Contaminated soils in the Netherlands: a change in perspective

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The dutch approach towards contaminated soils has changed over the last three decennia. In the eighties a few cases of serious contamination with industrial chemicals in soils had a large impact on the public awareness. It was considered necessary to clean-up to a level where a broad spectrum of soil uses would be possible, in other words: up to the multifunctional level. In this period of time, soil clean-up was thought to be feasible for the Netherlands in a rather short timeframe of several years. However, it became apparent that soil contamination was not limited to a few cases. Programs started for remediation of soil at tank stations, underground storage tanks and a lot of individual rather small sites. It became clear that the number of sites was in the order of tens of thousands. Over the years, contaminated soil became more and more an accepted issue. Contaminated soil was not considered that dangerous anymore, a rational and more pragmatic approach was introduced. The soil policy letter of the government in 2003 marked this change. Soil use and soil function became leading principles. A risk based approach with the adagium 'rationally coping with risks' was at the basis. Soil quality was considered more than chemistry: biological and physical aspects were considered of equal importance. And responsibilities for soil dealing with contaminated soils were transferred from the national level to the local scale of municipalities.

This 'fit for use' approach is reflected in the standard setting for slightly and seriously contaminated soils, as illustrated in figure 1.1.

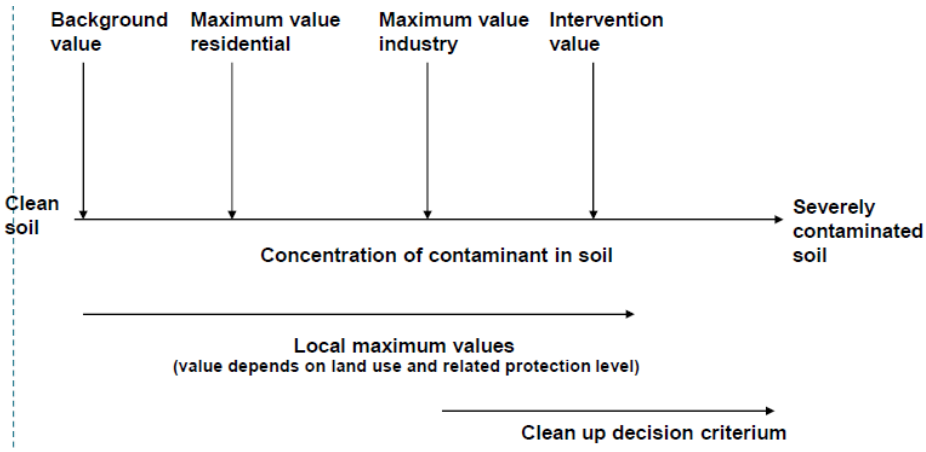

Figure 1.1. Dutch soil quality standards (Wezenbeek, 2007)

The advantages of soil remediation are still recongnized and considered worth paying for. In 2007 a societal cost benefit analysis for soil remediation options was performed and it showed the benefits for human health, the drinking-water supply, housing, perceptions and the ecosystem. It is anticipated that the large clean-up operation that started in the eighties will be mostly finished at around 2015. From than onwards clean-up activities are expected to be limited, mostly in combination with infrastructural works or spatial development projects.

Soil contamination is not considered an isolated policy issue anymore with separate legislation. It is one of the issues to be dealt with in broader decision making processes, as illustrated by recent developments in legislation. Sectoral legislation (like the Soil Protection Act) gets integrated with legislation for water and other environment issues.

The presentation will deal with the change in perspective over the years, illustrated by examples of soil management and soil remediation in over time, considering the regulatory context.

References

Wezenbeek, J. (2007). Know the quality of your soil or aquatic sediment: clarifying the risks. Senternovem publication reference 3BODMO704