
METHODOLOGICAL APPROACH TO ASSESSING RISKS OF EMERGENCIES RESULTED FROM UNAUTHORIZED ACTIONS IN CRITICALLY IMPORTANT HAZARDOUS PRODUCTION FACILITIES

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Abstract

The study examines a scheme for estimating possible risks associated with various unauthorized actions in critically important hazardous production facilities. We analyzed the main calculation methods and made the conclusion concerning the facilities which are mostly put at risk. As the subject of the research we chose the main pipeline and hazardous production facilities adjacent to it.

Keywords

Emergency risk assessment, main pipeline, unauthorized actions

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References

- [1] Grazhdankin A.I., Pecherkin A.S. On impact of complex risk management on growth of technogenic threats. *Bezopasnost' truda v promyshlennosti* [Occupational Safety In Industry], 2004, no. 3, pp. 38–42.
- [2] Kuz'mina M.S. Methods of predicting a probability of damnification of human and material resources. *Inzhenernyy zhurnal: nauka i innovatsii* [Engineering Journal: Science and Innovation], 2014, no. 9. Available at: <http://engjournal.ru/catalog/mathmodel/technic/1328.html>.
- [3] GOST R 51897–2011. Menedzhment riska. Terminy i opredeleniya. [State standard R 51897–2011. Risk management. Terms and definitions]. Moscow, Standartinform publ., 2012. 12 p.
- [4] GOST R ISO 31000–2010. Menedzhment riska. Printsipy i rukovodstvo [State standard R ISO 31000–2010. Risk management. Principles and guidelines]. Moscow, Standartinform publ., 2012. 21 p.
- [5] Kozyrev V.P., Yushmanov S.V. Graph theory (algorithmic, algebraic, and metric problems. *Teoriya veroyatnostey. Matematicheskaya statistika. Teoreticheskaya kibernetika*, 1985, vol. 23, pp. 68–117. (Eng. version: *Journal of Soviet Mathematics*, 1987, vol. 39, no. 1, pp. 2476–2508.).
- [6] Belov P.G. Upravlenie riskami: sistemnyy analiz i modelirovanie [Risk management: system analysis and simulation]. Moscow, Yurayt publ., 2014. 33 p.
- [7] Makhutov N.A., Taranov R.A., Kachanov S.A. Enhancement of measures aimed at increasing level of protection of critically important objects for the national security of the Russian Federation objects and people and their protection from technogenic and natural threats and terrorist acts. *Tekhnologii grazhdanskoj bezopasnosti*, 2010, vol. 7, no. 1–2, pp. 83–88.

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