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PROJECT FUNDED BY WALOON REGION – GREENWIN

Treatment MEthodology and MOnitoring for sequenced Reallocation of severely polluted Industrial Sites (MEMORIS) :

A combination of innovative technologies

MEMORIS PROJECT

Currently

Polluted site in Wallonia

- Many abandonded polluted sites → reallocation necessary for the economic redeployment of the region
- Severe mixed pollution (organic et inorganic compounds)
- Treatment : Excavation, transport and storage in CET

Issues

- Big surfaces → Too expensives
- Excavation and transport → risk for population
- Excavation of the superficial area → Groudwater problem and migration of pollutants

MEMORIS advantages

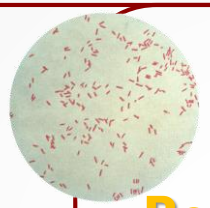
✓ In situ treatment limiting excavation
✓ Cheaper and safer
✓ Deeper pollution

Purpose : Clean up a fallow industrial area (Coking) with severe mixed pollution

Innovation : Attempt a sequential depollution with *in situ* methods for faster rehabilitation

4 AXIS OF THE PROJECT

Biostimulation by microorganisms

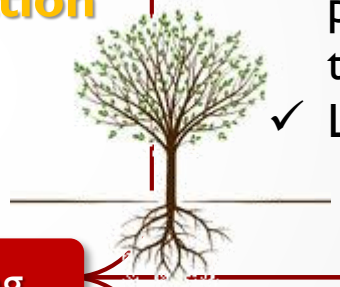


- ✓ In situ stimulation by temperature elevation
- ✓ Transfert of degradation products in effluents to vegetative unit

Phytoremediation

- ✓ In situ phytostabilization and phytoextraction in effluents to finish the degradation
- ✓ Landscape improvement

Remediation



Coupling

Hydro-geophysic methods

- ✓ Intallation of the floor heating device
- ✓ Continuous monitoring of contamination evolution and temperature fields

Monitoring

Bioindicators use

- ✓ Invertebrate models (snails and earthworms)
- ✓ Predictive biomarkers of toxic effects
- ✓ Sanitary risk

Thank you for your attention

MEMORIS PROJECT

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