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SUEK commissions high-performance modular treatment facilities with a production capacity of 800 m³/h at Kirov in Kuzbass. SUEK's investment in this environmental project totalled \$13m.

The revamp of old units and installation of new ones was initiated because the old treatment facilities had been in operation since 1961, and were worn and obsolete. SUEK developed the concept of the new treatment facilities together with EnviroChemie GmbH (Germany) based on modular-type treatment facilities successfully operated at Yalevsky, Ruban, Taldinskaya-Zapadnaya 1 and Taldinskaya-Zapadnaya 2 since 2016.

They proved to be of high performance and efficiency. All equipment was assembled at a factory in Germany and dispatched to Russia, almost in a ready-to-use form.

The multi-stage treatment, including mechanical cleaning in sumps, flotation, filtration and UV disinfection, makes water discharged into natural reservoirs conform to all sanitary standards. Moreover, part of the treated mine water is re-used for the process needs of the company.

It should be noted that the performance of such modular units is improved on an ongoing basis. When they were first introduced in the company, the capacity of one modular container was 30 m³/h; while today, at Kirov, each of the two new generation EnviModul T-Types units is capable of treating 400 m³ of water per hour. This type of high-tech equipment was introduced in Russia for the first time.

Along with the new modular units, the reconstructed treatment facilities include new pumping stations, mine water sumps, a sludge collector and sluice wells.

Thanks to these innovative solutions, the concentration of pollutants entering a natural water body, the River Inya, is three times less than before treatment and conforms to the environmental laws of the Russian Federation. Up to 100% of the treated water can be reused for the needs of the company's washing plant. Water treatment waste in the form of sludge will be added to coal as an additive.

“The upgrade of the treatment facilities at Kirov is part of a comprehensive environmental programme run by the company,” says Yevgeniy Yutyaev, General Director of SUEK-Kuzbass. “Thanks to modern modular systems, our divisions achieve high-efficiency mine water treatment. Targeted work is underway to improve our environmental management system. SUEK's total expenses on the reduction of its negative environmental impact in Kuzbass will exceed \$53m in 2019-2021.”

Let us note that the Kirov mine was one of the first in Russia to receive a comprehensive environmental permit. President Vladimir Putin, in his statement to the Federal Assembly, underlined the importance of promptly introducing new environmental standards. He said that in 2020, following the first 16, another 80 of the 300 largest enterprises are to receive comprehensive environmental permits and switch to the best available techniques.

SUEK plans to get them also for its – Komsomolets and Yalevsky mines in Kuzbass.

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