

The hydrographic network of the study area represented by R. Usha (the Dniro basin) and a network of drainage canals that flow into it.

Water management of RUE "national airport "Minsk" represented by a system of potable, industrial and fire water and two sewer systems.

Water is from 4 wells, located to the Northwest of the settlement Shemetovo.

Household and industrial wastewater from the enterprise's internal networks gravity comes to receiving chamber of sewage pumping station and then pumped to the collector at the wastewater treatment plant the town of Smolevichy.

Rain and melt water from the territory of the enterprise arrive on treatment facilities of rain sewage consisting of:

two ponds with a capacity of 30 thousand cubic meter each;

- pumping station;

- block filters.

The total annual number of surface runoff forming on the pool of rain water drainage of RUE "national airport Minsk is 2 621, 7 thousand cubic meters, including:

- rain runoff – 1 913,6 thousand cubic meters;

- snowmelt runoff – 708, 1 thousand cubic meters.

The main sources of pollution of surface wastewater suspended solids are dust and aerosol particles of unburned fuel, products of destruction of road surfaces and soil erosion, waste street estimates.

The discharge of treated storm water is carried out by sprocname the channel length of 800 m in Usha river 3.5 km upstream of the settlement Shemetovo.

Quality control of potable waters is SE "Minsk city center of hygiene and epidemiology", industrial and domestic wastewater – accredited laboratory sewage treatment plants the town of Smolevichy.

Quality control of wastewater for release from treatment facilities of rain sewage shall Borisov on accredited analytical control laboratory state institution "Republican center of analytical control in the field of environmental protection".

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THE PROBLEM OF WASTE GENERATION AT JSC “BELARUSKALI”.

JSC “Belaruskali” is one of the world’s biggest producers and exporters of potash fertilizers.

The intensive development of large-scale potassium fertilizers production at JSC “Belaruskali”, as well as the specificity of the geological conditions of sylvinit ore occurrence and their mineral composition, lead to a number of specific problems related to environmental protection in the Soligorsk industrial region. One of them is a problem of industrial wastes accumulation.

The industrial wastes of JSC "Belaruskali" are mainly represented by solid halite wastes containing 92–95% of sodium chloride, and liquid wastes – clay-salt slimes, represented by suspended potassium chloride and sodium chloride particles and the insoluble residue in a saturated aqueous solution of these salts.

Annually at JSC "Belaruskali", with the existing volume of potassium fertilizers production, about 16–20 million tons of halite wastes and 1.5–2.0 million tons of clay-salt slimes are formed. More than 1.9 million hectares are allocated for their disposal as the special salt dumps and slime storages. Currently, the total amount of the wastes accumulated exceeds 700 million tons.

The solid halite wastes are stored at the special salt dumps. On 01.01.2015 the area occupied by the halite wastes was about 616.73 ha from the reserved area of 938.19 ha. On the end of 2015 the total amount of halite wastes amounted to 771 989 thousand tons and the maximum height of the halite wastes dumping hill amounted to 142 m (the special salt dump of the 2nd mine factory).

Clay-salt slimes are accumulated at the special slime storages of JSC "Belaruskali". The total area of these slime storages is 968.86 ha and the total amount of clay-salt slimes accumulated at them exceeds 92460 thousand tons.

Such a significant amount of the industrial wastes accumulated at JSC "Belaruskali" has a negative impact on the environment, as expressed in the land alienation, groundwater pollution by salts penetrating into aquifers at the sites of industrial waste disposal, as well as soil salinization under the impact of atmospheric precipitation.

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ANALYSIS OF ENVIRONMENTAL MANAGEMENT SYSTEM AT JSC «MINSK ELECTROTECHNICAL PLANT NAMED AFTER V.I.KOZLOV» ENTERPRISE AND COMPARATIVE ANALYSIS OF ISO 14001:2004 AND ISO 14001:2015

Minsk Electrotechnical Plant named after V.I. Kozlov is one of world leaders in the field of production of wide spectrum of electro-technical equipment, power transformers, and complete transformer substations, current measuring transformers and the various switchgear devices. The enterprise is certified according to international standards of ISO 14001-2004, which ensure reliability and ecological safety of the manufactured products.

The purpose of work is to analyze differences between the new release of international standard of ISO 14001 and the development of measures for the effective transition to the update version of standard at an enterprise.

While attaining the objectives, production activities and technological processes at M.E.P. named after V.I. Kozlov which affect environment were investigated; the