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ENVIRONMENTAL PROVIDE ON REMOTE ARCTIC TERRITORY

Background
Exploration oil, gas and gas condensate wells drilled in the years of development of the Far North cause significant harm to the ecology of the area and influence the local people, flora and fauna of the tundra. Elimination of these environmentally hazardous facilities helps to mitigate the damage of the local ecosystem and at least allows to partially restore the ecological balance in this area. Therefore, the development of environmental measures is the current priority.

Aims and Objectives
To improve the reliability of environmental measures for environmental protection in case of oil and gas wells abandonment in the Far North.

Methods
Investigation of the main sources of environmental pollution and the development of specific conservation measures aimed at preserving of the ecosystem of the Arctic tundra.

Results
1. For exploration and development of oil and gas in remote areas of the Far North the exploration wells are drilled. Drilling of these wells will inevitably harm the environment.
2. Mostly the numerically small number of the North people live in the area of drilling. The local population mainly engaged in reindeer herding, hunting and fishing, which directly depends on environmental cleanliness of tundra territory and adjacent water resources.
3. The area of mineral exploration is a nesting site of rare birds arriving here to raise their progeny. Nature of Arctic tundra is poor; it is home for rare species of animals, plants and insects included in the Red Book.
4. One of the ways to preserve the local ecosystem is well abandonment, fulfilled its purpose and not transferred to the fund of wells for the further development of discovered oil and gas reserves.
5. On the example of the abandonment of a number of exploration wells the specific technical solutions are developed for the remediation of contaminated industrial waste on tundra territory.

Conclusion
If all of the above environmental protection measures are implied the abandonment of the wells do not have a negative impact on the environment. Compliance of exploratory wells design with the required environmental terms of construction, sanitary and fire regulations and use of environmentally sound abandoned wells design provides protection for mineral resources, land, soil and water from pollution; use of environmentally low-risk projects provide technological solutions to limit their negative impact on the environment. The elimination of hazardous production facility allows restoring the ecological condition of the territory, where a population of local people of Arctic and endangered species of flora and fauna live.

This publication refers to one of the first works in the field of environmental protection in the fields of the Arctic.

Key words: well, abandonment, protection of the environment, field, Western Siberia, the maximum allowable concentration, roughly-safe level, maximum permissible emissions, provisionally agreed emissions
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