

Abstracts

Legal Model of Transboundary Marine Mineral Resources Management in the Western Arctic Area of the Russian Federation

A. Vylegzhanin

The article is devoted to legal issues of the execution of Annex II («Transboundary Hydrocarbon Deposits») to the Treaty between Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean of 2010.

Attention is paid to interdependence between two levels of legal regulation, that is: 1) interstate level (addressed to Governments of Norway and Russia) and 2) private law level (addressed to legal persons holding rights to explore and exploit the transboundary oil and gas deposits according to Norwegian and Russian law.

Expected Development of the Russian Arctic Regions: Space Transformation, External Relations and Lessons of Foreign Strategy

A. Pilyasov

The long-term modes of productive forces organization in the RF Arctic regions are defined in the article. The innovative modernization factors of the Russian north regions both old and young from the economic development age point of view are also considered. There is the characteristic of the inter-regional and international cooperation directions of the Arctic regions within next ten years. The Arctic Strategy of the Russian Federation is compared with similar documents of other countries.

Radiation Monitoring and Emergency Response System Improvement at the North-West Region of Russia

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The Projects of Radiation Monitoring and Emergency Response System development in Murmansk and Arkhangelsk regions were included in the priority tasks in the framework of the Strategic Master Plan concerning NPS and other radiation-dangerous facilities dismantling at the North-West region of Russia. The key objective of the work is the cardinal improvement of the radiation monitoring and emergency response system in case of the accident at the radiation-dangerous facilities of the North-West region of Russia. The work is directed on the increase of forces and assets readiness, the mitigation of possible radiation accident effects, the increase of decision-making efficiency and the implementation of population and environmental protection measures.

Cooperative Russian-Norwegian Investigations of the Western Arctic Seas Radioactive Contamination at the Areas under Local Sources Exposure

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The basic results of the cooperative Russian-Norwegian investigations concerning the radioactive contamination of the Western Arctic seas under the local sources effect are discussed in the article. The common operations of the Russian and Norwegian experts in this area began in 1992 within the framework of cooperation in the field of the environmental protection in view of both sides concern of possible effects of radioactive waste (RW) discharge and disposal in the Arctic seas. The cooperative Russian-Norwegian Expert Group involved in the investigation of the Northern areas radioactive contamination was established to coordinate the works. In 1992 this Group carried out the first common marine expedition to study the radioactive contamination of the Kara and the Barents Seas; there were two common expeditions at RW disposal areas on the Kara Sea in 1993–1994. Hereafter the scope of cooperative expert group activity was extended in the on-shore radiation dangerous facilities effect on the water radioactive contamination, particularly (common study of Atomflot water area in Kola Bay in 1998) and cooperative monitoring under emergency situations (monitoring of possible radiation contamination of the Barents Sea at the area of Kursk NPS wreck in connection with her raising in 2001). From 2006 till the present time the works concerning «The Study of Radioactive Contamination of the Barents Sea Water» cooperative monitoring project are being carried out by Rosgidromet and the Norwegian Radioactive Protection Agency (NRPA).

Planning of Operations Concerning Oil Spills Prevention and Elimination of Prirazlomnoje Field

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The article deals with the detailed description of decisions concerning the prevention and elimination of possible oil spills of Prirazlomnoje field. There is a conclusion about some difficulties of oil spills elimination in the Russian Arctic especially in ice conditions; the recommendations of oil spills prevention and risk decrease are also reviewed

Environmental Feasibility Study of Rational Nature Management in the European North

A. Taskaev, I. Archegova

The environmental issues associated with the intensive extraction of natural resources in the North are considered in the article. The study results of the environmental balance maintenance procedure under the intensive industrial development of natural resources of the northern region (Komi Republic as an example) are given in it. The Nature Rehabilitation Concept is considered. The scientifically-proved and repeatedly tested process of broken and oil-polluted ground restoration is also proposed. The nature management is considered in unity of nature resources application processes (agricultural included) and the natural ecosystems restoration (Nature Rehabilitation System)

Basic Network of Environmental Safety Observatories in the Russian Arctic Regions

V. Pitulko, V. Donchenko

The insufficiency of reliable data does not allow the authorities to analyze properly the environmental changes in the Russian Arctic in real time. One element of the environmental risk management here may be a complex of environmental safety observatories.

Environmental Investigations of Oil and Gas Development in the Eastern Part of the Barents Sea

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The oil and gas pools development in the Arctic and the Barents Sea in particular has the higher interest and concern of the public both in connection with adverse climatic conditions at the areas of the projects implementation and the environmental restrictions related to the fragility of the Arctic sea ecosystems, availability of numerous commercial and rare species of biota. How can the sea hydrocarbon production affect the environmental condition of the eastern part of the Barents Sea and the region of the Barents Sea as a whole? To get the fair answer to this question some scientific-research institutes and the environmental companies conduct the diverse research works in the region. They include the scientific environmental programs, the annual regional fishery monitoring, as well as the engineering and environmental surveys under oil and gas projects implemented in the Barents Sea, the project of Shtokman field development in particular. As a result the full-scale long-term material giving the retrospective data about condition and dynamics of the environmental essential ingredients is accumulated. These researches should become a basis of the environmental support of the Barents Sea shelf development.

The Russian and Norwegian Barents Sea areas: a study of oil and gas presence and prospects.

V. Bogoyavlensky

The comparison of geological-geophysical studies and oil and gas bearing of the Russian and Norwegian offshore of the Western Arctic region is made in the article. It is shown that the prospects of large oil and gas pools discovery in the Barents Sea (including Pechora Sea) are connected with not well-explored by seismic and drilling the Mesozoic (especially Triassic) and Paleozoic clastic-carbonate complexes. The particular attention to prospects of oil and gas bearing of the Admiralteysky Swell and Fedynsky Arch uplifts is given.

Reform of Payments for Environmental Negative Impact: Essence and Risks.

G. Kharitonova

The development of the Russian institute of payments for negative influence on environment and essence and risks of its change in conditions of reform of the government is analyzed in the article by Environmental management

The Area of New Possibilities

V. Dmitrienko

The geographical location of Kola Peninsula determines its as a key link in providing the geopolitical interests of Russia in the north part of the Europe and Arctic regions. Today there is a new region management standard of high quality. The work concerning the Strategy of social and economic development of Murmansk area till 2025 is now under completion. The next step is the development of the Government Program of the comprehensive social and economic development of Murmansk region for 2011–2020.

Belomorie is the Region of the Arctic Challenges Solving.

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Principles of the social and economic development of Belomorie, the anthropogenic and weather impact on environmental and economy of catchment basin and sea for last 20 years in order to create the elements of decision-making support system, scientific basis of rational use and protection of the regional resources are considered in the article. Both results of the available data analysis and the mathematical models are used for the diagnosis and forecast of the White Sea ecosystems dynamics, social and economic development of region. The current challenges of Belomorie include some package of socio-economy, geology, hydrology, and oceanology, the environmental matters, tasks connected with the Country defense, EMERCOM activity as well as the aspects of the international cooperation within the Barents/Euroarctic region. It means that the challenge from scientific rank turned into the academic and international state.

LENIN Legendary Nuclear Ice Breaker.

N. Khlopin, N. Barinov

The material given in the article will allow to familiarize readers with some milestones of the first Civil Nuclear Ship construction, operation and current state (Lenin Nuclear Ice Breaker).

К сведению авторов

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2. Текст на бумажном носителе должен быть представлен в виде распечатки с компьютера (кегель 14). В состав электронной версии статьи должны входить: файл, содержащий текст статьи, и файл(ы), содержащий(е) иллюстрации. Если текст статьи вместе с иллюстрациями выполнен в виде одного файла, то необходимо дополнительно представить файлы с иллюстрациями.

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5. Оба экземпляра на бумажном носителе должны быть подписаны автором (всеми авторами). К рукописи прилагаются справка об авторах (фамилия, имя, отчество, место работы, адрес, телефон) и заключение о возможности опубликования работы в открытой печати.

6. В статьях основных разделов перед текстом помещается аннотация на русском и английском языках (количество знаков – 240). Статьи должны быть снабжены индексом УДК.

7. Подстрочные примечания (сноски) имеют сквозную нумерацию по всей статье.

8. Используемая литература помещается в конце статьи в виде пронумерованного списка расположенных в алфавитном порядке работ сначала на русском, затем на английском (или на любом другом – на латинице) языке. При ссылке в тексте дается номер работы в квадратных скобках.

9. При необходимости смысловых выделений шрифтом нужные слова подчеркивают и выносят указания на поля.

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