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

environmental management system, air protection, water consumption and water removal, waste management were analyzed, besides the consideration was given to the comparative analysis of ISO 14001:2004 and ISO 14001:2015 and the differences of the third release of standard of ISO 14001 as well as to the conformity of ISO 14001:2015. A number of activities for effective transition to the new version of the standard for the enterprise were developed.

Minsk Electrotechnical Plant named after V.I. Kozlov was proposed to develop a plan for the transition to the ISO 14001-2015 the main points of which are:

- development and implementation of transition plan, training all personnel in standard changes, including internal auditors and leadership, identification of those fields that do not meet the new requirements, and where to focus to achieve compliance;
- the alignment of the environmental management system in compliance with the requirements of the new version of the standard, to prepare new documents and adapt management processes, in order to bring them into conformity with the requirements.

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ABOUT THE POSSIBILITY OF A FRAGMENTED LARGE-SCALE DECONTAMINATION OF RADIOACTIVE OBJECTS

The paper examines the possibility of fragmented decontamination of large-scale projects, in particular, the surface of the soil with significantly morphologically heterogeneous structure.

The heterogeneity of geochemical landscapes (autonomous landscapes, geochemical barriers, etc.) associated with the irregularity of radioactive contamination of the soil surface.

To optimize the decontamination processes and the achievement of economic effect due to the fragmented actions, the using of the Voronoi diagrams method is suggests [1].

For the formalization of the problem, statement discusses the profile of the contamination of the surface of the soil. The results of the distribution of pollution of the studied territory the method of Voronoi diagrams on the ground highlighted the points corresponding to maximum radioactive contamination. If you connect these points by edges, we get polygons with different area and a different number of sides. These regions have name Voronoi shapes.

Earlier in the framework stereological approach we consider the case of two-dimensional systems of disks, in which connections between the distributions of the parameters modeling the functions and characteristics of structures, observed in the configuration space, were found. [2].