

On the Directions of Improving Industrial Explosive Materials' Balance

A.V. Malkov¹, FSBEI HE D.I. Mendeleev University of Chemical Technology of Russia (FSBEI HE MUCTR), Prof. Dr., malkov@muctr.ru

E.A. Telegina², FSAI Research Institute Environmental Industrial Policy Center (EIPC), e.telegina@eipc.center

A.A. Firer³, FSBEI HE MUCTR, PhD, firer@bk.ru

¹ Professor, UNESCO Department Green Chemistry for Sustainable Development, Moscow, Russia

² Research Worker, Engineering Center Department, Mytishchi, Moscow Region, Russia

³ Associate Professor, Department of General and Inorganic Chemistry, Moscow, Russia

Citation: Malkov A.V., Telegina E.A., Firer A.A. On the Directions of Improving Industrial Explosive Materials' Balance, *Kompetentnost' / Competency (Russia)*, 2022, no. 6, pp. 22–25. DOI: 10.24412/1993-8780-2022-6-22-25

key words

industrial explosive materials,
document review and assessment,
balance, structure for balance
maintenance, item range

We examined the topic stated in the title of the article from different angles. We gave a definition of industrial explosives, studied their areas of application, nomenclature, assessed the prospects for the Russian market of chemicals, including explosives. We have analyzed the procedure for maintaining the balance of production, distribution and use of industrial explosives, established by the competent authorities to ensure the safety of the use of these substances. Based on the results of the study of the problem, we have proposed recommendations for improving the balance sheet procedure. We believe that it is advisable for enterprises to consider the process of preparing and submitting information necessary for maintaining the balance of Industrial Explosive Materials as a procedure for the organization's safety management system. Requirements need to be improved in order to ensure that the procedures for preparing information by applicants are simple and reliable, and the procedure for evaluating information received from Russian organizations and compiling a balance of IEM ensures proper control of the circulation of industrial explosives.

References

1. Global Market Study on Industrial Explosives: Huge Potential from Construction, Quarrying, and Metal Mining Sectors. Persistent Market Research, 2021; <https://www.persistencemarketresearch.com/market-research/industrial-explosives-market.asp>.
2. ITS 23–2017. Informatsionno-tekhnicheskii spravochnik po nailuchshim dostupnym tekhnologiyam Dobycha i obogashchenie rud tsvetnykh metallov [BAT Reference Document ITS 23-2017 Mining and Processing of Non-Ferrous Metal Ores].
3. ITS 25–2017. Informatsionno-tekhnicheskii spravochnik po nailuchshim dostupnym tekhnologiyam Dobycha i obogashchenie zheleznykh rud [BAT Reference Document ITS 25–2017 Mining and Processing of Ferrous Metal Ores].
4. Beschastnov M.V. Promyshlennye vzryvy. Otsenka i preduprezhdenie [Industrial blasting. Assessment and prevention], *Khimiya*, 1991, 432 P.
5. Kuz'min V.I., Lysak V.I., Ivanenko E.A., Lata A.N. Issledovanie vliyaniya kinematcheskikh i energeticheskikh parametrov na strukturu i svoystva bimetallicheskih soedineniy pri svarke vzryvom s odnovremennoy shtampovkoy [A study of the influence of kinematic and energy parameters on the structure and properties of bimetallic joints during explosion welding with simultaneous stamping], *Izvestiya Volgogradskogo gosudarstvennogo tekhnicheskogo universiteta*, 2016, no. 10(189), pp. 18-24.
6. RF Government Decree of 12/07/2000 N 513 On measures to strengthen state control over the manufacturing, distribution and use of explosives and their waste products, as well as blasting supplies, industrial-purpose blasting powders and pyrotechnic products in the Russian Federation.
7. RF Ministry for Industry and Trade Order of 30/12/2013 N 2176 On approval of the administrative regulation of the Ministry for Industry and Trade of the Russian Federation for the provision of public services for maintaining the balance of production, distribution and use of industrial explosives.
8. Federal State Statistic Service Order of 31/08/2009 N 189 On approval of statistical tools for the Ministry for Industry and Trade of the Russian Federation to establish federal statistical monitoring of the activities performed by organizations of the industrial and defence industrial sectors.
9. Eurasian Economic Commission Council Decision of 20/07/2012 N 57 On approval Technical Regulation of the Customs Union On the safety of explosive substances and explosive-based products.
10. GOST R ISO 45001–2020 Sistemy menedzhmenta bezopasnosti truda i okhrany zdorov'ya [Occupational safety and health management systems].