

The Study Case #6 - ReSoil®-Military in Apače, SLOVENIA

Information of site owner/site provider

- General Staff of the Slovenian Armed Forces. Ministry of Defense of the Republic of Slovenia
- Source of funding: Ministry of Defence of the Republic of Slovenia & Slovenian Research and Innovation Agency under Grant V1-2280

Objective

Pilot-scale trial of reclamation of an infantry shooting range/polygon, which will be renovated in the near future

Contaminated site characterization

Remediation of Ranker, Cambisol, and Luvisol on silicate gravel & sand contaminated with 915 -19266 mg kg⁻¹ Pb, 189 - 505 mg kg⁻¹ Zn, 274 - 3683 mg kg⁻¹ Cu, and 44 - 631 mg kg⁻¹ Sb

Remediation results

- 74% Pb, 49% Cu, 26% Zn, 73% As, and 31% Sb were removed
- Soil properties and functions as a natural substrate were preserved



Site description

The Apače shooting range is currently under renovation. At the Apache infantry range, Pb, Cu, As, and Sb are the most problematic in terms of soil pollution.

ReSoil® REMEDIATION EFFICIENCY

Initial metal concentration Zn

mg kg-1

Pb

2082 mg kg-1

Cu

480 mg kg-1

347 mg kg-1

As

344 mg kg-

Sb

Reduction of metal and metalloid concentration



Cu

Zn

As

Sb