

**MODEL OF SAFETY MANAGEMENT SYSTEM OF LAND RECLUTIVATION
OF PLACES OF AMMUNITION DISPOSAL AND DESTRUCTION**

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An analysis of the impact of explosion hazards on the level of environmental safety of disposal and destruction of ammunition was carried out. It was found that the impact on soil at such locations is determined by explosion factors. An analysis of existing technologies of land reclamation that can be used for places of disposal and destruction of ammunition was carried out, and opportunities and limitations of their use were identified. In particular, it was found that the selection of technologies for reclamation and destruction of ammunition significantly depends on the risk of explosion of existing explosives and devices.

Based on the analysis of the above technologies in comparison with the factors of negative impact on the soil of the place of disposal and destruction of ammunition, it can be concluded that there is no single technology of land reclamation of such facilities to solve all problems. Thus, it is necessary to create a complex set of environmental technologies and methods of their application in order to quickly and efficiently remove all available pollutants from the soil, taking into account explosive factors, which may be not only ammunition but also explosive contaminated soil.

Experimenting in places of disposal and destruction of ammunition with reproduction of the conditions of explosions that have already occurred is unacceptable for safety reasons. Therefore, the simulation method should be used to analyze the relevant states of the safety management system during the land reclamation of the above facilities. This approach allows not only to identify possible alternatives for the safety management system, but also to predict the level of safety of the facility as a whole. This method of research allows to obtain stable statistics of events, provided when the real system is replaced by a model that describes it with sufficient accuracy.

The modeling is based on the approach outlined in [11], which, however, needs to be significantly improved in view of the increased risk of explosion at the site of disposal and destruction of ammunition. For the first time, a simulation model of the safety management system for land reclamation and ammunition destruction was created. During the development of the model, it is proposed to consider the parameters of the site of disposal and destruction of ammunition, which determine the parameters of explosion risk, and environmental quality indicators, as responses to the influence of factors of operation of the site of disposal and destruction of ammunition.

Safety criteria are determined using a regulatory approach in three areas: current factors, explosion risk parameters and environmental quality indicators. The use of this approach allows flexibility of modeling, as it gives an opportunity to include in the consideration any number of criteria parameters in all three areas. The integrated safety criterion is defined as the highest value of all individual safety criteria.

LITERATURE

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