

1. Could you describe the history of the safety and the environmental issues on the Northern Endeavour?

The detailed history of the safety and the environmental issues on the Northern Endeavour was considered by an independent expert, Mr Steve Walker, who was appointed by Government to undertake a review of the circumstances that led to the administration of the Northern Oil and gas Australia Group of Companies. A report was produced and is published on the Department of Industry's website, a copy is attached <https://www.industry.gov.au/sites/default/files/2020-09/disclosure-log-20-036.pdf>

2. What safety or environmental concerns have arisen about the vessel since it has been run by the Northern Endeavour Task Force? How have these been dealt with?

Further information on the condition of the Northern Endeavour should be directed to the Northern Endeavour Task Force that was established to manage and coordinate Northern Endeavour related matters.

3. How many Directions and Prohibition notices have been issued to Upstream Production Solutions (UPS), the current operators of the Northern Endeavour?

One prohibition notice was issued to UPS on 10 July 2019.

4. What are NOPSEMA's present concerns about the Northern Endeavour and its associated wells and other subsea infrastructure?

NOPSEMA continues to provide ongoing advice to the Northern Endeavour Task Force in accordance with a Deed of Standing Offer that covers the provision of advisory offshore regulatory services. NOPSEMA's views are one source of views considered by the Northern Endeavour Taskforce, as the Task Force also seeks input from other Government agencies and contractors in reference to the Northern Endeavour. Updates on the condition of the Northern Endeavour should be directed to the Northern Endeavour Task Force.

5. What were the last three incidents on board reported to NOPSEMA?

Information about incidents on board the Northern Endeavour should be directed to the Northern Endeavour Taskforce.

6. Can you estimate how many disused oil and gas wells there are around the Australian coast? How many other disused facilities?

There are approximately 400 'suspended' or 'shut-in' wells (~255 and ~149 respectively) currently regulated by NOPSEMA, in accordance with Part 5 of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGs Act) (RMA) Regulations 2011.

There are 19 facilities in Commonwealth waters that are in a state of non-production.

7. How many applications for a deviation from removal requirements is NOPSEMA currently considering? What oil fields to these applications apply to?

There are 7 Environment Plans (EPs) under assessment where a deviation from removal requirements is being sought. These relate to the following oil fields and well property:

- Montara 1,2,3 and Skua-1 Wellheads
- Thebe-1 Wellhead
- Calthorpe-1 Wellhead
- Woollybutt field
- Balnaves field
- Echo Yodel Capella field
- West Tryal Rocks 2 wellhead

8. Can you describe some of the plastics, metals and other materials found in subsea umbilicals and other structures, and the impact these could have in the marine environment over the long term?

The composition of subsea umbilicals and other structures varies significantly between applications. Common plastics include epoxy, polyurethane, polypropylene, nylon, high density polyethylene and polytetrafluoroethylene. The types of metals include carbon steel, stainless steel, copper, zinc, aluminium and lead. Other materials commonly found include kevlar fibres, carbon fibres, asphalt enamel, concrete and microporous silica. In addition, contaminants such as residual hydrocarbons, naturally occurring radioactive materials, mercury and subsea chemicals can also be found inside subsea umbilicals and structures.

The breakdown of subsea umbilicals and other structures may result in the release of materials (including plastics and metals) over differing timescales. A range of impacts and risks may be associated with release of these materials, such as:

- Impacts to marine water quality, benthic communities and habitats from the release of contaminants and plastics to the water column
- lethal or sublethal effects to marine fauna from ingestion or entanglement
- risk to human health through bioaccumulation of contaminants through the food chain

- 9. The total cost of decommissioning offshore oil and gas facilities in Australia is estimated to be about \$50 billion. Are you aware of any modelling about the jobs and economic activity this will create in Australia? Has any work been done to ensure that Australia can benefit economically from this significant spending?**

This question covers policy issues for consideration by Government. NOPSEMA is the independent regulator of offshore safety and environmental management. As such NOPSEMA's remit does not extend to policy development or cover economic factors impacting Australia.

- 10. In your NOPSEMA advisory board minutes of September 2020, you say:**

“The Board discussed that while it has been a legal obligation to fully remove equipment since the 1960’s, industry appears to not have had this as the default consideration in their planning, nor have assets been valued on the basis of full removal. In some instances equipment has not been maintained to enable removal and in one example the resulting technical and safety risks are such that equipment may now have to remain in place.”

That is quite shocking. Can you explain a bit more about what lead you to this conclusion?

NOPSEMA developed and implemented a Decommissioning Compliance Strategy following the Minister for Resources issuing specific expectations for NOPSEMA to heighten oversight of compliance with the requirements for removal of property and equipment in October 2019.

NOPSEMA conducted an initial series of inspections to ascertain the degree to which titleholders were complying with obligations under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGs Act) to plan for, and carry out, decommissioning activities. This identified a range of situations where little or no planning for removal was in place for facilities near or past the end of operations.

In response, NOPSEMA has issued a number of General Directions to titleholders to plug or close off wells, remove property and provide for the conservation and protection of natural resources. These notices are published on NOPSEMA's website. NOPSEMA has developed and published a Compliance Plan outlining steps to be taken to bring all titleholders into compliance using a tiered approach.

11. How many wells and facilities currently have in place approved environmental plans for full removal of property and equipment? Could you provide the Committee with a list? Could you also provide the Committee with a list of those that do not?

Unless otherwise approved in an environment plan, all property and equipment is required to be removed in accordance with the provisions of s572(3) of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGGS Act).

There are six Environment Plans (Eps) in force for facilities and wells that include petroleum activities for the removal or otherwise satisfactorily dealing with some property. These are:

- Woodside Energy Limited - Enfield Plug and Abandonment EP
- Woodside Energy Limited - Echo Yodel and Capella Plugging for Abandonment EP
- Woodside Energy Limited - Nganhurra Operations Cessation EP (currently under assessment as a proposed revision)
- Santos Limited – Santos Tern-1 Wellhead Abandonment EP
- Lattice Energy Limited – Otway Development Drilling and Well Abandonment EP
- Woodside Energy Julimar Pty Ltd – Balnaves Operations Cessation EP

The facilities yet to provide for decommissioning petroleum activities for the removal or otherwise satisfactorily dealing with property are listed below:

- BHP Billiton Petroleum (Australia) Pty Ltd - Griffin field (NOPSEMA has issued a request for submission of a proposed revision from BHP Petroleum to provide for decommissioning of the field)
- BHP Billiton Petroleum (Australia) Pty Ltd - Stybarrow field (NOPSEMA has issued a request for submission of a proposed revision from BHP to provide for decommissioning of the field)
- BHP Billiton Petroleum (Victoria) Pty Ltd - Minerva field (NOPSEMA has issued a request for submission of a proposed revision from BHP Petroleum to provide for decommissioning of the field)
- Cooper Energy – Basker Manta Gummy field (NOPSEMA has directed Cooper to submit an environment plan for decommissioning of the field)
- Eni Australia - Woollybutt field (under assessment)
- Esso Resources Australia - Whiting
- Esso Resources Australia - Fortescue
- Esso Resources Australia - Mackerel
- Esso Resources Australia - Flounder
- Esso Resources Australia - Bream A
- Esso Resources Australia - Bream B
- Esso Resources Australia - Dolphin
- Esso Resources Australia - Perch
- Esso Resources Australia - Kingfish A
- Esso Resources Australia - Kingfish B

- Santos Limited - Mutineer Exeter field (NOPSEMA has issued a request for submission of a proposed revision from Santos to provide for decommissioning of the field)
- Woodside Energy Limited – Enfield field (Nganhurra EP Revision under assessment)
- Woodside Energy Julimar – Balnaves wells and subsea property (under assessment)
- Woodside Energy - Echo Yodel and Capella subsea property (under assessment)

Note: All Esso facilities are currently covered by a single environment plan that requires submission of decommissioning EPs in order to comply with a General Direction issued for the decommissioning of property and equipment not in use.

Further details about EPs under assessment can be found on the NOPSEMA website.

Additional questions taken on day of hearing:

- 12. How many wells and facilities currently have in place approved environmental plans for full removal of property and equipment? Could you provide the Committee with a list? Could you also provide the Committee with a list of those that do not?**

Please see question 11

- 13. How many disused oil and gas wells are there around the Australian coast? How many other disused facilities and infrastructure? Can you provide a list? We note the Directions that NOPSEMA has issued to clean up disused wells and infrastructure to date– is NOPSEMA working on issuing further Directions for disused facilities it is aware of?**

Please question 6 above for the first part of this question. A list of facilities in a state of non-production is below. In terms of future direction please refer to the decommissioning compliance plan which outlines NOPSEMA's approach to enforcement actions in respect of decommissioning.

Disused facilities:

- BHP Billiton Petroleum (Australia) Pty Ltd - Griffin field
- BHP Billiton Petroleum (Australia) Pty Ltd - Stybarrow field
- BHP Billiton Petroleum (Victoria) Pty Ltd - Minerva field
- Cooper Energy – Basker Manta Gummy field
- Eni Australia - Woollybutt field
- Esso Resources Australia - Whiting
- Esso Resources Australia - Fortescue
- Esso Resources Australia - Mackerel
- Esso Resources Australia - Flounder
- Esso Resources Australia - Bream A

- Esso Resources Australia - Bream B
- Esso Resources Australia - Dolphin
- Esso Resources Australia - Perch
- Esso Resources Australia - Kingfish A
- Esso Resources Australia - Kingfish B
- Santos Limited - Mutineer Exeter field
- Woodside Energy Limited – Enfield field
- Woodside Energy Julimar – Balnaves field
- Woodside Energy - Echo Yodel and Capella field