

**ASROCKS Project Presentation in Uppsala, Sweden, Monday 26 May 2014**

Geological Survey of Sweden (SGU) hosted the meeting at the SGU head quarters in Uppsala, Sweden. Dr Nikolaos Arvanitidis and Dr Anna Ladenberger welcomed the ASROCKS experts to Sweden and gave preliminary introduction to the arsenic situation in Sweden. Dr Arvanitidis also mentioned arsenic studies of side rocks in Greece. The agenda of the day was following:

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| 10.00 | Welcome speech  |
| 10.15 | ASROCKS Project. Objectives and demonstration sites. Kirsti Loukola-Ruskeeniemi GTK                           |
| 10.40 | Preliminary risk assessment at demonstration sites. Heli Lehtinen (and Jaana Sorvari) SYKE                    |
| 11.00 | Sampling and analysis. Arsenic concentration in rock, soil, surface water and groundwater. Timo Tarvainen GTK |
| 11.30 | Results of the leaching tests. Terhi Ketola TTY.  |
| 12.00 | Lunch   |
| 13.00 | Geochemical distribution of arsenic in Sweden. Anna Ladenberger, Madelen Andersson and Bo Thunholm SGU        |
| 13.20 | Six main issues to be investigated. Heli Lehtinen SYKE  |
| 13.30 | Coffee break  |
| 14.00 | Discussion  |
| 15.00 | Final remarks   |

In addition to above mentioned experts, M. Andersson, M. Göransson, M. Sadeghi and B. Thunholm from SGU took part in the discussion. Elevated concentrations of arsenic have been found also from Sweden, for example in the Skellefteå mining district, Västerbotten area in Northern Sweden. Tove Göthner from Umeå University has studied arsenic in aggregates from licensed quarries in the county of Västerbotten. She suggested that standard leaching tests should be carried out on crushed aggregates from quarries within the geological province with elevated As concentrations. Swedish geological Institute (SGI) in Linköping has done leaching tests of some products.

Arsenic is also found from sulphide mineralizations at Caledonides, from black shales of different ages, from the Bergslagen mining district and from some disseminated sulphides in Gotland Island. Similar to Finland, some gabbros show elevated As concentrations. Aggregates from gabbro are used especially for rail road construction. Limit values from contaminated soil are 10 mg/kg (vulnerable land use) and 25 mg/kg (other land use). Concentrations 15 – 75 µg As/l are considered high for surface water and arsenic concentrations

higher than 75 µg/l are considered very high for surface water. Over 1 million people are depending on private water supply. Arsenic problems are mostly related to private drilled bedrock wells.



Anna Ladenberger from the Swedish Geological Survey welcomes the ASROCKS experts to Uppsala.