

DECISION AND LEGISLATION SUPPORT

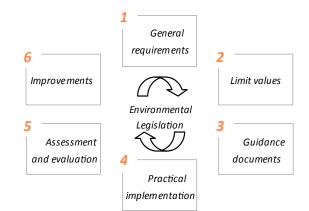
Guidance documents • Methodology for developing environmental quality criteria • Decision support on testing framework • Waste and soil

Environmental legislation is increasingly inter-related, reflecting the objective of promoting sustainable development and the approach of protecting the environment. Decision and legislation support can help strike the balance between the need for a high level of environmental protection and an appropriate level of regulation (for example, to ensure proper functioning of the internal market). We have assisted both national and European Union authorities with their development of environmental legislation.

SOUND KNOWLEDGE OF ENVIRONMENTAL LEGISLATION

We've provided technical support for the development of criteria for landfilling and utilisation of waste and soil within the European Union (EU) and Nordic countries.

Furthermore, we participate in the development and standardisation (CEN and ISO) of leaching tests applied to waste, soil and products in regulatory systems within the EU.



Our sound knowledge of EU waste legislation and relevant legislation on products enables us to provide you with expert assistance and technical support. We can offer input during law drafting and facilitate the co-operation and coordination between involved stakeholders and authorities. Our services include:

- development of guidance documents for the practical implementation of environmental legislation and capacity building
- · development of methodologies for setting of environmental quality criteria
- assistance with establishing environmental quality criteria and drafting of technical aspects in environmental legislations
- consequence analysis of environmental legislation
- · development of testing and documentation frameworks

SUMMARY

CLIENT

- Authorities at the national, regional or local level
- Private sector
- · Consultants and contractors

CHALLENGE

Need to:

- develop environmental quality criteria that effectively ensure protection of the environment and human health
- interpret requirements set in environmental legislation
- implement environmental legislations in practice

SOLUTION

- Methodology for the development/ establishment of environmental quality criteria
- Development of testing frameworks and guidance documents
- · Capacity building
- Evaluation of the consequences of implementation of environmental legislation

VALUE

- Effective and legally compliant implementation of environmental legislations
- Increased protection of the environment and human health by the development of environmental standards and compliance with quality criteria
- · Reduced costs in practice for stakeholders



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DEVELOPING LIMIT VALUES

We have extensive experience in the development of environmental standards that are based on content (for example, the maximum content of dangerous substances) and the leaching of substances (for example, to protect groundwater, surface water and soil).

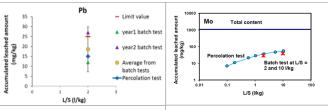
For instance, we've carried out a series of studies to develop a framework for the reuse of slightly polluted soil based on solid content and the leaching of contaminants, respectively.



The concept of risk/impact illustrated as a chain of events. For a risk or impact to occur, the chain must remain unbroken, and an undesired effect must occur at the receptor.

We've also been actively involved in the development of a methodology used to establish EU waste acceptance criteria for landfilling. This methodology is based on a step-wise procedure to develop leaching limit values that rely on the coupling of three consecutive source and transport models. Applying this methodology and the underlying principles of risk assessment, we can assist you in the development of specific limit values for your application. To do this, we take into account your specific needs with respect to:

- · environmental protection
- · field of application
- · material of interest



Evaluating the conformity to acceptance criteria based on the assessment of individual test results and their average

Results of percolation and batch leaching tests on a waste material as a function of L/S

ASSISTANCE AND SUPPORT ON TECHNICAL ISSUES

We provide expert assistance and technical support with the development of guidance documents on the implementation of environmental legislations (for example, with respect to the utilisation and landfilling of waste).

These guidance documents are typically addressed to stakeholders or authorities and explain how to implement legislations and the reasoning behind limit values, as well as parameter and method choices. Issues to be addressed in a guidance manual may include:

 sampling: how to understand requirements on the quality of sampling and how to put it into practice

- suitability of test methods: reasoning for setting limit values and guidance on test methods
- suggestions for and explanation of the statistical interpretation of limit values

As part of our guidance work, we offer training courses and workshops on specialised topics that facilitate the cooperation and coordination between involved stakeholders and authorities

CONSEQUENTIAL ANALYSIS

We have a very good understanding of EU waste legislations, relevant legislations on products, and the integration of legislations between sectors.

Thus, we can guide you in the process of drafting legislations, choosing test methods, defining parameters and limit values in order to ensure coherence. This also helps achieve a level of harmony with related legislations, suitability of methods, avoidance of unnecessary testing and sufficient environmental protection levels. At DHI, we also conduct analyses of the potential consequences of environmental legislations. These include the following questions:

- How will new or revised limit values affect for example the amount of waste recycled?
- Does the capacity of waste infrastructure match the amount of waste generated?
- What requirements or restrictions ensure a high level of environmental protection?
- · How will restrictions affect the stakeholders?

CUSTOMISED SOLUTIONS FOR DIFFERENT SECTORS AND MATERIALS

Our services are targeted at a variety of materials, including:

- · incineration and treatment residues
- · polluted soil
- · construction and demolition waste
- · mining waste and aggregates

We provide solutions customised to your needs – for example, with respect to recycling and utilisation of waste and soil, landfilling of waste, as well as establishment of 'end-of-waste' criteria.







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