

1st City Soil Health Knowledge Forum (CKF) Webinar

SML adoption and its implications in urban contexts.

Title: Technical complexities in Urban Soil Diagnosis

Duration: 3 hours

Format: Online via TEAMS

Date: 28 October 2026

Target Audience: URSOiLL Living Lab leaders, invited municipal authorities, soil/planning practitioners and relevant stakeholders.

Background

The EU officially adopted the Soil Monitoring Law (SML) on 16 December 2025, establishing the first common legal framework for assessing and monitoring soil health across Member States. While Member States have two years to transpose the Directive into their national legal systems, the implementation process already raises important challenges for **Healthy Soil Living Labs**, whose mission is to test and demonstrate innovative approaches to urban soil restoration. Urban experimentation frequently requires investigating soils under uncertain conditions, potentially revealing contamination by heavy metals, PFAS, or other pollutants. Such discoveries generate immediate questions regarding liability, remediation responsibilities, costs, land-use restrictions, and public health, creating discovery complexities that may discourage experimentation and delay restoration actions. If uncertainties are not addressed, Living Labs may face increasing barriers to implementing concrete interventions, creating a tension between the ambitions of the EU Soil Mission and the emerging regulatory framework of the SML.

At the same time, the SML presents a unique opportunity to strengthen urban soil governance. By calling for the harmonisation of soil monitoring practices and requiring Member States to designate competent authorities (including, where appropriate, local and subnational authorities) to implement its provisions, the Directive creates space for cities to play a more active role in soil health management. Healthy Soil Living Labs can therefore act as pioneers in developing and testing risk-based approaches that go beyond contamination assessment by considering exposure pathways, future land uses, ecosystem functions, and social vulnerability. Such approaches can help transform soil monitoring from a compliance exercise into a proactive planning instrument that supports urban regeneration, informed decision-making, and the restoration of healthy urban soils. Consequently, the first City Soil Health Knowledge Forum (CKF) will explore how cities can navigate emerging challenges while leveraging the opportunities offered by the Soil Monitoring Law to accelerate urban soil restoration and support its future implementation.



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Webinar's Objectives

The webinar will specifically address the following:

- City-to-city learning: local authorities' previous experiences on soil quality indices, adapting soil monitoring practices to urban soils and contexts, and developing risk-based approaches.
- Alignment of existing tools: How can proactive municipalities align their current partnerships and policy instruments with forthcoming EU requirements?
- Risk Management: Assessing the technical, economic, and social risks of increased contamination visibility, including the polluter pays principle

This webinar will explore the discovery phase through the lens of cities participating in the URSOiLL Living Labs, where the identification of soil degradation and contamination often represents the first step towards urban soil restoration. The session brings together two complementary expert perspectives: the technical and risk-management perspective on contaminated land, remediation and decision support, and the urban planning perspective on soil quality, ecosystem services and the translation of soil information into urban development decisions. It will examine how cities can move from discovery towards informed action while navigating liability, remediation, redevelopment, public health, planning and stakeholder concerns.

Guest Experts:

Jenny Norrman – Chalmers University of Technology

Professor at Chalmers' Geology and Geotechnics division. Her work covers contaminated land, remediation, soil functions, ecosystem services, risk management and subsurface planning. Her research includes gentle remediation options and approaches that connect contaminated-land management with sustainable land-use planning. She was part of the ISLANDR project and also involved in SPADES, linking soil with spatial planning and design.

Lydie Sombré – Brussels Environment

Project Manager at Brussels Environment, with work on urban soil quality and the integration of soil information into territorial planning. She has been involved in the Brussels Soil Quality Index (IQSB/BSQI), which assesses physical, biological and chemical soil conditions, ecosystem-service capacity and degradation to help match planned uses and functions with soil quality.

Section 1: Socio-Technical Risks – From Invisible Contaminants to Actionable Urban Soil Information

The first section will combine two complementary perspectives. Jenny Norrman (Chalmers University of Technology) brings expertise in contaminated soil, risk management, gentle remediation options, soil functions, ecosystem services and subsurface planning. Her work includes approaches that connect site-specific risks and soil conditions with remediation choices and sustainable land-use planning. Lydie Sombé (Brussels Environment) brings a municipal and planning perspective, including the Brussels Soil Quality Index and the use of soil-quality information and ecosystem services to inform urban development decisions. Together, the perspectives can help Living Labs consider not only how contamination is detected and assessed, but also how soil information can become usable evidence for planning, communication and restorative action.

Key Discussion Points:

- Using practical and user-friendly approaches to identify contaminant hotspots, understand uncertainty and assess risks to humans and the environment.
- Connecting soil condition, risk and remediation options with soil functions, ecosystem services and future land-use decisions.
- Understanding how soil-quality information can be translated into planning choices, including matching land uses and functions with the capacity and condition of the soil.
- Identifying technical, institutional and communication barriers that may prevent cities from acting once soil degradation or contamination is discovered.
- Exploring how better data, risk assessment, soil-quality indicators and positive communication can build confidence and unlock restorative action.

Section 2: "Case Clinic" Workshop – Bringing the Soil Monitoring Law to the City Level

The Case Clinic will bring the discussion from the European and national policy level to the local, practical level of cities and URSOiLL Living Labs. The central question will be how the requirements and ambitions of the Soil Monitoring Law translate into concrete situations in cities, where soil needs to be investigated, risks need to be understood, soil functions and ecosystem services considered, and restoration or planning actions ultimately need to take place.

This city-level perspective is particularly relevant because cities are where the practical consequences of soil discovery materialise. Urban areas can function as important testbeds for identifying and understanding soil degradation and contamination, but also for testing and implementing remediation, restoration and planning approaches. The discovery of contamination or poor soil quality can therefore create a transition point: the city moves from knowing (or suspecting) that a soil problem exists to deciding what to do with that information in relation to land use, redevelopment, risk management and restoration.

This creates a potential tension between monitoring and action. Better data can make previously unknown soil degradation and contamination visible, but once a problem is revealed, cities may face questions about liability, responsibilities, remediation requirements, costs, land-use



restrictions, public health and stakeholder reactions. At the same time, soil-quality information can support more informed planning by helping cities identify which soils should be protected, restored or prioritised for particular uses.

The Case Clinic will build on Section 1, combining the technical perspective on contamination, risk and remediation with the planning perspective on soil quality, ecosystem services and the integration of soil information into urban development. These dimensions correspond with the municipal friction points identified in the URSOiLL pre-webinar survey, including legal uncertainty, data availability, capacity constraints, coordination problems, planning conflicts and stakeholder resistance.

The Clinic will therefore ask:

What happens at city level when soil monitoring or local investigation reveals a problem, and what prevents the city or Living Lab from moving from discovery and diagnosis towards restoration or informed planning action?

Activation of P2P: Participants from URSOiLL Living Labs will be invited to bring a concrete case, situation or anticipated challenge from their own territory. Cases could involve, for example, uncertainty about what happens when contamination is discovered; unclear responsibilities between municipal, regional and national authorities; difficulties connecting monitoring results to spatial planning decisions; conflicts between soil restoration and development pressures; insufficient technical or financial capacity; or concerns among landowners, developers, authorities or communities about the implications of revealing soil degradation.

The cases will be used to identify the specific friction points between soil discovery, diagnosis, decision-making and action. Rather than treating the SML only as a regulatory framework, the Clinic will explore how its implementation interacts with the realities of cities as places where soil monitoring, planning, experimentation, remediation and restoration come together.

The discussion will focus on three topics:

1. What does discovery trigger at the city level?
When monitoring or investigation reveals soil degradation or contamination, what technical or social consequences follow?
2. Where does the friction occur between discovery and action?
What prevents the city or LL from moving from identifying a soil problem towards experimentation, remediation or restoration?
3. What clarification, knowledge, data, soil-quality indicators, risk assessment, coordination, governance arrangement, technical approach or stakeholder engagement could help the LL navigate the friction through its upcoming co-creation pathway?

Miro Board Integration: The municipal friction map developed from the pre-webinar survey will provide a common starting point for comparing cases. Participants will be able to identify whether their challenge is primarily related to data availability, capacity,

coordination, planning conflicts or stakeholder resistance, while also exploring how these dimensions interact in practice.

The purpose of the Case Clinic is therefore not to provide answers to every case. Instead, it will create a peer-learning space in which LLs can unpack their specific situations, learn from other cities and identify possible ways forward. The two expert perspectives can help distinguish between technical and risk-management issues, planning and governance issues, matters that can be addressed locally, those requiring coordination with regional or national authorities, and those that may require further policy or regulatory clarification.

Finally, the Clinic will connect the CKF directly to the upcoming URSOiLL co-creation pathways. The cases discussed will be translated into practical next steps for the LLs: questions to investigate, actors to engage, data or assessments to develop, soil-quality information to integrate into planning, governance arrangements to test, or specific frictions to address through co-creation. In this way, the discovery and diagnosis phase becomes not only a potential source of risk, but also an opportunity for Living Labs to learn how to move from monitoring and diagnosis towards informed restoration and planning action.

AGENDA

Time	Section	Content Focus
10:00 – 10:15	Welcome & Introduction	URSOiLL CKF overview, urban soil context and introduction of expert perspectives.
10:15 – 11:35	Section 1: Socio-Technical Risks	Jenny Norrman: contamination, risk, remediation and decision support. Lydie Sombrière: soil quality, ecosystem services and urban planning.
11:35 – 12:45	Section 2: Case Clinic	P2P activation: interactive LL cases, municipal friction mapping and expert discussion.