

# PHYTOREMEDIATION OF SOIL POLLUTED WITH LANDFILL LEACHATES

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## **Abstract**

Contaminated soils can be treated in various ways, including incineration, solvent extraction, thermal treatment or chemical oxidation. These methods are usually, however, expensive and generate secondary pollution. A sustainable solution proposed for soil cleaning is phytoremediation. It is a technology using plants as purifying agents for soil and water systems remediation. The cleanup process is realized according to various mechanisms, e.g. phytoextraction, phytovolatilization, phytostabilization or rhizofiltration. Results of investigations reveal that phytoremediation is an attractive treatment technology when the removal from soil of heavy metals, hydrocarbons or pharmaceuticals is concerned. In this work, emphasis is put on treatment of soil polluted with landfill leachates. Beside the development in waste management practices, landfill leachates still pose a huge environmental and technological problem to be coped with. This problem is addressed by the Pilot Case realized in Gdańsk Municipal Waste Treatment Facility within a framework of Baltic Phytoremediation project. During the presentation, basic concepts of phytoremediation technique in the perspective of landfill leachates management will be discussed.

**Keywords:** Phytoremediation, soil treatment, landfill leachates