

Malachowska-Jutsz, A., Janosz, W., Rudek, J. Toxicity of Engine Oil Contaminated Soil Made Subject to Natural Attenuation and Phytoremediation. *Ochrona Srodowiska* 2012, Vol. 34, No. 1, pp. 15–20.

Abstract: Soil samples contaminated with spent engine oil were tested for toxicity during natural attenuation and phytodegradation processes involving earthworms (*Eisenia fetida*) and white clover (*Trifolium repens*) as test organisms. Although the toxicity of the soil towards the test organisms was found to decrease with the progress of either process, the soil samples treated in the natural attenuation process were characterized by higher toxicity levels. The test animals were more responsive to the xenobiotic introduced into the soil than the test plants. The roots of the plants showed a more sensitive reaction to the presence of the contaminant than did their stalks. According to the Reproduction Test, the number of hatched juvenile earthworms is the most sensitive toxicity index.

Keywords: Spent engine oil, toxicity, bioremediation, earthworm, plants.