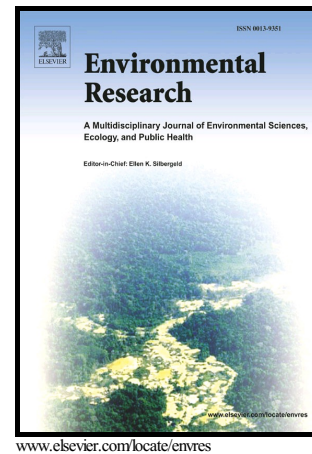


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**Full-scale composting of sewage sludge and market waste: Stability monitoring  
and odor dispersion modeling**

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**Abstract**

The aim of this study was to assess the odor immission derived from full-scale composting of different abundant and highly pollutant organic waste: sewage sludge with bulking agent (SL), sewage sludge pretreated through anaerobic digestion and supplemented with bulking agent (SL-AD), and market waste with olive leaves (MW-OL). The combination of dynamic olfactometry and Gaussian dispersion modeling allowed both the quantification of odor emissions from each waste and the evaluation of their global odorous impact in nearby urban areas. Wind speed, summer and winter seasons, and atmospheric conditions were considered in the dispersion model. The results revealed that high wind speed (2.6 m/s) increases the global odor immission in summer season, independently of atmospheric stability. However, the maximum odor

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