

## **INFORMATION**

### **INTERNATIONAL CONFERENCE ON MINING AND ECOLOGY MOSCOW, NOVEMBER 20–23, 2000**

In the autumn of the last year the International Conference “Development of Natural Resources and Ecological Problems – a Glance at the 21st Century” was held in Moscow, Russia. It was organized by Scientific Council on Problems of Mining Sciences of the Russian Academy of Sciences, Institute of Complex Development of Natural Resources and V. I. Vernadski State Geological Museum and supported by the Russian Fund of Fundamental Researches and Federal Ecological Fund.

Numerous representatives of scientific organizations, higher educational institutions and mining enterprises from Russian Federation, the Ukraine, Kazakhstan, Kirghizia, Uzbekistan, Tajikistan and Estonia took part in the conference. Altogether one hundred and forty eight reports were presented. The theses were published in a collection issued by the beginning of the conference. The reports covered a wide range of topics: georesources, natural resources and ecological safety at their development, designing of ecologically safe parameters, development of resources and geospheric changes resulting from it.

The representative of Estonia A.-T. Pihlak, Ph.D., read his paper at a plenary meeting. His report “Oxygen – the problem of the 21st century” dealt with the problem of uncontrolled consumption of atmospheric oxygen by the industries of the world and resulting from it consequences. The lecturer presented the data about sharp increase in oxygen consumption and called the attention to the fact that oxygen reproduction is continuously decreasing due to reckless cutting down of timber. He characterized the situation as an ecological catastrophe.

The main problems discussed were:

- As the industrial production of CO<sub>2</sub> is only a consequence of oxygen consumption, the problems caused by CO<sub>2</sub> only result from the basic problem – consumption of oxygen.
- The atmospheric oxygen resources accessible to development are determined mainly by the resources of combustible fossil fuels accessible to exploitation. At existing rates of consumption the commercial reserves and corresponding resources of oxygen will be exhausted by the year 2038, and prospected reserves by 2087, with all resulting consequences for civilization and nature.

To prolong *status quo* and to maintain the resources of oxygen – the most important natural resource of the planet – and also to push ecological disasters as far as possible, it is necessary:

- To arrange global monitoring of oxygen with exact recording of its use and reproduction.
- To exclude the use of fossil fuels for power needs, replacing them with alternative kinds of energy (nuclear, water, wind, solar, geothermal, etc.)
- To refuse the use of internal combustion engines replacing them with electric motors in all types of transport facilities.
- To forbid the use of electric power produced at thermal power plants working on organic fuel for illuminated signs.
- To expand forest planting and to diminish felling of timber.
- To reduce the consumption of wood on account of diminished demands of paper for advertising and “yellow” press.

The report awoke a great interest.

The conference stated that in the 20th century the contradictions in the sphere man–nature–resources became sharply aggravated. No marked positive changes have been made to guarantee a so high level of ecological safety at development of natural resources that adverse tendencies would be prevented.

The conference stated also that there is a significant break between general ideas about biosphere, systematic interrelations between geospheres, technogenesis and other fundamental categories and concrete requirements needed for nature protection. These requirements depend on the specificity of deposits, on the features of the local landscape and, first of all, on the mining industry. That is why various and isolated actions to protect the environment represent no basis to speak about ecologically safe development of natural resources.

The conference passed a number of resolutions for improving the state of environment at development of natural resources. The resolutions include also an item about the necessity of monitoring and recording the consumption of atmospheric oxygen at mining enterprises.

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