KASKAD PLANT FOR POTABLE WATER TREATMENT

Description
The water treatment technology is based on oxidation-absorption processes and ensures potable water production according to specifications. The water treatment process uses Tekhnosorb sorbent, a new high-activity synthetic carbon material with increased mechanical strength.

Technical appraisal and economic benefits
In comparison with the conventional technologies of potable water treatment, the plant purifies water with high color and turbidity indices and increased amounts of iron and manganese salts and their complex compounds with organic substances (up to the maximum concentration limit). The plant capacity is 500 m³ of potable water per day (two modules of 250 m³ each). Mounting a modular plant with a capacity of 250 m³ to 1000 m³ per day is possible.

Application areas
The plant is designed to purify water from open basins and underground sources.

Development stage
Transfer of engineering documentation on the fabrication of the plant modules; manufacture of the carbon sorbent is possible at the pilot production of the Technological Design Institute of Industrial Carbon, SB RAS.

Patent situation
A patent was granted on the Russian Federation.

Commercial offers
Contracts for the development of the plant modules; license agreements; know-how contract.

Estimated cost
US$ 80,000 for transfer of know-how and engineering documentation on the fabrication of the modules for a plant with a capacity of 500 m³ per day; US$ 130,000 for the same plant with an additional supply of the carbon sorbent.

Contacts
Institute of Hydrocarbon Processing, Siberian Branch of the Russian Academy of Sciences
54, Neftezavodskaya St., Omsk, 644040, Russia.
Phone: (3812) 67-26-16
Fax: (3812) 64-61-56
E-mail: rashida@incat.okno.ru