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## **CASE STUDY OF LANDFILL RECLAMATION AT CZECH LANDFILL SITE**

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### **Abstract**

The landfill reclamation project took place in the period from 2008 to 2009. Forestry reclamation was carried out in 2009. The aim of this project was to establish the growth of particular plant species, quantify plant species survival and changes in species properties over time. A phased approach was utilized to evaluate the technical and economic feasibility of the reclamation project; based on the results of these evaluations, in 2011 approximately 90 % of plant species survived during the first phase of landfill reclamation. The composition of wood species selected for the plantation can be evaluated as appropriate. The success is determined by the selection of wood species and the care that was taken of the seedlings after the plantation (frequent watering in the first months after plantation and also regular pruning, as a part of the mowing process; less prosperous seedling trees were hoed). This paper presents the researchers' landfill reclamation project experience, including an estimation of reclamation rates achieved during the project, project costs and estimated composition of the reclaimed materials. It is expected that a similar composition of wood species will be used for reclamation of the second phase of the landfill body. Only with regard to species *Juniperus communis* it is advisable to replace it with another species, due to lower rooting success (42 % in 2010 and 37.3 % in 2011).

*Key words:* landfill reclamation, municipal waste, municipal solid wastes, reclamation, revegetation

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