

WORK ORGANIZATION STANDARD

Industrial safety

Monitoring and conservation of biodiversity

Approved and brought into force by AO Severstal Management HSE director's order dated 27.07.2020 No. П-ОД-722-00-20-07

Effective as of 15.07.2020

1 Objective

1.1. This standard has been developed in order to manage the risks of possible biodiversity changes resulted from the operation of facilities and implementation of activities.

1.2. In order to make the adverse effect on biodiversity as low as reasonably practicable (ALARP), as well as to meet Russian regulatory requirements and adopted international requirements the programs are developed and works are organized for monitoring and conservation of biodiversity in the regions where Severstal (hereinafter referred to as "the Company") operates.

1.3. This standard specifies the procedure to develop the programs and to organize the works aimed at the monitoring and conservation of biodiversity in the regions where the Company operates.

2 Scope

2.1. This standard applies to all the facilities, buildings, works, projects and types of activities of the Company, including the ones performed by contractors on the Company's behalf.

2.2 The standard applies to the Company's business units (hereinafter referred to as "the Company's BU") in order to make the adverse effects on biodiversity as low as reasonably practicable.

2.3. The rationale for the development of biodiversity monitoring and conservation program shall be determined by each Company's BU according to the algorithm specified in Appendix No.1 to this Standard.

2.4. This standard is for:

- heads of the Company's BU;
- employees of the Company's BU who are responsible for the environmental protection;
- project managers of the Company's BU responsible for the projects the implementation of which can have a direct or indirect effect on the biodiversity change.

3 Regulatory requirements

This Standard has been developed in accordance with the following requirements:

- Federal Law d.d. 10.01.2002 No. 7-FZ "On Environmental Protection";
- Federal Law d.d. 24.04.1995 No. 52-FZ "On Wildlife";
- The Convention on Biological Diversity (Together with "Determination and monitoring", "Arbitration procedure", "Conciliation procedure") signed in Rio de Janeiro on 05.06.1992;
- Order of the Ministry of Natural Resources and Environment of the Russian Federation dated 25.11.2019 No. 35-r "On the approval of the Methodical Recommendations

on the structure and contents of the biodiversity conservation programs of the commercial organizations”;

- Collection of methodical recommendations on the conservation and restoration of biodiversity when performing economic activities prepared within the implementation of the project of the United Nations Development Programme (UNDP) / Global Environment Facility (GEF) – the Ministry of Natural Resources and Environment of the Russian Federation “Mainstreaming Biodiversity Conservation into Russia's Energy Sector Policies and Operations”;

- IPIECA’s guide on “Conservation of biodiversity and sustainable management of wildlife resources”;

- Seville Strategy for Biosphere Reserves;

- GOST R 57007-2016 Best available technologies. Biodiversity. Terms and Definitions

4 Definitions

Environment - a complex of nature components, natural and natural & man-made objects, as well as man-made objects.

Environmental impact assessment - an activity on the detection, analysis and consideration of direct, indirect and other consequences of the environmental impact by the planned economic or other activities aimed at making the decision on whether such an activity can or can't be performed.

Biodiversity - diversity of animal and plant objects within one species, among the species and in ecosystems.

Specially protected nature conservation areas - the areas of land, water and air space above them where natural systems and objects which have special environmental, scientific, cultural, aesthetic, recreational and health-related importance are located and which are fully or partly withdrawn from economic use according to the decisions of the governmental authorities and which are under special protection.

Natural heritage assets - natural objects, natural monuments, geological and physiographical formations and strictly restricted areas, natural sites which fall under the criteria of an outstanding universal value and which are defined in the Convention Concerning the Protection of World Cultural and Natural Heritage.

World natural heritage assets - natural heritage assets which are included into the World Heritage List.

Ecosystem (or ecological system) - a biological system which consists of the assemblage of living organisms, their habitats and the system of connections which exchanges substance and energy between them.

As low as reasonably practicable (hereinafter referred to as ALARP) - a level of impact which an organization can reach based on the reasonable practicality and its possibilities (technical, financial and administrative).

Ecosystem services - multiple and various goods which people obtain for free from the environment and correctly functioning ecosystems. There are 4 categories of services: support (nutrient cycle, formation of soil and primary production); provision (food, potable water, wood, fiber, fuel); control (climate, flood and disease rate control, water treatment); cultural (aesthetics, spiritual world, education and recreation).

Biodiversity indicator species - exact terms which provide information on the condition of biodiversity components, the change of their quantitative and qualitative characteristics, adverse effects on the components of biodiversity and other information about biodiversity components.

Environment state indicator - exact terms which provide information on the local, regional, national or global state of the environment.

Environmental characteristic - state of the environment which is characterized by physical, chemical, biological and other indicators and (or) a combination of those.

Compensatory measures - the measures taken by subjects of economic activity in accordance with state permissions and (or) design documentation which passed government expert reviews and obtained approvals of the competent government authorities as required by the law in order to restore the environment and biodiversity damaged due to anthropogenic factors within the area where economic or other activities are performed and compensate the damage caused to the environment.

5 The strategy of development of biodiversity monitoring and conservation programs

When receiving ecosystem services the implementation of biodiversity monitoring and conservation programs of the Company's BU is based on the principle "avoid - reduce - compensate - restore" and includes the following:

- the sequence of activities aimed at the biodiversity conservation and monitoring;
- mitigation of the adverse effect on biodiversity caused by the Company's BU;
- rational use of water resources, lands, soils, forests and other vegetation, biological diversity, recultivation of disturbed lands, consideration of the interrelations between the cultural heritage and biodiversity;
- efficiency analysis and assessment for the implemented actions based on the monitoring results;
- compensation of the adverse effects (beyond the specified values of SAE, ADR) including the compensation of damage caused to the environment and biodiversity objects.

6 Contents of biodiversity monitoring and conservation program

The program includes the following sections:

6.1. Identification of the territories where the activity takes place including the description of the Company's BU area boundaries specifying the adjacent (having adjacent boundaries with the Company's BU territory or divided by the watershed) specially protected nature conservation areas, natural reserves, national parks, reserves, as well as specified territories located in the area of potential impact (mainly at the distance of up to 5 km, as well as in the documented areas of the Company's BU impact).

6.2. Determination of indicator species of animal and plant world based on the biodiversity components which are important for its conservation in the region where the Company operates. External experts with a regional work experience in the evaluation of biodiversity and/or a critical habitat can be involved and can participate in the making of the list of indicator species.

6.3. Assessment of risks and impact of the economic activity on the biodiversity and ecosystem services specifying the types of adverse effects on the environment.

6.4. Characteristics of biodiversity condition in the regions where the Company operates including the description of rare and endangered indicator species of animal and plant world that live in the regions of economic activity of the Company's assets and in the areas of the activity impact.

6.5. Biodiversity monitoring and conservation program for specific indicator species of flora and fauna in the affected area of operating processing facilities by means of collecting measurement data, integrated processing and its analysis, distribution of monitoring results between the users and bringing monitoring information to the responsible officials' notice timely for compliance assessment and making managerial decisions.

6.6. The list of actions aimed at conservation and monitoring of biodiversity developed with respect to the principles specified in point 5. The program can include collective actions with all the parties concerned from the region where the Company's BU operates which ensure development, conservation of biodiversity, social, economic and cultural conservation of human communities.

6.7. The section specifying people responsible for specific actions described in point 7.2.

6.8. Program results communication plan (if needed).

6.9. Efficiency assessment of the developed biodiversity monitoring and conservation program (appendix No.2 to the Standard).

7 Responsibility during the implementation of the Standard

7.1. Heads of the Company's BU are responsible for meeting the following requirements:

- do not carry out economic activities in the territories where the assets of the world natural and cultural heritage are located;

- do not join any joint ventures if their activity is performed in the territory where the assets of the world natural and cultural heritage are located.

7.2. The Company's BU employees who are in charge of environmental protection are responsible for meeting the requirements 7.2.1–7.2.6 within their Company's BU:

7.2.1. To identify the rationale for developing biodiversity monitoring and conservation program in accordance with the Appendix No.1 to the Standard.

7.2.2. To prepare and include the requirements to the technical enquiries for the design of construction facilities, reconstruction and revamping regarding the assessment of the impact on the environment, as well as the assessment of a potential impact on biodiversity prior to the performance of new types of works or any significant changes of the existing facilities in accordance with the requirements of the existing Russian legislation. EIA documents shall be submitted for public hearing.

Requirements 7.2.3 – 7.2.6 shall be established and met in accordance with the requirement 7.2.1.

7.2.3. To develop biodiversity monitoring and conservation program including identification of indicator species.

7.2.4. To prepare, implement and update action plans aimed at biodiversity conservation in order to make the negative impact on biodiversity as low as reasonably practicable.

7.2.5. To arrange and carry out biodiversity monitoring. To prepare corporate reports on the monitoring results.

7.2.6. To cooperate with the parties concerned on the issues relating to biodiversity, to involve experts into critical problem solving.

8 Implementation time

This Standard requirements shall be implemented by the Company's BU starting upon its approval by HSE director of AO Severstal Management but no later than 1 year from its approval.

Algorithm to define the rationale for developing biodiversity monitoring and conservation program (identification)

Section of the questionnaire	Question	The answer is "Yes"	The answer is "No"
1. Identification of the territories where the activity is carried out (activity boundaries)	Are the Company's BU activities carried out in the specially protected nature conservation areas, reserves, national parks, Ramsar sites, assets of the World natural and cultural heritage?	<p>The activity should be ceased.</p> <p>The development of the program is mandatory and includes the measures aimed at the rehabilitation of the specially protected nature conservation areas, reserves territories, national parks, Ramsar sites, assets of the World natural and cultural heritage damaged due to economic activities.</p> <p>If the purchase of a new asset in the specified territories is being considered, the purchase shall be withdrawn.</p>	<p>The development of the program is voluntary.</p> <p>III, IV category enterprises shall develop the programs voluntary, it's not binding.</p> <p>When making a decision on the development of the program the answers to the remaining questions of the questionnaire shall be given in order to identify indicator species and critical habitats and to assess the risks.</p> <p>The program shall include the sections specified in point 6 of the Standard</p>
2. Identification of indicator species and critical habitats	<p>To be identified by each Company's BU.</p> <p>The questions for identifying indicator species and critical habitats:</p> <p>1. Does the activity of the Company's BU result in change of animal migration routes?</p>	<p>If yes, the animals which migration routes have been changed shall be included into the list of indicator species</p>	<p>If the answer is "No" to all the specified questions, the need for environment impact assessment shall be secured with internal local acts, as well as the need for biodiversity potential impact assessment prior to the performance of new types of works or significant</p>

	<p>2. Does the activity of the Company's BU result in change of populations of protected species of plants, rare species of animals, birds?</p> <p>3. Is wastewater discharged into fishery surface sources which are spawning grounds?</p> <p>4. Is the activity of the Company's BU performed in the critical habitats (territories and water areas within which the organisms listed in the Red Book of</p>	<p>and the program of their conservation shall be developed. Financing for support of populations shall be determined.</p> <p>If yes, each time the populations of protected species of plants, rare animals or birds appear in the production area or in the industrial facility a special action plan shall be developed and the measures aimed at the mitigation of impact shall be taken in accordance with the ALARP principle. When choosing the measures aimed at the mitigation of impact the conservation status of species, its life strategy, population density, biological and ecological factors which affect these species shall be estimated.</p> <p>If yes, a yearly program of river (which is a source of the Company's BU wastewater discharges) biodiversity monitoring shall be developed.</p> <p>If yes, a program of critical habitats monitoring shall be developed, as well as a special action plan for taking measures aimed at</p>	<p>changes of the existing facilities in accordance with the requirements of the existing Russian legislation.</p>
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	<p>the Russian Federation and (or) red books of the constituent entities of the Russian Federation live (grow) in natural freedom or which are linked with (or where they takes place) their life-cycle phases which are most important for the conservation of animal populations (natural sites, spawning grounds, winter quarters, gathering areas, areas of constant or seasonal concentration, migration routes, nursery grounds, rearing grounds, shelters), and for plants - their entire life cycle, which have special protection and use regulations.</p>	<p>the mitigation of the impact in accordance with the ALARP principle.</p> <p>When preparing the list of indicator species external experts with the regional work experience in biodiversity and/or critical habitat assessment shall be involved and shall participate in this activity. If the habitat is critically important due to the presence of endangered or vulnerable species, the recognized experts on these species (for example, including the representatives</p>	
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		of IUCN Commission Groups of specialists on the survival of species) shall be involved.	
3. Assessment of risks and potential impact on biodiversity and ecosystem services in the area of activity	Is the activity of the enterprise accompanied with emissions, discharges and the need for waste disposal?	When assessing the risks and impacts the respective threats to biodiversity and ecosystem services are reviewed and special attention is paid to such matters as the loss of living organisms' habitat, its deterioration and fragmentation, introduction of invasive alien species, excessive operation, hydrological changes, nutrient load, as well as environmental pollution.	With regard to the planned activity it is necessary to carry out the environment impact assessment, as well as the assessment of potential impact on biodiversity prior to the performance of new types of works or significant changes of the existing facilities in accordance with the requirements of the existing Russian legislation.
4.Reputational risks	Has the economic activity of the enterprise resulted in critical situations which led to reputational risks (fauna blight, filing of a claim for compensation, checks by regulatory authorities which resulted in a claim for suspension of activities)?	Biodiversity monitoring and conservation program shall include the milestones for the coverage of the results of works performed in mass media (communications plan)	Information about the results of works performed on biodiversity monitoring and conservation shall be put in mass media voluntary
5. Recultivation of a territory	Is it planned to recultivate disrupted areas in the BU (mining, mine filling)?	The program should be developed. When developing the program you should follow UNDP methodical recommendations regarding the use of technology for restoration of phytocoenosis when performing the works on recultivation of disturbed	The measures foreseen in the requirements of the Russian Federation legislation shall be taken

		lands at the enterprises. When developing the program the opinion of people who live in the adjacent areas shall be taken into account	
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Criteria for efficiency evaluation of biodiversity monitoring and conservation program

1. The efficiency of biodiversity monitoring and conservation program shall be evaluated once every 3 years.

2. Criteria for efficiency evaluation:

- the increase or invariability of the number of protected species and their realms in the area of potential impacts of the facilities due to the project implementation;

- the absence of invasion of dangerous alien species in the area of project/facility implementation;

- the reduction or invariability of the contents of polluting substances in the components of the environment;

- the availability of measures aimed at the protection of protected species and fragile ecosystems;

- the absence of damage to aquatic bioresources, fishery and traditional exploitation of natural resources;

- the presence/absence of acknowledgment of the Company's contribution to biodiversity conservation on the regional, national and international levels;

- if required by the Company's BU a comparative analysis can be carried out by invited experts (the employees of specially protected nature conservation areas, natural reserves, national parks, reserves) for the territories where economic activities are carried out and clean-contaminated territories (at the end of the developed programs of biodiversity and ecosystems conservation and rehabilitation);

3. If the answer is "Yes" to more than 60% of efficiency criteria, it indicates the efficiency of the developed program.

Otherwise, the program should be corrected.