

Mineral waters of Belarus

Belarus has significant fresh and mineral resources underground water.

Fresh groundwater is associated with inter-sea sediments anthropogenic strata, Paleogene, upper Cretaceous, upper Jurassic, Devonian and upper Proterozoic formations. By now more than 250 fields have been explored, on the basis of which the following activities are carried out: centralized water supply of more than 60 cities, water supply of many other localities and agricultural production facilities.

Total operational resources of the country's fresh groundwater they are about 50 million m³/sut. Active work is underway to combat technogenic pollution of underground waters. At the same time, the complex solves problems related to the study of the formation of the composition of fresh groundwater in aquifers, with the functioning of drainage systems, water treatment and water distribution.

The deposits of the sedimentary cover and the crystalline basement mineral waters (and medicinal brines) are timed. More than 60 have been explored mineral water sources with total reserves of about 15,000 m³/sut. The most chloride, sulfate-chloride, and chloride-sulfate waters are common, less common are sulfate and radon. Cationic composition of mineral waters quite diverse. On the basis of explored mineral water sources sanatoriums and dispensaries operate, and bottling plants operate mineral waters ("Minsk 3, 4, 5", "Darida", "Bobruisk", "Borisovskie 1,2», "Brest", "Mogilev", "Narochanskaya", etc.).

There are thermal water resources in the bowels of Belarus. In Pripjat the deflection temperature of groundwater at the 2000 m section varies from 30.8 to 61.3 °C, and at a depth of 3000 m - from 44.0 to 86.3 °C. the highest of the measured the temperature values (116.5 °C) are set in the SLE section. Barsukovskaya 3 on depth of 3860 m. the Main reason that constrains the use of

geothermal energy of the Pripjat deflection, is the lack of effective technology for lifting from great depths of thermal waters is very high mineralizations. In the Podlassko-Brest depression at a depth of about 1 km there are slightly mineralized underground waters with a temperature of about 30 °C.

It is possible that attempts to use them in the Internet may be successful.

heat power engineering using heat pumps.

Research and involvement in exploitation of mineral resources is expanding underground water. 70 sources with total reserves of 14320.8 m³ per day were explored, 50 are being developed. Mineral waters are used for Spa treatment

treatment, as well as sold through the retail network as mineral medicinal and table waters.

Belarus is rich in mineral brines, the reserves of which are within the limits of

The Pripjat deflection is estimated at 1830 km³. Highly mineralized brines (the breed got the name "Belarus") can serve as raw material base for the production of iodine, bromine, potassium, magnesium, and many other chemicals elements'. The project "Industrial brines of the Pripjat deflection" was developed», the implementation of which will allow receiving about 160 t of bromine and 1.2 t of iodine annually.

The search for new ore deposits in Belarus is also promising ferrous and non-ferrous metals, diamonds, gold, amber and other types of minerals fossils'.

Long-term plans and forecasts include the development of environmentally safe and cost-effective technologies for extraction, processing and use of mineral raw materials, increasing the recovery rate mineral resources in exploited fields.