## Pollution

Pollution - is a process of negative modifications of the environment - air, water, soil - by their intoxication by substances that threaten the lives of living organisms.

## Water pollution

**Contamination of fresh water** - the hit of various pollutants in the water of rivers, lakes and groundwater increases from year to year. It occurs by direct or indirect contact with contaminants in the water in the absence of adequate measures for the removal of harmful pollutants or their neutralization with the help of cleaning agents. In most cases contamination of fresh water is not visible, because contaminants are dissolved in water. But there are exceptions: foaming detergents, as well as floating on the surface oil and raw sewage. There are several natural pollutants. Aluminum compounds fall out in fresh waters as a result of chemical reactions. Floods wash out magnesium of the soil of meadows, which causes great damage to fish stocks. However, the volume of natural contaminants is negligible compared to the manmade. Annually thousands of chemicals fall out in water basins with unpredictable effects, many of which are new compounds. Elevated levels of toxic heavy metals (such as cadmium, mercury, lead, chromium), pesticides, nitrates, phosphates, petroleum, surface-active agents (surfactants) can be detected in the water. As you know each year the seas get up to 12 million tons of oil.

## Air pollution

**Air pollution** is the result of any undesirable change in the composition of Earth's atmosphere as a result of its admission to various gases, water vapor and particulate matter (due to natural processes or human activities). Approximately 10% of pollutants are released into the atmosphere as a result of natural processes such as volcanic eruptions, accompanied by emission of ash into the atmosphere, scattered acids, including sulfuric acid, and a variety of toxic gases. In addition, the main sources of sulfur in the atmosphere are sea spray and decaying plant residues.



**Agriculture.** The second major consumer of water is agriculture due to the use of irrigation. The run-off of water saturated with salt solutions and soil particles and residues of chemicals that enhance productivity becomes higher. These include insecticides, fungicides, which are sprayed over the orchards and crops, herbicides, famous means of weed control, and other pesticides, and organic and inorganic fertilizers containing nitrogen, phosphorus, potassium and other chemical elements. In addition to chemical compounds in the rivers gets a large amount of feces and other organic residues from farms where meat and dairy cattle, swine or poultry is grown.

The surface layers of the soil are easily contaminated. High concentrations in the soil of different chemical compounds - toxic substances adversely affect the livelihoods of soil organisms. The soil loses the ability to cleanse itself of soil pathogens and other undesirable microorganisms, which can have serious consequences for human, plant and animal life. For example, in highly contaminated soils germs of typhoid and paratyphoid fever can last up to one and a half years, while in clean - only for two to three days.

Land and ocean link rivers flowing into the sea and carried by the pollutants. Not breaking through contact with soil chemicals, such as petroleum products, oil, fertilizers (especially nitrates and phosphates), insecticides and herbicides leaching into rivers and then into the ocean. As a result, the ocean becomes a "cocktail" of nutrients and toxins.

Environmental pollution, the human environment is one of the oldest problems in the history of civilization. In towns and villages all over the world people are struggling with a problem like pollution. These pollutants may be associated with the phenomena of nature, and the intervention of people living in these areas. The natural contaminants include natural phenomena such as volcanic eruptions, earthquakes, high winds.

