

WATER IS LIFE. PROBLEMS OF WATER SUPPLY.

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Abstract

The article presents a research on the problems of water supply.

Key words: water supply, ecological problems.

PROJECT ARGUMENTS

No need to explain what wafer means for a man. But only some people understand how difficult the problem of providing steady and high quality drinking water supply is. Every second habitant of our planet experiences difficulty with access to the clean drinking water. More than 600 million people already live in the situation of “water stress”, and by 2030 up to the prognoses of UNESCO, almost half of the population of our planet will run into the deficit of water.

PROJECT

In December, 2003 General Assembly of United Nations declared the years of 2005-2015 the International decade of actions “Water for life”. The World water forum is conducted every three years. Annually on March, 22 on initiative of UNESCO and International association of water-supply the international day of water is held practically in all countries of the world.

More and more often politicians and scientists say: “The world enters an epoch of war for strategic resources among which fresh water becomes the major”.

In our time water contains all the elements of Mendelejev’s periodic table. The use of such water entails various problems. Most elements begin the ruinous influence, causing poisoning and mutations, when arriving at a certain concentration in the organism.

The use of importable water is the reason of almost 10% of all diseases in the world and 6% of all deaths, as it is registered in June, 2009 analytical lecture of the World organization of health protection. The use of water containing harmful admixtures reduce a potential life of a man up to 20-25 years. To this fact it is possible to add that even remaining years of a man will hardly be healthy, if he uses poor quality water. As relatively good quality drinking-water is accessible only to the habitants of metropolises, and majority of rural population has no access to such resource, the calamity becomes catastrophic.

In tap water passing the industrial cleaning, the increased concentration of manganese is fixed frequently. It is almost impossible to excrete manganese; it is very heavy to diagnose poisoning by it – symptoms are very general, mostly people do not pay attention to them.

The situation with drinking-water in our country looks frightening. Almost half of the centralized water-supply sources do not meet the sanitary standards.

As the ecological research of July, 2010, shows 40 million Russians live in an a polluted environment, in other words, live in the places where living is dangerous. And even more people in our country get a poisoning liquid for drinking-water.

Fresh water on our planet makes only 2.5% of world supplies; the rest is salt waters of seas and oceans. And if 75% of fresh water is in mountain glaciers and at the poles, 24% is under the ground as ground waters, and 0.5% is dispersed in the soil as moisture, then the most accessible and cheap sources of water are the rivers, lakes and other surface reservoirs which make hardly more than 0.01% of world supplies of water.

The methods of fight for the quality of water can be different, but the only acceptable and assured method of getting the drinking-water of high quality is cleaning it by the system based on the exact information about the quality and composition of the polluted water. Our state tries to solve the problem developing the program “Clean water”, the aim of which is making a home drinking-water in the accordance with the world standards.

The water treatment is intended to delete pathogens and harmful chemicals from water. The water treatment affects taste properties of water, makes the liquid tasty. If the question is about getting the drinking water, traditionally for the estimation of cleanness of water in a water object or in the source of water-supply physical, chemical and sanitary-bacteriological indexes are used. Temperature, smell and taste, colour and turbidity, are physical indexes of clean water. Chemical indexes characterize chemical composition of water. The hardness of water and a number of minerals are chemical indexes. General bacterial muddiness of water and muddiness from bacillus, toxic and radioactive elements are sanitary-bacteriological indexes. [5]

Two types of natural sources: superficial (rivers, lakes, storage pools) and underground (ground water, artesian water, and waters leaking through cracks in crystalline arrays etc) are used for drinking water supply In our country. Taking into account this wide spectrum of sources the concentration of nuclides in natural waters differs very much. The highest maintenance of natural nuclides are registered in groundwater. Fortunately, 75 % of the apartments in the settlements of the country are provided with tap water from superficial sources. The radioactive tap water is used by the fourth of our population.

The population meets with the problem of hard water; the water from plumbing is frequently very hard. Hard water does not cause poisoning, but if you use such water every day, your joints will hurt, kidney stones will appear, your skin will be dry and scaly. Therefore it is very important to know, what kind of water you drink. Defining hard water without its chemical examination is impossible. The ways of softening water are filtration, boiling, etc.

CONCLUSION

So we can see the faster technologies develop the more obvious the ecological problems become. Water is very important for our life and we should keep it clean.

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