# Submission to:

# Environment and Communications References Committee:

# INQUIRY INTO THE POTENTIAL ENVIRONMENTAL, SOCIAL AND ECONOMIC IMPACTS OF BP'S PLANNED EXPLORATORY OIL DRILLING PROJECT, AND ANY FUTURE OIL OR GAS PRODUCTION IN THE GREAT AUSTRALIAN BIGHT

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# TERMS OF REFERENCE ADDRESSED

- a the effect of a potential drilling accident on marine and coastal ecosystems
- d the capacity, or lack thereof, of government or private interests to mitigate the effect of an oil spill
- e any other related matters

# 1. Effects of a drilling or related accident on marine and coastal ecosystems

'Oil spills could impact coastal and marine environments in many ways, and can include;

- mortality or long term impacts on sea birds, marine mammals and other sea life,
- physical damage or permanent loss of foreshore and marine habitats,
- impacts on the health, viability and diversity of coastal ecosystems,
- damage to aquaculture stocks, facilities and tainting of commercial sea foods,

- smothering of, and damage to, intertidal biota and vegetation,
- contamination of coastal infrastructure and amenities leading to impacts on tourism and other recreational activities,
- shut-down or damage to power station cooling water, desalination plant intakes or salt pans,
- economic loss at both the regional and national level,
- adverse media and political attention on the oil and shipping industries and their operations.'

(Australian Maritime Safety Authority, "Oil Spills in the Australian Marine Environment: Environmental Consequences and Response Technologies, c 1999)

# 2. The capacity to mitigate the effects of oil spills

### 2.1 Capacity

The first element of capacity is the necessary intellectual capital to comprehend a task and the means by which it can be carried out. Often 'capacity' includes or implies the ability to comprehend the consequences of carrying out a task. The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) notes the size and expertise of its workforce, from which the relevant specialist knowledge (scientific and technical) is to be inferred. . Technology or equipment integral to the task are other aspects of effective capacity.

Where diverse skills and technologies are involved and multiple agencies are engaged, organizational knowledge is also a requisite, to mobilize and control the complex of intellectual and technological resources.

Offshore operations are complex and have all the above features. The knowledge component is dispersed across many agencies and individual actors. In broad terms, the weight of organizational knowledge resides in the public and statutory sector, scientific and technical knowledge is dispersed across the relevant public and private entities, and operational knowledge and equipment is centred in the private sector (with some significant exceptions in relevant statutory organizations).

Ultimately, capacity is the effective working together of the relevant knowledge and skills with the relevant tools and equipment to achieve the intended purpose. Capacity needs to exist both for the constituent, specific tasks and for oversight and proper functioning of the whole. In offshore projects the capacity for the whole is endorsed, subject to many conditions, in a grant of title. Capacity for both the whole task and its constituent parts has to be demonstrated for the life of the project.

### 2.2 Failures

Under the statutory scheme, titleholders are the first responders in 'oil spill' incidents. They must notify the regulator and may request the assistance of the Australian Maritime Safety Authority (AMSA). In the event of a significant incident, the responsible Minister will 'in the first instance' have leadership in providing the Australian Government's response. (Submission 4, 8.6, Australian Government Department of Industry, Innovation and Science (DIIS), March 2016) However the Department of Industry, Innovation and Science will call together and chair a (non-standing) Offshore Petroleum Incident Coordination Committee (OPICC) whose responsibilities are detailed largely as communications functions, while providing 'leadership and strategic coordination in response to an incident'. (Submission 4, 8.6 (DIIS))

There is a lack of clarity about the afore-mentioned arrangements, particularly in light of the reallocation of ministerial portfolios in July 2016. It is respectfully submitted that the Environment and Communications References Committee should seek to clarify:

- who is the responsible Minister to whom NOPSEMA is accountable? (The same Minister may give NOPSEMA policy directions. (Submission 4, 5.2.2, (DIIS));
- (ii) whether NOPSEMA remains 'separate from policy activities which promote the development of Australia's offshore and gas sector', (Submission 4, 5.2.2 DIIS); namely those of the Department of Industry, Innovation and Science, one of whose key functions is 'administration of policy which encourages oil and gas exploration and development in Australia's offshore areas'. (Submission 4, 2).

Further, while giving due regard to (a) the title-holder's incentive to rectify significant failures and (b) an operation's necessary reliance on site-specific knowledge, one must question whether outsourcing this responsibility in the event of failure is either right in principle or likely to be most effective in practice. In this scheme, other actors that are important to the integrity of the whole project throughout its lifetime, such as regulators and their agents, have less incentive to devise the means to ensure their functions are effective (See 2.3, paragraph 4). While the centre of operational responsibility cannot immediately shift during a crisis, the broader knowledge base should be available to the operator and mobilized as needed. It can also be questioned whether the most reliable oversight and the most efficient and rational response to a significant spill/crisis can be provided by the operator whose system has failed?

# 2.3 Mitigation

'Mitigation' means making a condition more mild, or less severe, than it was hitherto. It denotes an ability to moderate an undesirable condition that has been brought about. It is not an ability to restore a desirable condition that has been qualitatively altered. Mitigation presupposes that an

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event happens, with a particular result, and questions whether the result can be made less bad over time.

Stopping, controlling or capturing an unintended oil flow may make a qualitative difference to the effects that require subsequent mitigation. It is respectfully submitted that the focus of this part of the inquiry should be on whether proper regulation, administration and operation can together 'ensure' prevention of serious and catastrophic events. By definition, such events should be outside 'acceptable limits'. (re Submission 4, section 2 (DIIS)) The term 'ensure' gives false confidence where it might not apply in reality.

Conceivably, failures can occur in any part of the complex whole that creates and sustains offshore projects, from choice of acreage to assessment of proposals, ongoing regulatory and operational oversight; and the installation, operation or maintenance of facilities, amongst others.

Introducing the Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures) Bill 2012, the then Minister for Resources and Energy said:

NOPSEMA faces substantial difficulties in obtaining information about offshore petroleum activities for the purpose of monitoring compliance and in investigating the causes of incidents. Offshore operations are extremely technologically complex. They take place far from land, and in the case of well operations, far below the seabed, making physical inspection difficult or impossible for an inspector. In many cases, the inspector's best recourse is to ask questions of those carrying out the operations or to have them produce operational records detailing (eg) maintenance schedules. In particular, establishing the titleholder's standards of compliance over time can be a particular challenge, especially if records are incomplete. In an environment where compliance requires a major financial investment and where non-compliance can add considerably to the profits to be made, there should be nothing put in place that hampers the inspector's ability to establish the facts and investigate whether there has been compliance. Especially in an industry where non-compliance can result in incidents that have the potential to cause major environmental damage, an inspector must be able to follow-up any leads that are obtained from the answers given to questions. To shut-off any line of inquiry would not be in the public interest, given the nature of the potential harm that could occur.

(Explanatory Memorandum, Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures) Bill 2012: Statement of Compatibility with Human Right, p 29)

# 3. Other related matters

Criteria (b) and (c) for acceptance of a proponent's environment plan (EP) are:

(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.

(Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009), Reg 10A)

# 3.1 Impacts and risks as low as reasonably practicable

The test of what is 'reasonably practicable' involves weighing the quantum of risk against what might be sacrificed (in money, time or trouble) to avert the risk. (*Edwards v National Coal Board* [1949] 1 KB 704 at 712 per Asquith LJ) What is 'reasonably practicable' is not to be determined on the basis of cost to the party with the duty to avert the risk.

The elements implied in calculating quantum of risk have been stated in later decisions.

What is 'feasible' or 'physically possible' is broader than what is meant by 'reasonably practicable'. Whether an action is 'reasonably practicable' is to be judged on the basis of what is known at the relevant time. (*Slivak v Lurgi (Australia) Pty Ltd (2001)* 205 CLR 304 per Gaudron J at 322-323).

The severity of the risk should be taken into account, as well as its likelihood. (*Southam v Petersville Ltd (1988) 24 IR 186*, cited in NSW Minerals Council, Submission to the Australian Government National Review into Model Occupational Health and Safety Laws, July 2008, p46.)

In the same submission the NSW Minerals Council cites *WorkCover Authority (NSW) v Maitland City Council* (1998) IR 362 and *Bultitude v Grice Constructions Pty Ltd* [2002] NSWIRComm 20. In both cases the Court considered 'reasonable practicability' implied an element of 'reasonable foreseeability' of risk.

# 3.2 Impacts and risks of an acceptable level

It must be assumed that an Environment Plan that did not exclude impacts of a serious or catastrophic nature would not be acceptable. With the exception of events due to natural causes, occurring independently of human intervention, it is reasonable to expect that environment plans will be tailored to a level of risk management commensurate with averting serious or catastrophic incidents.

If it is argued that such impacts or the circumstances in which they might occur are unforeseeable and therefore exceed the responsibilities of the titleholder, the answer must be that there is not a proper statutory basis for granting the title.

In the context of offshore projects, financial assurance is directed to providing for the irreducible possibility of human error, not to preparing to compensate or clean up as a substitute for prevention.

'The Amount of financial assurance titleholders require should consider the most potentially 'costly' unplanned incident or event that could occur in connection with the activity, and the worst realistically predictable consequences of that incident or event, having regard to the relevant circumstances in which the activity is to be carried out." (Submission 4, 8.4, p26 (DIIS))

Pursuant to section 516A of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), NOPSEMA must include in its Annual Report a report on how its administration of legislation during the period accorded with the principles of ecologically sustainable development as set out in section 3A of the EPBC Ac. The principles are as follows:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- (c) the principle of inter-generational equity--that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- (e) improved valuation, pricing and incentive mechanisms should be promoted.

Principle (b) is particularly relevant to assessments of what is reasonably practicable, being consistent with above-cited precedent that reasonable practicability is to be judged on the basis of what is known at the relevant time.

It appears that even for lower-level events, titleholders are not meeting the required standards: 'Measures for process safety... are less definitive with adverse trends emerging for hydrocarbon releases and certain dangerous occurrences requiring the implementation of an emergency response plan'. (NOPSEMA Annual Report 2014-2015). This is not a promising indicator of titleholder capacity to provide the comprehensive management needed to avert larger-scale events.