

Municipal Solid Waste Management Systems in the Countries of the Baltic Sea Region: Comparative Legal Analysis

Kodolova Alena Vladimirovna^{^a} and Manvelova Aleksandra Borisovna^{^b}

St. Petersburg Federal Research Center of the Russian Academy of Sciences, 197110, Saint-Petersburg, Korpusnaya st., 18, Russia

alena_kodolova@mail.ru

Keywords: Waste management system, Solid municipal Waste, Baltic Sea Region countries, Waste management, Secondary raw materials, Waste recycling, Waste utilization, Waste disposal.

Abstract: The problems of formation, accumulation and subsequent management of solid municipal waste (SMW) are one of the key problems at the present stage. The article considers waste management systems in the EU countries of the Baltic Sea region, the Republic of Belarus and the Russian Federation. The comparative analysis of legislative requirements, target indicators, key characteristics of waste management systems, including stages of legal regulation of social relations in the sphere of waste management is carried out. Comparative analysis of the characteristics of waste management systems in the European countries of the Baltic Sea Region has shown that the current waste management systems are quite effective in solving the problems of collection and sorting of solid waste for the subsequent use of secondary resources.

1 INTRODUCTION

The purpose of the study is to analyze the experience of the Baltic Sea Region countries in the field of solid municipal waste (MSW) management and management to improve the efficiency of the MSW management system in our country.

The countries of the Baltic Sea catchment area (hereinafter - the Region) are: Norway, Sweden, Finland, Russia, Estonia, Latvia, Lithuania, Belarus, Ukraine, Poland, Slovakia, Czech Republic, Germany and Denmark. At the same time, most of the countries of the Region are members of the European Union (EU), implementing a common policy in the field of waste management.

For many years the process of integration of the states of the Region in various spheres has been observed. This process was reflected by some convergence of legislation, including in the environmental sphere, expressed in the orientation of Russia, Belarus and Ukraine to the provisions of the legislation of the EU states.


In the current tense geopolitical situation there is a development of disintegration processes and crisis


phenomena in various spheres of international relations. In this regard, the problems, the interest in the resolution of which contributes to the development of international relations, are of particular relevance.

The problem of safe waste management in the countries of the Region can be rightfully attributed to such problems. Actualization of this problem stimulates the preparation and adoption of effective political decisions to resolve environmental problems, which can contribute to the joint search for ways out of the geopolitical crisis. The available international experience has shown that the joint resolution of environmental problems has a significant positive impact on geopolitical processes.

Despite the outlined processes of disintegration in the Region as a whole, it should be noted that the processes of cooperation between the Russian Federation and the Republic of Belarus in recent years, on the contrary, have been developing in various spheres.

Russia and Belarus are member states of such international intergovernmental organizations as the

^a <https://orcid.org/0000-0001-6353-4809>

^b <https://orcid.org/0000-0003-0628-7033>

Commonwealth of Independent States (CIS) and the Eurasian Economic Union (EAEU).

Another integration union, the Union State (US), of which the Russian Federation and the Republic of Belarus are members, was established in the territory of the Region in 1999. The Union State has been one of the most solid integration associations in the post-Soviet space for twenty years already (Malyshev, 2019).

In accordance with Article 2 of the Treaty between the Russian Federation and the Republic of Belarus of 08.12.1999 «On the Creation of the Union State», one of the objectives of the Union State is the formation of a unified legal system. At the same time, according to the Program of Actions of the Russian Federation and the Republic of Belarus on the implementation of the provisions of the Treaty on the Establishment of the Union State (Rossiyskaya Gazeta, № 22), unification of legislation is planned in the field of civil law and taxation, while in the field of environmental security a joint policy is envisaged.

Both in the European Union and in the Union State the problems of effective waste management are of particular relevance.

Scientific articles on EU law investigate the problems of prevention of formation of certain types of waste, circular economy, efficient waste management (Zhang, Ho, Di Maio, Sprecher, Yang, Tukker, 2022; Duquennoi, Martinez, 2022; Araya, 2018).

The norms of European legislation are also of interest to Russian researchers. The object of the study is both EU directives (Boravskaya, 2011) and domestic norms (Shamko, 2013).

In Russia, scientific publications pay attention to practically all aspects of waste management (Semschikov, Kanenkin, 2013; Talaeva, 2019; Dubovik, 2021). The main reason confirming the relevance of these studies is the continuing growth of formation and accumulation of both solid municipal and industrial waste in our country. At the same time, the measures taken to prevent waste generation are clearly insufficient, which threatens not only to aggravate the environmental crisis, but also to aggravate the socio-economic situation in general (Masserov, Lomakin, 2019).

In the scientific literature there are complex studies of the legislation of the Russian Federation and the Republic of Belarus, as well as the practice of its application in the field of waste management and its involvement in secondary turnover (Pozdnyakova, Chelyapina, 2022; Ponomarev, 2018).

Despite a significant number of publications, to date there have been no studies on the analysis of

legislation on solid municipal waste management in the countries of the Region. In connection with the above-mentioned it seems necessary to conduct a comparative legal analysis of the legislation in the sphere of solid municipal waste management in the EU Member States of the Region and the Union State, to identify the shortcomings of waste management systems in the countries of the Region and to assess the best practices of waste management.

2 MATERIALS AND METHODS

Solid municipal waste management systems in the countries of the Baltic Sea Region were chosen as the object of the study.

When analyzing data in the sphere of waste management in the Russian Federation, Belarus and the EU, the reference normative legal acts and waste management programs were taken into consideration.

3 MAIN PROVISIONS OF WASTE LEGISLATION IN THE EU

The normative base regulating relations of economic entities in national waste management systems in European countries is mainly based on general principles and norms of international law, as well as on EU directives. In most cases it is the EU directives that lay the foundations of the European legislation, which are implemented in the national laws of the EU Member States. For this reason, EU Member States have a certain freedom of action in shaping their national legislation on the basis of these directives. In particular, the directives establish the principles and objectives of preventive environmental policy to prevent the generation or reuse of production and consumption waste in the circular economy.

The European Union has declared the circular economy as a major policy objective and has adopted a package of documents consisting of an action plan and legislative initiatives. Reuse and recycling of materials is becoming a key factor in maintaining economic growth and competitiveness in trade while taking into account environmental concerns.

In order to achieve the set objectives, the EU Directives set targets, the step-by-step fulfillment of which is assessed in accordance with the reporting rules contained in the decisions of the EU Commission.

As of 2017, the European Union has adopted about 20 directives related to various aspects of waste

management issues. To date, there are more than 20 of them.

In 2018, Directive 2018/851 of the European Parliament and of the Council of May 30, 2018 (the «Waste Directive») was adopted, amending Directive 2008/98/EC on Waste.

Under Directive 2018, EU Member States are required to take measures to reduce the amount and harmfulness of waste, such as promoting the use of resource-efficient, durable, repairable or recyclable products, establishing reuse systems for certain products, reducing food waste at different stages of the food chain, reducing the amount and harmfulness of waste in different sectors of the economy, taking into account the application of BAT.

By July 2020, EU Member States were required to align their national laws with the changes included in the revised Waste Framework Directive, the Packaging and Packaging Waste Directive and the Landfill Directive.

4 TERMS AND DEFINITIONS IN THE FIELD OF WASTE MANAGEMENT UNDER EUROPEAN UNION LEGISLATION

The main terms in the field of waste management are defined in the Waste Framework Directive 2008/98/EC. According to the provisions of Article 3 of this directive (as amended by Directive 2018/851), waste means substances or objects that the owner discards or intends to discard or must discard. The following waste types are defined in this article: «hazardous waste», «non-hazardous substances», «municipal waste», «construction and demolition waste», «waste oil», «bio-waste», «food waste».

The Waste Framework Directive 2008/98/EC pays particular attention to waste recycling. Article 3 of the Directive introduces the term «recycling», which refers to a recovery operation whereby waste materials are recycled into products, materials or substances for their original or other purposes. It includes the recycling of organic materials, but does not include energy recovery and recycling into materials to be used as fuel or for landfill operations. Waste treatment or recycling is by far the key element of waste management in the EU countries.

5 ENSHRINEMENT OF EXTENDED PRODUCER RESPONSIBILITY (EPR) IN EUROPEAN LEGISLATION

In 1975, the European Waste Directive was adopted 75/442/EC, laying down the foundations of the EPR principle.

The Waste Framework Directive 2008/98/EC (Article 8) regulated extended producer responsibility rules. The Directive in question established that EU Member States may implement various measures of a legal and non-legal nature to ensure that any legal or natural person who professionally develops, produces, processes, sells or imports products accepts extended producer responsibility.

Directive 2018/851 provides for Common Minimum Requirements for extended producer responsibility schemes (Art. 8a). The producer must cover the actual costs of waste management of the products it places on the European Union market, starting with separate collection.

Directive 2018 contains new provisions on producer responsibility. These include: the introduction of an obligation for producers to inform consumers, to report to the authorities and to self-monitor, as well as on producer charges adjusted for the environmental impact of products. Member States must organize sufficient monitoring of compliance with producer responsibility and ensure regular dialogue between stakeholder groups.

One of the important changes foreseen by Directive 2018 is the definition of the Common Minimum Requirements for Extended Producer Responsibility Schemes (Art. 8a of the Waste Directive). The producer must cover the actual waste management costs of the products it places on the European Union market, starting with separate collection.

EU member States may waive the sharing of financial responsibility if this is justified to ensure proper waste management and the financial viability of the EPR system. However, producers must cover at least 80% of the costs in those producer responsibility schemes that have been established to achieve the objectives set out in EU legislation, such as packaging producer responsibility schemes.

6 FORMATION OF THE LEGISLATIVE FRAMEWORK ON SECONDARY MATERIAL RESOURCES (SMR), SECONDARY RAW MATERIALS

In 1987, the European Union countries started to implement an integrated waste management strategy, taking into account both the environmental impact of waste and its use as secondary resources.

In 2008, the Framework Directive 2008/98/EC included the articles «By-products!» and «Removal of secondary raw materials from «waste» status».

In 2011, the Roadmap for a Resource Efficient Europe («circular economy») was adopted, outlining targets until 2020 and benchmarks until 2050 (The Roadmap to a Resource Efficient Europe (COM(2011) 571).

In 2014, legislation on the procurement of secondary raw materials was introduced (EU Directive 2014/24/EU on public procurement).

7 DEVELOPMENT OF WASTE LEGISLATION IN THE RUSSIAN FEDERATION AND THE REPUBLIC OF BELARUS

In Russia, the reform of the production and consumption waste management industry started in December 2014 with amendments and additions to the federal legislation.

To date, it is possible to assess the changes that have occurred. The positive trends include the development of the market of secondary raw materials, the system of separate collection of household waste, the actualization of the garbage problem among the population. The reform itself, however, passes with many difficulties, slowly, by trial and error, sometimes resistance and even sabotage from the subjects of these public rights, including local authorities and unscrupulous business.

8 TERMS AND DEFINITIONS IN THE FIELD OF WASTE MANAGEMENT UNDER THE LEGISLATION OF THE RUSSIAN FEDERATION AND THE REPUBLIC OF BELARUS

Currently, quite a few terms, definitions and norms used in Russian legislation are outdated and need to be revised, which is associated not only with the development of techniques and technologies, but also with changes in the economic and political situation in the country. This has necessitated the need to evaluate and update the conceptual apparatus, which is especially relevant in the development of regulatory documents and methodological recommendations.

In 2022 the Russian legislation on wastes underwent significant changes, which are aimed at realization of the next stage of reforming the waste management industry.

On July 14, 2022 the Federal Law No. 268-FZ «On Amendments to the Federal Law «On Production and Consumption Waste» and Certain Legislative Acts of the Russian Federation» (hereinafter - the Law on Secondary Resources) was adopted, which formalized in Russian legislation such concepts as «secondary resources», «secondary raw materials», «by-products of production» and defined the basis of their legal regime of application.

It should be noted that the concept of «secondary resources» was introduced in Federal Law № 89-FZ dated 24.06.1998 «On Production and Consumption Waste» (hereinafter - the Law on Waste), while the definition of «secondary raw materials» was introduced in Federal Law № 7-FZ dated 10 January 2002 «On Environmental Protection» (hereinafter - the Law on Environmental Protection). It is enshrined in the legislation that secondary resources are recognised as waste and, accordingly, they are subject to the waste management requirements stipulated by the current regulatory and legal acts. It should be noted that the Law on Secondary Resources contains specifics on the handling of secondary resources. For example, secondary resources are subject to utilisation, and their burial is not allowed.

In the Republic of Belarus the reform of the industry under consideration started earlier, and it can be said that the Law of RB «On Waste Management» dated 20 July 2007 № 271-Z (hereinafter - the Law of RB «On Waste Management») was adopted in the process of implementation of this reform.

Unlike Russian legislation, the terminology in the field of waste management in the Republic of Belarus has been and remains more detailed since 2007.

Article 1 of the Law of RB «On Waste Management» defines «waste», «production waste», «consumption waste», «medical waste», «hazardous waste». The above terms, except for the concept of «waste», are absent in the Russian Law on Waste.

The experts note that the definition of waste used in Belarus covers a much broader range of materials than is common in international practice; waste also includes by-products and materials that can be reused in production directly at the place of generation.

Differences in terminology in the legislation of the Russian Federation and the Republic of Belarus are also manifested in the sphere of waste management process regulation.

In the Republic of Belarus the term «waste utilization» is used for relations on further application of wastes for production of products, energy, etc.

In the Russian legislation according to Article 1 of the Law on Waste the term «waste utilization» is used, combining several processes, namely recycling (reuse of waste for its direct purpose), regeneration (return of waste to the production cycle after appropriate preparation), recovery (extraction of useful components for their reuse) and energy utilisation (use of solid municipal waste as a renewable energy source).

Both the Russian and Belarusian Waste Laws lack the terms «recovery» and «recycling». In Article 1 of the Russian Waste Law these types of waste management are referred to the utilisation process.

9 ENSHRINING EXTENDED PRODUCER RESPONSIBILITY (EPR) IN LEGISLATION

In the Republic of Belarus Law of RB «On Waste Management» 2012 introduces the principle of EPR and provides economic incentives in the field of waste management. In the period from 2012 to 2016 the state programmes aimed at implementation of the EPR principle were adopted. In 2012 Presidential Decree № 313 «On Some Issues of Consumer Waste Management» provides for measures to implement EPR by producers and suppliers of goods and packaging.

In the Russian Federation, the process of implementation of extended producer responsibility has been underway since 2015. Since the Federal Law № 458-FZ dated 29.12.2014 «On Amendments to the

Federal Law «On Production and Consumption Waste» and Certain Legislative Acts of the Russian Federation and the Annulment of Certain Legislative Acts (Provisions of Legislative Acts) of the Russian Federation» came into force, the basics of EPR were established. Nevertheless, over the years of the EPR implementation the goods waste management industry has been developing slowly. It is noted that the main reason for this is insufficient economic incentives to increase the volume of their utilisation and reduce the volume of their disposal.

In 2023, Federal Law № 451-FZ dated 04.08.2023 «On Amendments to the Federal Law «On Production and Consumption Waste» and Certain Legislative Acts of the Russian Federation» was adopted, the main purpose of which is to form an effective state regulation model aimed at maximising the return of secondary material resources to economic turnover and minimising the volume of consumption waste disposal. This law comes into force on 1 January 2024.

10 FORMATION OF THE LEGISLATIVE FRAMEWORK ON SECONDARY MATERIAL RESOURCES (SMR), RECYCLED RAW MATERIALS

During the Soviet period, sanitary rules SR 2524-82 «Sanitary rules for collection, storage, transport and primary processing of secondary raw materials» were in force in the USSR. In Russia these rules were cancelled in 1994.

In the Republic of Belarus with the adoption of the Law of RB «On Waste Management» (2007), the basic principles of waste management are defined, aimed at maximum involvement of waste in civil turnover as secondary raw materials; new terms are introduced, in particular, «secondary material resources», the term «secondary raw materials» is corrected; a ban on burying secondary material resources in landfills is introduced; the obligation of waste producers to collect secondary material resources is introduced. In 2012, a state institution «Operator of Secondary Material Resources» was established, which is charged with the function of coordinating activities in the field of SMR management

In the Russian Federation, the legal framework on secondary resources started to be formed much later. In 2022, with the adoption of Federal Law № 268-FZ «On Amendments to the Federal Law «On Production

and Consumption Waste» and Certain Legislative Acts of the Russian Federation» (hereinafter - the Law on Secondary Resources), such concepts as «secondary resources», «secondary raw materials», «by-products of production» were introduced into Russian legislation and the basis of their legal regime of application was defined. Legislation stipulates that secondary resources are recognised as waste and, accordingly, they are subject to the waste management requirements stipulated by the current regulatory and legal acts. Secondary resources are subject to utilisation and their disposal is not allowed.

11 PROSPECTS FOR THE DEVELOPMENT OF INTERSTATE STANDARDS AND JOINT PROGRAMMES IN THE FIELD OF WASTE MANAGEMENT WITHIN THE FRAMEWORK OF THE UNION STATE

The topic of interstate standards in Russia and Belarus and their interaction with national legislation is particularly relevant in connection with the countries' entry into the EAEU. According to Article 52 of the Treaty on the Eurasian Economic Union (signed in Astana on 29.05.2014), the EAEU adopts technical regulations (including those for environmental protection) that have direct effect on the territory of the EAEU states. With regard to various types of products within the EAEU, technical regulations establishing rules for waste management have been adopted. One such example is TR TS 021/2011 Technical Regulation of the Customs Union «On the Safety of Food Products», Article 16 of which regulates the handling of waste generated in the process of production (manufacturing) of food products.

Among the programmes of the Union State it is possible to mention the Scientific and Technical Programme of the SG «Increasing the efficiency of food production through processing of their waste on the basis of progressive technologies and techniques» (hereinafter - the Programme), conducted from 2010 to 2012. This Programme is included in the List of priority scientific, technological and innovation programmes and projects of the Union State for their further development, approval and implementation (Resolution of the Council of Ministers of the Union State No. 3 of 17 November 2008).

The Resolution of the Council of Ministers of the Union State of 30.03.2017 № 2 approved the results of the Programme. This resolution stated that the objectives of the Programme have been achieved. As a result of the Programme, new resource-saving technologies and equipment for alcohol production and obtaining high quality food and feed products from alcohol production waste, new highly efficient technologies and equipment for deep complex processing of whey to obtain a wide range of products for food purposes and feed products, new resource-saving technologies and equipment for deep processing of secondary raw material resources of fish and other food industries were created and introduced.

This programme is currently the only one within the Union State dedicated to waste. It seems that such programmes should be permanent in view of the acute urgency of waste-related issues. Clause 15 of the Programme of Actions of the Russian Federation and the Republic of Belarus on the implementation of the provisions of the Treaty on the Establishment of the Union State includes the implementation of a joint policy in the field of environmental security, hydrometeorology, monitoring and protection of the environment, prevention and elimination of the consequences of natural and man-made disasters, including the consequences of the Chernobyl accident. Consequently, the implementation of joint programmes on waste management is in line with joint agreements and the norms of international law.

12 CONCLUSIONS

Comparative analysis of the legislation of the Baltic Sea Region states has shown that the most significant changes in the development of legislation in the field of waste management are the development of waste prevention strategies and their use as secondary material and energy resources, as well as the legislative establishment and implementation of a hierarchical order of waste management.

The Russian Federation and the Republic of Belarus are reforming their waste legislation. At that, in the Russian Federation this reform started later than in Belarus, it passes with many difficulties, slowly, by trial and error method, sometimes resistance and even sabotage from the subjects of these public rights, including local authorities and unscrupulous business.

The definition of waste used in Belarus covers a much wider range of materials than in Russia. Waste also includes by-products and materials that can be

reused in production directly at the place of generation.

At present, many terms, definitions and norms used in Russian legislation are outdated and in need of revision, due not only to the development of techniques and technologies, but also to changes in the economic and political situation in the country.

Both in the Russian Federation and in the Republic of Belarus such terms as recycling and recovery, which currently have a special relevance and correspond to the purpose of the hierarchical order of waste management, are absent at the legislative level.

The best practices of the EU and the CIS Member States have served as a basis for the improvement of the CIS model legislation.

The current version of the Model Law «On Production and Consumption Waste» (adopted by the CIS IPA Resolution № 29-15 of 31 October 2007) was considered to be in need of updating due to the fact that over the past 13 years new approaches to waste management have been developed based on the application of mechanisms of extended liability of producers (importers) of goods, as well as the detailing of norms related to the establishment of the status of «waste» and its loss, and the development of new approaches to the use of waste as secondary materials.

In accordance with the Perspective Plan of Model Lawmaking in the Commonwealth of Independent States for 2020-2022, it was decided to develop a new edition of the model law «On Production and Consumption Waste». This model law was adopted in 2023.

In accordance with this model law, a course has been taken to establish at the legislative level the goals and objectives of EPR, norms on mandatory compliance with the hierarchical order of waste management, streamlining at the legislative level the terminology related to waste management with a clear and distinct boundary between the terms «waste management» and «waste treatment», transition to 100% standards of waste disposal from the use of goods, packaging, creation of a competitive environment that ensures fair and effective competition at all stages of the realisation of waste management, and the creation of a competitive environment that ensures fair and effective competition at all stages of waste management.

REFERENCES

- Malyshev, D.V., 2019. Union State of the Russian Federation and the Republic of Belarus: institutionalisation and current state. *Post-Soviet Studies*. Vol. 2 № 8. P. 1551-1162.
- Rossiyskaya Gazeta, № 22, 01.02.2000.
- Zhang, Ch., Ho, M., Di Maio, F., Sprecher, B., Yang, X., Tukker, A., 2022. An overview of the waste hierarchy framework for analyzing the circularity in construction and demolition waste management in Europe. *Science of the total environment*, Volume 803, 149892.
- Duquennoi, C., Martinez, J., 2022. European Union's policymaking on sustainable waste management and circularity in agroecosystems: The potential for innovative interactions between science and decision-making. *Sustainable food systems*. Volume 6.
- Araya, M.B., 2018. A Review of Effective Waste Management from an EU, National, and Local Perspective and Its Influence: The Management of Biowaste and Anaerobic Digestion of Municipal Solid Waste. *Journal of Environmental Protection* Vol.9 No.6. May 31.
- Boravskaya, T.V., 2011. Waste management: norms of the European legislation. *Municipal solid wastes*, № 7. P. 27-31.
- Shamko, T.G., 2013. Estonia in the EU: household waste management. *Municipal solid wastes*, № 12. P. 42-45.
- Semshikov, S.E., Kanenkin, E.I., 2013. Solid municipal waste handling: problems and prospects. *Bulletin of Angarsk State Technical University*, № 19. P. 203-206.
- Talaeva, O.V., 2019. Solid municipal waste management in the historical aspect and at the present stage. *Science without borders*, № 7 (35). P. 112-117.
- Dubovik, D.M., 2021. Payment for solid municipal waste handling: analysis of the recalculation problem. *Business, Management and Law*, № 4. P. 46-51.
- Masserov, D.A., Lomakin, A.V., 2019. Rational handling of solid municipal waste as a factor of economic development and environmental protection. *Modern Problems of Regional Development*, № 2. P. 7.
- Pozdnyakova, E.A., Chelyapina, O.I., 2022. Application of the legislation of the Union State of the Republic of Belarus and the Russian Federation in the field of waste management. *Service plus*, Vol.16. №1. P. 42-49.
- Ponomarev, M.V., 2018. Development of the legislation of the Russian Federation and the Republic of Belarus on wastes as a factor in the development of interstate legal and economic integration. *Vilanie state integration processes on the development of agrarian, environmental, natural resource and energy law*, P. 131-136.
- Directive 2008/98/ec of the european parliament and of the council of 19 November 2008 on waste and repealing certain Directives. URL: <https://eur-lex.europa.eu/eli/dir/2008/98/oj> (circulation date 15.07.2022).
- Directive 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste. URL:

- <https://www.eea.europa.eu/policy-documents/directive-eu-2018-851-of> (circulation date 03.07.2023).
- Directive (EU) 2018/852 of the European Parliament and of the Council of 30 May 2018 amending Directive 94/62/EC on packaging and packaging waste. URL: <https://www.eea.europa.eu/policy-documents/directive-eu-2018-852-of> (circulation date 11.12.2022).
- Resolution of the Council of Ministers of the Republic of Belarus 28 July 2017 № 567 On Approval of the National Strategy for the Management of Solid Municipal Waste and Secondary Material Resources in the Republic of Belarus for the Period until 2035.
- Mazur-Wierzbicka, E., 2021. Circular economy: advancement of European Union countries. *Environmental Science Europe*.
- European Commission: Circular Economy [Электронный ресурс]. URL: https://ec.europa.eu/environment/circular-economy/index_en.htm (circulation date 01.10.2022).
- Cude'cka-Purin, N., Atst'aja, D., Koval, V., Purvin, M., Nesenenko, P., Tkach, O., 2022. Achievement of Sustainable Development Goals through the Implementation of Circular Economy and Developing Regional Cooperation. *Energies* 2022, 15, 4072.
- European Union Council Directive 1999/31/EC of 26 April 1999 on landfills URL: <https://base.garant.ru/2563786/?ysclid=lniw9mk2qx401161571> (circulation date 09.10.2023).
- Federal Law of 29.12.2014 № 458-FZ «On Amendments to the Federal Law «On Production and Consumption Waste», certain legislative acts of the Russian Federation and invalidation of certain legislative acts (provisions of legislative acts) of the Russian Federation» // Rossiyskaya gazeta, № 299, 31.12.2014.
- National Strategy on Solid Municipal Waste and Secondary Material Resources Management in the Republic of Belarus for the period up to 2035, approved by the Decision of the Council of Ministers of the Republic of Belarus of 28.07.2017. № 567. URL: <http://www.government.by/upload/docs/file/1a9a20a06fc7fe5.PDF> (circulation date 02.09.2023)
- Explanatory note to the draft law № 345228-8 URL: <https://sozd.duma.gov.ru/bill/345338-8> (circulation date 02.09.2023)
- Technical Regulations of the Customs Union of 09.12.2011 N021/2011 URL: <https://docs.cntd.ru/document/902320560?ysclid=lniy0b0uld825129271> (circulation date 02.09.2023).
- Resolution of the IPA CIS of 14.04.2023 № 55-4 URL: https://iacis.ru/baza_dokumentov/modelnie_zakonodat_elnie_akti_i_rekomendacii_mpa_sng/modelnie_kodeksi_i_zakoni/20?ysclid=lnkcd74ln9199771959 (circulation date 09.10.2023).