Kuklis, I., Mazurek, I., Jagustyn, B. Classification Parameters of Solid Recovered Fuels Manufactured from Municipal Sewage Sludge. ***Ochrona Srodowiska*** **2014, Vol. 36, No. 4, pp. 51–56.**

Abstract: Requirements for solid fuels (SRF) are detailed in the norm PN-EN 15359:2012 'Solid recovered fuels – Specifications and classes' developed by the European Committee for Standardization. The norm specifies the rules of fuel classification and their physicochemical parameters. The key classification parameters of solid recovered fuels include net calorific value, chlorine and mercury content. In the study, particular attention was paid to the discussion of physicochemical properties and directions for use of municipal sewage sludge as a potential solid fuel or its secondary component. Also, the results of biomass content determination in sewage sludge as a potential fuel were presented. The purpose was to assess their biodegradability, considering potential classification of biomass energy as renewable energy. The comparative analysis demonstrated that the municipal sewage sludge was characterized by the relatively low net calorific value and chlorine content compared to other alternative fuels. At the same time, it exhibited higher levels of mercury. The studies indicated that the biodegradable fraction (biomass) content in sewage sludge might reach 96% of the ash-free dry mass. That value is close to the biodegradable fraction content of a typical solid biofuel.

Keywords: Sewage sludge, fuels, classification, biomass, chlorine, mercury.