

Table 1 Availability and mobility of trace metals

Metal species and associations	Mobility
Exchangeable (dissolved) actions	High. Changes in major cationic composition (e.g. estuarine environment) may cause a release due to ion exchange
Metals associated with Fe-Mn oxides	Medium. Changes in redox conditions may cause a release but some metals precipitate if sulfide mineral present is insoluble
Metals associated with organic matter	Medium/High. With time, decomposition/oxidation of organic matter occurs
Metals associated with sulfide minerals	Strongly dependent on environmental. Under oxygen-rich conditions, oxidation of sulfide minerals leads to release of metals
Metals fixed in crystalline phase	Low. Only available after weathering or decomposition.