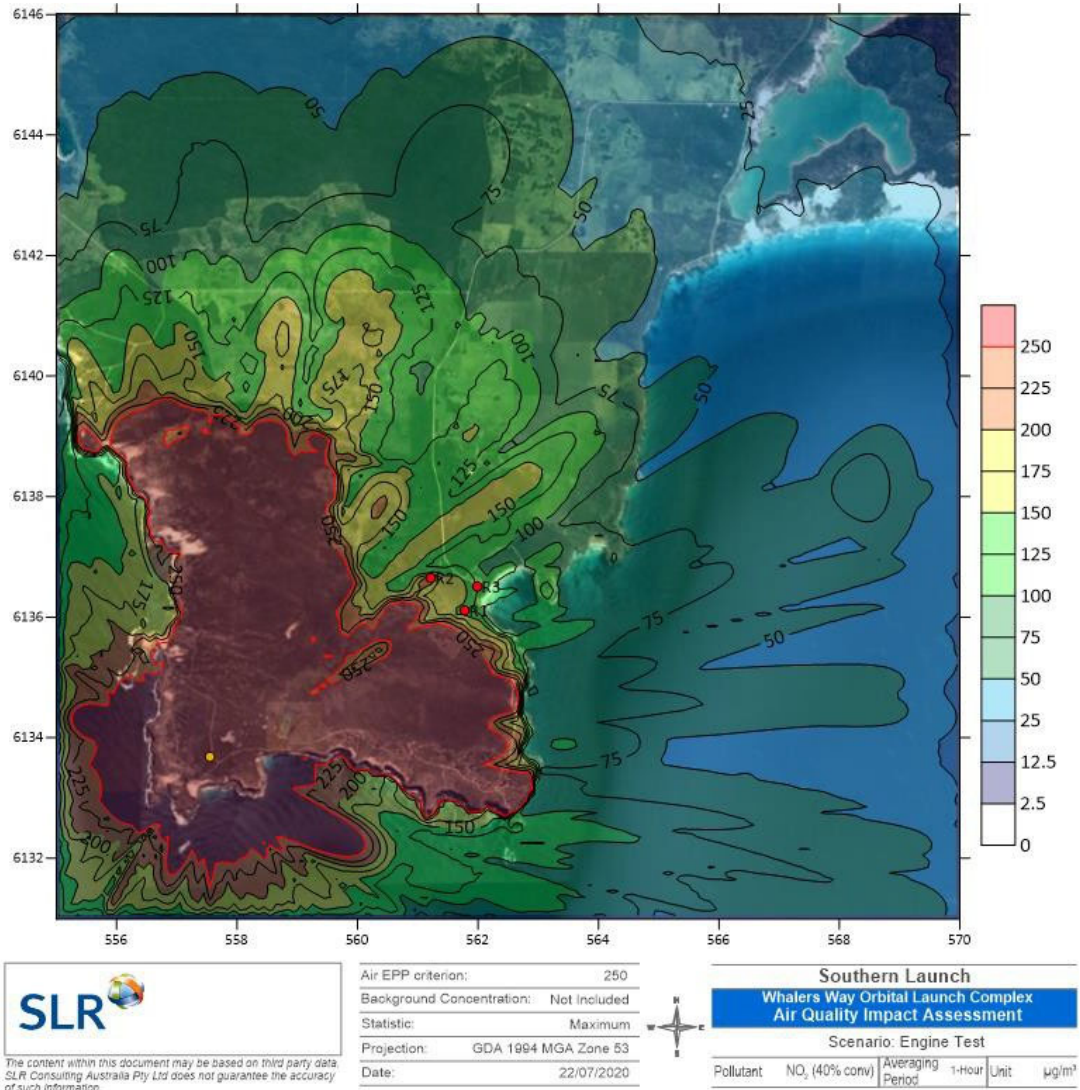


Figure 8 Results for NO2 for Engine Test Scenario (Appendix W, Pg 25)



APPENDIX Y - CULTURAL HERITAGE ASSESSMENT

Vegetation

Includes *Nondo* (Acacia species) which harvested annually in the past. "Evidence of harvesting is found within the Subject Area" (Appendix Y, p.5)

"Sand dunes, soil and vegetation covers each of the proposed Launch Areas in a manner that has the potential to obscure Aboriginal material culture" (p.5) – ie how they possibly claim that there are no sacred spaces here if it is covered by vegetation??

Claims "Much of the environment...comparatively barren" so therefore no "sustained occupation" (p.5)

However there are several coastal springs on the Whalers Way Peninsula "and all are associated with extensive evidence of Aboriginal occupation", as well as veins of quartzite quarried for the manufacture of stone artefacts (p.5)

Also metaphysical traditions associated with the 'Seven Sisters' and *Yulanya (Pulyállana)* from which the 'Uley' Basin and other landmarks on the Eyre Peninsula take their name (p.5)

Participants

Nauo Representatives: Brenton Weetra, Jody Miller, John Way and Jayden Roderick.

Southern Launch Reps: Mike "Pamp", Scott Cane and Brenton Ellis

"No women accompanied the field team at the request of senior Nauo men due to the cultural sensitivity and associated gender restrictions" (p.6) – this has been disputed by other elders.

The Theakstone family "have a long and close relationship with Nauo people" (NOTE: the reference given here, to Port Lincoln Times 24 May 1941, cannot be found and I believe is not correct).

Survey Results

Field team "inspected several areas" and found "two sites of mythological significance" and "two significant habitation areas" (p.12)

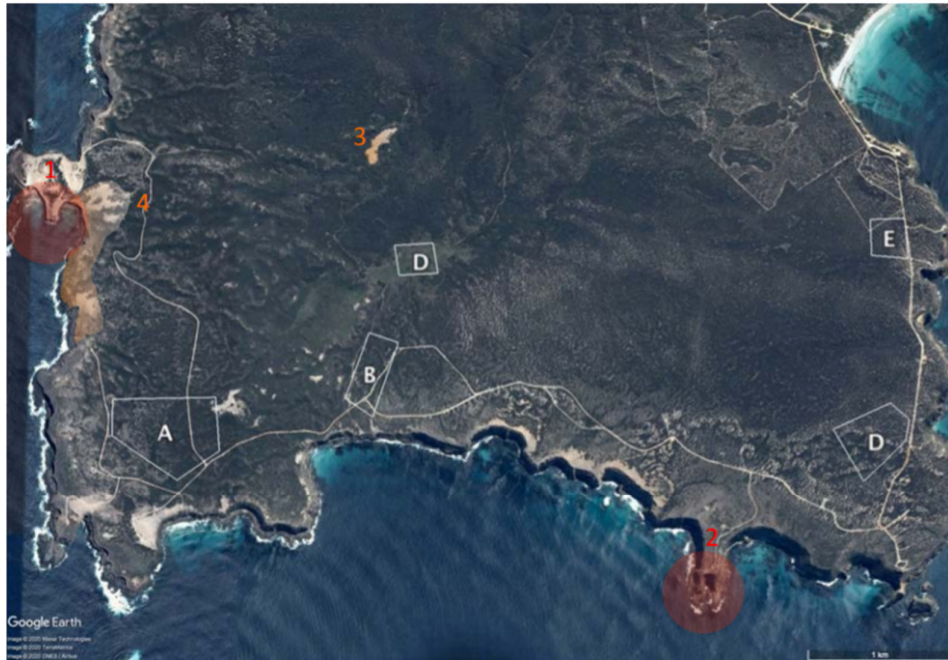


Figure 8: Mythological places (in Red 1 and 2) and areas of archaeological significance (Orange 3 and 4) recorded during the field survey.

Areas of Mythological Significance

Locations associated with narrative of 'Seven Sisters' "are located on the southern parts of Whalers Way but not within the proposed Launch Areas" (p.12-13)

This is all that is written in the report on areas of mythological significance.

Areas of Archaeological Significance

Two areas of archaeological significance found.

Site 3

Site 3 in Figure 8 where a "large scatter of artefacts" was found 700 m north of proposed Launch Area D (p.13)

Materials include "flakes, cores and formed artefacts as well as water-rounded ground and percussion-damaged granite cobbles", as well as fragments of emu egg (p.13)

The quantity, diversity and density of artefacts found at this location is "high" and is significant both archaeologically and to the Nauo (p.13)

Evidence of material from outside the local area – pink quartzite from eastern side of Whalers Way; glassy quartz from Marble Grange/Mt Greenly area; chalcedonies from deserts to the north.

Suggests "reasonably intense settlement at this location" and "presence of desert people" (p.13)

Also consumption of *Nondo*

Site 4

Also consists of numerous artefacts, suggesting "people from different regions travelling with their stone tools and camping, using and discarding them" (p.13)

Also has a high proportion of granite grindstones and hearthstones, again suggesting *Nondo* harvesting and preparation (p.13)

Suggests "large numbers of people converging from considerable distances to harvest, prepare and consume *Nondo* seeds and participate in regional initiation ceremonies" (p.13)

Area A

Three artefacts located in the dune in north-eastern corner (p.15)

Includes two flakes pieces of quartzite and core of chalcedony.

Chalcedony not found in the local region, so must have come from northern desert regions, "consistent with use and occupation of the area by neighbouring people and the harvesting of *Nondo* seeds" (p.15)

No other evidence of Aboriginal occupation was found in Area A, but "it is likely they exist in the proximity of the shallow drainage depression and swamp", and that "soil coverage is likely to have concealed" (p.16)

Area B

One artefact found to the west of Area B, a ground and percussion damaged granite cobble, thought to have been used in stone tool manufacture and seed processing (p.16)

Area D

Potential that depression near windmill was a "remnant Aboriginal soak", however view was discounted "by the fact that the nearest subsurface water is, according to Mr Theakstone, 80 feet below the surface" (p.16). NOTE: Could this water not have been taken and drained by settlers meaning that what was once a sustainable and annually used soak is now no longer showing accessible water??

Survey Outcome

"There are no sites or items of cultural significance located within the proposed Launch Areas" (p.17)

NOTE: How can this be right when they literally say they found artefacts within Area A??

"There are both secular and sacred areas of cultural significance within the subject area to the west and north of proposed Launch Areas" (p.17)

It is apparent that "these points of settlement are significant, being rich in archaeological content and associated with a significant known cultural event – the annual harvest of *Nondo* seeds on the dunes" (p.17)

These locations and known areas of mythological significance "establish a cultural landscape", however Launch Areas are situated in areas of "low cultural sensitivity" (NOTE: says who??) (p.17)

"No evidence of Aboriginal occupation was located within the proposed Launch Areas" (p.17) (NOTE: This conclusion seems utterly contradicted by previous evidence)

But then one line later: "it is apparent some artefacts are located across the calcrete plains in which the Launch Areas are located"

However **"the frequency of artefacts is so low as to have little cultural value, certainly insufficient in the view of the field participants to create an impediment to the proposed development"**

(NOTE: This seems disputable. Who decides they are of little cultural value, and that the development should go ahead anyway?)

Mr Theakstone "supported the opinion that we would "find nothing" across the plains central to the Subject Area" (p.17) (NOTE: is he not a relatively biased viewpoint?)



Figure 9: The two exclusion areas identified in Area A

4.2 Site B

Site B has been cleared for the proposed development without conditions.

4.3 Site C

Site C has been cleared for the proposed development without conditions.

"The mythological significance of locations defined in this survey...align rather well with the astronomical, scientific and philosophical ethos of Southern Launch" (p.19) (NOTE: This sentence is very controversial, as equating the sacred stories of guardians and Indigenous culture with a 50 tonne rocket blasting into the sky at 140 decibels and scaring away all the animals and life seems perplexing).

BUSHFIRE - REDACTED

APPENDIX AB

Bushfire is a serious concern in this fragile coastal ecosystem. Surrounding areas have been ravaged by bushfires numerous times in the past. Southern Launch have not released any information to the public in regards to their bushfire management plan as "it may compromise future security measures at the site."

The launch pad is bordered by mallee scrub, with more dense and unburnt mallee scrub surrounding the larger facility.

There are numerous fire risks on the facility including

- 4x diesel generators
- 8m high flare stacks (to burn off unused fuels)
- high voltage power lines to be installed
- fuel storage for liquid, hybrid and solid fuels

(Appendix P, EIS)

They plan to initially have water for firefighting trucked in from Port Lincoln. Once more developed, they plan to use firefighting water from the storm water detention basin, which will be contaminated with chemicals from the fuel and exhaust fumes fall out. (appendix P and U).

"The project may increase the risk of fire due to hot works during construction activities and the chance of sparks occurring off the rocket launches during times of hot and dry conditions." (Page 85, appendix P, EIS)

All we have been told is that Southern Launch will have firefighting equipment and the CFS available at every launch. We believe that something of this significance for fire risk should not be burdened onto a volunteer service such as the CFS and their bushfire management plans should be made available to the public, especially the neighbouring residents.

11th August

Ben Williams AGD Ben.williams2@sa.gov.au

Hi Penelope

Thank you for your email.

Lee Webb, Senior Environmental Planner, has just provided the following to me for your information.

“Appendices AB (Emergency Management Plan) and AC (Protective Security Assessment) have been redacted from public consultation due the risk that making such information available could compromise future security measures for the site.”

Kind regards

Ben

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:	Mrs Penelope Taylor
Contact number:	08 86856026
Email:	penelopetaylor57@gmail.com
Postal Address:	PO Box 2461 Port Lincoln 5606
Affected property (if different from postal address)	40 Right Whale Road Sleaford 5607
<i>You may be contacted by your nominated method of contact for further clarification or notification of a decision.</i>	
My interests are (tick or circle):	Owner of local property <input checked="" type="checkbox"/>
	Occupier of local property <input checked="" type="checkbox"/>
	A representative of a company/other organisation affected by the proposal <input checked="" type="checkbox"/>
	A private citizen <input checked="" type="checkbox"/>
Other:	Nearest sensitive receiver <input checked="" type="checkbox"/>

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

The Applicants have prepared their Environmental Impact Statement under the excellent guidelines of the State Planning Commission. They had at least 12 months and lots of money to employ experts to prepare reports under the specific directions that they requested. The summaries to these reports do not necessarily reflect the detail embedded in them.

The Community has been given 30 days, from August 5, to find out, read and dissect, and then make informed comment about this EIS and the development proposal, without access to money or planning feedback. How is this fair?

Appendices AB and AC have been redacted so the community are unable to make any comment on these critical reports relating to security and emergency management, including bushfire mitigation strategies.

Subsequently the applicants have a right of response, but the community has no recourse to examine and comment on this response, to see if it is as spurious as some of their appendix summaries.

Alongside this process, has been a separate development application to run 3 test launches, supposedly to inform the EIS. However, the consultation process will have closed before these tests have been run, so again the community has no opportunity to make informed comment in relation to this data .

As "nearest sensitive receivers" our family has not been approached about what form these tests on us will take, and in fact as neighbours only 3km from the site we have been given no consideration about the effects this proposal is going to have on our physical, mental, emotional and spiritual wellbeing, and indeed, on our entire future here.

We purchased our property adjacent to the proposed development site nearly 30 years ago, because it was in the conservation zone, (known then as rural coastal), and the development restrictions have prevented us from doing anything that does not comply with the nature of the conservation zone regulations. We deliberately chose this particular place because it is isolated, coastal, off-grid, down a narrow country unsealed road, and away from artificial light, noise and electromagnetic frequencies.

It is beyond belief that after investing all our time and money, for the past 3 decades, into this property, with a well-planned future for our family, we now face the possibility that a complete outsider, with no connection to this place, can come blazing in with a plan that completely flies in the face of every aspect of the conservation zone that we have abided by all this time.

Scan and email to spcreps@sa.gov.au or post to Minister for Planning and Local Government, GPO Box 1815, Adelaide SA 5000

MRS P. A. TAYLOR
P.O. BOX 2461
PORT LINCOLN 5606

LETTER TO THE HONOURABLE Mrs VICKI CHAPMAN



Dear Vicki

This photo has not been altered in any way; it was taken by my youngest son, who was quick enough to run up the hill behind our small house at Fishery Bay one summer afternoon, five or six years ago, as a thunderstorm came through. The changes in the light and dark and colour in the sky and surrounding environment had me mesmerised, and left to me there would have been no photo.

The sheer natural beauty of Sleaford Bay and hinterland is hardly conveyable by word or image. This is why people continue to come back to the area, and why local people are so protective.

After we arrived nearly 30 years ago, it did not take us long to realise that this was a very special place in the hearts and minds of a lot of people. Quite rightly, it was zoned Coastal Conservation by the DCLEP in 2015, after much consultation with the people of Lower Eyre Peninsula.

Whalers Way itself had been declared a Heritage Area in the 80's, and is called a private sanctuary. I must have been about 12 when our family used to bring our caravan to Eyre Peninsula, where we could take advantage of the remoteness for a few days and unwind. Whalers Way was a favourite spot. When my husband, Ian, and I were lucky enough to purchase our 75 acres with views overlooking the bay, we made a commitment to each other that we would respect the fragility of the coastal environment, and live as carefully and mindfully as possible.

Vicki, you grew up in the country, so you would surely understand some of the hardships that come with living in an isolated and remote area. Combine this with no money, small children, separated family, no water, power, or infrastructure; it would take a book to describe the extraordinary hardships and difficulties we encountered along our journey this nearly three decades.

Why would we do this, you might ask?

I have always been a passionate supporter of solar energy, and still have the solar panel I purchased in 1981. It actually still works, but there is barely any comparison to the solar power of today. But in the 90s when we came here, it was still very expensive, and it was exceedingly difficult to convince anybody let alone governments that this would be the way of the future. Now we have a thriving renewable industry, with South Australia often producing more renewable energy than we use. I am a great supporter of technology, when used wisely, and have seen first-hand how it has helped to advance the renewable energy sector.

I am also someone who is extremely sensitive to noise, light, and smell, as well as to electromagnetic frequencies. Settling here in this remote place allowed me to pursue my long term goals of a healing centre, where people who needed a respite from the 21st century "hustle and bustle" noise and vibration could come for a few days, or longer by negotiation, to allow themselves to heal.

I am a qualified counsellor and social worker, well versed in alternative healing modalities, and have in fact, on a non-profit basis, engaged in this practice throughout the time we have been here. I regularly run meditation groups here, and we have been available on many occasions when a displaced person needed a space to reflect in peace. In 2006 I completed Cert 1V in Tourism Operations, during which time I started to design how the business would look. (see App a). We took out a business name, but we have not yet been in a position to trade.

Recently, I have begun to see this plan more broadly as a plan for our whole family, as our children have become adults, and as the world has maintained its trajectory towards an alarming future. When our son and his fiancé, who have recently completed medicine and now work as young doctors, began to show an interest in integrative healing, we knew we had been on the right path. (App c)

In fact all our children now have considerable skills and qualifications, and as a family we are only now beginning to realise this long term business goal, and to feel that our sacrifices have been worth it. We have done all this in harmony with the nature of the conservation zone, so much so that we often get visitors saying they had no idea we were here.

We believe that our business model will prove a valuable asset to a well-designed and managed eco-tourism plan for this area. We are only at the planning stage, but we would be hoping to provide some low key accommodation and a basic medical clinic. Currently under the zoning we are likely to have to argue with council about approvals, so we are just letting it sit until we are ready. Whenever that is, it will be in line with the nature of the zone, and will enhance the already very profitable tourism business that currently relies on Whalers Way as a drawcard.

It seems to me to be extraordinarily unfair that a situation like this can be allowed to develop. No account was taken of the very profitable industries that already exist in this area. The fishing, farming and tourism industries rely and depend on the "clean, green" image that this pristine environment, currently largely free of industrial noise and pollution, offers as a marketing optic. Port Lincoln calls itself the "Seafood Capital". A brief look at any tourist brochure for the industry, not to mention the government's own strategic plans, emphasises the wilderness space as a key driver of the visitor economy.

This industry currently generates \$400 million in regional expenditure on Eyre Peninsula, (govt. figures) and directly provides 1,700 jobs. On economic terms alone, destroying Whalers Way, one of the major drawcards on the visitor itinerary, and replacing it with something that will at very best generate about an eighth of that return in 10 years, seems like a very bad idea. On social terms, the potential destruction of a favourite place of recreation and solace, is hard to come to terms with, and is generating some very emotional scenes in homes across the region at the moment.

On this point, my conversations with local Aboriginal people clearly show me that these people have not had their concerns addressed and are extremely unhappy about the development. It directly affects their connection to the land and sea, and their totem the whale, and they will be requesting more time to put their own submissions in to you. The Nauo, Barngala, Wirangu, Mirning and Kokatha peoples all appear to have had seasonal gatherings at Whalers Way, and it is vital that these people be heard.

Our life, and that of our family, has been totally disrupted as we attempt to deal with this monstrous proposal. We have as a family devoted many hours to deciphering the EIS, compiling referenced summaries, and making these available so that people can make informed decisions. I am told that someone is paying a lawyer \$500 an hour to do this work. We have done it for nothing other than our dedication to protect this wild place for the animals that depend on it, and for the people who love it.

I am an active member of the Port Lincoln Community, and currently serve on the Diocesan Synod of the Anglican Church, and the Diocesan Council of the Anglican Mothers Union. Before I was rudely interrupted in May with the alarming letter from Plan SA of the test proposal, I was busy helping to start up a branch of a wonderful charity, Quickest Warmth, (app b), that is currently serving the Northern suburbs of Adelaide. It saddens me to think that I have had to leave this project, just as it was gaining momentum, in order to fully devote myself to this cause.

While I am concerned about the greenhouse effects of this proposal, I do understand the interest that space generates in the minds of many. I myself am quite content to gaze at the night sky in all its majesty and wonder, and Whalers Way/Fishery Bay offers an exceptional opportunity to do this. The light pollution alone in this development would spoil this experience. For those who wish to go further, I urge them to think more broadly about what the future of space might look like.

Instead of destroying an already profitable region, why not think about creating a future space town, a bit like mining companies have had to do, where the industry can really grow and develop into something exciting that can embrace science and tourism, and engage with the indigenous community with an eye to future technological developments that we cannot probably imagine right now.

May I suggest that the empty promises and publicity stunts of this small start-up company should be seen for what they actually are, and that rather than enhance the future of space development in this State, this development could very well set it back. It is apparent from the EIS and also becoming obvious with the testing process, that the company's predicted business model of 36 orbital launches a year in 5 years' time, is highly unlikely, due to the considerable complexities of trying to

coordinate such issues as weather conditions, whale migration, aviation and marine exclusion zones, bushfire, and so on. In addition, the impossibility of predicting an accurate launch time makes any suggestion of tourists watching the launch quite untenable as a business proposition.

Whilst the proponents make much of their plans to conduct conservation initiatives, I make the point that the \$2.2 million of taxpayers' money that the government recently handed to Southern Launch could have gone a long way towards helping with such issues as erosion control, Osprey breeding, decent facilities and so on, in Whalers Way. Instead that money has largely been wasted on a test that should never have been given planning consent in the first instance.

Finally, may I say that giving a rural population like that of Lower Eyre Peninsula barely 30 days to respond to a 3500 page document that is extremely dense, with summaries that don't actually reflect the detail, when the developers have had over a year and much consultation with government agencies, hardly seems like a fair and equitable process, when so many people stand to lose from this development, but have no way of really finding out until it is too late. Not only that, SouthernLaunch have an opportunity to respond, as if they have not already had a chance to address everything that should have been addressed, but the community do not then have a right of reply.

Many concerned citizens, some of them experts, and some who are desperately worried about the long term effects of this impending disaster, will have written submissions covering much ground, and there is no need for me to go into any more detail here. I will attach all our summaries but I am sure you will do your own reading. It may seem unnecessary to point out, but it concerns me that many apparent supporters actually have no idea what they are supporting, due to the clever media spin that the company is very good at, and the fact that in a country town news like this often takes years to filter through enough for people to really understand the implications I feel that those that have taken the time to oppose this development with detailed analysis, should be given more weight than those who have simply parroted something about it being good for jobs.

In summary, this proposal has left us feeling absolutely devastated. We cannot believe that all our hard work and sacrifice may be for nothing. We are angry that we bought a property in a conservation zone in good faith, with every right to expect that this would continue into the next generation and beyond. We have been treated like laboratory rats as "nearest sensitive receivers" in the test proposal, without so much as a by your leave from anybody. Our business model, which will add benefit to this area while preserving the nature of the conservation zone, has never even been given a hearing. Our own sensitivities have been entirely overlooked.

Nevertheless, if it was just about us, I don't feel that I would have had the energy to oppose this. However, this is about much more than us. It is about all the people who love to come out to this area and experience its qualities; its tranquillity nature in all its wild glory, the waves, the surf, the beach, the cliffs, the whales, the heritage, the night sky, in essence, the sense of being part of a creation that is far bigger and older and deeper than we are. This is so important to people today, when it is becoming more and more difficult to find places like this.

I urge you with my deepest conviction, to protect Whalers Way from this short sighted and manifestly unsuitable development proposal. Please do not approve this development.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Neil Taylor", followed by a horizontal line.

MOTHERS' UNION REPORT FOR COMBINED CHURCH MEETING AUG 2021

This past year Mothers' Union has continued with the theme of "Building Hope and Confidence". Looking back over the year definitely reinforces how, with prayer and God's Grace, a small group of people working together are able to achieve much more than they could ever have imagined on their own.

It was in June 2020 that we first started to think about the possibility of bringing the Quickest Warmth Project to Port Lincoln, so at our first meeting in July, having received a "yes please" from Rev Prue O'Donovan, we began working out how we would do this.

Sunday Aug 9 was Mary Sumner Day, so with Rev Steve's blessing we held our celebration service at 10.30 that day, attended by some of our congregation, and some visitors. It was lovely to have Nel's daughter, Athena, to play the piano, and we were able to use the newly set-up digital display to show some short clips from the MU website. Afterwards some of us went out to the Port Lincoln Hotel, for coffee, which then stretched into lunch.

In August we also delivered COTA postcards to Matthew Flinders home, Pioneer Village, and Tumby Bay residents. Those who received a postcard were asked to write to someone in their lives about the experience of being isolated during "Lockdown", and to post the card back to COTA, where they are to be made into a display. We look forward to being able to view this display when it tours the regions.

Our much loved member, Gwen Richardson, passed away at 96, so our Sept service became a memorial service. During morning tea we watched the Funeral via video link in the Parish Centre.

October saw much celebration and joy as Reta Coffee was officially admitted as a Mothers Union member, after being a financial member for over 10 years, and Rosemary received her 25 year service badge. Rev Steve ran a lovely service, Judy Pearce played the organ, and Ian Taylor played his guitar. 8 of us went to the Peacock Gardens for lunch. We also received news, at long last, that the money we had sent to MU in Mandalay, had finally been received, and was being used to conduct sewing training online for 20 young women.

Our November meeting was cancelled due to a sudden lockdown, which also saw the garden stall, which we were assisting with in lieu of the Strawberry Fete, postponed. We went ahead with this in December and were delighted with the outcome, which raised \$1400 for the church.

In December we held a service of Praise and Thanksgiving, and were delighted to welcome Vicki as a new financial member. We ended the year by agreeing to promote the Quickest Warmth idea into the new year.

In 2021 we have been working through our MU Prayer and Service book starting in Feb with Form 1, Christian Discipleship. At our meeting we set a date for bringing Rev Prue to Port Lincoln, to coincide with our Lady Day festival on March 25. Then we went to the Peacock Inn to celebrate Bev Woodroffe's 80th birthday.

A number of things came together then on March 25th to make Lady Day a memorable occasion. Not only did we welcome Rev Prue and Rev Bart O'Donovan, but we also had Bishop John and Gavin and Lily Tyndale attend the service. \$250 was raised for the Quickest Warmth Project. Rev Prue gave the address, and Ian played and sang for us. 10 guests enjoyed a fish and chip lunch box from the Pantry.

At 2pm Prue spoke to a community meeting of about 40 people, about how we might envisage the Quickest Warmth Project in our region. At afternoon tea, people answered questionnaire, and everyone went home with a personal gift.

In April and May we continued to work on this project, and then with the help of Raelene Sampson, and donations from the congregation and Terry Whites Pharmacy, we were able to deliver our first packs; 6 towel packs for West Coast Youth, and 8 prison discharge packs to OARS. Following on from that, in June, we delivered a dozen toiletry bags and 5 adult activity packs to the Port Lincoln Hospital, and 3 winter warmth packs to the women's shelter.

Finally, in June we held our annual Wave of prayer service. Nel has continued in her role as Diocesan Overseas Links coordinator, and was able to supply prayer updates for some of our links, as well as for Myanmar and Fiji.

We would like to thank everyone for their support, and especially Rev Steve for his deep prayers for our children and families throughout the year.

(App. c)

Form 12

Affidavit

Mark appropriate section below with an 'x'

I [] swear on oath / [x] do truly and solemnly affirm that:

Set out text in separate numbered paragraphs

If the affidavit relates to an application, identify the application and state the material facts relevant to the application

1. I, Isaac Taylor, a graduate of Adelaide University's bachelor of medicine/surgery, would like to state my intentions of developing an integrative health clinic at my family property at 40 Right Whale Road, Sleaford.

This would be the achievement of a longer than life goal, started by my parents' commitment to a low impact, low toxic load lifestyle when they began developing this property, and their ethos of changing the world by changing the individual. These aspirations have driven my own study of Medicine, with a view to deepen my understanding of the science behind humans and planetary health, which now has me poised to deliver holistic health care in a truly unique location.

I have personally undertaken placements in similar health clinics, most notably the The Health Lodge in Byron Bay, and have attended conferences from the Australian College of Environmental and Nutritional Medicine, to further this goal. It has illustrated how this model of healthcare is truly impactful and effective, and that it is a financially successful model also.

At a time when our healthcare systems are bursting to the point of collapse, a fundamental shift towards maintaining health, rather than just preventing disease, is crucial for the future of our people and our planet.

The development of Southern Launch's international rocket launching facility within 5 kilometers of our proposed business site would be disastrous to this business plan. Currently, the proposed location of this business is 5 kilometers from the nearest mains electrical supply, and experiences minimal noise pollution and no airborne pollutant contamination is present from any type of industry. These are three cornerstone principles upon which our business model sits, enabling an escape from the toxic load of metropolitan life.

Southern Launch's proposal would see Stage 3 mains power supply erected right through our location. It will drastically increase heavy traffic in the area. It will add the pollutant load of industry to the air, not to mention the aerosolized chemical pollutants associated with regular combustion of rocket propellant in a close proximity.

It would render our business model obsolete, and prevent the development of a truly unique healthcare facility that would provide a service the local population so desperately need. As such, Southern Launch's proposal simply cannot go ahead.

Yours

sincerely

Dr Isaac Taylor - MBBS

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

Applicant: SouthernLaunch.Space Pty Ltd
Development Number: 932/P007/19
Nature of Development: Whalers Way Orbital Launch Complex Proposal
Assessment Level: Environmental Impact Statement
Subject Land: Lot 101 Right Whale Road, Sleaford
Phone Number: 1800 752 664
Close Date: 16 September 2021

Name:

Contact number:

Email:

Postal Address:

Affected property (if different from postal address)

You may be contacted by your nominated method of contact for further clarification or notification of a decision.

My interests are (tick or circle):

- Owners of local property
- Occupiers of local property
- A representative of a company/other organisation affected by the proposal
- private citizens

Other:

****Submissions will be made available for public inspection on the PlanSA Portal and will be addressed in the proponent's Response Document (to be released for public information at a later date).**

The aspects of the proposal I wish to make comment on are (add pages as required):

Please see letter attached from the Sleaford Bay Residents Action Committee.

Submission on Application
Development Act 1993
Section 46B – Environmental Impact Statement – Major Development

SLEAFORD BAY ASSOCIATION SUBMISSION

The residents of Sleaford Bay have a number of major concerns with regard to this development proposal (Whalers Way Orbital Launch Complex)

1. Extra Traffic

Significantly, the extra traffic on the Proper Bay and Fishery Bay Roads is of major concern.

The development proposes that **per launch** there will be: 3 Fuel deliveries per week, 3 Oxidiser deliveries per week, Launch vehicle transport to site, 3 crane movements per week, 1 generator fuel delivery per week, 1 septic tank pump out per week, 24 + other vehicles (Staff, VIPs 4WDs, small trucks et.) plus delivery of water, food, sundries. The large delivery vehicles will be 19 metre semitrailers.

The proposal is for 36 (+ 6 suborbital) launches per year, which means that this amount of traffic will be on an almost continuous basis throughout the year. As residents and users of this road, we are extremely concerned about this amount of traffic on our roads, which have not been designed for this purpose.

Proper Bay Road is a single lane bitumen road frequented by local residents, beach goers, surfers and visitors to the area. It is also a favourite route for cyclists, as well as for a family of emus near Tulka which regularly steps onto this road when they are raising their chicks. Kangaroos and koalas, as well as lizards, birds and snakes, also often frequent this area.

Fishery Bay Road is an unsealed road which contains a number of dangerous bends and crests. It deteriorates rapidly, and is graded once a year by the DCLEP, who have recently informed our progress association that they currently have no available quarry material to maintain this road. The Traffic and Access report in the EIS (Appendix AA) omits Fishery Bay road entirely, other than to mention that the Council may need to grade it 'slightly more frequently'.

Farmers along this road often need to use it to run their sheep between paddocks, or to the shearing quarters, and there is often farming vehicles and other machinery present on the road.

The added stress which will come from having to share the roads with heavy vehicles, the increased damage to the road, the risk to our vehicles (residents have already experienced windscreen damage as a direct result of increased heavy vehicle traffic on Fishery Bay Rd due to the test launch), the increased dust and noise, and the effect on wildlife, all combine to make us very uncomfortable with this proposal.

2. Cliff Instability

Right Whale Road is less than 10 metres from the unstable overhanging cliffs of Fishery Bay.

This road is entirely unsuitable for the proposed amount of heavy vehicle traffic. Nothing has been said about this in the EIS. The lead up to the test launch has already demonstrated that trucks will not be able to use Right Whale Road without putting other road users at a disadvantage, and in fact, risking the safety of these road users. There is a possibility that this amount of heavy vehicle traffic will cause boulders to fall onto the beach below, which will in turn reduce the distance between the road and the cliff to even less than the present 10 metres.

3. Noise

The residents of Sleaford have chosen to live in an isolated region. One of the positive benefits of this choice is the relative silence, and the absence of industrial noise and traffic. The continuous heavy vehicle traffic will raise the noise level considerably, and will seriously compromise the peaceful lifestyle that local residents have chosen. In addition, there is likely to be increased air traffic, including helicopter traffic, which will also compromise the quiet lifestyle that residents have chosen.

People come out to Fishery Bay in order to experience the benefits of the peace and quiet that this environment provides. The decibel level of the rocket when it is launched is proposed to reach 95 decibels at Fishery Bay. Combined with industrial level traffic, the entire effect of a peaceful retreat from the worldly hustle and bustle is lost.

4. Visitor Access

Several members of the Sleaford Progress Association have current or future business plans that rely on the ability of visitors to access Whalers Way as part of their experience of the wild and natural environment.

It is unclear and unestablished from the relevant Appendix AA (Traffic Impact Assessment) in the EIS what the actual impact of this development on unescorted visitor access to Whalers Way will be, as this was only given cursory attention and a single throwaway line on p.43 about visitor numbers being "more limited/better managed". What this means in practical terms and how this will impact on those in the region who rely on regular and unrestrained access of visitors to Whalers Way remains unknown.

Given the incredible financial benefits which unescorted visitors bring to this region and the high desirability of Whalers Way as an accessible tourist attraction, we are highly concerned about the negative impact this curtailed access will have on the region. In addition, increased infrastructure and the general industrial nature of the site will hugely compromise the very desirability of Whalers Way as a wilderness destination.

The loss of this iconic tourist attraction will be impossible to mitigate, as without this attraction our remoteness makes us a much less desirable destination.

5. Water

We are always aware, as residents of Lower Eyre Peninsula, that water is a limited resource, which must be used wisely and cautiously. As each launch is likely to use around 150,000 Litres of water, this seems to be an extraordinary added burden on our limited water supply. We have heard that a local farmer has offered this water, however we are concerned about the extreme stress this could place on our critical water resource.

6. Chemicals

Residents of Sleaford rely on the clean image of this region in their farming and tourist ventures. There seems to be no guarantee that this proposal will not seriously detract from this image. There is no way of realistically calculating how far the chemical drift will travel, where it will

land, nor how much this will accumulate over time or where (see Appendix W – Air Quality Assessment).

7. Whales

A number of our members have a special relationship with the whales that visit our bay every year, often returning to have their calves. This proposal threatens this relationship, and threatens the migration of these animals as they seek places where there is no noise. It is stated in the EIS that the decibel level will cause temporary deafness in whales if they happen to be on the surface (see Appendix S, p.6).

It is highly likely that if this proposal goes ahead, with 35+ launches per year, the whales will seek other places, and their migratory patterns will change. Considering research is currently underway to find additional breeding sanctuaries for whales as the Head of the Bight reaches capacity, it would seem illogical to undermine the potential that Sleaford Bay has to grow as a region in which nursing and breeding whales are frequently present.

8. Vegetation

The impact on rare Mallee and coastal heath should not be written off with a financial offset.

9. Bushfire

While it is likely that most of the residents of Sleaford will not be in the path of a potential bushfire (aside from the adjoining neighbours), it is still of grave concern that a highly risky venture that requires flame trenches, flare stack, fuel delivery and storage, high voltage power lines, plus the launch itself, be allowed in such a high bushfire risk location as Whalers Way, which contains mallee scrub that has not seen a fire for over 200 years. We consider it a highly inappropriate place for such a proposal.