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## **PROSPECTS FOR THE PRODUCTION OF SHALE OILS FROM THE RUDOV BEDS OF THE DNEIPER-DONETSK DEPRESSION**

DMYTRO SULIMA, PhD student

O. V. BARTASHCHUK, Doctor of Science (Geology), Scientific Adviser

IULIIA I. SHAMAIEVA, Associate Professor, PhD in Philology, Language Adviser

*V. N. Karazin Kharkiv National University, Kharkiv*

At present, the subject of my research "Geological criteria for the formation of shale oil accumulations in the Rudivska strata of the Visean Lower Carboniferous of the Dnipro-Donetsk Basin" has proved to be highly actual, taking into account the current paradigmatic situation in the field of geology and relevant studies.

The process of extracting hydrocarbons from shale rocks involves the use of hydraulic fracturing, which is not unambiguous from an environmental point of view. In this connection, experts divide environmental pollution into mechanical, chemical, biological, physical and radiation according to its type of origin.

Mechanical pollution includes contamination with solid particles, containers and waste items that accumulate on the earth's surface: in soil, water, and air. Chemical pollution is pollution by substances and compounds of artificial origin that enter the geographical environment and disrupt the processes of the circulation of matter and energy. Biological pollution is the spread of organisms that have emerged as a result of human activity. Examples of biological pollution include bacteriological weapons, new viruses that cause epidemics of dangerous diseases, and the rapid reproduction of certain plant or animal species that have been relocated by humans from one place of distribution to another. Physical pollution includes changes in thermal, electrical, and radiation conditions caused by human activity, as well as vibrations and noise.

Thus, the peculiarities of natural resource management in my field of work focus on such three categories of environmental pollution as mechanical, chemical, and physical contamination [1].

Our analysis has proved that such types of pollution can be caused by hydraulic fracturing. For that matter, seismic activity turns out to be of particular relevance as it has already been proven that hydraulic fracturing can trigger earthquakes.

As for water pollution, we have experientially come up with the conclusion that during the extraction process, water is contaminated with methane and radioactive elements that are washed out of the host rocks.

In terms of air pollution, it is caused by the release of methane and other gases. At the same time, the fracking process is always accompanied by noise pollution.

Another significant issue here is land use. Shale oil extraction leads to disturbance of the landscape, damages agricultural land due to the use of a large area by the deposits.

Together with this, soil contamination should also be taken into consideration as there is always a risk of toxic fluid leakage from sumps and uncontrolled fountain emissions.

Speaking about climate impacts, emissions of methane and other gases from shale oil production are higher than from conventional oil production. The damage to the climate is commensurate with the damage caused by coal mining.

To deal with the above, we have developed certain conceptual approaches to green environmental management: a) improving the legal framework; b) strengthening responsibility for non-compliance with laws and environmental standards; c) development of public environmental thinking; d) improvement of extraction technologies.

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### **MANAGING FORESTS IN SKOLE BESKYDY NATIONAL PARK: CHALLENGES AND STRATEGIES**

ANASTASIYA SVYSTUN, post-graduate student

IHOR ROZHKO, Associate Professor, PhD in Geographical

OLENA IVASYUTA, Associate Professor, PhD in Philology, Language Adviser

*Ivan Franko National University of Lviv*

Forest management practices that could be deemed as sustainable involve the rational and balanced use of forest resources, with a particular focus on mountainous landscapes that have diverse environmental conditions. This approach