

Arctic Offshore Oil and Gas Guidelines White Paper No. 4

Decommissioning and Site Clearance in the United States and Canada

The Arctic Council¹ endorsed the latest version of the <u>Arctic Offshore Oil and Gas Guidelines</u> (AOOGG) in April 2009. The AOOGG were prepared by the Protection of the Marine Environment Working Group (PAME) and are "intended to define a set of recommended practices and outline strategic actions for consideration by those responsible for regulation of offshore oil and gas activities" in the Arctic.

As active participants in the Arctic Council, the United States and Canada have the potential to demonstrate model practices for offshore oil and gas development in their neighboring offshore areas of the Western Arctic Ocean, especially as each country reviews its procedures in light of the fatal April 2010 Deepwater Horizon blowout and explosion in the Gulf of Mexico. This paper outlines national laws and regulations existing at the time of the accident. It suggests how both countries, as they revisit their procedures, can use the Arctic Council guidelines to more effectively regulate *Decommissioning and Site Clearance* of offshore oil and gas facilities in the Western Arctic, where they both have jurisdiction and share a boundary in the Beaufort Sea.

For a survey of the offshore permitting process in each country, a list of references, and a description of this White Paper Series please refer to the Letter and Overview available at www.vermontlaw.edu/energy/news.

¹ The Arctic Council was established in 1996 as a "high level intergovernmental forum" to promote cooperation, coordination and interaction among the Arctic states with significant involvement from Arctic Indigenous communities and other Arctic inhabitants. State members are Canada, Denmark/Greenland, Finland, Iceland, Sweden, the Russian Federation, and the United States.

I. Decommissioning and Site Clearance - AOOGG

The final chapter of the Arctic Council AOOGG devotes a single page to decommissioning offshore facilities and site clearance, with a two-fold focus: existing international agreements relevant to decommissioning and the need for integrated, site-specific decommissioning plans. They recommend that individual plans should be incorporated into the design phase of each development and revisited again when the facility is no longer needed. They should cover the facility itself, as well as safety, health and environmental concerns and financial and technical considerations. The Guidelines also suggest establishing a trust fund to help decommission structures when their use ends.

The Arctic Council AOOGG reference several international agreements with potential to create decommissioning obligations for the Arctic, although none is Arctic-specific. These agreements establish or recommend standardized practices for member states in matters such as pipeline removal or sealing of wells, but not all Arctic states belong to each agreement referenced. The AOOGG thus highlight how different elements of the international decommissioning framework are found in a number of conventions rather than in any one place.

The AOOGG refer to specific International Maritime Organization (IMO) provisions for full or partial disposal of platforms at sea in the 1972 London Dumping Convention, to which all eight Arctic States are party, and in its 1996 Protocol, to which five of the eight are party since the U.S. and Finland have signed but not ratified, and Russia has not signed. The Guidelines also refer to the 1989 IMO Resolution A.672(16), "Guidelines and standards for the removal of offshore installations and structures on the continental shelf and in the Exclusive Economic Zone," which deal with safety of navigation. The Guidelines note that "amongst other things" Resolution A.672(16) considers that complete removal of structures placed on the seabed after 1998 should be feasible. The Guidelines do not mention the resolution's allowance for state discretion and case-by-case determination of whether partial or complete removal will be required.

Although Denmark is the only Arctic Ocean littoral state that is party to the OSPAR (Oslo and Paris Conventions for the protection of the marine environment of the North-East Atlantic) Convention,² the AOOGG refer expressly to OSPAR Decision 98/3 on the Disposal of Disused Offshore Installations (1998). The decision has detailed rules for decommissioning offshore facilities that employ a very broad definition of decommissioning, even as they admit exceptions. The decision also prohibits decommissioning unless the rest of the Member States are consulted. The Decision's concept of a regulatory Decommissioning Assessment consists of a decision-making procedure that takes into account a broad range of factors, including impacts on the marine environment, the atmosphere and soil, the consumption of natural resources and energy associated with re-use or recycling and impacts on the activities of communities and on future uses of the environment.

² The three non-coastal Arctic states, Sweden, Finland and Iceland, are also party to OSPAR, the 1992 Oslo-Paris Convention for the Protection of the Marine Environment of the North-east Atlantic.

In all cases, the AOOGG recommend that individual decommissioning plans should consider not only the facility itself but environmental and other stakeholder concerns, referencing the IMO London Convention (1972) Waste Assessment guidance. Other matters to be considered are noise, impact on communities established during facility operation and the possibility of post-decommissioning monitoring to assess recovery of the site.

II. Decommissioning and Site Clearance - United States

At the time of the Deepwater Horizon incident, the Minerals Management Service (MMS) was the U.S. agency responsible for issuing regulations for decommissioning offshore facilities under the Outer Continental Shelf Lands Act (OCSLA).3 As of July 14, 2010, the Department of the Interior (DOI) delegates OCSLA responsibilities to three newly established Interior agencies: the Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, and Office of Natural Resources Revenue (hereafter BOEMRE).4 The Alaska Region office, under a Regional Director, is responsible for administering OCSLA in the U.S. Arctic. The OCSLA implementing regulations devote an entire subpart specifically to decommissioning and, until further amendment, still refer to the MMS.⁵

The OCSLA regulations define decommissioning as: "(1) Ending oil, gas, or sulphur operations; and (2) Returning the lease or pipeline right-of-way to a condition that meets the requirements of regulations of MMS and other agencies that have jurisdiction over decommissioning activities."6 This broad definition encompasses all forms of decommissioning covered by the regulations: permanently plugging wells, temporarily abandoned wells, removing platforms and other facilities, site clearance and pipeline decommissioning.⁷ The regulations also address who is subject to the regulations and decommissioning duties (lessees and owners of operating rights, right-of-way holders), when decommissioning obligations accrue (e.g. when you drill a well, install a platform, pipeline or facility, create an obstruction to other OCS users or re-enter a previously plugged well) and when the major deadlines, which vary from region to region, arise for the decommissioning of an offshore facility.

Regulatory procedures vary depending upon the type of decommissioning involved (definitive or temporary well plugging or site clearance), but all types have two stages in common. First, applicants for a Development and Production Plan (DPP), must provide "a brief description of how you intend to decommission your wells, platforms, pipelines and other facilities, and clear your sites."8 Second, as site usage nears its end, the owner or lessee must submit an initial decommissioning plan or application to the

³ Outer Continental Shelf Lands Act, Title 43 USC §§ 1331 et seq.

⁴ DOI Press Release July 14, 2010, at http://www.doi.gov/news/pressreleases/Salazar-Receives-Implementation-Plan-for-Restructuringthe-Departments-Offshore-Energy-Missions.cfm. See also DOI Secretarial Order 3302, June 18, 2010.

^{5 30} Code of Federal Regulations (CFR), Part 250, Oil and Gas and Sulphur Operations in the Outer Continental Shelf, §§ 1700 et seq., Subpart Q. 30 CFR Part 256, Subpart I - Bonding, contains relevant financial responsibility provisions.

⁶ 30 CFR § 250.1700.

⁷ See, e.g. 30 CFR § 250.1703.

^{8 30} CFR § 250.255.

agency. For the Alaska OCS Region, an initial removal application is due at least two years before production is projected to cease. The final application is due no later than two years from the initial application date. This initial application must contain "(d) [p]lans to protect marine life and the environment during decommissioning operations, including a brief assessment of the environmental impacts of the operations, and procedures and mitigation measures that you will take to minimize the impacts."9 The agency has the authority to ask for changes to be introduced in the final version of the plan. The statutorily defined content of a decommissioning plan includes environmental considerations and mitigation measures.

All platforms and other facilities must be removed within one year after the lease terminates, unless the agency grants approval to maintain the structure for other activities. A post-removal report is due within 30 days after removing a platform or other facility. The agency may approve partial structure removal or toppling in place for conversion to an artificial reef if certain conditions are met. After the decommissioning is complete, the agency must assess whether it has been undertaken properly. It is not clear whether the decommissioning phase of a project, as such, is subject to a separate environmental assessment and public comment period under the National Environmental Protection Act (NEPA).¹⁰

Detailed financial requirements for offshore operators appear in the OCSLA regulations regarding Bonding, 11 including the possibility of a lease-specific abandonment account pledged to meet decommissioning obligations.¹² Before lease exploration activities can begin -- at the latest when the proposed DPP is submitted -- the lessee "must furnish the Regional Director a \$500,000 bond that guarantees compliance with all the terms and conditions of the lease." ¹³ However, when a lessee can demonstrate "that wells and platforms can be abandoned and removed and the drilling and platform sites cleared of obstructions for less than the amount of lease bond coverage required ... the authorized officer may accept a lease surety bond in an amount less than the prescribed amount but not less than the amount of the cost for well abandonment, platform removal, and site clearance."14

The most recent MMS Notice to Lessees (NTL) relevant to financial responsibility describes Supplemental Bond Procedures for decommissioning liability. 15 Under the NTL, each lease-holder "with determined liability must be covered by a supplemental bond unless at least one lessee ... demonstrates to the satisfaction of the MMS that it has the financial ability to ensure that wells can be plugged and abandoned, platforms removed and the drilling and platform sites, including pipeline corridors, cleared of all obstructions, per MMS The initial review of potential decommissioning liability "generally" occurs when a lessee

^{9 30} CFR § 250.1726.

¹⁰ NEPA, 42 U.S.C. 4321 et seg.

^{11 30} CFR Part 256, Leasing of Sulphur or Oil and Gas in the Outer Continental Shelf, Subpart I - Bonding, § 256.52.

^{12 30} CFR § 256.56, to meet obligations under 30 CFR § 250.1703. See also 30 CFR §256.53. MMS[BOEMRE] also provides a model decommissioning trust fund agreement, for the Gulf of Mexico Region, see www.gomr.mms.gov/homepg/lsesale/bonding/ Model_Decommissioning_Trust_Agreement.pdf.

^{13 30} CFR § 256.53 (b)(1)(i).

¹⁴ 30 CFR § 256.53 (c).

¹⁵ MMS (BOEMRE) NTL 2008-N07, Effective Date: August 28, 2008, Notice to Lessees and Operators of Federal Oil, Gas, and Sulfur [sic] Leases and Pipeline Right-Of-Way Holders in the Outer Continental Shelf, Supplemental Bond Procedures.

submits an Exploration Plan (EP) for approval. Other events prompting review of decommissioning liability include when the DPP is submitted, when the EP or DPP are significantly revised, when any part of the lease is assigned, or "when a Notification of an Incident of Noncompliance (INC) is issued related to safety, environment, non-payment of royalty, or other violations of MMS regulations." The lessee may submit a third party indemnity agreement in lieu of a supplemental bond.

III. Decommissioning and Site Clearance - Canada

The federal government is responsible for offshore oil and gas development in Canada's North. The Department of Indian Affairs and Northern Development (DIAND) and the National Energy Board (NEB) have independent but complementary roles. DIAND administers the rights to oil exploration and the NEB authorizes drilling on the OCS. The Canada Oil and Gas Operations Act (COGOA) is the primary act governing offshore development in the Arctic.¹⁶ The Canada Oil and Gas Drilling and Production (COGDP) Regulations, ¹⁷ which came into effect in 2009, are one of several sets of regulations implementing COGOA.

The COGDP Regulations impose obligations in three general areas on operators seeking to suspend or abandon a well, beyond being able to locate it readily. Operators must also (a) ensure isolation of all hydrocarbon bearing zones from the rest of the environment and prevent formation fluid from escaping, (b) subsequently monitor well integrity to prevent pollution and (c) clear the seafloor so that other commercial uses of the sea are not impaired.¹⁸ No installation may be removed unless these requirements are met for the wells associated with it. The COGDP Regulations include site decommissioning at the initial authorization stage of a project, tying it to the project's overall plan and management system. Applicants for an NEB authorization¹⁹ "shall develop an effective management system that integrates operations and technical systems with the management of financial and human resources to ensure compliance with the Act and these Regulations."20 The COGDP Regulations specify that "a description of the decommissioning and abandonment of the site, including methods for restoration of the site after its abandonment" must accompany an application for authorization, with such items as "a description of the scope of the proposed activities," an execution plan and schedule, safety plans, environmental plans and contingency plans.²¹

Abandonment of fixed offshore production installations is covered by the Canada Oil and Gas Installations (COGI) Regulations.²² These provide that, where removal is a condition of a development plan approval, "the operator shall incorporate in the design of the installation such measures as are necessary to facilitate its removal from the site without causing a significant effect on navigation or the marine environment."23 The

¹⁶ Canada Oil and Gas Operations Act (R.S.C. 1985, c. 0-7).

¹⁷ Canada Oil and Gas Drilling Production Regulations (SOR/2009-315).

¹⁸ ld., arts. 56-58.

¹⁹ Under COGOA s. 5.(1)(b), the NEB may issue "an authorization with respect to each work or activity proposed to be carried on."

²⁰ COGDP Regulations, s. 5. (1).

²¹ COGDP Regulations, Part Two, s. 6.(k).

²² Regulations Respecting Oil and Gas Installations Used in Areas of Canada Under the Canada Oil and Gas Operations Act (SOR/ 96-118), for which COGOA is also the enabling legislation.

²³ Canada Oil and Gas Installations Regulations, (SOR/96-118).

Operator shall also ensure "that, on the abandonment of a well, the seafloor is cleared of any material or equipment that might interfere with other commercial uses of the sea."²⁴

Decommissioning of an oil or gas facility is subject not only to the COGOA regulatory regime, but also to the Canadian Environmental Assessment Act (CEAA).²⁵ CEAA considers decommissioning to be a "project" subject to environmental assessment requirements.²⁶ Thus, before beginning any of their offshore project activities, operators must prepare a comprehensive document detailing the environmental consequences of their project, including those of decommissioning the facility and site clearance.

As to financial responsibility, under the COGOA, an applicant to the NEB for an authorization "shall provide proof of financial responsibility in the form of a letter of credit, a guarantee or indemnity bond or in any other form satisfactory to the National Energy Board, in an amount satisfactory to the Board."²⁷ The holder of the authorization has a continuing obligation to "ensure that the proof of financial responsibility remains in force for the duration of the work or activity in respect of which the authorization is issued."²⁸

While not specific to decommissioning, ²⁹ under the Arctic Waters Pollution Prevention Act (AWPPA), ³⁰ s. 8.(1) (a) the Governor in Council may require "any person who engages in exploring for, developing or exploiting any natural resource on any land adjacent to the arctic waters or in any submarine area subjacent to the arctic waters ... to provide evidence of financial responsibility, in the form of insurance or an indemnity bond satisfactory to the Governor in Council, or in any other form satisfactory to the Governor in Council, in an amount determined in the manner prescribed by regulations" made under the Act.

IV. Observations and Conclusions

Compared to other aspects of offshore activity, regulations specific to offshore site decommissioning are relatively sparse in both the U.S. and Canada. The Arctic Council AOOGG themselves devote only a single page to the issue. Both systems require at least a basic description of decommissioning and site clearance plans at the outset of a project. Canada requests more information up front generally, including information on restoration plans. However, U.S. regulations provide greater detail as to decommissioning plans required at the end of a project, which are subject to agency review and a two-year timetable.³¹

²⁴ Id., s. 58.

²⁵ Canadian Environmental Assessment Act (1992, c. 37).

²⁶ Id., Art. 2.

²⁷ COGOA, s. 27. (1).

²⁸ Id

²⁹ Arctic Waters Pollution Prevention Regulations, C.R.C., c. 354, s. 11 - 15. The relevant sections apply "to civil liability for the deposit of waste by ships in arctic waters." s. 11.

³⁰ Arctic Waters Pollution Prevention Act, R.S., 1985, c. A-12.

³¹ U.S.: "a brief description of how you intend to decommission your wells, platforms, pipelines and other facilities, and clear your sites." 30 CFR § 250.255. Canada: "a description of the decommissioning and abandonment of the site, including methods for restoration of the site after its abandonment." SOR/2009-315, Part Two, 6.(k).

The existence of such detail and timetables in the OCSLA Regulations is just one way in which the U.S. decommissioning regulations take a more prescriptive approach than the Canadian regulations.³² Regulatory Impact Analysis Statement that accompanies Canada's 2009 OGDP Regulations observes that, with them, "the Government's role in management of safety, environmental protection and prevention of waste shifts from prescribing how companies must operate to identifying clear regulatory goals and objectives while ensuring that companies have processes in place to effectively identify and manage safety and environmental issues through the lifespan of each project from planning through decommissioning."33

Canada's regulation of decommissioning can be viewed as focusing more systematically on environmental effects than the United States in two ways: by requiring environmental effects of decommissioning to be addressed before a project even begins, and in CEAA's categorization of decommissioning as a separate project subject to the Act's requirements. The latter is in part a consequence of CEAA's approach of assessing environmental consequences of private projects, instead of assessing agency managed actions as is the case under NEPA in the United States. And, while the United States requires developers of projects in the Alaska OCS to assess environmental impacts of decommissioning, it does so at the end of the project and not as part of the overall planning for an offshore oil and gas development.

Neither country's decommissioning rules refer specifically to any of the international agreements mentioned in the Arctic Council AOOGG. The United States and Canada may be able to draw constructively on relevant IMO provisions referenced there. Neither system precludes partial, rather than complete removal of offshore structures, under lease-specific conditions. Whether this practice, which is more widely practiced in nonarctic waters, should be reconsidered for the Arctic is an appropriate topic for further discussion.

A question raised by the relatively more detailed U.S. provisions on financial responsibility is whether the NEB has greater discretion in establishing such requirements than do the Regional Directors who are generally responsible in the United States. However, both countries apply some element of a case-by-case analysis of financial responsibility requirements.

For a survey of the offshore permitting process in each country, a list of references, and a description of this White Paper Series please refer to the Letter and Overview posted at http://www.vermontlaw.edu/energy/news. This is the last of four White Papers. 1. Operating Practices, 2. Environmental Monitoring, and 3. Northern Communities: Participation in Decision-making - are also posted at the URL above.

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³² For further comparisons of the prescriptive and goals-oriented approaches to offshore regulation, see the Overview to this White Paper series, available at www.vermontlaw.edu/energy/news.

³³ Canada Gazette Part II, Vol. 143, No. 25, p. 2341.