

BENEFICIAL EFFECTS OF VEGETATION IN NITROGEN-CONTAMINATED SOIL AND WATER

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Abstract

This work will review available information on the science and engineering associated with plants that are being used at nitrogen-contaminated sites. Phytoremediation may be viewed as an inexpensive method to address high nitrogen concentrations in soil and water. Most problems occur because of high concentrations of nitrate and/or ammonium; both of these forms of nitrogen will be included in the review. The chemistry of nitrogen transformations when plants are grown at nitrogen-contaminated sites will be reviewed. Fate and transport of nitrogen compounds and information on inhibition at high concentrations will be included.

Key words: nitrogen-contaminated sites, fate and transport, phytoremediation