

## **Residence Time Effects on Metal Sorption Reversibility on Soil**

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The fate of Pb in soil has been the subject of intense study for many years. However, few studies have considered the effect of long residence times (aging) on soil-Pb interactions. In this paper the significance of aging on Pb sorption and release from soils and soil components was investigated. The sorption of Pb on soil steadily increased from 1 day to 30 days; further sorption was slow. Lead release from the soil was studied using  $\text{Cu}^{2+}$ ,  $\text{Ca}^{2+}$ , and EDTA. The studies revealed that Pb release decreased with aging, suggesting that a continuous slow reaction occurs which decreases the availability of the Pb. These findings indicate that aging is an important phenomenon when considering soil-Pb interactions. Such results could have significant impacts on metal mobility and remediation of contaminated soils.