

ATMOSPHERIC AIR AND ITS POLLUTION

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Annotation. There can be no life on the globe without oxygen. Oxygen is a product of the vital activity of terrestrial plants, when plants absorb and decompose water and carbon dioxide during photosynthesis, releasing free oxygen into the atmosphere.

The article highlights the importance of atmospheric air and the sources of its pollution.

Keywords: atmosphere, oxygen, photosynthesis, nutrients, natural and artificial pollution, pollution control

Atmospheric air is considered a source of oxygen for respiration, carbon dioxide for photosynthesis, as well as a carrier of water vapor on the planet, protecting living organisms from cosmic radiation. Air controls the climate, is a habitat for flying organisms, affects soil fertility, and allows several chemical processes to take place. There can be no life on the globe without oxygen. Oxygen is a product of the vital activity of terrestrial plants, when plants absorb and decompose water and carbon dioxide during photosynthesis, releasing free oxygen into the atmosphere. All other living things absorb only oxygen. Carbon dioxide enters the atmosphere as a result of respiration of living organisms, fuel combustion, and decomposition of organic substances. Nitrogen contained in the atmosphere is of great biological importance. It is a source of nutrients for nitrogen-storing bacteria and blue-green algae. It is cultivated by other plants. And from a physiological point of view, it allows you to carry out vital processes while maintaining atmospheric pressure. There is a distinction between natural and artificial air pollution. The atmosphere constantly contains a certain amount of dust.[1]

They are formed as a result of natural phenomena. There are three types of dust: mineral, organic, and cosmic. Mineral dust is formed as a result of absorption of rocks, volcanic eruptions, forest fires, evaporation of water from the surface of the seas. For example: when producing 1 kWh of electricity, 6.0 tons of harmful substances are released into the atmosphere. In the field of ferrous and non-ferrous metallurgy, 423.6 thousand tons of waste are emitted into the atmosphere, of which 595 thousand tons are gaseous sulfur dioxide. Non-ferrous metallurgy enterprises emit special pollutants such as heavy metal aerosols, sulfuric acid, cyanides and fluorides. Enterprises in the construction industry emit 57.6 tons of waste, a certain amount of which consists of dust and is a gas. The main source of air pollution in many cities of the republic is the construction industry and cement production. The chemical industry accounts for about 5% of total atmospheric pollution.[2]

As a result of air pollution with sulfur dioxide by dust such as smoke, sheep are formed in the humid and quiet air of industrial areas. It can damage people's lives by forming a poisonous fog. In such conditions in the City of London, many people died due to heart disease and exacerbation of lung diseases. The car occupies a large place in air pollution. 60% of the atmospheric air in the United States is polluted by car exhaust fumes. In large cities such as New York, Los Angeles, Tokyo, Tashkent, Samarkand, the air pollution level is 80-90%.

The gases from the car contain harmful substances. In addition to sulfur and nitrogen compounds, is gas is released into the environment, as well as carcinogenic substances such as benzopyrene 3,4 and

lead. When gases are released into the atmosphere, 25-27% of lead is released. Gases released into the air negatively affect the health of plants, animals and humans. The most dangerous pollution of the atmosphere is radioactive pollution. This becomes dangerous because it negatively affects human health and causes a wide variety of mutations in their offspring. The sources of radioactive contamination are tests of atomic and hydrogen bombs, as well as radioactive contamination of power plants during the manufacture of nuclear weapons from nuclear reactors, and radioactive waste enters the atmosphere. For humans and other living organisms, atmospheric air pollution with freons leads to serious negative consequences. They are used in refrigeration units, in the production of semiconductors and aerosol cans.[3]

Freons affect the ozone layer. They decompose under the influence of short-wave ultraviolet rays, which, as a result, decompose into chlorine, fluorine. As a result, chlorine and fluorine interact with ozone. The thinning of the ozone layer is the reason for the increase in the incidence of skin cancer as a result of the penetration of ultraviolet rays into safe areas. As a result of air pollution, people suffer from such ailments as facial disfigurement, decreased ability to work, cough, dizziness, compression of the vocal cords, various diseases related to the lungs, eyes, general poisoning of the body, and a decrease in the effectiveness of fighting the disease. The fight against atmospheric pollution is very complex and multifaceted. To protect the atmospheric air, the following measures must be applied:

1. Improvement of existing technologies that exclude the formation of hazardous substances. Introduction of new technological processes;
2. Devices for improving fuel composition and carburetors, reducing and eliminating emissions into the atmosphere using cleaning devices;
3. Prevent atmospheric pollution and expand green spaces by properly locating sources of harmful waste. In the Republic of Uzbekistan, the State Committee for Nature Protection monitors atmospheric air and sources of its pollution.

The main Hydrometeorological Center monitors the level of atmospheric air pollution in 39 settlements on a daily basis. 16 types of gases (waste) and 6 types of heavy metals and benzopyrene are under control. The State Committee for Nature Protection oversees industrial enterprises and motor transport in 136 settlements of the republic. According to the law of the Republic of Uzbekistan "On Atmospheric Air", the state of atmospheric air and related information are carried out in a unified state control system, that is, control of the natural environment.

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