Specific features of domestic and international legal regulation of environmental management in the Arctic

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Abstract. The presented article examines the specific features of legal regulation of Arctic environmental management by different countries and the major directions of the state policy in this field. The article analyzes various national and international laws and regulations that formalize the development of Arctic resources and protection of the Arctic environment, and assesses the provisions of the Arctic development strategies of foreign countries and the «Foundations of the State Policy of the Russian Federation in the Arctic until 2020 and Beyond» [1]. One of the major directions of the state policy in the Arctic is finding a balance between the need to develop Arctic resources and protect the Arctic environment. Given the global importance of achieving this goal, the Russian Federation as the largest polar country needs to ensure that an appropriate regulatory framework is created. One of the possible options would be the adoption of the Federal Law on the Arctic Zone of the Russian Federation. In addition to the general issues of Russian sovereignty, jurisdiction, and the guiding principles of governance in the Arctic, the law should include provisions concerning the specific features of environmental management in the Arctic region with allowance for the need to develop natural resources and protect the Arctic environment from negative impacts. Another option involves the adoption of specialized laws focusing on environmental protection and prevention of pollution of Arctic waters and lands of the Russian Federation.

1. Introduction
Among the major factors that increase the interest of various states in the development of Arctic resources are the richness and diversity of the Arctic natural resource potential, uncertainty of its international legal regime, improvement and development of modern technologies that enable the extraction and development of Arctic resources.

According to analytical data, the Arctic contains about one-third of the world's mineral reserves (oil, gas, iron, gold, diamonds, copper, etc.). The Arctic seas are inhabited by over 150 commercial fish species. The Arctic also provides an inexhaustible supply of fresh water [2, P. 409-410].

2. Main Body
The specific features of legal regulation of environmental management in the Arctic are associated with the fragility of the Arctic ecosystem and high economic interest of various countries in this region.

«Canada's Northern Strategy: Our North, Our Heritage, Our Future» [3], which has been effective since 2009, states that exercising Canada's sovereignty in the Arctic involves maintaining a strong
presence in the North and "... enhancing stewardship of the region." The Strategy also notes that the "tradition of respect for the land and the environment" of the Arctic region is paramount to Canada's state Arctic policy, and so is the principle of the region's sustainable development. Canada's Northern Strategy also emphasizes the importance of increasing protection of the Arctic marine environment, including from the negative impact of Canada's transport system. In order to prevent harmful impact on the Arctic marine environment, Canada regularly assesses the capacity to respond to marine pollution and ensures that the Canadian Coast Guard and communities have the necessary equipment and response systems in place for emergencies [3].

According to the current Canadian legislation, "... any company now undertaking industrial development in the North must undertake a rigorous environmental assessment, establish a site closure and remediation plan, meet standards for operational and environmental safety, and satisfy the requirements of various laws [3]."

Canada has a fairly broad legal framework for the regulation of environmental management in the Arctic. In particular, Canada adopted the Arctic Waters Pollution Prevention Act and the Northern Inland Waters Act in 1970, and the Oceans Act in 1996 [4, P. 25]. Thus, Canada's 1970 Arctic Waters Pollution Prevention Act establishes civil and criminal liability for violating environmental safety regulations and discharging pollutants within 200 nautical miles from the coast of Canada [5, P. 233].

Canada's Northern Strategy also formulates the need to deepen international cooperation with other countries with common interests in the Arctic, such as oil and gas development, scientific cooperation in the region, overcoming the negative impacts of climate change, etc. At the same time, Canada's Northern Strategy underlines the importance of "working with non-Arctic states on Arctic issues [3]."

One of the major directions of Norway's state policy in the Arctic is serving and protecting their national interests in this region. In order to achieve this goal, the Norwegian government considers it necessary to develop such areas of state activity as environmental and natural resource management, security and readiness to take the necessary measures in case of emergency, energy and fisheries management [6].

Norway’s 2017 Arctic Strategy notes that one of the directions of Norway's state policy in the Arctic is to ensure the country’s leading role in various"... central activities", including "... fishing and biodesign, i.e. development of the sea's biological capacity." The Norwegian government also emphasizes the importance of cooperation with Russia in the Arctic region on a number of issues, such as unregulated fishing, "... management of renewable fishery resources for the current and future generations", finding a balance between economic interests related to the use of Arctic resources, and economic security in the region [6].

One of the major diplomatic measures aimed at regulating international relations in the field of Arctic environmental management between Russia and Norway was «the 2010 Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean»[7]. The Treaty establishes the terms of cooperation between Russia and Norway "... in the sphere of fisheries... and fisheries in the Barents Sea... with a view to maintain their existing respective shares of total allowable catch volumes and to ensure relative stability of their fishing activities for each of the stocks concerned [7]." The agreement also defines the mechanism of cooperation between the two countries in the development of mineral deposits. The Russian Federation has ratified the Treaty by the Federal Law of April 5, 2011 No. 57-FZ «On the Ratification of the Treaty between the Russian Federation and the Kingdom of Norway Concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean»[8].

According to the Norwegian government's assessment of the new avenues of constructive cooperation with Russia in the Barents Sea, "... due to the close and constructive cooperation between Norway and Russia in sustainable fisheries management...” fishery resources have increased considerably in recent years [6].
In 2013, the United States of America adopted the Arctic Strategy. According to N. Pankevich, the US government is rather skeptical about the prospects of Arctic resource development, because "the relatively short Arctic coastline of the US compared to other polar countries stipulates the insufficiency of the regulatory basis for the implementation of extensive Arctic development programs... also due to the remote, extreme climatic conditions and the related technological difficulties [9, P. 100]."

P. Gudev believes that the US policy on the development of Arctic natural resources can be mostly characterized as wait-and-see, since the United States still has not entered the 1982 United Nations Convention on the Law of the Sea [10, P. 59]. The author notes that "... the non-participation of the US in the 1982 Convention and the consequent lack of international legitimization of its activities makes the US limit investments..." in Arctic resource development [10, P. 50]. That said, the author stresses that the US has a national legislation system that allows seabed resource development in areas that "... according to the 1982 Convention, fall within the jurisdiction of the International Seabed Authority." For instance, in 1980 the US passed the Deep Seabed Hard Mineral Resources Act [10, P. 54].
In 2015, Congressman Rick Larsen officially announced the creation of the specialized Congressional Arctic Working Group, which "... will bring together stakeholders from across the native, environmental, oil and gas, mining, national security, and navigation communities to advise Congress about the opportunities and challenges for the US as an Arctic nation [12]."

Similar to other polar countries, Denmark also has its national «Kingdom of Denmark Strategy for the Arctic 2011–2020» [13, P. 83]. As rightfully noted by R. A. Kurbanov, the specific features of Denmark’s Arctic Strategy stem from "... the considerable autonomy of Greenland and the Faroe Islands in solving problems, including those related to the exploration and exploitation of mineral resources[13, P. 83]."

At the multilateral international legal level, the legal regulation of environmental management in the Arctic region is defined by such documents as «the 1973 Agreement on the Conservation of Polar Bears», «the 1976 Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration and Exploitation of Seabed Mineral Resources», «the 1993 Nuuk Declaration on Environment and Development in the Arctic», «the 2008 Ilulissat Declaration», «the 2014 International Code for Ships Operating in Polar Waters (Polar Code)» [14], etc.

Of the five Arctic states, the Russian Federation has the largest Arctic area within its jurisdiction.

The Russian legislation system in the field of environmental management comprises a wide range of laws and regulations: Federal Law «on Environmental Protection», «Land Code of the Russian Federation», «Forest Code of the Russian Federation», «Water Code of the Russian Federation», «Federal Law on Subsoil», Federal Law «on Fauna», Federal Law «on Atmospheric Air Protection», Federal Law «on the Continental Shelf of the Russian Federation», Federal Law «on the Internal Sea Waters, Territorial Sea, and Contiguous Zone of the Russian Federation», Federal Law «on the Exclusive Economic Zone of the Russian Federation» [15], etc.
As of today, the Russian Federation has no legal acts regulating social relations in the field of environmental management in the Arctic. Nevertheless, a number of legal acts regulating general issues of environmental management and development of the Arctic region have special provisions concerning the specific features of environmental management in the Arctic.

![Figure 3. The polar sector of the Russian Federation and sectors of the other Arctic states](http://umotnas.ru/umot/velikij-peredel-arktiki-globalenoe-poteplenie-otkrivaet-nevida/3.jpg)

In particular, the Foundations of the «State Policy of the Russian Federation in the Arctic until 2020 and Beyond» [1] approved by the President of the Russian Federation identify the following major objectives of the state Arctic policy: "... an expansion of the resource base of the Arctic zone of the Russian Federation capable substantially to meet the requirement of Russia in hydrocarbon resources, water biological resources and other kinds of strategic raw materials"; environment protection of the Arctic; maintenance and development of international cooperation on Arctic development, including "... in the field of effective natural resources management and environment preservation in the Arctic [1]."

With regard to the primary goals in the field of development of environmental management in the Arctic, the Foundations of the «State Policy of the Russian Federation in the Arctic until 2020 and Beyond» [1] emphasize the need "... to provide an essential increase of balance mineral resources of the Arctic sea deposits...", including by exploitation of the continental shelf and "... development of oil and gas deposits in the Arctic zone of the Russian Federation." The major goals also include the introduction of new kinds of techniques and technologies for the exploration and exploitation of natural Arctic resources, "... including in the areas covered with ice" [1]. Pursuant to the «Foundations of the State Policy of the Russian Federation in the Arctic until 2020 and Beyond» [1], the President of the Russian Federation has also approved the «Development Strategy of the Arctic Zone of the Russian Federation and National Security until 2020»[17].

The scale and importance of the set goals and objectives require the Russian Federation – the largest polar state with a rich history of Arctic development — to ensure the creation of an appropriate regulatory framework and implementation of law enforcement.

One of the important conditions for the state regulation of environmental management in the Arctic is the possibility of conducting an appropriate environmental assessment. As rightly noted by E.V. Voskresenskaya, D.A. Mokhorov, and A.A. Tebryaev, environmental assessment and "... forensic analysis is an important legal instrument for ensuring rational environmental management and
protecting the environment from the adverse impacts on urban areas." The authors also propose a National Environmental Forensics Standard and a Uniform National Forensics Standard of the Russian Federation [18]. It appears that the authors' proposals are applicable to not only urban, but also natural environments. The National Environmental Forensics Standard should be adopted considering that Russia has a large sector of the Arctic under its sovereignty, which places a particular responsibility upon our country to ensure the region's environmental security in the course of development of its natural resources.

3. Conclusion

Another option for the development of the Russian legal framework for regulating environmental management in the Arctic could be the adoption of the Federal Law on the Arctic Zone of the Russian Federation, the draft of which is yet to be adopted by the Russian Parliament. In addition to the general issues of Russian sovereignty, jurisdiction, and the principles of governance in the Arctic, the law should include provisions concerning the specific features of environmental management in the Arctic region with allowance for the need to develop natural resources and protect the Arctic environment from negative impacts. Another potential solution involves the adoption of specialized laws focusing on environmental protection and prevention of pollution of Arctic waters and lands of the Russian Federation.

The results of the analysis of various laws and regulations of the Russian Federation and foreign countries makes it possible to conclude that legal regulation of environmental management in the Arctic both at the domestic and international level needs to ensure sustainable development of the Arctic environment with allowance for the desire of a number of countries to strengthen their territorial standing and protect their sovereignty in the Arctic region.

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