

Assessment of opportunities waste of TNT different retention periods

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Keywords: waste of TNT, sulfite lye, sulfate ash, current waste, a ten-year shelf life, chemical analysis, method of disposal, silicate glass, assessment opportunities.

Abstract

This article presents the results of studies to assess the feasibility of using sulfate as waste production of TNT ten-year period of storage in the manufacture of silicate glass. In this regard, we have analyzed the composition of the current industrial waste production of TNT and waste ten-year shelf life. It was shown that the storage of waste under the open sky did not increase the content of nitro-derivatives of toluene. The content of TNT in them remained at the level of trace. Expect significant relative increase in the content of TNT and organic compounds - explosive derivatives of TNT in the ash was not confirmed. It was found that the coincidence time is a relative decrease in the content of water-soluble components of the waste. However, the content of the main component of waste – sodium sulfate over time has increased, although it remained within normal limits in accordance with TU 3.75 10103-13-90. The relative content of components such as sodium carbonate, decreased by 4 times, the sodium chloride is 28 times that of the sodium sulfide - 6 times, and the content of water-insoluble precipitate is increased almost in 2 times. As it turned out, the quality of samples of glass, made on the basis of glass batch using a ten-year waste differs slightly from the samples produced on the basis of the glass batch of the current waste.