

WATER POLLUTION JUNIOR

Water pollution is intended as water quality degradation caused by the introduction of substances that alter its physico-chemical characteristics and impede its normal use. These substances having either a solid, liquid or gaseous origin have different effects according to their amount and potential danger and fragility of the environments where they are released. These substances can have a human origin, when they are introduced by humans, or a natural origin. Pollution of water of natural origin can be caused by decomposition of organic debris, saltwater invading coastal aquifers, water blackening due to landslides, earthquakes, dust erupted from volcanoes.

Pollution can either be found at the level of superficial water or subterranean water. Pollution of superficial water can differ in its features or seriousness depending on whether it affects water in a river or in a lake and the consequences are: fish fauna depletion, death of aerobic bacteria and aquatic plants, formation of pestilential odors and deteriorating material, diffusion of pathogenic microorganisms, moreover, the more the water is polluted the greater are the costs of making it drinkable.

Pollution of aquifers is very dangerous from the point of view of preservation of water as a resource for humans. Once it's polluted, in fact, subterranean water has a low depurative power and shows to employ much more time to recover original quality of water.

Water is essential for numerous human activities. Agricultural use of water is the most important of human uses and it concerns two thirds of the world's supply of fresh water. This water is mainly used for irrigation. Household water uses include human nourishment, preparation of food, personal hygiene and domestic and public hygiene. In this case not only the quantity of water available but also its quality becomes significant. Man uses water even in industrial activities. Here, three different types of uses can be identified: as a raw material (for example, in the production of food), for cooling machinery and lastly for washing plants and equipment. In addition water is also a source of renewable energy produced in hydroelectric plants.