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ECOLOGICAL PROBLEMS OF THE URBAN ENVIRONMENT

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ANNOTATION
The article discusses the main environmental problems of the urban environment. All environmental problems of the city are a consequence of economic and other human activities.

KEY WORDS: *component, environment, factor, atmosphere, system, object, noise, vibration.*

A city is one of the types of social and spatial organization of the population, emerging and developing on the basis of the concentration of industrial, scientific, cultural, administrative and other functions.

A city is a populated area with a population of over 10 thousand people, the vast majority of whom are employed in industries not related to agriculture. The process of growth and development of cities is called urbanization (Latin urbanus - urban) [2,6].

The urban environment is a combination of two systems - anthropogenic and natural. As the city develops, anthropogenic factors become dominant, which leads to disruption of the ecological balance.

The components of the city's natural environment are atmospheric air, surface and underground waters, soils, grounds, and sunlight. These are components of the environment, without which life for humans and other organisms is impossible. Natural-anthropogenic objects include urban forests, parks, gardens, green areas of residential and industrial areas, boulevards, squares, protective zones, canals, reservoirs, etc. Natural objects of the city are natural monuments [3].

The urban environment differs sharply from the environment of natural ecological systems. The urban ecosystem is characterized by pollution by chemicals and microorganisms, increased levels of physical impacts, such as noise, vibration, electromagnetic fields and information pollution. And also, the urban environment is an area of increased danger due to road traffic accidents and industrial accidents.

All environmental problems of the city are a consequence of economic and other human activities. The most pressing environmental problems of the urban environment include: air pollution, the problem of clean "drinking water", protection of vegetation and soil, as well as waste management [2, 6].

Ambient air quality plays a vital role in the urban environment. Because a microclimate is formed in the city, which differs from the atmosphere of natural ecosystems. The quality of the air environment in which a person lives depends on his health, well-being and performance. Deterioration of atmospheric air in the city leads to the death of green spaces, as well as pollution of soils, reservoirs and watercourses, damage to cultural monuments, structures of buildings and structures [1].

The main sources of urban air pollution are industrial production, motor transport and other types of human activity, which are accompanied by the release of various pollutants into the atmospheric air, for example;

- ✓ urban dust of anthropogenic origin - particles of ash, soot, heavy metals;
- ✓ biological impurities – viruses, bacteria, fungi;
- ✓ microscopic mites and microorganisms.

The soil of the urban environment is subject to degradation, alienation and pollution as a result of urban planning and economic activities.

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Urban soil degradation is the destruction of the fertile soil layer, partial or complete destruction of the soil cover, accompanied by a deterioration in its physical and biological condition and a decrease in fertility [4].

Degradation processes include

- Soil Erosion – destruction of soil and removal of loose components of soil material by water and wind;
- Over Compaction - compaction of soils leads to a decrease in their porosity, which means a decrease in soil moisture capacity and air permeability;
- Alienation of land for residential buildings, industrial facilities and roads.

As a result of soil pollution due to anthropogenic activities, their chemical composition changes, which causes a number of negative consequences, including loss of the ability for bioproductivity and self-purification.

Surface water bodies of the city are polluted mainly by discharged industrial and municipal wastewater, storm water discharged from the territory of settlements, as well as runoff from agricultural land, livestock complexes, and poultry farms. As a result, heavy metals, petroleum products, surfactants, and nitrogen and phosphorus compounds enter water sources [5].

In recent years, the problem of garbage has come to the forefront among other environmental problems of the urban environment. Therefore, with the increase in anthropogenic impact on the natural environment, the need arose to find effective methods for assessing the ecological state of the urban environment.

Thus, the city provides a person with work and maximum amenities, that is, comfort, ease of life, density of communications and accessibility to meeting important needs. But nevertheless, the most important human needs are not met in the city - clean air, clean water, silence and primary food.

If environmental measures are not taken in a timely manner, then the city's environmental problems develop into global ones, posing a threat to the lives of present and future generations of people and all life on Earth.

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