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Effect of Soil Washing for Lead and Zinc Removal on Soil Hydraulic Properties

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Soil washing as a metal pollution remediation process, especially part with intensive mixing of the soil slurry and soil compression after de-watering, significantly deteriorates physical properties of soil compared to those of non-remediated soil. Furthermore, changed physical characteristics of remediated soil influence interaction of plant roots with soil system and affect soil water regime. Remediated soils showed significant differences to their original state in water retention properties and changed structure due to the influence of artificial structure created during remediation process. Disturbed and undisturbed soil samples of remediated and original soils were analyzed. We evaluated soil hydraulic properties as a possible constraint for re-establishing soil structure and soil fertility after the remediation procedure.