

APPENDIX J Titleholder report on public comment

Please find attached the titleholder report on public comment for the Possum 3D Marine Seismic Survey Environment Plan (EP) submitted, as required, after completion of the public comment process.

The Possum 3D MSS EP was submitted to NOPSEMA for completeness check on 8 November 2021 and on acceptance entered a 30 day period of public comment where the EP was published on the NOPSEMA website from 15th November 2021 to 15th December 2021.

A total of 3 public submissions were received, consisting of 6015 additional interested parties who commented on the draft EP. The following pages detail the common issues or themes raised from the received comments. Searcher note that no new information relevant to impacts and risks in the EP were received. Where applicable Searcher has indicated the pertinent sections corresponding to the raised matters and where they have already been accounted for in the EP.

In the Environment Plan references to the 30 day public comment period and this “APPENDIX J: Titleholder report on public comment” have been highlighted in a different font (Times New Roman) and underlined for clarity.

Details for Searcher as both the Titleholder and nominated liaison person are as follows:

Name: Searcher Seismic Pty Ltd
ABN: 16 117 264 347
Address: Suite 1, Level 4, South Shore Centre, 85 South Perth Esplanade, South Perth, WA 6151
Telephone: +61 8 9327 0300
Contact: Katrina Devlin
Email: k.devlin@searcherseismic.com

ID#	Comments received (in general terms)	Titleholder Response
1	<p>Matter: Accountability and Compensation for damage Claim: Lack of accountability or compensation by oil and gas companies for damaging the environment.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher however notes that the EP contains relevant information at section 1.4 detailing that NOPSEMA require demonstration of Financial Assurance to cover the proposed activities, including environmental damage, prior to acceptance of the EP.</p>
2	<p>Matter: Alternative Location Claim: Undertake the proposal in a different location.</p>	<p>Searcher thanks the stakeholders for their response. Offshore exploration permits for oil and gas are administered by NOPTA who release permits under the OPGGS Act 2006. Searcher does not decide or influence the permit release process or their location, this is decided by NOPTA. As such, Searcher is commercially and operationally constrained to acquire data relevant to required outcomes for NOPTA’s exploration permits or special prospecting authority conditions and administration requirements for titleholders and are therefore unable to conduct this survey in a different location.</p>
3	<p>Matter: Alternative Technologies Claim: Seismic blasting is a risky technology. Invent a safer method of detecting resources.</p>	<p>Searcher thanks the stakeholders for their response. The technology that will be used for this survey involves a series of sound sources that create acoustic emissions, within a specified frequency and amplitude, to detect geological formations. This technology is the only technology that is technically feasible for generating the required geophysical data and is commercially viable. All other seismic technology is still being developed and is not technically or commercially feasible for this survey. Searcher notes that a comprehensive assessment of the potential impacts and risks is provided in Section 6 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
4	<p>Matter: Biologically Important Areas (BIA) Claim: Keep seismic testing away from marine parks and biologically important areas (BIA). There are Biologically Important Areas (BIA) for three species that overlap the Rowley Shoals proposal area for the pygmy blue whale, the white-tailed tropicbird and the little tern.</p>	<p>Searcher thanks the stakeholders for their response. Concerns for the Marine Parks and Reef are addressed at Matter ID 24. Searcher notes that a comprehensive assessment of the potential impacts and risks to the Environment, including the species with Biologically Important Areas, is provided in Section 6 of the EP. A detailed assessment of potential impacts from anthropogenic sound is provided in section 6.4 of the EP. Pygmy blue whales are not expected to be displaced from their BIA. The acquisition area overlaps a very small portion of the white-tailed tropicbird breeding BIA and a very small portion of the little tern resting BIA. Only birds diving and foraging within the operational area would be exposed to anthropogenic sound while diving for small pelagic fishes near the sea surface, or be affected by changes in prey distribution. It is considered reasonable that birds may avoid the seismic sound and physical impact is considered not credible. Anthropogenic sound theoretically has the ability to affect the tropicbird foraging through avoidance of diving for prey or through disturbing their prey. Only the area around the seismic source (approximately 10 km) at any one time is expected to influence fish behaviour and therefore potentially influence the availability of their prey source. As such, at any moment in time the affects to potential foraging sources is extremely small. Further, the area of the BIA overlapped with the acquisition area (approximately 10-15%) is small, leaving most of the BIA available for foraging. The seismic activity will be managed so that potential impacts and risks to protected marine fauna including pygmy blue whale, the white-tailed tropicbird and the little tern are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks to protected marine fauna including pygmy blue whale, the white-tailed tropicbird and the little tern will be</p>

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		mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.
5	<p>Matter: Chain Reactions and tipping points Claim: Until the proponent can prove that no harm comes to the marine life in the marine parks then they can't do blasting. Unknown chain reactions and tipping points are too great to risk.</p>	<p>Searcher thanks the stakeholders for their response. There is no seismic acquisition proposed in the Marine Parks. Under the OPGG Environment 2009 regulations, Searcher is required to demonstrate that changes to the marine environment in the vicinity of the Marine Parks due to the seismic activity are reduced to ALARP and Acceptable levels and are not inconsistent with other relevant legislation. Searcher notes that a comprehensive assessment of the potential impacts and risks is provided in Section 6 of the EP. Searcher has used the best and most contemporary scientific evidence with sound propagation modelling to predict the potential effects of anthropogenic sound on marine life. For example in Anthropogenic Sound section 6.4, peer-reviewed literature does not indicate any long-term abandonment of fishing grounds by commercial species due to seismic activity, with several studies indicating that catch levels returned to pre-survey levels after seismic activity had ceased. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to marine life and the marine parks, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. There is no residual or long-term impact expected from the routine operations.</p>
6	<p>Matter: Chemicals from Explosives Claim: Chemicals from underwater explosives will kill fish.</p>	<p>Searcher thanks the stakeholders for their response. The seismic array that will be used in the seismic survey consists of a series of sound sources that discharge compressed air. Explosives will not be used during the survey therefore explosive related chemicals will not be released into the environment.</p>
7	<p>Matter: Climate Change Claim: Oil and gas or fossil fuel activities contribute to climate change and global warming. Concerned that the environment is already stressed from climate change.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher notes however that a comprehensive assessment of the potential impacts and risks to the environment is provided in Section 6 of the EP. A detailed assessment of atmospheric emissions is provided in section 6.5 of the EP with control measures adopted to use more environmentally friendly fuel in section 6.10.2. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
8	<p>Matter: COP26 and Net zero by 2050 Claim: Proposal in conflict with Australia's COP26 commitments, and achieving net zero by 2050.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher notes however that a comprehensive assessment of the potential impacts and risks to the environment is provided in Section 6 of the EP. A detailed assessment of atmospheric emissions is provided in section 6.5 of the EP with control measures adopted to use more environmentally friendly fuel in section 6.10.2. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>

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9	<p>Matter: Diving Claim: Impacts to diving spots, people/divers and local economy.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential impacts and risks to divers is provided in Section 6.4.10 of the EP with management measures detailed in Section 6.4.12. The 40 m depth contour at Mermaid Reef nearest the acquisition area has been identified as the nearest potential dive location and is considered representative of the greatest underwater sound impacts on divers. When the seismic vessel is at its closest point to the 40 m depth contour, the modelled sound level of 147.4 dB re 1 μPa (SPL; LP) at this location slightly exceeds the recommended safety threshold of 145 dB re 1 μPa (SPL; LP). Sound levels reaching the representative 40 m dive site from the two adjacent sites modelled (Sites 1 and 2) did not exceed the threshold, indicating it would be a transient exceedance. The acoustic modelling showed that as the sound reaches the steeply rising reef edge its energy decreases dramatically. The leeward sides of the reef are predicted to be exposed to significantly lower sound levels and most of the reef will be exposed to lower than the diver safety threshold value throughout the survey. The area on the north-west side of Mermaid Reef that is predicted to be exposed to sound above the recreational diver sound threshold is highly localised and would only be exposed to sound at this level for a short time. Prior consultation noted that identified diving operations only potentially run in October and November which is outside the proposed Possum seismic survey timing. Furthermore, in accordance with the management controls set out in Section 9, including the implementation of the DMAC 12 Safe Diving Distance from Seismic Surveying Operations Rev 2.1, there will be no impacts to diver health due to anthropogenic sound and the activity will be managed to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
10	<p>Matter: Drill Rigs following seismic survey Claim: Concerned about drill rigs following seismic blasting, the industrialisation of the Western Australian coast, and risk of oil spills.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>
11	<p>Matter: Earth's Crust weakened Claim: Seismic blasting weakens the Earth's crust, throws all marine life into chaos because they communicate via sounds and songs.</p>	<p>Searcher thanks the stakeholders for their response. Acoustic Modelling was conducted for the survey, demonstrating that as the signal reaches the seabed its energy decreases dramatically and is unlikely to weaken or damage the earth crust. The earth's crust issue raised by the stakeholder is more relevant to the concern raised about impact on seabed, which is addressed in ID 17. Searcher notes however that a comprehensive assessment of the potential impacts and risks to the environment is provided in Section 6 of the EP. A detailed assessment of potential impacts from anthropogenic sound is provided in section 6.4 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to the marine parks, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. No effects on the seabed, seafloor features are predicted in section 6.4.8.2 and Table 6.15.</p>

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12	<p>Matter: Financial Investment Claim: Object to financial investment in oil and gas projects and its profits. Call to invest in sustainable or clean energy projects.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>
13	<p>Matter: Fish and Commercial Fisheries Claim: Seismic blasting impacting fish species, fish stocks and fish catch rates (i.e. whiting and flathead).</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive description of the Biological Environment and the relevant Commercial Fisheries is provided, respectively, at section 4.6 and 4.7 of the EP. A detailed assessment of the potential effects of anthropogenic sound on fish and fisheries is provided in sections 6.4.6 and 6.4.9 of the EP. Based on quantitative acoustic modelling and the best available science, the results show that serious injury and mortality are restricted to 144m from the seismic source. Behavioural and TTS effects are restricted to up to 10 km from the source which is not predicted to reach reef fish on the nearby reefs and shoals. Furthermore, the behavioural effects are likely to elicit an avoidance response that further reduce the potential for PTS/injury and TTS. This may result in some temporary displacement, particularly of mobile pelagic species within 10 km of the seismic source limited to the duration of the survey.</p> <p>The Mackerel Managed Fishery and North West Slope Trawl Fishery are the only historically active (recorded catch within the last 5 years) fisheries within or adjacent to (within 10 km of) the acquisition area. For the Mackerel Managed Fishery there is no overlap between the ensonified area capable of inducing behavioural changes and fished areas of the fishery. For the North West Slope Trawl Fishery there is a small overlap of 2.33% of the fishery and crustaceans on the seabed are unlikely to be exposed to lethal levels of anthropogenic sound. There is no known fishery for whiting or flathead in the area that overlaps with the ensonified area capable of inducing a behavioural response.</p> <p>Searcher is a member of the Collaborative Seismic Environment Plan (CSEP) consortium that underpins the National Energy Resources Australia (NERA) Commercial Fishing Industry Adjustment Protocol as negotiated with commercial fishing peak industry bodies, including AFMA, WAFIC and the Northern Territory Seafood Council. The CSEP Adjustment Protocol details an evidence-based process for commercial fishers to make a claim for loss of catch, displacement or gear damage within an Adjustment Area, a copy of which is available on the NERA website.</p> <p>Therefore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that potential impacts and risks to fish and fisheries are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
14	<p>Matter: Food and Food Chains Claim: Pollution or destruction of food and food chains.</p>	<p>Searcher thanks the stakeholders for their response. The EP contains a comprehensive assessment of the potential effects of seismic activity on marine life that constitute food and food chains in section 6. The seismic activity will be managed so that potential impacts and risks to protected marine life, fauna and fisheries are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that potential impacts and risks to protected marine life, fauna and fisheries are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>

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15	<p>Matter: Future Generations Claim: Need to protect the ocean / environment for future generations.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher would like to note however that a comprehensive assessment of the potential impacts and risks to the environment is provided in Section 6 of the EP. In accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. In this manner Searcher supports protecting the ocean / environment for future generations</p>
16	<p>Matter: Government and Politicians Claim: Call for government or politicians to oppose the proposal. Will not support any government or politicians who approve the proposal.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>
17	<p>Matter: Government Approval Claim: Concerned that seismic testing will devastate marine life, despite a government approval indicating it will have little impact to marine life.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects on marine life including threatened and protected marine life is provided in section 6 of the EP. A detailed assessment of potential impacts from anthropogenic sound is provided in section 6.4 of the EP. The seismic activity will be managed so that potential impacts and risks to protected marine fauna are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the EP demonstrates that the seismic activity will be managed so that potential impacts and risks to protected marine fauna and fisheries are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements, therefore meeting the conditions required for government approval.</p> <p>Searcher is confident that the Government has adequate and experienced resources in place to understand and appraise the EP which presents an assessment of potential impacts and risks backed up by scientific studies, scientific evidence and researches which will support the Government decision on whether to approve or reject the proposed survey.</p>
18	<p>Matter: Healthy Oceans/Communities Claim: Healthy oceans mean healthy communities.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher would like to note however that a comprehensive assessment of the potential risks and impacts on the marine environment is provided in Section 6 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. In this manner Searcher supports the health of oceans and communities.</p>

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19	<p>Matter: Heritage Values Claim: Protect heritage values.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects of the seismic activity on heritage values is provided in section 6.4.8 of the EP. The seismic activity will be managed so that potential impacts and risks to heritage values are not inconsistent with the relevant IUCN principles. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to heritage values, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
20	<p>Matter: Irreparable damage Claim: The proposal will destroy / wreck / vandalise the ocean, the environment, and marine species, causing irreparable damage. Need to prioritise their protection instead, and leave it untouched / pristine. Opposed to seismic blasting.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects, impacts and risks on the ocean, the environment and marine species are provided in section 6 of the EP. The seismic activity will be managed so that potential impacts and risks are not inconsistent with the relevant plans of management. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks; to the ocean, environment, and marine species, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. There is no irreparable damage expected from the routine operations.</p>
21	<p>Matter: Loss of Macological species Claim: Concern that seismic exploration will result in loss of many Malacological species.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects of anthropogenic sound on molluscs is provided in section 6.4.3 of the EP. Based on quantitative acoustic modelling and the best available science, mobile molluscs such as squid are likely to respond behaviourally and avoid the seismic sound. For more sessile molluscs such as scallops, the research shows there may be slightly increased rates of mortality above background levels. However, this effect would be likely to be restricted to close proximity of the seismic survey and will have little effect across the population within the broader bioregion, there are also no scallop fisheries in or near the survey area. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that potential impacts and risks to Macological species are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
22	<p>Matter: Marine life Claim: Seismic exploration should not be permitted in areas important for our protected marine life and fisheries.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects on protected marine life and fisheries in the vicinity of the survey is provided in section 6 of the EP. A detailed assessment of potential impacts from anthropogenic sound is contained within sections 6.4 of the EP. The seismic activity will be managed so that potential impacts and risks to protected marine life and fisheries are not inconsistent with the relevant plans for management. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks to protected marine life and fisheries will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
23	<p>Matter: Marine Park Extension Claim: Balance every blasting licence with commensurate extension of marine park area.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>

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24	<p>Matter: Marine Parks, Reefs and Shoals - vicinity to survey Claim: Seismic blasting is too close to the pristine Rowley Shoals, in the Rowley Shoals Marine Park and Mermaid Reef Marine Park. Marine Parks must be protected.</p>	<p>Searcher thanks the stakeholders for their response. The survey area is in close proximity to, but has been designed to avoid, the Mermaid Reef Commonwealth Marine Reserve (MRCMR) boundary (4.4 km to Operational Area; 7.2km to Active Source area) and the Rowley Shoals Marine Park boundary at Imperieuse Reef (11.9km to Operational Area; 21.65km to Active Source area). The operational area also avoids the ancient coastline.</p> <p>Searcher notes that a comprehensive assessment of the potential impacts on the marine parks in the vicinity of the survey is provided in section 6.4.8.2 of the EP and all other biological receptors that may occur in the marine park are assessed in their respective sub-headings in section 6 of the EP. The seismic activity will be managed so that potential impacts and risks to the marine parks are not inconsistent with the requirements of the relevant marine park management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to the marine parks, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
25	<p>Matter: Marine Parks, Reefs and Shoals Claim: Concern for the pristine coral reefs and crystal-clear waters that provide food, shelter and passage to hundreds of marine animals, many of which are protected and threatened species.</p>	<p>Searcher thanks the stakeholders for their response. Concerns for the Marine Parks and Reef are addressed at Matter ID 24. Searcher notes that a comprehensive assessment of the potential impacts to the environmental values and key biological receptors of the marine parks in the vicinity of the survey is provided in section 6.4.8.2 of the EP and all other biological receptors that may occur in the marine parks are assessed in their respective sub-headings in section 6 of the EP. The seismic activity will be managed so that potential impacts and risks to the environmental and biological receptors that may occur in the marine parks are not inconsistent with the requirements of the marine park management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks to environmental and biological receptors in the marine parks are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
26	<p>Matter: Oil & Gas Obsolete Claim: Oil and gas / fossil fuels are obsolete and no longer needed. Move towards renewable / sustainable energy instead.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>
27	<p>Matter: Opposed to Recreational fishing Claim: Opposed to recreational fishing industry.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>
28	<p>Matter: Overseas markets Claim: Oil and gas companies are diverting gas resources to overseas markets, causing local manufacturing to collapse.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>

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29	<p>Matter: Protected Species Claim: 96 protected marine species (18 threatened) are likely to occur within the proposed seismic operational area including whales, sea turtles, sea snakes, sharks, rays, 31 different types of fish and 13 seabirds. All of these marine animals rely on underwater sound to communicate, navigate, mate, feed and detect predators. If seismic blasting went ahead it would interfere with these natural processes, potentially harming wildlife we should be protecting.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects of anthropogenic sound on protected and threatened marine species is provided in section 6.4 of the EP. The seismic activity will be managed so that potential impacts and risks to protected marine species are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to protected marine fauna, cetaceans, marine reptiles, fish and avifauna, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
30	<p>Matter: Regional economy Claim: Impacts to regional economy through local tourism and recreational and commercial fishing.</p>	<p>Searcher thanks the stakeholders for their response. Concerns for Tourism, Recreation and Commercial Fishing related to the Marine Parks and Reef are addressed at Matter ID 24, Divers at Matter ID 9 and Fisheries at Matter ID 13. The regional economy is detailed in the socio-economic environment in section 4 of the EP. Searcher notes that a comprehensive assessment of the potential impacts and risks to the regional economy is provided in section 6 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
31	<p>Matter: Risk to the Planet Claim: Future of the planet at risk. Need to protect and look after the planet</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher notes however that a comprehensive assessment of the potential impacts and risks to the environment is provided in Section 6 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. In this manner Searcher supports protecting and looking after the planet.</p>

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32	<p>Matter: Risks don't end with seismic survey Claim: The risks to our protected marine species don't end with seismic surveys. Modelling suggests the potential impact zone of an oil spill in this location would encompass some of our most iconic marine parks and reefs including Scott Reef, the Kimberley Marine Park, Argo-Rowley Terrace Marine Park, and the Eighty Mile Beach Marine Park. This would devastate a near-pristine marine environment, the marine life that call it home and local communities, fishing and tourism businesses.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that the seismic survey does not involve drilling or oil production, so an oil spill from a reservoir is not possible. In relation to the Argo-Rowley Terrace Marine Park and other Marine Parks or reefs within the survey area, a comprehensive assessment of the potential effects of a worst case credible Marine Hydrocarbon spill from the seismic vessel is provided in section 6.10 of the EP. The risks of a fuel spill from the seismic vessel are of a similar likelihood and consequence to the risks of a spill from one of the many commercial vessels that transit the area. The seismic activity will be managed so that potential impacts and risks to the marine parks and reefs are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, from a marine hydrocarbon spill, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
33	<p>Matter: Scallop/zooplankton mortality Claim: Seismic blasting can kill scallops and tiny zooplankton more than a kilometre away.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects of anthropogenic sound on zooplankton and scallops is provided in sections 6.4.2 and 6.4.3 of the EP. Based on quantitative acoustic modelling and the best available science, the predicted maximum distance that plankton could suffer mortality is 120 m from the seismic source. Scallops may suffer some mortality at levels slightly higher than natural rates of mortality close to the seismic source. There are no scallop fisheries in or near the survey area. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that potential impacts and risks to zooplankton and scallops are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
34	<p>Matter: Seabed damage Claim: Seismic exploration is damaging to the seabed.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential impacts and risks from the seismic activity is provided in Section 6 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. No effects on the seabed, seafloor features are predicted in section 6.4.8.2 and Table 6.15.</p>
35	<p>Matter: Seismic Banned Claim: Seismic exploration should be banned.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim.</p>

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36	<p>Matter: Seismic blasting Claim: Seismic blasting can confuse, harm and potentially kill precious marine fauna (i.e. scallops, zooplankton, fish species and whales). Seismic blasting could be devastating for these incredible Australian marine icons</p>	<p>Searcher thanks the stakeholders for their response. The seismic array that will be used in the seismic survey consists of a series of sound sources that discharge compressed air. Searcher notes that a comprehensive assessment of the potential impacts and risks from the acoustic source and anthropogenic sound during the survey is provided in section 6.4 of the EP. The seismic activity will be managed so that potential impacts and risks are not inconsistent with the relevant plans of management. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to the marine parks, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
37	<p>Matter: Seismic impact zones Claim: Under sea surface blasts have disastrous effects at distances far outside the zones of immediate impact.</p>	<p>Searcher thanks the stakeholder for their response. The seismic array that will be used in the seismic survey consists of a series of sound sources that discharge compressed air. Searcher has undertaken an Acoustic Modelling Report to inform a comprehensive assessment of the potential effects on marine species including threatened and protected marine life at all relevant distances from the seismic source. A detailed assessment of potential impacts and risks from anthropogenic sound is contained within sections 6.4 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that potential impacts and risks are reduced to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
38	<p>Matter: Stakeholder Concerns Claim: Deep concern from Australian public, coastal communities, scientists, recreational fishers and commercial fishers on impacts to marine life and local fisheries.</p>	<p>Searcher thanks the stakeholders for their response. Searcher conducted comprehensive Stakeholder Consultation (see EP section 8) prior to the NOPSEMA 30 day public review with all concerns from relevant stakeholders addressed within the EP including impacts to marine life and local fisheries. Further following consultation the EP adopted a number of management controls as detailed in section 9 to mitigate against potential effects of anthropogenic sound on marine life and local fisheries in sections 6.4.6 and 6.4.9 of the EP as addressed in Matter ID 13 - Fish and Fisheries.</p>
39	<p>Matter: Survey Parameters Claim: Seismic blasting involves loud explosions into the seabed every 10-15 seconds, 24 hours a day, 7 days a week.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential impacts and risks of anthropogenic sound is provided in Section 6.4 of the EP with the survey parameters detailed in section 3.3.1. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey. No effects on the seabed, seafloor features are predicted in section 6.4.8.2 and Table 6.15.</p>
40	<p>Matter: Survey Timing Claim: Put off the seismic exploration for a few more years to gauge how we progress away from fossil fuels.</p>	<p>Searcher thanks the stakeholders for their response. However, the issue raised by the stakeholders does not contain merits that pertain to the potential environmental impacts from the seismic survey. Searcher is unable to assess the merits of this claim. Searcher notes however that a comprehensive assessment of the potential impacts and risks to of the timing of the survey is provided in section 6.1 of the EP. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>

ID#	Comments received (in general terms)	Titleholder Response
41	<p>Matter: Whales Claim: Seismic blasting can damage whales hearing, cause displacement from key feeding and breeding grounds and cause fatalities.</p>	<p>Searcher thanks the stakeholders for their response. Searcher notes that a comprehensive assessment of the potential effects of anthropogenic sound on whales (cetaceans) is provided in section 6.4.4 of the EP. Based on quantitative acoustic modelling and the best available science, anthropogenic sound will be managed so as not to cause instantaneous PTS and TTS. Cumulative PTS is not considered credible due to the amount of time a whale would need to spend in very close proximity to the seismic source to elicit this response. The speed at which the vessel and whales move, along with the likelihood of whales responding behaviourally to avoid close proximity to the source, makes PTS highly unlikely, particularly given the management controls that will be implemented (see section 9 of EP). For the same reasons, cumulative TTS is theoretically possible but also highly unlikely. In addition, TTS is a temporary hearing injury response and is recoverable in 24 hrs. There are no known feeding or breeding grounds in the vicinity of the seismic survey.</p> <p>The seismic activity will be managed so that potential impacts and risks to protected marine fauna including specifically cetaceans are not inconsistent with the relevant management plans. Furthermore, in accordance with the management controls set out in Section 9, the seismic activity will be managed so that the potential impacts and risks, to protected marine fauna including specifically cetaceans, will be mitigated to ALARP and Acceptable levels in accordance with the environmental regulatory requirements for the Possum seismic survey.</p>
42	<p>Matter: Blank public comments</p>	<p>No additional comments or concerns have been raised. Searcher is unable to assess the merits of this claim.</p>