

Chemical Pollution of Water: Waste Water, Sewage Water, and Pollutant Water

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Abstract : We divide water into drinking, mineral, industrial, technical and thermal-energetic types according to its use and purpose. Drinking water must comply with sanitary requirements and norms according to organoleptic devices and physical and chemical properties. Mineral water - must comply with the norms due to some components having therapeutic properties. Industrial water must fulfill its normative requirements by being used in the industrial field. Technical water should be suitable for use in the field of agriculture, household, and irrigation, and the normative requirements should be met. Heat-energy water is used in the national economy, and it consists of thermal and energy water. Water is a filter-accumulator of all types of pollutants entering the environment. This is explained by the fact that it has the property of dissolving compounds of mineral and gaseous water and regular water circulation. Environmentally clean, pure, non-toxic water is vital for the normal life activity of humans, animals and other living beings. Chemical pollutants enter water basins mainly with wastewater from non-ferrous and ferrous metallurgy, oil, gas, chemical, stone, coal, pulp and paper and forest materials processing industries and make them unusable. Wastewater from the chemical, electric power, woodworking and machine-building industries plays a huge role in the pollution of water sources. Chlorine compounds, phenols, and chloride-containing substances have a strong lethal-toxic effect on organisms when mixed with water. Heavy metals - lead, cadmium, mercury, nickel, copper, selenium, chromium, tin, etc. water mixed with ingredients cause poisoning in humans, animals and other living beings. Thus, the mixing of selenium with water causes liver diseases in people, the mixing of mercury with the nervous system, and the mixing of cadmium with kidney diseases. Pollution of the World's ocean waters and other water basins with oil and oil products is one of the most dangerous environmental problems facing humanity today. So, mixing even the smallest amount of oil and its products in drinking water gives it a bad, unpleasant smell. Mixing one ton of oil with water creates a special layer that covers the water surface in an area of 2.6 km². As a result, the flood of light, photosynthesis and oxygen supply of water is getting weak and there is a great danger to the lives of living beings.

Keywords : chemical pollutants, wastewater, SSAM, polyacrylamide

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