

ENVIRONMENTAL PROJECTS

SULPHUR PROGRAMME AT KOLA MMC

Location

Nickel settlement, Murmansk Region

Project overview

The project envisages the construction of a 200 kt dry concentrate loading point, the upgrade of the flotation circuit at Zapolyarny Concentrator to allow for production of two types of copper-nickel concentrate, and the complete shutdown of smelting operations in Nickel. The new facility will separate high-grade concentrate and low-grade concentrate, ready to be shipped to third-party consumers. In 2019, the concentrator processed 7.9 mln t of ore.

After all smelting operations are shut down, the employees will be offered jobs at other Nornickel enterprises.



For more details
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In 2017–2020, the project’s CAPEX will total RUB 5.8 bn (USD 90.9 mln).

CLOSURE OF THE SMELTING SHOP IN NICKEL

This is a comprehensive environmental project at Kola MMC that will completely eliminate emissions in Nickel, while reducing emissions from Kola MMC by 50% by the end of 2020 (from a 2015 baseline).

Nickel, Zapolyarny, Murmansk Region

WILL BE CLOSED



The Sulphur Programme at Kola MMC envisages the closure obsolete production shop in Nickel town (near the Norwegian border) and downstream modernization in Monchegorsk. These activities will completely eliminate sulphur dioxide emissions in the Russia-Norway border area and significantly reduce adverse environment impact in Monchegorsk. The programme is expected to reduce sulphur dioxide emissions from Kola MMC by 50% in 2020, and by 85% in 2021 (from a 2015 baseline).

Project timeline

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- CAPEX – RUB 2.3 bn (USD 35.6 mln)
- Approval from the Main Department of State Expertise secured
- Completion of all construction and installation works
- Launch of finished concentrate production and plant pre-commissioning

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- CAPEX – RUB 1.6 bn (USD 24.9 mln)
- Partial closure of electric furnaces at the smelting shop in Nickel
- Pre-commissioning at the loading point, and shipping of low-grade concentrate

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- Complete shutdown of smelting operations in Nickel
- Launch construction of a loading point for high-grade concentrate

SULPHUR PROGRAMME (POLAR DIVISION)

Location

Norilsk Industrial District, Krasnoyarsk Region (Polar Division)

Project overview

The project will be phased in at Nornickel's two core downstream facilities in the Norilsk Industrial District as follows:

Nadezhda Metallurgical Plant

- **Phase 1:** The recovery of gases at Nadezhda and the establishment of acid neutralisation facilities (including gypsum storage and related infrastructure) – to be completed by 2023
- **Phase 2:** The expansion of neutralisation infrastructure (for sulphuric acid from Cu stream) – to be completed by 2025

Copper Plant

- **Phase 1:** Preparatory work and retrofitting of the gas cleaning unit – to be completed by 2023
- **Phase 2:** Recovery of sulphur dioxide from rich off-gases at sulphuric facilities, reduction of Copper Plant's emissions to the maximum allowable limits, and the discontinuing of converter operations with sulphur-poor gases – to be completed by 2025

Project timeline

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- CAPEX – RUB 1.5 bn (USD 24 mln)
- Completion of the bulk of on-site preparatory work
- Development of design documentation for **Phase 1** at Nadezhda Metallurgical Plant, and successful state environmental review
- A number of equipment supply contracts signed
- Development of design documentation for **Phase 1** at Copper Plant

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- Nadezhda Metallurgical Plant will develop detailed design documentation, secure approval from the Main Department of State Expertise, and commence construction and installation works
- Copper Plant will carry out construction and installation works for **Phase 1** and develop documentation for **Phase 2**