

IMPACT OF THE CONSTRUCTION INDUSTRY ON ECOLOGY

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***Annotation:** this article provides detailed information on the protection and effective use of water resources, soil protection and its pollution, energy and Environmental Protection, purification of atmospheric air from dust and toxic gases, minerals and their use on the territory of Uzbekistan, environmental foundations of waste management and irrigation, architectural construction ecology, use of recreational resources and its improvement.*

***Keywords:** drinking water, pipes, mechanical effects, gurunt, Hard Rock, junk, dynamic effect, sand, toxic gases.*

INTRODUCTION:

Work is being carried out intensively in order to provide the population with clean drinking water. Water supply is entering remote areas. Modern building materials are becoming much easier to carry out these works with the help of special techniques. Iron pipes were replaced by longer service life polyethylene pipes. The production process is convenient, and the assembly is carried out for a short time. In terms of the abundance of raw materials even in production, and the main thing is that the low price of tan is the convenience of polyethylene pipes. And the intolerance to mechanical influences is the only drawback. Polyethylene pipes by nature do not ucgram into the carriage at all.

In the Fergana Valley, the land is mostly in the form of guruntli, hard rock, rock gravel, gravel or arzik. Usually construction installation work is carried out on such structured lands. The depth of the trench is determined from the ground level to 1m-1.2 m, depending on the outer diameter of the groove, for the purpose of mimoying from mechanical and dynamic influences. For ease of Assembly, the trench width is performed from the outer diameter of the pipe to the double-sided 0.3. So if the pipe is diametric 110mm, the depth of the trench will be 1.2 m, and the width will be 0.7 m.

When the construction installation work is carried out in areas with hard and sharp rocks in the structure of the grunt is buried with a sandy bed under and over the pipes for protection purposes, 0.1 m from the pipe , 0.3 m over the pipe.



In relatively small population addresses, pipes from diametric 50mm to 160mm are mainly used for the project.

It follows that for the mantle of a 1000 meter long water or wastewater network, sand will be needed in an amount of $1000 \times 0.7 \text{m} \times 0.4 \text{m} = 280 \text{m}^3$.

If we calculate that modern bulk carriers take an average load of 18m^3 , then $218/18 = 16$ moshina sand means Fergana Valley regions are characterized by regions with limited sand reserves. Climatic changes, a decrease in river water affect the amount of sand turbidity entering the Valley.

The role of sand homashion in the drying industry is very important. Sand raw materials are used, from concrete mixtures to Wormwood work of facade plaster. It is true that we bury the less-depleted sand underground. Transportation from other parts of Uzbekistan is very expensive, and the depletion of sand barkhans does not affect the ecalogy either . Favuna and flora, living in the sand, are becoming extinct.

In many places, it is possible to re-bury the sown Bush by separating hard and sharp varieties by sifting the soil in place, dug in the mantash jaroyon. Ham will speed up the construction process even by reducing the cost.

Environmental support for the life cycle of building materials in individual stages allows not only to assess the intensity of their negative impact on the environment. The natural environment (pollution, waste generation, consumption of Natural Resources, etc.), but also a more accurate determination of energy consumption at each stage.

The effect of the construction production of a reinforced concrete plant on atmospheric air. The construction of the reinforced concrete plant has a significant negative impact in the form of pollution of the air basin with harmful gas and dust emissions and various aerodynamic disturbances.

The production of building materials and building structures contributes the most to air pollution. Suffice it to say that the world cement industry is significantly deteriorating the state of natural ecosystems, releasing more than one million tons of nitrous oxide emissions and a huge amount of CO_2 every year.

Significant dust emissions are observed in industrial buildings in the production of cement, concrete, silicate products, as well as building materials such as reinforced concrete, wood and metal construction structures. Auxiliary industrial enterprises actively release dust, for example, warehouses with ready-made cement products. Polydispers dust containing up to 20% SiO_2 is released both in loading and unloading work and in the transportation of finished products.

The most important binding material - the dust content of air in buildings during the cement production process reaches $100\text{-}120 \text{ mg} / \text{m}^3$ (the dust content of the surrounding Technosphere- $1.7\text{-}1.9 \text{ mg} / \text{m}^3$). In cement plants, active sources of dust and gases are processing devices, drying drums, ball mills and especially Rotary ovens with clinkers.

The release of toxic gases, heavy metals, radionuclides and other harmful substances in addition to dust leads to a significant deterioration in the sanitary and environmental situation near existing construction industry enterprises.



The environmental situation that occurs in the production of non-standard metal structures (dust of metals and their scales, welding aerosols, carbon dioxide, manganese and other harmful substances) in the workshops of the reinforced concrete plant is no less dangerous.

In the process of cement production, Air is contaminated within a radius of up to 3 km or more. The surroundings of cement plants often turn into lifeless yellowish-gray spaces. The largest cement production in Europe - MALTSEVSKY Portlandcement-releases up to 90 thousand tons of pollutants per year in the area where JSC operates, extensive damaged and dried up areas of the most valuable pine plantations are recorded.

The development of non-metallic building material deposits is accompanied by pollution of atmospheric air with gas and dust emissions as a result of the operation of quarry equipment and machines (bulldozers, conveyors, excavators, dump trucks, etc.).

Especially large emissions of organic and inorganic dust occur in the process of open-pit mining and explosive extraction of minerals. The dust cloud can stretch for many kilometers; by settling in the soil, dust contaminates it and reduces productivity.

Less pollution of the atmosphere occurs when transporting mined bulk mineral raw materials transported in open wagons and car bodies. In such cases, tens of thousands of tons of natural building materials are blown.

Dust in the atmosphere can play not only a negative, but also a positive role. If there are no dust particles, there are no clouds or fogs. At the same time, large amounts of dust reduce total radiation, which leads to a decrease in the amount of solar energy, and this negatively affects biotic communities. And, of course, one should not forget about the toxicity of many types of dust, their ability to be carriers of pathogenic bacteria, etc.

However, the most radical measure to protect the air basin from pollution should be taken into account the greening of technological processes and, first of all, the creation of closed technological cycles, low emissions and exhaust-free technologies that exclude the penetration of harmful pollutants into the atmosphere. .

Unfortunately, the current level of development of greening technological processes, the introduction of closed technological cycles, etc.k. it is not enough to completely prevent the emission of toxic substances into the atmosphere. For this reason, various methods of waste gas treatment are widely used in enterprises of the construction industry, but from the point of view of the future, dust and gas treatment devices have no prospects.

The task of architectural and planning solutions also involves the interoperation of emission sources and settlements in an environmentally appropriate manner, taking into account the direction of the wind.

The impact of the construction production of a prefabricated concrete plant on Water Resources. Modern construction has a multifaceted negative effect on the subsurface and, in particular, on the surface hydrosphere.

The water shell of the Earth's surface is a necessary and extremely sensitive component of the natural environment to pollution and other types of anthropogenic influences. Like other types of ecosystems, the aquatic ecological system has corresponding anthropogenic impact limits, the increase



of which can lead to a breakdown of relationships within ecosystems and irreversible phenomena in the biosphere.

There are the following main types of impact of construction on aquatic ecosystems:

- 1) intensive water consumption until the end of Water Resources;
 - 2) pollution and clogging of surface water bodies sewage and construction waste
- H) changes in the water regime of rivers in the construction of various objects (turbidity, etc.).

Construction is the main consumer of municipal and drinking water, mainly industrial water. Large amounts of water are spent on the preparation of concrete and cement mortar, cooling engines, aggregates and other technological devices, washing construction machines and mechanisms, Heat Supply, hydraulic testing of structures, the domestic needs of builders themselves, etc.

Some of the industry's most water-intensive industries include reinforced concrete goods and structures plants, cement plants, gypsum and pottery works, wet cement, etc. For example, 500-800 kg for steaming reinforced concrete and concrete structures. Steam for 1 m³ product.

A significant amount of water is consumed by ready-made concrete plants that are in operation. In European countries, water is used not only for mixing concrete, but also for washing drums of concrete mixers in large volumes, mixing equipment, wheels of concrete trucks, not only at the end of the shift, but also during the day.

As can be seen from the above data, large volumes of construction production (for example, more than 10 thousand ready-made concrete plants are currently working in Europe alone) also require a large amount of water.

An environmentally hazardous reduction in the conditions of unreasonable use of water resources can lead to the end of water reserves. A decrease in water is understood as an unacceptable reduction in their reserves in a certain area or a decrease in the minimum allowable flow of water. Both have unfavorable environmental consequences, disrupting the environmental ties established in the human-biosphere system.

Construction can be a serious factor in surface hydrosphere pollution. This is primarily caused by the sewage from the construction industry being discharged into bodies of water without being treated (or sufficiently treated).

At the plant for the production of shelves of contact networks, water is used as a solvent, absorber, coolant, etc. The volume of wastewater is determined by factors such as the capacity of the enterprise, the characteristics of the production technology, the type of product and material, etc.

The composition of wastewater of enterprises of the construction industry is much more complex - it is a heterogeneous mixture of various mixtures of mineral and organic origin, including hydroxides of a number of metals, various toxic compounds, hydrocarbons (oils, mazut, etc.), etc. .

Surface water bodies and rivers are complex ecosystems that are very sensitive to anthropogenic influences. When untreated wastewater is released, it changes chemical composition, mineralization increases, the active reaction of the environment changes, new toxic substances appear, etc.. Physical properties (color, smell, taste, etc.) deteriorate sharply. Reservoirs belong to the category of polluted and cause significant dissonance and functioning of the natural system.



The environmental condition of the surface hydrosphere, as well as the construction of underwater and other hydrotechnical structures of the hydrological regime of Rivers, is disrupted by the absorption of coastal building material quarries, which is manifested in changing the shape of the banks, deepening of the banks. kanal et al.

The construction production of a prefabricated concrete plant can adversely affect the underground hydrosphere in different ways. Firstly, it often significantly pollutes groundwater with its waste, secondly, it liquefies their water resources, and thirdly, it creates conditions for the development of unfavorable geological processes (flooding, karst, etc.).

The main sources of groundwater pollution associated with construction are wastewater from construction industry enterprises, contaminated wastewater from construction facilities and temporary storage of building materials, as well as wastewater from construction and household landfills. Contaminants are infiltrated through the soil aeration zone and enter the subsurface aquifers.

Groundwater and surface water are protected from the negative effects of construction through a set of measures aimed at preventing (preventive measures), limiting and eliminating the consequences of their pollution, blockage and reduction.

The following protective measures are envisaged to protect the hydrosphere from contamination:

- reduce the volume of wastewater discharged by construction industry enterprises due to the development of low-waste and waste-free technologies, the introduction of a closed-structure water supply system;

- mandatory treatment of industrial wastewater. According to the Water Code of the Republic of Belarus, in the process of construction and use of any objects, including construction objects and enterprises of the construction industry, it is forbidden to drain wastewater into water bodies without treatment;

- Separation at any water object (rivers, ponds, lakes, etc.) of the water protection zone with a width of 0.1 to 1.5 km or more. Within the water protection zones, any construction, plowing of land, dumping of garbage and production waste, etc. are prohibited. The water protection zone is marked with a special mark.

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