Possible negative legal consequences of unlimited technological expansion in the Arctic basin

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Abstract. The article discusses the problems and features of the legal regulation of environmental management in the constituent entities of the Russian Federation located in the Far North of the Arctic. Due to their geographical location, climatic conditions and underdeveloped infrastructure, these entities were and remain problematic regions in terms of subsoil use. It is indicated that the legal and legislative practice of the Arctic states themselves plays the leading role in the legal status of the Arctic. At the same time, international treaties should be applied taking into account the references to regional agreements contained in them. According to the authors, the regulation of the relations of subsoil use for exploration and production of the main types of minerals should be carried out with the active participation of the constituent entities of the Russian Federation, which may contribute to the rational and integrated use of subsoil. It is proposed to add and amend the relevant legislation of the Russian Federation.

1. Introduction

Digitalization in the field of management and science and the organization of production is based on the need to digitalize the economy, which is the deployment of the well-known thesis on the scientific organization of labor (SOL), and, in fact, the implementation of the classical thesis on the need for universal accounting and control of all business processes, ultimately meaning principles of social justice.

In this regard, the question arises about the reasons for the attention of the scientific community to the concept of the term "digitalization", in particular regarding the application of technology to the concept. Apparently this is due to the fact that the digitalization phenomenon, which means, first of all, the extremely accurate and timely reflection of all internal connections and the consequences of decisions, has clearly failed in the sphere of trade due to the mass resistance of its carriers, and is transferring its application vector to the sphere that becomes the most socially dangerous due to the most destructive consequences, the direct combination of science and production, causing the manifestation of this effect to the greatest extent. Nature management is objectively becoming such a sphere on an ever-increasing scale and pace, and its most vanguard area is subsurface management due to its likely exhaustion.

In this continuum, the “black hole” effect arises, exacerbated by the scale and turbulence of modern technology.

A side effect of this effect is the unpredictable and virtually unregulated pumping of unlimited financial resources from one “black hole” to another. This creates a new, and inherently unexpected, effect of the “mole tunnel” connecting them.
If these consequences are not predicted and not ruled out in a timely manner, then a global economic disruption can be obtained, in comparison with which natural disasters may seem like a weak echo of a wandering “ozone hole”.

One of the weakest links in nature management is the territory of the Arctic, which requires the use of special scientific technologies, which are essentially digital. Due to their geographical location, climatic conditions and underdeveloped infrastructure, the constituent entities of the Russian Federation belonging to the Far North were and remain problematic regions. However, the Far North is rich in many minerals, which makes it attractive from the point of view of industrial development.

The sphere of subsoil use is an area of maximum accumulation of legal, economic and geopolitical interests. The territory of the Far North is a giant oil and gas basin, which is an uncontested source of energy in the near future. In addition to energy reserves, the northern region also has transport potential.

2. Methods

Currently, the development of mineral deposits is of economic interest for countries located on the coast of the Arctic Ocean (Russia, Denmark, Canada, Norway and the USA). According to international agreements, states exercise sovereign rights to develop subsoil within 200 nautical miles of their exclusive economic zone. The term “Arctic states” is used in international law to mean different groups of states: in one case, a group of five states is indicated whose coast faces the Arctic Ocean, which has, in accordance with the 1958 Geneva Conventions on the Definition of Sea Spaces[1] and the UN Convention on 1982 of the Law of the Sea[2]. The term is also used in the Ilulissat Declaration of 2008 of the five Arctic states[3]. However, in the conditions of activity in the northern territories, regulation of relations by the 1982 UN Convention on the Law of the Sea has significant regulatory flaws[2].

In the legal situation of the Arctic, the legal and legislative practice of the Arctic states themselves plays a dominant role. Moreover, universal international treaties are applied, first of all, taking into account the references contained in them to regional agreements and in the context of international law.

In our opinion, the further development of international cooperation in the field of subsoil use should also be based on the concepts of national environmental safety. It is these concepts that cover the proper level of interaction and integration of states in the process of ensuring the protection, preservation and improvement of the natural environment.

The legal and economic foundations of the integrated rational use and protection of subsoil in the Russian North, as well as throughout the country, are regulated by the Law of the Russian Federation of February 21, 1992 No. 2395-I “On Subsoil”[4], which allowed federal executive bodies of the Russian regions, including the Far North, to exercise its authority to manage the state subsoil fund and state control over the use of subsoil. However, recently there has been a clear retreat of executive authorities from their responsibilities for state regulation in the field of subsoil use. The tendencies of transition from state regulation to market self-regulation in this most important sector of the economy are emerging, which is associated with the presence of legal gaps in the regulation of subsoil use.

The subjects of the Russian Federation currently have the authority to manage subsoil blocks of local importance, the list of which is also approved only by agreement with the federal governing body of the state subsoil fund or its territorial bodies. Section 2.3 “Subsurface sites of local importance” of the Law of the Russian Federation dated February 21, 1992 No. 2395-I “On Subsoil”[4] defines subsurface sites of local significance: those containing common minerals used for the construction and operation of underground structures of local and regional significance, are not associated with mining;

containing groundwater, which are used for drinking and domestic water supply or for the technological supply of water to industrial facilities or agricultural facilities, the production volume of which is not more than 500 cubic meters per day.

It seems that the powers of the state-owner are subordinate to the tasks of the environmental activity of the state, obliged to use natural resources as the basis of life of citizens. The lack of
authority by state authorities of the constituent entities of the Russian Federation to decide on the right to use a subsoil plot of federal significance located on their territory, to exercise state control over geological exploration, rational use and protection of subsoil, is contrary to the constitutional provision. The inability of the state authorities of the entity in whose territory the subsurface site is located to influence the choice of the most environmentally sound mining technologies, the resolution of issues related to the elimination and conservation of mineral deposits of other environmental issues negatively affects the environment.

In our opinion, the regulation of subsurface use relations for exploration and production of the main types of minerals without the active participation of a constituent entity of the Russian Federation cannot contribute to the rational and integrated use of mineral resources, and the existing distribution of powers puts the subjects of the Federation with rich mineral resources in an economically disadvantaged position.

Of particular importance is the regulatory framework for the socio-economic development of the Far North. It includes a number of federal laws aimed at the socio-economic development of the North of the Russian Federation, the norms of federal laws, decrees of the President of the Russian Federation, resolutions of the Government of the Russian Federation, agreements between the bodies of state power of the Russian Federation and state power of the northern entities on the delimitation of objects of competence and authority. The fundamental law in this list is Federal Law of June 19, 1996 No. 78-FZ “On the Basics of State Regulation of the Socio-Economic Development of the North of the Russian Federation”[5].

In our opinion, the provisions of Federal Law of May 7, 2001 No. 49-FZ On Territories of Traditional Nature Management of Indigenous Minorities of the North, Siberia and the Far East of the Russian Federation are very relevant[6]. According to Article 1, such territories are recognized as specially protected territories established for traditional nature management and the traditional way of life of the indigenous peoples of the North, Siberia and the Far East of the Russian Federation. Taking into account the peculiarities of the legal regime of territories of traditional nature management, such territories belong to specially protected territories of federal, regional and local significance. In a number of subjects in the northern territories, normative legal acts have been adopted on the territories of traditional nature management of indigenous peoples.

In 2010, the Republic of Sakha (Yakutia) adopted Law 820-3 No. 537-IV “On Ethnological Expertise in Places of Traditional Residence and Traditional Economic Activities of Indigenous Minorities of the North of the Republic of Sakha (Yakutia)”[7]. This law is the first such law on the territory of the Russian Federation, which provides for the study of the impact of the construction of industrial facilities on indigenous peoples and compensation for these peoples for the damage caused, has established the mandatory ethnological examination.

In order to implement the above law, the order of the Ministry for the Development of Civil Society Institutions of the Republic of Sakha (Yakutia) dated September 19, 2017 No. 445-P “On Approving the Administrative Regulation for the Provision of Public Services for Ethnological Expertise in the Locations of Traditional Residence and Traditional Economic Activities of Indigenous Minorities of the Republic Sakha (Yakutia) was issued”[8], which defines the authorized executive body of the Republic of Sakha (Yakutia) in the field of ethnological expertise, The procedure for conducting ethnological expertise has been approved.

The basis of the legal regulation of relations in the field of organization, protection and use of specially protected natural territories is Federal Law of March 14, 1995 No. 33-FZ “On specially protected natural territories”[9]. The preamble of the above law enshrines the definition of specially protected natural territories, according to which these are land, water surface and air space above them, where natural complexes and objects that have special environmental, scientific, cultural, aesthetic, recreational and health significance are located,
which are removed decisions of state authorities in full or in part from economic use and for which a special protection regime has been established. In accordance with Articles 1 and 2 of this Law, specially protected natural territories may have federal, regional or local significance depending on the established categories of specially protected natural territories and may be managed by the federal executive bodies, executive bodies of the constituent entities of the Russian Federation and local authorities themselves. The subjects of the Russian Federation have the right to adopt laws and other regulatory legal acts of entities on specially protected natural territories.

On the territory of the Russian Federation, in order to create an environmentally safe and comfortable environment in the places of population’s residence, eliminate the accumulated environmental damage, Government Decree No. 326 of April 15, 2014 “On Approving the State Program of the Russian Federation “Environmental Protection” approved the state program, which includes a number of federal subprogrammes providing for economic regulation in this area when using subsoil (subprogram 1 “Quality Regulation environmental protection”; subprogram 2 “Russia's biological diversity”; subprogram 3 “Hydrometeorology and environmental monitoring”; subprogram 4 “Organization and support of work and research in the Arctic and Antarctic”; subprogram 5 “Ensuring the implementation of the state program of the Russian Federation “Protection environment ” for 2012 - 2020”; subprogramme 8 “Elimination of accumulated environmental damage”) [10]. However, the documents of state strategic planning do not comprehensively regulate issues related to environmental protection and environmental safety of the Far North.

An important role is played by regional programs that take into account the environmental characteristics of the regions. For example, the state program of the Khanty-Mansiysk Autonomous Okrug - Ugra approved by the Government of the Khanty-Mansiysk Autonomous Okrug - Ugra dated October 9, 2013 No. 426-p “Ensuring the Environmental Safety of the Khanty-Mansiysk Autonomous Okrug - Ugra for 2014-2020” [11], the state program of the Krasnoyarsk Territory “Environmental Protection, Reproduction of Natural Resources”, approved by the Government of the Krasnoyarsk Territory dated July 17, 2018 No. 422-p[12].

In carrying out all types of activities (regional geological exploration, exploration and mining, construction and operation of underground structures, the formation of specially protected geological objects, etc.) that ensure subsoil use in the Far North, including geological exploration, design and survey, construction and operational works, one has to face serious difficulties due to the almost complete lack of relevant and accurate geospatial information. An example is the Coronation Glacier on Baffin Island, it has been quite active since the late 1980s, and the melting speed is on average about 30 m per year. If this process persists, after some time the glacier will disappear, a sandbank will form in its place, covered with a small layer of water, and, as a result, there will be a need for legal regulation of the allocation of newly emerged territories of the Far North of the Russian Federation.

The main problem of developing subsurface use is the large financial costs of developers and the practical lack of developed infrastructure. According to the Decree of the Government of the Russian Federation of April 15, 2014 No. 322 “On approval of the state program of the Russian Federation “Reproduction and use of natural resources ”[13], the amount of budget allocations for 2019 in the amount of 86116311 thousand rubles does not allow significant financial support for subsoil users. In particular, for the implementation of the project for the extraction of lead, zinc and silver at the Pavlovsk deposit in Novaya Zemlya, certain regulatory features are required. Due to the remoteness of the field from the mainland and the need to work on a rotational basis, the cost of work can increase 2.5 times.

According to the Energy Strategy of Russia for the period until 2030, approved by Decree of the Government of the Russian Federation of November 13, 2009 No. 1715-r, Russia
possesses one of the world's largest mineral resources potential[14]. As of January 1, 2018, 254 producing enterprises, including 144 independent oil and gas producing companies, are producing natural and associated petroleum gas in the country.

In a May decree, President of Russia V.V. Putin set a goal to increase freight traffic along the Northern Sea Route to 80 million tons[15]. According to the latest estimates of the Ministry of Natural Resources, it is most likely that by 2024 the volume of cargo transportation along this route will amount to 52 million tons per year. Such a forecast has been prepared based on company plans and expert evaluations.

NOVATEK, the largest shipper of the Northern Sea Route, will construct the "Utrenny" terminal for liquefied natural gas and gas condensate in the seaport of Sabetta. Financing of the port infrastructure development project is planned jointly by the state and the investor. The state finances and implements the creation of the water area and protective structures, and NOVATEK - the construction of the port itself and shipping terminals. The representative of the company did not disclose the costs of this project. Neftegazholding plans to build an offshore terminal in Sever Bay to ship oil from the Payakhskaya group of fields. To implement this project, the holding turned to the Ministry of Finance for support, in particular, to co-finance the field’s transport infrastructure from the federal budget.

3. Results and Discussion

The process of developing new approaches and principles for strategic planning of subsoil use in the Far North is a separate, extremely important innovative, technological mechanism for developing legal mechanisms. In this regard, as a starting document for starting of a new project for the development of the territory, it is necessary to conduct a comprehensive study of the trends in the development of legal regulation in order to eliminate its fragmentation and inadequacy of the level of legal regulation.

In the field of regulation of oil activity, recommendations initiated by regional organizations are used. All these documents are advisory in nature. Their adoption suggests that further improvement of the legal regulation of the above area can be formalized by federal legislation. At the state level, more stringent requirements may be established, for example, in the field of environmental protection.

In recent years, there has been a tendency to amend the federal regulatory framework to improve legislation in the areas of national customs policy, intergovernmental relations, the reform of natural monopolies, and others. But at the same time, the experience of legislative activity of the northern and Arctic subjects of the Russian Federation is not fully taken into account. Due to the lack of specific norms and the existence of contradictions in regulatory legal acts, it is actually difficult to provide comprehensive legal regulation of the relations of subsoil use in the northern territories of the Russian Federation.

We mention it appropriate to consider the following proposals for improving the legal regulation of subsoil use in the Far North: to adopt a single agreement imposing legal obligations, or to improve the interaction of states with decisions of the Arctic Council by making appropriate changes to the Charter of the organization;

The Ministry of Justice should develop a mechanism of regional responsibility, which will be an important step in ensuring compliance with international law.

We believe that in order to increase the efficiency of regulation of subsoil use in the Far North, the following proposals should be considered: to identify and analyze the economic and legal regulation of the state’s side of the processes of reproduction of the mineral resource base during exploration; review the distinction between the subjects of jurisdiction between the federation and its subjects to increase the effectiveness of managerial decisions.

It is also advisable to introduce additions and amendments to the Law of the Russian Federation “On Subsoil”, in terms of differentiation of property on the basis of an agreement between government bodies of the Russian Federation and government bodies of constituent entities of the federation, in accordance with Article 11 of the Constitution of the Russian Federation [16].
The adoption of regulatory acts governing ownership of geological information, primarily located in the geological funds of joint-stock enterprises, would make it possible to combine information for the further development of mineral resources.

4. Conclusions
For the development of social ecology, it is necessary to consider new approaches to the use of natural resources (including mineral) at scientific conferences, including international ones.

We believe that it is advisable to amend a number of regulatory acts that improve the forms of state control over subsoil use, increase the level of responsibility of bodies that promote the development of entrepreneurial activity in the development of mineral deposits.

We believe that in order to create a unified database, the Ministry of Culture of Russia, together with the executive bodies of the constituent entities, local self-government bodies, needs to document the natural and cultural heritage of indigenous peoples, as well as develop a draft law on ethnological expertise both in the federal subjects and at the federal level.

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