

#environment

#industrial

#innovation

AN ENVIRONMENTALLY FRIENDLY SOLUTION FOR SOIL REMEDIATION

Structure : Teredepol (University of Strasbourg)



Strasbourg

Grand Est

Terdepol, a New Soil Remediation Solution

In France, more than 11,600 industrial sites (land parcels, brownfields), often located on the outskirts of cities, are contaminated. With the acceleration of the “net zero land-take” policy, current law requires that these sites be remediated before they can be repurposed. The problem is that current methods, which are often costly, struggle to remediate soil effectively, quickly, and in an environmentally friendly manner. The startup Terdepol, founded in Strasbourg in 2025, offers an innovative new industrial process capable of cleaning soil contaminated with hydrocarbons directly on-site.

How does it work?

After excavating the soil to be treated, a treatment unit is installed directly on-site and operates in three successive phases: first, leaching using an eco-friendly solution containing a biodegradable and reusable surfactant, which separates the hydrocarbons from the soil. Next,

the pollutants are recovered to be either reused or disposed of. Finally, the clean soil is returned to the site. Hydrocarbon pollutants are thus removed on-site, and eventually PFAS and heavy metals as well, reducing the final waste generated from contaminated sites to a minimum.

Terdepol's scientific and technological developments were made possible by Daniel George and Yves Rémond of the Laboratory of Engineering Sciences, Computer Science, and Imaging (ICube - CNRS/Unistra/Insa Strasbourg/Engees) and Philippe Ackerer, a researcher at the Strasbourg Institute for Earth and Environment (Ites - CNRS/Unistra/Engees).

What's next?

The priority is to conduct a full-scale trial, then finalize the prototype. We will be able to optimize our process for all types of soil. Then Terdepol will begin its commercial development to sell its process to developers, industrial firms specializing in decontamination, and local governments,

Furthermore, our future plans include expanding our process, particularly to address so-called "forever chemicals," the PFAS.

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<https://savoirs.unistra.fr/innovation/terdepol-une-nouvelle-solution-de-depollution-des-sols>