Grodno Integrated Solid Waste Management Project: Assessment of Landfill Gas Recovery Potential (Belarus)



Client:

The World Bank in co-operation with the Government of Belarus Ministry of Housing and Utilities

<u>Period:</u> 2009

Narrative description of project:

The City of Grodno through the Government of Belarus has sought World Bank financial support for implementation of an Integrated Solid Waste Management Project. Development of this ISWM Project entails the development of a municipal solid waste materials recovery facility at the existing landfill and the evaluation of that landfill site for their potential to economically collection and treatment of landfill gas.

The first assessment should evaluate the landfill gas recovery potential by estimating landfill gas production potential and identifying main options for gas usage.

Consultancy work evaluates and makes recommendations to improve current landfill operational practices in order to optimize the landfill gas generation rate and maximize the potential landfill gas capture rate.

A further objective is to predict the theoretical annual landfill gas yield with a computer based model taking into consideration the specific site conditions and parameters. Identification and consideration of potential gas utilization options like flaring, electrical power generation for grid connection or the potential direct use by nearby heat and energy consumers is another objective of this project.



The expert of INTECUS is assigned with the assessment of all the above mentioned factors to achieve a most effective landfill gas recovery system at the existing landfill site and shall give recommendation about potential landfill gas utilization. Part of the assignment is also to give recommendations to improve recycling activities.





