



Briefing: Equinor’s pervasive safety problem and what it means for the Bight

“Under slightly different circumstances it could have led to a major accident with the loss of several lives... and emissions/discharges to the natural environment.”

- Equinor has had sixty-four separate safety incidents¹ over a three year period at its facilities in Norway and the North Sea region².
- On ten occasions the incidents involved major accidental discharge of hydrocarbons into the environment (e.g. oil spills and gas leaks).
- 2018 saw an increase in the total number of spills compared with 2017
- In 2019 Equinor has already recorded more safety incidents than in any of the past four years.
- On multiple occasions Equinor has been found by the Norwegian Petroleum Safety Authority (PSA) to have failed to address previously recorded safety violations, described by the PSA as a “pervasive lack of follow-up of non-conformities...and deficient maintenance”

Reportable incidents by numbers October 2016 through September 2019:

Safety Incidents	Number
Non-conformities identified by the Norwegian Petroleum Safety Authority	51
Incidents resulting in an injury to a worker	3
Hydrocarbon releases (spills and leaks): Includes: <ul style="list-style-type: none">• Gas leaks	10 6

¹ Including both reported incidents and individual audit inspections with adverse findings, most of which themselves resulted in multiple safety citations.

² Due the

<ul style="list-style-type: none"> • Other liquids e.g. Naptha or LPG • Oil 	2 2
Fires	6
'Well Control' incidents	3
Crew evacuations due to incidents	6
Investigated by police or police notified	5
Number of audit incidents³	34

Full list of incidents available [here](#).

Summary

Norwegian oil company Equinor plans to drill an ultra-deepwater 'wildcat'⁴ offshore oil well in the Great Australian Bight, in waters almost a kilometre deeper than the site of the Deepwater Horizon disaster in the Gulf of Mexico. Its application is before the federal regulator, NOPSEMA, and if approved Equinor intends to begin drilling what would be one of the deepest wells ever attempted in Australia, from October next year.

Offshore oil drilling is inherently risky. Accidents involving serious injury or death to workers as well as environmental harm occur regularly.

But experts have noted that drilling for oil in the Great Australian Bight is exceptional - in terms of the risk of a drilling accident occurring and the difficulties in responding to an incident - due to its remote locations, harsh physical environment, lack of support infrastructure, and comparatively poor inspection regime.

³An audit incident is an issue that is picked up during an inspection, rather than being reported by the operator. Norway has some of the tightest regulatory requirements for inspection of oil drilling facilities in the world. Australia's regulation and inspection regime are nowhere near as strict; for example, Australia does not currently have a requirement to inspect wells during construction and inspections of offshore platforms are infrequent. This means there is a heightened risk that incidents like these might not be picked up in any planned project in the Great Australian Bight e.g. in 2017 it was revealed a North West shelf rig had been spilling oil for 2 months before it was noticed.

⁴ The term ultra-deepwater refers to wells in water depths greater than 1,500m. Increased water and well depth involves challenges including typically higher pressure and temperature hydrocarbons, higher water pressure at the well-head, and engineering challenges related to the length of the pipe connecting the drilling unit with the well-head; a 'wildcat' well is an exploration well drilled in a previously unexplored basin or reservoir, the significance of this is that the reservoir pressure and temperature that the drilling team will encounter is unpredictable.

Experts have noted that, despite the high risk environment, Equinor is taking a cavalier approach to safety with its bid to drill the Stromlo-1 well in the Great Australian Bight - indeed it is an approach that would not meet the safety standards required in Norway⁵.

Through a sophisticated marketing campaign Equinor portrays itself as a safe company. But a quick glance at Equinor's accident record reveals a much less flattering picture.

Over the past three years Equinor has flouted safety regulations with alarming regularity, endangering the lives of its workers and putting pristine environments at risk through fires, oil spills and gas leaks.

Perhaps most concerning is Equinor's repeated failure to address safety violations identified in previous audits undertaken by the Norwegian offshore oil safety regulator, the Petroleum Safety Authority (PSA). This prompted the PSA to declare that the company had demonstrated "*a pervasive lack of follow-up of non-conformities, inadequate follow-up of findings from enterprise-of-competence controls and deficient maintenance*⁶."

Incidents are increasing at Equinor facilities, despite the company's commitment to reverse the trend in 2017. 2018 saw an increase in the total number of oil spills compared with the previous year⁷, and already in 2019 Equinor has experienced more safety incidents than in any of the past three years, according to PSA audits and incidents reported in media.

This recidivist behaviour, characterised by a sustained disregard for the rules, should be extremely concerning to the Australian regulator, NOPSEMA, and to communities and stakeholders who rely on the Great Australian Bight's marine environment and have objected to Equinor's plans based on safety fears.

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<http://sydney.edu.au/environment-institute/news/sei-news-experts-ask-authority-hold-oil-giant-account-big-ht-plan/>

⁶ <http://www.ptil.no/audit-reports/audit-of-troll-c-article12839-889.html>

⁷ Equinor 2018 Annual Report

<https://www.equinor.com/en/investors/our-dividend/annual-reports-archive.html>

Excerpts from the incident reports:

Troll field, Norway, 15 October 2016 (spreadsheet item 5)

Statoil lost control of a well at the Troll field but was able to secure it with the rig's blowout preventer. The top drive with the completion string was suddenly raised six metres out of control. At the same time, large quantities of fluid and gas flowed out of control up through the rotary table. This blowout lifted the 2.5-tonne hydraulic slips and threw some two tonnes of bushings several metres across the drill floor. The liquid column reached the top of the derrick about 50 metres above the drill floor. Activation of a number of gas detectors led to local equipment shutdowns.

Stabilisation of the well was not achieved until 26 October 2016 after a long and challenging period of normalisation work. Statoil classified the rig incident as having the highest degree of seriousness, dubbed Actual Red 1.

Similarities were found with the disastrous Macondo [Deepwater Horizon] well blowout from 2011, and one of the Statoil chiefs called it “a very serious well control incident.” PTIL stated that **“under slightly different circumstances, it could have led to a major accident with the loss of several lives as well as substantial material damage and emissions/discharges to the natural environment.”**

Asgard field, Norway, 10 March 2017 (spreadsheet item 16)

Gas escaped from the seabed manifold to the sea surface and leaked for 20 minutes, releasing appr. 25 tonnes of gas. The leak came from a different well than the one that was being worked on. The rig involved is Deepsea Bergen; no gas was detected onboard, though the rig was moved away from the site when the leak was discovered.

On 11th September 2017 PTIL published the results of its investigation into this incident. No people were injured in the incident but **Statoil gas hazard analyses show it could have led to fatalities had there been personnel in the area.** The investigation identified five nonconformities and one improvement point. Statoil has

been asked to explain how these nonconformities will be dealt with, and to provide an assessment of the identified improvement point.

Asgard field, Norway, 20 November 2017 (spreadsheet item 30)

The PSA found two regulatory non-conformities on the part of Equinor: deficient knowledge about and updating of operating documentation, and design weaknesses in the system for overloading prevention and deficiencies in ignition source control.

In its late 2017 audit, it found that several of its earlier recommendations had not been properly addressed. It identified four non-conformities, relating to maintenance of equipment on Statoil's Asgard A floating production, storage and offloading vessel. One improvement point was also identified. ***PSA stated that its audit had exposed "a pervasive lack of follow-up of non-conformities, inadequate follow-up of findings from enterprise-of-competence controls and deficient maintenance" on the part of Statoil [Equinor].*** The company has until 20th April 2018 to respond.

Gudrun field, Norway - 1 June 2018 (spreadsheet item 36)

An audit by the PSA uncovered regulatory failings related to barrier management for electrical facilities, as well as process and technical safety, in an audit of Equinor's Gudrun field platform in the North Sea.

The inspection was carried out to verify whether Equinor was in compliance with regulations related to technical, operational and organisational barriers to reducing the probability of failures. The audit identified regulatory non-conformities in respect to methods for establishing design loads for fires and also deficient non-conformity handling. The agency also found improvements could be made in terms of barrier management for passive fire protection, function testing of facilities for fire-fighting, inspection programme for pipe penetrations in firewalls, equipment labelling, damage to cables and information on following up hazard and accident situations.

Hammerfest, Melkøya, Finnmark county, Norway - 17 June 2018 (spreadsheet item 38)

A gas leak of nearly one tonne of LNG occurred at Equinor's Hammerfest liquefied natural gas plant in June.

The gas escaped through an open valve during loading to a road tanker at the facility. The direct cause of the incident was the failure to close a valve during verification of the liquid level in the road tanker. However, ***the LNG could under, marginally different circumstances, have ignited and caused the truck driver to suffer third-degree burns within two to three seconds***, the Petroleum Safety Authority (PSA) said in its investigation report of the incident.

Mongstad, Hordaland county, Norway - 10 December 2018 (spreadsheet item 43)

Equinor's Mongstad oil refinery on Norway's west coast evacuated 300 workers and halted part of its gasoline production following a gas leak.

The spill of liquefied petroleum gas (LPG) led to an emergency shutdown of the refinery's naphtha-making unit, however, there were no injuries. Equinor declined to elaborate on the impact on production and the unit's operation.

Mongstad, Hordaland county, Norway - 16 January 2019 (spreadsheet item 46)

The audit in January 2019 showed that five of the nine regulatory breaches identified in 2017 had not been rectified in accordance with the binding schedules that Equinor had agreed to. In addition, the PSA identified a new non-conformity, concerning the deficient prioritisation and management follow-up of regulatory non-conformities within the working environment.

The other non-conformities that remained to be addressed included: Benzene exposure, communication of working environment data to safety delegates, non-conformity handling of working environment observations (in process), area noise requirements, noise measures implemented and noise exposure measurements.

Snorre B Platform, Norwegian Sea, 5 March 2019 (spreadsheet item 49)

A riser plunged to the seabed after becoming disconnected from the North Sea platform. The riser, which was connected to the platform's water injection system, came loose from its fastening on the facility. ***The report classified the incident as a "serious aberration of safety functions or other barriers such that the integrity of the installation was at risk".***

Asgard B platform, Norwegian Sea, 13 March 2019 (spreadsheet item 52)

The PSA and local police are investigating an accident that saw a worker injured by a falling trolley. The trolley, weighing around 80kg, fell about five metres into an area that was cordoned off for a lifting operation, hitting a worker and causing an injury that was classified as a “first-aid case” by Equinor.

Troll field, North Sea, 14 May 2019 (spreadsheet item 56)

Norway’s Petroleum Safety Authority (PSA) has identified a series of regulatory violations following an audit of drilling activities at the Equinor-operated Troll field.

The PSA uncovered several ***non-conformities including a lack of training and practice routines for personnel to secure barrier functions in the event of a well control incident***. Other shortcomings were found with Equinor’s capacity in terms of manpower and resources within its drilling and well planning department for Troll, as well as follow-up of measures required after previous audits, including one on emergency preparedness carried out two years ago.

Gullfaks field, North Sea, 6 June 2019 (spreadsheet item 61)

Norway’s Environment Agency (EA) took Equinor to task over repeated regulatory breaches at its Gullfaks field and ordered the oil giant attend a meeting to explain the failings.

The agency singled out the North Sea field due to its ***poor environmental track record. The Gullfaks field is responsible for the second-highest discharges of water with oil content, highest emissions of carbon dioxide and other polluting gases, and the second-highest nitrogen oxide emissions among Norwegian oilfields***.

The field also had the highest discharges of chemicals and two of the three platforms at Gullfaks - A and C - were among six installations with a high environmental impact factor on the Norwegian continental shelf.

A letter to Equinor highlighted ***“repeated non-conformities”, a lack of information sharing between the three platforms resulting in similar violations occurring at each facility and a lack of effective follow-up with corrective action to prevent such failings***, based on audits carried out over the past 10 years.

In particular, the EA carried out audits of the B and C platforms in 2018 and 2019, respectively, in which it found ***Equinor had carried out drilling operations “without checking the validity of environment risk and emergency response analyses”***. This, the agency stated, constituted a breach of regulations as well as the framework consent for the Gullfaks field.

