Implementing the Arctic Offshore Oil and Gas Guidelines
in the United States and Canada

27 July 2010

Institute for Energy & the Environment
Vermont Law School
27 July 2010

Dear Readers,

The Institute for Energy and the Environment at Vermont Law School is pleased to present this White Paper Series on “Implementing the Arctic Offshore Oil and Gas Guidelines in the United States and Canada.” We began the project well before the fatal April 2010 Deepwater Horizon explosion at the BP Macondo well in the Gulf of Mexico. Our objective was, and remains, to compare relevant U.S. and Canadian laws and regulations for ways in which they comport with the [Arctic Offshore Oil and Gas Guidelines](http://www.vermontlaw.edu/energy) endorsed by the Arctic Council in 2009. We believe that the Guidelines, or AOOGG, can serve as a template for both countries as they revisit, revise and possibly even harmonize aspects of their regulatory systems for this fragile and resource-rich region. The series focuses on the western Arctic because both countries have offshore oil and gas jurisdiction there and share a boundary in the Beaufort Sea.

The Arctic Council was established in 1996 as a high level intergovernmental forum to promote cooperation and coordination among the eight Arctic States, with involvement of Arctic Indigenous communities as Permanent Participants. The Arctic Council Guidelines are non-binding but represent an international collaboration among oil and gas regulators from around the circumpolar North.

The series includes the attached overview of the offshore permitting process in the Canadian and U.S. Arctic, and white papers for each of the following AOOGG chapters:

- Operating Practices,
- Environmental Monitoring,
- Northern Communities - participation in decision-making, and
- Decommissioning and Site Clearance.

We will distribute one White Paper every week for the next four weeks. Each of the four papers will also be available at [http://www.vermontlaw.edu/energy/news](http://www.vermontlaw.edu/energy/news) as they are distributed.
Three AOOGG chapters are not covered in our series: Environmental Impact Assessment, Safety and Environmental Management, and Emergencies. In selecting our four topics we purposely excluded Emergency Response because separate Arctic Council projects address it in greater depth than the Guidelines, including the Working Group on Emergency Prevention, Preparedness and Response of the Arctic Environmental Protection Strategy.

Each paper surveys relevant provisions in the AOOGG, discusses corresponding U.S. and Canadian laws and regulations, and analyzes commonalities and gaps and the extent to which each system reflects Guideline recommendations. The same brief overview of the oil and gas permitting process in each country, as well as a list of references, accompanies each paper.

The Institute for Energy and the Environment at Vermont Law School serves as a resource on energy law and policy. The Institute develops scholarly, technical and practical publications; provides forums and conferences for professional education and issue development; and serves as a center for graduate research on energy issues, with an environmental awareness.

We welcome your questions and comments. Please address any feedback to Betsy Baker at the Institute for Energy and the Environment, bbaker@vermontlaw.edu.

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To review the Canadian and United States processes for permitting offshore oil and gas activity in the Arctic in light of the Arctic Council Arctic Offshore Oil and Gas Guidelines is to compare two systems attempting to balance traditional prescriptive regulation with systems management, performance-based and goal-oriented regulation.

“Goal-oriented regulation is a hybrid approach that includes prescriptive and goal- or performance-based elements. Prescriptive regulation dictates the means by which compliance is achieved, including what is to be done, by whom and how it is to be accomplished. Goal- or performance-based regulation sets regulatory goals or performance objectives to be achieved and allows companies to identify the means to meet them.”

Some argue that a performance-based approach, implemented properly, can reduce regulatory inefficiencies and help keep pace with technological change. Both countries combine elements of the two approaches, Canada more intentionally and the U.S. on a more piecemeal basis. We began this regulatory review months before the fatal April 2010 explosion of the Deepwater Horizon. In its wake, some have called for a return to a more prescriptive regulatory approach. We caution against a rush back to exclusive reliance on prescription and believe that there can be an appropriate role for goal orientation, systems management and reference to industry standards. Any approach must involve consistent and appropriate oversight and enforcement, as well as narrow prescriptive requirements for certain subject matters.

The gradual move away from prescription and towards performance and management systems for offshore development can be traced to the 1988 Piper Alpha explosion in the North Sea, which killed 165 people. Lord Cullen’s subsequent Report promoted systems management based on the best potential of industry to foster safety and environmental protection, and still shapes discussion today in the oil and gas regulatory world. We urge our readers to study two documents to better understand the debate in Canada and the United States: 1) The Regulatory Impact Analysis Statement annexed to the December 2009 amendments

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to the Canada Oil and Gas Drilling and Production Regulations\textsuperscript{3} and 2) the June 2009 Proposed Rule, Safety and Environmental Management Systems for [U.S.] Outer Continental Shelf Oil and Gas Operations, amending the Outer Continental Shelf Lands Act (OCSLA) regulations,\textsuperscript{4} for which the public comment period has concluded and the rule-making process is ongoing. It is also highly instructive to read the Canada OGDP Regulations and the existing U.S. OCSLA Regulations side-by-side. The former embodies systems management and comprehensive planning to promote safety and environmental protection whereas the latter often simply lists required steps, due dates and application processes, addressing at one point how an operator is to “protect the rights of the federal Government.”\textsuperscript{5} It should be noted that the 2009 Canada OGDP Regulations are recent innovations and only one of several relevant sets of offshore regulations, the remainder of which take a more traditional prescriptive approach. Finally, although the Arctic Offshore Oil and Gas Guidelines contain a chapter on Safety and Environmental Management, it is not the topic of an individual White Paper in this series. Rather, the four White Papers address the prescription-performance balance as it pertains to their individual subject matters: 1) Operational Practices, 2) Environmental Monitoring, 2) Northern Communities, and 4) Decommissioning.

A final introductory note: This overview and series of white papers focus on the western Arctic because both countries have offshore oil and gas jurisdiction there and share a boundary in the Beaufort Sea.

Overview of the U.S. Arctic Offshore Oil and Gas Regulatory Process

U.S. laws and regulations distinguish between the exploration phase and the development and production phase of offshore oil and gas activity. The Department of the Interior (DOI) has lead agency responsibility under the Outer Continental Shelf Lands Act (OCSLA) to regulate mineral exploration and development of the OCS. As of July 14, 2010, DOI delegates OCSLA responsibilities formerly handled by the Minerals Management Service (MMS) to three newly established Interior agencies:\textsuperscript{6} the Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, and Office of Natural Resources Revenue; the Alaska Region office is responsible for regulating offshore oil and gas activity in the U.S. Arctic. Multiple

\textsuperscript{3} Canada Gazette Part II, Vol. 143, No. 25, p. 2337 ff.
\textsuperscript{4} 30 CFR Part 250, 74 Federal Register, 28639 June 17, 2009.
\textsuperscript{5} 30 CFR § 250.204.
\textsuperscript{6} DOI Secretary Salazar “ordered the restructuring of the Minerals Management Service on May 19, 2010, separating the agency's resource management, safety and environmental oversight, enforcement and revenue-collection responsibilities and reassigning those functions to three newly established Interior agencies... These three new entities will replace the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM). In June, Salazar renamed the Minerals Management Service to be BOEM.” DOI Press Release July 14, 2010. See also DOI Secretarial Order 3302, June 18, 2010.
other federal actors are also potentially involved in permitting offshore activity in the U.S. Arctic, as seen in
the situation at the time of the Deepwater Horizon explosion: the Fish and Wildlife Service (FWS), also in the
DOI, splits oversight of Marine Mammal Protection Act (MMPA) authorizations and Endangered Species Act
(ESA) requirements with the National Marine Fisheries Service (NMFS), which is in the Department of
Commerce under the National Atmospheric and Oceanic Administration (NOAA); the Environmental
Protection Agency (EPA) reports directly to the President and oversees permitting under the Clean Air Act
(CAA) and the Clean Water Act (CWA); the U.S. Coast Guard typically becomes involved in reviewing and
implementing contingency and discharge prevention plans following a spill, and takes the lead in
implementing the U.S. Canada Joint Marine Pollution Contingency Plan and its 1983 Beaufort Sea annex.

This overview reflects requirements as of April 19, 2010, and, unless otherwise specified, does not address
legislative changes proposed since the Deepwater Horizon explosion the next day; thus it also refers primarily
to the Minerals Management Service (MMS) rather than its successor entities.

Under the system in place before the Deepwater Horizon incident, and now under review, OCSLA required
the Secretary of Interior to prepare and maintain a national oil and natural gas leasing program, which
consists of scheduled lease sales for discrete five-year periods. The MMS designated 26 Lease Areas for oil
and gas sales nationwide, of which the Beaufort Sea and Chukchi Sea areas, as well as several areas in the
Bering Sea, are considered part of the U.S. Arctic. All five-year lease plans underwent an Environmental
Impact Statement (EIS) review, including opportunity for public comment, to determine what areas might be
selected for lease sales. The leasing process for individual sales began with a call for information and
nominations, and notice of intent to prepare an EIS, followed by public comment periods on both. MMS
next identified the geographic area of proposed individual sales for environmental analysis under the National
Environmental Protection Act (NEPA). After a draft EIS, public hearing and the posting of the final EIS, NOAA
carried out a Coastal Zone Management (CZM) Consistency Determination under the federal CZM Act,
invoking the affected state's CZM plan(s). A proposed notice of sale was issued and usually available for
public comment approximately one month after the EIS was final; affected states had 60 days to submit
comments on the proposed lease sale. The MMS-Alaska Region was to solicit comments as between
sovereign entities from Alaska Native Tribal Governments that might be affected. After considering the
comments, the MMS issued a final notice of sale and solicited lease bids.

MMS issued a lease for blocks specified in a successful bid, following a fair market evaluation and other
checks. Before an operator could begin exploratory drilling activity it was to submit to MMS an Exploration
Plan (EP) and supporting information, such as CWA and ESA permits or MMPA authorizations as necessary,
Plans of Cooperation with subsistence communities and, finally, an Application for Permit to Drill (APD).
Similarly, it was to submit a Development and Production Plan (DPP) APD for every individual well before starting development or production activities. The operator was also to submit an oil spill contingency plan (OSCP), which was also subject to public comment, with or before the EP and DPP, as well as a hydrogen sulfide contingency plan. Once approved, the OCSP was then referenced in the EP and DPP. At both the exploratory and production stages, the MMS monitored compliance through audits and inspections.

**Overview of Canada's Arctic Offshore Oil and Gas Regulatory Process**

The federal government is responsible for offshore oil and gas development in Canada's North, leasing offshore oil and gas rights through a bidding and license system. The Department of Indian Affairs and Northern Development (DIAND) provides exclusive rights to exploration in certain areas and the National Energy Board (NEB), which is the primary offshore oil and gas regulatory authority, authorizes drilling. While the same rules apply across the Canadian Arctic, this white paper series focuses on the western Arctic and refers only in passing to Nunavut.

DIAND is responsible for governing the allocation of Crown lands to the private sector for oil and gas exploration in Nunavut, the Northwest Territories, and the northern offshore, as well as developing the regulatory environment, setting and collecting royalties, and approving benefit plans before development takes place in a given area. Management of the oil and gas resources in Canada's north attempts to balance northern and national interests in the context of Aboriginal land claims, promotes investment in the sustainable development of northern resources, and provides related information and advice. Relevant legislation for these activities includes the Canada Petroleum Resources Act (CPRA) and the Canada Oil and Gas Operations Act (COGOA).

DIAND shares regulatory responsibilities for management of northern oil and gas with the NEB, an independent federal agency that was established by the Parliament of Canada in 1989 to regulate international and interprovincial aspects of the oil, gas and electric utility industries. Under the COGOA, NEB regulates petroleum activity in Canada's frontier areas including Canada's Arctic offshore where it has the lead role in approval of operations including approval of exploration activities and specifically the drilling of wells. NEB's primary focus, when examining applications for oil and gas activities, is to ensure safety of individuals, protection of the environment and conservation of resources.
A number of additional federal, territorial and Aboriginal governments are also involved in oil and gas management in the Arctic. At the federal level, requirements for an environmental assessment prior to drilling are overseen by the Canadian Environmental Assessment Agency, with involvement of responsible federal bodies including, for example, the Department of Fisheries and Oceans, Environment Canada, and Natural Resources Canada. In the Western Arctic the Environmental Impact Review Board, co-management boards and other bodies established under the Inuvialuit Final Agreement play a significant role in the Beaufort Sea region. The Government of the Northwest Territories (NWT) and the NWT Water Board may also become involved.

Under the two federal acts that are the focus of this white paper series, CPRA and COGOA, a number of regulations provide additional direction for the management of oil and gas activities in northern Canada. Most recently, the Canada Oil and Gas Drilling and Production (COGDP) regulations were brought into force December 31, 2009. The COGDP regulations represent a more goal oriented approach than other elements of the existing regulatory framework, which still contains prescriptive components. The Canada Oil and Gas Installations (COGI) regulations and others will be discussed as appropriate.

Other federal acts discussed in this white paper series include the Arctic Waters Pollution Prevention Act, Canada Environmental Assessment Act, Canada Environmental Protection Act, Canada Oceans Act, Marine Liability Act, and Navigable Waters Protection Act. Additional acts, not addressed specifically in this series, but potentially relevant to oil and gas development in the Arctic include the Fisheries Act, the National Energy Board Act, and the Species at Risk Act.

As in the United States, Canadian laws and regulations distinguish between the exploration and production phases; however, in Canada, oil and gas “development” is considered part of exploratory activities. After acquiring leasing rights from DIAND, a project operator must obtain regulatory approval to explore and develop these rights by submitting a two-part development plan to NEB. After NEB approves the plan, the operator must obtain a Production License from DIAND, which is not an authorization to drill or produce but rather provides exclusive rights to an area. Part one of the plan submitted to NEB becomes a public document that describes how the field will be developed, including production rate, monitoring procedures and the costs and environmental factors associated with the proposed development. Part two remains a...
confidential document and must include technical or any other information necessary for a comprehensive evaluation of the proposed development.

As part of the application for a project authorization, the COGDP Regulations require submission of a contingency plan, a safety plan and an environmental protection (EP) plan before any exploration activity may begin. The contingency plan focuses on response and mitigation procedures and coordination, while the safety plan describes the procedures, practices and monitoring measures required to minimize safety risks. The EP plan requirements are extensive, for example, it must describe the studies undertaken to identify and evaluate potential environmental problems and summarize the measures to manage the environmental risks. Furthermore, the plan must list the structures critical to environmental protection and identify the person accountable for the plan and its implementation. A Social Economic Statement and an Environmental Impact Statement may be required for complex projects.

A Certificate of Fitness is required for every drilling, production, diving and accommodation installation used for offshore exploration or development activities. The Chief Safety Officer must approve the scope of work before issuing the Certificate of Fitness. Even after approval of a development plan, the operator must receive the following additional approvals before production: production operations authorization, petroleum transportation approvals for pipelines and production reporting/authorizations. After approvals have been issued, the NEB uses audits and inspections to monitor offshore activities for compliance with required safety, environment and conservation measures.

The federal Crown issues licenses for its offshore subsurface rights within the Inuvialuit Settlement Region (ISR), whose definition in the 1984 Inuvialuit Final Agreement (IFA) "encompasses the marine waters of both the Mackenzie Delta and the Beaufort Sea, up to the high water mark." Within the marine areas of the ISR, the Inuvialuit neither own sub-surface resources nor possess sea-bed interests, but section 11 of the IFA gives the Inuvialuit rights to submit relevant offshore activities to environmental screening by bodies established under the agreement.

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7 Under COGOA s.5.(1) (b) the NEB may issue an authorization for “each work or activity proposed to be carried on.”
8 Regulatory Roadmaps Project, NWT-ISR, 2001, at 2-4 and 6-1.
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References

Works referenced in preparing this White Paper series include but are not limited to those listed below, as well as laws and regulations cited in each white paper and websites of U.S. and Canadian federal agencies, ministries and departments:

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