

## The first arsenic guidelines for aggregate production were established in Finland

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Naturally occurring arsenic in bedrock and soil may cause the mobilization of As during rock aggregate production and construction activities, potentially impacting on groundwater aquifers, surface waters, and biota. Here, we present the outcome of two EU projects, RAMAS and ASROCKS. Both projects focused on the Tampere-Häme region of Southern Finland, where bedrock and soil contain more As than in other parts of Finland on average.

Over 1000 groundwater samples revealed that drilled bedrock wells may contain As-rich water in certain geological units. Naturally occurring As in bedrock and soil may also cause the mobilization of As during rock aggregate production and construction activities, potentially impacting on groundwater, surface waters, and biota.

As concentrations in aggregate products exceeded the regional background levels in some samples, but during leaching tests mobilization of As was found to be low. Risk management tools were established in cooperation with authorities, companies, and other stakeholders. The guidelines for As for the aggregate and construction industries can be applied in other countries like Sweden and Norway.

### References:

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