Impact of transport on water bodies

GRI 303-1 GRI 14.7.2

The Company's use of transport assets, including water transport, impacts the environment as evidenced by Big Scientific Expeditions.

Environmental impact of water transportation largely arises from

Use of oil-containing fuel (mainly diesel fuel)	Noise pollution affecting hydrobionts, marine birds, and marine mammals	Impact of ballast, bilge, and wash water sent to treatment facilities and then discharged into water bodies

Risks

Fuel spills and related emergencies	Changes in the behaviour, physiology, and individual functions of ecosystem members	Dispersal of invasive species by ballast water

Nornickel develops measures to mitigate risks associated with the negative impact of the Company's transport on water resources and implements environmental protection measures and programmes, including those aimed at reducing fuel consumption and preventing contamination of the Dudinka and Yenisei Rivers. In order to compensate for damage to aquatic biological resources and replenish the food resources of aquatic habitats, the Company regularly releases juvenile fish (for more details, please see the Biodiversity section).

Each year during the navigation season, one of the Group's enterprises, a shipping company operating in the Yenisei River basin, deploys an environmental protection fleet, which includes:

5 waste collecting vessels

2 treatment plants

2 vessels for complex waste processing

The Company uses port infrastructure, including water transport, in line with applicable environmental laws on the prevention of water bodies pollution by vessels.

Thanks to the environmental fleet, the Yenisei River basin can be navigated without inflicting environmental damage.

Each year, the Company implements environmental protection measures to prevent damage to aquatic ecosystems from vessel operations. They include:

- laboratory measurements and analysis of surface water composition for compliance with sanitary and epidemiological rules and standards
- monitoring of surface water quality in navigable areas to ensure compliance with public health safety requirements
- maintenance and operation of environmental protection vessels
- upkeep of vessel systems to prevent pollution of water bodies, shoreline areas as well as fleet berthing, repair, and maintenance sites, including pollution caused by waste
- operational and environmental control over the condition of ambient air
- employee training in environmental safety programmes.

The shipping company's auxiliary fleet provides the vessels with drinking water as well as collects and transports pollutants from vessels, including rubbish, faecal sewage and bilge water. In 2024, the shipping company's waste collecting vessels removed approximately 13.9 kt of wastewater (up 4.5% y-o-y), 6.83 kt of oil-containing water (up 1.8x y-o-y), and over 282 tonnes of waste, while also delivering 4.68 kt of drinking water to vessels. Spending on environmental initiatives in 2024 totalled RUB 374 million, up 10% y-o-y.

Waste and tailings storage facilities

Sustainable waste management

GRI 3-3 / GRI 306-1, 306-2 / SASB EM-MM-150a.10, EM-MM-540a.2 GRI 14.5.2, 14.5.3

Nornickel's safe waste management is aligned with the key aspects of the public policy in this area. The 2031 Environmental and Climate Change Strategy outlines the Company's waste management priorities, from regulatory compliance of waste disposal facilities in Russia to expanding the proportion of recycled waste across categories.

The Company's waste management complies with applicable Russian laws. Nornickel maintains records of waste generated, treated, recovered, neutralised, transferred to, or received from third parties, and disposed of; these records are aggregated on a quarterly and annual basis.

The Company monitors waste management throughout its entire life cycle, including the management of waste by third parties. Contracts for further waste management are made with third parties possessing all necessary permits, licences, state expert reviews, technical regulations, and specifications.

Contractors undertake to abide by environmental standards established both by the government and the Company. A relevant internal document provides for ongoing contractor monitoring and the imposition of sanctions for violations of environmental requirements and environmental damage.

Waste classification

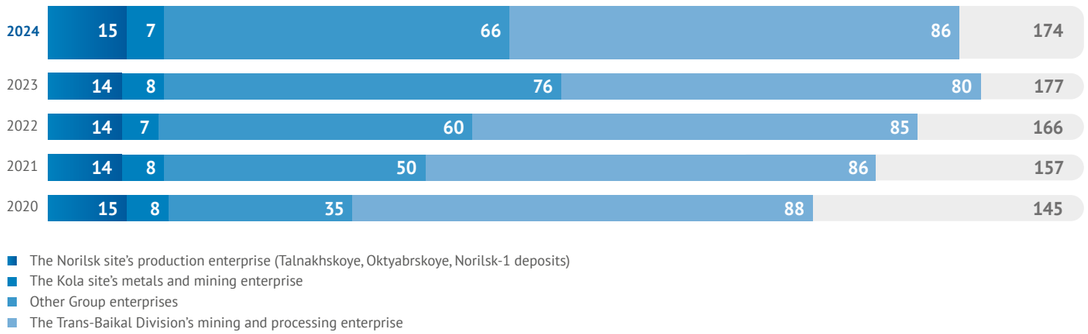
MED-17

Nornickel's operations generate hazard class 1–5 waste.

Hazard class	Waste generation, t		Share of total waste generation, %		Description
	2023	2024	2023	2024	
Hazard class 1	20.4	**14.2**	0.00001	**0.00001**	Hazard class 1–2 (highly hazardous) waste includes mercury lamps and thermometers, batteries, acids and alkalis used in batteries, uninterruptible power supplies, and oils. As required by Russian laws, Nornickel transfers highly hazardous waste to a federal operator by signing an agreement in the federal state information system
Hazard class 2	47.2	**67.6**	0.00003	**0.00004**	
Hazard class 3	8,018.6	**6,941.2**	0.0045	**0.004**	Waste associated with production or other economic activities, or coming from materials and products that have lost their consumer properties after having been used according to their intended purpose
Hazard class 3	1,595,458.0	**1,154,176.8**	0.9	**0.7**	Close to 97% of hazard class 4–5 waste is generated by mining and concentration operations (overburden, host rock, and tailings). In 2024, mining and concentration hazard class 4 waste stood at 687.8 kt (all of it tailings), while class 5 waste totalled 168.4 mln t (including 30.7 mln t of tailings and 137.7 mln t of overburden)
Hazard class 5	175,290,849.8	**173,082,348.0**	99.1	**99.3**	
Total	**176,894,394.1**	**174,243,547.8**	**100.0**	**100.0**	

Waste generation (mln t)

GRI 306-3



No significant year-on-year changes in waste generation were recorded in 2024.

Contribution to combating contamination with waste

GRI 306-2, 306-4 | GRI 14.5.3, 14.5.5

The Company fosters non-waste production by developing and implementing mineral waste recycling approaches while making efforts to clean up existing pollution.

Key projects and initiatives contributing to increased waste recycling and treatment

Initiatives	Expected effect	Results for 2024
Building a crushing unit for processing construction waste into certified crushed stone	15% of construction waste generated by the Company will be recovered	64.88 kt of construction waste was recovered
Constructing a ferrous scrap recycling shop	Ferrous scrap processing capacity will be 100 ktpa	The project was suspended due to reallocation of the Company's budget
Building a non-ferrous scrap recycling shop	Non-ferrous scrap recycling capacity will reach 2 ktpa	The project was suspended due to reallocation of the Company's budget
Organising temporary waste storage and management sites at the Kola site's metals and mining enterprise in line with applicable Russian laws	Share of non-mineral waste recycling (other than gypsum and cake waste) at the Kola site's metals and mining enterprise is expected to reach 60% by 2031	Share of non-mineral waste recycling (other than gypsum and cake waste) at the Kola site's metals and mining enterprise reached close to 75%. The enterprise is exploring options for the recycling of ferrous cake
Processing large tyres and rubber products into crumb rubber / pyrolysis fuel	All of the Company's rubber products waste will be recycled	Preparation of design documents
A waste sorting project	–	Bins for plastic, glass, and paper waste were installed

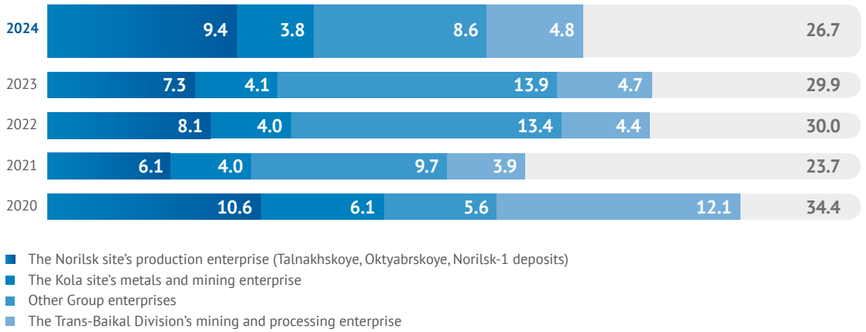
OPEX for waste management in 2024

RUB 37.3 bn

CAPEX for waste management in 2024

RUB 0.1 bn

Onsite waste disposal (mln t)[1,2]



In 2024, onsite waste disposal decreased 10.7% y-o-y to 26.7 mln t.

Clean Norilsk programme

OPEX for the Clean Norilsk programme in 2024

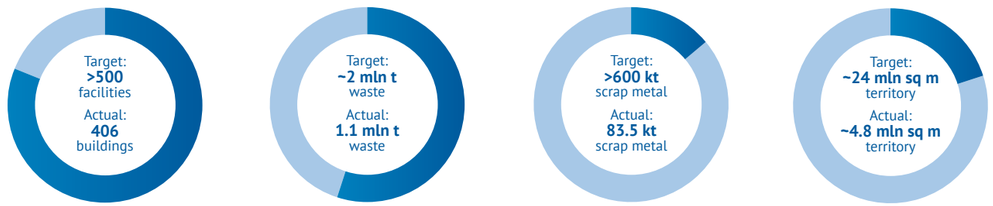
RUB 2.7 bn

Clean Norilsk is Nornickel's large-scale programme aimed at removing industrial and construction waste, improving public amenities in the Norilsk Industrial District and the Arctic zone, and restoring previously and currently used land in accordance with environmental, sanitary, and epidemiological standards.

The Clean Norilsk programme was launched in 2021. The programme is scheduled to span ten years and will be implemented in multiple phases, each involving a set of waste disposal activities. The Company plans to invest over RUB 40 billion in the programme, with RUB 15 billion spent on related activities in 2021–2024.

In 2024, technical and biological rehabilitation activities were completed on 4.1 ha of disturbed land as part of the programme.

Clean Norilsk targets through 2030 and 2021–2024 actuals



[1] With the Norilsk site's production enterprise (Norilsk-1 deposit) accounting for the largest share among all Group enterprises.
[2] Figures may not fully add up due to rounding.

Waste disposal

GRI 3-3 / SASB EM-MM-540a.1, EM-MM-540a.2

Nornickel takes a responsible approach to tailings management, with a strong focus on ensuring their operational safety. To mitigate environmental and industrial safety risks, the Company regularly monitors the condition of hydraulic structures and inspects discharge sites as well as adjacent areas.

The Company has in place PJSC MMC Norilsk Nickel's Tailings Management Policy. In 2024, the Company developed the Corporate Standard for Operation of Hydraulic Structures of Tailings Storage Facilities, which reflects its overall approach to tailings storage facility management. The standard is planned to be implemented before the end of 2025.

The Company's tailings storage facilities

Our tailings storage facilities comply with Russian laws and have all permits along with design and expert documentation in place for the commencement of construction and operation.

The Company currently has seven tailings and gypsum storage facilities in its portfolio. For more details, please see the GRI Quantitative Indicators Disclosure appendix.

Operation of each tailings storage facility is subject to mandatory compliance with safety criteria, developed specifically for each facility and approved by regulators. Once every five years, an expert agency accredited by Rostechnadzor conducts detailed inspections of hydraulic structures. The expert agency that issues an industrial safety declaration for the relevant facilities upon which Rostechnadzor carries out a due diligence. At least once every five years, as part of the safety declaration process, the Company collaborates with Russia's EMERCOM to conduct comprehensive drills aimed at verifying preparedness for emergency containment and response at hydraulic structures, resulting in the issuance of a formal opinion.

Safety monitoring of tailings storage facilities

Every facility of the Company has a safety monitoring system for tailings storage facilities, which encompasses internal operational control and environmental monitoring.

The Company has in place a safety monitoring protocol for the hydraulic structures of each tailings storage facility, defining the scope (type) and timeframes of such monitoring. Daily visual monitoring over the technical condition of hydraulic structures is the responsibility of operators, while instrumental measurements (surveying, environmental, and hydrogeological control, etc.) are performed in line with the monitoring protocol timelines.

In 2024, the Company continued designing an automated monitoring solution for hydraulic structures at three tailings storage facilities in the Norilsk Industrial District. The design solutions are expected to be fully implemented by the end of 2025.

As part of creating a security operations centre for the Kola site's metals and mining enterprise, a roadmap was developed in 2024 for the digitisation of the local tailings storage facility in 2024–2025. According to the roadmap, the following activities were carried out:

- Provision of equipment for monitoring meteorological conditions and automated water level measurements (two weather stations and a hydrological complex)
- Testing of drones equipped with payloads for geodetic monitoring and visual inspection of the condition of hydraulic structures, including process pipelines
- Testing of remote sensing technology for geodetic monitoring purposes

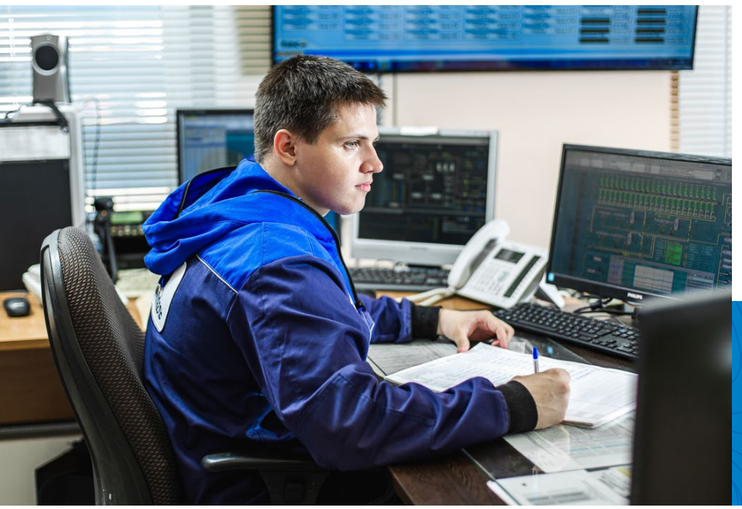
Based on the results of geotechnical surveys, an independent expert review of the stability of the containment dams is carried out by specialised organisations accredited by the Federal Environmental, Industrial, and Nuclear Supervision Service of Russia (Rostechnadzor). This review is conducted when developing safety declarations for hydraulic structures, designing and overseeing monitoring systems, and performing other activities to ensure the safe operation of the storage facilities. All hydraulic structures of the Company are subject to ongoing comprehensive monitoring for industrial safety.

Assessment of tailings storage facility risks

There are two processes in place to assess the Company's tailing storage facility risks:

- Estimates of potential damage to life and health of individuals, and to property of individuals and legal entities as a result of an emergency at a hydraulic structure. The estimates of potential damage are prepared at least once every five years, when developing a safety declaration for the hydraulic structure
- Assessment of technical and production risks carried out in line with the Procedure for Managing Technical, Production, and Environmental Risks of MMC Norilsk Nickel and Russian business units of the Nornickel Group

The Company registers tailings storage facilities, determines the timeframes for their decommissioning, and estimates the future closure and land rehabilitation costs. The Company uses the resulting data to calculate the present (discounted) value of future costs, recognising its environmental provision with respect to the tailings storage facilities.



Preparedness to respond to accidents and emergencies

SASB EM-MM-540a.3

All tailings storage facilities used by the Company are situated at a considerable distance from production sites and human settlements.
Due to the fact that tailings storage facilities have an increased risk of negative environmental impact, local communities, and infrastructure facilities, the Company annually develops emergency response plans (ERPs) for hydraulic structures, separately for each tailings storage facility. Such plans include:

- operational section: a list of potential accidents at the hydraulic structure and a response system detailing the measures to be taken and the persons responsible for their implementation
- emergency communication protocols and diagrams for both operating personnel and relevant local authorities, as well as for informing the wider public about the nature, scale, and potential consequences of the accident
- material and financial reserves maintained by the Company to ensure a prompt response to any damage, accident, or emergency at the tailings storage facility's hydraulic structure
- allocation of responsibilities among all parties involved in accident response and containment, along with a defined course of action
- evacuation plans and maps for personnel and equipment in the event of an accident at the hydraulic structure
- a schedule of emergency drills covering the key elements of the emergency response plan's operational section, conducted with the involvement of operating personnel. Such drills are conducted at least once every two years, with corresponding reports prepared following each exercise.

For more details on the emergency preparedness system, please see the Accident and Emergency Preparedness section.

There have been no emergencies at tailings storage facilities of the Company or Russian business units over the past five years.

Soil protection and responsible mining

Land protection

To reduce the negative impact of its operations on soil, Nornickel carries out progressive reclamation of land affected by deposit development[1], waste disposal, construction, and other activities.

Design documentation has been drawn up for the development, construction, and operation of deposits, including:

- an environmental impact assessment
- a list of measures to prevent and/or mitigate potential negative effects on the environment and ensure sustainable use of natural resources throughout the deposit life cycle.

Nornickel ensures full compliance with applicable Russian environmental legislation during deposit development and related activities. The Company also monitors environmental conditions throughout the entire life cycle of the deposit. Upon completion of deposit development, the Company commits to decommission mine workings and rehabilitate lands[2].

Disturbed and rehabilitated land area in 2024 (ha)

GRI 304-3 / TNFD C.0

Indicator	Total	Including: during mining	during construction	during disposal of industrial and municipal solid waste	during other activities
Total disturbed land area, beginning of period	**17,164**	14,312	1,262	874	716
Total rehabilitated area[3]	**71**	7	0	–	64
Total disturbed land area in the reporting period	**199**	49	23	127	–
Total disturbed land area, end of period[4]	**17,292**	14,354	1,286	1,001	652

1 For the full list of deposits, please see the Norilsk Nickel Group Profile section.
2 For a more detailed list of environmental protection measures taken during the deposit life cycle, please see Nornickel's 2023 Sustainability Report.
3 The table does not include data on disturbed and rehabilitated land near CHPP-3. In 2024, rehabilitation was limited to the Krasnoyarsk Territory.
4 Figures may not fully add up due to rounding.