

Common Forum Autumn meeting 2022 23 November 2022

Athens, GREECE

MEETING REPORT



WELCOME

The Common Forum Autumns meeting 2022 at the Hellenic Ministry of Environment and Energy in Athens, Greece, 23 November 2, was opened by the Secretary General for Natural. Environment and Water -Dr Petros Varelidis.

This meeting was attended by new representatives, partner organisations, guests and national experts from:

- Greece: Georgia Mantzava, Alexandra Karpodinis (Hellenic Ministry of Environment and Energy)
- Finland: Nina Lehtosalo (Ministry of the Environment)
- Portugal: Tomás Albergaria (Portuguese Environment Agency)
- NICOLE: Johan De Fraye
- Cabernet: Paul Nathanail
- Delegates and experts from Greece

CONTAMINATED LAND MANAGEMENT IN GREECE

Contaminated land management in Greece – Iraklis PANAGIOTAKIS

Unlike most EU countries, Greece does not have a robust Soil Strategy and as a result a Contaminated Soil Management Framework. Currently in Greece, contaminated soil management is part of the hazardous waste management framework, which is a problematic practice for consultants, industries, and pertinent authorities. Furthermore, multiple authorities are involved in contaminated soil management, a definition of "contaminated sites" is lacking as well as national soil screening values. A contaminated site inventory exists from a study in 2013, but it is not completed. Additionally, an analytical database for illegal landfills, most of them have been already remediated.

The need for a robust national contaminated soil management framework has been identified. Thus, a project was carried out in 2021 on "Improved hazardous waste and contaminated soil management in Greece" in order to investigate the best available EU and other international practices and make recommendations for a new contaminated soil management framework.

A roadmap of further steps was developed using EU and international experiences. Additionally, several key challenges have been identified ranging from diffuse contamination management, orphan sites, back-ground concentration to excavated soil and constriction-demolition-waste reuse.



SESSION 1 – NEWS FROM COUNTRIES AND INITIATIVES

Session 1-1 – Overview of the Flemish Experiences with PFAS – Johan CEENAEME

Within an exploratory campaign on PFAS carried out from 2016-2018 an inventory of risk activities in Flanders was established. It was concluded that especially on firefighting training grounds soil and groundwater are contaminated with PFAS and that PFAS must be included as a suspect substance within soil investigations. Accelerated by the Flemish crisis caused by a PFAS contaminated mega site several actions were started ranging from preventive actions, development of trigger values and guidelines for soil investigation.

An inventory of potentially PFAS contaminated sites was established with more than 6.000 locations initiating the investigation of around 600 fire service related sites starting in July 2021. Results of this preliminary soil investigation lead to a data base (maps) and "no regret measures". This information was communicated to local authorities together with information on avoiding/limitation of consumption of local food, use of groundwater, use of compost. These measures will be re-evaluated after the evaluation of site measurements.

Several guidelines on PFAS were generated (general, analytical methods, excavated soils, preliminary soil investigation, code of good practice – descriptive soil investigation). Soil criteria for PFAS were developed (for soil remediation, for excavated soil and soil materials) which are applicable since 19 April 2022 as a temporary framework.

Ongoing actions and research activities comprise the topics: leaching of PFAS from soil to groundwater, diffuse presence of PFAS in groundwater in Flanders, development of methods for dealing with the sum of PFAS in action frameworks, characterisation of PFAS in soil & groundwater on sites with different risk activities, using non target methods and measurement of PFAS in house dust & contribution to exposure.

Session 1-2 – Lead – decision on trigger values in Sweden – (Åsa VALLEY & Yvonne OHLSSON)

Being confronted with differing EFSA and WHO toxicological reference values for lead, a COMMON FORUM survey was initiated in 2018 regarding the adaption of the national values in the various countries. Discussions in the COMMON FORUM lead Working Group and a joint workshop with SOILveR followed.

For Swedish soil screening values either generic, not legally binding but quite strict guideline values for sensitive and less sensitive land use are in use. They are often (erroneously) used as target values. Site specific screening values are also allowed.



Particular functions in the Swedish model:

The final guideline value is sometimes lower than the lower value in the various pathways which can result in screening values below background concentration. If this is the case, the value will be elevated to background level. This situation caused several problems due to the low screening values.

Therefore, a cost-benefit analyses was carried out. It was concluded that the connection between low levels of lead in soil and exposure is difficult to understand. A time series for lead blood levels in children (1976-2019) showed a decrease over the years which more or less follows the lead curve in benzine. Nowadays, according to a report from the Swedish food safety authority, around one-third of lead exposure in Swedish children is due to the consumption of food. The question arises where else lead in blood derives from?

In November 2022, Swedish lead screening values were revised for sensitive land use (remained the same) and less sensitive land use (were lowered). Furthermore, the calculation of site specific values is possible.

Further work:

Since not lowering screening values is based on weak ground, research on exposure from low levels in soil is promoted. Local/regional efforts in establishing region specific risk assessment methodology in mining areas are supported.

Swedish drinking water criteria for lead will be lowered from 1 January 2023 due to the new Drinking Water Directive (10 to 5 μ g/l by 2036).

Session 1-3 – Polluted sites and soils in Switzerland: legal changes to accelerate the treatment of polluted sites and better protect children's health - Christiane WERMEILLE

The Swiss Environmental Protection Act has been in force since 1985, rules on polluted sites only since 1997. In 2014, little amendments and new articles on financial guarantee have been introduced. In 2015, thoughts regarding the revision of the Act have been initiated.

This revision process was started due to the large cantonal differences in prioritisation and progress, the limited financial and human resources of the cantons and the fact, that the target of completing the remediation of contaminated sites within a maximum of two generations (by 2050) will probably not be met. Furthermore, the Federal fund for the remediation of contaminated sites has a sufficient cash reserve and a consensus has been reached on how to deal with children's playground and diffusely polluted soils. The concrete proposal of the legal adaption was finalised in 2021, the treatment in Parliament is foreseen in 2023.

Main amendments comprise among others:

- Deadlines for federal subsidies (2028 (2030) for investigations, 2040 (2045) for remediation,
- Increase of subsidies for remediation of orphan sites (40 -> 60 %),
- Introduction of additional, retroactive fixed subsidies for investigation and remediation of all polluted sites (independent of remediation costs) to cover administrative work of the cantons,



- All polluted soils where children play are polluted sites (incl. diffuse pollution). If the remediation values are exceeded (e.g. lead 300 mg/kg, dioxin 20 ng TEQ/kg, PAHs 10 mg/kg, Benzo[a]pyrene 1 mg/kg), public playgrounds must be remediated, while the remediation of private gardens remains a voluntary measure of the owner,
- Deadlines for federal subsidies 2060 for the children playground).

The proposed changes are justified by the benefit for households and local businesses but as well as in limited intervention with regard to private surfaces and the protection of children's health.

Session 1-4 – EU Mission: A Soil Deal for Europe & Living Labs - Johan DE FRAYE

The EU Missions are a new instrument under the R&I program Horizon Europe (2021 – 2027) to address major societal challenges. One mission deals with soils initiated by a number of drivers (e.g. DG Agriculture, EU Green Deal with many targets covering soil and several Strategies with soil components).

The supportive framework for soil protection in the EU comprises the EU Soil Strategy (policy framework), the EU soil observatory (Soil monitoring) and the EU Soil Mission (research and innovation).

The main goal of the Mission 'A Soil Deal for Europe' is to establish 100 living labs and lighthouses to lead the transition towards healthy soils by 2030. The Mission contains eight objectives, of which No 4 "reduce soil pollution and enhance restoration" is of particular interest to the Common Forum. Four further operational objectives evolve around soil contamination (e.g. soil literacy).

Living Labs are real-life sites in rural or urban areas. Each living lab contains a group of sites and brings together different stakeholders at regional or sub-regional level. Experience exists already in the agricultural field, in particular in France and Canada. A Living Lab can be used for polluted soils, brownfields, urban environment. At least three Member States need to be involved. Several projects at a regional level (so one country) are possible, but at least three Member States must be involved in one Living Lab. NICOLE and some of its members are keen to prepare a proposal for submittal under this Horizon programme and are interested in collaborating with CF members in identifying specific needs and projects that could be included herein.

Lighthouses are individual sites of exemplary performance for showcasing good practices, training and communication. They help with the adoption of sustainable practices by inspiring land users.

Preparatory action to support the soil mission and LL implementation:

- PREPSOIL (Preparing the EU Mission towards healthy soils) is an already signed project to support stakeholders with the establishment of living labs: https://prepsoil.eu/,
- NATIOONS is ready to be signed: focuses on national engagement.



Session 1-5 – Sustainathon – "Mach 2022" – Paul NATHANAIL

Since 2021, REMTECH Europe, held online and in person in Ferrara Italy, has organised Sustainathons - 24 hour online events on how countries around the world are linking sustainable remediation and sustainable water use to their progress in achieving the UN Sustainable Development Goals (SDGs). In September 2022, speakers range from a range of countries including the Vatican, USA (Los Angeles), Kenya, United Arabic Emirates, Malawi, Indonesia briefed the global audience. The role of several faith organizations in shaping behaviours, the importance of measuring gender equality, the role of networks and the importance of sharing experiences were highlighted by several speakers. Sustainathon gives speakers unable to travel to Ferrara or other international events a voice. The next Sustainathon in September 2023 is already being planned. Offers to contribute are welcome.

https://remtechexpo.com/en/remtech-europe

Session 1-6 – Challenges of residual contamination in Estonia and the approach of LIFE IP Clean-EST – Olav OJALA

Main environmental pressures on water bodies in Estonia are diffuse pollution from agriculture, fragmentation of rivers (flow barriers) and residual pollution from Soviet era.

Residual pollution:

A differentiation is made between historical residual and nowadays pollution with the Chemical Act from 1998, forcing the Polluter Pays Principle (PPP). Inventoried contaminated sites are categorized in state and local sites. The local sites are left to local initiatives (land owners or local municipalities can apply for financial support from the state). The State sets initiatives for state sites and they are open for funding (ECF, ERDF, State funds, LIFE, JTF). Limit values of contaminants exist for industrial land and residential land. If industrial limit values exceed, the excavated soil is classified as hazardous waste. Public awareness was reached with an inventory process. Before it was difficult to get information. Publication through an environmental portal helped that process (https://register.keskkonnaportaal.ee/register). The public and relevant interest groups (municipalities, landowners, industries) have been informed of the need and plans for the remediation of contaminated areas through the process of public consultation of river basin management plans.

LIFE IP CleanEST is an integrated water management project launched in 2019 until 2028 that is focused on improving the status of water bodies in Ida-Viru and Lääne-Viru Counties. The project will focus on the measures of the existing river basin management plan, as well as on potential new solutions taking into consideration among others diffuse and point sources of pollution. The project consists of 23 partners and is led by the Ministry of Environment. A lot of stakeholders including COMMON FORUM are involved.

Three soil remediation works are running, one of them is already finished. Several studies on further remediation needs are under way. One soil remediation project is undertaken at Erra River (Uhaku Karst area), where additional funds have been allocated (European Cohesion Fund).



Due to the duration of the project, several combinations are possible – remediation, restoring habitats, research modelling (lab tests, in-situ demonstration). One of the specialities is the evaluation of projects results in terms of ecosystem services – How much change was there for communities? Should we put more focus on improvement of any specific ecosystem services? How scalable is the ecosystem service approach to the RBMP process? Or is this too expensive compared to the added value etc.?

At the moment, 20 rivers have been investigated regarding riverine ecosystem services. Further effort will be put in transferring ecosystem services into monetary implementation for stakeholders to recognise it on the monetary side (to argue better that, from at least the state's point of view, remediation is an investment).

https://lifecleanest.ee/

Session 1-7 – French news and initiatives – Valérie GUERIN

Regulatory developments:

- Draft decree and guide to define the typology of uses in contaminated sites management: published in a decree and guide by the end of 2022 (land use definitions with 8 different types of uses and a definition on the change of use)
- National register of waste, excavated soil and sediments: Decree of 25 March 2021, implementation of the Register (RNDTS) in January 2022

New guidelines:

- Process for selection and validation of guidelines: annual work program is defined by the French Ministry of Environment with technical advisor institutes (BRGM, INERIS in the field of contaminated site management), guidelines are developed in working groups and reviewed by a selection of end-users. Available beginning of 2023:
 - By MTEC, BRGM, INERIS: Generic guideline on how to operate groundwater monitoring at industrial and contaminated sites; Guideline on requirements for validating the termination and evolution of groundwater monitoring. Both guidelines are available in French.
 - BRGM updated guides on: contaminated sites diagnosis; fate and transport of contaminants. BRGM developed new guides on: Protocol for stopping in situ treatments; Soil sampling for volatile and semi volatile compounds (part of it will be used in the NF ISO 18400-301 under development); How taking biodiversity into account in the management of contaminated sites; Post flood pollution management procedure. BRGM developed a glossary of contaminated site terms (in French, but with a proposal for equivalence in English in accordance with ISO 11074 which will be revised in 2023).
 - INERIS: Practical guide for the preparation and analysis of plants consumed by humans in the context of contaminated sites; Influencing factors of oral bioaccessibility for metal and metalloids in soils - State of the art - Characterization of soil physicochemical properties; Guidance document for chemical risk assessment for ecosystems.



SESSION 2 – TOWARDS A PROPOSAL FOR A EU SOIL HEALTH LAW

The proposal for an EU Soil Health Law is expected to get adopted before summer 2023. For keeping on providing support, feedback and new inputs to this process the session focused on looking out for

- ideas (and possible concerns) on "Soil Health" (... is it a deeply transformative concept?),
- anticipate common denominators with regard to "Soil Health Certificates" and the "Passport for excavated soils" as tools in managing contaminated land, and
- interfaces to "Circular Economy" or aspects of "Circularity".

As a result of discussions¹ it has been agreed to summarise workshop "findings" for conveying key messages (in particular referring to major societal challenges, like Biodiversity, Circular Economy, Climate Change Adaptation), and <u>to call on EC for using the SHL</u> as a new "window-of-opportunity"

- to instruct/develop common understanding and processes in contaminated land management,
 also as a new starting point to develop joint approaches and guidelines, and
 - to address diffuse pollution,
- to enable good interfaces to existing EU legislation,
 - based on identification (work by EC) of interfaces between different existing EU legislation and SHL proposal, consider legal adaptations through the SHL (articles) in order to:
 - (1) avoid overlapping legislations; (+ examples),
 - (2) rectify contradictory disposals (+ examples).
 - (3) complete legal gaps; (+ examples), and
 - (4) centralise soil concepts in the SHL to ensure coherence

SESSION 3 – NETWORK INITIATIVES – UPDATE AND DISCUSSIONS

Session 3-1 – EmConSoil network – activities and results of WG PFAS meeting - Johan CEENAEME

The EmConSoil Network of policy makers, industry consultants, scientists, civil society on contaminants of emerging concern and others was established in 2019. The goals and topics lead from knowledge sharing on emerging substances and their remediation, addressing policy challenges, gathering information, bringing together expertise (e.g. through webinars, working groups). Participation is free of charge and without obligation (registration form).

¹ See also results of the joint workshop with NICOLE (24/25 November 2022) as summarized through the joint "Athens statement" (20 December 2022).



Common Forum Autumn meeting 2022

23 November 2022 Athens, GREECE

Among others, several publications have been issued (e.g. "Challenges for emerging soil contaminant governance & policy") and 4 webinars on PFAS (links available on request) were held in autumn 2022.

One recent activity was an international PFAS workshop in October 2022 dealing with the questions on the social context, broader health issues, stakeholder involvement and communication.

Within the PFAS team at Common Forum a framework and working program (6th secretariat period 2022-2024) was proposed to be addressed within the PFAS team:

- needs: exchange of information/experience (inventory, investigation and remediation of soils (potentially) containing PFAS; reuse of soil and soil materials)
- topics: performing risk assessments for PFAS; remediation of PFAS-contaminated soils; investigation and approach for diffuse contamination of PFAS; trigger values for reuse of soil and soil materials; exchange with the PFAS working group of NICOLE
- shared leadership: **PFAS-team@COMMON.FORUM**
- meetings: every 3-4 months (next 22 March 2023, 9:30)
- document sharing platform

Future initiatives

- ENSOr 5 during Belgian Presidency of the EU spring 2024 (2-3 days)
- Possible cooperation with SOILveR
- Continuation of webinars EmConSoil and newsletters

Session 3-2 – Look differently, Think differently, Act differently. A paradigm shift to work out the EU Soil Strategy – Margot DE CLEEN & Co MOLENAAR

Introduction:

RIVM together with input from the knowledge network Dutch Soil Platform, made a study to determine building blocks for a long term holistic soil policy. The incentives comprised the need for societal and policy transformations (using ESS), the pressure on land and soil services, the connection of environmental policies with spatial planning and the development of EU soil policy and soil strategy as well as the lack of an holistic national soil policy.

The key points can be an input to the Common Forum WG Soil as a Resource and were discussed within the preparation for the enlarged Soil Expert Group (ESEG).

What has been discussed among others:

- Landscape scale would be preferred
- Zero passing on of negative effects to other compartments, countries and generations
- Human, ecological and physical risks should be incorporated into risks of soil degradation
- A paradigm shift towards sustainable use and management in addition to soil protection based on a broad perspective of welfare and wellbeing of peoples and planet



- Show the value of soil for society
- Define a long-term vision for good soil health and show long-term commitment (<10 years)
- Use **existing** districts and networks
- Be aware of the fact that degraded (contaminated) land may have value and can provide ESS

Paradigm shift:

From soil protection to healthy soils contributing to welfare, prosperity and environment – should be looked at in a holistic way. Soil is connected so SDGs – if the basis is not OK you can't have a healthy system and healthy society. Therefore, you have to look, think, act differently.

Look differently: realize that healthy soils are the basis for our welfare, wellbeing, prosperity and environment (zero passing on; Soil-Sediment-Water (SSW) system should be leading – how can it add to special values (climate adaptation, biodiversity etc.); long-term (LT) vision is needed, strategy what to do in shortterm; area approach on level landscape which gives more handling options; protection, sustainable use and more focus on restoration (also biological and physical); be aware of (the potential) value of degraded land.

Think differently: start with societal challenges; from sectorial way of looking at the challenge to integral, a more holistic way; SSW-system is basis for spatial planning and (re)development; new business model should acknowledge values of SSW-system; involve stakeholders: share LT responsibilities and benefits; share long-term knowledge and long-term financing/involvement.

Act differently: SSW-system should steer in decision making and spatial planning; co-creation with stakeholders in an early stage; connect urban and rural landscapes to get into a dialogue; business models based on contribution to welfare, prosperity and environment; process top-down (framework) and bottom-up (initiatives); upscaling of areas for multiple use.

Follow-up CF

How can you upgrade degraded land (welfare, prosperity, environment)? How can you bring stakeholders together? How to connect SSW-system with societal challenges = SDGs? How to reach a LT vision (financing, involvement, monitoring)? How can a balance be created?



NEXT CF MEETING

2023

- Spring 2023 Stockholm (Sweden), 31 May 2 June 2023
- Autumn 2023 (next step: call for candidates)



PARTICIPANTS

– –		
Tomás	Albergaria	Portugal
Christian	Andersen	Denmark
Joan	Bartoll	Spain/Catalonia
Núria	Boget	Spain/Catalonia
Johan	Ceenaeme	Belgium/Flanders
Margot	De Cleen	The Netherlands
Johan	De Fraye	NICOLE & Soil Mission, Board Member
Joerg	Frauenstein	Germany
Esther	Goidts	Belgium/Wallonia
Valérie	Guerin	France
Alexandra	Karpodini	Greece
Nina	Lehtosalo	Finland
Georgia	Mantzava	Greece
Nicolaas	Molenar	The Netherlands
Dietmar	Müller-Grabherr	Austria
Paul	Nathanail	Cabernet
Yvonne	Ohlsson	Sweden
Olav	Ojala	Estonia
Iraklis	Panagiotakis	Greece
Jussi	Reinikainen	Finland
Åsa	Valley	Sweden
Griet	Van Gestel	Belgium/Flanders
Petros	Varelidis	Greece
Martha	Wepner-Banko	Austria
Christiane	Wermeille	Switzerland
Kristina	Widenberg	Sweden

Note: Handouts of the presentations from this meeting are available for download at www.commonforum.eu