

Sowka, I. Assessing the Olfactory Impact of a Sugar Factory: A Case Study. *Ochrona Srodowiska* 2011, Vol. 33, No. 1, pp. 31–34.

Abstract: To determine the range of exposure to odor annoyance, use was made of dynamic olfactometry, an indicator model and the Pasquill model. Odor concentrations in the gases were measured with a dynamic olfactometer in compliance with the EN 13275 Standard. Based on the measured values of odor concentrations and gas streams, the values of odorous emissions were determined. It was found that more than 99% of total odor emission came from point sources. The results of calculations performed with the indicator model show that the entire area subjected to model investigations was exposed to odor emissions at varying degree of wind velocity. Similar results were obtained from the calculations of maximal odor concentrations when use was made of the Pasquill model. The results obtained with the indicator model, as well as those achieved with the Pasquill model, made it possible to highlight the most significant contributing source in the deterioration of air quality in the vicinity of the industrial object being examined.

Keywords: Odour nuisance, odour concentration, odour emission, indicator model, Pasquill model.