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Justification for the Adoption of Standards for Emissions of Pollutants into the Atmosphere

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Abstract: This article analyzes the effects of harmful emissions on the environment from the production of asphalt-concrete. Also, the results of the calculation of released dust in the production of asphalt-concrete are given, monitoring.

Key words: calculation, asphalt-concrete, dust, production, asphalt concrete plant, bitumen storage, cement warehouse.

Intensive use of natural resources, insufficiently effective cleaning and waste disposal led to disruption of the natural balance in the natural environment of entire geographic regions and individual countries. Dropped the ability to restore natural resources in large areas. The ecology of some areas of the planet is on the verge of a crisis. [4]

Over the past decade serious practical steps, that would significantly change the attitude of the human community to nature, to the problem of its preservation, to ensure the sustainable development of future generations. The bank of unsolved environmental problems continued to increase. There are many reasons for this, and among them, not least is the weak professionalism of the decision makers in the field of environmental protection, in particular, in its protection from industrial waste. The above fully applies to the problem of protecting atmospheric air from dust and gas emissions.

Methods. The following methods are used to determine the composition and amount of pollutants in the exhaust gas streams:

- theoretical (balance);
- calculation and analytical (experimental);
- reporting -static.

The theoretical method allows to establish the composition and quantity of pollutants on the basis of drawing up thermal and material balances of technological processes taking into account the chemical composition and properties of raw materials, fuel, materials, structural and geometric features of units, technological parameters, processes that ensure maximum performance of units and data on specific emissions of pollutants of the operated equipment.

It is used in the design of new industries, as well as for the analysis of existing technological processes and is the most promising. The calculation and analytical method consists in determining the parameters of the emission sources, the volume output of the contaminated gas, the analysis of the composition and concentration of pollutants in conditions close to the existing technological processes. The calculation and analytical method is the most commonly used in the practice of industrial production.

Reporting-static method is a set of techniques and methods of statistics, revealing the laws of determining the composition and quantity of pollutants produced in the production of specific products. Its application is allowed in the production, which established a systematic analysis of

emissions of pollutants and their specific amount. The main parts. A large number of sources can significantly pollute the air. Low sources are those, in which the emission is lower than 50 m, and high sources are meant as an emission higher than 50 m. Conventionally they call sources that have an air-gas mixture temperature above 50° C; at lower temperatures, emissions are considered cold. [1,6]

Emissions of enterprises of different industries and transport contain a large number of various harmful impurities. Samarkand ELUP is located in the town Farkhad, Samarkand city. The main activity of the enterprise is the production of asphalt-concrete mix and concrete products. The production capacity of the enterprise is 200 thousand tons per year of asphalt concrete mix, and production of 10 thousand m^3/year of reinforced concrete structures.

Knowledge of the characteristics of the main methods and methods of purification of atmospheric air, industrial wastewater and soils from various harmful substances at the enterprises of the construction industry is a gap in environmental issues. big job. At the moment, it is necessary to develop well the technological schemes of wastewater and air treatment for various construction enterprises. [2]

A large number of small sources can significantly pollute the air. Low sources are understood to be those in which the emission is lower than 50 m, and high sources mean an emission higher than 50 m. Conventionally they call sources that have a temperature of the emitted gas-air mixture higher than 50 ° C; at lower temperatures, emissions are considered cold. Emissions of enterprises of various industries and transport contain a large number of various harmful impurities.

Samarkand state Unitary Enterprise for Current road use is located in the village. Farhad. G. Samarkand. The main activity of the enterprise is the production of asphalt-concrete mix and reinforced concrete products. The production capacity of the enterprise is 200 thousand tons per year of asphalt concrete mix, and production of 10 thousand m3 / year of reinforced concrete structures. [2]

Asphalt mixer brand AMMAN with a capacity of 160 tons. at one o'clock. The main activity of Samarkand state Unitary Enterprise for Current road use is the production of asphalt mix and the manufacture of concrete products. The production activity of the enterprise is carried out on one industrial site, in the following workshops and areas:

- Administrative and domestic buildings;
- Crushing and screening shop;
- Asphalt plant;
- bitumen storage;
- Railway cement storage;
- boiler room;
- Reinforcement shop;
- Machine shop;
- Garage;
- Shop production of concrete products (road curbs)
- fuel;

On the territory of the Samarkand state Unitary Enterprise for Current road use , 38 sources of emissions of pollutants into the atmosphere were identified, of which 12 were organized.

The release of pollutants occurs as a result of the work of the following equipment, or technological operations;

- unit of dumping PGS dump trucks into the bunker of the reloading device-1 pc.

- PGS filling unit from transfer hopper to belt conveyor No. 1, 1 pc. crushing and screening shop. The source of the release of inorganic dust (SiO2 20-70%) is the process of unloading wet raw materials with a dump truck into the bunker of handling equipment. The volume of the discharged RMT is 110,5 thousand m3 / year or 210,000 tons / year. The duration of the dump truck unloading processes, with an average productivity of the dumping unit of 162 tons / hour, is 1,300 hours / year. Calculation of dust emissions unlimited in the process of dumping the RTM from dump trucks, is carried out according to the formula:

$q = K_1 * K_2 * K_3 * K_4 * K_5 * K_7 * B * G * 106/3600$, g /s where,

K_1-weight fraction of the dust fraction in the rock is 0,04;

K_2-fraction passing into aerosol volatile dust-0,02

K_3-coefficient taking into account wind speed-1,0

K_4-coefficient, taking into account the closeness of the node-0,2.

K_5-coefficient taking into account the moisture content of the material-0,4;

K_7-coefficient taking into account the size of the material -0,01;

B-coefficient taking into account the height peresipki-0,4;

G-performance of the filling unit -167t / g

q = 0.04 * 0,002 * 1,0 * 0,2 * 0,01 * 0,4 * 0,5 * 162 * 106/3600 = 0,0144g / s.

The estimated power of inorganic dust emission from dump truck unloading processes is;

M - inorganic dust = 0,0144g / s.

The source of inorganic dust emission is the mixing unit from the hopper of the reloading device to the No. 1 belt conveyor. The volume of the CBC is 109.95 thousand m3 / year or 208905t / year. The duration of the filling process of the ASG, with an average productivity of the filling unit 115t / hour, is 1820 hours / year. Calculation of dust emission unorganized in the process of pouring the ASG from the hopper of the reloading device to the conveyor belt No. 1 is carried out according to the formula:

$q = K_1 * K_2 * K_3 * K_4 * K_5 * K_7 * B * G * 106/3600$, g /s where, [2]

K_1-weight fraction of the dust fraction in the rock is 0,04;

K_2-fraction passing into aerosol volatile dust-0,02

K_3-coefficient taking into account wind speed-1,0

K_4-coefficient, taking into account the closeness of the node-0,2.

K_5-coefficient taking into account the moisture content of the material-0,4;

K_7-coefficient taking into account the size of the material -0,01;

B-coefficient taking into account the height of the pour -0,1;

G-productivity of the site -115t / g

q = 0,04 * 0,002 * 1,0 * 0,2 * 0,01 * 0,4 * 0,1 * 115 * 106/3600 = 0,002044 g / s.

The estimated power of inorganic dust emission from the mixing process of the ASG from the hopper of the transfer device is not:

M - inorganic dust = 0,002044 g / s.

Work on the inventory of emission sources of pollutants was complex and was carried out in strict accordance with the regulatory documents defining and regulating the composition, structure and volume of these works. According to the results of the inventory, identified; emission sources -50, emission sources-38, of which organized-12, equipped with PGOU-5, pollutants-12

Pollutant uptake -36,789033t / year.

The gross emission of pollutants into the atmosphere is 11,462165 tons / year, emissions from mobile sources amount to 101,078142 tons / year. Analysis of the calculation of surface concentrations of harmful substances generated by production emissions showed that their contribution to the level of air pollution is insignificant and does not exceed the established quotas at the border of the production site of the open pit and the plant.

List of used literature.

1. “Regulations on the State Ecological Expertise of the Republic of Uzbekistan” Resolution of the Cabinet of Ministers of the Republic of Uzbekistan 2001
2. Ecological Bulletin No. 11-12 (91) 2008
3. "Regulations on the State Ecological Expertise of the Republic of Uzbekistan" Resolution of the Cabinet of Ministers of the Republic of Uzbekistan 2001
4. Collection of methods for calculating emissions into the atmosphere of pollutants by various industries. Under. Ed. L.I. Verev, Leningrad, Gidrometeoizdat, 1986.
5. LF Dolina “Techno-ecology for builders”. Dnepropetrovsk 2006 p. 15