

Presentation topic:

The impact of rail transport on the environment

Work tasks

- ✓ show the urgency of the problem associated with the negative impact of railway transport on the environment;
- ✓ consider measures to combat disruptions in the biosphere due to the impact on it of rail transport.

Environmental problems

The continuous intensification and expansion of the scale of economic activity leads to an aggravation of environmental problems, to the direct and side effects of industrial activities on the composition and atmosphere, the thermal regime of the planet, the background of radioactivity, to the pollution of the World Ocean, water bodies, land and a decrease in fresh water reserves, renewable raw materials and energy resources, release of non-recyclable biochemical and toxic waste into the biosphere, the environmental impact of anthropogenic territories, the impact of environmental factors on the physical and mental health of humans and the gene pool of human populations.

Transport in public life

Transport is an important condition for the functioning of social production and the life of people. Passenger traffic in cities is growing faster than the population of cities.

A large share of the total volume of transportation is carried out by industrial transport, in which 30-35% of transportation is carried out by railways.

Air pollution

Locomotive and carriage depots are sources of air pollution. Particularly unfavorable from a sanitary point of view is pollution of limited volumes of the environment, in which people constantly or periodically work. Thus, railway tunnels are more polluted by exhaust gases of diesel locomotives.

Загрязнение воздуха

The most important measure to combat air pollution with harmful substances is to reduce their emission in sources of education. This is achieved by mechanization and automation of production processes, replacement of solid fuel with gaseous fuel, etc.

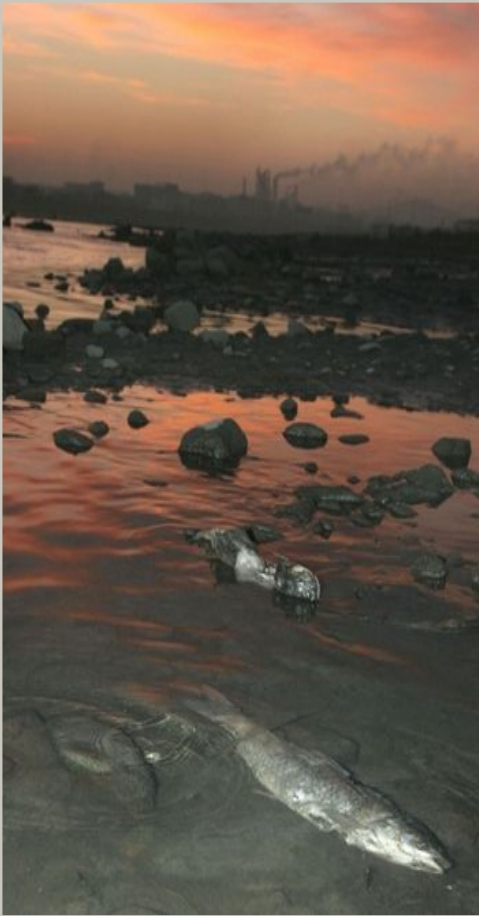


Air pollution



In rail transport, the greatest danger in terms of pollution of surface sources drinking facilities are represented by locomotive and car repair plants, depots, sleepers impregnating plants, rail welding trains, and other production facilities. So, in the wastewater of washing sections of locomotive depots, from 3 to 25 g / l of oil products, from 1 to 2 g / l of surfactants used in washing solutions are found.

Water pollution



A lot of work is underway to improve cleaning methods and introduce circulating water supply systems. When re-using wastewater, it is not necessary to deeply treat it; the degree of purification that is achieved at existing treatment facilities is quite sufficient. The introduction of circulating water supply systems can significantly reduce the consumption of fresh water for technical needs.