

# Phytotechnologies

Introduction of phytoplankton to a contaminated site for the biotic degradation of the contaminant.

## [1,4 Dioxane \(14DX-1\)](#)

### **Section 6 (Remediation Technologies)**

Describes remediation and treatment of 1,4-Dioxane, including the use of phytotechnologies.

## [1,4 Dioxane \(14DX-1\)](#)

### **Section 6.3.1.4 (Phytoremediation)**

Use of phytoremediation as a treatment of 1,4-dioxane in unsaturated and saturated soil matrix.

## [Making the Case for Ecological Enhancements \(EC0-1\)](#)

### **Section 2.3 (Using Natural Remediation as a Cleanup Technology)**

Discusses the pros of using natural remediation, including phytotechnologies, as a cleanup technology.

## [Making the Case for Ecological Enhancements \(EC0-1\)](#)

[Appendix D](#), see specifically [4-6](#), [9-11](#), [30](#), [32](#).

Case Studies of uses of phytotechnologies as remediation.

## [Planning and Promoting Ecological Land Reuse of Remediated Sites \(EC0-2\)](#)

### **Section 2.1 (Using Natural or Ecological Enhancements as a Cleanup Technology)**

Discusses phytotechnology as a natural remediation technology including the pros and cons of implementation.

## [Planning and Promoting Ecological Land Reuse of Remediated Sites \(EC0-2\)](#)

### **Section 2.2 (Natural or Green Remediation Strategies)**

A short description of various natural/green remediation strategies, including phytotechnologies.

## [Planning and Promoting Ecological Land Reuse of Remediated Sites\(EC0-2\)](#)

### **Appendix C-2**

A case study on the implementation of phytotechnology as remediation of a former industrial site in Chattanooga, TN.

### [Mining Waste \(MW-1\)](#)

#### [Phytotechnologies Page](#)

A summary of phytotechnologies and their applicability and use in treating mining waste.

### [MTBE and Other Fuel Oxygenates \(MTBE-1\)](#)

#### **Section 4.5 (Phytoremediation), pages 73-76**

Outlines use of phytoremediation on MTBE-affected groundwater.

### [Phytotechnologies \(PHYT0-3\)](#)

This document provides a broad overview of phytotechnologies, their implementation as remediation strategies, and the regulatory, cost, and efficacy considerations of their use.

[Table 1-3](#): A summary table of phytotechnology mechanisms.

[Section 1.2](#): Describes the physiological processes that are the basis of phytoremediation.

[Section 1.4](#): Advantages and limitations of phytotechnologies.

[Table 2-2](#): Checklist of deliverables by phytoremediation project phase

[Table 2-4](#): Site assessment information specific for phytotechnologies.

[Section 2.3](#): Phytotechnological remedy selection based on site characterization.

[Figure 2-1](#): Plant species screening process flow chart for phytotechnology selection.

[Figure 2-2](#): Phytotechnology remedy selection decision tree.

[Section 2.4](#): Design and implementation of phytoremediation treatments.

[Section 2.5](#): Operation, maintenance, and monitoring of phytotechnologies after implementation.