

FREQUENTLY ASKED QUESTIONS

Well Control, Spill Readiness and Emergency Response

Q. What is the role of the Board in regulating offshore drilling?

Our role is one of regulatory oversight of Operator activity in four key areas - worker safety, environmental protection, resource management, and industrial benefits. The Board's mission statement confirms that worker safety and environmental protection will be paramount in all Board decisions. The Board has no part in the establishment or administration of royalties or taxes for any offshore activity. We do not promote the industry.

Q. What are the regulatory requirements that Operators must meet before they can begin work offshore?

Prior to receiving the Operations Authorization a number of statutory obligations must have been met. The applicant must have completed the environmental assessment process required by both the Canadian Environmental Assessment Act as well as the Atlantic Accord Implementation Act. The Operator must have obtained a Certificate of Fitness from an independent third party Certifying Authority, a Letter of Compliance from Transport Canada for the drilling installation; and, they must file a Safety Plan, an Environmental Protection Plan and a Contingency Plan that includes an Oil Spill Response Plan. In addition, they must submit documentation respecting financial responsibility, and finally, they must provide a Declaration of Fitness, attesting that the equipment and facilities to be used during their program are fit for purpose, the operating procedures relating to them are appropriate, the personnel employed are qualified and competent, and the installation meets all necessary Canadian standards. Only after all of this documentation is presented to and approved by the Board, may an Operator proceed with the application.

Q. What is the current level of capacity available to deal with oil spills in the NL offshore?

Locally available resources are sufficient for a Tier 1 or Tier 2 response. Tier 1 is the response capability that exists offshore on the facilities. Tier 2 is the response capability that includes resources located on shore that can be mobilized to the

site. Tier 1 and 2 capability includes large containment and recovery systems – boom-and-skimmer systems – with fluid pumping capacities of over 50,000 barrels per day each.

Tier 3 response requires the Operator to mobilize equipment from other sources in Canada or around the world (such as was the case in the Gulf of Mexico in 2010).

The 2009 Spill Response Capability Assessment by Operators is available on the Board's website.

Q. Can a blowout occur in the NL offshore?

A blowout is a recognized hazard for all oil and gas drilling activity onshore or offshore.

Q. What specific requirements do you place on companies to manage the risk of blowouts? What must they have in place before they can drill a well?

Drilling and well control are critical aspects of offshore operations and are addressed extensively in the regulatory framework. This involves a review of the Operator's well planning and technical capabilities in respect of well and casing design, well control matters, kick prevention and detection, establishment of severe weather operating limits, a review of emergency disconnect requirements and an assessment of the relief well drilling arrangements. Emphasis is also placed on ensuring that all personnel have the requisite training in well control and blowout prevention. A review is conducted to ensure suitable redundancy of the blowout prevention (BOP) control systems, in the event of any situation that could result in a disconnection from the well.

The drilling and production guidelines in place speak to all critical matters in relation to well barriers, blowout prevention and well control including BOP stacks, casing and cementing matters as well as detailed requirements and expectations pertaining to the termination of wells. These guidelines reflect high standards and modern thinking with respect to drilling, cementing and well control matters.

Q. If there is a blowout in the NL Offshore Area, where would the oil go?

Generally, oil that had not been recovered or had not evaporated within the first hours or days of its release, would disperse (both horizontally and vertically) and naturally degrade to very low concentrations. The timing of this is very dependent upon factors such as prevailing weather and sea state, the oil type and release conditions (e.g., from a surface installation or subsea) and oceanographic conditions. Under some circumstances oil could remain in the area for weeks before moving generally eastwards to the mid-Atlantic.

Q. What systems are installed on the rigs working in the NL offshore?

Primary well control takes place on the drilling floor through the balancing of drilling fluids against hydrostatic pressure. If the well needs to be shut in, it can be done using either of two hydraulic control systems. This redundancy helps ensure that the well can be shut in by the drilling crew. The vessel also has three back-up systems capable of activating the BOP and shutting in the well should the need arise to do so – it has the acoustic system; ROV intervention capability, and an automode function (AMF), which automatically activates the BOP and shuts in the well when the signal is lost.

Q. Can blowouts occur on production installations as well?

Yes they can, but production installations use different systems and equipment to control well pressure and manage the risk of a blowout.

Q. What measures are in place to manage the risk of a blowout on production installations?

All production wells linked to an FPSO vessel are equipped with surface-controlled subsurface safety valves which are located beneath the seabed in each wellbore, and which are “fail-safe close”, i.e., they require surface intervention to stay open.

Q. If a major incident occurred on one of the FPSOs (e.g. explosion, collision, etc)? Could this also result a major spill from all the wells which feed into the FPSO?

Daily production comes from the cumulative flow of all wells. A blowout in one well does not cause a blowout in other wells. Operators would shut down production to deal with the well control issues.

Major events can cause spills and these risks are identified in the Operator’s Safety Plans along with how the risks will be managed.

Q. Is drilling in deep water more risky than shallow water?

Drilling rigs must be designed and built to specifications that enable them to drill in deep water. There are a limited number of these available around the world. In order to drill a relief well, Operators require rigs built to these specifications.

The C-NLOPB requires Operators to identify available deep water rigs that can be accessed by the company in the event that a blowout occurs and a relief well must be drilled by a different rig.

Q. Are NL Operators using the same technology to prevent blowouts as they used on the *Deepwater Horizon*?

Although we do not know what specific equipment and systems were in use on the Deepwater Horizon drill rig, blowout preventers essentially operate the same.

Q. What would be the environmental impacts of a blowout on the Grand Banks or in the Orphan Basin?

The environmental impacts of a blowout are described in the Operator's environmental assessment, which is available on the Board's website.

First and foremost, a blowout, of gas or oil, represents a serious threat to personnel safety and potentially to the integrity of the installation. If the blowout also results in the extended release of oil to the sea, then it would represent a risk to marine birds in the area. It also is likely that fish harvesting activities in the vicinity of the spill would need to be suspended. It is very unlikely that oil from a release at either of these locations will reach the shores of Newfoundland.

Q. What level of environmental assessment does a drilling project receive?

The first level of environmental assessment is the strategic environmental assessment. Before an authorization is granted, a project specific environmental assessment must be conducted.

Q. Is the Board satisfied with the amount of time it can take to drill a relief well?

The drilling of a relief well can take several weeks. This is why a relief well is the last resort measure for dealing with a well control problem. The primary method of well control is from the drill floor using the weight of the drilling fluid as a barrier. The Board requires Operators to reduce risk to a low as reasonably practicable.

Q. Would the Board consider requiring the company to drill a relief well at the same time it drills the exploration well?

Drilling a relief well at the same time is not a practical action for two reasons. First, a blowout can occur in a relief well, so this doubles the risk. Second, until the incident occurs, there is no way of telling where the relief well should intersect with the primary well to shut it in. In other words, you have to identify the target before you begin drilling.

Q. Does the Board require same season relief wells?

The issue of same season relief wells is an arctic issue and not applicable here as drilling can be done in the winter.

Q. Is the Board considering making any changes to its policies, procedures or to guidance in light of the event in the Gulf of Mexico?

The Board reviewed the Presidential Commission's inquiry report into the deepwater Horizon event and implemented several improvements based on the results of the review.

Q. What are the financial obligations of companies if a blowout occurs?

Currently, there is unlimited liability should parties be found to be at fault or negligent for a spill. In addition, there is absolute or "no fault" liability set at \$30 million, plus a promissory note of \$70 million. Before any drilling or production activity can take place, the proponent must provide evidence that it can cover the financial costs and damages that may result from a spill. The financial capacity requirements comprising assets, insurance and potential guarantees typically range from \$250 million to \$500 million.

Q. What are the specific changes proposed in the financial liability/polluter pays legislation?

The proposed changes include an increase in absolute liability to \$1 billion; allows government to seek damages; provides for public disclosure of emergency plans; regulators will have direct access to \$100 million (up from \$30 million); allows for creative sentencing and regulators may impose fines for instances of non-compliance.

Q. How fast can the necessary equipment be mobilized to react to a similar event here as the one in the Gulf?

Equipment that is available offshore can be mobilized in minutes to hours depending upon the type and complexity of equipment involved. Resources in the greater St. John's area can be mobilized to dockside in minutes to a few hours. It takes 16-18 hours to reach the northeast Grand Banks operating area and about 20-22 hours to reach the Orphan Basin.

Q. What information is available to the public?

Information that can be made available may be found on our website, or possibly in hard copy through out Information Resource Centre. The Board will review all information requests and make a determination.

Q. The Board regulates safety and environment, but also resources and industrial benefits. How do you respond to allegations that there is a conflict within your mandate?

The Board does not promote the industry. Our legislation provides that in matters of safety versus resource management and production, safety is paramount. The Atlantic Accord legislation defines a Chief Safety Officer with broad powers and responsibilities for worker safety, as well as a Chief Conservation Officer with powers over resource management. The legislation stipulates that an order made by the Chief Safety Officer cannot be overruled by the Board, and it prevails over a decision of the Chief Conservation Officer.

The C-NLOPB has, in the past, not hesitated to restrict, or to shut down outright, offshore operations when it had questioned an Operator's ability to properly and prudently conduct its operations. It also has conducted high-profile prosecutions of Operators for spill events.

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