



IMPACT OF ROAD TRANSPORT ON THE ENVIRONMENT

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Annotation

In recent years, the share of vehicles in air pollution has been increasing. Because cars, planes, diesel locomotives, agricultural machines, etc. consume large amounts of oxygen and release various gases (carbon monoxide, nitrogen oxides, hydrocarbons, toxic compounds of lead, dust, dry matter, etc.) into the atmosphere (containing about 200 toxic substances.) and pollutes it. In addition to polluting the atmosphere with various toxic gases, cars use 3-4 times more oxygen than the oxygen that the world's population needs to breathe. A car engine consumes 20-30 people a year breathing oxygen.

Keywords: carbon monoxide, nitrogen oxides, hydrocarbons, lead compounds, dust, dry matter, smog

Introduction

The scientific and technological revolution has entered a qualitatively new stage in the relationship between society and nature. This stage is characterized by the unprecedented use of available resources on the planet, which is very important for the development of natural resources. The scientific and technological revolution has created previously unknown technical and technological means. As a result of the scientific and technological revolution, man has risen to a new level of freedom in his attitude to nature, as a result of which he has subdued many forces that were not previously subordinate to him. The rapid development of science and technology has led to the expansion of the scope and mix of human impact on nature, which has led to changes in the natural environment under the influence of anthropogenic factors. And these changes are destroying the material foundations of life. It is making the human environment, society unsuitable for life, and threatening the planet with death. The problem of survival; It has become the topic of the century and is in the spotlight of the world community.

Harmful gases and factors released as a result of the activities of various large industrial enterprises, factories and plants, vehicles, and other institutions of the national economy on the planet. Some think that such gases that are formed will





disappear on their own. Not really. Some of the contents of the emissions into the atmosphere circulate in the external environment for many years.

It is estimated that each year, one vehicle removes an average of 4 tons of oxygen from the air, releasing 800 kg of carbon monoxide, 40 kg of nitrogen oxides and about 200 kg of various toxins, including hydrocarbons, into the environment. Considering that there are now more than 500 million cars in the world, it is safe to say that the amount of pollutants emitted into the atmosphere is very large. Vehicles pollute the atmosphere with 45.7% nitrogen oxides and 42% hydrocarbons. About 75 million tons or 78% of the world's total emissions of about 100 million tons a year are from vehicles. 60% of urban air pollution is caused by vehicles

If we consider the effect of the exhaust gas from the pipes of internal combustion engines using only gasoline or diesel fuel, it is a colorless toxic gas formed from the partial combustion of various fuels and is present in large quantities in the exhaust gas from internal combustion engines. Is gas enters the body through the respiratory tract and combines with hemoglobin in red blood cells to form carboxyhemoglobin. This substance cannot bind oxygen, resulting in a lack of oxygen in tissues and cells, primarily nerve cells. In addition, harmful gases in the air can enter the airways directly and enter the alveoli of the lungs, into the bloodstream, or combine with moisture in the mucous membrane and cause inflammation.

At present, the level of environmental pollution from industrial waste in developed countries has decreased by 10-15 times compared to 10-15 years ago. This focus on the cleanliness of the environment is the result of the work being done to protect it from toxic gas fumes.

Since one of the main factors of urban air pollution is motor vehicles, any goal can be achieved by reducing the toxicity of the air they pollute or by applying various technological processes to reduce the total amount of emissions into the air. However, the fact that in many transport enterprises, organizations of passenger transportation, the failure of metering devices, the use of which is not carried out in a timely metrological inspection, indicates that this issue is still neglected.

There are several measures to prevent artificial pollution of the atmosphere, the most important of which are:

- ❖ It is very important to reduce vehicle emissions. In order to reduce the amount of toxic gases emitted from the car, it is necessary to strictly adhere to their technical condition and the regular flow of fuel to the engine;
- ❖ Regular monitoring of air quality in cities and industrial centers is of great importance in keeping urban air clean;





- ❖ Necessary modification of urban development projects in order to ensure the smoothness of the city's main roads, sidewalks, order at intersections, proper traffic to protect the atmosphere from vehicle emissions;
- ❖ Expanding the area of green plants. Green plants filter polluted air, trap dust in their leaves, absorb carbon dioxide and produce oxygen.
- ❖ Increase the number of underground roads, especially at intersections, to prevent traffic congestion.
- ❖ Low-rise houses close to the road should be in the front row, followed by high-rise houses, followed by kindergartens and school buildings. Only then will we be able to protect people, at least for a while, from the toxic gases of vehicles.

Exhaust gases	The composition of the exhaust gases	
	Gasoline engines	Diesel engines
Nitrogen	74-77	76-78
Oxygen	0,3-8,0	2--8
Water	3,0-5,5	0,5-4,0
Carbon-2 oxide	05--12	01--10
Carbon monoxide	01--10	0,02-0,50
Nitric oxide	0-0,8	0,001-0,400
Hydrocarbons	0,20-0,30	0,1-0,10
Sulfur gas	0-,002	0-,03

Internal combustion engines that use gasoline and diesel toxic gases from the pipe (per 1000 liters, kg)

Nature is the living environment of society, the source of its material and spiritual needs. Society is the highest stage of natural development and has a special social meaning. Nature and society are two parts of a whole of interconnected matter, a unique social ecosystem. Man plays a central role in the system of interaction between nature and society. Man is at the same time an integral part of nature and society, and has a socio-biological significance. The exchange of matter and energy is the basis of the existence of nature. Matter, a higher form of motion, lives and develops as a separate part of nature. At different stages of society's development, its attitude to nature has also changed. In the primitive community system, humanity did not have a significant impact on nature. the emergence of agriculture and animal husbandry in the system of slavery led to an increase in the impact on nature.

The development of science and technology has had a significant impact on the biosphere, as well as the development of much work. Although he is happy that all the production processes are booming, the various harmful gases emitted into the



biosphere have not disappeared by themselves, and now these gases have shown their effects.

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