

# The history of the Northern Endeavour

Once a lucrative and productive FPSO, it's now on the way to the knacker's yard

*Russell Yeo*



*The Northern Endeavour on its final resting place | Credits: BE&R Consulting*

24 September 2025

The Northern Endeavour today set off on its last journey, leaving the Timor Sea for Singapore enroute to its final destination – a breaker's yard in Denmark.

And with its departure ends a long and sorry tale of what was once a gleaming and productive floating production storage and offloading (FPSO) – producing more than 200 million barrels of oil from 1999 to 2015.

And while the ship currently being unceremoniously towed to Singapore is now a filthy, rusty, former shadow of itself, it was once a happy vessel on which to work.



*Credits: Daniel Iyers*

Take a look at some of the comments from previous crew members.

*"I spent nearly five years onboard, and the team truly felt like family. Many of those friendships have lasted to this day..."*

*"She was a special FPSO — ahead of her time in both design and capability. Grateful for the experience and the people who made it unforgettable..."*

*"My first offshore trip was the NE, and I've been spoiled by it ever since. Never have I been in such a beautiful facility, and the crew was pretty awesome too..."*

*"It really does feel like losing a part of our family sending her off on her decommissioning journey..."*

*"The NE was always such a unique FPSO, a unique culture that was so different from other Woodside assets and other FPSOs..."*

*"She stands among the best facilities and crews I've had the pleasure of working with, and I'll truly miss that."*

So how did what was once such a valuable and loved asset end up on the back of a Chinese towboat? ENB takes a look back at the Northern Endeavour's eventful life.

The Northern Endeavour has spent the last 20 years plus, tethered to the ocean floor above the Laminaria-Corallina fields, about 550km northwest of Darwin, but it started its life in Samsung Heavy Industries' South Korean shipyard following the signing of contracts in September 1996.

After being fully fitted out by the FPSO consortium Kvaerner-SBM the following year, a unit operating agreement was set up to create a joint venture across the Laminaria and Coralline fields and the FPSO itself, with [Woodside](#) the major shareholder alongside minor partners [BHP](#) and [Shell](#).

The initial development, covered by Production Licence AC/L5, consisted of three wells on Laminaria and two on Corallina, with excess gas being reinjected through a dedicated gas-injection well, East Corallina-1.

Production started on 7 November 1999, with total project costs reported as A\$1.37 billion.

In 2002, in recognition of the richness of the field, two additional infill wells were drilled for Laminaria and tied back to the Northern Endeavour with a sidetrack well (Corallina-2 sidetrack-2) drilled and tied back to the FPSO in 2009.

Output on the vessel was spectacular, and it proved to be an extremely successful and lucrative operation for the JV.

## Northern Endeavour, oil production (MMbbl)

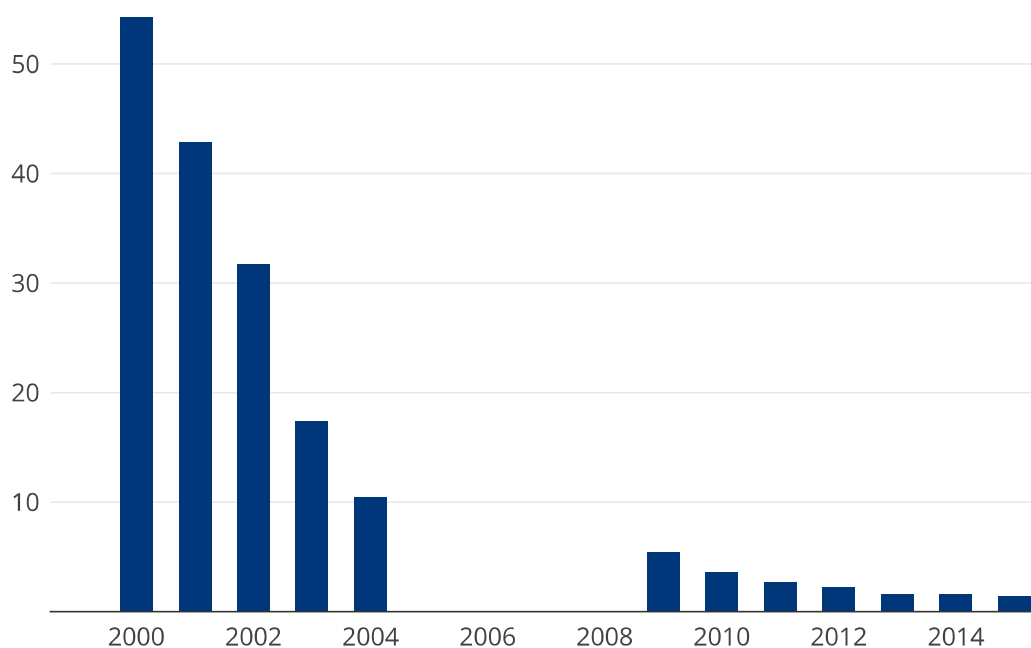


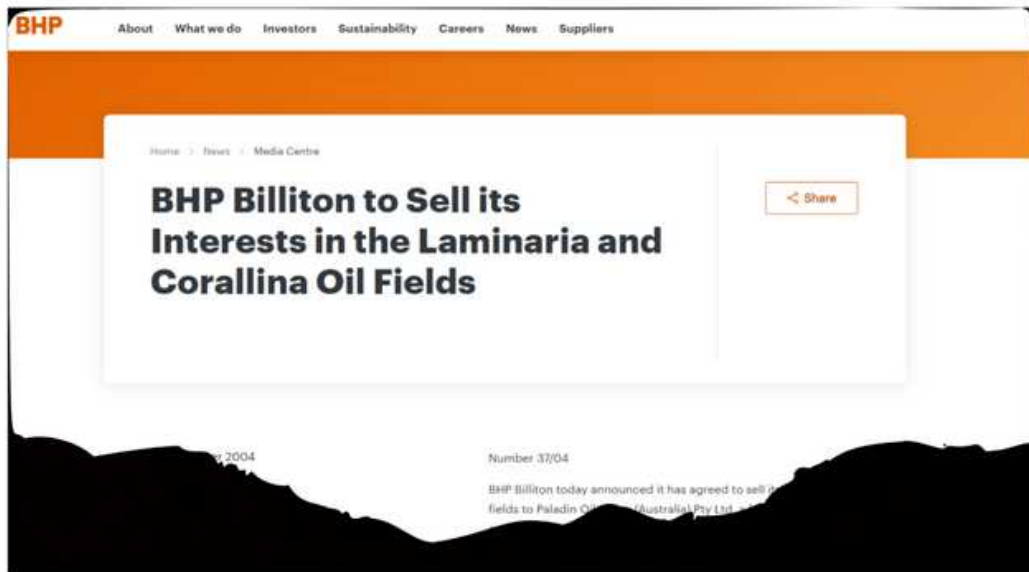
Chart: Energy News Bulletin • Source: Sourced from Woodside annual reports

"I was part of her journey from the very early days — my first offshore assignment. I still remember the day she was producing 202,000 barrels when I arrived. I spent nearly five years onboard, and the team truly felt like family. Many of those friendships have lasted to this day," said one former crewmember.

And the figures gathered from Woodside's annual reports back this up - 54.3 MMbbl in 2000 - not a bad start to the new millennium.

But these heady days lasted only a brief few years, and by 2004, it was producing just 10.5 MMbbl, and output was on a downward trajectory.

With this in mind, it was in the same year that BHP announced it would sell its stake in both fields and the FPSO to incoming JV partner [Paladin Resources](#). In their statement, the mining giant at the time said the move was being taken as "part of the company's active portfolio management strategy. Following a review, BHP's interests in the fields were identified as being non-core to its future petroleum strategy."



Credits: BHP

The next year, Shell followed BHP out the door, selling their stake to Woodside and Paladin.

Woodside's then CEO Don Voelte said the agreement would consolidate Woodside's ownership in one of its key assets, adding, "We supported the entry of Paladin into the joint venture because they shared our view of the investment opportunities in and around Laminaria-Corallina. We are each increasing our interests and are committed to working together to realise the full potential of these assets."



Later in 2005, Canadian oil giant [Talisman Energy](#) agreed to buy out Paladin Resources, leaving the JV now in a very different position from its original makeup. Now, the Corallina/Northern Endeavour ownership was split between Woodside (66.67%) and Talisman (33.3%), and the Laminaria field was split between Woodside (59%) and Talisman (41%).

Fast forward to 2015, and with production down to just 1.4 MMbbl, in July, Woodside informed regulators they were planning to decommission the aging vessel in the second half of the following year. Never one to shy away from hedging their bets, Woodside also put out feelers to see if there might be a buyer willing to take the vessel off their hands.

From: [REDACTED]  
Sent: Thursday, 9 July 2015 2:27 PM  
To: [REDACTED]  
Subject: Woodside Activity Update: Northern Endeavour Floating Production Storage and Offloading Vessel (FPSO) Decommissioning  
Attachments: Woodside Activity Update - Northern Endeavour FPSO Decommissioning.pdf

Dear [REDACTED]

As part of Woodside's ongoing consultation for its current and future activities, we advise that we are seeking environmental approval to undertake decommissioning activities in Commonwealth waters.

Production is expected to cease from the Laminaria-Corallina fields located in petroleum production licence areas AC/L5 and WA-18-L, in the second half of 2016, with the departure of the Northern Endeavour FPSO vessel due to occur shortly thereafter.

The FPSO is located offshore within the Timor Sea and is about 550 km north-west of Darwin. Water depth is about 340 m.

All topside and subsea equipment will be flushed of hydrocarbons, prior to the permanent disconnection and removal of the Northern Endeavour FPSO. Production wells will be isolated and subsea equipment will be flushed and preserved in-situ until the wells are plugged and abandoned at a later date.

Plugging and abandonment of wells and the decommissioning of subsea equipment will be subject to future Environment Plan submissions.

In support of the proposed decommissioning activities, we will submit an Environment Plan to the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) for assessment.

An Activity Update is attached providing information on the proposed activities. The Activity Update will also be posted on our website at <http://www.woodside.com.au/Working-Sustainably/Society/Pages/Shareholder-Engagement.aspx>.

Should you require additional information or have a comment to make about the proposed activities, please contact us by close of business on 7 August 2015 to allow us sufficient time to inform our activity planning and Environment Plan development. Comments can be made by return email, letter or by phone. A toll free 1800 number is provided on the attached Activity Update.

Please note that comments provided to Woodside will be included in the Environment Plan, which will be submitted to the NOPSEMA.

We look forward to hearing from you.

Kind regards

[REDACTED]  
Corporate Affairs Adviser  
Woodside Energy Ltd.  
Woodside Plaza  
240 St George's Terrace  
Perth WA 6000  
Australia  
[REDACTED]

And so it came to pass on 29 September 2015 that Woodside and Talisman signed the Laminaria-Corallina Sale Agreement, which created Northern Oil & Gas Australia Pty Ltd (NOGA) - a newly formed company with Angus Karoll as its sole director, which would take control of Talisman by a 100% share purchase.

## D.6 Disposal group held for sale

In September 2015, management committed to a plan and signed a conditional agreement to sell the Group's interests in the Laminaria-Corallina joint operation for a base price of A\$0.9 million, plus a closing adjustment for movements in working capital assets and liabilities existing at the effective date and for the proceeds of oil sales received and operating and capital expenditure paid during the interim period. Accordingly, the joint operations are presented as a disposal group held for sale. The Laminaria-Corallina joint operation forms part of the Australia Oil operating segment. The sale is subject to a number of conditions precedent and is expected to complete in March 2016.

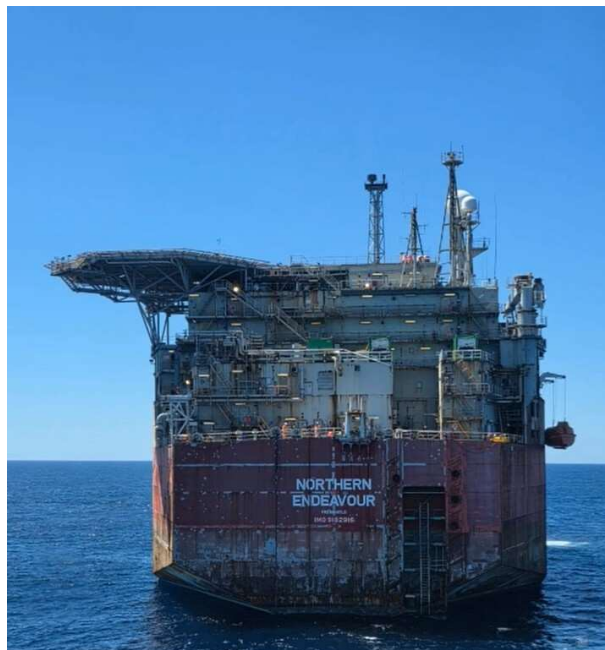
*Credits: Woodside annual report, 2015*

Under this deal, Talisman would acquire Woodside's share of the AC/L5 licence as well as ownership of the Northern Endeavour and all subsea infrastructure.

Early the following year, NOGA rebranded as Timor Sea Oil & Gas Australia Pty Ltd (TSOGA), taking over from Talisman Energy. It then contracted [Upstream Production Solutions \(UPS\)](#) to handle maintenance and operation of the facility for three years.

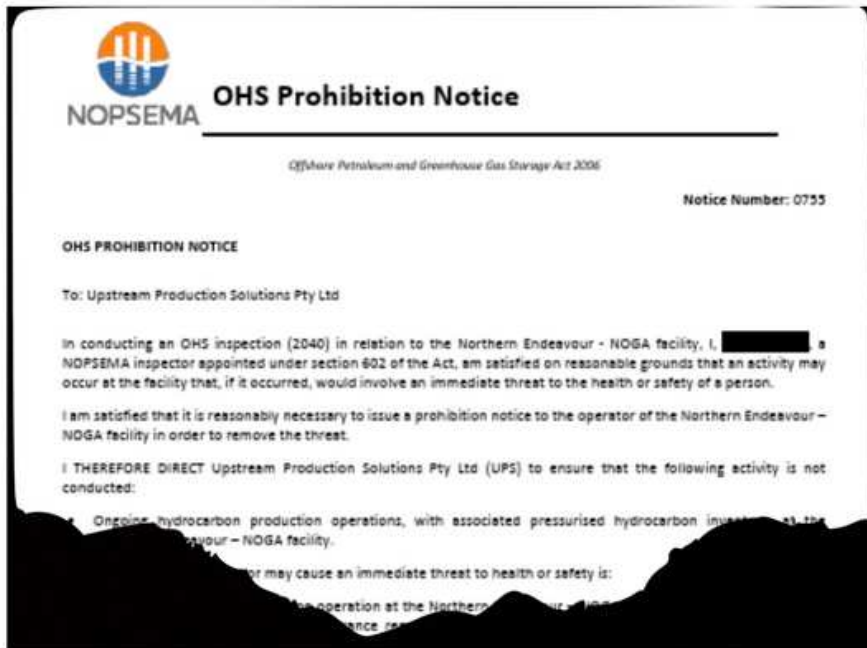
And on 9 April 2016, UPS became the safety case holder for the facility following NOPSEMA's acceptance, with Woodside officially walking away from the Northern Endeavour on 12 September 2016.

The vessel was now about 20 years old, and the cracks were starting to show.



*Credits: Daniel Iyers/LinkedIn*

So much so that on 10 July 2019, NOPSEMA issued a prohibition notice to UPS, and then eight days later, a general direction ordering TSOGA to stop production immediately and to address a range of long-standing issues, particularly relating to corrosion and safety systems.



Credits: NOPSEMA

And while the Northern Endeavour had still been producing, NOGA's pockets were not deep enough to meet NOPSEMA's requirements and re-establish production. Then, on the 20 September 2019, the company went into voluntary administration. The Northern Endeavour was de-crewed and put into a "lighthouse mode."



Credits: ENB

Early the following year, creditors backed administrator [KPMG](#)'s recommendation to wind up NOGA.

"At the meeting of creditors on 7 February 2020, creditors resolved to wind up the Companies and the Administrators were appointed Liquidators of the Companies," – the creditors said in a blunt statement.

Keith Pitt, the then minister for resources, water and Northern Australia, said: "The decision sends a strong signal to the world that Australia will maintain its global reputation as a safe, reliable and responsible country for offshore oil and gas development."

He also, at that early stage, added that taxpayers should not be left to bear the costs.

"We have been working closely with the offshore oil and gas industry on proposals to recover the costs," Pitt said.

However, so as not to burden the taxpayer with the millions needed for this mammoth project, the government was determined to have it paid for by industry, and so in 2021 worked to enact the *Offshore Petroleum (Laminaria and Corallina Decommissioning Cost Recovery Levy) Act 2022 (Cth)*, which was designed to cover all costs of the decommissioning.

Pitt said the levy was an "important measure to ensure taxpayers aren't footing the bill for the decommissioning and remediation of the oilfields, northwest of Darwin in the Timor Sea."



Former federal resources minister Keith Pitt | Credits: Supplied

When established, the levy – predictably very unpopular with the industry - was applied to all offshore production title holders and was calculated on a per-barrel of oil equivalent produced basis. As a result, as they pointed out in the consultation during the bill's drafting, Chevron would pay the greatest share of the levy, despite receiving no economic benefit from or involvement in the Laminaria-Cor oil fields.

The industry's lobby group APPEA (now known as [AEP](#)) called it a "terrible precedent," adding: "To slug an entire industry at \$0.48 per barrel and not put an end date on it is over the top."

Nevertheless, with the funding in place, the government now needed a leading contractor and so, in a \$324.89m deal in 2022, appointed [Petrofac](#) to assume operatorship of the FPSO in addition to

Petrofac and regulators to ensure the safety of workers on the Northern Endeavour, and to protect the environment."



Madeline King | Credits: X

Later in the year, [Wood](#) was awarded the role of Owner's Team by the Australian government, with responsibility for overseeing the first decommissioning phase of the Northern Endeavour. In October, Petrofac took operatorship of the vessel on behalf of the government, a milestone the company described as a "huge step in the landmark decommissioning contract."

The following year, things started to happen.

In May, the government revealed its plans for the first phase of decommissioning, to disconnect the FPSO from the wells that connected it to the seabed and then tow it to a scrap yard.

"Decommissioning activities, which will commence in Q2 2023 and cover a range of activities associated with flushing of the topsides and subsea equipment, suspension of the wells, disconnection of the FPSO and the commencement of towing," the government said in an environmental plan.

Then, in July 2023, the government launched the tender process for the work to disconnect, decommission, and rehabilitate the seabed itself, with [Xodus](#) being brought on board in the same month to provide technical and project support services for Phase 1 of the decommissioning of the FPSO.

The following month, Australia's [Department of Industry, Science and Resources](#) (DISR) said it had received approval under the *Environment Protection and Biodiversity Conservation Act* to tow the FPSO to a shipyard in Asia for decommissioning.



Credits: AJAY LAKSHMANAN MOHAN

But it is no simple task to tow and decommission a vessel the size of the Northern Endeavour, and so in May 2024, the government contracted [BE&R Consulting](#) to provide independent advisory services on the technical requirements and risks of transporting the vessel to a recycling yard, subsequent recycling activities, and waste disposal management.

While the government was preoccupied with the how and the who of the project, the companies that had been forced to pay for the work were still very discontent with the levy, with Shell starting legal action in May against Woodside and Paladin to try to recoup more than \$86.5 million of clean-up costs.

Shell's writ filed in the WA Supreme Court stated it should not have to pay for the clean-up, arguing Woodside's and Paladin's liability was spelled out in a specific clause in their share purchase agreement.

This legal complication notwithstanding, in October 2024, the government released the terms of the contract for the removal and dismantling of the 274-metre-long facility and put the job out to tender.

This year has seen a lot of progress with the vessel – leading up to today's departure to Singapore.

In March, the government contracted [COSCO Shipping Heavy Transport](#) to dry tow the Northern Endeavour using the Hua Rui Long semi-submersible heavy transport vessel, the third largest vessel of its type in the world. They also announced at the same time that an extensive well suspension and flushing campaign had been successfully completed as part of the FPSO decommissioning program.



Hua Rui Long | Credits: Marine Traffic/Rush 2112

<b>19 April</b>	
<b>0600</b>	<ul style="list-style-type: none"> <li>Offshore installation manager (OIM) of the Northern Endeavour informs Petrofac employees and contractors at their prestart meeting that Petrofac did not have a fire suppression system available.</li> <li>OIM advises that no hot works could be undertaken until the fire pumps were back online.</li> <li>Petrofac issues hot work permits on the verbal understanding that hot work tasks such as battery tooling, needle gunning and running the UHP diesel pump do not occur.</li> </ul>
<b>20 April</b>	
<b>0600</b>	<ul style="list-style-type: none"> <li>Petrofac advises employees at the prestart meeting that there is no change in the state of the fire suppression system.</li> <li>Petrofac directs employees to undertake work outside the integrated safe system of work procedures. Needle gunning, the operation of diesel-powered forklifts, and diesel cranes are now approved by Petrofac.</li> </ul>
<b>21 April</b>	
<b>0600</b>	<ul style="list-style-type: none"> <li>Northern Endeavour's OIM states Petrofac is close to diagnosing the electronic issues with the fire suppression system and will attempt to start the fire pumps, which may cause the facility to 'go black.'</li> <li>Permits are issued, and work continues for the day. Fire pumps have not been tested.</li> </ul>
<b>22 April</b>	
<b>0600</b>	<ul style="list-style-type: none"> <li>Northern Endeavour's OIM advises employees that Petrofac will attempt to start up the fire pumps today, as they are confident they have diagnosed and resolved the issues with the fire pumps.</li> <li>OIM again states there is a high chance the facility would 'go black.'</li> <li>OIM adds that fire suppression is available if needed for the use of diesel cranes, forklifts, and needle gunning.</li> </ul>
<b>1250</b>	<ul style="list-style-type: none"> <li>The facility goes black.</li> <li>Employees hear the backup diesel generator start up and run for approximately 20-30 minutes before shutting off again.</li> </ul>
<b>1330</b>	<ul style="list-style-type: none"> <li>Facility goes black again.</li> </ul>
<b>1340</b>	<ul style="list-style-type: none"> <li>Petrofac announces over the PA system that all permits are suspended and returned to the office.</li> <li>Employees passing the backup diesel generator note a strong smell of burning electricity.</li> </ul>
<b>1400</b>	<ul style="list-style-type: none"> <li>Petrofac attempts to fire-up the diesel generators to keep some power running.</li> <li>When the diesel generator for the fire pumps is running it was noted the back-up diesel generator has no water or coolant in the radiator.</li> <li>Attempts were made to get the backup fire pumps running.</li> <li>Facility goes black again with the back up diesel generator only able to run for 20 minutes before overheating.</li> <li>Efforts were made to restart the backup diesel generator to get the last water in the BDG radiator so Petrofac can try to get it back online.</li> <li>The backup diesel air compressor shuts down. The decision was made to try to start the backup diesel generator. The generator blows a coolant hose and a head gasket, with water visibly coming out.</li> </ul>
<b>1500</b>	<ul style="list-style-type: none"> <li>Northern Endeavour OIM calls an emergency over the PA (no power to sound the alarm) and advises the facility is "black" and that helicopters are on standby to come to the facility later in the day to demand the remaining diesel generator cannot be made to run consistently.</li> </ul>
<b>1600</b>	<ul style="list-style-type: none"> <li>Announcement made for employees to go to the alternative muster point, where they are advised that all attempts at restoring power have been exhausted and the facility is now "black-black."</li> <li>Employees advised helicopters are now on the way and a list of personnel names to be demobilised that day was circulated.</li> <li>Employees assemble on the helideck as the coolest place on the asset.</li> <li>No lighting is available as backup helideck lights are solar-powered and stored in a (dark) cupboard.</li> <li>OIM announces over the PA that all personnel need to go to the alternative muster point.</li> <li>Once there, OIM advises employees that helicopters are not coming out due to the loss of daylight and lack of artificial lighting on the helideck.</li> <li>OIM advises that Petrofac's satellite phone has a limited battery life, and the OSV alongside the facility is Northern Endeavour's only means of communication with onshore support.</li> </ul>
<b>Overnight</b>	
	<ul style="list-style-type: none"> <li>Most employees sleep on the helideck, with some opting to sleep in their non-air-conditioned cabins.</li> <li>There are no working toilets or showers. A makeshift toilet was constructed and wrapped in scaffolding to ensure some privacy. Buckets were to be used for toilets, and their contents were thrown over the side.</li> <li>Catering staff made sandwiches. Bottles of water were made available in the mess.</li> <li>Employees advised helicopters would be on the facility at first light the following day. Still, Petrofac would only know of their whereabouts when the helicopters came into UHF radio range – roughly 20 minutes' notice.</li> </ul>
<b>23 April</b>	
<b>0630</b>	<ul style="list-style-type: none"> <li>First helicopter lands taking a full load of 16pax off the facility.</li> </ul>
<b>0700</b>	<ul style="list-style-type: none"> <li>Second helicopter lands.</li> <li>On land at Truscott Airbase, a regional airport located 500km west-southwest of Darwin, employees are held in a stalling pattern.</li> <li>Later, a decision is made that some employees can go home that day, whilst others will spend a night at Truscott with arrangements to fly home the next day.</li> <li>Two more helicopters were called to fully deman the facility.</li> </ul>

Credits: ENB

A power failure forced the evacuation of the crew on the disused vessel, prompting the unions – never one to miss an opportunity - to send a five-page letter to the resources minister Madeleine King, industry minister Tim Ayres, employment minister Amanda Rishworth and assistant regional development minister Anthony Chisholm, labelling Petrofac as an "absolute disgrace " and calling for swift and decisive action.

14 May 2025

Senator The Hon Anthony Chisholm MP  
 Assistant Minister for Regional Development  
 Via email: senator.chisholm@aph.gov.au

The Hon Madeleine King MP  
 Minister for Resources  
 Via email: Madeleine.King.MP@aph.gov.au

Senator The Hon Tim Ayres MP  
 Minister for Industry and Innovation  
 Via email: senator.ayres@aph.gov.au

The Hon Amanda Rishworth MP  
 Minister for Employment and Workplace Relations  
 Via email: Amanda.Rishworth.MP@aph.gov.au

Dear Minister,

**Re: Decommissioning of the Northern Endeavour FPSO – Serious Breaches of Occupational Health and Safety**

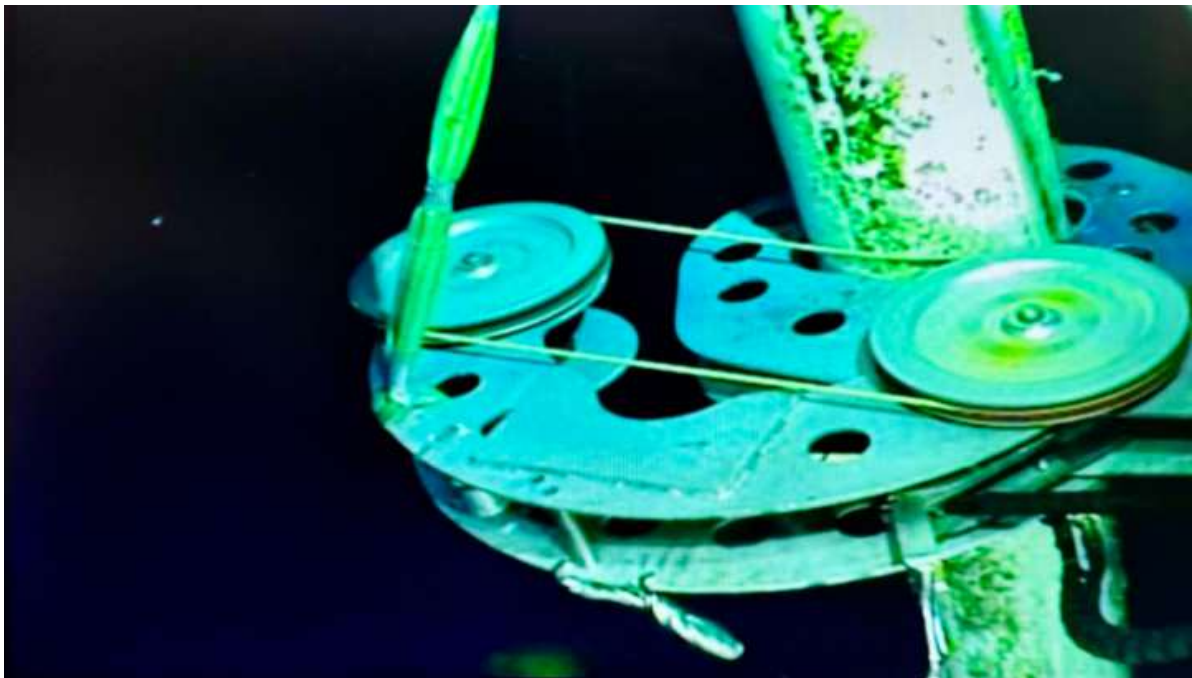
I contact you on behalf of the Offshore Alliance, an alliance between The Australian Workers' Union and the Maritime Union of Australia. The Alliance has over 4000 members working in hydrocarbons in Western Australia, including those working on the Northern Endeavour FPSO, which is located in the Timor Sea approximately 550km north of Darwin.



The decommissioning of the Northern Endeavour FPSO has had a troubling history. Following Woodside's sale of the facility to Northern Oil Services, a company which had little experience in the sector and no prior FPSO decommissioning experience, the facility was able to operate for a period. At no stage was the facility properly decommissioned.

Credits: ENB/Offshore Alliance

However, this major hiccup aside, in May it was announced engineers had disconnected it from the Corallina and Laminaria oilfields, which DISR described as a "significant milestone that reduces risk to people and the environment."



The live feed from the ROV on a monitor with the riser cutting device preparing to cut. | Credits: DISR

Seven weeks later, it was announced the power had been restored to the vessel, with Shane McWhinney from the Northern Endeavour team at DISR explaining, "The main generators were out for maintenance, and then we had a failure of the emergency diesel generator, which just triggered a whole load of other things, and then we just lost complete power."

Later that month came a headache of a different sort – bad PR – when it was announced that due to a lack of decommissioning facilities and expertise in the Australian maritime and energy sectors, the Northern Endeavour would be towed first to Singapore and then finally to Denmark to be