APPROVED

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**POLICY**

**on Responsible Consumption and Production
(Resource Saving)**

2023

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**INTRODUCTION**

Resource saving and resource efficiency are on the forefront agenda in the modern economic development model. An increase in the population of the planet and a general increase in the consumption of goods and services per capita are the basis of global economic development. They lead to faster growth in industrial and agricultural production and, as a result, significantly increase the world economy’s demand for natural resources.

Natural resources are divided into renewable, which are reproduced under the influence of natural processes and/or conscious human efforts as they are used up, and non-renewable, which cannot be restored after their complete exhaustion. At the same time, the human need for “new” natural resources is far ahead of the time needed by nature to restore them.

The predatory use of natural resources leads not only to their depletion, but also to land degradation, reduced soil fertility, water scarcity, marine ecosystems deterioration, and a decrease in landscape and biological diversity. The pollution of the environment as a whole is rising, which results in a lower quality of human life.

The natural resources preservation must be considered both on the temporal and spatial horizons. This means that indirect effects occurring in different places and at different times must also be taken into considered when analyzing specific products and the economy of the country as a whole. For products this means taking the entire life cycle of the product into account, including the extraction of rough materials, manufacturing, delivery and use, up to recovery and disposal.

The National Security Strategy of the Russian Federation considers environmental protection, natural resources conservation and environmental management a priority. Achieving the goals of environmental safety and rational natural resource use requires, among other things, ensuring environmentally sustainable economic growth, stimulating implementation of innovative technologies, developing environmentally safe industries, reduction of production waste and consumption, as well as developing the industry for their disposal and reuse.

The United Nations 2030 Agenda for Sustainable Development calls for a transition of the world community to rational patterns of production and consumption, achievement of limited development and efficient use of natural resources, a significant reduction of waste by taking measures to prevent its formation, reduce, recycle and reuse it.

PJSC ALROSA (hereinafter “ALROSA” and/or “the Company”), noting the need to maintain a balance between production growth and environmental sustainability, confirms its readiness for continuous improvement of its own production processes, including processes aimed at sustainable waste management and responsible consumption and production.

# 1. General provisions

The growing concern of the international community about environmental challenges posed by increased consumption of goods and services is reflected at all levels, from supranational agreements to individual lifestyles. The trend of responsible consumption is gaining active popularity. It implies a conscious choice in favor of products and services that have a lower negative impact on the environment and is reflected in responsible production in relation to the entire value chain, from raw materials to disposal.

The use of material and rough resources is the basis for the production of products (goods), services, processes, and works. Measures on the rational use and economical spending of material resources at all stages of the product life cycle, the performance of work and the provision of services are classified as resource saving. The requirements for resource saving are divided into the following groups:

– resource content requirements—determine the perfection of processes, products, services and works, for example, in terms of the composition and quantity of materials used, weight, dimensions, volume of the product, etc.

– resource intensity requirements (in terms of manufacturability)—determine the possibility of achieving the optimal cost of resources in the implementation of the processes of manufacturing, repair and disposal of products, as well as in the provision of services and the performance of various works, taking the requirements of environmental safety and labor protection into account

– resource efficiency requirements—determine the possibility of achieving the optimal resource costs when using products, as well as in the provision of services and performance of work taking the requirements of environmental safety and labor protection into account

– recyclability requirements—determine the possibility of achieving the maximum use of waste during their disposal, the production of secondary material resources and raw materials.

These groups of requirements are interrelated and must be determined during development, manufacture, operation, disposal of products, planning of services and performance of work.

As already noted, material and rough resources are consumed throughout the entire life cycle of products: in the processing of rough materials, in the manufacture of the product (production of working materials, direct manufacture of the product, etc.), in the use of products (including reuse), in the recovery product and its disposal. The overall balance of resource conservation includes all activities, starting with the extraction of rough materials from the environment and ending with the release of the used (waste) substance into the environment in the form of production waste. Only a part of the resources extracted from the natural environment can be processed into working materials and used by the corresponding product system. This part of the materials is considered as a used extract. The unused part of the materials is thrown back into the environment. Secondary rough materials generated during the manufacture (recovery) of a product can replace the original rough materials (obtained from natural resources). In this case, natural resources are used less, the requirement for them is reduced. It is necessary to collect, sort, process and recycle production waste as completely as possible to be able to use high quality secondary rough materials.

Waste treatment includes the following main activities:

– prevention, minimization and monitoring of waste generation at the stages of the life cycle of products, goods, services and work processes

– documenting of activities for the production and consumption waste management at the stages of the technological cycle of generation

– organization and monitoring over the processes of collection, sorting, neutralization, transportation, placement, storage of waste

– reuse of production waste in the technological cycle

– organization and monitoring of inert waste disposal processes

– organization and monitoring of hazardous waste disposal processes

– mandatory supervision of transboundary movements of waste, places of waste disposal and processes for the safe removal of waste at the stages of technological cycle

– informatization of waste management processes.

Waste management requirements are set for all types of waste, and primarily for waste containing rare-earth and precious materials (for the purpose of their disposal), electrochemical power sources and hazardous materials (for the purpose of their disposal), as well as for all products that are completely or partially (in the form of elements of a product or structure) can be reused after their withdrawal from operation (without modification or with modification).

Energy conservation is also associated with measures to reduce the consumption, expenditure and losses of fuel and energy resources and to involve alternative (local) energy sources, secondary energy resources in economic circulation in compliance with the requirements for people safety and environmental protection. Generally, energy conservation is associated with the establishment and implementation of standards focused on local (regional) conditions and specific energy-consuming facilities and, along with material conservation, is part of a set of measures and measures for resource saving.

For the purpose of material and power conservation the resource management in production can only be effective if it is aimed at perceiving the overall material and energy flow as an integral management object with the coordination of all commodity circulation processes, starting from the purchase of the necessary material, fuel and energy resources for the efficient organization of production, ending with the shipment of finished products to the consumer. An important condition is the development and implementation of comprehensive measures and actions of the material and energy management, the identification of internal production reserves to reduce the material and power consumption of output products, ensuring the reduction of production costs and increasing the sustainability of products by demonstrating responsible consumption and production.

Training and education of each employee’s moral responsibility for the rational use of material/rough and energy resources increases the expected results in resource conservation.

The provisions of this Policy are subject to compliance by all structural divisions of the Company and are recommended for use by subsidiaries and companies (collectively referred to as the ALROSA Group) as a basis for developing their own Policies.

# 2. Referenced codes and standards

2.1. Decree of the President of the Russian Federation “On the National Security Strategy of Russia” No. 400 dated 02.07.2021.

2.2. Federal Law “On Production and Consumption Wastes” No. 89-FZ dated 24.06.1998.

2.3. GOST 30166-2014 Interstate Standard. Resource Saving. Basic Principles.

2.4. GOST R 58534-2019 National Standard of the Russian Federation. Environmental Management. Resource Efficiency. Part 1. Basic Principles and Strategies.

2.5. GOST R 55103-2012 National Standard of the Russian Federation. Resource Saving. Efficient Control of Resources. Basic Regulation.

2.6. GOST R 52106-2003 National Standard of the Russian Federation. Resource Saving. General.

2.7. GOST R 52107-2003 National Standard of the Russian Federation. Resource Saving. Classification and Definition of Indices.

2.8. GOST R 52108-2003 National Standard of the Russian Federation. Resource Saving. Waste Treatment. Basic Principles.

# 3. Terms and Definitions

This Policy uses the following terms:

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| **Material and rough resources** | A set of primary (obtained in nature) types of materials, substances and secondary material resources (obtained from production and consumption waste), from which rough materials for economic activity are obtained. |
| **Fuel and power resources** | A set of traditional and alternative fuels, renewable and non-renewable power sources, other energy resources used for economic purposes. |
| **Resource conservation (saving)** | Organizational, economic, technical, scientific, practical and informational activities, methods, processes, a set of organizational and technical measures and activities accompanying all stages of the life cycle of facilities and aimed at the rational use and economical spending of resources. |
| **Power management** | Implementation of legal, organizational, scientific, industrial and economic measures aimed at the efficient (rational) use (and economical spending) of fuel and power resources and the involvement of renewable energy sources in the economic circulation. |
| **Resource content of processes, products, services and works** | A set of systemic and structural properties characterizing the composition and content of resources concentrated in products, services and works of a certain type at a given level of development of society. |
| **Resource intensity of products, services and works** | A set of systemic and structural properties determining the possibility of products manufacturing, repair and disposal, as well as determining the possibility of providing services and performing work with established costs and losses of resources in technological cycles. |
| **Resource efficiency of products, services and works** | A set of operational properties characterizing the technical excellence of products, as well as the processes of providing services and performing work according to the degree of expenditure and use of various resources with the achievement of a certain beneficial effect in the given conditions of functioning and intended use. |
| **Recycling** | Processing of products, modules or parts for reuse or for other purposes at the end of the life of the product. |
| **Recuperation** | The process of extracting valuable substances involved in the process and usually get into waste, and returning them to their original state for reuse. |
| **Regeneration** | An action leading to the recovery of waste to the level of secondary rough materials or material for reuse for its direct or other purpose, in accordance with the current documentation and existing needs. |

# 4. Goals and objectives of the Policy

4.1. This Policy sets the following goals:

– rational use and saving of material resources

– maximum conservation of natural resources and integrated use of non-renewable resources

– technical re-equipment and modernization of production providing resource savings and using the best available technologies, improving maintenance and repair processes aimed at extending the life cycle

– implementation of waste-free or low-waste technologies, use of waste for the production of goods (products), including reuse of waste for its intended purpose (recycling), waste return to the production cycle after appropriate preparation (regeneration), as well as the extraction of useful components for waste reuse (recuperation)

– increasing efficient use of production space and equipment

– dispatching and computerization of individual production facilities of the enterprise, their mutual cooperation and integration.

4.2. These goals define the main objectives aimed at resource conservation and responsible consumption and production:

– increasing the level of responsibility for and monitoring of the rational use of all types of resources, creation and implementation of a science-based regulatory framework in planning practice for the expenditure of all resource types

– creation of a resource audit system including the whole range of works from diagnostics of the irrational use of resources at the enterprise to the introduction and implementation of resource-saving projects and measures, ensuring replaceability of materials

– carrying out energy audits to identify losses and unproductive expenditures of power resources, improving systems of production heat and power supply based on the identification and involvement in the technological process of secondary energy resources, alternative power resources, integrated optimization of technological processes

– maintaining a balance between the development of industries and the consumption of secondary rough materials while maintaining the stability of the surrounding human-induced environment

– improvement of quality management systems for the products’ production, sale and consumption, and the provision of services

– ensuring cost-effective and safe use of secondary material resources.

# 5. Policy implementation Principles

Arranging and implementing production activities to enable resource conservation is based on the following principles.

5.1. The principle of balance of interaction between the natural environment and production, which is based on the organization of the process of nature management on the principles of the balance of the withdrawal of natural resources, the negative anthropogenic/human-induced impact on natural environment objects and the pace of natural environment restoration.

5.2. The principle of consistency – all types of resource-using processes, facilities (including products from components to end modules and blocks) and products tend to be combined into systems interconnected by material, power, informational, organizational and other links, forming connected sets with a hierarchical coverage of objects and goods including products and works. This principle covers the levels (types) of disaggregation of objects and levels of resource saving management, including forecasts, plans, programs, standards and specific regulations.

5.3. The principle of complexity – all types of resource-forming and resource-using processes are the result of a sequence of actions of a certain kind, organized and established in local regulatory documents and organizational and administrative documents of ALROSA, establishing flexible, informative, specific, qualitative and quantitative requirements for all stages of the facilities’ life cycle in order to increase resource saving.

5.4. The principle of restrictions rationality – the processes for the use of material resources of any kind should be aimed at reducing their depletion, which is achieved by rationalizing the use, transportation, processing and alternative replacement, taking environmental safety and technological development trends into account to ensure specified levels of quality and safety of goods, products and works.

5.5. The principle of interconnectedness – the conditions for resource saving are inseparable from the general issues of regulatory support and standardization of resource use requirements, ensuring the quality of facilities, goods, as well as from the requirements of environmental friendliness, safety, compatibility, interchangeability, communication, informatization of technological processes and technical means.

5.6. The principle of continuity – forecasting, planning, implementation and evaluation of the results of regulatory support and standardization of resource saving requirements should be carried out constantly on a continuous basis, with the view of specific resources’ features, methods of their extraction, transformation and use in facilities of various levels of disaggregation, at the stages of the product life cycle and at the phases of technological waste cycle.

5.7. The principle of mandatory provision of resource conservation requirements at all stages of the product life cycle and at the phases of technological waste cycle.

# 6. Policy implementation Instruments

6.1. The main instruments promoting resource conservation in production are the following:

– planning of material flow parameters, i.e. planning the need for material resources in conjunction with the choice of suppliers, forms and channels for promoting rough materials to production

– regulation of the commodity flows’ parameters maximum close to the actual need for them in production

– monitoring of the material flow management

– reduction of excess stocks of substances, materials, components and semi-finished products

– supervision of compliance with the norms of consumption of material-technical and fuel-energy resources and reduction of their consumption in the production cycle with a focus on existing (and documented) advanced and best available practices

– modernization and technical re-equipment of production, optimization of the production cycle;

– gathering of proposals from enterprise employees concerning the organizational measures and activities that ensure savings in the consumption of materials and prevent their irrational spending, including during storage and transportation at the enterprise

– implementation of effective motivation instrument for the rational use and economical spending of resources

– development of an internal control system in the Company.

6.2. The main instruments promoting the saving of natural resources used in production:

– saving natural resources by technology improvements (increasing the share of recycled water, reusing waste, process, industrial waters, building new facilities in previously developed territories)

– integrated use of natural resources (replacement of common minerals with overburden (barren) rock, development of human-induced deposits)

– use of secondary resources (use of waste as feedstock or power source).

6.3. The main mechanisms to reduce waste generation and their use in production:

– increase in the life cycle of goods and products

– creation of a centralized system for handling packaging material

– selective collection of waste and waste calculation

– introduction of technical and technological solutions for the use of waste for manufacturing products and raw materials, power production, involvement in secondary production processes, extraction of valuable components from waste.

# 7. Stakeholders

The stakeholders related to the production and business activities of ALROSA include:

– individuals – citizens of the Russian Federation who are current or potential owners of the Company’s securities or living on territories where the Company’s production assets, public and nonpublic organizations, associations, research institutes and expert organizations, social and charitable organizations are located

– government authorities, including authorities of the Russian Federation entities, authorities of municipal entities, executive and legislative authorities as well as federal and regional level supervisory authorities

– financial institutions, including credit and investment organizations, which are current or potential owners of the Company’s securities, rating agencies

– other companies that carry out their activities on adjacent territories, including suppliers.