Arctic Offshore Oil and Gas Guidelines White Paper No. 5

The Arctic Offshore Oil and Gas Guidelines in Greenland and The Russian Federation

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Prepared for the Inuit Circumpolar Council
by Vermont Law School Institute for Energy and the Environment

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Table of Contents

The Arctic Offshore Oil and Gas Guidelines in Greenland and the Russian Federation

Abbreviations

Chapter 1	ARCTIC OFFSHORE OIL AND GAS GUIDELINES
AOOGG	Arctic Offshore Oil and Gas Guidelines (Arctic Council)
BAT/BEP	Best Available Technology (or Techniques)/Best Environmental Practices
EIA	Environmental Impact Assessment
MARPOL	Marine Pollution (International Convention for the Prevention of Pollution from Ships)
OSPAR	Oslo Paris (see OSPAR Convention for the Protection of the Marine Environment of the North-east Atlantic)
PEIA	Preliminary Environment Impact Assessment
SEA	Strategic Environmental Assessment
PAME	Protection of the Marine Environment (Arctic Council working group)
UNCLOS	United Nations Convention on the Law of the Sea
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
Chapter 2	GREENLAND
AGSG	Act on Greenland Self-Government
ALARP	As low as reasonably possible
AOOGG	Arctic Offshore Oil and Gas Guidelines (Arctic Council)
BAT/BEP	Best Available Technology (or Techniques)/Best Environmental Practices
BMP	Bureau of Minerals and Petroleum (Greenland)
EIA	Environmental Impact Assessment
GEUS	Geological Survey of Denmark and Greenland
GINR	Greenland Institute of Natural Resources
HOCNF	Harmonized Offshore Chemical Notification Format
HSE	Health, Safety and Environment
IBA	Impact Benefit Agreement
ISO	International Organization for Standardization
MRA	Mineral Resources Act (Greenland)
NERI	National Environmental Research Institute
OSPAR	Oslo Paris (see OSPAR Convention for the Protection of the Marine Environment of the North-east Atlantic)
PAME	Protection of the Marine Environment (Arctic Council working group)
PEIA	Preliminary Environmental Impact Assessment
PLONOR	Pose Little or No Risk to the Environment (OSPAR list)
SGA	Greenland Act on Self-Government
SIA	Social Impact Assessment
SEA	Strategic Environmental Assessment
SEIA	Strategic Environmental Impact Assessment (Greenland's term for SEA)
SSA	Social Sustainability Assessment
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
Chapter 3	THE RUSSIAN FEDERATION
AOOGG	Arctic Offshore Oil and Gas Guidelines (Arctic Council)
EEZ	Exclusive Economic Zone (of the Russian Federation)
EA	Environmental Assessment

FZ	Federal Statute
ILO	International Labour Organization
IWGIA	International Work Group for Indigenous Affairs
KMAR	Khanti-Mansiyski Autonomous Region
KOAP	Administrative Violations Code of the Russian Federation
OGA	Oil and Gas Assessment (Arctic Council)
OVOS	Environmental Impact Assessment (Russia)
PAME	Protection of the Marine Environment (Arctic Council working group)
RAIPON	Russian Association of Indigenous Peoples of the North
SER	State Environmental Review
TTP	Territories of Traditional Use
UNDRIP	United Nations Declaration of Rights of Indigenous Peoples

Chapter 1. The Arctic Offshore Oil and Gas Guidelines (AOOGG)

I. The Arctic Offshore Oil and Gas Guidelines (AOOGG): Overview and Principles

The Arctic Council Ministers endorsed the Arctic Offshore Oil and Gas Guidelines on April 29, 2009.[1] Prepared by the Protection of the Marine Environment (PAME) working group of the Arctic Council, the Guidelines, or AOOGG, are not legally binding. Rather, a main purpose is "to define a set of recommended practices and outline strategic actions for consideration by those responsible for regulation of offshore oil and gas activities" and "to assist regulators in developing standards, which are applied and enforced consistently for all offshore Arctic oil and gas operators" (p. 4). The Guidelines "are intended to encourage the highest standards currently available. They are not intended to prevent States from setting equivalent or stricter standards, where appropriate" (id.). The AOOGG can thus be used to promote even stronger national and circumpolar standards, which are urgently needed if the Arctic States want to put in place adequate protections proactively rather than responding to a disaster such as the Exxon Valdez or Deepwater Horizon after the fact.

The Guidelines contain eight parts: 1. Introduction; 2. Arctic Communities, Indigenous Peoples and Sustainability; 3. Environmental Impact Assessment; 4. Environmental Monitoring; 5. Safety & Environmental Management; 6. Operating Practices; 7. Emergencies; and 8. Decommissioning. We concentrate on parts 2 (Indigenous Peoples), 3 (Environmental Impact Assessment), and 6 (Operating Practices), referencing the other parts as necessary.

This White Paper is based on the assumption that Permanent Participants and Arctic States alike[2] should use the Guidelines to inform policy decisions and to hold accountable all government representatives, development proponents and community advocates that seek to affect how oil and gas are being developed in the Arctic. A powerful tool for such accountability are the four General Principles (Part 1.3) set out at the start of the Guidelines. The principles are general enough to allow each country to adopt nationally tailored rules yet specific enough for critics to draw upon when a country's measures fall short of the agreed points.

The four General Principles of the AOOGG are the Precautionary Approach, Polluter Pays, Continuous Improvement, and Sustainable Development. The first two refer explicitly to the Rio Declaration Principles 15 and 16, respectively. The Guidelines discuss the Precautionary Approach in mandatory language: it "shall be widely applied by States to oil and gas activities according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific

[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.

[2] The Arctic Council membership comprises the eight Arctic States (Canada, Denmark/Greenland, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States) and the Permanent Participants (Aleut International Association-AIA, Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council, RAIPON and The Saami Council).

certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." By contrast, the Polluter Pays principle is stated as what national authorities "should" do, such as endeavoring to promote its application internally.

Under the principle of Continuous Improvement "All parties should continually strive to improve health, environment and safety by identifying the processes, activities and products that need improvement, and implement necessary improvement measures." In other words, there is never a resting point. Regulatory authorities, communities and developers should "continually strive" to improve all aspects of offshore oil and gas development, from procedures for decision making and public participation to technology for better safety and environmental protection; and from planning and bidding for lease sales to monitoring a site after decommissioning. Continuous improvement can occur under prescriptive regulatory systems but the performance-based approach discussed in part 5 of the AOOGG is better structured to allow regulators and operators to keep pace with rapidly changing technological developments without having to amend prescriptive rules with each change. Under performance-based regulations "the regulator sets specific quantifiable goals but does not specify how the operator must meet these goals. This system allows "the operator the flexibility to specify how they intend to comply with a regulatory body's mandate that operations be conducted safely and in an environmentally sound manner." AOOGG p. 25. Greenland and Russia each apply a hybrid of prescriptive and performance-based regulation, as discussed below in Chapters 2 and 3, respectively.

The Guidelines identify multiple components of the Sustainable Development principle, saying: "Arctic governments should be mindful of their commitment" to it in permitting offshore oil and gas activities. We highlight three items the Guidelines identify as part of sustainable development:

a) Promoting "the use of best available technology/techniques and best environmental practices" (BAT/BEP);
b) The need "to maintain hydrocarbon production rates in keeping with sound conservation practices as a means of minimizing environmental impacts"; and
c) "Broad public participation in decision making."

We place these points in context in Chapters 2 and 3 when discussing the permitting process generally and operating practices for each country.

Here and in the following chapters, we highlight the AOOGG references to two items: international law; and national circumstances. At page three the Guidelines provide: "Arctic petroleum activities must be conducted in compliance with applicable international law." This sentence follows specific

references to the UNCLOS, MARPOL, OSPAR, and London Convention treaties.[3] While not specified in the AOOGG, international human rights standards such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)[4] also qualify as a source of international law potentially applicable to arctic hydrocarbon activities. As discussed under point III., below, the Guidelines include selectively edited language from UNDRIP, Article 32 but do not identify it as such.

As to national circumstances, the Guidelines say, at page 4: "Policy development should take into account the domestic situation with respect to political, economic, legal, and administrative conditions. Consideration should be given to macro-economic effects, regional effects and potential environmental impacts." This leaves room for each Arctic State to adapt the Guidelines to a range of domestic circumstances, such as Greenland's recent acquisition of control over its mineral resources and Russia's policy vision for Arctic oil and gas as key to the future economic development of the entire country.

Immediately after pointing out the need to consider a country's domestic situation, the Guidelines highlight the importance of planning: "Such considerations should result in a staged opening plan, and ensure protection of areas of special environmental concern."[5] Implemented properly, staged opening could ensure that any development would be a) planned in advance, b) incremental, and c) environmentally protective. The Guidelines continue: "While these guidelines do not address socio-economic aspects in any detail, nor do they set standards for assessment of potential socio-economic effects of offshore oil and gas activities, these are nonetheless important to consider and integrate into the planning and conduct of exploration and development." The Guidelines do, however, contain clear statements about avoiding adverse economic and environmental impacts on indigenous peoples, as discussed below in Part III. Finally, the Guidelines encourage consideration of how the various bodies involved in decision making are engaged in "Institutional Strengthening" (AOOGG, Part 1.6).

II. Arctic Communities, Indigenous Peoples and Participation in the AOOGG

The Guidelines invoke public participation or the interests of northern and indigenous peoples and communities in many contexts, including in how environmental impact assessments are conducted. AOOGG Part 2 gets to the heart of the matter and opens by asserting that offshore oil and gas activity should be conducted to "avoid adverse impacts on the traditional ways of life,

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[3] United Nations Convention on the Law of the Sea, opened for signature Dec. 10, 1982, 1833 U.N.T.S. 397 (entered into force Nov. 16, 1994); International Convention for the Prevention of Pollution From Ships, Feb. 17, 1978, 34 U.S.T. 2407, 1340 U.N.T.S. 61; Convention for the Protection of the Marine Environment of the North-East Atlantic, opened for signature Sept. 22, 1992, 32 I.L.M 1069 (entered into force Mar. 25, 1998); Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Dec. 29, 1972, 26 U.S.T. 2403, 1046 U.N.T.S. 138.

[4] Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc.A/RES/61/295 (Sept. 13, 2007).

[5] Guidelines, Part 1.2, p. 4.

resource uses and cultural values of Arctic indigenous communities."[6] Part 2.2 provides: "In planning and executing offshore oil and gas operations, necessary measures should be taken, in consultation with neighboring indigenous communities, to recognize and accommodate the cultural heritage, values, practices, rights and resource use of indigenous residents. Arctic States, in cooperation with the oil and gas industry, should address the economic, social, health and educational needs based on equal partnership with indigenous people." Equal partnership is not defined.

Without specifying indigenous communities *per se*, the Guidelines acknowledge that participation of "local communities" is key to implementing the AOOGG. Part 1.6, Institutional Strengthening, states that implementation of the Guidelines requires institutional mechanisms at the local, national and regional levels to encourage transparent regulation and strict enforcement, and to "enable government agencies, local communities and non-governmental organizations to participate as appropriate in environmental management." Strong institutions are required to "make sure that scientific, technical and indigenous traditional knowledge are available to the processes and are effectively used;" that "communication between operators, government bodies [is conducted] in culturally appropriate ways and in local languages;" and that "adequate advance notice is given of public consultation meetings that take into account local communities' harvesting, hunting and fishing annual schedules" (AOOGG, 10). Notably, the term "co-management" does not appear anywhere in the Guidelines.

Meaningful Participation. The Guidelines refer twice to "meaningful participation" but only the first reference is specific to Arctic indigenous communities. Part 2.4 concludes that Arctic States should "improve cross-cultural communication methods to ensure full and meaningful participation of indigenous residents, including procedures to incorporate local knowledge," but the question "participation in what?" is not answered.[7] Part 3.3 on Strategic Environmental Assessment (SEA), recommends at page 17 that "all available regional baseline monitoring information be used [as part of an SEA], as well as meaningful stakeholder and public involvement, and incorporation of indigenous traditional ecological knowledge." Both of these quotations include meaningful participation and traditional knowledge in the same sentence. Such an approach is troubling because it potentially conflates two distinct and important ways for indigenous interests to be represented. This begs the question whether some parties view inclusion of traditional knowledge as a substitute for meeting the requirement of meaningful participation. This questionable pattern is repeated in the Guidelines' discussion of human environment under Part 1.5 on Potential Effects

[6] Part 1 uses similar language in stating the Guidelines' Goals for Environmental Protection during Oil and Gas Activities in the Arctic Area, which "should be planned and conducted so as to avoid ... adverse effects on livelihoods, societies, cultures and traditional lifestyles for northern and indigenous peoples; and adverse effects to subsistence hunting, fishing and gathering." Guidelines, Part 1.2, p. 6.

[7] Guidelines at p. 12. Part 2.4 contains multiple references to traditional knowledge and to human use of resources, providing that "Arctic States should: -- incorporate local and traditional knowledge into the decision-making process including the initial siting studies and disposition of resource use rights. For example, ethnological expert studies are being used in Russia in which scientific and local knowledge are combined; -- identify and appropriately manage oil and gas activities in ecologically and culturally sensitive areas; and -- for use in planning and decisions, identify species, which are resources for human use and their ecological requirements, and identify patterns of their use as resources."

of Oil and Gas Activities on Environment and Society, which says that "... in many Arctic countries, indigenous people are becoming active participants in oil and gas activities as decision makers, business owners, and employees." Yet it continues: "Project planning, environmental assessments and regulations should take into account indigenous and traditional knowledge when addressing local concerns and developing ways to mitigate possible environmental damage and negative socioeconomic effects" (p. 9).

Consultation and Integrated Management. Such repeated pairing of considering indigenous and traditional knowledge on the one hand and active participation in decision making on the other may result from the fact that meaningful participation is not clearly defined, either in the Guidelines or by national legal systems. The Guidelines fail to define either "meaningful participation" or the structure of participation, but do suggest steps that might improve consultation: "Advanced information collection and analysis may permit improved consultation and dialogue to proactively avoid conflicts as well as target enhanced socio-economic impact analysis where required. Arctic governments should consider the use of integrated management schemes" (Part 2.3). The Guidelines neither define "integrated management schemes" nor discuss why they are raised here, but the juxtaposition implies that integration cannot occur without two key concepts raised in the preceding sentence: consultation and impact analysis. The close relationship of the two concepts is confirmed by the fact that the Guidelines also discuss "Consultation" at length in Part 3.6, discussed below, which contains detailed recommendations for Environmental Impact Assessment, but fails to use the precise term "prior informed consent."

III. Environmental Impact Assessment (and Environmental Monitoring) in the Guidelines

Environmental Impact Assessment and Environmental Monitoring are related but distinct activities, and the Guidelines discuss them in two separate Parts. This White Paper focuses primarily on Part 3, Environmental Impact Assessment (EIA). It discusses Environmental Monitoring only as it relates to EIA. A main purpose of the EIA process is to "integrate environmental considerations in the overall planning from the beginning" of a project (p. 14). For Environmental Monitoring, the Guidelines emphasize the importance of a comprehensive environmental monitoring program during all phases of oil and gas exploration, development and production.

Part 3 of the Guidelines divides its discussion of EIA into six parts: 3.1 Purpose; 3.2 Technique and Process; 3.3 Strategic Environmental Assessment (SEA); 3.4 Preliminary Environment Impact Assessment (PEIA); 3.5 Environmental Impact Assessment (EIA); and 3.6 Consultations and Hearings. It also recognizes the diversity of national approaches to EIA and, in Annex D, describes EIA procedures in Canada, the Faroe Islands, Greenland, Norway, Russia, and the United States. Part 3.5 provides that EIA in the Arctic should consider "the recovery and regenerative capacity of the Arctic" (p. 18). The 1997 Arctic Environment Protection Strategy noted that EIA in the Arctic is unique because, for example, "the simple ecosystems and the slow breakdown of contaminants may influence fundamental assumptions in predicting the fate of pollutants. The lack of baseline

information may lengthen the EIA process compared with EIAs in temperate regions, and the importance of traditional knowledge in the Arctic demands new ways of collecting information."[8]

Part 3 of the Guidelines begins by identifying common elements of various EIA approaches: a long-term focus on effects and planning, consideration of cumulative effects, competing interests and alternative development options. It also says that PEIAs and EIAs "should consider" effects of oil and gas development on multiple elements, including "human society including indigenous ways of life," landscape fragmentation, subsistence ways of life, oil spill preparedness and response in sea ice conditions, permafrost and transition zones, ice dynamics, and the interaction of any of these elements. Part 3 calls for regional baseline environmental studies and monitoring, and for establishing these before activities begin, possibly as part of an SEA. SEAs are conducted on a larger scale than individual projects and deal with impacts of "a policy, plan or program initiative" (p. 16). The Guidelines also call for public participation at the SEA stage: "As part of an SEA it is recommended that all available regional baseline monitoring information be used, as well as meaningful stakeholder and public involvement, and incorporation of indigenous traditional ecological knowledge" (p. 19). Acknowledging that project impacts "may have international effects," the Guidelines also call for "intercompatible" monitoring programs "so that results may be compared from one year to another and from one place to another allowing changes to be measured and transboundary effects considered" (p. 14).

Part 3.2 includes Risk Analysis and Environmental Risk Analysis under EIA, reminding readers that both industry and regulators use information gathered for EIA purposes to decide whether to proceed with a project, to aid prevention and mitigation measures, and to choose alternative actions. The Guidelines specify that environmental risk analysis begins with defining and documenting risk criteria, which "must at a minimum incorporate national and international laws and standards. Consultation should also include input from local communities and interested parties for risk criteria analysis. If data is insufficient to define risk criteria, then the risk assessment should also incorporate the precautionary principle as reflected in Principle 15 of the Rio Declaration" (p. 16).

According to AOOGG Part 3.2, which describes the main features of the EIA process, there "should be a clear and accepted understanding of roles and responsibilities regarding the EIA process." Information and data used for EIA purposes "may be gathered from existing sources (scientific literature, databases, registers, indigenous and traditional knowledge, public hearings and comments, etc.) and necessary additional information may be obtained through baseline investigations or monitoring programs." There is no specific mention of industry sources of information for EIAs, but these are not precluded.

[8] Arctic Environment Protection Strategy 1997: Guidelines for Environmental Impact Assessment (EIA) in the Arctic. Sustainable Development and Utilization. Finnish Ministry of the Environment, Finland, p. 8.

Part 3.5 on Environmental Impact Assessment (EIA) lists eighteen components that EIAs should include, noting that EIAs should be based on "best available information" (p. 17). The eighteen factors are reproduced in Appendix I to this White Paper, in a table that compares the Guidelines to what the law requires EIAs to contain in Greenland and Russia. National law may, of course, require more or other than the seventeen factors to be considered. One of the factors is "other development options;" if authorities prepare the analysis, they may include a no action alternative. This component "should include an evaluation of the different alternatives and the reasons for choosing the selected activity" (p. 18). Cumulative effects appear twice in these seventeen EIA components, once under conservation biology accounting for disturbances and once under identifying all sources of noise.

Part 3.6 on Consultations and Hearings defines consultation as "an effective dialogue between and amongst regulators, potential operators and stakeholders." Guiding principles for consultation, which can take many forms, include the fact that "effective consultation is two-way" and "should be open and transparent" and occur over the lifetime of the project (p. 19). The principles emphasize the ongoing nature of consultation, which "in general ... should commence at the planning stage and continue throughout the lifetime of a project" (p. 19), and note that "[t]imely release and dissemination of critical information to potentially affected parties is essential," through such "alternative" communication methods as "translation into indigenous languages, multimedia, radio, TV, public meetings, etc." (p. 19).

Also under Part 3.6 on EIA, States should "consult and cooperate with the indigenous peoples concerned through their own representative institutions in order to understand and integrate their needs and concerns with any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources, such as oil and gas" (Id.). While traceable to the idea of prior informed consent, this Guideline provision also fails to adopt it. The language quoted parallels Article 32 of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), and did not appear in the 2002 version of the Guidelines, but it excludes the Declaration's specific reference to prior informed consent.[9] Where UNDRIP says "shall," the AOOGG excerpt uses "should"; the Guidelines version also replaces the UNDRIP phrase "in order to obtain their free and informed consent prior to the approval of" any project with "in order to understand and integrate their needs and concerns with" any project.

Part 3.6 is the primary section discussing consultation, community and indigenous involvement in EIA, but other segments of Part 3 also mention it. As seen above, Part 3.2 on Risk Assessment and Environmental Risk Assessment provides: "Consultation should also include input from local

[9] UNDRIP, art. 32(2): "States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources." Underlining added to show what phrases are included in the AOOGG language quoted above.

communities and interested parties for risk criteria analysis. ... The environmental risk analysis should be initiated as soon as practical to allow time if needed for public consultation" (p. 16). As already mentioned, Part 3.3 recommends that "meaningful stakeholder and public involvement and incorporation of indigenous traditional ecological knowledge" be part of an SEA (p. 17). Part 3.4 describes PEIAs as a "screening level review" that should include "consideration of input from early engagement with local communities potentially impacted from the development" (p. 17). Arguably this reference to "early" engagement is the closest the Guidelines come to indicating that prior informed participation of affected communities is desirable, without mentioning the issue of obtaining their consent. Part 3.5 says that EIAs should include "potential socio-economic effects and the effects on traditional ways of life of indigenous people" and that the EIA should contain "a summary in non-technical language, assisted with figures and diagrams" of the information in the EIA. "If need be, other means of displaying this information, based on cultural heritage of the local and indigenous residents, should be prepared" (p. 18).

Part 4 on Environmental Monitoring provides that environmental monitoring programs should be established during the development of an EIA, before oil and gas exploration begins. This practice will provide a regional baseline against which data collected throughout the project can be compared (Part 3). Environmental monitoring programs should continue throughout the decommissioning and reclamation process (Part 4.1). The "length and breadth" of the monitoring program will be "determined by the scale and duration of offshore oil and gas activities and the immediate or long-term impacts" (Part 4.1). The program should be regional in scope and "conducted so as to distinguish impacts due to oil and gas activities from other relevant sources" (Part 4.1). Among the aims and objectives of environmental monitoring is "compiling information to aid future decisions about where, when, how and if oil and gas activities should be allowed to occur" (p. 21).

IV. Operating Practices in the Guidelines

The Arctic Council AOOG Guidelines devote Part 6 to Operating Practices, identifying seven topics that responsible oil and gas development should address. The Guidelines interpret "operating" broadly, to cover every phase of oil and gas activity from prospecting and exploration to development, production, platform decommissioning and site clearance. The Guidelines do not always identify the phase of oil and gas activity to which the following seven topics apply.

1. Waste Management - AOOGG

Waste Management is the longest segment in the AOOGG discussion of Operating Practices. The Guidelines assume that overall initial planning can prevent pollution discharges during operations. They recommend preventive pre-construction management techniques such as planning for zero discharge of drilling wastes. They also examine different types of waste, such as fluid waste from

well testing, waste from drilling activities, production waste discharge, and hazardous waste handling and disposal.

2. Use and Discharge of Chemicals - AOOGG

The Guidelines recommend that operators should always use and discharge the lowest level of chemicals possible and assess chemical risk by examining biodegradability, bioaccumulation and acute toxicity using laboratories that follow established international testing standards.

3. Emissions to Air - AOOGG

The Guidelines identify air emissions as resulting from 1) combustion of fuel for power, 2) production, treatment, storage or transportation of oil and gas, and 3) gas flaring. They advise adopting practices to improve energy efficiency, such as using more fuel efficient equipment and encouraging energy conservation behavior. The Guidelines recommend adopting policy instruments and using best available techniques to reduce emissions and discharges from petroleum activities, emissions from flaring, and VOC emissions.

4. Design and Operations - AOOGG

The Guidelines recommend that for every stage of oil and gas activity, from exploration to decommissioning, operators should include and maintain safety and environmentally protective measures in the practical design of all relevant facilities. Ensuring "that wells remain under control at all times ... even while operating under extreme conditions" is of primary importance. AOOGG, 36. Effective practices include conducting periodic risk analyses "to follow the progress of activities in planning and implementation," updating these analyses "on a continuous basis and includ[ing them] as part of the decision making process." AOOGG, 36-38. Furthermore, "[b]lowout preventers and related equipment should be suitable for operation in subfreezing conditions. Drilling fluids, well casing programs, cements, emergency well shut-in procedures and well safety programs should also be suited to Arctic conditions, including moving ice and possible subsurface permafrost." AOOGG, 37.

5. Human Health and Safety - AOOGG

Operating practices must incorporate management systems, work procedures and control of materials to ensure employee health and safety. Management systems are covered extensively in a separate Part 5 of the AOOGG, and represent a move from a prescriptive to a performance-based approach to regulation. Health and safety management systems should cover training, testing of preparedness, establishing clear lines of communication and related matters. They should address the likely sources of hazards in arctic oil and gas operations, including "the harsh Arctic environment, the structural integrity of the installation, blowouts, fire and explosions, equipment failure, the transfer of personnel and supplies" and other causes.

6. Transportation of Supplies, Transportation Infrastructure and Training - AOOGG

The Guidelines specify on page 1 that they address all stages of offshore oil and gas activity except transportation of oil and gas. They recommend that planning for transportation, by air or water, of people, supplies, and infrastructure should be integral to any environmental impact analysis of a project, as should careful planning of supply routes, cargo handling and safe navigation and their effects. Operating practices should consider how supplies, the supply base and installations can operate with the least environmental impact. Operating practices should also adapt and apply other sections of the Guidelines regarding management systems, monitoring programs and emergency planning to transportation activities. Relevant International Maritime Organization standards should also be followed.

7. Training - AOOGG

The Guidelines recommend requiring personnel to have relevant training, including installation-specific emergency training, to ensure appropriate response in difficult and emergency situations. Training also promotes leadership and command ability, communication skills, team building, and crisis management.

Chapter 2. Greenland

Lisa Campion, Catherine Peterson and Zhen Zhang, with Betsy Baker

I. The Licensing Process for Offshore Oil and Gas Development in Greenland

A. Legal Background

Since January 1, 2010, when the Mineral Resources Act (MRA) enacted by the Greenland Parliament entered into force,[1] the Self-Government of Greenland has had the sole "right of use of and the right to exploit mineral resources in the subsoil in Greenland," MRA section 2(1). Greenland's exclusive authority over its own mineral resources has significant practical, political and legal implications that are inseparable from the Danish Parliament's Act on Greenland Self-Government (AGSG). The AGSG recognizes the people of Greenland as "a people pursuant to international law with the right of self-determination" (Preamble). The Preamble also states that the AGSG is expressly based on "a wish to foster equality and mutual respect" between Denmark and Greenland, and on an agreement between *Naalakkersuisut* (the Greenland Government) and the Danish Government as equal partners."[2] This expression of equality is another key to understanding the integral relationship between Greenland's self-governing status and its assumption of authority over mineral resources in Greenland.[3]

The AGSG entered into force on June 21, 2009, some six months before the MRA, and paved the way for the Greenland Self-Government authorities to "assume responsibility for the mineral

[1] Greenland Parliament Act No. 7 of 7 December 2009 on Mineral Resources and Mineral Resource Activities (the Mineral Resources Act or MRA). The Greenland parliament is referred to in this paper as the Inatsisartut.
[2] Act on Greenland Self-Government, 2009, No. 473, Preamble, Act no. 473 of 12 June 2009 (AGSG), Preamble. All quotations are from the Danish Statsministeriet Translation, available at http://www.stm.dk/_a_2957.html
[3] Explanatory Notes to the Bill (hereafter MRA Explanatory Notes), part 1.2, p. 6: "One of the reasons for the Act on Greenland Self-Government is a wish to ensure the highest possible degree of equality between Greenland and Denmark."

resource area" at the time of its choosing and after negotiation with the Danish Government.[4] Upon assuming a field of responsibility, the Self-Government authorities take on all related legislative and executive functions and, significantly, responsibility for financing any expenditures related to it. The AGSG also allows for the transfer of other areas of responsibility, both existing and not yet known, to the Greenland Self-Government authorities.[5] In implementing the MRA, the Self-Government of Greenland established its jurisdiction over the mineral resource sector and laid the basis and framework for its exclusive regulation of mineral resources and all activities related to them in Greenland.[6]

Politically and legally, both the AGSG and the MRA are important milestones on the path from Greenland's status as a Danish colony (1721-1953/54), to becoming a Home Rule government in 1979, to achieving increasing self-determination.[7] Self-governing Greenland remains a part of the Danish Realm, but the AGSG expressly provides for the future possibility of full independence from Denmark, leaving the decision to the people of Greenland and establishing procedures to begin that process should such a decision be reached.[8] Practically, the potential revenue that Greenland stands to earn from exploiting its natural resources is seen as providing the economic basis for possible eventual independence. Legally, the AGSG defines what is to be regarded as revenue from mineral resource activities to the Greenland Self-Government authorities, including relevant licensing and taxation revenue; it also provides a formula for reducing the Danish Government's subsidy to the Greenland Self-Government authorities as mineral resource revenues increase.[9] These are key components of the "new system for economic relations between the Greenland Self-Government authorities and the Danish Government" that have arisen under self-government.[10] Additional political aspects of the relationship between the AGSG and the MRA, and what these mean for self-determination, are discussed in Part II, below, including the AGSG's non-ethnic definition of the people of Greenland and the MRA's discussion of how the Government of Greenland (*Naalakkersuisut*) is to account to the Greenland Parliament (*Inatsisartut*) for the licensing of mineral resources that belong to all Greenlanders.

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[4] MRA Explanatory Notes, p. 1; The Greenland-Danish Self-Government Commission, Report on Self-Government in Greenland, Executive Summary, April 2008, p. 7 (hereafter Commission Report on Self-Government).

[5] AGSG § 2 and Schedule. The Self-Government may choose to assume, and negotiate with the Danish Government for the transfer of, 28 Areas including, e.g. aviation, family law, and ship registration and maritime matters. See also, Commission Report on Self-Government, above note 4, at 8.

[6] MRA Explanatory Notes, p. 2.

[7] See generally Commission Report on Self-Government, above note 4.

[8] AGSG § "21. (1) Decision regarding Greenland's independence shall be taken by the people of Greenland. (2) If decision is taken pursuant to subsection (1), negotiations shall commence between the Government and Naalakkersuisut with a view to the introduction of independence for Greenland."

[9] MRA Explanatory Notes, part 1.2.3, p.10, "The revenue definition."

[10] MRA Explanatory Notes, part 1.2.2, p. 8. Another key component is the Self-Government's responsibility upon assuming the mineral resources area to finance related administrative and other activities.

The MRA has the further practical effect of allowing the Self-Government authorities to determine entirely for themselves what companies are awarded licenses for arctic offshore oil and gas exploration and development in Greenland, under the regulatory framework they establish. Previously, Greenland Home Rule authorities played an active but shared role in the administration of mineral resources, beginning with a 1998 amendment to the old Mineral Resources Act, whereby "the authority to grant licenses and administrative tasks in the mineral resources area were transferred from the Danish Minister for Energy and the Mineral Resources Administration for Greenland under the Minister to the Greenland Home Rule Government and the Bureau of Minerals and Petroleum under the Home Rule Government."[11] The Greenland Bureau of Minerals and Petroleum (BMP) had thus been developing its expertise for over a decade under Home Rule before Greenland became self-governing under the AGSG and the MRA entered into force in 2010. In connection with the AGSG, it was also "agreed that the Greenland Self-Government will take over the Danish Government's holding of shares in Nunaoil," giving it full control over the national oil company of Greenland.[12]

The "basic principle" of regulating activities under the MRA "is that the activities may be performed only according to the Greenland Government's licenses pursuant to the provisions of the Act."[13] While this is "a continuation of the principles" of the 1998 Mineral Resources Act that was repealed by the MRA, Danish authorities no longer have a say in licensing decisions. Previously, they had participated through the now disbanded Danish/Greenland Joint Council on Mineral Resources in Greenland.[14] Though the Greenland Self-Government authorities have assumed responsibility for mineral resources, Denmark remains obligated under section 9 of the AGSG to provide consulting services, for payment and by renewable agreement, to assist the *Naalakkersuisut* in overseeing the management of Greenland's mineral resources. Under such agreements, the Danish Government provides *Naalakkersuisut* "with research of special relevance to mineral resource exploration in Greenland," AGSG § 9.(4).[15] As long as this research – conducted by the Geological Survey of Denmark and Greenland (GEUS) and the National Environmental Research Institute/Aarhus University (NERI) – is carried out for the purpose of meeting these AGSG obligations, it may be conducted without a license. The only other activities not requiring a license under the MRA involve the non-commercial collection of loose minerals by permanent residents of Greenland, pursuant to part 11 of the MRA.

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[11] MRA Explanatory Notes, part 1.1, p. 5.

[12] MRA Explanatory Notes, pp. 48-49.

[13] MRA Explanatory Notes, part 2.2, p. 21.

[14] See generally, MRA Explanatory Notes, part 1.1, p. 4. Greenland's 2009 MRA repeals Denmark's Act No. 335 of June 6 1991on Mineral Resources as amended. See Denmark's Consolidated Act No. 368 of 18 June 1998 on Mineral Resources in Greenland. The MRA also repeals relevant parts of the field of responsibility covered by the Act on the Continental Shelf in respect of Greenland. MRA § 98 and MRA Explanatory Notes p. 126. Both the MRA and MRA Explanatory Notes are available on the BMP website: http://www.bmp.gl/administration/legal_foundations.html.

[15] AGSG § 9.(1) and (2); MRA Explanatory Notes part 2.2, p. 22.

This chapter focuses on licensing requirements for large scale commercial operations under the MRA, which is now the primary act covering offshore oil and gas development in Greenland. Following Scandinavian legal practice, we rely on the Explanatory Notes as an essential source for understanding the Act. We also mention other relevant acts as necessary and several sets of BMP Guidelines, two of which are current: Guidelines for Preparing an Environmental Impact Assessment (EIA) Report (January 2011), and Guidelines for Social Impact Assessments (SIAs) (November 2009).[16] Apart from the BMP Guidelines we also refer to the NERI "Guidelines to environmental impact assessment of seismic activities in Greenland waters" (June 2010).[17]

The BMP is in the process of updating two other sets of Guidelines referenced in this paper: the Health, Safety and Environmental Guidelines (HSE), and the Draft Drilling Guidelines.[18] Until those updates are complete, individual licenses are the best place to find current requirements.[19] The BMP relies on its statutory authority under sections 76 and 86 of the MRA to set out the terms and conditions for HSE and drilling requirements in each individual license it grants.[20] The MRA is intended as a "framework act laying down the main principles for the administration of mineral resource activities" and authorizes the *Naalakkersuisut* to "lay down provisions in executive orders and standard license terms as well as specific license terms."[21] This approach ensures that a "dynamic interpretation" of the MRA (and, presumably, the licenses issued under it) is possible, "so that new knowledge and technology in the area can immediately be applied" without the need to amend the MRA.[22]

This dynamic framework approach to regulating offshore hydrocarbon activity reflects a move away from prescription and towards adaptive regulation in Greenland, although the BMP uses a hybrid of the two approaches.[23] The shift is best understood in the MRA's assertion of a balanced and integrated regulatory approach. The purpose of the MRA is set out in section 1(1): "to ensure

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[16] BMP Guidelines for preparing an Environmental Impact Assessment (EIA) report for activities related to hydrocarbon exploration and exploitation offshore Greenland, January 2011 (hereafter 2011 EIA Guidelines), to be posted on the BMP website in February 2011; BMP, Guidelines for Social Impact Assessments for mining projects in Greenland, November 2009 (hereafter SIA Guidelines). The SIA Guidelines "shall, with relevant modifications" also apply to petroleum projects when the BMP so requires, SIA Guidelines, 3. Under definitions in MRA § 5.–(1) "Mineral resources means hydrocarbons and minerals."

[17] Boertmann, D., Tougaard, J., Johansen, K. & Mosbech, A., NERI Technical Report no. 785. Guidelines to environmental impact assessment of seismic activities in Greenland waters. 2nd edition. National Environmental Research Institute, Aarhus University, Denmark, 2010, p.42 – available at: http://www.dmu.dk/Pub/FR785.pdf.

[18] BMP, Guidelines for submitting applications for approval of offshore installations for hydrocarbon exploration in Greenland, with particular emphasis on HSE (Health, Safety and Environmental) requirements, undated (hereafter HSE Guidelines); and BMP, Final Draft Exploration Drilling Guidelines (hereafter Draft Drilling Guidelines), March 2010.

[19] The text of the licenses are available upon request from the BMP. See LIST OF MINERAL AND PETROLEUM LICENCES IN GREENLAND, January 16, 2011, at http://www.bmp.gl/petroleum/current_licences.html: "All licence texts may be requested from BMP in Danish and in unofficial English and Greenlandic translations. The delineation of a licence area applied for (section I) can also be requested from BMP."

[20] Letter from the BMP, 24 January 2011, on file with authors.

[21] MRA Explanatory Notes, p. 30. See also MRA Explanatory Notes, pp. 112-13.

[22] MRA Explanatory Notes, p. 30.

[23] See MRA § 79 and its Explanatory Notes, pp. 108-09, as discussed below in Part IV, Operating Practices.

appropriate exploitation of mineral resources." This purpose is supplemented by section 1(2), which "aims to ensure that activities under the Act are performed appropriately as well as in a sound manner as regards safety, health, the environment, resource exploitation and social sustainability."[24] MRA section 3(2) establishes that the *Naalakkersuisut* will ensure that its Mineral Resource Authority considers mineral resource management and related activities "as a single integral whole." This "single, integrated regulatory process is to contribute to a holistic regulatory process in the technically difficult fields" and to guarantee professional expertise in the regulators.[25]

Two concepts in MRA section 1(2) are referenced repeatedly throughout the Explanatory Notes to the MRA: "social sustainability" and "best international practices." The former is a new concept that was not contained in the old Mineral Resources Act (and will be discussed in Part II, below);[26] the latter is tied directly to regulation as a dynamic process. Section 83 of the MRA combines both ideas by requiring that, in performing activities covered by their licenses, licensees are not only subject to the laws in force but must follow best international practices "in the area under similar conditions."[27] As in other arctic states, in Greenland the move away from regulatory prescription is seen most clearly in the areas of health and safety and environmental protection.[28] Section 79 requires the licensee's performance to reflect acknowledged best international practices for risk reduction in matters of health and safety, and will be discussed in Part IV, below, which deals with operating practices.[29] Section 52(1) highlights the importance of BAT for the MRA's provisions on environmental protection, placing "particular importance ... [on] preventive measures through the use of cleaner technology."

B. Steps in the Licensing Process

Greenland pursues a "one stop shop" policy that allows all hydrocarbon permits and approvals to be obtained from the BMP. Under the MRA, as with the mineral resources act it repealed, the "regulatory process applied by the Bureau of Minerals and Petroleum has been in accordance with the principle of a single, integrated regulatory process."[30] This approach "ensures that the necessary expert knowledge is established and that mineral resource activities are assessed as a whole, where all activities are assessed in relation to the overall impact on the environment and

[24] MRA Explanatory Notes, p. 20, p. 30.

[25] MRA Explanatory Notes, p. 34; see also pp. 2-3.

[26] MRA Explanatory Notes, p. 54.

[27] MRA Explanatory Notes, p 111. "Because of the dynamics characterizing the international mineral resource industry, a detailed specification of current standards would only be a snapshot and would soon be of no relevance."

[28] See, e.g. Canada Gazette Part II, Vol. 143, No. 25, Regulatory Impact Analysis Statement annexed to the December 2009 Amendments to the Canada Oil and Gas Drilling and Production Regulations, p. 2337 ff.; and U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement, 30 CFR Part 250 Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Safety and Environmental Management Systems; Final Rule, 15 October 2010, Fed. Reg., Vol. 75, No. 199, p. 63610.

[29] MRA Explanatory Notes, p. 108.

[30] MRA Explanatory Notes, part 2.3, p. 23.

society."[31] The geographic scope of the MRA "extends to the territorial land and territorial sea off Greenland and in the continental shelf area and the exclusive economic zone off Greenland."[32]

For the purposes of licensing large-scale commercial hydrocarbon projects, Greenland distinguishes between three phases: prospecting, exploration and exploitation (production).[33] To determine which areas should be opened for licensing, the BMP consults, inter alia, with NERI and the Greenland Institute of Natural Resources (GINR), both of which organizations "prepare regional Strategic Environmental Impact Assessments (SEIA)."[34] Once an area is opened for licensing following upon the completion of an SEIA, an applicant may apply for a non-exclusive prospecting license for up to five years,[35] or for an exclusive license for exploration and exploitation of mineral resources.[36] In either case the applicant must provide social and environmental impact information required by the BMP as part of the application process, as will be discussed below in Parts II and III. For an exclusive license, the applicant can respond to two types of invitations for exploration and exploitation licenses: 1) a licensing round for high-hydrocarbon-potential areas or 2) an open door invitation for applications at any time for areas with limited data.[37] To date, the licensing rounds have focused on western Greenland, where seven exploration licenses were granted in 2010, effective in 2011, bringing the total number of exclusive exploration licenses up to twenty.[38] Exploration and exploitation licenses are typically granted for ten years or, if special circumstances exist, up to 16 years; exploitation licenses cannot exceed 50 years and terminate when exploitation activities are discontinued according to law.[39] Exploitation can only be conducted by limited companies that demonstrate the requisite technical expertise and financial background for the activities in question.[40]

Selection of operators depends not only on financial capability but on compliance with best international practices, technical capability, and the quality and scope of health, safety and environment (HSE) programs.[41] These latter factors are discussed in Part IV. Exploration licenses may by their terms gradually reduce the area covered by the license.[42] For applicants under the

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[31] MRA Explanatory Note, part 2.3, p. 23.

[32] MRA §§ 9(1); MRA Explanatory Notes, p. 39. This provision defines the act's scope "in accordance with international law, including the United Nations Convention on the Law of the Sea of 10 December 1982" and point out that "the continental shelf off Greenland is not fully delimited in relation to neighboring states."

[33] MRA § 10. This white paper concentrates on requirements for large-scale projects, not on the requirements for operators of small-scale commercial operations, set out in MRA § 33.

[34] 2011 EIA Guidelines, p.7. See above note 15, regarding the Danish government's obligation to provide consultancy services for a fee and by agreement.

[35] MRA § 15. See also Greenland BMP, Standard Terms for Non Exclusive Prospecting Licences, March 2009.

[36] MRA § 16(1).

[37] MRA § 23; See also Greenland BMP, Strategy Regarding Exploration and Exploitation of Hydrocarbons in Greenland, 2003, p. 4; January 2010 Invitation to Apply for Licences for Hydrocarbon Exploration and Exploitation under the Open Door Procedure (hereafter 2010 Open Door Invitation Letter), available at http://www.bmp.gl/petroleum/application_procedures.html.

[38] Marianne Stigset and Niklas Magnusson, Greenland Awards Baffin Bay Licenses to Statoil, GED, Cairn , Nov. 27, 2010. Current information on the number of licenses is available from the BMP.

[39] MRA § 22; MRA § 16(5); MRA Explanatory Notes, p. 47.

[40] MRA § 16(3) and MRA Explanatory Notes, p. 45. Exceptions are allowed for small-scale operations under MRA § 32.

[41] 2010 Open Door Invitation Letter, above note 37.

[42] MRA § 16(2).

open door procedure, selection criteria also include what might be described as thoroughness or eagerness to explore and exploit, phrased as the "way in which the applicant intends to explore and begin exploitation of (bring into production) the area comprised by the application ... including the applicant's willingness and ability to explore thoroughly for hydrocarbons ... as demonstrated by the quality and scope of the proposed work programme and attendant documentation."[43] If two applicants have equal merits, an applicant's "willingness and ability to contribute to the Greenland and Danish authorities' continued development of a strategic environmental assessment" will be determinative.[44] Any special conditions that might give rise to HSE hazards must be disclosed at the application stage, along with a statement of how such hazards will be handled.[45]

The holder of an exploration license is automatically entitled to receive a license for exploitation subject to certain conditions, including conducting an Environmental Impact Assessment (EIA) and a Social Impact Assessment (SIA) for governmental approval,[46] however once an EIA is approved, identified significant negative impacts cannot stop a project. Furthermore, the licensee is obligated to conduct EIAs and SIAs when applying for approval of each specific exploration activity that may have an impact, for instance, an exploration drilling campaign. The results of both assessments will be announced to the public and such announcements may include notice of public hearings. Before any drilling can begin, whether for exploration or exploitation, the operator must submit an application for drilling approval that includes a detailed drilling program and site survey plan for the proposed well location, an oil spill contingency plan and emergency evacuation plan.[47] For "more complex works carried out in connection with activities covered by the bill and which may involve a special risk, including drilling of wells, shaft sinking, driving of drifts, etc.," the Greenland Government must approve each activity before implementation[48] and requires for each activity an EIA Report.[49] Before issuing the Approval to Drill, the BMP has the duty to ensure that the operator holds the necessary licenses[50] and has fulfilled multiple requirements, including: obtaining a guarantee of financial responsibility, a Declaration of Insurance, and a Certificate of Fitness for the drilling installation and vessels (standby, support and icebreaking); and documenting its HSE Management System. The BMP must further ensure that the following assessments have been conducted: "an appropriate safety assessment of the operator's facilities, equipment, operating

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[43] 2010 Open Door Invitation Letter, p. 5, above note 37.

[44] MRA Explanatory Notes, p. 63.

[45] Id., p. 6.

[46] MRA § 73 (1)(i) requires an EIA for exploitation of hydrocarbons, MRA § 73 (2) requires an EIA for activities that "must be assumed to have significant impact on the environment." Although the MRA Explanatory Notes for § 73 do not specify exploration as an activity requiring an EIA, exploration arguably falls under the statement that: "An activity will be subject to an EIA if it must be expected to be in conflict with the area's land use, relative wealth of natural resources, quality and regeneration capacity or sustainability of the natural environment," p. 104.

[47] See, e.g. BMP Draft Exploration Drilling Guidelines, pp. 4-6, and see above note 18, regarding current updating of the drilling guidelines.

[48] MRA Explanatory Notes, p. 115.

[49] 2011 EIA Guidelines, p. 5.

[50] However, the licensee is responsible for ensuring that permits or approvals required under other legislation are obtained, see MRA Explanatory Notes, p. 117.

procedures, contingency plans and personnel, and an EIA and SIA of the proposed programme."[51] Several of these elements are detailed below in Part IV.

If exploration reveals viable deposits, then exploitation is appropriate. Exploitation can begin after updates are made to the EIA and SIA, a hearing process is completed, and the government approves the related activities. By some estimates, production begins approximately 10 to 15 years after receiving the exploration and exploitation license.[52] While as much as 50 billion barrels of crude oil and gas may exist in Greenland's waters, with 18 billion barrels off the western coast alone,[53] there has been no commercial production as of February 1, 2011.

II. Arctic Communities, Indigenous Peoples, Participation and Social Impact Assessment in Greenland

A. Legal Background

The term "indigenous peoples," as used in the AOOGG, may play a different role in Greenland than in other Arctic states where Inuit are not in the majority. Upon entry into force of the Act on Greenland Self-Government (AGSG) on June 19, 2009, Greenland became a self-governing member of the Danish Realm and, some six months later, building on the plan in the AGSG, its Inatsisartut (Parliament) enacted the Mineral Resources Act (MRA) whereby the Self-Government took over full responsibility for the mineral resources sector. The AGSG and the MRA are integrally related, just as the economic benefits anticipated from Greenland's development of its own mineral resources are inseparable from its aspirations for increased political independence.[54] Given the current composition of the *Naalakkersuisit*, and the fact that indigenous Greenlanders or Inuit constitute approximately 88% of Greenland's population, Inuit now exercise practical control over oil and gas regulation in Greenland.[55]

Greenland's laws do not provide special protection or consideration for "indigenous peoples" as such when the government considers offshore development license applications. With the authorities of the Greenland Self-Government having assumed full responsibility for mineral resources, there is no longer any need to have special rules concerning the right of the original

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[51] Draft Drilling Guidelines, p. 4, above note 18.

[52] John Archer & Keiron Henderson, Greenland Awards New Oil Exploration Licenses, REUTERS. Nov. 29, 2010, available at http://uk.reuters.com/article/2010/11/29/greenland-oil-licence-idUKLDE6AS04M20101129.

[53] Id.

[54] See MRA § 1(1)-(2), § 2(1); and SIA Guidelines, p. 3: "Greenland aims at developing the mineral resources industry to one of the country's primary business sectors."

[55] Government of Greenland, Statistics Greenland 2010. Greenland in Figures, 7th revised edition (May 2010).

population to collect and extract mineral resources.[56] Yet Greenland expressly models its offshore practices, in part, on the AOOGG,[57] which recommends special consideration of "indigenous peoples" and their participation in oil and gas development decisions. Accordingly, this section of the White Paper describes ways in which Greenland's offshore impact assessment practices, absent such special protections, affect matters of potential importance to Greenland's Inuit population, such as subsistence use and cultural heritage.

The Preamble to the Act on Greenland Self-Government refers to "the people of Greenland" and recognizes them as "a people pursuant to international law with the right of self-determination." Thus, the AGSG reflects the language in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) that expresses the right of self-determination.[58] In August 2009, Greenland's Premier spoke of Greenland's partnership with Denmark as being "developed upon principles laid out in" the Declaration and the new developments in their relationship as "operationalizing" the rights affirmed in the Declaration.[59] Under current law, Greenlanders comprise a larger group than the indigenous people of Greenland and include all people entitled to vote; to acquire this privilege a person must be at least 18 years old, possess Danish citizenship, and have resided in Greenland for at least six months prior to the election or referendum.[60] The AGSG provides that any decision "regarding Greenland's independence shall be taken by the people of Greenland."[61] The Act does not use the terms indigenous people or Inuit, nor does being a Greenlander imply any particular ethnic background.[62]

Greenland's Bureau of Minerals and Petroleum, which implements the MRA, seeks to accomplish the act's goals through its "one stop shop" policy and by requiring a licensee to address numerous issues in an initial application before exploration or exploitation can begin.[63] Through the application process, and the Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA)[64] processes in particular, the applicant for a license must provide an in-depth analysis of the extent of the proposed activity's impact on environmental and socio-economic

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[56] MRA Explanatory Notes, p. 81.

[57] See, e.g. AOOGG, p. 81.

[58] Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc.A/RES/61/295 (Sept. 13, 2007). Article 3 provides "Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."

[59] Kleist, K., Statement, 2nd Session of the Expert Mechanism on the Rights of Indigenous Peoples, Geneva, 10-14 August, 2009, Geneva, 11 August, 2009, in Charters, C. and Stavenhagen, R. (eds), Making the Declaration Work. The United Nations Declaration on the Rights of Indigenous Peoples. Copenhagen 2009, Document No. 127. IWGIA, pp. 248-251.

[60] Kleist, M., Greenland's Self-Government, in Polar Law Textbook (2010), p.181, who also points out that "the right to vote and run for public office in Greenland may change, if the Inatsisartut ... should so decide," p. 182.

[61] MRA, Chapter 8, 21.-(1).

[62] Kleist, above note 60, pp. 182-183.

[63] Important among these are matters the MRA discusses in individual sections on Environmental Protection, Climate Protection, Nature Conservation, Environmental Liability and Responsibility, Compensation for Environmental Damage, Environment Impact Assessment (EIA), and Social Sustainability Assessment (SSA).

[64] Note that the MRA refers to SSA while BMP Guidelines use the term Social Impact Assessment or SIA. This White Paper uses the term SIA.

factors.[65] This section focuses primarily on SIA and provisions in the MRA upon which indigenous individuals can draw. The EIA process is discussed in detail in Part III.

The Government of Greenland acknowledges that all mineral resource development activity will have some impact.[66] While the MRA "contributes to … further developing Greenland,"[67] its offshore development rules simultaneously aim to mitigate negative environmental, social, and cultural impacts on all Greenlanders.[68] The BMP may deny approval for an activity if its decision is motivated by reasoned considerations, including consideration for matters relating to techniques, safety, health, the environment, resource utilization or social sustainability.[69] The MRA attempts to achieve a holistic regulatory process by considering economic benefits, environmental impacts, and social and cultural impacts prior to granting licenses.[70]

B. Cultural and Environmental Protection in the MRA

Opportunities for public participation in the Greenland EIA and SIA processes are better understood when viewed in the context of how the MRA addresses matters of potential importance to Inuit ways of life. The MRA does not use the terms subsistence or hunting, but speaks of protecting human, animal and plant life, natural and cultural values, and "rightful utilization of the soil, the sea, the subsoil or natural resources."[71]

Part 13 of the MRA specifically addresses Environmental Protection (sections 51-54), Climate Protection (sections 55-58) and Nature Conservation (sections 59-62), in order to "help to protect the environment so that society can develop on a sustainable basis respecting human conditions of life and respecting preservation of animal and plant life."[72] The inclusion of measures to protect the environment and the climate in an act that governs mineral resource activity is another reflection of the MRA's integrated approach to mineral resource development and lays the groundwork for an environmental policy "based on a holistic view of man's interaction with nature."[73] The government may lay down rules on any of these matters, including the applicability

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[65] SIA Guidelines, p. 4: " it is important to see the SIA in context with the rest of the project, especially the Environmental Impact Assessment that shall also be submitted with the application for an exploitation license"; Id. at p. 4, 1.3: regarding the role of the BMP – "In the SIA process, BMP has the regulatory authority to review, evaluate and approve according to these guidelines, as well as to facilitate public hearing processes."

[66] MRA Explanatory Notes, p. 29.

[67] MRA Explanatory Notes, pp. 2-3.

[68] MRA § 1(1)-(2).

[69] MRA Explanatory Notes, p. 55.

[70] MRA Explanatory Notes, p. 24, "In this way allowance can be made, for example, for the need to view and look after the economic and business interests of the Greenland society in the mineral resource and subsoil activities in relation to consideration for safety, health, the environment, resource utilisation and social sustainability."

[71] MRA § 51(2), § 55(2).

[72] MRA § 55(1)-(3).

[73] MRA Explanatory Notes, p. 89.

of provisions of "national or international rules, agreements, or guidelines" relevant to each area.[74] Once again, the Explanatory Notes view this as indicating how the entire MRA is intended to balance economic development with the need to limit environmental and social impacts.[75] If provisions under Part 13 overlap with provisions in the other parts of the MRA "that are also aimed at environmental conditions, then the rule that results in the highest environmental standard, which means the highest level of environmental protection, will take precedence."[76]

Through the MRA provisions on Environmental Protection, the *Inatsisartut* aims to "prevent, limit, and combat pollution and other impacts on the climate from activities that may directly or indirectly "endanger human health," "damage animal or plant life or natural or cultural values on or in the soil, in the sea or in the subsoil," "impair recreation values or activities," "limit the use of … resources," and "impair human conditions of life," amongst other things.[77] The MRA rules on Climate Protection aim to reduce the discharge of CO2 and other greenhouse gases and only allow activities which allow society to development on a sustainable basis.[78] Under the MRA sections on Nature Conservation, in granting a license or approving an activity or establishing and operating a facility that is subject to the MRA, the government "attaches importance to, for example, the consideration for avoiding impairment of nature and the habitats of species in designated national and international nature conservation areas and disturbance of species for which the areas have been designated."[79] Yet only if the Greenland Government deems it "expedient" may it require public hearings before making determinations as to the location of an activity or facility that is presumed to have significant impacts on a designated nature conservation area.[80]

Also relevant to subsistence and other Inuit interests, the MRA addresses environmental liability, responsibility for environmental damage, and compensation for environmental damage.[81] The law defines environmental damage broadly as pollution of the sea and soil or other "significant impact on nature, including human environment."[82] The MRA's definition of environmental damage also includes significant disturbances because of noise and vibrations.[83] Compensation for harm, including an impact on hunting, will be provided "within the framework of the principle on

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[74] MRA § 54; § 62.
[75] MRA § 54; 62; See also, MRA Explanatory Notes, p. 93.
[76] MRA Explanatory Notes, p. 88.
[77] MRA § 51-55.
[78] MRA § 55-(1); MRA Explanatory Notes, pp. 91-92.
[79] MRA § 59.
[80] MRA § 61(2) and Explanatory Notes, p. 93: "If the Greenland Government considers it necessary, the public must be heard concerning the assessment of the impacts on the location before the licence is granted. Such a hearing could be held in connection with a hearing on the EIA report. It will depend on a specific evaluation in each case whether a hearing should be held concerning an assessment of the impacts on the location. It depends on, for example, how extensive the impacts are and whether an EIA report is prepared at the same time."
[81] MRA §§ 63, 64.
[82] MRA § 63.
[83] MRA § 63.

proportionality."[84] The MRA mandates that compensation will be granted for a range of damages, "even if the damage is accidental."[85] Thus, an operator that is licensed is subject to strict liability for environmental damage, broadly defined and expressed in the law, including impacts on the human environment.

C. Public Participation under the MRA

The BMP publishes EIA Guidelines to assist license holding companies in preparing an EIA for activities related to hydrocarbons in offshore Greenland.[86] The EIA Guidelines require the licensee to address effects on animals and resources, along with impacts on Greenlandic people generally and on those who rely on subsistence activities.[87] For example, the licensee must address impacts on the "present use of natural resources," including hunting, fishing, and tourism; further, the "cumulative impacts with other human activities in and near the license area should be considered."[88] Therefore, the licensee must provide information ranging from a description of the environmental setting to an in-depth analysis of the potential impacts of the activity.[89]

The licensee must prepare an EIA for the entire region within which the proposed activity will take place[90] and base it on the Strategic Environmental Impact Assessments, as well as the latest data available from the National Environmental Research Institute (NERI) and other sources.[91] The fact that separate NERI guidelines exist on the "environmental impact assessment of seismic activities in Greenland waters"[92] (for companies preparing the EIA) reflects, if only indirectly, the regulators' acknowledgement of the significance of marine mammals to Greenland. The BMP EIA Guidelines call for the use of the Best Available Technology (BAT) and Best Environmental Practices (BEP) during all phases of activity to minimize environmental impacts.[93] The BAT and BEP standards are another indication of Greenland's hybrid of prescriptive and performance-based regulation.

Besides the EIA, which is discussed in detail in Part III, the MRA requires that a licensee prepare a Social Sustainability Assessment (SSA) if a project is "assumed to have [a] significant impact on social conditions."[94] The MRA introduced the idea of social sustainability to the Greenland

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[84] MRA Explanatory Notes, p. 94, referring to MRA § 61(5).
[85] MRA § 67-69.
[86] 2011 EIA Guidelines, p. 5.
[87] 2011 EIA Guidelines, Appendix 1.
[88] 2011 EIA Guidelines, Appendix 1.
[89] 2011 EIA Guidelines, Appendix 1.
[90] 2011 EIA Guidelines, 5.
[91] 2011 EIA Guidelines, 8. NERI acts as Greenland Government's scientific independent advisor.
[92] Boertmann, D. et al., NERI Technical Report no. 785, above note 17.
[93] Note that the MRA uses the term to Best Available Techniques in §§ 52 and 53.
[94] MRA § 76. On the comparability of SSA and SIA, see also above note 64 and the text accompanying below note 97.

legislation[95] and considers the SSA report requirements as providing an "holistic account of the social impact of the activities."[96] The BMP issues Social Impact Assessment (SIA) Guidelines for mining operations that it may adapt as appropriate to the petroleum sector.[97] The BMP SIA Guidelines use the term SIA instead of SSA and this white paper uses the terms interchangeably, referring primarily to SIA.

Before the BMP approves a license for any offshore activity the license applicant must engage relevant stakeholders in consultations and public hearings, with the purpose of creating maximum development and employment opportunities and mitigating potential damages.[98] In its SIA, the applicant must "appropriately demonstrate, describe and assess the direct and indirect impacts of the activity on social conditions as well as interaction between the conditions, mutual impact between conditions and cumulative effects of impacts on the conditions."[99] Although the SIA Guidelines provide considerable detail about the process and content of an SIA report, and the MRA requires the report to discuss alternatives, neither the MRA nor the SIA Guidelines explains the criteria used to determine if a project has a "significant impact on social conditions."[100] If either the government or licensee determines that a project has a "significant impact on social conditions," the licensee must prepare an SIA.[101] The BMP only grants the license or activity approval if it approves the SIA.

Even if the SIA results indicate a potential for social impacts, the BMP may still license the project, and the MRA appears to give the BMP broad discretion in making such a decision.[102] An SIA must identify and analyze the potential impacts of the proposed action or development on the human environment, and recommend initiatives to realize both direct and indirect sustainable development opportunities, as well as ways to mitigate negative impacts.[103] However, the guidelines define human environment broadly to include effects on business and employment, income, socio-economic features, land and resource use, health, and socio-cultural features.[104]

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[95] MRA Explanatory Notes p. 106.

[96] MRA Explanatory Notes, p. 106.

[97] SIA Guidelines, p. 3. While the Guidelines are designed for the mining sector, the BMP may also apply them, with appropriate adjustments, to petroleum development. The SIA guidelines also apply to mineral and exploration and exploitation projects.

[98] See, e.g., SIA Guidelines, p. 10 (4.3): maximize development opportunities and mitigate negative impacts; and p.4 (first bullet point): "to engage all relevant stakeholders in consultations and public hearings."

[99] MRA § 77(1)-(4).

[100] BMP, SIA Guidelines, p. 3, begin by identifying issues that "are essential in the Greenlandic context: Recruiting Greenlandic labour; Engaging Greenlandic enterprises; Focusing on knowledge transfer (e.g. education programmes) in order to ensure long term capacity building of local competence within the mining industry and mining support industries; Preserving socio-cultural values and traditions." However, these factors appear to present desired outcomes rather than offer criteria for determining impact. The MRA Explanatory Notes for §78 provide that it is "highly relevant to ensure that local authorities have been involved" with respect to assessing local employment and education matters, p. 109.

[101] Ultimately this appears to be BMP's decision. In theory, if the licensee assumes a project will have a significant impact on social conditions, then the licensee can prepare the SIA even if the BMP does not first mandate it. We are not aware of such a situation.

[102] MRA § 76.

[103] SIA Guidelines, p. 3.

[104] SIA Guidelines, p.3.

Accordingly, even if the SIA indicates cultural impacts, the government may find that the economic benefits of a project outweigh the cultural impacts and ultimately grant the license.

The licensee and the BMP use the SIA to develop a Benefit and Impact Plan for implementing an Impact Benefit Agreement (IBA). One purpose of an SIA is to "assist mining companies and their consultants in implementing the Impact Benefit Agreement."[105] The IBA is intended to create maximum development opportunities and mitigate damages arising from social impacts. As a general rule, the IBA shall be signed at the same time that the BMP approves the exploration activity.

One main objective of an SIA process is to "engage all relevant stakeholders in consultations and public hearings."[106] The SIA envisions that the licensee will consult with stakeholders about their immediate interests in the project. Stakeholders may include, but are not limited to, the public sector, non-governmental organizations, affected communities, individuals and relevant companies.[107] In an effort to prepare stakeholders for "meaningful discussions," the licensee must provide a "non-technical brief" prior to public meetings.[108] By identifying key issues through public participation, the SIA aims to "ensure that concerned groups have an influence on topics to be studied by the SIA."[109] Even though the licensee is responsible for preparing the SIA, the BMP aims to facilitate the public hearing process using its regulatory authority to do so.[110] The BMP also assists the licensee in identifying stakeholders. The government offers a list of known organizations that the licensee should consider when identifying "stakeholders." The Inuit Circumpolar Council and Hunters and Fishers Association are among those included in the list.[111] When an SIA report has been submitted to the Greenland Government, the Government must "publish a notice to this effect to ensure the public's involvement and possibility of voicing their opinions."[112] The SIA Guidelines thus require the licensee to consult with the public. The extent of the BMP obligation to consult directly with the public is less clear: as the decision making body it "will involve and circulate the report to relevant stakeholders in the review process for their views" and "during the hearing process assist the licensee with arrangements of public meeting(s)."[113]

[105] SIA Guidelines, p. 3: "These Guidelines have been prepared to assist mining companies and their consultants with guidance in preparing Social Impact Assessments of mining projects in Greenland."
[106] SIA Guidelines, p. 4.
[107] SIA Guidelines, Appendix 2.
[108] SIA Guidelines, p. 6.
[109] SIA Guidelines, p. 6.
[110] SIA Guidelines, p. 4.
[111] SIA Guidelines, p. 16.
[112] MRA Explanatory Notes, p. 107.
[113] SIA Guidelines, pp. 6-7.

The BMP is responsible for publishing the licensee's SIA information on the BMP website or in "another suitable manner."[114] The licensee must document the stakeholder's involvement and prepare a brief in "layperson's terms."[115] The brief must list which stakeholders were involved, describe the process used to involve them, summarize their comments, provide actual comments, and offer "plans for the future process of involving stakeholders."[116] The licensee must also include the entire SIA analysis in its application packet and must also prepare a non-technical summary of the SIA report.

When reviewing and approving a SIA the Greenland Government may require the licensee to provide further material, or insist that special conditions be studied further.[117] "In that connection, it is highly relevant to ensure that local authorities have been involved, especially with a view to obtaining information and assessments of local labour market conditions and educational measures to provide the required qualified labour."[118]

A range of opinion exists among Greenland Inuit regarding offshore drilling and the adequacy of the regulatory process. For example, in April 2010, the Inuit Circumpolar Council Greenland communicated to the BMP what it perceived as inadequacies in the impact assessment consultation process for considering license applications.[119] The ICC Greenland letter did not request that the BMP ban offshore drilling. Instead, it requested increased involvement in the public hearing and consultation process required by the MRA when the BMP is considering offshore activity and a more transparent process generally. ICC Greenland contends that the current application process leads to a failure to consult adequately with Greenlandic people who subsist off the land. It called on the Greenland Government to uphold its obligations of "free, prior, and informed consent" under international law, including the UN Declaration on the Rights of Indigenous Peoples.[120] The MRA makes only general reference to international standards and can be read in such a way that those standards apply only to the activities licensed by the government and not to the licensing processes themselves.[121] ICC Greenland also suggested that the government start a "consultation on consultation" activity, meaning a commission or other

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[114] MRA § 76(4). The SIA Guidelines do not appear to require such publication.

[115] SIA Guidelines, p. 6.

[116] SIA Guidelines, p. 16.

[117] MRA Explanatory Notes, p. 107.

[118] Id.

[119] Inuit Circumpolar Council (ICC) Greenland Statement to the Bureau of Mineral Petroleum Regarding the Capricorn Greenland Exploration 1, Exploration Drilling Programme, Sigguk Block, Disko West, Greenland, (April 21, 2010) .

[120] While not referring specifically to prior informed consent, Greenland's Premier recently stated "we are in the Government of Greenland also striving to implement important provisions of the Declaration in our day to day work." Changes and Challenges in Greenland, Mr. Kuupik Kleist, Prime Minister, Speech of May 2010 at http://uk.nanoq.gl/Emner/News/News_from_Government/2010/05/TheCircle_Changes_Challenges.aspx

[121] See generally, MRA sec. 83 (stating "(1) Activities covered by licences granted under the Greenland Parliament Act must be performed in accordance with acknowledged best international practices in the area under similar conditions. Activities must be performed appropriately as well as in a sound manner as regards safety, health, the environment, resource utilisation and social sustainability") (emphasis added).

meaningful Greenland-wide process to conduct a comprehensive review of impact assessment practices. Given ICC's position as a Permanent Participant on the Arctic Council, ICC Greenland requested that the BMP consistently share more information with the public in order to allow ICC to be able to fulfill its obligations to Greenland at the international level.

By contrast, at the June 2010 assembly of the Inuit Circumpolar Council in Nuuk, Greenland's premier, Kuupik Kleist, an Inuit, responded to public concerns about the government's approval of exploratory drilling on Greenland's west coast.[122] He requested respect for such decisions, because "the exploitation of our enormous riches in oil and mineral resources is indisputably the promising and real potential for a greater degree of economic self-sufficiency."[123] He assured the assembly that Greenland's predominately Inuit government "refus[es] to compromise for quick cash."[124] Despite the range of views in Greenland's Inuit community regarding the potential benefits and harms from greater offshore oil and gas development, Greenlanders have in common the desire to avoid unnecessary environmental and social impacts. As suggested above and in Part V below, the processes in place can provide more specific criteria to improve meaningful participation by those potentially affected by those impacts.

III. Environmental Impact Assessment in Greenland

Greenland's environmental impact assessment process involves two types of assessment: a Strategic Environmental Impact Assessment (SEIA) and an Environmental Impact Assessment (EIA). A third type of assessment, the Social Impact Assessment (SIA), is covered in Part II, above, but it is considered an integral part of the overall assessment process.[125] The BMP has developed Guidelines for preparing an EIA that draw on multiple sources: on EIAs prepared for similar operations elsewhere in Greenland, on regional SEIAs for such areas as the Disko-Nuussuaq region, on the PAME Arctic Offshore Oil & Gas Guidelines endorsed by the Arctic Council, and finally on the OSPAR Guidelines for Monitoring the Environmental Impacts of Offshore Oil and Gas Activities.[126]

Prior to opening any areas in Greenland for oil and gas development, BMP works with the Greenland Institute of Natural Resources (GINR) and the National Environmental Research Institute (NERI) of Denmark to develop a strategic environmental impact assessment (SEIA) for that

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[122] Canadian Broadcasting Corporation, Greenland Defends Offshore Drilling, June 29, 2010 ,available at: http://www.cbc.ca/canada/north/story/2010/06/29/inuit-greenland-drilling.html

[123] Id.

[124] Id.

[125] MRA Explanatory Notes, p. 56.

[126] MRA Explanatory Notes, p. 88; 2011 EIA Guidelines, above note 16, p. 9.

region.[127] The SEIA helps the Greenland Government/BMP determine if licenses should be granted in the specific region.[128] The "SEIA identifies knowledge and data gaps, highlights issues of concern, makes recommendations for mitigation and planning and identifies restrictive and mitigative measures and monitoring requirements that must be dealt with by the companies applying for oil and gas licenses in Greenland."[129] Before the Greenland Government/BMP opens an area for licensing, it can involve the public in the Strategic Environmental Impact Assessment process as follows: once the SEIA is completed, and before the BMP opens the area for licensing, the public may comment upon the SEIA, but no mechanisms are specified by law or in the guidelines that indicate just how or when public participation should occur.[130]

After the SEIA is completed and approved, the region studied is opened for license applications. The applicant shall provide documentation indicating a high standard for HSE management systems, the necessary experience and expertise, and a good track record of environmental performance in past operations. In the license period, each licensee has the responsibility of preparing an EIA for each of the activities the licensee plans to undertake, including exploration,[131] production, development, transportation and decommissioning.[132] However, the initial EIA shall assess and focus on exploratory drilling, including scenarios of possible subsequent activities related to production, transport and decommissioning.[133] The EIA must cover the entire region that may be affected, including land facilities and trans-boundary aspects.[134] Once the licensee completes the EIA, it must update and further develop the EIA as needed.[135] This may include updating the EIA during the transition between each of the activities or if circumstances require changes to the initial EIA. As with SIAs, EIAs are to be made available as public documents on the webpage of the Greenland Government.[136] NERI works in coordination with BMP and the operators to update a database of all the environmental data collected for hydrocarbon activities. Licensees are required to work with BMP to prepare a plan for acquiring supplementary EIA data and must submit their data to NERI in formats agreed upon by NERI and BMP.[137] BMP, NERI and the licensees have access to the data collected within this EIA database.[138]

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[127] 2011 EIA Guidelines, above note 16, at 7.
[128] See our discussion of the AOOGG at Chapter 1, AOOGG, 82.
[129] Id.
[130] 2011 EIA Guidelines, Appendix 2.. Beyond the flowchart, neither the MRA nor the EIA contains a clear statement mandating public comment at any particular stage for the SEIA, other than prior to an area being opened for licensing.
[131] Although not expressly required by the MRA, an EIA may also be required as part of an application for an exploration license, if the activity "must be assumed to have significant impact on the environment." MRA § 73; MRA Explanatory Notes, part 5, p. 29, and p.103.
[132] 2011 EIA Guidelines, 5.
[133] Id.
[134] Id.
[135] Id.
[136] 2011 EIA Guidelines, 6; MRA § 75.-(1) (identifies "another suitable manner").
[137] 2011 EIA Guidelines, 8.
[138] Id.

When preparing an EIA, licensees are to review the region's SEIA as well as the BMP's EIA Guidelines and the "Environmental Oil Spill Sensitivity Atlas for the West and South Greenland Coastal Zone," prepared by NERI.[139] The EIA Guidelines provide that the EIA should contain the following sections: extended non-technical summary,[140] introduction, environmental setting, activities and emissions, impact analysis along with environmental management plan, waste handling plan, monitoring and reporting plan, emissions and discharges plan, monitoring environmental impacts of routine operations plan, monitoring environmental impacts of accidents plan, decommissioning plan, and environmental study plan (ESP).[141] The ESP must be prepared and updated in collaboration with BMP, NERI and GINR. The ESP describes how environmental data will be procured and prepared to secure the data necessary to update the EIA when needed, as well as baseline data for assessing the impact of accidents. Site surveys at exploratory drill sites are also part of the ESP. Finally, the EIA must also contain a decommissioning plan along with alternative development options, including reasons for selecting the chosen plan.[142]

The EIA process applies and utilizes the Best Available Technology (BAT) and Best Environmental Practice (BEP) during all phases of hydrocarbon activity to minimize environmental impacts.[143] The MRA attaches importance to the licensee's use of "the best available techniques" to limit pollution and increase environmental protection, a requirement deriving from the OSPAR Convention on the Protection of the Marine Environment of the North-East Atlantic.[144] Part IV of this chapter describes some of these sections in further detail and how they relate to Greenland's mix of prescriptive and performance-based regulation.

After the BMP approves the ESP, the collection of baseline data and site surveys begins.[145] Afterwards, stakeholder consultation may be required by the Greenland authorities for preparing the EIA, which can be conducted in connection with preparing the SIA.[146] The EIA report is then

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[139] Id.

[140] MRA Explanatory Notes, p. 105 (stating "According to the proposed provision, the applicant and – insofar as this is not the same party – the entity responsible for an activity subject to an EIA are obliged to prepare and submit the EIA report as well as a non-technical summary of the report to the Greenland Government").

[141] 2011 EIA Guidelines, 10-12.

[142] Id. at 11-12.

[143] Id. at 9.

[144] MRA § 52 and 2011 EIA Guidelines, p. 9. The OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic refers instead to Best Available Techniques, which is defined in Appendix 1 of Convention and "means the latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste." OSPAR defines BEP as "the application of the most appropriate combination of environmental control measures and strategies."

[145] 2011 EIA Guidelines, 6.

[146] Id. at 7.

submitted to BMP to initiate the public hearing process.[147] The public hearing process takes a minimum of 6 weeks to allow the local authorities, stakeholders, and the general public time to submit their comments on the EIA to the licensee.[148] BMP makes electronic versions of the report available on the Greenland government webpage.[149] BMP may also require the licensee to provide physical copies of the EIA for public review at local municipality offices, libraries, etc.[150] After the public hearings, the licensee must forward all comments received to the BMP, discuss and incorporate the relevant comments into the EIA, and submit the final version of the EIA, along with a list of changes made to jt, to the BMP for government approval. The comments submitted through the public hearing process may be made public.[151]

The Government of Greenland (*Naalakkersuisut*) approves[152] the final version of the EIA, which can take up to eight weeks.[153] After approval, no further changes can be made.[154] The Government takes into account NERI and GINR's evaluation of the EIA.[155] NERI and GINR act as BMP's scientific advisors and offer an independent analysis of the EIAs submitted, with a particular focus on the expected environmental impacts and the described BAT and BEP solutions.[156] Once the EIA is approved, the Government may approve the licensee's application.[157]

Under the MRA, neither the licensee nor the government are required to consult with the public regarding environmental protection, climate protection, or nature conservation, unless the government determines through the licensee's EIA that the activity will cause significant impacts. However, if a project is assessed to have significant impacts under the rules on EIA in Part 15 of the MRA, the BMP may only license or approve the project "after the public and authorities and

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[147] Id.; MRA Explanatory Notes, p. 93. "If the Greenland Government considers it necessary, the public must be heard concerning the assessment of the impacts on the location before the licence is granted. Such a hearing could be held in connection with a hearing on the EIA report. It will depend on a specific evaluation in each case whether a hearing should be held concerning an assessment of the impacts on the location. It depends on, for example, how extensive the impacts are and whether an EIA report is prepared at the same time."

[148] 2011 EIA Guidelines, 7.

[149] Id.; and MRA Explanatory Notes, p. 105. "According to the proposed provision, the Greenland Government must publish a notice when an EIA report has been submitted to the Greenland Government. The provision also implies that such notice must be published on the Greenland Government's website or in another suitable manner, for example in a national newspaper or through the electronic media."

[150] 2011 EIA Guidelines, 7.

[151] Id.

[152] MRA Explanatory Notes, p. 31. "Part 15 of the bill contains rules to the effect that a number of activities may be performed only if an environmental impact assessment (EIA) has been made and a report on the assessment has been approved by the Greenland Government."

[153] 2011 EIA Guidelines, 7.

[154] Id.

[155] Id.

[156] Id.

[157] MRA Explanatory Notes, p. 103. "The activities mentioned thus imply that an EIA report must be prepared before the Greenland Government can decide whether to approve an exploitation and closure plan." "According to the proposed provision, the Greenland Government cannot grant a licence for or approval of an activity subject to an EIA before an EIA assessment has been made and a report thereon prepared."

organizations affected have had an opportunity to express their opinion."[158] In other words, if the licensee's mandatory EIA identifies that an offshore drilling project presents significant environmental impacts, then the BMP must provide a public comment period. Even though the MRA does not define the duration or format of this public "opportunity," the EIA Guidelines specify that an "opportunity" for a public hearing must be provided, in which stakeholders can express an opinion on the EIA.[159] The MRA also fails to state how the public is to be notified of the opportunity, other than to suggest use of the government website or "another suitable manner"[160] of notification; again, the EIA Guidelines specify in more detail how the public is to be notified.[161]

IV. Operating Practices in Greenland

The following discussion is organized according to the seven topics that the Arctic Council AOOGG suggest responsible offshore development should address.[162] We emphasize that Greenland's rules do not use this seven-part division but that many requirements in the Mineral Resources Act (MRA) and the various BMP Guidelines on EIA, HSE and Exploration Drilling,[163] although found in different docouments, would also fit within the AOOGG categories. The items discussed below are but a sampling of relevant provisions. We remind the reader that the HSE and Exploration Drilling Guidelines are in the process of being updated.[164]

1. Waste Management[165]

Developers must implement a waste handling plan to estimate and report the type and amount of polluting substances, including produced water, oil, heavy metals and other contaminants used in all activities.[166] The plan should also describe how discharges are minimized by applying BAT and BEP and how compliance is ensured as well as how polluting discharges are monitored.[167] No mention is made of zero-discharge of drilling wastes, an AOOGG recommendation, but "Norwegian standards and the OSPAR convention standards shall as a minimum be applied

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[158] MRA §§ 55; 61. See also MRA Explanatory Notes, p. 92 and p. 93.
[159] 2011 EIA Guidelines, pp. 6-7.
[160] MRA § 75-(1).
[161] 2011 EIA Guidelines, p. 7.
[162] See our discussion of the AOOGG in Chapter 1 of this White Paper.
[163] See, above notes 16 and 18.
[164] Id.
[165] AOOGG, 31.
[166] 2011 EIA Guidelines, Appendix 1.
[167] Id.

regarding release of drill cuttings and mud."[168] "Only water based drilling muds will be approved."[169] "Heavy fuel oil and oil with a sulphur content >1.5 % will not be allowed."[170]

Part 13 of the MRA sets forth rules on environmental protection that "aim to prevent, limit and combat pollution of and other impact on nature and the environment caused by activities that may: … Damage animal or plant life or natural or cultural values on or in the soil, in the sea or in the subsoil." MRA section 51(2)(ii).[171] The rules in Part 13 of the MRA aim to "Limit the use and waste of raw materials and other resources" and "promote recycling and limit problems in relation to the disposal of waste." MRA section 51(3)(ii) and (iv).

2. Use and Discharge of Chemicals[172]

The EIA Guidelines require that "all chemicals used or discharged must have been tested and evaluated for their eco-toxicological properties according to OSPAR Harmonized Offshore Chemical Notification Format (HOCNF)."[173] In addition, they must be registered accordingly in the Danish Product Register PROBAS. Licensees must select chemicals that will pose the lowest risk to the environment, especially those listed on OSPAR's PLONOR list (Pose Little or No Risk to the Environment).[174] The Draft Exploration Drilling Guidelines require the mud program to include a detailed description of the types of drilling fluids and their chemical components (section 4.11, p. 9). Mud containing "chemicals which can be particularly detrimental to the health or environment" cannot be used unless BMP (and possibly other authorities) approve their use (section 5.12, p. 13). No specific reference is made to operators discharging the lowest level of chemicals possible, as recommended by the AOOGG,[175] but the licensee must ensure for offshore operations generally that the safety and health risks are "reduced to a level 'as low as reasonably practicable.'"[176] Furthermore, the BMP EIA Guidelines advise that BAT be used when discharging possible contaminants into the water.[177]

3. Emissions to Air[178]

Under Part 13 of the MRA section 53(2), operations and procedures must ensure "that pollution, emissions, the generation of waste and the use of resources will be reduced in the best possible

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[168] 2011 EIA Guidelines, 15.
[169] 2011 EIA Guidelines, Appendix 1.
[170] 2011 EIA Guidelines, Appendix 4.
[171] MRA Explanatory Notes, part 1.2.1, p. 8, states: "Environmental powers under the Act for Greenland on Environmental Conditions, the Marine Environment Act and the order on its entry into force for Greenland are exercised by the Bureau of Minerals and Petroleum as part of the overall regulatory process for mineral resource activities."
[172] AOOGG, p. 34.
[173] 2011 EIA Guidelines, Appendix 1.
[174] Id.
[175] AOOGG, p. 34: "The amount of chemicals used and discharged should be as low as possible."
[176] MRA Explanatory Notes, p. 108.
[177] 2011 EIA Guidelines, p. 6.
[178] AOOGG, p. 35.

manner." One developer's EIA states that any flaring will require permitting by Greenland and will be monitored; it also states that "combustion emissions from plant and machinery … aircraft … [and] potential well test flaring" will be mitigated by a plant and machinery maintenance program, using low sulfur fuel and limited flaring."[179]

The BMP EIA Guidelines require an estimate of amounts and how emissions are minimized by BAT and BEP as well as creating a monitoring plan describing how emissions are monitored.[180]

4. Design and Operations[181]

Every step of oil and gas activity should include and maintain safety and environmentally protective measures in the practical design of the facilities.[182] Before issuing an Approval to Drill, the BMP must ensure satisfactory evidence of a level of overall safety and fitness. The operator must obtain a valid certificate of fitness for the drilling installation and support vessels. The operator's facilities, vessels, equipment, operating procedures, contingency plans and personnel all have to undergo a safety assessment. The site survey of the drilling site includes numerous design assessments. The survey looks at limitations on foundation positioning and anchoring, the presence of other objects, and the possibility of penetrating zones with varying or abnormal pressures.[183] Drilling program requirements includes a 24 hour report on drilling, lithology and weather and sea conditions to be provided daily to BMP. The Exploration Drilling Guidelines go into much more detail on numerous points, including well characteristics and operation and the design and operation of blowout preventers and other well control mechanisms.

5. Human Health and Safety[184]

The MRA devotes section 79 to Health and Safety on Offshore Facilities and requires the licensee to "ensure that the enterprise in question ensures and supervises that the health and safety risks are identified, assessed and reduced as much as is practically possible." MRA section 79(3). "It follows from the provision that the licensee is ultimately responsible for ensuring that the ALARP principle has been implemented on the offshore facility. ALARP is an abbreviation of "as low as reasonably practicable"."[185] Placing the burden on the licensee to show that it has the necessary

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[179] Cairn Energy PLC, Non-Technical Summary, Environmental Impact Statement, Exploration Drilling Programme, Sigguk Block, Disko West, Greenland, Wells 3 and 4(Version 1)15, 16 (2010), available at http://dk.nanoq.gl/Service/Hoeringsportal/Milj%C3%B8vurderinger/2010/~/media/DE522772DAD74814AC4C0910D0D9BFE8.ashx.

[180] 2011 EIA Guidelines, Appendix 1.

[181] AOOGG, p. 36.

[182] Draft Exploration Drilling Guidelines, above note 18, p. 4.

[183] Draft Exploration Drilling Guidelines, p. 6.

[184] AOOGG, p. 38.

[185] Explanatory Notes to the MRA, p. 108.

systems and practices in place to reduce risk is the MRA's clearest move from prescriptive to performance-based regulation. Under section 79, the licensee must not only comply with all mandated rules but must also follow best international practices for reducing health and safety risks: "The ALARP principle means that the enterprises are responsible for reducing health and safety risks as much as is practically possible from time to time in accordance with technical and social developments, in contrast to previously applied legislative practice where the authorities were responsible through regular issuance of rules."[186] The BMP requires every applicant for an Approval to Drill to submit evidence that it has a Health Safety and Environmental (HSE) management system in place.[187]

The BMP HSE Guidelines require the operator's HSE system to comply with international standards and practices and considers the ISO 14001 standard on Environmental Management Systems an acceptable basis.[188] The system must be implemented at every phase of operations and must include procedures for responsibility and competence, training, communication, supervision and control, and contingency plans. The MRA stipulates health and safety requirements for offshore facilities.[189]

6. Transportation of Supplies and Transportation Infrastructure[190]

As noted above,[191] the Arctic Council Guidelines specify on page 1 that they address all stages of offshore oil and gas activity except transportation of oil and gas. Accordingly we refer only briefly to tangentially related transportation issues. The Danish Maritime Agency must approve mobile offshore installations for safety during navigation, a matter distinct from HSE requirements.

7. Training[192]

Hiring competent personnel in all phases of operations and giving them the necessary training are among the minimum objectives required of an HSE policy for offshore operations in Greenland.[193]

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[186] Id. "Operationally, the requirement of reducing the risks according to the ALARP principle involves first and foremost unconditional observance of all specific requirements and directions as well as threshold limits in rules and legislation. Secondly, enterprises must assess whether it is possible to completely remove or further reduce the health and safety risks. The latter also applies in cases where legislation contains no specific directions or threshold limits, but only broad and functional requirements. ... The principle is also in accordance with the general rule of the provision in section 1(2) of the bill, which prescribes that activities covered by licences under this bill must be performed according to acknowledged best international practices in the area."

[187] Draft Exploration Drilling Guidelines, p. 4.

[188] The Arctic Council AOOGG contain an entire chapter on Management Systems (Part 5, which we do not analyze in this white paper). Part 5 references the ISO 14000 series as applicable to the offshore industry.

[189] MRA § 79. See also Explanatory Notes to the MRA, p. 27: "The working environment area is regulated by the Greenland Working Environment Act; see Consolidation Act No. 1048 of 26 October 2005. The Working Environment Act applicable to Greenland applies to onshore work and to exploitation of mineral resources, including also offshore activities." However the rules of Part 17 of the MRA on health and safety in connection with offshore facilities replace the Greenland Act on Working Environment as regards the areas to which they apply. With the MRA in force the Greenland Act on Working Environment thus only applies for onshore activities.

[190] AOOGG, p. 39.

[191] See our discussion of the AOOGG in Chapter 1 of this White Paper.

[192] AOOGG, p. 40.

[193] HSE Guidelines, p. 2.

The operator is responsible for determining whether further personnel training is necessary.[194] The guidelines do not dictate specific training activities for leadership and team building. The MRA provisions on Environmental Protection require that best available techniques be used when a party "must ensure that an employee receives the necessary training and instructions in performing the work in a manner so that environmental risks are identified, assessed and reduced as much as practically possible."[195] The ISO Standard 14001 referenced in the HSE Guidelines require management systems to address training.[196] The HSE Guidelines state that, at a minimum, the licensee's HSE policy should include "giving personnel all necessary training."[197] In addition, licensees "must ensure that they have sufficient competent personnel to perform the tasks involved in exploration drilling and to monitor compliance with and control of HSE requirements." To satisfy this requirement, licensees "must currently assess the need for further training."[198]

V. Evaluating Greenland's Offshore Rules Against the AOOGG

Greenland offers a single and integrated system for licensing and regulating offshore hydrocarbon activity. Greenland expressly models its Guidelines for preparing EIAs on the PAME "Arctic Offshore Oil and Gas Guidelines" (AOOGG) endorsed by the Arctic Council in 2009. The offshore regulatory system as described on paper in the Mineral Resources Act (MRA), in force January 2010, and related documents, is inseparable from Greenland's achievement of Self-Government and assumption of responsibility for the island's mineral resources under the Act on Greenland Self-Government in June 2009.

The MRA aims to be comprehensive and holistic, as does the one stop shop regulatory approach that allows all hydrocarbon permits and approvals to be obtained from the Bureau of Minerals and Petroleum (BMP), which implements the MRA. One example of the MRA's comprehensive scope is that an entire law on environmental protection, climate protection and nature conservation is included within the act (Part 13), as are rules on environmental liability and responsibility that define environmental damage, enforcement mechanisms and compensation, establishing a strict liability standard (Part 14).

As noted in Chapter I of this White Paper, the Arctic Council Guidelines contain four general principles on which arctic offshore oil and gas activities "should" be based: the Precautionary

[194] HSE Guidelines, p. 4.
[195] MRA § 53.-(5)(iv).
[196] See our discussion under point 5. Human Health and Safety, above; and HSE Guidelines, above note 18, pp. 2-3; MRA § 79.
[197] HSE Guidelines, p. 2.
[198] HSE Guidelines, p. 4.

Approach, Polluter Pays, Continuous Improvement and Sustainable Development. Below we discuss these principles on their own and as they relate to the three focal points of this Greenland chapter: Indigenous Participation/SIA; EIA; and Operating Practices.

Neither the MRA nor its Explanatory Notes uses the exact terms "precautionary approach" or "polluter pays," but the Act's treatment of the responsible party for environmental damage reflects the polluter pays principle. It is harder to find language in the MRA or Explanatory Notes that takes an explicit stance for the precautionary approach;[199] however, the Act does contain an entire section on climate protection, whose aim is to "help protect the climate so that society can develop on a sustainable basis respecting human conditions of life and respecting preservation of animal and plant life." In discussing climate protection as part of environmental protection, the MRA Explanatory Notes state "it should be pointed out that the concept includes both the very local micro-climate, the CO2 contribution of the activity as well as the consequences of future climate changes such as rises in sea levels."[200]

One way that Greenland promotes continuous improvement of health, safety and environment (HSE) practices and processes is by using a hybrid of prescription and performance-based regulation and treating the MRA as a framework act that requires best international practices. This allows the government to develop additional requirements in standard form and individual licenses and allows for dynamic interpretation to keep up with technological changes without amending the MRA.[201] The MRA also adopts the ALARP (as low as reasonably possible) standard for health and safety risk reduction on offshore facilities, which means that "enterprises are responsible for reducing health and safety risks as much as is practically possible from time to time in accordance with technical and social developments, in contrast to previously applied legislative practice where the authorities were responsible through regular issuance of rules."[202]

As defined in the AOOGG, the principle of Sustainable Development (p. 7) involves promotion of Best Available Techniques/Best Environmental Practices (BAT/BEP), "integration of environmental and social concerns into all development processes," and "broad public participation in decision making," amongst other factors. The need for sustainable development of Greenland's offshore resources is inherent in the inseparability of its new authority over mineral resources and its move toward greater self-determination and possible independence. The requirement for BAT/BEP standards is repeated throughout the Act, Explanatory notes and the guidelines produced by the BMP (e.g. EIA and Draft Drilling Guidelines).

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[199] But see MRA Explanatory Notes, p. 88: "In the case of overlapping or coincidence the rule that results in the highest environmental standard, which means the highest level of environmental protection, will take precedence."

[200] MRA Explanatory Notes, p. 88.

[201] MRA Explanatory Notes, p. 30. See also MRA §1(2).

[202] Explanatory Notes to MRA §79(1), p.108.

As stated on paper, Greenland's new requirements for Social Impact Assessment (SIA) integrate environmental and social concerns, insofar as licensees must conduct an SIA (and EIA) for each individual exploration activity that may have an impact, and before they will be granted exploitation licenses. The SIA also places an unprecedented importance on limiting social impacts, which is particularly significant to indigenous people. However, ICC Greenland has proposed a "consultation on consultation" to address its concerns that consultation with the public has been insufficiently transparent and inadequate in impact assessment processes. BMP has the regulatory mandate to facilitate communication between the public and a licensee but also has discretion in such isolated matters as whether it is "expedient" to give "the general public ... an opportunity to express its opinions on the assessment of the impacts on the location of an activity or facility that is presumed to have significant impacts on a designated national or international nature conservation area" before a license or an approval is granted.[203] In addition, public participation at the SEIA stage is not mandatory.

Beyond Greenland's express reliance on the AOOGG as a model for its EIA procedures, it adopts some version of almost all seventeen of the categories the AOOGG recommend for inclusion in an EIA (see the table in Appendix II). Under any circumstances, the approval of exploitation plans "may be rejected if the rejection is motivated by reasoned considerations, including consideration for matters relating to techniques, safety, health, the environment, resource utilization or social sustainability."[204] The approach effectively gives the BMP complete discretion to deny licenses for environmental and social impacts even if the applicant submits an acceptable application. It also supports the AOOGG principles of Continuous Improvement and Sustainability.

As for operating practices, the Greenland regulatory system touches on all seven of the categories the AOOGG suggests should be considered over the life of a project: waste management, chemical use and discharge, emissions to air, design and operations, human health and safety, transportation of supplies (as opposed to hydrocarbons themselves) and training. Greenland law does not appear to organize waste into the categories suggested by the Guidelines (fluid waste, drilling waste or production waste), but this seems insignificant, e.g. drilling fluids are discussed instead under chemical discharge. Under air emissions (and waste), the MRA covers the Guidelines' call for fuel efficient equipment or efficient behavior by use of the best available technique standard, MRA section 52(1), attaching "particular importance ... to preventive measures through the use of cleaner technology." Under MRA section 52, BAT means "the most efficient and advanced level of the development of activities and operating methods" and their suitability "to prevent, or where this is not possible, generally limit the emissions and other environmental

[203] MRA §61(2) and MRA Explanatory Notes, pp. 93-94.
[204] MRA Explanatory Notes, p. 55.

impacts as a whole."[205] Requirements to report every 24 hours on drilling, lithology and weather and sea conditions meets the AOOGG suggestion for design and operations that risk analysis follow progress of activities, updating analysis on a continuous basis. BMP is currently finalizing its Draft Drilling Operation guidelines, making individual licenses all the more important as a source of requirements for operating practices. For example, detailed requirements for personnel qualifications, experience and training, including safety and emergency training, are contained in individual licenses.[206]

[205] MRA Explanatory Notes, p. 90.

[206] See, e.g. Grønlands Selvstyre RÅSTOFDIREKTORATET Juli 2010, GODKENDELSESVILKÅR OG SIKKERHEDSKRAV FOR EFTERFORSKNINGSBORINGER I HENHOLD TIL § 15 I TILLADELSE 2008/10 MED ENERET TIL EFTERFORSKNING OG UDNYTTELSE AF KULBRINTER, for Cairn/Capricorn Greenland, pp. 44-45.

Chapter 3. The Russian Federation

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I. The Russian Legal System and Offshore Oil and Gas Development

A. Introduction to the Russian Legal System

The Russian legal system often proves difficult to understand for someone not familiar with the country in general and with Russian law in particular. Legal terminology and poor translation are in part to blame. The names for the mix of statutes, orders, rules, and regulations can be confusing in translation; the same is true of titles for the federal administrative agencies and the entities that comprise the Russian Federation. For all of these reasons it is critical to clarify definitions from the start. Readers who choose to proceed directly to Part II, on specific steps in the licensing process, are encouraged to refer at a minimum to Part I.C. at page 42 for an introduction to the most important statutes for offshore oil and gas activity.

The Russian Federation is a federal state and consists of eighty-three constituent entities or subjects of federation (*subjekty federatsii*). The various entities are equal members of the Russian Federation, but have different labels. This paper refers to four types, although there are more: Regions or *Oblasti*, Territories or *Krai*, one Autonomous Region or *Avtonomnaya Oblast*, and Autonomous Areas or *Avtonomnye Okruga*.

Codes and statutes are the main sources of Russian law and we focus exclusively on these without discussing judicial decisions. The Constitution of the Russian Federation is the highest source of law.[1] Next in line are Constitutional statutes or *Konstitutsionnye zakony*. Statutes, or *zakony*, follow Constitutional statutes.

All sources of law can be divided into two main groups: 1) statutes, or *zakony*, and 2) sub-statutes, or *podzakonnye akty*. As the name suggests, statutes (issued by the legislature) have higher authority than sub-statutes, which are typically issued by administrative agencies.[2] Sub-statutes are generally promulgated under an enabling statute. However, if there is no statute on a particular legal issue, it is possible for a sub-statute to have preeminent legal authority on that point. This is relevant for offshore oil and gas statutes which, as discussed in Part I.C below, are in a state of some uncertainty and currently undergoing reform.

Federal statutes, except for the Constitution, are enacted by the Russian parliament, also called the Federal Assembly, which has an upper (*Sovet Federacii*) and lower (*Duma*) house. Federal sub-statutes encompass all other laws enacted by federal bodies other than the Federal Assembly.

Presidential Orders or *Ukazy Prezidenta* ("Presidential Orders") are a distinct source of law within the Russian legal system; they have greater legal authority than sub-statutes but, according to Article 90 of the Constitution, cannot conflict either with the Constitution or federal statutes.[3] Presidential orders are followed in the legal hierarchy first by decrees of the Government of the Russian Federation and then by federal sub-statutes promulgated by agencies for matters within their limited jurisdiction.

The President of the Russian Federation is the head of the executive branch. The President has direct control over a number of federal agencies, for instance, the Ministry of Justice and those agencies that are responsible for national security and foreign relations, such as the Ministry of the Interior and the Foreign Affairs Ministry. Some of these, like the Ministry of Justice, are involved in various aspects of offshore oil and gas development, either directly or indirectly.

The Prime Minister is the head of the 'Government of the Russian Federation,' which operates as kind of mega-agency that coordinates and directs all the federal agencies not under the control of the President. The 'Government of the Russian Federation,' or *Pravitel'stvo Rossijskoj Federatsii*, is

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[1] KONSTITUTSIIA ROSSISKOI FEDERATSII [KONST. RF] [CONSTITUTION] ART. 15 (RUSS.).

[2] "Sub-statute" is a broad term and encompasses essentially all rules, regulations, policies, etc., that have binding effect and are not statutes (which are enacted by a legislature). However, sometimes sub-statutes do not have an enabling statute. To place a sub-statute in the hierarchy of Russian laws, it is best to disregard the title of the sub-statute and focus on the promulgating body instead.

[3] M.V. BAGLAI, KONSTITUTSIONNOE PRAVO ROSSIJSKOJ FEDERATSII [CONSTITUTIONAL LAW OF THE RUSSIAN FEDERATION] 461 (4th ed. 2004).

not to be confused with 'the Russian government,' a generic term that can refer to the federal government as a whole or any one of its branches.[4] Within the system of the Government of the Russian Federation there are Ministries or *Ministerstva*, Agencies or *Agenstva*, and Services or *Sluzhby*. Ministries are always independent bodies, whereas an Agency and Service can either be part of a Ministry or an independent body like a Ministry. Responsibility for the regulatory regime for offshore oil and gas development belongs primarily to the Ministry of Natural Resources and the Environment (*Minprirody)*, the Federal Agency for Mineral Resources (*Rosnedra*), the Federal Agency for Water Resources (*Rosvodresurs*), the Federal Service for Oversight of Natural Resources (*Rosprirodnadzor*), the Federal Hydrometeorological and Environmental Monitoring Service (*Roshydromet*) and the Federal Service for Ecological, Technological, and Nuclear Oversight (*Rostechnadzor*).[5] In brief (though this account is by no means comprehensive, and agency jurisdiction is rarely exclusive), *Rosnedra* issues licenses for offshore development; *Rosprirodnadzor* is responsible for environmental review and approval of environmental impact assessments, as well as issuing permits for drilling and waste disposal; and *Rostechnadzor* is responsible for establishing safety regulations and operating practices.

B. The Constitution and Offshore Oil and Gas Development

The highest source of law in Russia is the Constitution of the Russian Federation.[6] Article 4 of the Constitution establishes the supremacy of the Constitution throughout the entire territory of the Russian Federation, and Article 15 states that laws adopted within the Russian Federation shall not contradict the Constitution. Eleven articles in the Constitution have a direct bearing on the offshore development of oil and gas in the Russian Arctic. These Articles address environmental, regulatory and jurisdictional issues related to natural resource development, as well as the rights of indigenous peoples who are affected by development.

Articles 9, 36, 42, 58, and 74 all refer to the constitutional requirement to protect and preserve the environment. Article 9 establishes that land and natural resources must be protected "as the basis of the life and activity of the peoples living on the territories concerned."[7] Likewise, Article 36

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[4] This distinction may seem unnecessary for readers familiar with the Russian legal system, but it is important to understand. For the sake of consistency, we only use the term 'Government of the Russian Federation' to refer specifically to the mega-agency. When we wish to refer to the federal government, as distinct from the mega-agency or from governments of the constituent entities of the Russian Federation, we use the terms 'the Russian government' or 'the Russian Federation' or, simply, the federal government.

[5] An organizational chart of the executive branch of the Russian Government that highlights the agencies involved in various aspects of offshore oil and gas exploration and extraction is attached to this White Paper as Appendix III.

[6] CONSTITUTION ART. 15.

[7] Translations of the Constitution are from the official English translation available at the Kremlin website: http://archive.kremlin.ru/eng/articles/ConstMain.shtml. All other translations of Russian documents are by the authors of this white paper.

states that "possession, utilisation and disposal of land and other natural resources shall be exercised by the owners freely provided that this is not detrimental to the environment and does not violate the rights and lawful interests of other people." Article 42 confirms the right of everyone to a "favourable environment, reliable information on the state of the environment, and compensation for damage caused to his (her) health and property by violations of environmental laws," and Article 58 establishes the corresponding obligation of everyone "to preserve nature and the environment and to treat natural resources with care." Finally, Article 74 establishes the principle that commercial activity can be restricted by federal law only in order "to ensure security, to protect the life and health of people, and to preserve nature and cultural values."

The rights of indigenous peoples within the Russian Federation are implied in Articles 9, 36, and 74, but Article 69 explicitly states that the Russian Federation "shall guarantee the rights of indigenous small peoples in accordance with the universally recognized principles and norms of international law and international treaties of the Russian Federation." Article 71 establishes that the Russian Federation has jurisdiction over "the regulation and protection of the rights of national minorities." The status of indigenous peoples in Russia is discussed in more detail in Part III, below.

Articles 15, 67, 71, 72, and 76 deal with regulatory and jurisdictional issues. Article 71 sets forth those matters under the exclusive jurisdiction of the Russian Federation (the federal government) and Article 72 enumerates matters within the joint jurisdiction of the Russian Federation and the constituent entities of the Russian Federation. Among the latter are "issues of the possession, utilisation and management of land and of subsurface, water and other natural resources" and "protection of the environment and provisions for ecological safety." However, the Constitution does not establish what is meant by joint jurisdiction, which has led to disputes between the Federation and its constituent entities. Federal legislation under Vladimir Putin's presidency clarified the principles of joint jurisdiction in a manner that strengthened the power of the Federation at the expense of the regions.[8] On the other hand, Article 76 of the Constitution does establish clearly a doctrine of preemption: with regard to all matters set forth in Articles 71 and 72, "[l]aws and other normative legal acts of the constituent entities of the Russian Federation shall not conflict with federal laws…." In the event of a conflict, "the federal law shall prevail." Such preemption is important for offshore development, as it means in practice that the federal government exercises

[8] Soili Nysten-Haarla & Juha Kotilainen, *Institutions, Interest Groups and Governance of Natural Resources in Russia*, *in* THE CHANGING GOVERNANCE OF RENEWABLE NATURAL RESOURCES IN NORTHWEST RUSSIA 18 (Soili Nysten-Haarla ed., 2009).

virtually full control over all licensing and regulatory matters concerned with offshore oil and gas exploration and extraction.[9]

Matters not identified in Articles 71 and 72 of the Constitution are subject to the control of the constituent entities of the Russian Federation. Thus Article 76 also establishes that in the event of a conflict regarding a matter not subject to joint jurisdiction or the exclusive control of the federal government, "the normative legal act of the constituent entity of the Russian Federation shall prevail."

Another jurisdictional conflict arises when comparing Articles 9 and 71. As already mentioned, Article 9 provides that natural resources shall be protected as the basis of the livelihoods of the peoples residing in the territories concerned. Article 71, on the other hand, establishes that the Russian Federation has jurisdiction over the "territorial sea," the "exclusive economic zone and the continental shelf of the Russian Federation," i.e., all offshore resources. As a result, Article 9 of the Constitution (which would appear to require local and regional involvement in the development of offshore resources) is largely ignored in the federal statutes.

According to Article 15, "Universally-recognized principles and norms of international law as well as international agreements of the Russian Federation should be an integral part of its legal system. If an international agreement of the Russian Federation establishes rules, which differ from those stipulated by law, then the rules of the international agreement shall be applied." Finally, Article 67 affirms that the Russian Federation "shall have sovereign rights and exercise jurisdiction on the continental shelf and in the exclusive economic zone of the Russian Federation in accordance with the procedure specified by federal law and norms of international law."

C. Federal Statutes and Offshore Oil and Gas Development

Russia is currently in the process of revising its continental shelf (offshore) oil and gas legislation. The reform is necessary because existing statutes often contradict one another and do not necessarily reflect the exigencies currently facing the offshore oil and gas industry in Russia (for instance, the need for foreign expertise and capital to develop the offshore fields). These factors

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[9] Federal preemption is an evolving doctrine. For example, FZ dated as of December 29, 2004 N 199 modified certain aspects of the relationship between federal, regional, and local governmental authorities in the field of environmental, health, and safety services. *See* Federal'nyj Zakon o Vnesenii Izmenenij v Zakonodatel'nye Akty Rossijskoj Federatsii po Predmetam Sovmestnogo Vedenya Rossijskoj Federatsii i Subjektov Rossijskoj Federatsii , a Takzhe s Rasshireniem Perechnya Voprosov Mestnogo Znachenya Munitsipal'nyh Obrazovany [Federal Law of the Russian Federation on Incorporation of Changes in Certain Legislative Enactments of the Russian Federation in Connection with Broadening the Role of the States of the Russian Federation in the Matters of Joint Jurisdiction of the Russian Federation and the States of the Russian Federation, as well as with the Broadening of the Local Matters of Municipalities] Dec. 29, 2004, *available at* www.consultant.ru.

create a great deal of uncertainty when it comes to implementing the statutes. Also, the current legislative framework which regulates the use of natural resources and environmental protection is extensive and unwieldy. The framework includes federal statutes, orders of the President, decrees and directives of the Government of the Russian Federation, normative acts issued by federal ministries, services and agencies,[10] and even industry operating procedures incorporated as standards.[11] Moreover, in certain instances this already unwieldy federal body of laws is augmented by stricter requirements established at the regional level for environmental protection and natural resource development.[12] Overall, the existing legislative framework that regulates environmental protection and the use of natural resources comprises over 800 documents.[13]

The categorization of offshore oil and gas activity provides an example of the kind of uncertainty that arises from the current legislation. Russian legal usage does not apply the term "offshore" in the context of hydrocarbon development. Traditionally, however, the law does distinguish between "territorial sea" and "continental shelf." Depending on the federal statute, offshore can mean either 1) "the territorial sea of the Russian Federation" (a 12 nautical mile zone extending from the shore),[14] or 2) the continental shelf of the Russian Federation (which is defined so as to include any extended continental shelf that is "determined in accordance with international law").[15] As the licensing requirements for offshore oil and gas development differ depending on whether it is taking place in the territorial sea or the continental shelf (as we discuss in the next sub-section), this ambiguity can create significant confusion.

In what follows, we briefly review the main federal statutes that are relevant for offshore oil and gas development (with the cautionary reminder that they are not the only relevant statutes, which are numerous, but the most important ones). The statutes reviewed are: 1) "On Subsoil Resources;"[16]

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[10] Arctic Council Oil and Gas Assessment (hereafter "Arctic Council OGA"), unpublished manuscript (on file with authors), app. 2.1, § 4.7.2.1.

[11] *See* Part IV, Operating Practices, below.

[12] Arctic Council OGA, § 4.7.2.1.

[13] Arctic Council OGA, § 4.7.4. The Russian government went some way to addressing this problem in 2002 with the federal statute "On Technical Regulating," which established a new system for standardizing regulatory documentation. *See* Federal'nyj Zakon O Texnicheskom Regulirovanii [On Technical Regulating] Dec. 27 2002, *available at* www.consultant.ru.

[14] Federal'nyi Zakon RF o Vnutrennih Morskih Vodah, Territorial'nom More i Prilezhaschej Zone Rossijskoj Federacii [Federal Law of the Russian Federation on Inland Sea Waters, Territorial Sea and the Adjacent Zones of the Russian Federation], ROSSIISKAYA GAZETA [ROS. GAZ.] Apr. 22, art. 2. (hereinafter, "FZ On Territorial Seas").

[15] Federal'nyi Zakon RF o Kontinental'nom Shel'fe Rossijskoj Federatsii [Federal Law of the Russian Federation on the Continental Shelf of the Russian Federation], ROSSIISKAYA GAZETA [ROS. GAZ.], Oct. 2, 1999. art. 1. (hereinafter, "FZ On Continental Shelf"): "If the continental margin exceeds 200 nautical miles from these baselines from the inner boundary of the territorial sea, the outer boundary of the continental shelf ... is determined in accordance with international law."

[16] Federal'nyi Zakon RF o Nedrah [Federal Law of the Russian Federation on Subsoil Resources], ROSSIISKAYA GAZETA [ROS. GAZ.], Mar. 3, 1995 (hereinafter, "FZ On Subsoil Resources").

2) "On the Continental Shelf of the Russian Federation;" 3) "On Production Sharing Agreements;"[17] 4) "On Inland Sea Waters, Territorial Sea and Adjacent Zones of the Russian Federation;" 5) "On the Exclusive Economic Zone of the Russian Federation;" two similarly titled but distinct statutes, 6) "On Environmental Protection"[18] and 7) "On Environmental Review;"[19] and 8) "On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation."[20] Federal statutes dealing with offshore and gas development can be divided into two groups: 1) those that establish the conditions and requirements for obtaining right of access to offshore subsoil deposits, either for exploration or extraction; and 2) those that deal with the relevant environmental legislation. We begin with the first group.

i. Right of Access to Oil and Gas Deposits

The statute "On Subsoil Resources" is the main statute setting forth the rules for exploration and extraction of mineral resources in the Russian Federation. Among other things, it establishes a licensing process for exploration and extraction of offshore mineral deposits that is regulated directly by the federal government and, significantly, does not involve tenders and auctions. It also sets forth special rules regarding re-licensing, including issuance of new licenses, as well as extending existing licenses. "On Subsoil Resources" gives a prominent role to the Government of the Russian Federation (the mega-agency) in every part of the process for issuing licenses. This is in keeping with the key role the development of natural resources has within the broader framework of Russian national policy, as can be seen in the 2008 document released by the Kremlin regarding Russia's Arctic Strategy, which describes the Arctic zone as a "national strategic resource base."[21] Thus, Article 2 of "On Subsoil Resources" designates mineral deposits located in the territorial seas and the continental shelf of Russia as "areas of subsoils of federal importance." This designation is important, as it affirms the authority of the federal government in regulating offshore oil and gas development, and excludes the regions (*subjekty*) of the Russian Federation from a significant role in the process.

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[17] Federal'nyi Zakon RF o Soglasheniyah o Razdele Produktsii [Federal Law of the Russian Federation on Production Sharing Agreements], ROSSIISKAYA GAZETA [ROS. GAZ.] Jul. 1, 1999 (hereinafter, "FZ On Production Sharing Agreements").

[18] Federal'nyj Zakon RF ob Ohrane Okruzhajuschej Sredy [Federal Law on the Protection of the Environment], ROSSIISKAYA GAZETA, [ROS. GAZ.] Jan. 12, 2002 (hereinafter, "FZ On Environment").

[19] Federal'nyj Zakon RF ob Ekologicheskoj Ekspertize [Federal Law on Environmental Review], ROSSIISKAYA GAZETA, [ROS. GAZ.] Apr. 15, 1998 (hereinafter, "FZ On Environmental Review").

[20] Federal'nyj Zakon RF o Garantiyah Prav Korennyh Malochislennyh Narodov Rossijskoj Federatsii [Federal Law on Guarantees of the Rights of Numerically Small Indigenous Peoples], ROSSIISKAYA GAZETA, [ROS. GAZ.] Aug. 22, 2004 (hereinafter, "FZ On Rights of Indigenous Peoples").

[21] Russia's New Arctic Strategy, 18 JOURNAL OF INT'L SECURITY AFFAIRS, 2010, at 97, http://www.securityaffairs.org/issues/2010/18/russia's_new_arctic_strategy.pdf. For the original text of this document in Russian see Osnovy Gosudarstvennoj Politiki Rossijskoj Federatsii v Arktike na Period do 2020 goda i Dal'nejshujuy Perspektivy [The Foundations of the National Policy of the Russian Federation in the Arctic for the Period Ending in 2020 and Beyond] Sep. 18, 2008, *available at* http://www.scrf.gov.ru/documents/98.html.

Article 9 of "On Subsoil Resources" appears to establish two different legal regimes for offshore areas of federal importance: one regime for areas located exclusively within territorial seas and another for areas either located exclusively within the continental shelf or extending from the territorial sea into the continental shelf.[22] If an area is located exclusively within the territorial sea, then the provisions of the federal statute "On the Continental Shelf" do not apply, with the result that the offshore licensing process – including the requirements for establishing who can become a "user" (licensee) of the mineral deposits – is different. However, for this technical distinction to be meaningful in any real sense, there must be deposits which are in fact located exclusively in a territorial sea of the Russian Federation, which remains to be determined.

The statute "On the Continental Shelf" is not limited to the exploration and extraction of mineral resources, but covers all natural resources located within the continental shelf. Only Chapter II is concerned with the exploration and exploitation of mineral resources. In many respects, "On the Continental Shelf" functions as a so-called "specific" statute as contrasted with the "general" statute, "On Subsoil Resources." This means that in those cases where a provision of the general statute (On Subsoil Resources) contradicts a provision of the specific statute (On the Continental Shelf), the provision of the specific statute prevails. In many of its provisions, however, the specific statute refers to the general statute for context. Article 7 of "On the Continental Shelf," for example, states that licenses for the study and use of plots of the continental shelf will be given to parties which meet the requirements of Article 9 of "On Subsoil Resources." On the other hand, Article 8 of "On the Continental Shelf" establishes its own licensing requirements for the exploration and exploitation of mineral deposits within the continental shelf. Thus, a certain ambiguity remains as to which statute prevails when the two are not in agreement.

Article 9 of "On the Continental Shelf" outlines the terms for any drilling operations within the territory of the continental shelf; it also distinguishes the procedure for issuing permits for drilling operations from the licensing procedure related to regional geological study, exploration and extraction of mineral resources of the continental shelf.

It is important to note that the Russian parliament has already taken significant steps to eliminate discrepancies between the two principal statutes dealing with offshore mineral resources. The July 2008 amendments to the law "On Subsoil Resources" designated both the territorial sea and the continental shelf of the Russian Federation as "areas of mineral resources of federal importance" and thus extended the tender and auction exception to these areas (Article 10.1).[23] Additionally, the December 2009 amendments to the continental shelf statute addressed a discrepancy concerning the date upon which a granted license becomes effective. Previously, the subsoils

[22] *See* notes 14 and 15, above.
[23] FZ On Subsoil Resources (as amended).

statute stated that the effective date was when the license was officially registered with the government, whereas the continental shelf statute held that the effective date was the date of issuance of the license; currently, both statutes provide that a license is effective as of its official registration with the government.

The intent behind the law "On Production Sharing Agreements" was to establish a mechanism to protect the interests of the Russian Federation by supplementing the issuance of offshore licenses. Pursuant to the statute, potential investors are required to enter into an agreement with the Russian Federation that specifies the terms and conditions for exploration and extraction of mineral resources, including the sharing of project profits with the Russian state. The statute also provides an additional means of addressing environmental concerns, as such agreements can in theory contain provisions regarding environmental compliance. Yet through April 2008, only three such agreements had been reached and all three had been entered into prior to the enactment of the statute.[24] Rising oil prices in recent years provide a partial explanation for this: such agreements came to be regarded as disadvantageous for Russia – a product of the Russian economic transition under Yeltsin in the 1990s when oil prices were lower.[25] While the statute has for all practical purposes been dormant to date, it has been amended several times since it was enacted (the last amendment occurring in May 2010), so there is reason to believe that it will play a more decisive role in the near future. There appears to be a consensus within the Russian academic community concerned with such matters that production sharing agreements should be used more widely.[26]

The law "On the Exclusive Economic Zone of the Russian federation" confirms the exclusive jurisdiction of the federal government over mineral deposits located within the continental shelf (Article 5). The "exclusive zone" of the Russian Federation includes all natural resources located in and on the continental shelf.

ii. Environmental Legislation

The federal statutes "On Environmental Protection" and "On Environmental Review" are two distinct laws. "On Environmental Protection" designates the continental shelf as an "object of special environmental protection" and refers to the statute "On the Continental Shelf" for its definition.

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[24] Mazkov Evgenij Yuirievich, Pravovoe Regulirovanie Geologicheskogo Izucheniya i Dobychi Nefti i Gaza na Kontinental'nom Shel'fe Rossijskoj Federatsii [Legal Regulation of Geological Exploration and Extraction of Oil and Gas in the Continental Shelf of the Russian Federation] (2008) (unpublished candidate of legal studies dissertation, Moscow State Law Academy) (on file with authors) at 66.

[25] Arild Moe & Elana Wilson Rowe, *Northern Offshore Oil and Gas Resources: Policy Challenges and Approaches*, *in* RUSSIA AND THE NORTH, 111(Elana Wilson Rowe ed. 2009).

[26] *See* Mazkov, note 24, above, at 123-140.

Pursuant to Article 46 of "On Environmental Protection," "construction and operation of oil and gas production facilities, processing facilities, and transportation and storage of oil and gas reserves" within the offshore areas of the continental shelf and the exclusive economic zone of the Russian Federation are subject to the requirements of an environmental impact assessment (OVOS)[27] and a state environmental review (SER). These requirements are further specified in Articles 32 and 33 of the statute, and dealt with in much greater detail in the federal law "On Environmental Review" and the May 16, 2000 Order of the Committee of the Russian Federation on Protection of the Environment entitled "On Regulations for Environmental Impact Assessments."[28]

Article 3 of "On Environmental Protection" lays out the basic principles of the statute. These include: the right to a healthy environment; a science-based approach to ensure sustainable development of natural resources; compensation for environmental harm; a presumption of the environmental risks associated with economic activity; a preventive provision to reduce the negative impact of economic and other activities through the use of best available technologies; the mandatory participation of business and government actors in environmental protection; the right to information about the health of the environment; public participation in the process; and international cooperation in the field of environmental protection. Article 4 establishes the "objects" of protection covered by the statute. Article 11 outlines the rights of citizens to register complaints, submit claims for damages to courts, and receive information. The requirement that certain activities covered by the statute be licensed is established in Article 30. Finally, Article 33 states that an OVOS of planned activities, economic or otherwise, must be carried out by their proponent in order to establish the relevant materials for an environmental review by the Federal Service for Oversight of Natural Resources (*Rosprirodnadzor*), as laid out in the separate federal law "On Environmental Review" as well as in sub-statutes promulgated under this law.[29]

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[27] We use the Russian acronym for environmental impact assessment, OVOS, while retaining English acronyms for environmental assessment (EA) and state environmental review (SER), in order to highlight the fact that in Russia the environmental impact assessment, or OVOS, is only one stage of a larger process of environmental assessment.

[28] Committee of the Russian Federation on Protection of the Environment, Order Dated as of May 16, 2000 N 372 On Adoption of the Manual for Assessment of Planned Economic and Other Activities on the Environment in the Russian Federation. For the sake of brevity we refer to this Order as "On Regulations for Environmental Impact Assessments."

[29] *See* Pravitel'stvo Rossijskoj Federatsii Postatnovlenie ot 13 Sentyabrya 2010 g. N 717 O Vnesenii Izmenenij v Nekotorye Postanovleniya Pravitel'stva Rossijskoj Federatsii po Voprosam Polnomochij Ministerstva Prirodnyh Resursov i Ekologii Rossijskoj Federatsii, Federal'noj Sluzhby po Nadzoru v Sfere Prirodopol'zovaniya i Federal'noj Sluzhby po Ekologicheskomu, Technologicheskomu i Atomnomy Nadzoru [Decree of the Government of the Russian Federation Dated September 13, 2010 N 717 On Amendment of Certain Decrees of the Government of the Russian Federation Regarding the Jurisdiction of the Ministry of Natural Resources and the Environment of the Russian Federation, Federal Service for Oversight of Natural Resources and Federal Service for Ecological, Technological, and Nuclear Oversight] *available at* www.consultant.ru; and Ministerstvo Prirodnyh Resursov i Ekologii Rossijskoj Federatsii, Federal'naya j Sluzhba po Nadzoru v Sfere Prirodopol'zovaniya Prikaz ot 29 Sentyabrya 2010 g. N 283 O Polnomochiyah Rosprirodnadzora i Ego Territorial'nyh Organov v Sootvetstvii s Postanovleniem Pravitel'stva Rossijskoj Federatsii ot 13.09.2010 N 717 [the Ministry of Natural Resources and the Environment of the Russian Federation, the Federal Service for Oversight of Natural Resources Order Dated September 29, 2010 N 283 On Jurisdiction of Rosprirodnadzor and Its Regional Branches Pursuant to the Decree of the Government of the Russian Federation Dated 09/13/2010 N 717] *available at* www.consultant.ru.

The statute "On Environmental Review"[30] establishes the principle of environmental review for all offshore economic activities. It governs the state environmental review (SER) that is conducted by *Rosprirodnadzor* in what is the second of two environmental assessment (EA) phases in Russia. In the first phase, the project proponent conducts an OVOS; in the second phase the state conducts an environmental review, for which the proponent must submit documentation. Part IV below, contains a thorough discussion of both phases and their related laws and orders, including the above mentioned Order "On Regulations for Environmental Impact Assessments," which details requirements for the OVOS process.[31]

"On Environmental Review" refers expressly to the statutes "On Subsoil Resources," "On the Continental Shelf," and "On Inland Sea Waters, Territorial Sea and Adjacent Zones of the Russian Federation," in order to determine what types of action are subject to environmental review. The latter statute, "On Inland Sea Waters . . . ," also requires an environmental review for any oil and gas exploration and extraction activities (Article 39).[32]

The statute "On Environmental Protection" imposes various types of liability for violation of environmental regulations (Chapter XIV). Thus it sets forth the principle of complete recovery for any harm caused to the environment. This principle, which is phrased in terms similar to "polluter pays," provides that environmental harm should be remedied in accordance with existing damage-valuation methods; and if such methods are absent, that a violator shall be liable for full actual costs of restoration, plus lost profits (Article 77). We address issues of liability in the final part of this chapter.

iii. Laws on the Rights of Indigenous Peoples

The federal law "On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation" is intended to protect certain rights of indigenous people in connection with

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[30] "On Environmental Review" is sometimes translated "On Environmental Expertise," and the process of state review is described as conducting an "environmental expertise." This usage is confusing in English, so we have decided to use the term "review," which is a more accurate English rendition of the Russian.

[31] As detailed in Part IV of this White Paper, according to the Order "On Regulations for Environmental Impact Assessments," the operator must submit documents to the federal authorities twice: first, in the preliminary stage of OVOS, and second, once the OVOS has been completed. This second submission will contain not only the results of the OVOS process, but what was said and agreed upon during public consultation. As a positive review is required for the implementation of any activity, these submissions will take place before any kind of activity commences. These submissions do not appear to be part of the licensing process, as an OVOS and review are required for all activities, regardless of the kind of license involved. The environmental standards that might be written into a license are a separate matter.

[32] On a related matter, it is interesting to note that "On Inland Sea Waters . . ." allows for regional (*subjekty*) participation in environmental monitoring (Article 36), whereas "On the Continental Shelf" does not – another example of how the various statutes relating to offshore development differ in significant ways.

their cultural identity, traditional subsistence practices, and the territories in which their settlements are located and upon which their livelihoods depend. For example, indigenous people have the right to participate in an environmental impact assessment of any economic activity taking place within their traditional territory and affecting their settlement of the area (Article 8). The statute also sets forth the responsibilities of the federal, state, and local governments regarding the protection of such rights (Articles 5, 6 and 7). A number of other federal statutes also relate to the issue of indigenous rights, which we address more thoroughly in Part III, below.

iv. Sub-statutes (*podzakonnye akty*).

There are many standards, decrees, instructions, orders, rules, and regulations that interpret the federal statutes and make up the extensive and complex body of sub-statutes (*podzakonnye akty*) dealing with offshore development. These derive from a plethora of sources. The standards for environmental protection provide an example of how these sub-statutes interact with statutes. The general legal framework for environmental standards is established in Articles 1 and 19-29 of the statute "On Environmental Protection," discussed above. Article 1 defines basic concepts of environmental protection, including the various types of standards and regulations that are relevant. Article 21 refers to environmental quality standards, which establish maximum allowable concentrations of pollutants; Article 23 refers to emission/discharge standards, which establish maximum allowable air and water discharges; and Article 22 refers to procedural standards, which define standards of acceptable environmental impact.

While the statute describes the different types of standards that are applicable, it does not describe the standards themselves; it is the sub-statutes of the various administrative agencies that "develop and specify individual provisions of the laws and determine the mechanism of their implementation."[33] Thus, for example, the "Rules on Protection of Waters from Pollution Caused by Drilling in Marine Oil and Gas Fields RD 153-39-031-98," approved by the Ministry of Fuel and Energy (now the Ministry of Energy) in 1998, implement a portion of the standards required by the statute "On Environmental Protection."[34] Alongside the decrees, orders, and instructions enacted by official government ministries and agencies, the regulatory framework is also supplemented by rulings from special agencies and technical institutions; even the private sector has a role, with company operating procedures adopted as regulatory standards. For instance, the above rules on marine pollution were developed for Gazprom by the Research and Design Institute on

[33] Arctic Council OGA, above note 10, at app. 2.1, § 4.7.4.

[34] *See* RD MINENERGO NEFTYANNAYA OTRASL' [RD MINISTRY OF ENERGY, OIL INDUSTRY], http://normativ-doc.okis.ru/rd-minenergo-neft.html (last visited Feb. 13, 2011).

Development of Oil and Gas Deposits of the Continental Shelf, and then accepted and enacted by the Ministry of Fuel and Energy and *Minprirody*, among others.[35]

D. Russian Arctic Strategy and Legislative Reform

In March 2009 the Kremlin publicly released the full text of its new Arctic Strategy, first issued in September 2008, which laid down the foundations for Russian Federation policy in the Arctic until 2020 and beyond.[36] Key to this document is the characterization of Russia's Arctic as a "national strategic resource base."[37]

The importance to Russia of the oil and gas reserves hidden beneath the Arctic continental shelf becomes evident when the role of energy exports in the Russian economy is taken into account. Russia produces 11.5 percent of the world's primary energy, making it the largest energy producer and exporter in the world.[38] Russia's energy production is five times more than its share of global population or world GDP. The Russian economy grew by approximately 7% from 2002 to 2008,[39] attributable mostly to growth in energy exports. Revenues from exports of oil and gas products alone increased from $36.2 billion (U.S.) in 2000 to $241 billion in 2008, and exceeded Russia's entire 1999 GDP.[40] Thus it is not surprising that the Kremlin affirmed in its Arctic Strategy paper that one of the main goals of the Russian Federation's official state policy in the Arctic is "expand [ing] the resource base of the Arctic zone." The oil and gas reserves which make up this resource base are seen as "capable of fulfilling the socio-economic tasks associated with national growth."[41] Russia moved closer to implementing its long-term plans for the Arctic in 2010, when it signed an agreement with Norway on September 15 to end a forty year dispute over a large block of offshore territory straddling the Barents Sea and the Arctic Ocean.[42] This agreement was a major diplomatic achievement for both countries and signaled Russia's willingness to engage in the "softer" path of international diplomacy in the Arctic. The agreement may also result in greater support from Norway regarding Russia's submission to the Commission on the Limits of the Continental Shelf based on the Lomonosov Ridge and will most likely improve Russia's

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[35] *Id.*

[36] Russia's New Arctic Strategy, above note 21, at 97.

[37] *Id.* at 98.

[38] U.N. Dev. Program (UNDP), National Human Development Report in the Russian Federation 2009 Energy Sector and Sustainable Development, 15 (2010), *available at*: http://hdr.undp.org/en/reports/nationalreports/europethecis/russia/name,20196,en.html.

[39] *Id.*

[40] *Id.*

[41] Russia's New Arctic Strategy, above note 21, at 98, 99.

[42] Chris Weafer, Race for the Arctic, and FDI, RUSSIA BEYOND THE HEADLINES (Sept. 15, 2010), http://rbth.ru/articles/2010/09/15/race_for_arctic_and_fdi04945.html.

international investment credentials, leading to a larger volume of foreign direct investment. [43] More immediately, the agreement opens up the Barents Sea for exploration and development.

However, the very fact that Russia characterizes its offshore oil and gas reserves in the Arctic as strategic resources of national concern gives rise to a fundamental tension in its offshore policy: it will be difficult for Russia to develop these resources adequately without foreign expertise and investment; yet, because they are strategic resources, Russia is reluctant to relinquish control over their development.[44] The history of Vladimir Putin's conflict with the oligarchs beginning in the 1990s exemplifies how important it is to the current administration in Russia that foreign ownership and control of oil and gas assets be kept firmly within limits.[45] Thus, the two main federal statutes dealing with offshore licensing – "On Subsoil Resources" and "On the Continental Shelf" – both contain provisions that strictly limit the amount of foreign ownership of companies involved in offshore oil and gas development. Currently, all offshore licenses are issued either to Rosneft or Gazprom, both of which are controlled by the Government of the Russian Federation.[46] On the other hand, in September 2010, immediately following upon the signing of the Barents Sea agreement with Norway, *Minprirody* called for exploration licenses to be granted to all companies, including foreign companies, wishing to search for oil and gas deposits in the Arctic, with a further right to develop the explored fields.[47] The BP-Rosneft agreement announced January 14, 2011, lays the foundation for such exploration.[48]

The current legislative reform of the licensing and regulatory framework for offshore oil and gas development in Russia is driven as much by a need to address this policy tension as by the issues of statutory ambiguity and complexity already addressed in this paper. It remains to be seen what the ultimate result will be.

II. The Licensing Process for Offshore Oil and Gas in the Russian Federation

The Russian regulatory framework provides for different categories of "use" of mineral resources, some of which are subject to licensing. Article 6 of the federal statute "On Subsoil Resources" lists

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[43] *Id.*

[44] Arild Moe, above note 25, at 107.

[45] *See* DR. MARTHA BRILL OLCOTT, THE ENERGY DIMENSION IN RUSSIAN GLOBAL STRATEGY: VLADIMIR PUTIN AND THE GEOPOLITICS OF OIL, , THE JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY OF RICE UNIVERSITY, (OCT. 2004), *available at* http://www.rice.edu/energy/publications/docs/PEC_Olcott_10_2004.pdf.

[46] Segodnya Gosudarstvo Vydaet Licenziy, i na Etom Ego Vlyanie Zakanchivaetsya [Today the Government's Involvement Ends after It Has Issued a License], Pravo TEK, http://www.lawtek.ru/analysis/interview/59898.html?print.

[47] Russian Ministry Calls for More Access to Arctic for Geological Exploration, RIANOVOSTI, (Sept. 23, 2010 17:21), http://en.rian.ru/russia/20100923/160698550.html.

[48] *See e.g.*, Guy Chazan, *BP, Rosneft Deal Draws Criticism*, WALL STREET JOURNAL, (Jan. 14, 2011), http://online.wsj.com/article/SB10001424052748704511404576085932247348132.html.

the principle categories of use, which include, *inter alia*, regional geological studies, geological studies, exploration and extraction, and the formation of research and training areas, geological reserves, and wildlife preserves. The use of mineral resources on the continental shelf, however, is limited to regional geological studies, geological studies, and prospecting, exploration and extraction.[49] The Russian government requires licenses for all of these uses.

The Federal Agency for Mineral Resources (*Rosnedra*) is responsible for issuing offshore licenses. Article 11 of "On Subsoil Resources" establishes the terms and conditions for issuing licenses, and lists the activities for which licenses must be issued. Though for the sake of clarity we review the Russian licensing process under the separate categories of exploration and extraction, it is important to note that both uses are often permitted under the so-called "combined" license. Another point to note here is that the following discussion only describes the licensing process for obtaining the right to develop and exploit offshore mineral resources. Some activities integral to oil and gas development, such as drilling and waste disposal, are subject to a separate permitting process, which we do not discuss in this paper; licenses for these activities are issued by the Federal Service for Oversight of Natural Resources (*Rosprirodnadzor*) (which is also responsible for reviewing environmental impact assessments).[50] One last introductory comment: the licensing process for offshore oil and gas operations only occurs after an environmental assessment of the proposed project has been concluded and *Rosprirodnadzor* has approved the state environmental review, as detailed in Part IV below.

A license is effective from the date of its government registration.[51] Generally, the process of issuing a license involves two stages: first, the Government of the Russian Federation makes a decision to bestow the right to use an oil and/or gas deposit (field); second, after this initial decision has been made, the actual licensing process begins (though there are some exceptions). Thus the Government of the Russian Federation has virtually full control over access to offshore oil and gas. The bestowal process cannot be compared to the process found in some other Arctic States whereby a government opens a particular area for bids from entities interested in leasing blocks for

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[49] FZ On the Continental Shelf, art. 7.

[50] Postanovlenie Pravitel'stva Rossijskoj Federatsii ot 2 Oktyabrya 2009 g. N. 783 g. Moskva "O Nekotoryh Merah po Relizatsii Federal'nyh Zakonov 'O Kontinental'nom Shel'fe Rossijskoj Federatsii' i "Ob Iskluchitel'noj Ekonomicheskoj Zone Rossijskoj Federatsii" [Decree of the Government of the Russian Federation, dated October 2, 2009 N. 783 in Moscow, "On Some Aspects of Implementation of the Federal Statutes 'On the Continental Shelf of the Russian Federation' and 'On the Exclusive Economic Zone of the Russian Federation.'"], ROSSIISKAYA GAZETA, [ROS. GAZ.] Nov. 10, 2009 para b (hereinafter, "Decree 783"). Pursuant to paragraph b of Decree No. 783, the Federal Service for Oversight of Natural Resources issues drilling permits after consultations with the Ministry of Defense, the Ministry of Economic Development, the Federal Security Service, the Federal Service for Environmental, Technological, and Nuclear Oversight, the Federal Communications, Information Technologies, and Mass Media Control Service, the Ministry of Education and Science, the Federal Customs Service, the Federal Fisheries Agency, and the Federal River and Sea Transport Agency. *Id.*

[51] FZ On the Continental Shelf, art. 8; FZ On Subsoil Resources, art. 10.

exploration and production. Indeed, as we already noted in Part I of this chapter, the statute "On Subsoil Resources"[52] explicitly excludes the tendering process from offshore development.

Currently, the right to use offshore oil and gas deposits of the Russian Federation is available only to companies that satisfy the following requirements: 1) formation under the laws of the Russian Federation; 2) at least five years of offshore oil and gas development experience on the Russian continental shelf; and 3) Russian Federation control of more than 50% of the company's voting stock.[53] Under certain circumstances involving a threat to national defense or national security, the Government of the Russian Federation can further restrict the right of a foreign company or a domestic company with foreign capital to "use" offshore mineral deposits.[54] Thus, access to Russia's oil and gas is tightly controlled and the permitting process provides the Russian government with many ways to direct the economic development of its arctic resources. In many cases, the licensing process essentially involves "ironing out" the details.

A. Exploration

The Russian legal framework for offshore mineral resource exploration identifies two types of exploratory uses: 1) regional geological studies; and 2) geological studies that are based on a "combined" license to prospect, explore and extract.[55] The "Temporary Regulation on Phases and Stages of Geological Oil and Gas Exploratory Activities" generally follows this scheme and provides a more detailed breakdown of every phase of the exploration process.[56]

Regional Geological Studies include "mildly-invasive" activities such as conducting geological and geophysical surveys, seismological studies, and establishing and maintaining monitoring regimes. While such studies have a variety of purposes, often the goal is to assess the "prospects" for oil and gas extraction in a particular area. Thus, *Rosnedra* will typically issue a license for an area or region where oil and gas may be present.[57] The process for obtaining a license is as follows. First, the applicant enters into a contract with the government.[58] The contract establishes the terms and conditions of the license and must comply with the provisions of the Federal statute "On Placement

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[52] FZ On Subsoil Resources, art. 10.1.

[53] *Id.*, art. 9. As of 2008, these requirements mean in practice that only two or three oil and gas companies are actually eligible for offshore licenses. Mazkov, above note 24, at 114, 115.

[54] FZ On Subsoil Resources, art. 2.1.

[55] FZ On the Continental Shelf, art. 7; FZ On Subsoil Resources, art. 10.1; Mazkov, above note 24, at 93.

[56] Mazkov, above note 24, at 88.

[57] Ministerstvo Prirodnyh Resursov Rossijskoj Federatsii, Prikaz ot 7 Fevralya 2001 g. N 126 Ob Utverzhdenii Vremennyh Polozhenya i Klassifikatsii [Order of the Ministry of Natural Resources of the Russian Federation Dated as of February 7,2001 N 126 On Adoption of the Temporary Manual and Classification], § 2, *available at* www.consultant.ru (hereinafter, "Order 126").

[58] FZ On Subsoil Resources, art. 11.

of Orders of Goods and Services for Government Needs."[59] Second, *Rosnedra* issues a license and notifies the Ministry of Defense, the Federal Security Service, the Ministry of Education and Science, the Federal Fisheries Agency, and the Federal River and Sea Transport Agency.[60] *Rosnedra* issues geological study licenses for a period of up to 10 years.[61] Upon completion of a regional geological study, the area studied may be included in the list of deposit areas that are subject to further licensing.[62]

The Government of the Russian Federation may also issue a combined license with a geological study component, which is to be distinguished from a license issued solely for regional geological studies.[63] The geological study or "exploration" component of a combined license is carried out specifically for the purpose of developing an oil and gas field, and normally consists of exploratory drilling, locating the actual deposits of oil and gas, valuation of the deposits and study of the deposits.[64] Prior to issuing a combined license, *Rosnedra* consults with the Ministry of Defense, the Ministry of Economic Development, the Federal Security Service, the Federal Fisheries Agency, and the Ministry of Energy. *Rosnedra* also notifies the Ministry of Education and Science, and the Federal River and Sea Transport Agency.[65]

B. Extraction

The statutes "On Subsoil Resources" and "On the Continental Shelf," outline five circumstances under which a license for extracting oil and gas deposits may be granted to a company: 1) as part of a combined license, after the exploration phase is completed; 2) upon discovery of an oil or gas deposit; 3) pursuant to a production sharing agreement; 4) subsequent to the transfer of a license pursuant to Article 17 of "On Subsoil Resources"; and 5) based on a decision of the Government of the Russian Federation outside the factual circumstances listed above.[66]

There are three important considerations concerning a combined license: first, the extraction phase cannot be initiated until the exploration phase is complete;[67] second, the Government of the Russian Federation needs to make another decision (to allow extraction) before the extraction

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[59] *See* Federal'nyj Zakon RF O Razmeschenii Zakazov na Postavki Tovarov, Vypolnenie Rabot, Okazanie Uslug dlya Gosudarstvennyx Nuzhd [Federal Law on Placement of Orders of Goods and Services for Government Needs], ROSSIISKAYA GAZETA, [ROS. GAZ.] July 21, 2005.
[60] Decree 783 para. d.
[61] FZ On Subsoil Resources, art. 10.
[62] Mazkov, above note 24, at 94. At this point, *Rosnedra* allows the issuance of a combined license.
[63] FZ On Subsoil Resources, art. 6 and art. 10.1.
[64] Order 126, §§ 3,4.
[65] Decree 783, para. d.
[66] *See* FZ On Subsoil Resources, art. 10.1.
[67] *Id.*

phase can begin;[68] and third, if the licensee's stock is controlled in any part by foreign capital, the Government may suspend the licensee's right to extract, if it believes that issuing the license might constitute "a threat to defense or security of the state."[69] Although, by definition, a combined license is supposed to combine exploration and extraction, and every license is issued based on the decision of the Government of the Russian Federation, it nonetheless will not allow extraction unless it has made a separate decision to do so. Hence, commentators question the term "combined license" because de facto a combined license consists of two separate licenses.[70]

The right to extract upon discovery of an oil or gas deposit is determined by a two-step process. First, and most importantly, the discovery has to be documented pursuant to applicable laws of the Russian Federation. Based on the documentation, and government-recognized proof of discovery, the Government of the Russian Federation makes a decision whether or not to grant the license.[71] As already mentioned, *Rosnedra* will only make this decision once an environmental assessment has been completed for the proposed development of the deposit. Pursuant to the statute "On Environmental Review," no project will go forward if the results of the environmental review are negative.

Article 10 of "On Subsoil Resources" outlines the different maximum terms that can be attached to licenses. Some licenses have a statutory maximum term (as in the case of licenses for regional geological studies) and some do not (as in the case of licenses for extracting mineral deposits). The statute provides that the term of an extraction lease or the extraction phase of a combined lease should be calculated on the basis of a feasibility study of the development of the mineral deposits and determined according to the estimated depletion term of the oil or gas field.

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[68] Mazkov, above note 24, at 111.

[69] FZ On Subsoil Resources, art. 21; Pravitel'stvo Rossijskoj Federatsii, Postanovlenie ot 16 Sentyabrya 2008 g. N 697 Ob Utverzhdenii Polozhenya o Prinyatii Reshenya o Prekraschenii Prava Pol'zovanya Uchastkom Nedr Federal'nogo Znachenya dlya Razvedki i Dobychi Poleznhyh Iskopaemyh v Sluchae Osushcestvlenya Geologicheskogo Izuchenya Nedr po Sovmeschennoj Litsenzii [Decree of the Government of the Russian Federation Dated as of Sept. 16, 2008 N. 697 On Adoption of the Manual for Determination of Cancellation of the Right to Use a Subsoil Field of Federal Importance Held under a Combined License for Geological Study and Extraction], § 3 *available at* www.consultant.ru.

[70] *See, e.g.,* Mazkov, above note 24, at 109-10.

[71] *See* Pravitel'stvo Rossijskoj Federatsii, Postanovlenie ot 27 Noyabrya 2008 g. N 897 Ob Utverzhdenii Polozhenya o Rassmotrenii Zayavok na Poluchenie Prava Pol'zovanya Nedrami pri Ustanovlenii Fakta Otkrytiya Mestorozhdenya Poleznyh Iskopaemyh na Uchastke Nedr Federal'nogo Znachenya ili na Uchastke Nedr Federal'nogo Znachenya, Kotoryj Otnesen Uchastkam Nedr Federal'nogo Znachenya v Rezul'tate Otkrytya Mestorozhdenya Poleznyh Iskopaemyh Pol'zovatelem Nedr, Provodivshim Raboty po Geologicheskomu Izucheniy Nedr Takogo Uchastka za Schet Sobstvennyh Sredstv dlya Razvedki i Dobychi Poleznyh Iskopaemyh Otkrytogo Mestorozhdenya [Decree of the Government of the Russian Federation Dated as of Nov. 27, 2008 N 897 On Adoption of the Manual for Consideration of Subsoil Resource Use Applications upon Discovery of Subsoil Resources in the Area of Federal Importance or upon Discovery of Subsoil Resources in the Area Designated as Such Due to Earlier Discovery While Conducting Self-funded Exploration and Extraction of Mineral Resources of the Earlier Discovered Field], *available at* www.consultant.ru.

Article 12 of "On Subsoil Resources" and Article 8 of the law "On the Continental Shelf" establish mandatory conditions to be included in a license. This is important, as many of the regulatory standards for operating practices are incorporated into the licenses themselves. Among the mandatory conditions are the types of permitted activities, the term of the license and specific deadlines, the territory for which the license is issued, environmental terms and conditions (including a program for environmental monitoring), geological information-sharing arrangements, and emergency procedures. We shall discuss these standards in more detail below in Part V, which deals with operating practices.

III. Arctic Communities, Indigenous Peoples, and Participation

The Russian Federation recognizes the rights of indigenous people to land and natural resources at both the constitutional and statutory levels. Practically, however, much remains to be done to provide effective protection of indigenous peoples' land and resource rights, and to strengthen their rights to participate in development decisions that affect them. According to the 2002 All-Russian Census, the total number of northern indigenous peoples in the Russian Federation is 252,222.[72] They comprise between 0.2 and 12 percent of the population in the different regions with indigenous residents;[73] however, approximately 30 percent of Russia's indigenous peoples live in "urban" areas.[74]

Both the Russian Constitution and federal law (including several federal statutes and a Presidential Order[75]) grant numerous protections for indigenous people; however, some of these protections have been described as "largely theoretical."[76] Two federal statutes are specific to the indigenous peoples of the north: "On the General Principles of Organization of Communes of Indigenous and Minority Peoples of the North, Siberia and the Far East of the Russian Federation,"[77] and "On

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[72] Irina Sirina, *Oil and Gas Development in Russia and Northern Indigenous Peoples, in in* RUSSIA AND THE NORTH, 188 (Elana Wilson Rowe ed. 2009). A 2010 census' web-site (http://www.perepis-2010.ru/) reports a total population in Russia of 141,900 million in 2010 (73% urban; 27% rural) yet does not appear to provide separate figures for indigenous peoples. According to the Arctic Human Development Report, 2004, "[a]bout 15,000 people in the indigenous population of the Russian Arctic lead a nomadic way of life," Ch. 2, p. 31. ORAN R. YOUNG, NIELS EINARSSON, ARCTIC HUMAN DEVELOPMENT REPORT 31 (2004) , *available at* http://hdr.undp.org/en/reports/regionalreports/other/arctic_2004_en.pdf.

[73] Sirina, above note 72, at 188.

[74] *Id.* at 189.

[75] Christina Henriksen, *Indigenous Peoples and Industry. Complex Co-existence in the Barents Euro-Arctic Region*, *in* TALKING BARENTS PEOPLE, BORDERS AND REGIONAL COOPERATION 95-96 (Atle Staalesen ed. 2010).

[76] *Id.*, at 96.

[77] Federal'nyj Zakon Ob Obschih Prinstipah Organizatsii Obschin Korennyh Malochislennyh Narodov Severa, Sibiri i Dal'nego Vostoka Rossijskoj Federatsii [On the General Principles of Organization of Communes of Indigenous and Minority Peoples of the North, Siberia and the Far East of the Russian Federation] July 20, 2000, *available at* www.consultant.ru.

Territories of Traditional Nature Use of Numerically Small Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation." A third statute applies to all minority peoples: "On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation."[78] Each of these statutes is discussed below, following a brief description of relevant constitutional provisions. The Russian Federation uses the term "numerically small indigenous peoples of the north" as an official designation that "provides a certain status to 40 different peoples in the North, Siberia and Far East."[79]

The Constitution contains a single specific reference to indigenous peoples, in Article 69: "The Russian Federation shall guarantee the rights of numerically small indigenous peoples in accordance with the universally recognized principles and norms of international law and international treaties of the Russian Federation." However, other constitutional provisions are potentially relevant to indigenous peoples. Article 9 establishes that land and natural resources must be protected "as the basis of the life and activity of the peoples living in the territories concerned." Article 15 of the Constitution emphasizes that, in the case of conflict between an international agreement to which the Russian Federation is a party, and national law, the international agreement takes precedence. In this context it is significant to note that the Russian Federation has not adopted ILO Convention 169 nor approved the UN Declaration on the Rights of Indigenous Peoples, both of which are of particular relevance to indigenous rights worldwide.

Additionally, Article 36 requires that the possession, utilization, and disposal of land and natural resources be exercised by the owners in a manner that is not detrimental either to the environment or to the rights of other people. Article 68 declares Russian as the official language, but also "guarantee[s] all of its peoples the right to preserve their native language and to create conditions for its study and development," thus providing a basis for the right of indigenous peoples to preserve their native language.[80] Article 72 of the Russian Constitution establishes joint federal and regional jurisdiction for a number of matters, including the "protection of the traditional habitat and the traditional way of life of small ethnic communities." Finally, Article 74 establishes the principle that commercial activity can be limited in order to "protect the life and health of people and to preserve nature and cultural values."

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[78] Two other federal laws are worth mentioning are: Postanovlenie Pravitel'stva Rossijskoj Federatsii ot 24 Marta 2000 g. N 255 O Edinom Perechne Korennyh Malochislennyh Narodov Rossijskoj Federatsii [Decree of the Government of the Russian Federation Dated March 24, 2000 On the Unified Registry of Indigenous Minority Peoples of the Russian Federation] *available at* www.consultant.ru; and Rasporyazhenie Pravitel'stva Rossijskoj Federatsii ot 4 Fevralya 2009 g. N 132-r, Kontseptsiya Ustoichivogo Razvitiya Malochislennyh Narodov Severa, Sibiri i Dal'nego Vostoka Rossijskoj Federatsii [Directive of the Government of the Russian Federation Dated as of February 4, 2009 N 132-r Approving The Concept of Sustainable Development of Minority Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation] *available at* www.consultant.ru (hereinafter, the "Development Concept").

[79] Henriksen, above note 75, at 95. *See also* INTERNATIONAL WORKING GROUP ON INDIGENOUS AFFAIRS, THE INDIGENOUS WORLD - IWGIA ANNUAL REPORT 35 (2010), *available at* http://www.iwgia.org/sw41165.asp (hereinafter "IWGIA Report").

[80] CONSTITUTION ART. 68.

Besides these constitutional provisions, both the executive and legislative branches of the federal government have introduced a series of measures designed to provide better protection for indigenous peoples. An early federal step was the Presidential Order No. 397 of 1992, urging the constituent entities of the Russian Federation to establish 'territories of traditional use' (TTPs), within which indigenous peoples might be guaranteed the right to engage in traditional activities. This right was supposed to encompass such things as access to traditional subsistence practices, compensation for interference with subsistence activities, and limited exclusionary rights.[81] Once created, a TTP was not available for industrial activities without the consent of the indigenous peoples to whom it was granted.[82]

Presidential Order No. 397 contemplated lands being granted in perpetuity, but in many cases tenure has been much more limited.[83] The authorities opposed the privatization of land and resources and were reluctant to transfer title for territories of traditional use.[84] Since enactment of the Land Code[85] in 2001, however, this situation has been slowly changing. Government implementation of Order No. 397 and other related initiatives nonetheless remains irregular and many regions have not designated territories of traditional use because there is no formal decree on how to establish such territories.[86]

The Federal Assembly enacted a new framework law in 2001 to elaborate the 1992 Presidential Order No. 397: "On Territories of Traditional Nature Use of Minority Indigenous Peoples of the

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[81] ARCTIC OIL AND GAS: SUSTAINABILITY AT RISK? 131 (Aslang Mikkelsen, Oluf Langhelle eds., 2008). *See also* Ukaz Prezidenta RF ot 22 Aprelya 1992 goda N 397 O Neotlozhnyh Merah po Zaschite Mest Prozhivanya i Hozyajstvennoj Deyatel'nosti Malochislennyh Narodov Severa [Order of the President of the Russian Federation Dated April 22, 1992 N 397 On Immediate Measures to Protect the Areas of Traditional Settlement and Subsistence Activities Minority Peoples of the North] *available at* www.consultant.ru.

[82] Presidential Order No. 397 granted the land in perpetuity and required the grantee's consent. However, under the order, TTPs were not implemented and the 2001 framework law "On Territories ..." supplemented it. "On Territories" recognizes the indigenous use of the land and grants limited exclusionary rights. The rights are granted for certain renewable periods. Since the law grants rights to the indigenous user and requires protection for indigenous use and the environment, companies wanting to operate on the land must obtain the consent of the users. However, Article 12 of "On Territories ..." allows the state to withdraw the land for industrial use if it provides substitute lands of equal value and compensation for losses caused by the withdrawal. If the state does not do this but companies remain interested in the land, the user may rely on his or her exclusionary rights to prevent companies from taking the land. In this second setting, the companies can pay the users for permission to access their lands. Under Article 12, with or without consent, the companies must compensate the users for environmental harm.

[83] Gail Fondahl, *Autonomous Regions and Indigenous Rights in Transition in Northern Russia*, *in* DEPENDENCY, AUTONOMY, SUSTAINABILITY IN THE ARCTIC (Hanne Petersen, Birger Poppel eds., 1999).

[84] Gail Osherenko, *Indigenous rights in Russia: is title to land essential for cultural survival?*, 13 GEO. INT'L ENVTL. L. REV. 695 (2001).

[85] ZEMELNYJ KODEKS ROSSIJSKOJ FEDERATSII [ZK RF] [Land Code] art. 95 (Russ.).

[86] ARCTIC OIL AND Gas, above note 81, at 131.

North, Siberia and the Far East of the Russian Federation."[87] The 2001 statute relates to subsistence activities and grants certain proprietary rights to specified indigenous peoples, especially connected to compensation for interference with traditional activities and limited exclusionary rights. This law has the greatest potential for direct impact on the lives of indigenous peoples, because it is considered a mechanism both for access to subsistence lands and for ensuring environmental protection. By recognizing the indigenous use of the land, the law also has the potential to improve indigenous peoples' ability to provide input into decisions regarding oil and gas development in Russia. It is unclear whether the law applies to marine areas, but nothing in the statute expressly excludes such areas from coverage.

Under the law "On Territories of Traditional Nature Use . . ." the Russian legislature established territories of traditional use aimed at the "protection of native habitat and traditional lifestyle of indigenous peoples; the preservation and development of the cultural identity of minorities; and the preservation of biodiversity on the territories of traditional use." (Article 4). Territories of traditional use may be established on three levels: federal, regional and local (Article 5). Territories of traditional use have the status of "specially protected natural areas" (Article 1) and are handed over to qualifying small-numbered indigenous peoples free of charge for a certain renewable period. In the case of industrial development within a territory of traditional use, part of the territory of may be withdrawn, on the condition that the State replaces the displaced land with some other territory (Article 12). The indigenous "owners" of the territorial land are entitled to reimbursement from the project proponent for losses caused by damage done to their original habitats (Article 12).

Despite the potential of the 2001 law "On Territories of Traditional Nature Use . . ." to improve the lives of indigenous people, thus far it has not been effectively implemented, even after the Russian Ministry of Regional Development presented an action plan to adopt related recommendations of the UN Committee on the Elimination of Racial Discrimination from August 2008.[88] The Ministry was responding in part to a submission by RAIPON and IWGIA to the February 2009 Universal Periodic Review of the UN Human Rights Council, but the action plan failed to include implementation of the 2001 law.[89]

Both regional and federal governments have been slow to establish territories of traditional nature use. The Government of the Russian Federation (the mega-agency) has not established any indigenous territories under federal law. Regional legislatures have, to varying extents, established

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[87] Federal'nyj Zakon Rossijskoj Federatsii ot 7 Maya 2001 goda N 49-FZ O Territoriyah Traditsionnogo Prirodopol'zovaniya Korennyh Maolochislennyh Narodov Severa, Sibiri i Dal'nego Vostoka Rossijskoj Federatsii [On Territories of Traditional Nature Use of Minority Indigenous Peoples of the North, Siberia and the Far East of the Russian Federation] *available at* www.consultant.ru.

[88] IWGIA Report, above note 79, at 45-46.

[89] *Id*.

protected territories for indigenous use within 28 regions (*subjekty*) of the Russian Federation.[90] These territories are documented in an official federal listing. Some regional regimes have been implemented, for example in the Khanti-Mansiyski Autonomous Region (KMAR), where there are 523 traditional use territories under regional law.[91] These regional regimes exist exclusively onshore and are thus not expressly relevant to offshore development, but they do show the potential of regional laws to address indigenous interests. More than 60 oil and gas industry entities operate in the KMAR, which has adopted a regional law to regulate and standardize oil company activities in relation to indigenous peoples' rights and practices in the region.[92] Many heads of families there have entered into agreements with, and currently receive compensation from, oil companies that explore or extract on territories of traditional nature use or patrimonial land.[93] The Khanti-Mansiysky regional administration has provided a model agreement and oversees these individual agreements; it acts as an arbiter when conflicts arise, and has established a legal department under its executive branch specifically for the purpose of representing indigenous peoples in court.[94] However, it is unclear how well these agreements and the KMAR regional law work in practice.

Also in the onshore setting, oil companies have on occasion hired indigenous people to consult and negotiate on their behalf with indigenous communities and other associations.[95] Under the law "On Territories of Traditional Nature Use . . .," land is granted to individuals who use the land for subsistence activities. As a result, oil companies can in effect purchase permission to drill from the individual subsistence users.[96] In 2002, the unemployment rate of indigenous peoples in some areas was above 50 percent.[97] A situation such as this leaves room for oil companies to make what may appear to be lucrative financial offers to the individual indigenous users of the land, entitled to protection under the law as "owners" of territories of traditional nature use.[98] Furthermore, the oil companies and the state maintain close relations, such that indigenous

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[90] Rep. of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples, James Anaya, *On the Situation of Indigenous Peoples in the Russian Federation*, 5, June 2010 U.N. Doc. A/HRC/15/37/Add.5 (2010) (hereinafter "Anaya Report").

[91] *Id.*

[92] Anaya Report, above note 90, at 12.

[93] *Id.*

[94] *Id.*

[95] *Id.*; MARKUS JOHN, ET.AL, FOSSIL FUELS, OIL COMPANIES, AND INDIGENOUS PEOPLES: STRATEGIES OF MULTINATIONAL OIL COMPANIES, STATES AND ETHNIC MINORITIES : IMPACT ON ENVIRONMENT, LIVELIHOODS, AND CULTURAL CHANGE 180 (Sabine Ziegler ed., 2007).

[96] The 2001 law "On Territories..." grants certain rights, including limited exclusionary rights, to the subsistence user, who can in theory exclude oil companies from accessing his or her land. However, the government can use Article 12 of the law to override the subsistence user's right as long as it provides another territory and compensates the user.

[97] Aleksandr Shapovalov, *Straightening Out the Backward Legal Regulation of "Backward" Peoples' Claims to Land in the Russian North: the Concept of Indigenous Neomodernism*, 17 GEO. INT'L ENVTL.L. REV. 435, 442 (2005).

[98] John, et al, above note 95, at 170-181.

peoples dealing with the oil industry very often have to contend with unspecified state interests. In the event an indigenous user or group refuses to consent to a proposed activity, the state may nonetheless permit it to go ahead, simply requiring the oil company to compensate the indigenous group financially for harm to the environment and the loss of subsistence land.

Furthermore, the 2001 law contradicts Russia's Land Code on the issue of land use. The Land Code, adopted in 2001 shortly after the law "On Territories of Traditional Nature Use . . .," recognizes only two types of land use: ownership and rental. This leaves little room for the type of land use granted to indigenous peoples in the law "On Territories ...", especially because a formal decree on the exact procedure for establishing territories of traditional nature use has yet to be adopted.[99]

The Federal Assembly has also passed other statutes relevant to Order No. 397 and indigenous peoples. These statutes include: "On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation"; "On the General Principles of Organization of Communes of Indigenous and Minority Peoples of the North, Siberia and the Far East of the Russian Federation"; and "On Environmental Protection." These laws provide additional protections for the rights of indigenous peoples.

The first statute, "On Guarantees of the Rights of Numerically Small Indigenous Peoples of the Russian Federation," has been called the "bedrock of indigenous rights in the Russian legal system."[100] This law formally recognizes all indigenous Russians but primarily concerns small indigenous populations of the North. It enumerates rights similar to international standards. Article 8 of the statute states that the small indigenous populations of the North have the right to "own and use, free of charge, various categories of land required for supporting their traditional economic systems and crafts." The emphasis here is on the right to continue to use the land for traditional purposes. The law does not emphasize the ownership of the associated resources or the right to use those resources based on centuries of use and customary law.

Secure land and resource tenure is one of the most basic human rights for indigenous peoples, as emphasized by Articles 25-30 of the United Nations Declaration of Rights of Indigenous Peoples (UNDRIP). UNDRIP calls for states to uphold the rights of indigenous peoples to free, prior, and informed consent before using indigenous lands, territories and resources, and also defends the right of indigenous peoples to participate in decision-making processes. Significantly, Russia abstained from voting on adoption of the UNDRIP. Although Russia is not party to the declaration, secure land and resource tenure is a right grounded in the general human rights principles of

[99] Indra Overland, *Indigenous Rights in the Russian North*, *in* RUSSIA AND THE NORTH 174 (Elana Wilson Rowe ed., 2009).
[100] *Id.* at 172.

equality and cultural integrity that are incorporated into many of the multilateral treaties to which the Russian Federation is a party.[101]

The second statute, "On the General Principles of Organization of Communities [*obshchinas*] of Indigenous and Minority Peoples of the North, Siberia and the Far East of the Russian Federation," provides fewer protections to indigenous peoples, but it does specifically acknowledge indigenous peoples as a protected category of citizens. In the original draft, an *obshchina* (indigenous community) was understood as being both an organ of local self-government and a legal entity that could own land.[102] Unfortunately, these draft provisions were removed, and the enacted law only grants formal recognition to traditional local communities, classifying them as noncommercial entities, which makes them exempt from taxation.[103] In terms of key indigenous rights, however, the law adds little.

The third law, "On Environmental Protection," aims at achieving a balance between economic development and environmental protection. It requires that all citizens be provided with a chance to participate and make their views known during the environmental impact assessment (OVOS) that every proponent of economic activity is required to undertake, a process that we discuss below in Part IV. The Order "On Regulations for Environmental Impact Assessments" stipulates that every developer conducting on OVOS must provide an opportunity for public participation at the pre-assessment stage, throughout the OVOS process and during the discussion of a draft OVOS report. However, the statute "On Environmental Protection" has no provisions that are specific to indigenous populations. Moreover, while the federal regulatory framework does require a program of environmental monitoring of economic activities, it does not establish any specific requirements for ongoing public consultation.

Russian federal legislation further restricts the legal protections for indigenous peoples when it defines indigenous minorities of the Russian Federation as "peoples living on the traditional lands of their ancestors, preserving a traditional way of life, livelihoods and trades, numbering in the Russian Federation less than 50,000 people and considering themselves to be ethnic communities."[104] The implication of this definition is that only those indigenous peoples who live in rural areas, engage in traditional subsistence economies, and maintain traditional modes of life are entitled to official

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[101] *See* International Covenant on Civil and Political Rights, G.A. Res. 2200A (XXI), U.N. Doc. A/RES/2200(XXI) (Dec. 16, 1966); International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200A (XXI), U.N. Doc. A/RES/2200 (XXI) (Dec. 16, 1966); International Convention on Elimination of All Forms of Racial Discrimination, G.A. Res. 2106 (XX), U.N. Doc. A/RES/2106(XX) (Dec. 21, 1965).

[102] Overland, above note 99, at 174.

[103] *Id*.

[104] FZ On Rights of Indigenous Peoples, art. 1.

status as northern indigenous peoples and are consequently eligible to enjoy the range of privileges stipulated in federal and regional laws.

There may be indigenous ethnic groups that share the characteristics and challenges of small-numbered indigenous peoples but do not enjoy the corresponding recognition or legal protection, because of the numerical population limitation. Instead, these northern ethnic groups are subject to the laws regulating the lives of all citizens of the Russian Federation.

Besides the requirement of having a population of 50,000 or less, the recognition of indigenous peoples is based on administrative discretion, in that it is left to government officials to determine on a case-by-case basis whether a group is involved in a traditional economy or maintains a subsistence way of life. The official listing of small-numbered indigenous peoples of the Russian Federation identifies 46 such groups.[105] The size of these groups varies from fewer than 300 people (240 *Ent*) to more than 40,000 people (41,000 *Nenet*).[106] In total, these groups comprise 244,000 people,[107] residing in 28 constituent entities of the Russian Federation, mainly in the North, Siberia and the Far East of Russia.

The approaches taken in these various statutes contribute to a potential conflict between traditionalism and industrialization, especially given that the economic and cultural development of northern indigenous peoples is a statutorily declared national priority of the Russian Federation.[108] Russian laws and statutory protections focus less on ancestry and more on the protection of traditional activities and the land bases that enable their continuation.[109] This raises the question of whether indigenous rights protect individual rights to engage in subsistence practices or the collective rights of ethnic groups regardless of lifestyle. On paper, the legal framework in Russia appears to protect a traditional, subsistence way of life for indigenous individuals, but not collective indigenous rights. However, even the traditional, subsistence way of life is often disregarded in the name of economic development. This is demonstrated by the fact that, even after lands are designated as territories of traditional use, the state may permit industrial activity without the indigenous user's approval, as long as the indigenous user is provided with different territory or financially compensated. On the other hand, regional ordinances can strengthen protections for indigenous peoples in onshore settings, as seen in the example of the Khanti-Mansiysky Autonomous Region, discussed above.

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105 Common List of Numerically Small Indigenous Peoples of Russia, N255 of 2000, and N760 of 2008, as cited in Anaya Report, above note 90, at 5.
106 *Id*.
107 *Id.*
108 *See, e.g.* FZ On Rights of Indigenous Peoples, arts. 1, 4, 5. *See also* Overland, above note 99, at 174.
109 Sirina, above note 72, at 190.

In summary, while the legal structure provides numerous protections "on the books" for people who fit the definition of "indigenous," the reality is that the laws are unevenly implemented, often leaving indigenous peoples with little protection in their interactions with the state and offshore project proponents. Nevertheless, indigenous populations do have some special recognition under the law and also the right to participate and comment as Russian citizens without any special status during the OVOS process. How adequately these rights are protected is unclear.

IV. Environmental Assessment in the Russian Federation

The environmental assessment (EA) process established by Russian law is divided into two distinct stages: 1) the environmental impact assessment (OVOS) undertaken by the developer of the proposed activity, and 2) the state environmental review (SER) undertaken by the Federal Service for Oversight of Natural Resources (*Rosprirodnadzor*). Article 32 of the federal statute "On Environmental Protection" establishes the requirement for an OVOS of any economic or other activity, while Article 33 confirms that this assessment is carried out in order to provide the relevant documents for an environmental review.

A. Environmental Impact Assessment (OVOS)

The environmental impact assessment is prepared by the developer and includes materials and documents described in the federal order "On Regulations for Environmental Impact Assessments."[110] The developer is required to make two submissions to the federal authorities: 1) during the preliminary stage of the OVOS, the developer submits documentation outlining the proposed project or activity;[111] 2) once the OVOS has been completed, and a public consultation has been held, the final version of the OVOS is submitted to *Rosprirodnadzor* for review, along with comments and suggestions made during the public consultation.[112] The review is conducted by an "expert commission" appointed by *Rosprirodnadzor*.[113]

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[110] Gosudarstvennyj Komitet Rossijskoj Federatsii po Ohrane Okruzhajuschej Sredy, Prikaz ot 16 Maya 2000 g. N 372 Ob Utverzhdenii Polozheniya Ob Otsenke Vozdejstviya Namechaemoj Hozyajstvennoj Deyatel'nosti na Orkuzhajuschuju Sredy v Rossijskoj Federatsii [Committee of the Russian Federation on Protection of the Environment, Order Dated as of May 16, 2000 N 372 On Adoption of the Manual for Assessment of Planned Economic and Other Activities on the Environment in the Russian Federation], *available at* www.consultant.ru (hereinafter, "Order 372").

[111] *Id.* § 3.1.1.

[112] *Id.* §§ 3.3.2.-3.3.3.

[113] *See* discussion of "On Environmental Review," art. 3, at 69, below.

i. OVOS Process and Content

The order "On Regulations for Environmental Impact Assessments" outlines the process for conducting and completing an OVOS. This sub-statute also repeats general principles contained in the federal environmental statutes.

An OVOS has three stages: 1) the pre-assessment stage; 2) the research stage; and 3) the final stage, when a final report is prepared and delivered to the federal authorities.[114] In the preliminary phase, the developer prepares and submits to the federal authorities documents containing a description of the planned activity; its purposes; alternatives to the project; possible environmental hazards and proposed solutions; methods for assessing impacts; a time frame; and the estimated composition and content of the materials to be included in the OVOS. The developer also informs the public of the proposed activity, conducts preliminary consultations, and carries out a preliminary assessment of the environmental impacts of the project. In the research stage, the developer conducts studies on all aspects of the project, drafts a preliminary version of the OVOS report and makes it available to the public for comment. The developer must hold some form of public hearing during this stage, in order to record any objections to the project and devise possible solutions. Information about the date and location of the public hearing and a draft version of the OVOS report must be available to the public for no less than 30 days before the date of the hearing.[115] In the final stage, the assessment materials are finalized, taking into account comments, suggestions and information provided in the public hearing. The final report submitted to the federal authorities must include an account of the proceedings of the public hearing, if one was conducted.[116]

The language of the order "On Regulations for Environmental Impact Assessments" is general in nature, and on its own does not provide very detailed instruction concerning what is required of a developer in putting together an OVOS. Section 3.2.2, for example, states that the developer is responsible for conducting an "assessment of the environmental impacts of proposed economic and other activities (the probability of risk, extent, nature, size, area of distribution, as well as an estimate of environmental and related social and economic consequences)" and identifying "measures that reduce, mitigate or prevent adverse impacts."[117] Yet this section provides no information on whether federal law requires a developer to have in place a contingency plan for responding to an oil spill, for instance. In order to establish the scope of what is required by an OVOS, it is necessary to look beyond the order "On Regulations ..." to the governing statutes.

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[114] Order 372, §3.
[115] Order 372, § 4.10.
[116] *Id.* § 3.3.1.
[117] *Id.* § 3.3.2.

Article 14 of the statute "On Environmental Review" states that the documents reviewed by *Rosprirodnadzor* are comprised entirely of materials from the OVOS. "The scope of environmental impact assessment research and materials, therefore, is identical to the scope of [a state environmental review] defined in Articles 11 and 12 of the law ['On Environmental Review].'"[118] Article 11 of "On Environmental Review" specifically incorporates the law "On the Continental Shelf," which states in Article 6 that the Government of the Russian Federation has responsibility for the "consequences of accidents leading to oil pollution." What this means is interpreted and implemented at the sub-statutory level. In June 2003, the Federal Service for Ecological, Technological and Nuclear Oversight (*Rostechnadzor*) approved by resolution "Safety Regulations for Prospecting and Developing Oil and Gas Deposits on the Continental Shelf."[119] Sections 1.8.4 and 3.6 of this document require developers to have measures in place for responding to oil spills within the climatic conditions of the far north. Thus it would appear that a developer compiling materials for an OVOS for arctic offshore development would indeed have to include a contingency plan for oil spills in sea ice conditions. This example, however, demonstrates the complexity of the legal and regulatory framework governing offshore development and the need to cross reference several documents to determine certain requirements.

ii. Public Consultation Requirements for an OVOS

Section 4 of the order "On Regulations for Environmental Impact Assessments" details the regulatory requirements for informing and consulting with the public during the OVOS process. Public participation in the preparation of the assessment materials is an "integral" part of the process, and should take place at every stage.[120] The public must be informed about the proposed activity through publication in official organs of the federal or state governments and the publication must include information about the "expected form of public discussion (poll, hearings, referendum, etc.), as well as the form of comments and suggestions."[121] The sub-statute also suggests other means of disseminating the information – through television, radio, the internet, and periodicals – in order to ensure that the public is duly informed.[122] The type of public hearing is determined by the degree of environmental impact expected by the proposed activity.[123] All

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[118] Arctic Council OGA, above note 10, app.2.1., § 4.7.3.1.

[119] Federal'nyj Gornyj i Promyshlennyj Nadzor Rossii Postanovlenie ot 5 Ijunya 2003 g. N 58 Ob Utverzhdenii Pravil Bezopasnosti pri Razvedke i Razrabotke Neftyannyh i Gazovyh Mestorozhdeniyj na Kontinental'nom Shel'fe [Federal Mining and Industrial Oversight of Russia Resolution Dated as of June 5, 2003 N 58 On Approval of Safety Regulations for Prospecting and Developing Oil and Gas Deposits on the Continental Shelf] *available at* www.consultant.ru (hereinafter, "Safety Rules PB 08-623-03").

[120] Order 372, §§ 4.1 and 4.2.

[121] Order 372, § 4.2.

[122] Order 372, § 4.4.

[123] Order 372, § 4.7.

decisions taken and concerns raised during the public hearing must be documented, and the developer shall draft an official record of the hearing which shall be signed by representatives of all participants. Minutes of the public consultation must be annexed to the final version of the assessment materials delivered to *Rosprirodnadzor*.[124] Furthermore, individuals and organizations are allowed to submit written comments and proposals for OVOS documentation within 30 days after the public hearing.[125] The law does not specify the means by which the draft report is to be made available, nor in what languages; it does require, however, that the developer provide a non-technical summary of the OVOS materials for the public. The materials submitted for review must show the means adopted by the developer for involving the public.

B. State Environmental Review (SER)

The materials the developer compiles for the OVOS are submitted for a "state environmental review." An "expert commission" appointed by *Rosprirodnadzor* reviews the proposed project in a "state environmental review" (SER) to ensure that it complies with environmental, normative and legal requirements. It is this second stage of the environmental assessment process that determines whether the proposed project will proceed or not. According to Article 18 of the statute "On Environmental Review," the legal consequence of a negative "conclusion" of the SER is prohibition of the project implementation. However, in the event of a negative SER, a project initiator may request another review and submit documents that take into consideration observations listed in the conclusion of the first SER.

Under Article 3 of the law "On Environmental Review," the principles of environmental review include: 1) presumption of potential environmental harm from economic activity; 2) compulsory nature of the review; 3) comprehensive assessment of the environmental impact of the proposed economic activity; 4) reliability and completeness of the information provided to the reviewing committee by the developer; 5) independence of the expert ecological commission; 6) scientific validity, objectivity and legitimacy of the review; and 7) transparency and public participation. The cost of the expert environmental review is borne by the developer, as established in Articles 27 and 28.

Article 4 of the law "On Environmental Review" establishes two types of environmental review: the state environmental review and a public environmental review (Articles 20-25). While the state environmental review is required for all economic activities on the continental shelf,[126] the public environmental review is not mandatory. Pursuant to Article 20, a public environmental review may

[124] Order 372, § 4.9.
[125] Order 372, § 4.10.
[126] FZ On the Continental Shelf, art. 31

be organized and conducted at the initiative of citizens, local administrations, and public associations. In 2008, for example, "Sakhalin Environmental Watch" conducted an environmental review of Exxon Neftegas Limited's project in Piltun Bay in North-East Sakhalin. Those initiating a review have to provide advance written notice to the local administration. If the project chosen to be reviewed is regarded under federal law as a state secret, then registration of the review may be cancelled. According to Article 25 of the law "On Environmental Review," the results of the public environmental review must be taken into account in the state environmental review, if they are available at the time the state review is conducted.

V. Operating Practices in the Russian Federation

Russia has yet to develop its vast offshore arctic oil and gas fields. However, there is every sign that it is actively preparing itself for the monumental and costly enterprise of exploring and exploiting its arctic resources. According to the Kremlin's 2009 Arctic Strategy, the next ten years will be spent laying the political, economic, military, technical, and structural foundations for this huge undertaking.[127] Already two large oil and gas deposits in the Barents Sea have been discovered and identified, the *Shtokmanovkoe* gas field and the *Prirazlomnoe* oil field.[128] The possibilities for significant and widespread damage to the environment and disruption of indigenous Arctic communities are increasing with the escalation of economic activity. Under these circumstances, the strict regulation of operating practices takes on greater importance. Indeed, one aspect of the ongoing legislative reform in Russia is concerned with tightening environmental regulations (though commentators differ as to what the actual results of this reform will be in practice).[129]

Several legal sources determine standards for operating practices in Russia: federal statutes, individual offshore licenses, and sub-statutes promulgated by federal agencies, which sometimes adopt industry rules and practices. The federal statute "On the Continental Shelf" is the primary source of federal standards for operating practices. Article 9, for example, establishes the terms for drilling operations on the continental shelf, which include, among other things, providing information that demonstrates compliance with drilling and cement requirements, and establishing measures to ensure safety of navigation and transportation. Articles 16 through 22 are concerned with drilling platforms and installations; Article 16 enumerates the various provisions that must be in place before a license for a platform will be granted, including emergency preparedness and measures to prevent oil spills. Chapter VI of the statute is concerned with "preservation of the

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[127] *See* Russia's New Arctic Strategy, supra note 21.
[128] Mazkov, above note 24, at 141.
[129] Oil and Ice, ARCTIC FOCUS (Nov. 9, 2010), http://arcticfocus.com/2010/11/09/oil-and-ice/.

marine environment" and deals with the issue of waste management: Article 35, for example, requires a permit to bury waste and other materials on the continental shelf, and establishes that a request for a permit must specify the type of vessel to be used to transport the waste. Article 8 requires licensees to maintain contact with the meteorological, naval, military and security services of the Russian Federation overseeing the applicable coastal region.

The statute "On Environmental Protection" plays a special role in ensuring that a licensee's operating practices are in compliance with environmental laws and regulations. Thus the issue of waste disposal is also addressed by Article 51 of the statute, which concerns "requirements for environmental protection in the treatment of waste production and consumption." Article 47 deals with requirements for handling and disposing of dangerous chemicals. As noted earlier in the paper, this statute (Articles 19-29) also establishes the legal framework for emissions and discharge standards. Article 46 of the statute requires licensees to clean all byproducts and collect mineralized water and associated petroleum gas. [130]

The statute "On Subsoil Resources" is also relevant for operating practices. Article 23, for instance, establishes "the basic requirements for the rational use and conservation of mineral resources" and addresses the technical aspects of mineral resource development. Article 24, on the other hand, deals with basic requirements for the safe management of activities in order to ensure employee health and safety.

As already stated in Part II of this chapter, dealing with the offshore licensing process, standards for operating practices in Russia are also built into the licenses themselves. Thus, Article 12 of "On Subsoil Resources" lists the elements that must be included in every license issued for the development of mineral resources. Among other things, a license must include requirements for "the protection of the environment" and standards for the "safe management of activities." Pursuant to Articles 8 and 9 of the law "On the Continental Shelf," every offshore license must specify, among other things, operating procedures for the following activities: 1) environmental monitoring; 2) prevention, abatement and mitigation of environmental harm; 3) prevention of accidents and development of contingency response plans; 4) drilling, and the construction and operation of structures, cables and pipelines used in the exploration and extraction process; and 5) navigation and transportation. Licensees must comply with the terms and conditions set forth in the licenses.

Finally, operating practices are subject to a great number of sub-statutes promulgated by federal agencies and services. Of central importance are the "Safety Regulations for Prospecting and

[130] FZ On Environmental Protection, art 46.

Developing Oil and Gas Deposits on the Continental Shelf," which *Rostechnadzor* approved by resolution. Rostechnadzor approved these rules in June 2003. These regulations cover a wide spectrum of issues, from employee safety to evacuation procedures to communication devices. Section 1.8.4 deals with measures to prevent accidental emissions and discharges, including oil spills. Section 3 addresses the safety requirements for the design and operation of "ice-resistant" drilling platforms. Section 3.6 provides that drilling platforms operating in northern waters must have measures in place to contain oil spills on drifting ice surfaces. At the sub-statutory level, industry rules and practices are often adopted as legally-binding standards (for example, "Rules on Protection of Waters from Pollution Caused by Drilling in Marine Oil and Gas Fields," mentioned already in Part I.C).[131]

Despite the wide variety of sub-statutes covering different aspects of the activities that comprise offshore oil and gas development, the regulation of certain important areas remains ambiguous. For example, the question of the ownership of drilled solids has not yet been settled, though this is one of the principle byproducts of offshore oil and gas exploration and extraction – and one of the most environmentally harmful.[132]

VI. Remedies Under the Current Regulatory Framework

States and local populations have so far had little effect on the formation and implementation of offshore oil and gas policies in the Russian Federation.[133] Some academics point to a lack of transparency in the way the state conducts planning, environmental review, and permitting for offshore development.[134] As a result, local populations have become suspicious of government involvement; in some cases, this has led to negative attitudes regarding projects.[135] However, the 2009 amendments to "On Subsoil Resources" may suggest that the Russian government (at least theoretically) is moving toward greater transparency.[136] Commentators have recommended that the regions become more involved in determining the terms and conditions of licenses; another suggestion has been to insist upon a more regular process of conducting public hearings on the issues of environmental impacts and operational safety.[137]

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[131] RD Minenergo Neftyannaya Otrasl' [RD Ministry of Energy, Oil Industry], http://normativ-doc.okis.ru/rd-minenergo-neft.htm (last visited Feb, 13, 2011).
[132] Mazkov, above note 24, at 158-59.
[133] *Id.* at 149.
[134] *Id.*
[135] *Id.*
[136] See Article 13.1 of FZ On Subsoil Resources (requiring the Government of the Russian Federation to establish an Internet site for informing persons about planned auctions and tenders for use of mineral deposits).
[137] Mazkov, above note 24, at 151.

Under Russian law there are three types of liability: administrative, criminal, and civil. The first type is defined by the Administrative Violations Code of the Russian Federation.[138] There are many violations contained within the code that have relevance for oil and gas development, ranging from those that are general (e.g., Article 8.4, "Violations of Environmental Review Legislation," or Article 8.5, "Non-Disclosure or Tampering with Environmental Data") to those that are specific to offshore development (e.g., Article 8.17, "Violation of Rules and Terms and Conditions of a License Issued in Respect to a Territorial Sea, Inland Water, Continental Shelf or Exclusive Economic Zone of the Russian Federation," or Article 8.18, "Violation of Rules Regarding Exploration of Natural Resources or Marine Scientific Explorations in a Territorial Sea, Inland Water, Continental Shelf or Exclusive Economic Zone of the Russian Federation"). However, despite the broad reach of the Administrative Violations Code, the penalties do not appear to be adequate to the violations. For example, a conviction for violation of the terms and conditions of a license regarding environmental protection under Article 8.17 may result in either a fine for the responsible executive in the range of 10,000-15,000 rubles (approximately $300-500 US); a fine for the responsible entity in the range of 100,000-200,000 rubles (approximately $3,000-6,000 US); or confiscation of the equipment and the vessel.[139]

In contrast to the Administrative Violations Code, the Criminal Code[140] does not have the same reach with respect to offshore oil and gas development. However, a number of provisions of the Criminal Code impose severe consequences for violations of environmental laws that result in harm.

With respect to civil liability, Articles 6, 11, and 12 of the law "On Environmental Protection" provide regional governments, non-profit environmental organizations, and citizens the right to bring a civil action to remedy environmental harms that have resulted from a violation of environmental laws. As already mentioned, the statute establishes the principle of complete recovery for the harm caused to the environment (Article 77). It employs the "polluter pays" principle. It also provides two types of injunctive relief. First, the court may require specific performance from the tortfeasor to restore the damaged environment to its prior state (Article 78). Second, the court may impose a permanent, temporary or partial injunction on a tortfeasor who has damaged the environment (Article 80). The statute also allows for compensation for bodily injury and property damage that has resulted from damage to the environment (Article 79). The statute of limitations for a claim for environmental damages is 20 years (Article 78).

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[138] KODEKS ROSSIJSKOJ FEDERATSII OB ADMINISTRATIVNYH PRAVONARUSHENIYAH [KOAP RF] [ADMINISTRATIVE VIOLATIONS CODE] (RUSS.).

[139] KOAP RF article 8.18, § 1.

[140] UGOLOVNYJ KODEKS ROSSIJSKOJ FEDERATSII [UK RF] [CRIMINAL CODE] (RUSS.).

Under Articles 11 and 12 of the law "On Environmental Protection," citizens and NGOs have the following rights: 1) the right to reliable information regarding the state of the environment in their place of habitation and the environmental protection measures taken by the government; 2) the right to petition the government regarding issues related to the environment and to receive a response to such petitions; and 3) the right to organize and participate in pickets and rallies that support an environmental cause. Additionally, NGOs have the right to hold public hearings on environmental issues and promote environmental causes.

VII. Evaluating Russia's Offshore Rules against the AOOGG

The Russian Federation regulates offshore oil and gas activity in the Arctic through a complex and sometimes opaque system of rules derived from the Constitution, multiple statutes and orders, sub-statutes, regulations and other sources of law. Russian offshore rules do not expressly reference the PAME "Arctic Offshore Oil and Gas Guidelines" (AOOGG) endorsed by the Arctic Council in 2009.

Chapter I of this White Paper discusses the four general principles on which the AOOGG say arctic offshore oil and gas activities "should" be based: the Precautionary Approach, Polluter Pays, Continuous Improvement and Sustainable Development. Below we discuss these principles on their own and as part of the three focal points of this Russia chapter: Indigenous Communities and Participation; Environmental Assessment; and Operating Practices.

Aspects of all four AOOGG principles can be found in the complementary principles that Russian legislation establishes for environmental regulation. These appear in two acts relevant to offshore hydrocarbon activity, "On Environmental Protection" and "On Environmental Review," and in related environmental assessment regulations.[141] Environmental protection principles include use of a science-based approach to ensure sustainable development of natural resources, compensation for environmental harm, a presumption of the environmental risks associated with economic activity and a preventive provision to reduce the negative impact of economic and other activities through use of BAT. Principles of environmental review include presumption of potential environmental harm from economic activity and scientific validity, objectivity and legitimacy of the review transparency and public participation. More specifically, the Polluter Pays principle appears in

[141] For the principles listed in the statute "On Environmental Protection" (Art. 3) see Part I.C.i in this Chapter; for principles listed in the statute "On Environmental Review" (art. 3), see Part IV.B. The regulations appear in Committee of the Russian Federation on Protection of the Environment, Order Dated as of May 16, 2000 N 372 On Adoption of the Manual for Assessment of Planned Economic and Other Activities on the Environment in the Russian Federation.

Article 77 of "On Environmental Protection." The concept of Continuous Improvement can arguably be read into the combined principles of that statute's Article 3 (e.g. mandatory participation of business and government actors in environmental protection, public participation in the process) even though "Continuous Improvement" is not stated expressly. Sustainable Development can also be derived from several of the principles listed in Article 3, including BAT, conservation practices and public participation.

Indigenous Communities and Participation

The environmental assessment process falls short of providing meaningful participation and effective consultation as recommended in the AOOGG. The AOOGG views effective consultation as involving two-way, open and transparent communication over the life of the project; these characteristics are not evident in the environmental assessment process. Further, the rules do not provide for incorporating traditional knowledge into the assessment process or offer indigenous peoples any special involvement when it comes to public participation. Indigenous peoples simply have the same opportunities to provide comments as any other member of the public. As noted in the next section, it appears that developers are not required to address specific impacts to indigenous users or traditional uses of the areas affected by the proposed activity in the environmental assessment materials they provide to the authorities. Independent of the environmental review process, traditional uses are supposed to be preserved under an act designed to establish territories of traditional nature use. However, no federal areas have been established to date and it is unclear whether the law applies to marine areas.

Environmental Assessment

On paper, several aspects of the federal regulations on Environmental Assessment correspond to AOOGG recommendations. For example, a project proponent must describe alternatives to the proposed activity that would achieve similar goals, including a "zero option" of no activity. The proponent must also compare expected environmental and and socio-economic consequences of alternatives under consideration, including the zero-option alternative, and justify the choice made. This compares to requirements in AOOGG Part 3.5 for discussing various development options. How these requirements play out in practice, and how consistently they are implemented, is less clear.

Other ways in which the Russian environmental assessment can be seen as compatible with AOOGG recommendations is that Russian regulations require developers to describe the kind of

environmental monitoring program to be put in place and a post-project analysis. Such monitoring corresponds to the AOOGG recommendation that sufficient baseline data be available for EIA purposes at project outset and for ongoing monitoring throughout the life of the project. In addition, the BAT recommendation contained in the AOOGG can be seen in the statute "On Environmental Protection," in which Article 31(2) provides that "[n]ational standards and other regulatory documents in the field of environmental protection tailored to the scientific and technological achievements and requirements of international rules and standards." Significantly, Article 1 of the statute defines best available technology as "a technology based on the latest achievements of science and technology aimed at reducing the negative environmental impact and time-bound practical application with regard to economic and social factors."

Notwithstanding this reference to economic and social factors in Article 1 of the law "On Environmental Protection," the two-tier Russian environmental assessment process does not appear to require potential licensees to inquire into social and economic impacts at the level called for in the AOOGG. Requirements for social and economic factors are very general, both for the proponent's initial submission of environmental assessment information and in the State Environmental Review. The treatment of social and economic factors is especially problematic regarding effects specific to traditional ways of life. Under the environmental assessment regulations, the project proponent's assessment of risks of environmental impacts must simply include consideration of related social and economic consequences, with no express reference to categories of people or uses affected.

Operating Practices

The Russian regulatory system touches on all seven of the categories the AOOGG suggests should be considered for Operating Practices over the life of a project: waste management, chemical use and discharge, emissions to air, design and operations, human health and safety, transportation of supplies (as opposed to hydrocarbons themselves) and training. However, given the large number of sources that must be consulted to determine operating requirements, it is difficult to assess the degree to which the AOOGG recommendations for Operating Practices are followed.

Article 12 of the law "On Subsoil Resources" and Article 8 of the law "On the Continental Shelf" establish mandatory conditions to be included in a license. This is significant, as many of the regulatory standards for operating practices are incorporated into the licenses themselves. The statutory requirements are fairly general, referring, for example, to the need to address the construction and operation of structures.

Operating practices are also subject to a range of sub-statutes promulgated by federal agencies and services. For example, the "Safety Regulations for Prospecting and Developing Oil and Gas Deposits on the Continental Shelf," which Rostechnadzor approved by resolution in June 2003, cover a wide spectrum of issues, from employee safety to evacuation procedures to communication devices. At the sub-statutory level, industry rules and practices are often adopted as legally-binding standards, but this does not contradict AOOGG recommendations. In addition, the regulation of certain important areas remains ambiguous. For example, the question of the ownership of drilled solids (which falls under waste management and chemical use and discharge in the AOOGG Operating Practices section) has not yet been settled, though this is one of the principle byproducts of offshore oil and gas exploration and extraction and one of the most environmentally harmful.[142]

The laws, regulations and other sources of rules for offshore oil and gas activity in Russia reflect a strictly prescriptive approach to regulation. For example, the Safety Regulations referred to in the preceding paragraph contain an extensive and detailed listing of requirements that the operator must meet. One of the few indications that management plays any role in establishing safety standards appears in §1.14, which specifies management's responsibility for enforcing the extensive prescriptive rules set out in the rest of the document. The Russian regulatory authorities appear not to have introduced any performance-based requirements for developers to use management systems for health, safety or environmental protection as discussed in the AOOGG. To be sure, the AOOGG do not recommend any particular mix of prescription and performance based regulation, but indicate that a hybrid regulatory approach may be desirable.

As presented on paper, the Russian Federation regulatory regime appears to contain elements that reflect many AOOGG recommendations, with the exception of how indigenous peoples participate in assessments. How rules are laid down in laws and regulations and how they are implemented and enforced are two separate questions. We do not address actual implementation and enforcement in this White Paper. We do, however, observe that the AOOGG call for institutional mechanisms at the local, national and regional levels to encourage transparent regulation and strict enforcement of existing rules. Any Arctic State wishing to make good use of the AOOGG can seek ways to strengthen its institutions to this end.

[142]Oil and Ice, ARCTIC FOCUS (Nov. 9, 2010), http://arcticfocus.com/2010/11/09/oil-and-ice/.

APPENDICES

Appendix I

Frequently asked Questions: Offshore Oil and Gas Activity in Greenland

1) Which government authorities regulate offshore oil and gas activity in Greenland and what are their roles?

The Mineral Resource Authority under the Greenland Government is the overall administrative authority for mineral resources, including all matters relating to offshore mineral resources and associated activities. In the Authority, the Bureau of Minerals and Petroleum (BMP) serves as the "one stop shop" for those seeking licenses for offshore hydrocarbon activity. BMP issues letters of invitation to potential licensees, publishes model licenses and guidelines for applicants, facilitates public hearings, publicizes EIA and SIA reports, and evaluates all information a licensee submits. Through the BMP the Greenland Government decides whether to grant or deny individual licenses. Before any activity subject to an EIA can be implemented the Greenland Government must approve the EIA report.

2) What must the authorities do before opening an area for offshore hydrocarbon activity?

Before opening any area in Greenland to offshore hydrocarbon activity, the BMP works with the Greenland Institute of Natural Resources (GINR) and National Environmental Research Institute (NERI) of Denmark to develop a strategic environmental impact assessment (SEIA) for the region. The SEIA helps the authorities determine if licenses should be granted in the specific region. Once the SEIA is completed, and before the Greenland Government and BMP open the area for licensing, the public may comment upon the SEIA.

3) How do licenses for prospecting, exploration and exploitation differ?

Prospecting licenses typically allow the holder to conduct limited preliminary exploratory studies to help it evaluate whether to begin actual exploration in the area concerned. Prospecting licenses do not prevent other companies from prospecting in the same area; they are granted for up to five years and may be renewed. MRA Explanatory Notes, p. 43.

Exploration and exploitation licenses may be granted separately or together, but they always give the license holder exclusive rights to work in the area covered by the license. Exploration and exploitation licenses are typically granted for ten years or, if special circumstances exist, up to 16 years. Exploitation licenses cannot exceed 50 years and end when exploitation activities are discontinued according to law. "Exploration and exploitation activities comprise all activities carried out by or on behalf of the licensee according to the licence, including [more detailed surveys and] the establishment of the necessary infrastructure and activities in support of exploration or exploitation activities." MRA Explanatory Notes, p. 44.

4) What information must a company provide before receiving an exploration and exploitation license?

"The licensee must have the expertise and financial background required for the exploitation activities in question." MRA Explanatory Notes, p. 45. The company must show

compliance with best international practices and "ensure that health and safety risks in relation to offshore facilities used for exploration, exploitation or transport of hydrocarbons have been identified, assessed and reduced as much as is practically possible." MRA § 79-(1). It must pay license application fees and fees upon granting of individual licenses. In addition, the company must prepare the Environmental Impact Assessments and Social Impact Assessments described below for its proposed activities, and the authorities must approve them.

5) **What other approvals must a licensee obtain?**

After receiving its license and before any drilling can begin, whether for exploration or exploitation, the operator must apply for individual drilling approvals. Each application must include a detailed drilling program and site survey plan for the proposed well location, an oil spill contingency plan and emergency evacuation plan. The licensee must also conduct EIAs and SIAs for each specific exploration activity that may have an impact, for instance an exploration drilling campaign. Complying with requirements under the MRA does not exempt licensees from obtaining approvals or permits required under other legislation. MRA § 79(1).

6) What environmental impacts must a company describe and when (EIA)?

Individual EIA reports must be approved before any activity subject to an EIA can be implemented. An EIA must describe the "environmental setting" for the proposed activity, with concise descriptions of climate, bathymetry, oceanography, ice conditions, and the biological environment. When describing the biological environment, the company must emphasize the species and how they function and interact in the ecosystem, including: a) benthic and pelagic communities, b) commercially important fish and invertebrate species, c) marine birds, and d) marine mammals. This section must also include a summary description of threatened species, national responsibility species and species of conservation concern, important habitats and/or areas of particular ecological importance, and Valued Ecosystem Components. The company must also describe the baseline chemistry and pollution level as well as the present use of natural resources including fishing, hunting, tourism. MRA Part 13 and EIA Guidelines, Appendix 1.

In addition to the environmental setting, the EIA must describe activities and emissions and contain an impact analysis along with plans for each of the following matters: environmental management, waste handling, monitoring and reporting, emissions and discharges, monitoring environmental impacts of routine operations, monitoring environmental impacts of accidents, decommissioning, and an environmental study plan.

7) What social impacts must a company describe and when must it provide a Social Impact Assessment (SIA)?

A company must address social impacts within the EIA by describing the "present use of natural resources," including hunting, fishing and tourism and the "cumulative impacts with other human activities in and near the license area should be considered." EIA Guidelines, Appendix 1. Thus the licensee must provide information ranging from a description of the environmental setting described in 6), above, to an in-depth analysis of the potential impacts of the activity.

A company must also address social impacts within an SIA by appropriately demonstrating, describing and assessing "the direct and indirect impacts of the activity on social conditions as well as the interaction between the conditions, mutual impact between conditions and cumulative effects of impacts on the conditions." MRA § 77(1)-(4). More specifically, within the SIA the

company must identify and analyze the potential impacts of the proposed action or development on the human environment, and recommend initiatives to realize both direct and indirect sustainable development opportunities as well as ways to mitigate negative impacts. SIA Guidelines, p. 3. To adequately identify and analyze the potential impacts, the company must "engage all relevant stakeholders in consultations and public hearings." SIA Guidelines, p. 4. To prepare stakeholders for "meaningful discussions," the company must provide a "non-technical brief" before public meetings. SIA Guidelines, p. 6.

8) How does the law protect the environment and marine mammals during offshore activity?

The *Inatsisartut* aims to "prevent, limit, and combat pollution and other impacts on the climate from activities that may directly or indirectly: "endanger human health," "damage animal or plant life or natural or cultural values on or in the soil, in the sea or in the subsoil," "impair recreation values or activities, "limit the use of … resources," and "impair human conditions of life," amongst other things. MRA §§ 51-55. The government "attaches importance to, for example, the consideration for avoiding impairment of nature and the habitats of species in designated national and international nature conservation areas and disturbance of species for which the areas have been designated" when granting a license or approving an activity or establishing and operating a facility that is subject to the MRA. MRA § 59. Separately, NERI has published "Guidelines to environmental impact assessment of seismic activities in Greenland waters." 2nd edition. National Environmental Research Institute, Aarhus University, Denmark, 2010.

9) What processes ensure that individuals and local communities are involved in the decision-making?

The EIA and SIA both require public involvement before the BMP and Greenland Government approves a license application. If the licensee's mandatory EIA identifies that an offshore project presents significant environmental impacts, then the BMP must provide opportunity for public comment. The MRA does not define the duration or format of this opportunity but the EIA Guidelines specify that an "opportunity" for a public hearing must be provided, in which stakeholders can express an opinion on the EIA. EIA Guidelines pp. 6-7. See also question 10, below.

The SIA Guidelines envision that a company will consult with stakeholders about their immediate interests in the project. Stakeholders may include, but are not limited to, the public sector, non-governmental organizations, affected communities, individuals and relevant companies. SIA Guidelines, Appendix 2. To prepare stakeholders for "meaningful discussions," the applicant must provide a "non-technical brief" prior to public meetings. SIA Guidelines, p. 6. By identifying key issues through public participation, the SIA aims to "ensure that concerned groups have an influence on topics to be studied by the SIA." SIA Guidelines, p. 6. Even though the applicant is responsible for preparing the SIA, the BMP aims to facilitate the public hearing process and assist the licensee in identifying stakeholders. SIA Guidelines, p. 4. BMP must publish a notice when the SIA report is submitted "to ensure the public's involvement and possibility of voicing their opinions." MRA Explanatory Notes, p. 107. While the SIA Guidelines expressly require the company to consult directly with the public; by contrast BMP "will involve and circulate the [SIA] report to relevant stakeholders in the review process for their views" and "during the hearing process assist the licensee with arrangements of public meeting(s)." SIA Guidelines, pp. 6-7. When reviewing and approving an SIA, the BMP may require the applicant to provide further material, or that special conditions must be studied further. MRA Explanatory Notes, p. 107. "In that connection, it is highly

relevant to ensure that local authorities have been involved, especially with a view to obtaining information and assessments of local labour market conditions and educational measures to provide the required qualified labour." Id.

10) What factors must the authorities consider when conducting national and local hearings?

The authorities do not conduct the hearings; they facilitate them. The licensee conducts the hearings and must follow the procedures described above and in this section.

"The Greenland authorities may demand that the licensee shall conduct stakeholder consultation in connection with preparing the EIA. The stakeholder consultations can be conducted in connection with preparing the Social Impact Assessment." EIA Guidelines, p. 7. After stakeholder consultation, the EIA report is submitted for public review; the public hearing process takes a minimum of 6 weeks to allow the local authorities, stakeholders and the general public to submit their comments on the EIA to the licensee. Id. BMP makes the electronic versions of the report available on the Greenland Government webpage. The BMP may also require the licensee to provide physical copies of the EIA available for public review at local municipalities' offices, libraries, etc. After the public hearings, the licensee must forward all comments received to the BMP, discuss and incorporate the "relevant" comments into the EIA, and submit the final version of the EIA along with a list of changes made to the EIA to BMP for government approval. Id. Beyond the procedures described, the EIA Guidelines do not identify what factors the authorities must consider when evaluating an assessment for approval or how much weight they must give individual factors or comments.

11) What obligation do the authorities have to ensure that individual and community input is properly represented in the EIA and SIA reports?

As noted in 10) above, the licensee can conduct stakeholder consultations for an EIA "in connection with preparing the Social Impact Assessment." Following a public hearing, the "licensee shall forward the incoming comments to the BMP;" no specific form is specified. However, the licensee shall also discuss "relevant comments" and incorporate them in the final version of the EIA report, "which shall be submitted (together with a list of the changes made) to the BMP for further governmental approval." The authorities must review all such input and changes before they can approve an assessment. The EIA Guidelines provide for possible but not mandatory publication of comments: "Incoming comments submitted through the public hearing process may be made public, as comments, or extracts hereof, may be incorporated in the final version on the EIA." All quotations in this section are from the EIA Guidelines, p. 7.

Appendix II

Arctic Offshore Oil and Gas Guidelines (AOOGG) - Components of an EIA

According to Part 3.5 of the AOOGG, an EIA "should be based on the best available information" and include the following items:

AOOGG Part 3.5	Greenland	Russian Federation
Source: Part 3.5	Source, unless otherwise indicated: EIAG=BMP EIA Guidelines*	Source, unless otherwise indicated: Order "On Regulations for Environmental Impact Assessments±
0) Items not recommended in the AOOGG EIA list of factors pp. 17-18.	1) Waste Handling Plan 2) Monitoring and Reporting Plans for emissions and discharges; environmental impacts of routine operations; and of accidents. 3) Decommissioning Plan	1) Evaluation of significance of residual impacts on the environment and consequences. 2) Development of proposals for environmental monitoring and control at all stages of planned economic activity. 3) Recommendations for post-project analysis of planned economic activity.
1) BASELINE: Describe the reference or initial state of the activity area; identify baseline data needs.	1) Strategic Environmental Impact Assessment 2) Environmental Study Plan (ESP) describes how environmental data will be procured and prepared; secure data necessary to update the EIA; and secure baseline data for assessing the impact of accidents. 3) Site surveys at exploratory drill sites are conducted as part of the ESP.	1) Preliminary assessment of the environmental impact includes documenting the state of the env't. that will be affected and its most vulnerable components. 2) Research stage includes analysis of the territory (state of the env't.; existence and nature of anthropogenic stress, etc.). 3) Evaluation of OVOS materials provides basis for implementing ongoing environmental monitoring and for post-project analysis.
2) RISK: Environmental risk analysis of potential impacts & risk analysis of potential spills from the activity, note pollution sources, transport mechanisms, routes and duration of exposure to species or habitats of concern.	1) Risk for and impacts of acute oil spills, including trajectory modeling in the marine environment. 2) Risk of introducing new and potential invasive species. 3) Effects on seabirds and marine mammals from disturbances (e.g. helicopters).	1) Principle: presume potential environmental danger of any economic activity. 2) Assess probability of risk (extent, nature, size, area of distribution, and prediction of environmental consequences). 3) Identify possible impacts of proposed economic activity on environment.

AOOGG Part 3.5	Greenland	Russian Federation
Source: Part 3.5	Source, unless otherwise indicated: EIAG=BMP EIA Guidelines*	Source, unless otherwise indicated: Order "On Regulations for Environmental Impact Assessments±
3) SPILL RESPONSE: Oil spill response methods and limits under varying environmental conditions (oil type, seasonality, ice conditions, etc.).	1) Not separately required but see 2) above on risk.	1) Not separately required in Order±, which contains only general language and states that federal laws determine content of required OVOS documentation. These laws also provide the legal basis for the assessment. *See* "On the Continental Shelf," art. 6 and "Safety Regulations for Prospecting and Developing Oil and Gas on Deposits on the Continental Shelf," which require spill response methods for arctic conditions.
4) TIME SERIES: Best available time series.	1) Not specifically required.	1) Not specifically required.
5) ACTIVITY DESCRIPTION: Describe proposed activity, including purpose, location, duration, intensity (its physical characteristics & land use requirements in construction and operation phases); state main characteristics of proposed development process, incl. type and quantity of materials to be used.	1) "Introduction" includes company description, location of license area, purpose of activity and timeline; 2) "Activities and Emissions" includes description of proposed activities (purpose, location, duration, intensity, etc. and identifying drilling platforms, ships, pipelines, loading and port facilities, etc. 3) Energy requirements	1) Company description, request, investment feasibility, feasibility study. 2) Initial documentation: description of proposed activity; possible alternatives to implementation; conditions of implementation; timing and location of affected territory; land use requirements and waste load from transport and infrastructure, and measures to mitigate. 3) Purpose and need for planned activity.
6) EMISSIONS: Estimated type and quantity of expected residues and emission (including air, water, soil, vibration, light, heat and radiation pollution).	1) Emissions to air must estimate amounts and specify means to minimize emissions by BAT and BEP. Discharges to water (types, amounts) must be described and amounts of polluting substances estimated. 2) Separate plans for monitoring and reporting emissions and discharges (to air, water) required. 3) EIA must evaluate effects of emissions of other contaminants to air and water	1) Other than requiring the developer to identify sources of emissions and discharges, the Order± does not specifically refer to emissions, but see 3) above on spill response. The statute "On Environmental Protection" establishes the framework for standards on emissions and discharges, and a proponent is expected to provide OVOS materials on meeting these standards.

AOOGG Part 3.5	Greenland	Russian Federation
Source: Part 3.5	Source, unless otherwise indicated: EIAG=BMP EIA Guidelines*	Source, unless otherwise indicated: Order "On Regulations for Environmental Impact Assessments±
7) MODELS: Forecasting methods used to assess effects on the environment and any limitations on models due to lack of data.	1) EIA must describe the predictive methods used to assess effects on environment and their limitations, e.g. due to lack of data.	1) Developer must demonstrate the use of tools and methods of measuring, calculating and evaluating are in accordance with laws of Russian Federation. 2) Methods must be scientifically based. 3) OVOS materials must include description of methods used to evaluate impact on env't., and any major problems foreseen. 4) In case of detection of lack of necessary information in OVOS materials to predict impact on env't., more studies must be conducted.
8) AREA: Based on 1-7, identify area of potential impact.	1) EIA shall cover entire region possibly affected by the activities, including land based activities.	1) Assessment of environmental impacts must include entire area that is at risk of being affected, including transboundary impacts.
9) LIKELY EFFECTS: Likely significant effects, direct or indirect and evaluation of their spatial and temporal scales.	1) Covered in sections of this chart, e.g. 6, 8 and 11.	1) Possible impacts of proposed activity must be identified, including extent and nature of impacts, and probable environmental consequences. 2) Evaluation of significance of residual impacts and their consequences on the environment.
10) LIKELIHOOD OF TRANSBOUNDARY IMPACTS.	1) Must be included, e.g. impacts of oil pollution in waters of neighboring countries.	1) Preliminary assessment must include analysis of possibility of transboundary impacts. 2) In the event of that possibility, studies required to evaluate impact on env't., taking into account provisions of the UNECE Convention on Environmental Impact Assessment in a Transboundary Context.
11) SOCIO-ECONOMIC: Potential socio-economic effects and the effects on traditional ways of life of indigenous people.	1) Impacts on fishing and hunting, and 2) Cumulative impacts with other human activities in and near the license area should be considered.	1) Assessment of risks of environmental impacts must include consideration of related social and economic consequences. 2) Developer must compare socio-economic effects of alternatives under consideration to those of proposed activity, and provide justification for proceeding with proposed activity.

AOOGG Part 3.5	Greenland	Russian Federation
Source: Part 3.5	Source, unless otherwise indicated: EIAG=BMP EIA Guidelines*	Source, unless otherwise indicated: Order "On Regulations for Environmental Impact Assessments±
12) MITIGATION. Describe measures proposed to avoid, reduce or rectify identified potential significant adverse effects, considering Arctic's capacity to recover & regenerate.	1) Environmental Management Plan required describing measures to mitigate impacts on the environment.	1) Developer must identify measures that reduce, mitigate or prevent adverse impacts, and asses their effectiveness and feasibility.
13) BIOLOGY. An accounting with the principles of conservation biology, including disturbance and cumulative effects.	Required elements: 1) Climate, Bathymetry, Oceanography, Ice conditions, Biological environment, focusing on species' function and interaction in ecosystem. 2) Summary description of: a) threatened species, national responsibility species and species of conservation concern, b)important habitats and/or areas of particular ecological importance, e.g. upwelling areas, ice edge communities and polynyas, c) Valued Ecosystem Components 3) Baseline chemistry, pollution level (hydrocarbons, heavy metals, etc). 4) Present use of natural resources (fishing, hunting, tourism).	1) Not specifically required, but see section 3) above on spill response.
14) OTHER DEVELOPMENT OPTIONS. Where authorities prepare the EIA this may include a no action alternative. Evaluate different alternatives and state reasons for choosing selected activity.	1) Alternative project development options shall be described and arguments for the selected solution shall be presented.	1) Describe alternatives to activity that would achieve similar goals, including "zero option" (no activity). 2) Compare expected environmental and socio-economic consequences of alternatives under consideration, including no-option alternative, and justify implementing proposed activity.
15) SUMMARY. Nontechnical summary, with figures and diagrams, of preceding information. Prepare other ways to display it based on cultural heritage of local and indigenous residents if needed.	1) Non-technical summary in Greenlandic, Danish and English shall briefly describe the project and conclusions, including preferred options compared to alternatives, important potential environmental effects, mitigation, uncertainties and responses from the public hearings.	1) Non-technical summary of final report of OVOS materials must be made available to the public.
16) NOISE. Assess all associated noise sources, incl. seismic or other testing equipment, vessels, aircraft, drillships, drilling operations, and ice-breaking equipment and their potential effects on fish, marine mammals, and other wildlife including cumulative effects.	1) EIA includes impacts of noise, in particular underwater noise, on marine mammals and fish.	1) Not specifically required.

AOOGG Part 3.5	Greenland	Russian Federation
Source: Part 3.5	Source, unless otherwise indicated: EIAG=BMP EIA Guidelines*	Source, unless otherwise indicated: Order "On Regulations for Environmental Impact Assessments±
17) HEALTH. Assess human health effects with systematic consideration of public health status baseline & analysis of oil and gas activity.	1) Licensee must ensure for offshore operations generally that safety and health risks are "reduced to a level as low as reasonably possible See also Explanatory Notes to MRA at 20, 2-28.	1) Not specifically required, but see section 3) above on spill response.
18) OTHER RESEARCH. Integrate the results of the Arctic Climate Impact Assessment and other research into the evaluation of possible impacts of oil and gas activities and infrastructure in the Arctic Ocean.	1) Not specifically required.	1) Not specifically required.

NOTES

AOOGG Part 3.5 lists 19 bullet points, but inadvertently split point 7, above, into two parts, so we list only 18 items.
* = Bureau of Minerals and Petroleum Guidelines for Preparing an Environmental Impact Assessment Report for Exploration, Development, Production, Decommissioning and Transport of Hydrocarbons Offshore Greenland
** = OSPAR Guidelines for Monitoring the Environmental Impacts of Offshore Oil and Gas Activities
± = Committee of the Russian Federation on Protection of the Environment, Order Dated as of May 16, 2000 N 372 On Adoption of a Manual for Assessment of Planned Economic and Other Activities on the Environment in the Russian Federation.
MRA = Mineral Resources Act (Greenland). OVOS= Russian acronym for environmental impact assessment.

Appendix III

Principal Federal Agencies Involved in Permitting, Control and Oversight of Offshore Oil and Gas Exploration and Extraction Activities[1]

President of the Russian Federation

Ministry of Defense

(1) Regional study – receives a notification from Rosnedra; (2) Combined license – provides a consultation to Rosnedra; (3) Drilling permits - provides a consultation to Rosprirodnadzor

Federal Security Service

(1) Regional study – receives a notification from Rosnedra; (2) Combined license – provides a consultation to Rosnedra; (3) Drilling permits - provides a consultation to Rosprirodnadzor

Government of the Russian Federation

Grants the right to use offshore mineral deposits

Ministry of Education and Science

(1) Regional study – receives a notification from Rosnedra; (2) Combined license – receives a notification from Rosnedra; (3) Drilling permits - provides a consultation to Rosprirodnadzor

Ministry of Natural Resources and the Environment (*Minprirody*)

Federal Service for Oversight of Natural Resources (*Rosprirodnadzor*)

(1) Conducts state environmental review (SER); (2) Issues drilling permits; (3) Issues waste disposal permits

Federal Service for Ecological, Technological, and Nuclear Oversight (*Rostechnadzor*)

(1) Establishes safety regulations and operating practices; (2) Controls and oversees compliance with safety requirements and operating standards; (3) Issues pollutant discharge permits; (4) Approves waste generation limits

Federal Agency for Water Resources (*Rosvodresurs*)

Protection of marine environment

Federal Agency for Mineral Resources (*Rosnedra*)

Issues licenses for all types of offshore oil and gas development

Federal Hydrometeorological and Environmental Monitoring Service (*Roshydromet*)

Conducts state environmental monitoring

Ministry of Transport

Federal River and Sea Transport Agency

(1) Regional study – receives a notification from Rosnedra; (2) Combined license – receives a notification from Rosnedra; (3) Drilling permits - provides a consultation to Rosprirodnadzor

Federal Fisheries Agency

(1) Drilling permits - provides a consultation to Rosprirodnadzor (2) Combined license – provides a consultation to Rosnedra

Ministry of Energy

Combined license – provides a consultation to Rosnedra

Ministry of Economic Development

(1) Drilling permits - provides a consultation to Rosprirodnadzor (2) Combined license – provides a consultation to Rosnedra

[1] This chart based on the hierarchy set forth in the chart prepared by the Government of the Russian Federation. ISPOLNITEL'NAYA VLAST' [EXECUTIVE POWER], http://www.government.ru/power/ (last visited Feb. 13, 2010). Many federal agencies are involved in regulating various activities associated with offshore oil and gas development. Due to the space limitations, in this paper we only discuss the agencies that regulate the *core* aspects of Arctic oil and gas exploration and extraction. In this chart, we listed only the agencies that we discuss in the paper.

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