

## Cefic views on the Soil Monitoring and Resilience (Soil Monitoring Law) proposal

Sustainable use and protection of the soil environmental quality is a priority for the chemical industry. We recognise European soil as a valuable natural resource, and the need to maintain its quality. The chemical industry is committed to reducing its environmental impacts. It supports the European Green Deal and has taken its responsibility seriously by raising operational excellence standards to protect people and environment, for instance through Responsible Care®.

Soil and groundwater protection remains one of the chemical industry's highest priorities, along with prompt remediation measures in case of accidental spills or historic contamination. The industry applies the latest technologies and procedures to comply with European and national legislation frameworks. **Considering the various types of soil in Europe, their properties and functionalities, it is crucial to respect the subsidiarity principle.** National, regional and local perspectives need to be considered when addressing the issues of pollution and degradation. We appreciate that in the proposal the Member States are given a degree of flexibility for the implementation of this directive, e.g. for defining aspects of soil degradation (Annex I Part B) or soil districts (Article 4).

Cefic would like to share a few key considerations on the new Soil Monitoring Law proposal:

### Definitions (Art 3):

We welcome the **future harmonisation** of soil definitions, which today varies from one EU Member State to another. We consider that the definition of 'soil' in the proposal is very broad and it covers materials from land surface to bedrock, which could be tens (or more) metres thick, including sub-soils, regolith and other artificially deposited material that are naturally unlikely to have properties consistent with descriptors of 'healthy soil'. For this reason, we believe that the definition of soil should be aligned with ISO 11074 standard.

*Soil is the 'upper layer of the Earth's crust transformed by weathering and physical/chemical and biological processes and composed of mineral particles, organic matter, water, air, and living organisms organized in generic soil horizons'.*

In the present proposal, contaminated sites with a demonstrably unacceptable risk to humans and the environment are conceptually equated "*potentially contaminated sites*", meaning those sites for which such a risk is possible but not proven. Hence, both are defined as "*contaminated sites*". A corresponding distinction is urgently needed to differentiate the two and the definition of the soil contamination in the proposal needs to take into account if there is evidence that the substance poses an unacceptable risk to human health and environment.

Land, in general, has been altered by human activities over the last centuries and beyond. Locally, this led to the creation of “*artificial lands*” which are well defined in the proposal. It is impossible for this land-type to simultaneously achieve a healthy status and being fit for its purpose e.g. provide stability for installations or the protection from hazardous substances entering the soil. “*Artificial land*” should therefore be excluded from the objective to achieve healthy soils. If the conditions of artificial land are such that it poses an unacceptable risk to human health or the environment, it should fall within the scope of Chapter IV Contaminated sites.

Finally, we are concerned with the definition of ‘*healthy soil*’ in the Commission’s proposal as it lacks distinction between different soil and land uses (e.g. soil use for industrial activities, road construction, food production). We consider that the definition of healthy soil should incorporate the **land use** purpose of the soil. The risk-assessment and the ‘health’ designation should also take those different end uses of soil into account accordingly.

### **Assessment of soil health (Art 9)**

The definition of ‘*unhealthy soil*’ refers to the fact that if one of the criteria is not met the soil will automatically be considered as unhealthy based on a “*one-out-all-out-principle*” (as in the case with the assessment of the status of water bodies in the Water Framework Directive). Depending on the number of indicators applicable, it is challenging to comply with all those descriptors at the same time and the situation in which one descriptor is slightly exceeding the set value should not necessarily lead to the conclusion that soil is unable to provide given ecosystem services. Moreover, it will make it difficult to show progress over time on the status of soil health in a specific district, especially since some parameters respond slowly to changes in soil management. This is a well-known issue for the implementation of the Water Framework Directive that should not be repeated in the Soil Directive.

### **Voluntary soil certification (Art 9)**

We see no benefit of bureaucracy whilst introducing a soil health certification mechanism for land transactions, even though it is voluntarily. Already now, a buyer can request any kind of soil-related information from a seller if desired, including up-to-date information from soil investigations. Risks relating to possible soil contamination are regularly addressed in transaction contracts with proven and tested mechanisms like indemnifications. Although voluntary, such a soil-certification mechanism might become the norm and in turn lead to liability-allocation related constraints and delays of the process e.g. due to long-lasting planning of the investigations, sample analysis, data interpretation etc. In any case, the voluntary soil health certification might be used only as an informative tool for existing data. It should be ensured that such a certificate allows for transfer of sites that may not meet the definition of a ‘healthy’ soil without additional administrative burden for the land seller. The proposal should preserve the right to conduct commercial transactions, including the ability to pass on the management of potential future liabilities for soil and groundwater between the involved parties e.g. from a seller to another e.g. a buyer.

### **Risk based approach (Art 12)**

**Cefic supports the principles of a risk-based and sustainable risk management of industrial sites, and welcomes their inclusion in the Directive.** A risk-based approach consistent with how the land is used, or is planned to be used, according to its purpose should apply to soil investigation and remediation measures. This includes various types of interventions on soil with effects on physical and biological soil health. Such a purpose-oriented, risk-based approach would identify when there is an unacceptable risk to human

health and the environment, taking into account the land use purpose and would help to identify the appropriate and proportionate measures to prevent harm. This is of key importance to set the right priorities in a sustainable way.

The Commission should develop the outline/frame for a purpose-oriented, risk-based approach that the Member States could use to develop their respective risk-based approaches. The Expert Group on Soil from the Commission could have an instrumental role to help develop such a frame as well as to support and guide the implementation of the Soil Monitoring Law.

#### **Investigation of contaminated sites (Art 14)**

The proposal should ensure coherence between the national and EU legislation in order to avoid double requirements. For instance, the Industrial Emissions Directive already includes provisions for the industrial production sites on soil to ensure that this resource is fully protected, and that contamination is avoided during the life of the permit. These provisions include background information on the current state of the soil e.g. details on former activities and potential contamination. However, this only gives an indication of the current physical condition of the soil, but does not assess any risk that may be caused by any soil contamination. Hence, the data collected as required by the Industrial Emissions Directive (IED) could be usable for the monitoring requirements of the soil monitoring law.

We are concerned by the idea to introduce *'trigger events'* that could initiate a soil investigation if they are not a result of a risk-based assessment. Recital 45 of the proposal states that such a trigger event could, for instance, be the review of an environmental or building permit or a real estate transaction. Such events do not alter the risk situation of a site and would leave the impression that the mechanism of trigger events was merely introduced as a data producing exercise with little (or no) additional benefit beyond this. We believe that this cannot be the intention of it, especially since these trigger events are introduced in the context of potentially contaminated sites for which the proposal itself foresees a risk-based approach.

#### **Risk assessment and management of contaminated sites (Art 15)**

We see the role of the responsible competent authority to ensure that the risk assessment is appropriately performed and approve the assessment, rather than carrying out a site-specific assessment. As well as for other legislation, we consider that the companies should carry out the risk assessment as they have the best knowledge on the contaminants and details on the site development plans. For this reason, the site-specific risk assessments should be carried out by the liable party on the basis of the risk assessment methodology defined by the Member State in accordance with the polluter-pays principle.

#### **Register (Article 16)**

We are concerned that the Member States are requested to create a register of both *'contaminated sites'* and *'potentially contaminated sites'*. We consider that this register should be limited only to contaminated sites. Including a list that may have a potentially-contaminative use, but for which there is no evidence of contamination actually having occurred would create public concern and have a financial impact on owners of sites. We consider that the inclusion on a register should only occur after a site has been confirmed based on data to be *'contaminated'*. In addition, we consider that the sites should be removed once the remediation activities have been conducted.

#### **Soil descriptors, criteria for healthy soil condition, and land take and soil sealing indicators (Annex I)**

We consider that in Annex I part B, concerning soil contamination, the criteria for healthy soil condition should be clarified in order to connect to risk assessment methodology. The descriptor should be the outcome of the risk assessment which takes into account the purpose/land use of the soil (based on the methodology defined according to the Member State). This way a site-specific evaluation can be performed, and focus can be put on the relevant hotspots where risks cannot be excluded.

### **Methodology (Annexes II, part B)**

We appreciate that reference to methodologies are mentioned in Annex II for determining the values for the soil descriptors, land take and soil sealing indicators aiming to guide the Member States. We consider that *a new section D* should be included to add the reference methodology for contaminated soil investigation, risk assessment and remediation based on ISO standards, such as ISO 21365 (on conceptual site models for potentially contaminated sites), ISO 15800 (on characterisation of soil with respect to human exposure), ISO 15175 (on characterisation of contaminated soil related to groundwater protection), ISO 18400 (multiple parts) (on soil sampling), ISO15799 (ecotoxicological risk assessment), ISO 19204 (on ecological risk assessment), ASTM Standard E-1739 (Standard Guide for Risk-based corrective action at petroleum release sites), ASTM E2081-22 (Standard Guide for Risk-based corrective action) or ISO 18504 (sustainable remediation).

### **Indicative list of risk reduction measures (Annex V)**

We appreciate that the Commission has included an indicative list of potential remediation techniques in the proposal, which we consider it to be fairly comprehensive. In order to complement it, we recommend to modify the remediation techniques for the biological remediation techniques (point 1(b)(e)) in order to include Monitored natural attenuation (MNA) and Natural source zone depletion (NSZD). The reason behind is that MNA is the established term for the remediation technique, whereas 'natural attenuation' refers only to the physical, chemical or biological processes. NSZD is now an established remediation technique for light non-aqueous phase liquids (such as oil) sites, and should be included in this list. In addition, we would recommend to also include new and innovative techniques that are available on the market as these are constantly evolving and may contribute sustainable remediation. We consider that the 'Pump and treat of groundwater' should be moved from point 1(c) (c) to 1(a)(g). The reason behind is that this techniques is the physical abstraction of water followed by treatment that can be any combination of physical, biological or chemical. Most of these techniques use physical means (eg activated carbon sorption). Biological systems are often used, but chemical treatments are relatively rare.

With regards to the physical remediation techniques, we consider that the proposal should reflect limitations in disposal and incineration capacity within the EU and the need for a full environmental impact assessment of different remediation measures e.g. Greenhouse gas emissions of transport and high-temperature incineration of soils versus other soil management practices. Remediation should only be done using pragmatic and sustainable measures and techniques taking into consideration cross media impact in the environment.

### **Penalties**

Article 23 of the Soil Monitoring law proposal refers to turnover of the legal person or of the natural person having committed the violation. The amount of administrative fines should be proportionate to the nature and severity of the illegal conduct. Fines should take away the benefits of non-compliance without being excessive. **Turnover as a basis to calculate an administrative fine can lead to unfair results.** It is important

that penalties are designed in a way that encourages compliance, and that the level of such penalties remain proportionate to the nature and severity of violations.

Cefic looks forward to sharing its ideas and exploring potential policy solutions with the European Commission and stakeholders in due course.

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About Cefic

Cefic, the European Chemical Industry Council, founded in 1972, is the voice of large, medium and small chemical companies across Europe, which provide 1.2 million jobs and account for 15% of world chemicals production.