

Soil contamination



If we ask what the ground is, most people will say that it is the upper layer of the Earth's crust, which is what it is. However, only a few people would be able to explain more and answer questions like: What is soil contamination? Why is it important to protect the soil? It is necessary to reflect more to be able to answer these questions and be aware of the importance of clean and healthy soil.

Without soil there would be no life. The ground performs some of the essential functions for the survival of terrestrial and aquatic ecosystems. Soil is the home of animals, plants and microorganisms. It forms part of the natural cycles that regulate the balance of the ecosystems. It also protects the penetration of harmful substances in subterranean and superficial waters. The ground functions as a support for economic and social development. It produces food and biomass. It offers raw materials necessary for the development of production. It is the base of the infrastructures where human activity is developed. And, it is an element of the landscape and cultural heritage.

Often, the use of the land for social and economic development is incompatible with the conservation of its natural functions and the correct function of the ecosystems. Industrial activity releases polluting substances which contaminate soil. In European countries, the number of soils potentially contaminated by industry is over 2 million. In the Basque Country, industrial activity has left a legacy of 8.585 contaminated or potentially contaminated sites. These sites are distributed over the territory, although they tend to be more in past or present areas of industrial activity: Bilbao Metropolitan (32,5%), San Sebastian (29%) and Álava Central (13%). Their recuperation would cost 1.800 million Euros, but it would bring about important benefits associated with the recovery and reuse of contaminated soils.

The contamination of soil can damage our health, deteriorate our ecosystems, reduce the economic value of the land and affect the quality of the landscape. This is the reason why, soil protection against contamination has been present in Basque environmental politics over the last few years. In 1994, the Basque Government drew up a Master Plan for soil. Many steps have been taken since then to reduce the potential dangers of soil contamination.

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If you want to read the whole article access:
http://www.naider.com/ateneo/articulo_blog.asp?id=303





Instructions

Read the text carefully and write schematic notes about the effect of human intervention. Think about... where humans interfered, modified or what other biotic and abiotic components were altered by their actions. These sentences will help you.

When we talk about soil pollution we usually think of superficial rubbish, cans, papers etc. After reading this article you now know that this is just the visible part of the problem. Nowadays, soil contamination is more and more in the spotlight of environmental management. This is mainly due to the risk soil contamination poses for human health and the correct functioning of the ecosystems. The formation of a layer of 30 cm of soil can last for 1.000 to 10.000 years. We should consider soil as a non-renewable resource in need of protection.

- How do you think unlimited waste dumping affects industrial estates and urban areas?
- What do you think would happen if there were no limits on the use of pesticides?
- What about burying our waste out of sight, instead of treating it?

