

# Occupational safety



## 2017 MILESTONE

Bystrinsky GOK implemented an advanced system for monitoring mining machinery and personnel positioning designed to improve mining operations safety, ensure better coordination of rescue teams in emergencies, and enhance production process management. Occupational safety is one of the core aspects of the Company's corporate social responsibility, with Nornickel seeking to ensure zero workplace fatalities and reduce its lost time injury frequency rate.

The Company's Occupational Health and Safety Policy gives precedence to the life and health of employees over operational performance while also demonstrating the management's commitment to creating a safe and healthy environment and fostering sustainable employee motivation for safe workplace behaviour.



In 2017, Nornickel's Board of Directors approved the Working Conditions Policy available on the Company's corporate website

The Board’s Audit and Sustainable Development Committee oversees occupational health and safety matters, reviewing relevant reports by the management on a quarterly basis. First Vice-President – Chief Operating Officer is responsible for the development of an action plan and enforcement of compliance with the applicable occupational safety requirements.

He also chairs the Company’s Health, Safety and Environment Committee (HSE Committee) charged with:

- improving health and safety performance at the Company and its subsidiaries in Russia;
- toughening responsibility of Nornickel’s executives for ensuring operational health and safety.

In 2017, the committee was engaged in considering improvements to the existing health and safety management system, as well as monitoring the implementation of the scheduled activities aimed at reducing injury rates and enhancing the system’s effectiveness. To that end, a series of video conferences and meetings were held with representatives of the Company’s branches and Russian subsidiaries.

All the production facilities have job- and operation-specific regulations and guidelines containing dedicated health and safety sections. Moreover, Nornickel’s collective bargaining agreements also have occupational health and safety provisions. The Company and most of its subsidiaries have joint health and safety committees made up of management, employee and trade union representatives.

As all maintenance and construction operations at the existing production facilities are classified as high-hazard, the contractors’ workers are required to attend induction and target briefings on health and safety prior to the commencement of works. Work permits also contain information on occupational safety requirements to be followed during the performance of works or in the immediate run-up to them.

## Corporate standards

The Company keeps improving its occupational health and safety management system, including by developing and implementing corporate standards.

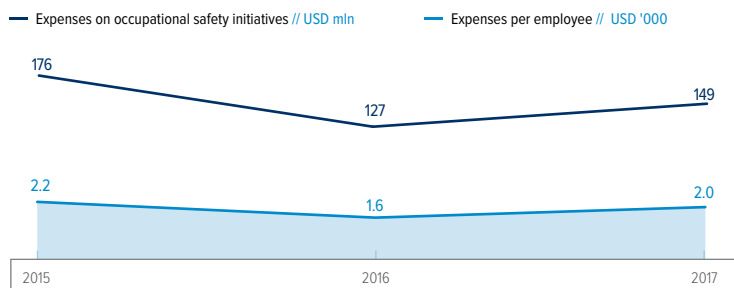
The HSE Department monitors the implementation of the standards across Nornickel’s branches and Russian subsidiaries, including through second-party audits. In 2017, a total of 38 audits were held in accordance with the approved schedule.

As part of the Risk Control project (launched in 2016 to implement the STO KISM 121-211-2014 occupational health and safety management standard), 2017 saw further adjustments to the risk registers to be piloted directly at the production sites, risk register-based employee briefings, and drafting of data sheets for high and material risks.

### HSE certifications

- ☞ Kola MMC and Norilsk Nickel Harjavalta – OHSAS 18001 (international certificate)
- ☞ Polar Division and Pechengastroy – GOST R 54934-2012 (Russian standard identical to OHSAS 18001)
- ☞ Norilsknickelremont – GOST 12.0.230-2007 (interstate standard identical to ILO-OSH 2001)

### Expenses on occupational safety initiatives



Following the certification of 484 conveyors at Polar Division, work is underway to improve occupational safety at the production facilities: fencing and drive and tension stations were repaired, including the installation of new blocking devices, replacement of wiring and painting of equipment (in 2017, a total of 309 conveyors were fully repaired).

In 2017, the Technological and Organisational Change Management project was launched, resulting in:

- development and approval of a standard for the Management of Technical, Technological, Organisational and HR Changes;
- training sessions for process owners and change leaders;
- implementation of a change management process at pilot units;
- building of a team for the standard to be rolled out.

Special-purpose underground machinery across Norilsk Nickel's mines was equipped with protective covers (a total of 83 units of machinery).

In 2017, radio communications and positioning systems were installed and commissioned at Komsomolsky, Taimyrsky, Zapolyarny and Kayerkansky mines of Polar Division and Severny mine of Kola MMC.

The Company's branches and Russian subsidiaries have health and safety monitoring systems in place with the following prevention and control functions:

- safety behaviour audits;
- multi-stage health and safety control;
- ad hoc health and safety inspections;
- on-the-spot health and safety inspections;
- comprehensive health and safety inspections.
- In addition, 2017 saw the launch of regular Risk Hunting sessions which use visual reports for information purposes.

In 2017, pilot testing (assessment of knowledge and skills) of managers in charge of mines and mining facilities at Polar Division and Kola MMC was held as part of a project to develop and roll out a model of professional competencies for line managers of mining facilities. Testing was used to assess the competency model.

To benefit from the opportunities offered by interactive safety briefings, comprehensive programmes were put in place, enabling remote briefings for employees and testing capabilities for the key mining jobs.

## External health and safety audit

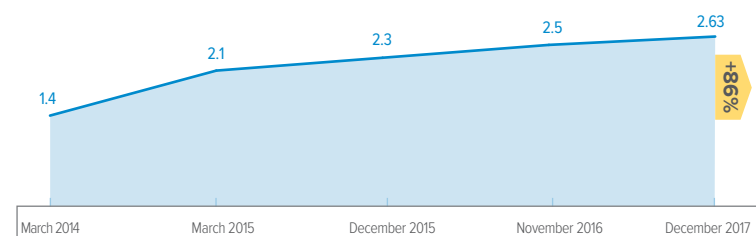
In order to define priority paths for further improvement of the corporate health and safety management system and mitigate injury and accident risks at Nornickel's key assets, DuPont Science and Technologies has been assessing the level of the Company's industrial safety culture every year since 2014.

Improvements in the safety culture metrics came on the back of greater personnel involvement in occupational health and safety, a sharper focus on HSE on the part of the production facilities' management (management training completed, a team of in-house experts built) and enhancement of risk assessment and management expertise.



**Report of corporate social responsibility for 2017**

### Safety culture as per the Bradley curve



### Health and safety performance indicators

In 2017, the Company failed to improve its LTIFR<sup>1</sup> due to a group accident at Zapolyarny mine in July 2017, when a methane explosion in the mine opening claimed the lives of four people. An ad-hoc investigation followed to enforce compliance with the safety rules set out in the Special Requirements for Mining Operations in Hazardous Gas Conditions. The investigation gave the Company an opportunity to take a series of organisational, technical and disciplinary actions to prevent similar accidents going forward.

Investigation of production accidents and occupational diseases is carried out in accordance with the Labour Code of the Russian Federation, industry regulations, and

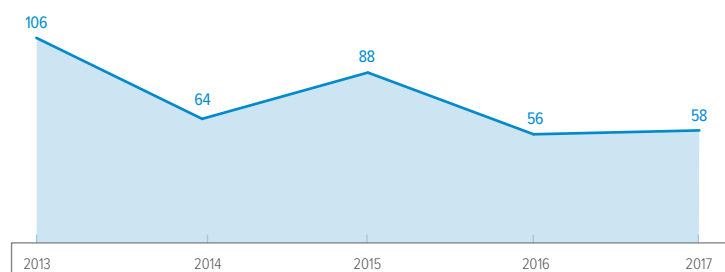
the Accident Investigation corporate standard. All fatal accidents were reported on to the Board of Directors and thoroughly investigated to avoid them in the future. Nornickel's management views occupational safety and zero workplace fatalities as its key strategic objective and keeps running dedicated programmes to prevent workplace accidents and injuries.

In 2017, the implementation of core occupational safety standards, rollout of video information systems and launch of the Risk Control project (development of risk mitigation initiatives) resulted in a 46% decrease in the number of fatal accidents.

### Safety performance indicators

Indicators	2015	2016	2017
FIFR <sup>2</sup>	0.12	0.11	0.06
LTIFR	0.62	0.35	0.43
Production-related accidents, including:			
fatalities	88	56	58
lost-time injuries	14	13	7
Minor injuries	74	43	51
Accidents among the contractors' employees, including:			
fatalities	411	719	719
fatalities	19	18	15
fatalities	5	8	1

### Total number of accidents // people



<sup>1</sup> LTIFR stands for Lost Time Injury Frequency Rate (LTIFR = non-fatal LTIs / total number of hours worked \* 1,000,000).

<sup>2</sup> FIFR stands for Fatal Injury Frequency Rate (FIFR = FIs / total number of hours worked \* 1,000,000).