

# Bioremediation

*Bioremediation is a means to cleanup brownfields and toxic chemical spills, as well as cleaning grey and black water for reuse in a green home. Dealing with everything as simple as daily waste water to cleaning up industrial sites, there are various forms of bio-remediation that utilize different natural methods to revitalize ecosystems and water.*

*Mycotechnology and mycoremediation uses mushroom mats, spores, and root systems that function as natural filters, eating chemicals and toxic substances, and in turn neutralizing and inoculating contaminated sites.*

*Additional forms of bioremediation can be classified as “dry” and “wet”. Due to the overuse of fresh potable water for human waste, there is a major shortage of fresh water and a continued depletion of natural aquifers. Instead of using fresh water for the disposal of human waste, “dry” remediation is a composting system that uses sawdust and dry carbon plant materials to decompose the waste, creating natural bacteria that raises the temperature over 200 degrees, successfully killing the pathogens and generating pure, organic Earth-friendly fertilizer.*

*“Wet” bioremediation includes pond remediation and biocell installation. Pond remediation use snails, algae, and lotus flowers to naturally draw the chemicals out. Biocells use effective reservoirs in the sand and gravel rock layers underneath a planter. The roots of the plants perceive grey and black water as a source of food, drinking the nutrients and putting oxygen back to the water. When the water comes out of the biocell, it is free of bacteria and reusable. It can be filtered even further with micron, carbon, or UV filters.*

*Using mycoremediation to clean up chemical spills, “dry” bioremediation for composting, and “wet” bioremediation to process waste water, can effectively bypass chlorine and chemicals to process our waste water and naturally detoxify our ecosystems.*