

Topical Scientific Workshop on Risk Assessment for the Sediment Compartment

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Poster Number

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Торіс	Exposure assessment
Title	The SEM-AVS concept: Can it Fulfil the Promise, a Critical Review
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Keywords: Nickel, Acid Volatile Sulfides Simultaneously extracted metals, bioavailability

Summary: The main question to be solved from a risk assessment point of view is to which extent the SEM-AVS concept is mature enough to be used to refine the environmental risk assessment for metals. An in-depth evaluation of the literature data on SEM-AVS was performed in order to determine whether the existing information validates the applicability of the SEM/AVS concept for metals in general (and nickel in particular) and what hurdles may still have to be overcome. Key issues that are tackled are the underlying mechanism of the SEM-AVS concept, available SEM-AVS databases and the relative importance of the observations that metals can be bioaccumulated from the sediment irrespective of the AVS concentration under certain conditions.