NORMAN WG-7 SOIL - Task 2 meeting
2025-05-23

Participants:

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Feedback to the JRC prioritisation scheme

Diana from JRC shared with NORMAN the draft prioritization scheme that will be used to select contaminants for inclusion in the list for soil monitoring of the SML.

The following summarises our discussions on the scheme. The notes will serve as an input for JRC to further refine the scheme.

Method availability

- Participants agree that it is essential to establish a category for substances currently lacking analytical methods. This is crucial to ensure that substances of concern are not overlooked due to the absence of available methods. However, the challenge is to determine the appropriate stage in the decision tree to address the question: "Does a (standard) analytical method exist?"
- With respect to the prioritisation scheme that was presented, Diana explained that the availability of analytical methods should not be used as a criterion to filter out a substance from the beginning of the process. This would not be useful to discriminate the compounds since the majority of the compounds would be allocated to this category (there are many substances for which standard analytical methods in soil are currently lacking).
- Raffaella suggested that the development of analytical methods would only be needed for substances for which we identify a concern. However, participants argued that the need to develop standards should not be dependent solely on the identification of a risk. For

example, a substance that is persistent or has widespread occurrence should also be considered for method development.
- Laetitia suggested that the question "Does a (standard) analytical method exist?" could come after the categorisation steps to determine whether a development of an analytical method is a priority or not.

Universe of substances / list of candidates
- Annegret asked for clarification about the input list of substances (blue box), which seems very large. She noted that the data seems extensive and hard to manage. Diana explained that the plan is to automatically retrieve information from other databases.
- Valeria suggested to start from NORMAN's suspect list exchange (SLE) for the list of substances. In the SLE, each list has a name, is curated and is retrievable. This could form the basis for a list of compounds to work on. NORMAN's SusDat is the result of the merging of all SLE lists and today contains about 120.000 substances (best proxy for the chemical universe). The NDS is designed to collect data for all compounds in SusDat for a large set of parameters (physico-chemical properties, ecotoxicity data, monitoring data, etc.)
- Diana confirmed the need to focus more on identifying which information should be retrieved and from where, whether from the NORMAN Database System or other databases. There could be support from JRC to develop the right scripts and tools for retrieving data.
- Matthieu commented that hence we should discuss more whether the info in the databases is relevant for the purpose.
- Laetitia endorsed this approach by suggesting that we should begin with the desired properties and criteria, and then proceed to search for the most suitable databases.

Decision tree / data / multiple lines of evidence
- Peter questioned why we are starting from scratch instead of aligning more closely with the prioritization scheme developed in NORMAN for water. He suggested beginning with the desired action categories and then developing the scheme from there.
    - Valeria mentioned that the NORMAN scheme was developed for application to the water domain where monitoring data are available for many substances. With soil we are in a data poor situation so a certain adaptation of the original NORMAN prioritisation scheme will probably be needed.
- Matthieu pointed out that the absence of monitoring data should not prevent us from developing and considering other types of information. He recommended adopting a multiple lines of evidence approach.
- In line with this, Raffaella suggested that to compensate for the lack of soil monitoring data, we should not limit ourselves to soil. Instead, we should also utilize monitoring data available from other media, such as (ground)water and air.
    - Diana warned that we also know that some substances just pass through soil while others are adsorbed so strongly to soil that they are not detected in groundwater.
    - Laetitia suggested to use multiple line of evidence, each with their weight if some have more uncertainty. E.g. soil monitoring data gets a higher score, water monitoring data + likelihood to be in soil, based on phys-chem properties, will have another weight.

Protection goals

- It's clear that with soil different protection goals can be defined: human via food, soil biota, groundwater and drinking water resources, … Raffaella asked whether we should not develop sub-prioritisation schemes for different protection goals.
- Annegret recalled that our aim is to give advice to decision-makers / managers on where measurement should take place and this depends on the protection goals.
- Sandrine mentioned that for our objectives both the mobility and persistency of the substances are important.
- The prioritization scheme presented by JRC is organised in two levels: data 1 and data 2. Diana explained that her intention was that data 1 would represent the limiting factor.
    - The meaning of Data 1 and Data 2 at 2 different levels was not well understood by the participants
    - Valeria mentioned that in a decision tree we need to have yes/no questions at each "decision point".
    - Diana: will check data 1 and data 2 and will make some improvement in a revised version.
- Laetitia remarked on the challenges of scoring by risk, since this is difficult to estimate the risk when many data are missing.
    - Diana clarified that the focus is on hazard, and risk would only be considered when feasible. Laetitia therefore suggested to have this in a prioritisation step, rather than a categorization step.
    - Valeria mentioned that a watch list aims at getting more information, i.e. enrich your dataset. If you have evidence of a risk, you need to take remediation action. In that case, monitoring becomes a tool to follow up your actions.
    - Matthieu suggests that the protection goal could come at end of the risk section. Based on what you've monitored etc. you can set protection goals per land use, scale, etc.
        - Diana: this is the local adjustment. Setting goals per land use is difficult because this is not for forever.
        - Matthieu reacted that it's difficult to evaluate the risk without consideration of the land use.
        - Pia says that land use is already implemented in the regulation of chemicals already. Another idea would be to add a correction factor when vulnerable habitats occur (Natura 2000). Probably this would make it too complicated for this exercise here.
        - Annegret mentioned that you'll need different thresholds anyway for risk evaluation.
        - Diana says that in guideline suggestion we can suggest representative sampling for land use. X % of sampling in agricultural land
- Matthieu mentioned that it's important that we do a quality assessment on the data that goes into Data 2. If we move outside regulatory data, we need to have an assessment and scoring to reflect the quality of the data.
- Xenia mentions that the purpose of monitoring is to focus on diffuse pollution. Sampling guidelines should have this focus too. If you sample to protect terrestrial organism, food or groundwater - you might have different guidelines. This needs to be clarified at some point.
    - Diana clarified that we'll only sample topsoil- nothing else
    - Xenia says that it would be sad if we don't take the biota samples too in this SML; also sampling of soil gas would be important for contaminated areas.

- Xenia mentioned that all elements are in the tree. We now need to have a multi-criteria approach (and not a simple decision tree). Give more even balance from some properties or info (eg volumes).

Way forward?
Diana will work on a comparable scheme

Next meeting? End of June