## Workshop concerning experience with investigation and risk assessment of vapour intrusion across Scandinavia

## Workshop organizers:

Dorte Harrekilde, Rambøll Environment and Health (Denmark)

Englandsgade 25, 5000 Odense C, Denmark, T: +4551615838, doh@ramboll.dk

Daniel Nordborg, Rambøll Environment and Health (Sweden)

Krukmakergatan 21, 10462 Stockholm, Sweden, T: +466156466,

Daniel.nordborg@ramboll.se

Emilia Pöyry, Rambøll Environment and Health (Finland)

Säterinkatu 6, 02601 Espoo, Finland, T: +358(40)5348315, Emilia.poyry@ramboll.fi

Exposure to volatile organic contaminants from soil pollution can represent a serious health risk which is dealt with in different ways in the Scandinavian countries depending on the local regulatory framework and technical experience. Exposure to organic contaminants can occur when soil vapour intrudes into buildings, f.ex. when converting old industrial buildings to housing/institutions or when new buildings are planned. Mitigation can therefore involve both environmental and/or constructional measures. The problematic substances from soil pollution are typically BTEX'es, chlorinated solvents and their metabolites. Moreover especially oil contamination poses a challenge, as volatilization of hydrocarbons from treated surfaces, furniture, household appliances etc. also contribute significantly to the presence of petrogenic hydrocarbons in indoor air. The general approach to the topic varies widely from country to country.

The workshop aims at highlighting both differences and similarities in our approaches to dealing with vapour intrusion across national borders in the Nordics – and to inspire us to learn from and collaborate with our Nordic neighbors. Experiences on the following aspects will be addressed and discussed:

- Regulatory framework, drivers for cleaning up soil pollution and threshold values
- Indoor air investigation (soil gas and indoor air) and risk assessment

Each of the four Nordic countries is represented by an environmental consultant, who will present an approach to the same indoor air pollution case from the national perspective of their country. The case description includes some questions to ensure that the differences between the countries can be compared.

Experiences from Denmark, Sweden, Norway and Finland will be presented as short talks which will be followed by two group discussions and a summary of highlights in plenum. Polling questions will be asked during the workshop and will be an integral part of the discussions.

## Program

11.00 – 11.10	Introduction to the workshop
	Mette Christophersen, Rambøll
11.10-11.50	Regulatory framework across Scandinavia including threshold values for indoor air
	Emilia Pöyry, Finland
	Daniel Nordborg, Sweden
	Susanne Sandanger, Norway
	Dorte Harrekilde, Denmark
11.50-12.20	Group work – discussion of the different approaches and local drivers
12.20-12.30	Summary of highlight in plenum
12.30-13.00	Lunch
13.00-13.10	Introduction to part 2 of the workshop and the presented case
	Mette Christophersen, Rambøll
13.10-13.25	Methods for sampling and analysis of soil gas and indoor air – pros and cons
	Eeric Järvinen, Ramboll Analytics
13.25-14.05	Presentation of how the same case would be tackled in each country
	Emilia Pöyry, Finland
	Daniel Nordborg, Sweden
	Susanne Sandanger, Norway
	Dorte Harrekilde, Denmark
14.05-14.45	Group work – discussion of the different approaches, pros and cons, best practices and future collaboration
14.45-15.00	Summary of highlights in plenum