

STATEMENT OF REASONS

A determination on publication of a statement of reasons will be made by NOPSEMA on a case-by-case basis, based on the type of decision and the potential for the decision to be of interest to multiple persons.

In the case of Baleen 2D HR Seismic Survey, PEP-11, Offshore Sydney Basin, and NOPSEMA's acceptance of the proposed activity, NOPSEMA considers it appropriate to provide the statements of reasons due to:

- Specific stakeholder interest
- No apparent deterrents or restrictions on release of this information.

Providing this statement to stakeholders does not amount to an acknowledgment by NOPSEMA that the recipient is a 'person aggrieved' within the meaning in the *Administration Decisions Judicial Review Act 1977* (the ADJR Act).

This statement of reasons can be read in conjunction with the summary of the accepted environment plan, *Baleen 2D HR Seismic Survey Environment Plan Summary Rev 2*, for this activity available on NOPSEMA's website for public disclosure.

STATEMENT OF REASONS

Baleen 2D HR Seismic Survey , PEP-11, Offshore Sydney Basin

The National Offshore Petroleum Safety and Environmental Management Authority provides the following statement of reasons for its decision to accept the Baleen 2D HR Seismic Survey Environment Plan in accordance with regulation 10 of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009.

Relevant terms

1. In this statement, the words and phrases have the following meaning:
 - 1.1. The Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 are referred to as the Environment Regulations.
 - 1.2. The Baleen 2D HR Seismic Survey Environment Plan is referred to as the environment plan (EP).
 - 1.3. Asset Energy Pty Ltd is referred to as the titleholder.
 - 1.4. The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* is referred to as the OPGGS Act.
 - 1.5. The National Offshore Petroleum Safety and Environmental Management Authority is referred to as NOPSEMA.
 - 1.6. The term activity or activities means a petroleum activity.
 - 1.7. The term petroleum activity means operations or works in an offshore area undertaken for the purpose of: (a) exercising a right conferred on a petroleum titleholder under the Act by a petroleum title; or (b) discharging an obligation imposed on a petroleum titleholder by the Act or a legislative instrument under the Act.
 - 1.8. The term environment means: (a) ecosystems and their constituent parts, including people and communities; and (b) natural and physical resources; and (c) the qualities and characteristics of locations, places and areas; and (d) the heritage value of places; and includes (e) the social, economic and cultural features of the matters mentioned in paragraphs (a), (b), (c) and (d).
 - 1.9. The term environmental impact means any change to the environment, whether adverse or beneficial, that wholly or partially results from an activity.
 - 1.10. The term control measure means a system, an item of equipment, a person or a procedure, that is used as a basis for managing environmental impacts and risks.
 - 1.11. The term environmental management system includes the responsibilities, practices, processes and resources used to manage the environmental aspects of an activity.
 - 1.12. The term environmental performance means the performance of a titleholder in relation to the environmental performance outcomes and standards mentioned in an environment plan.

- 1.13. The term relevant person has the meaning provided under regulation 11A of the Environment Regulations.
- 1.14. The term environmental performance outcome means a measurable level of performance required for the management of environmental aspects of an activity to ensure that environmental impacts and risks will be of an acceptable level.
- 1.15. The term environmental performance standard means a statement of the performance required of a control measure.

Decision

2. On 10 January 2018, NOPSEMA made the decision pursuant to regulation 10 of the Environment Regulations to accept the environment plan.
3. Acceptance of the environment plan permits the titleholder to undertake the activity described in the environment plan which is a 2D marine seismic survey in Commonwealth waters adjacent to the NSW coastal waters, located within petroleum permit area PEP-11 – offshore Sydney Basin.
4. In undertaking the activity the titleholder is subject to the requirements of the Environment Regulations and relevant provisions in the OPGGS Act.

Authority

5. Pursuant to a valid instrument of delegation dated 12 October 2017 made by Stuart Smith Chief Executive Officer of NOPSEMA as the Regulator under the Environment Regulations, the Environment Manager - Assessment and Inspection, as the delegate of the Regulator made the decision to accept the environment plan and provided notice of this decision in accordance with subregulation 11(1) of the Environment Regulations.
6. A copy of the relevant instrument of delegation is available from NOPSEMA on request.

Background

7. On 4 July 2017, the titleholder submitted an environment plan (Revision 0) to NOPSEMA in accordance with subregulation 9(1) of the environment regulation.
8. On 3 August 2017, the titleholder was notified that NOPSEMA was not reasonably satisfied that the environment plan met the criteria set out in environment regulation 10A. An opportunity to modify and resubmit an environment plan was provided to the titleholder.
9. On 31 October 2017, the titleholder resubmitted an environment plan (Revision 1) to NOPSEMA in accordance with subregulation 9(1) of the environment regulation.
10. On 30 November 2017, the titleholder was notified that NOPSEMA was unable to make an assessment decision under subregulation 10(1) (c) of the environment regulation. Under environment regulation 9A(1) NOPSEMA requested the titleholder to provide further written information. On 21 December 2017, the titleholder submitted further written information to NOPSEMA.

11. The petroleum activity described in the environment plan is a marine seismic survey in Commonwealth waters adjacent to the NSW coastal waters. The survey will occur in petroleum permit area PEP-11.
12. The environment plan states that the activity will be undertaken using a purpose-built survey vessel equipped with the necessary hardware to conduct a seismic acquisition survey. The survey comprises forty six 2D lines of total length 208km, using a 90 cubic inch gun array and 1 streamer containing hydrophones (900m in length). The survey will be conducted in an area of 12.25 square kilometres plus a single 2D tie line approximately 50 km in length to the south west of this area.
13. The environment plan states that the seismic survey activities are planned to be undertaken in the period from 15 March to 31 May 2018, excluding the period 23 March to 8 April surrounding Easter.
14. The acceptance was based on the document submitted as Revision 3 on 21 December 2017, including requested further written information, dated 21 December 2017 and 5 January 2018, provided in accordance with the Environment Regulations.
15. Information of which NOPSEMA was made aware of, or information which was held by NOPSEMA (see below) was considered, where relevant, in conjunction with the information provided in the environment plan to make the decision.
16. On 10 January 2018 it was determined that the environment plan met the criteria set out in regulation 10A and the environment plan was accepted by NOPSEMA.

Materials considered in making the decision

17. In making this decision, NOPSEMA considered documents making up the environment plan submission in accordance with legislative requirements and NOPSEMA assessment policy and procedure.
 - Baleen 2D HR Seismic Survey EP (Revision 3, submitted 21 December 2017)
 - Further information provided by the titleholder on the 21 December 2017 and 5 January 2018 in response to NOPSEMA request for further information
 - *Offshore Petroleum and Greenhouse Gas Storage Act 2006*
 - Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009
 - NOPSEMA Environment Plan Assessment Policies, Guidance and Guidelines
 - PL0050 – Assessment
 - PL1347 – Environment Assessment
 - GN1344 – Environment Plan Content Requirements
 - GL1721 – Environment plan decision making
 - IP1349 – Operational and Scientific Monitoring Programs
 - IP1411 – Consultation requirements under the OPGGS Environment Regulations 2009

- IP1488 – Oil pollution risk management

Available at <https://www.nopsema.gov.au/environmental-management/environmental-resources/>

- Relevant Legislative and Other Requirements
 - Department of Environment, Water, Heritage and the Arts (2009). *The Temperate East Marine Bioregional Plan*.
 - Department of the Environment, Water, Heritage and the Arts (September 2008) *EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales*
 - Relevant policies, plans of management, recovery plans, conservation advice and other guidance for matters protected under the *Environmental Protection and Biodiversity Conservation Act 1999*, as well as other additional relevant scientific literature
 - Third party correspondence received by NOPSEMA on or before the date of acceptance.

Legislative framework

18. The Environment Regulations relevantly provide:

- Subregulation 9(1) states that before commencing an activity, a titleholder must submit an environment plan for the activity to the Regulator.
- Subregulation 9A(1) states that if a titleholder submits an environment plan, the Regulator may request the titleholder to provide further written information about any matter required by these Regulations to be included in an environment plan.
- Subregulation 9A(3) states that if a titleholder receives a request, and provides information requested by the Regulator within the period specified or within a longer period agreed to by the Regulator:
 - a) The information becomes part of the environment plan; and
 - b) The Regulator must have regard to the information as if it has been included in the submitted environment plan.
- Paragraph 10(1)(a) states that if the Regulator is reasonably satisfied that the environment plan meets the criteria set out in regulation 10A, the Regulator must accept the environment plan.
- Paragraph 10(1)(b) states that if the Regulator is not reasonably satisfied that the environment plan meets the criteria set out in Regulation 10A, the Regulator must give the titleholder notice in writing under subregulation 10(2).
- Paragraph 10(1)(c) states that if the Regulator is unable to make a decision on the environment plan within the 30 day period, the Regulator must give the titleholder notice in writing and set out a proposed timetable for consideration of the plan.
- Subregulation 10(2) states that a notice to a titleholder under this subregulation must:
 - a) State that the Regulator is not reasonably satisfied that the environment plan submitted by the titleholder meets the criteria set out in regulation 10A; and

- b) Identify the criteria set out in regulation 10A about which the Regulator is not reasonably satisfied; and
- c) Set a date by which the titleholder may resubmit the plan.
- Regulation 10A provides the criteria for acceptance of an environment plan and states that, for regulation 10, the criteria for acceptance of an environment plan are that the plan:
 - a) is appropriate for the nature and scale of the activity,
 - b) demonstrates that the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable,
 - c) demonstrates that the environmental impacts and risks of the activity will be of an acceptable level,
 - d) provides for appropriate environmental performance outcomes, environmental performance standards and measurement criteria,
 - e) includes an appropriate implementation strategy and monitoring, recording and reporting arrangements,
 - f) does not involve the activity or part of the activity, other than arrangements for environmental monitoring or for responding to an emergency, being undertaken in any part of a declared World Heritage property within the meaning of the *Environment Protection and Biodiversity Conservation Act 1999*,
 - g) demonstrates that: the titleholder has carried out the consultation required by Division 2.2A; and the measures (if any) that the titleholder has adopted, or proposes to adopt, because of the consultation are appropriate, and
 - h) complies with the Act and regulations.

Consideration and findings of material facts

19. Following an assessment undertaken in accordance with the Environment Regulations and NOPSEMA's assessment policies and procedures NOPSEMA provides the following considerations and findings of material fact which contributed to the decision to accept the environment plan.

Environmental Assessment – Description of the activity

- 19.1. NOPSEMA considered the description of the activity and found that:
- a comprehensive description of the activity had been provided in the environment plan which was relevant for the consideration of environmental impacts and risks of the activity,
 - information considered relevant for the consideration of environmental impacts and risks (such as the operational details of the activity and proposed timetable) included:
 - a statement in the EP that the survey is planned to occur between 15 March and 31 May 2018, excluding the period 23 March to 8 April surrounding Easter.
 - the activity duration, which is three to four days,

- hours of operation, which is 24 hours a day,
- the activity location, which is within Permit Area PEP-11 – offshore Sydney Basin (approximately 120 km from Sydney to Newcastle), over an operational area of 4,568 km² within which an acquisition area covers approximately 460 km²,
- water depths of the activity location, which range from 125m to 145m,
- the total volume of the airgun array, which is 90in³ from a single source,
- airgun operating pressure, which is ~2000psi,
- source interval, which is 6.25m,
- hydrophone type, length and depth, which is 1 solid hydrophone streamer, 900m long and towed at a depth of ~3m,
- general details of the vessels to be used for the activity, and
- the activity or any part of the activity will not be undertaken in any part of a declared World Heritage property within the meaning of the *Environment Protection and Biodiversity Conservation Act 1999*.

Environmental Assessment – Description of the environment

19.2. NOPSEMA considered the description of the environment that may be affected by the activity including relevant values and sensitivities and found that:

- the description includes ecosystems and their constituent parts in the area that may be affected by the activity, including under emergency conditions,
- 36 listed threatened and 42 listed migratory species within the meaning of the *Environment Protection and Biodiversity Conservation Act 1999*, including 32 species of cetaceans, have been identified and described,
- values and sensitivities of the Central Eastern Shelf Province Commonwealth marine area has been identified and described,
- in identifying relevant values and sensitivities the environment plan has given regards to the Temperate East Marine Bioregional Plan.
- Commonwealth and NSW managed commercial fisheries including the Commonwealth Trawl Sector of the South East Shark and Scalefish Fishery (SESSF), Eastern Tuna and Billfish Fishery (ETBF), Ocean Trap and Line Fishery, Ocean Trawl Fishery and Lobster Fishery (lobster trapping) have been identified and described, and
- social, economic and cultural features of the environment relating to shipping, tourism and recreational activities including fishing, ports and commercial shipping, have been identified and described.

Environmental Assessment – Requirements

- 19.3. NOPSEMA considered the environment plan’s description of requirements, including legislative requirements that apply to the activity and are relevant to the environmental management of the activity and found that:
- a suitable description of the relevant legislative and other requirements applying to the activity, including relevant plans of management under the *Environment Protection and Biodiversity Conservation Act 1999* has been provided in the environment plan, and
 - a suitable demonstration of how these requirements will be met by the titleholder has been provided by integrating these requirements as criteria for demonstrating that impacts and risks of the activity will be of an acceptable level.

Environmental Assessment – Evaluation of environmental impacts and risks

- 19.4. NOPSEMA considered the details of the environmental impacts and risks for the activity and found that:
- a sufficiently robust method consistent with internationally recognised standards, AS/NZS ISO 31000: Risk management - Principles and guidelines and AS/NZS ISO 14001: Environmental management systems, has been applied for the identification and evaluation of environmental impacts and risks of the activity.
 - all environmental impacts and risks detailed as resulting from all aspects of the activity are appropriately identified, given the description of the activity and environment that may be affected by the activity.
 - These include impacts and risks associated with:
 - Seismic activities generating underwater noise
 - Interference with / exclusion of other users of the sea
 - Artificial lighting produced from the vessel
 - Routine Discharges (Sewage, Grey Water Waste)
 - Routine Disposal – (Putrescible Waste, and Hazardous / Non-hazardous)
 - Atmospheric emissions
 - Introduction of marine pests from vessel hull or ballast water discharge
 - Disturbance of seabed (dropped objects) / loss of equipment
 - Hazardous / Non-hazardous solid waste
 - Physical presence of vessel (marine fauna collision, entanglement of fishing gear)
 - Accidental release of hazardous chemicals and liquid wastes (excluding fuel)
 - Accidental Hydrocarbon (Fuel) Spill
- 19.5. NOPSEMA considered the evaluation of environmental impacts and risks and found that this was appropriate to the nature and scale of each impact and risk given:
- a sufficiently robust method has been applied for the demonstration that each environmental impact and risk of the activity will be reduced to as low as reasonably practicable, and the implementation of additional control measures would be grossly

disproportionate to benefit gained, by evaluating all against one or a combination of the following criteria;

- Environmental Hazard Identification;
 - Risk Analysis;
 - Consequence Ranking;
 - Impact Management – development of environmental performance outcomes, performance standards, and measurement criteria to reduce (or eliminate) the level of risk to acceptable, ALARP levels;
 - Demonstration of ALARP and Acceptability;
 - Post-Control Ranking; and
 - Risk Monitoring, Review and Reporting.
- a sufficiently robust method has been applied for the demonstration that each environmental impact and risk of the activity will be of an acceptable level by evaluating all against the following criteria;
 - Asset Energy's Health and Safety at Work and Environment Policies;
 - all relevant Commonwealth legislation;
 - Consistency with relevant plans of management and policy statements developed under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*;
 - providing sufficient information and time for stakeholders to make an informed assessment; and
 - demonstrating that impacts and risks have been reduced to ALARP.
 - the evaluation considered the likelihood and consequence of all impacts and risks using a consistent method before and after implementation of control measures.
 - the statements and conclusions drawn by the titleholder regarding impacts and risks have been sufficiently supported with scientific literature, with greater effort placed supporting the evaluation where there is a higher degree of uncertainty and higher potential consequences. Supporting detail includes the use of underwater acoustic modelling to predict received levels below and at distance from the sound source and the use of maximum credible spill scenario modelling to predict the extent of spill and received levels at sensitive receptors.
- 19.6. An acceptable and as low as reasonably practicable level of impact and risks to fish and crustacean species was demonstrated for the following reasons:
- The survey is a two dimensional survey consisting of a maximum of 460 km of acquisition area and will take place over a maximum 3-4 day period (including down time). These survey design characteristics limit the sound exposure duration and reduce the risk of cumulative impacts on sound sensitive biological receptors.

- Underwater acoustic modelling was carried out specific to the operational area and the proposed airgun array to predict peak sound levels at source (1 m from airgun array) and received sound levels at various ranges from the source. Results of this modelling were used to inform the prediction of environmental impacts from the activity, including through the interrogation of model outputs against suitable acoustic impact thresholds/criteria. The thresholds/criteria derived were found to be reasonable based on published scientific literature. The impact prediction method was deemed to be appropriate to the nature and scale of the activity.
 - Results of modelling in the EP indicate that it is unlikely that sound levels may cause injury to finfish beyond 70 m from the source using conservative impact thresholds based on published literature. Within 1 km, the risk from temporary and recoverable hearing loss to individual and populations of fish is moderate and beyond 1 km, is slight and negligible, which are acceptable levels.
 - According to the EP there are no known reefs or identified habitats within the operational area for site-attached fish to occur. The EP notes that the closest defined fish habitat is 5.5km from the acquisition area. This indicates that the fish fauna that may be exposed to sound emissions are likely to be mobile pelagic and demersal species and are able to utilise avoidance behaviours by swimming away from the source.
 - The EP demonstrated that the consequence of impacts to fin fish is likely to be limited to short term disturbance within the operational area.
 - The EP appropriately uses the underwater acoustic modelling and a comparison with relevant published literature to evaluate the potential impacts of the activity on crustaceans that may be exposed to acoustic emissions.
 - The modelling outputs and evaluation demonstrates that mortal impacts on crustaceans are likely to be limited to extremely close ranges, approximately 10m from the source.
 - Given the water depths of the activity location, which range from 125m to 145m and after consideration of scientific literature and activity specific sound modelling, the predicted received levels at the seabed are below levels that will result in physiological impacts on crustaceans.
 - The EP has demonstrated that it is highly unlikely that lobsters (and other crustacean) would be exposed to levels that would induce a physiological response at the seabed. In addition, the EP commits to avoiding the spawning period for the eastern rock lobster (*Jasus verreauxi*).
- 19.7. An acceptable and as low as reasonably practicable level of impact and risk to matters protected under Part 3 of the EPBC Act was demonstrated for the following reasoning:
- The activity does not overlap with any habitat critical to survival of any listed threatened or migratory species.
 - Although the survey will be undertaken within a humpback whale migration Biological Important Area (BIA), the survey is limited to 3-4 days total duration between 15 March and 31 May 2018, a period that temporally avoids the defined peak humpback whale

northward migration period (June) and it does not take place in a restricted migration corridor.

- Given the activity will occur within the shoulder period for the northward humpback whale migration, all aspects of Policy Statement 2.1 Part A and some aspects of Part B will be implemented to mitigate noise impacts on humpback whales. This includes a 500m shut down zone, increased low power zone (2km) and having two qualified marine mammal observers.
- The sound attenuation predictions in the horizontal plane, supported by the acoustic modelling exercise, provide robust justification that the proposed mitigation zones will be effective in preventing physical injury to cetaceans should they be present in the operational area during the survey.
- The activity will be undertaken consistent with the Conservation Advice for humpback whales (*Megaptera novaeangliae*) 2015.
- The closest defined aggregation site for grey nurse sharks is Little Broughton Island approximately 60km from the northern most edge of the survey area. The EP assesses that, although the precise timing for breeding and pupping in Australia is unknown, evidence suggests that breeding in October to early November. In addition, a grey nurse shark breeding period of October – November is identified in the meta-data for the breeding BIA layer in National Conservation Values Atlas on the Department of Environment and Energy's website.
- Given the timing, duration and location of the survey, the EP demonstrates that it is unlikely that acoustic emissions from the survey would interfere with breeding behaviours of NSW grey nurse shark populations. Therefore it is unlikely to hinder the recovery of the grey nurse shark in the near future, or impact on the long term conservation status of the species. As such the activity will not be undertaken inconsistent to the Recovery Plan for the Grey Nurse Sharks (*Carcharias taurus*) 2014.
- The activity does not overlap with any Key Ecological Features (KEF) of the Commonwealth Marine Area. The closest KEF is >30 km from the operational area and therefore will not be impacted by the planned aspects of this activity.
- The temporal and spatial restrictions in conjunction with the control measures for sound mitigation are appropriate to the nature and scale of the activity.

19.8. An acceptable and as low as reasonably practicable level of impact and risk to commercial fisheries and recreational fishing was demonstrated for the following reasoning:

- The EP recognises that the activity overlaps with areas that are important for recreational and commercial fishing activities. Through the consultation process, the titleholder was able to determine that the periods leading up to Christmas and Easter are of economic importance. In response to these concerns raised by relevant persons, the activity will be restricted to a 3-4 day period between 15 March and 31 May with a clear commitment to avoiding the period between 23 March and 8 April so as to avoid the Easter holiday period.
- The EP has appropriate ongoing consultation arrangements in place to address any relevant persons concerns that may be raised prior to and during the activity. This includes

the direct communications with fishers (commercial and recreational), management arrangements with respect to access to the survey area and measures to inform relevant persons of the vessel location and intended movements.

- The EP demonstrated that the consequence of impacts to target species is likely to be limited to short term disturbance within the operational area. This is supported by underwater acoustic modelling and the application of appropriate cumulative impact thresholds that predict recoverable injury to fish (with a swim bladder involved in hearing) is likely to be approximately 70m from the source. Noting the depth of the acquisition area (125-145m), it is unlikely that target demersal species will be injured by underwater sound emissions and that target pelagic species will be able to utilise avoidance behaviours over the temporary disturbance period given the 3-4 day duration of the activity.
- Given the temporal and spatial limitations of the activity, combined with the adopted control measures for addressing relevant person's objections and claims, the EP has demonstrated that any impacts and risks from sound emissions or vessel interactions would be of an acceptable level.

19.9. NOPSEMA considered the details of the control measures that will be used to reduce the impacts and risks of the activity to as low as reasonably practicable and acceptable levels and found that:

- control measures in the form of systems, equipment, persons and procedures have been clearly identified,
- these control measures will be appropriate for managing each of the environmental impacts and risks of the activity, given a clear demonstration has been provided by the titleholder through application of the above method of risk analysis, treatment and evaluation, and
- the control measures applied will be effective in reducing the environmental impacts and risks of the activity to as low as reasonably practicable and acceptable levels.

Environmental Assessment – Environmental performance outcomes and standards

19.10. NOPSEMA considered the environmental performance outcomes, environmental performance standards and measurement criteria and found that:

- environmental performance standards have been appropriately set for control measures identified as being necessary to reduce the environmental impacts and risks of the activity to as low as reasonably practicable and acceptable levels,
- environmental performance outcomes have been appropriately set to provide measurable levels of performance for the management of the environmental aspects of the activity to ensure that environmental impacts and risks of the activity will be of an acceptable level, and
- measurement criteria provided will allow the titleholder to determine whether each environmental performance outcome and environmental performance standard is being met for the duration of the activity.

Implementation strategy for the environment plan

19.11. NOPSEMA considered the implementation strategy for the activity including monitoring, recording and reporting arrangements and found that:

- the plan includes suitable arrangements for reporting to the Regulator in relation to the titleholder's environmental performance of the activity,
- the environmental management system described is consistent with recognised standards, AS/NZS ISO 14001: Environmental management systems and contains specific measures to ensure that environmental impacts and risks of the activity will continue to be identified and reduced to as low as reasonably practicable; that the control measures detailed in the environment plan will be effective in reducing the environmental impacts and risks of the activity to an acceptable level and as low as reasonably practicable; and that the environmental performance outcomes and standards in the environment plan will be met,
- a clear chain of command is established in the environment plan, with set roles and responsibilities of personnel in relation to the implementation, management and review of the environment plan, including during emergencies or potential emergencies, with the titleholder responsible for ensuring the activity is undertaken in the manner described in the environment plan,
- there are suitable measures in place to ensure that each employee or contractor working on, or in connection with, the activity is aware of his or her responsibilities in relation to the environment plan, including during emergencies or potential emergencies, and has the appropriate competencies and training, in particular, those with specialist roles such as Marine Mammal Observers,
- sufficient arrangements are in place for monitoring, recording, audit, management of non-conformance and review of the titleholder's environmental performance and the implementation strategy to ensure that the environmental performance outcomes and standards in the environment plan are being met,
- sufficient arrangements are in place to allow monitoring of, and maintaining a quantitative record of, emissions and discharges (whether occurring during normal operations or otherwise), such that the record can be used to assess whether the environmental performance outcomes and standards in the environment plan are being met,
- an oil pollution emergency plan has been provided that is consistent with the national system for oil pollution preparedness and response and includes arrangements for responding to and monitoring oil pollution, including: the control measures necessary for timely response to an emergency; the arrangements and capability in place, for the duration of the activity, to ensure timely implementation of the control measures, including arrangements for ongoing maintenance of response capability; the arrangements and capability in place for monitoring the effectiveness of the control measures and ensuring that the environmental performance standards for the control measures are met; and arrangements and capability for monitoring oil pollution to inform response activities are in place,

- arrangements for testing of the response arrangements in the oil pollution emergency plan include a pre-survey campaign specific oil pollution emergency drill that will be appropriate given the response arrangements and nature and scale of the risk of oil pollution for the activity,
- monitoring of impacts to the environment from oil pollution and response activities has been provided for, that is appropriate to the nature and scale of the risk for the activity and will be sufficient to inform any remediation activities, and
- appropriate ongoing consultation arrangements are in place with relevant authorities of the Commonwealth, NSW , and other relevant interested persons or organisations through the development of a communication and engagement strategy requiring relevant persons to be kept informed of the activity through a number of mechanisms including, weekly status reports and fortnightly teleconferences.

Details of titleholder and liaison person

19.12. NOPSEMA considered the details of the titleholder and liaison person provided in the environment plan and found:

- that details of the titleholder's name (Asset Energy Pty Ltd), business address and ACN (within the meaning of the *Corporations Act 2001*) and the titleholder's nominated liaison person, their business address, telephone number and email met requirements, and
- there were suitable arrangements provided for notifying the Regulator of a change in the titleholder, the nominated liaison person, or of change in the contact details of either the titleholder or the liaison person.

Other information in the environment plan

19.13. NOPSEMA considered other information provided in the environment plan and found that:

- the titleholder's "Management Policy - Statements Statement On Health And Safety At Work" and "Environmental Policy" were provided, and
- details of all reportable incidents, meaning those that have the potential to cause moderate to significant environmental damage relating to the activity, are provided.

Consultation undertaken in the course of preparing the environment plan

19.14. NOPSEMA considered the consultation that the titleholder has carried out as required by Division 2.2A and the measures that the titleholder has adopted, or proposes to adopt because of the consultations and found that:

- in the course of preparing the environment plan, the titleholder consulted with each of the following (a relevant person):
 - each Department or agency of the Commonwealth, to which the activities to be carried out under the environment plan, may be relevant,

- each Department of agency of the NSW, to which the activities to be carried out under the environment plan, may be relevant,
- each person or organisation whose function, interests or activities may be affected by the activities to be carried out under the environment plan, and
- other persons and organisations that the titleholder considered relevant.
- the titleholder has demonstrated that each relevant person has been provided with sufficient information and a reasonable period to make an informed assessment of the possible consequences of the activity on the functions, interest or activities of the relevant person, given:
 - The titleholder provided information in the form of correspondence to relevant persons via emails on 5 April 2017 and engaged in face to face meetings, teleconferences and email exchanges with relevant persons during and since this time.
 - A consultation meeting was held by the titleholder on 25 May 2017 to enable key relevant persons an opportunity to further explore the activity and to provide a forum for targeted commercial fishery stakeholders to raise claims or objections.
 - The consultation undertaken has met the requirements of Division 2.2A. The titleholder has adopted appropriate measures to reduce impacts and risks to an acceptable level.
- the report provided by the titleholder on consultation undertaken in the course of preparing the environment plan includes:
 - a summary of each response made a by a relevant person,
 - an assessment of the merits of any objection or claim about adverse impact of each activity to which the environment plan relates,
 - a statement of the titleholder's response, if any, to each objection or claim, and
 - a copy of the full text of any response by a relevant person.
- the objections and claims raised by relevant persons and assessed by the titleholder relate to:
 - displacement to commercial and recreational fishing activities,
 - impacts to commercial shipping / other marine users,
 - impacts to commercial and recreational fish species and fish stocks,
 - impacts to commercial and recreational fisheries,
 - impacts to marine fauna,
 - Management of waste and oil spills
 - management measures,
 - consultation.

- These objections and claims have been sufficiently addressed by the titleholder given the evaluation of environmental impacts and risks provided in the EP.

19.15. NOPSEMA considered the environment plan and found that it complies with the Environment Regulations and the relevant requirements of the OPGGS Act.

Signed



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David Christensen

Environment Manager, Assessment and Inspection

31 January 2018