

Press Release

Philippsthal (Germany), December 12, 2019

Storage of saline wastewaters in the Springen mine field: Reducing environmental impact and securing the region's future

The sustainable and predictable disposal of saline wastewater is an indispensable prerequisite for the continuation of potash production in the Werra region. From 2022, K+S plans to discharge highly concentrated wastewater into the old mining area of the Springen mine (Wartburg district). After more than 90 years, it will therefore be possible to discontinue the injection into the plate dolomite, to remediate a former mining site and also to make further progress in reducing the environmental burden on the Werra river.

The discharge of wastewater into old mine areas, known by experts as "storing", was included in the measures program of the Weser River Basin Community Environment Ministers as one of several options for saline wastewater reduction.

"We want to safeguard the future of our Werra production sites. This also includes achieving a fair balance between economic and ecological goals. The planned storage of wastewater in the Springen mine will enable us to achieve the river management targets for the Werra and Weser, establish our saline wastewater management on a long-term basis and contribute to the remediation of a former mine in Thuringia," says Dr. Burkhard Lohr, Chairman of the Board of Executive Directors of K+S.

Since K+S has now completed other measures in the "Salt Reduction" program, such as the construction of the KCF plant, a large-scale research project was initially required for storing in order to have the feasibility and safety aspects of the process thoroughly examined by experts and to find suitable areas. The Springen mine field, part of the former Merkers mine, proved to be the most suitable, taking all



circumstances into account. It complies with all safety requirements and provides sufficient space to accommodate the production wastewaters of the Werra plant for approx. 20 years. At the same time, the highly concentrated saline waters are particularly suitable to be used for the remediation of a mining contamination from the time before 1990.

Safety is our top priority

The major research project, which involved not only universities but also renowned experts from relevant specialist institutes, focused on safety issues. They mainly concern the influence of the saline wastewater on the minerals of the deposit, possible effects on the surface and the long-term safety of the entire mine at the Werra, which also includes the Herfa-Neurode underground storage site. The long-term practical experience gained by K+S since 2007 with temporary storage in the Springen mine field was also evaluated. From this perspective, the current assessment indicates that the project can be officially permitted.

Pipeline construction underground

The technical concept for the storage system envisages an annual transport of around 1.4 million cubic meters of saline waters from the KCF plant from Philippsthal to Heringen over an existing pipeline system from 2022 onwards. They are concentrated there and transported underground via a pipeline in the Grimberg shaft. A 20-kilometer-long pipeline then transfers the wastewater through the Wintershall mine field to Springen, so that no pipeline construction or surface transportation is required. In a second project phase, further adjustments or additions to the processing facilities from 2028 will lay the foundations for storing all production waters at the Werra plant in the Springen mine field.

Comprehensive permission procedure and dialogue with the public

The implementation of the project requires several permissions from the Thuringian and Hessian mining authorities. They will thoroughly examine the project and give their permission only if all safety issues have been satisfactorily addressed. Furthermore, the state parliaments of Thuringia and Hesse will have to decide on the amendment



of a state agreement required for the construction of the underground pipeline in the border area of the Wintershall and Springen mine fields. The state governments have pledged their support for this.

K+S has committed themselves to transparently managing the project for the public and to intensively informing the people in the vicinity of the Werra sites on the project's progress. After all, it is all about the future of the region and further improvements for the environment. The next milestone is the submission of the application documents to the responsible authorities.

About K+S

K+S is a customer-focused, independent minerals company for the Agriculture, Industry, Consumers, and Communities segments and wants to grow the EBITDA to € 3 billion by 2030. Our approximately 15,000 employees enable farmers to provide nutrition for the world, solutions that keep industries going, improve daily life for consumers and provide safety in winter. We continually meet the growing demand for mineral products from production sites in Europe, North and South America as well as a worldwide sales network. We strive for sustainability because we are deeply committed to our responsibilities to people, environment, communities and economy in the regions in which we operate. Learn more about K+S at <https://www.kpluss.com>.

Your contact person

Press:

Ulrich Göbel

Phone: +49 561 9301-1722

ulrich.goebel@k-plus-s.com