### **Accepted Manuscript**

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PII: S1512-1887(17)30020-9

DOI: 10.1016/j.aasci.2017.02.009

Reference: AASCI 87

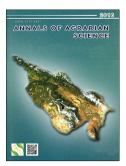
To appear in: Annals of Agrarian Sciences

Received Date: 10 June 2016

Accepted Date: 7 September 2016

Please cite this article as: N. Makarenko, O. Budak, Waste management in Ukraine: Municipal solid waste landfills and their impact on rural areas, *Annals of Agrarian Sciences* (2017), doi: 10.1016/j.aasci.2017.02.009.

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#### ACCEPTED MANUSCRIPT

Annals of Agrarian Science vol. 15, no.1, 2017

# Waste management in Ukraine: municipal solid waste landfills and their impact on rural areas

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#### ABSTRACT

The article presents the results of a study of the influence of Myronivka municipal solid waste landfill in the surrounding rural areas. It is established that environmentally hazardous situation has generated in the locations of the landfills causes dissatisfaction among the local population. It is shown that incorrect use may be the cause of the deterioration of quality of drinking water, atmospheric air, sanitary and hygienic condition of agricultural soils. It is established that the effect of the landfill extends beyond the sanitary protection zone, therefore there is a need to improve its monitoring system with obligatory consideration of impacts on adjacent rural areas. The size of the normative sanitary-protective zone was specified under the actual level of air pollution and natural factors. It is shown that such a scientific and methodical approach can provide a more objective establishment of the sanitary protection zone. In turn, this will provide an opportunity to take appropriate organizational and managerial decisions on the placement of different objects and prevent the negative impact of landfills on rural areas.

**Keywords:** municipal solid waste landfills, rural areas, sanitary protection area, hazardous substances, phytotoxicity of soil, environmental monitoring.

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#### Introduction

In the resolution of the United Nations General Assembly (UNGA) "The Future we want" of June 27, 2012 a weighty place is given to the struggle against waste [1]. In Ukraine the problem of waste management is extremely urgent. According to official data [2] Ukraine produces about 45 million m3 of waste annually, which is buried on 6.7 thousand dumps and landfills with a total area of more than 10 hectares. Footprint of municipal solid waste landfills is up to over 1000 ha in some regions of Ukraine (Fig. 1).

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