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Prof. Dr Snežana Šerbula

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IS THERE A NEED TO INFORM CITIZENS MORE DIRECTLY ABOUT THE HANDLING OF HOUSEHOLD HAZARDOUS WASTE?

DA LI POSTOJI POTREBA DA SE GRAĐANI DIREKTNIJE INFORMIŠU O NAČINU POSTUPANJA SA OPASNIM OTPADOM IZ DOMAĆINSTVA?

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Abstract

Municipal solid waste (MSW) is a part of overall solid waste which is generated in human society, besides commercial and industrial waste. Depending on the dangerous characteristics affecting human health and the environment, it can be inert, non-hazardous and hazardous. Subcategory of waste, which represents over 66% of MSW is household waste, generated from domestic source. Around 1% of household waste is defined as household hazardous waste (HHW).

There are several definitions of household hazardous waste, depending on legislation of different countries. A comprehensive definition is given by the UK National Household Hazardous Waste Forum (NHHWF): “any material discarded by a household, which is difficult to dispose of, or which puts human health or the environment at risk because of its chemical or biological nature”. HHW is a heterogeneous waste group with flammable, corrosive, reactive, caustic, and toxic characteristics. Quantity and type of HHW generating on source depends on average standard of living. Citizens in everyday life are not completely and directly informed about the handling of their waste. The aim of this study is to emphasize the need to inform citizens more closely about the characteristics of HHW and how improper waste management can affect their health, habitation, and wider environment.

A review of the legislation in the field of solid and hazardous waste management in Republic of Serbia (RS) was carried out, as well as local waste management plans for major cities in RS. These are public documents available online at Environmental Protection Agency (Serbia) website. Local waste management plans for city of Belgrade, Novi Sad and Nis for period from 2011 to 2020 were used. Attention was focused on HHW in which manner it was accorded to overall municipal solid waste.

Local waste management plan for city of Belgrade laid out the most precise selection of special waste streams whose some components are and household hazardous wastes. Recycling yards are in the plan for HHW collection sites besides bulky waste, construction

waste from households (<1m³) and useful components of municipal waste (paper, glass, plastic, metal waste). Mainly components of HHW are: paints (latex and oil-based), flammable liquids and solids (ex. gasoline, paint thinner), automotive oil, filters, and antifreeze, poisonous materials (insecticides, herbicides), corrosive materials (ex. household cleaners), mercury containing materials (fluorescent lights, thermometers), compressed gases (ex. propane), batteries (lead-acid, cadmium, lithium and alkaline), oxidizing substances (ex. household cleaners, polishes), aerosols in line with its mass share in HHW stream. Local waste management plan for city of Novi Sad and Nis also rely on special waste streams when point to HHW. Waste is classified according to the waste catalog in which within number 20 is listed municipal solid waste including HHW.

Unambiguous identification for HHW is required so that the citizens could adequately manage with the aforementioned waste. Considering that HHW can cause health issues to citizens according to its nature and can cause local environmental damage, it would be of great importance to publish a manual referred to HHW handling and identification, designed for domestic use.

Keywords: household hazardous waste, hazardous waste management, domestic waste handling

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