On the activities of the Republic of Belarus to implement the environmental principles of the Madrid Protocol of 1991 in 2019-2021

English version provided by the author

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**Information document submitted by the Republic of Belarus**

***Summary***

This document provides information on the next steps taken by the Republic of Belarus in 2019-2021 to implement the provisions of the Protocol on Environmental Protection to the Antarctic Treaty, the final Comprehensive Environmental Assessment of the construction and operation of the Belarusian Antarctic Station, as well as the recommendations of the Australian Antarctic Division's inspection team observers.

***Background information***

In May 2015, at ATCM XXXVIII - CEP XVIII in Sofia (Bulgaria), the CEP XVIII Information Document No. IP39 presented by the Republic of Belarus *Construction and operation of the Belarusian Antarctic Station on Vechernyaya Mountain, Enderby Land - Final Comprehensive Environmental Assessment* (hereinafter - CEA) was approved by Consultative Parties to the Antarctic Treaty without comment.

In December 2015, with the transport and logistics assistance of the Russian Federation, the Republic of Belarus began to create a year-round infrastructure of the Belarusian Antarctic Research Station *Vechernyaya Mountain* (hereinafter referred to as BARS *Vechernyaya Mountain)* in East Antarctica, at the point with coordinates S670040/ E0460009/.

In January 2020, observers from the Australian Antarctic Division (hereinafter - AAD) of the Ministry of Foreign Affairs and Trade of Australia carried out an inspection of BARS *Vechernyaya Mountain*. Observers of the AAD inspection team were given free access to all parts, installations and equipment of BARS *Vechernyaya Mountain* in accordance with Article VII (3) of the Antarctic Treaty, as well as to all records kept on BARS *Vechernyaya Mountain*, which are required in accordance with the Protocol on Environmental Protection to the Antarctic Treaty. The inspection team found the station's modular and efficient design to be a good example of a modern facility. The inspection report notes that “*The members of the inspection team are extremely impressed with the high level of design and construction of the station, its small area and minimal landscape changes, the desire for efficient energy and water use, and the focus on integrated scientific research.*” The inspection team of AAD highly praised for the rational use of existing buildings and the clearance work on the site of the former field base of the Soviet Antarctic Expedition *Vechernyaya Mountain* in cooperation with the Russian Federation, and also noted that “*the construction and operation of the station, as well as the measures taken to mitigate the impacts, identified in the environmental assessment process strictly correspond to the final version of the Comprehensive Environmental Assessment (CEA) prepared by Belarus*”. The inspection team concluded that the station is being used with close attention to the 1991 Madrid Protocol and general environmental performance.

The inspection report noted that some of the environmental systems specified in the CEA had not yet been installed and commissioned. In the opinion of the inspection team observers, the introduction of this environmental equipment in accordance with the construction schedule set forth in the CEA will contribute to ensuring the use of best practices and full compliance with the relevant provisions of the 1991 Madrid Protocol.

***Results of environmental protection activities in 2019-2021***

During the 2020-2021 season, the first stage of the wintering complex of the BARS *Vechernyaya Mountain*, including modern residential, laboratory, service, technological, medical, storage, environmental and support facilities, as well as satellite, VHF and KV communication systems, Internet and TV broadcasting

Un barco en la nieve

Descripción generada automáticamente con confianza media (see Fig. 1) was completed. Construction and material and technical equipment of the BARS *Vechernyaya Mountain* facilities is carried out in strict compliance with the final CEA, with the expectation of its further year-round operation. A limited number of station personnel (11-15 people), introduction of alternative energy sources and modern equipment for wastewater treatment, recycling and waste management, guarantee a minimal impact on the Antarctic environment and allow preserving the pristine natural environment in the station area. As of today, the infrastructure of the first stage of the BARS *Vechernyaya Mountain* is fully prepared for the pilot wintering with a staff of 11 people.

*Figure 1 - General view of the station*

Within the framework of implementation of the provisions of the 1991 Madrid Protocol, the final CEA and the recommendations of the AAD inspection team observers, the Republic of Belarus carries out consistent activities to ensure the maximum possible protection of the Antarctic environment, including:

- the national legislation on the implementation of environmental activities in Antarctica is being improved and strengthened;

- stage-by-stage equipping of the infrastructure of BARS *Vechernyaya Mountain* with modern environmental objects, systems and equipment is being carried out;

- measures are being taken to reduce the number of sources of waste generation;

- together with the Russian Federation, systematic work continues on the disposal of waste from Soviet Antarctic expeditions outside the scope of the Antarctic Treaty;

- on an ongoing basis, a program for monitoring key parameters of the Antarctic environment in the area of operation of BARS *Vechernyaya Mountain* is being implemented, aimed at assessing the accuracy of forecasts of the impact of economic activities on the environment and identifying unforeseen consequences.

In the period 2019-2021 the Republic of Belarus in these areas of environmental protection activities in Antarctica carried out the following work:

- approved in 2019 by the Resolution of the Government of the Republic of Belarus “On Approval of Recommendation 10 Annex V to the Protocol on Environmental Protection to the Antarctic Treaty *Area Protection and Management*”. Annex V entered into force for the Republic of Belarus on November 14, 2019;

- approved in 2020 by a decree of the Government of the Republic of Belarus the regulation “On the procedure for issuing a permit to carry out activities in the Antarctic Treaty area”. This regulation entered into force in the Republic of Belarus on December 28, 2019;

- under consideration by the Ministries and departments of the Republic of Belarus there is a draft Decree of the Government of the Republic of Belarus “On approval of Measure 1 Appendix VI to the Protocol on Environmental Protection to the Antarctic Treaty *Liability arising from environmental emergencies”;*

- modern environmental protection equipment was delivered to BARS *Vechernyaya Mountain* and put into operation, including: a press for compacting solid waste of group 4 (see Fig. 2); incinerator (waste incineration) installation (see Fig. 3); storage transportation tank on a ski chassis for removal and disposal of domestic wastewater into the sea area (see Fig. 4); two two-layer isotainer fuel storage facilities with a volume of 26 cubic meters. each (see Fig. 5).

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| ***Figure 2 -*** *Group 4 solid waste compaction press* | ***Figure 3*** *- Incinerator IU-32* | ***Figure 4 -*** *Transportation tank on ski chassis for domestic wastewater disposal* | ***Figure 5 -*** *Isotainer double-layer fuel tanks* |

- 11.6 tons of non-incinerated solid waste of groups 2 and 4 have been removed from the BARS *Vechernyaya Mountain* area outside the Antarctic Treaty. Not burnt waste collected by the Belarus experts is packed into empty drums from mineral oil, is located in special transport packings

(see Fig. 6) and are annually removed outside the scope of the Antarctic Treaty on board the Russian ships “Academician Fedorov” and “Academician Treshnikov”, for subsequent disposal on the territory of the Russian Federation.

*Figure 6 - Transport stacking with waste groups 2 and 4*

***Prospects for the development of the Belarusian Antarctic infrastructure in 2021 - 2025***

In the period 2021-2025 the research of the Republic of Belarus in the Antarctic will be carried out in accordance with the subprogram “Development of the activities of the Belarusian Antarctic station” of the State program “Scientific and innovative activities of the National Academy of Sciences of Belarus” for 2021–2025.

From 2021 to 2025, the second phase of BARS *Vechernyaya Mountain* will gradually include up to 10 units of modular infrastructure of scientific, residential, industrial and environmental purposes, including the construction of a sewage treatment plant for domestic sewage with the diversion pipeline directly into the sea or into a deep glacial mine.

***Final information***

The National Antarctic Program of the Republic of Belarus expresses its deep gratitude to the observers of the AAD inspection group for valuable recommendations, close and effective cooperation, high professionalism and objective evaluation of our country's activity in the Antarctic.

Following the spirit and the letter of the Antarctic Treaty and the environmental principles of the 1991 Madrid Protocol, the Republic of Belarus remains committed to establishing an environmentally safe research station near *Vechernyaya Mountain* on Enderby Land in East Antarctica, to developing and strengthening international cooperation in the Antarctic.

In order to ensure the maximum possible protection of the Antarctic environment, our country will consistently continue to implement a set of measures to reduce emissions of pollutants, wastewater discharges, reduce sources of waste generation, prevent fuel leaks, remove waste from Soviet Antarctic expeditions outside the Antarctic Treaty, and continuously monitor key parameters of the Antarctic environment.