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Cécile Le Guern, Béatrice Bechet, Alexandra Lepinay, Pierre Conil

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## *Dynamics of emerging organic pollutants from a municipal landfill*

**Cécile LE GUERN<sup>1,4</sup>, Béatrice BECHET<sup>2,4</sup>, Alexandra LEPINAY<sup>3</sup>, Pierre CONIL<sup>1,4</sup>**

<sup>1</sup> BRGM, Direction Régionale des Pays de la Loire - 1 rue des Saumonières, 44000 Nantes – [c.leguern@brgm.fr](mailto:c.leguern@brgm.fr)

<sup>2</sup> IFSTTAR Nantes, LEE/GERS - Route de Bouaye, CS4, 44344 Bouguenais – [beatrice.bechet@ifsttar.fr](mailto:beatrice.bechet@ifsttar.fr)

<sup>3</sup> LPG-Nantes - Faculté des Sciences et des Techniques, 2 rue de la Houssinière, BP 92208 44322 Nantes Cedex 3 France

<sup>4</sup> IRSTV, FR CNRS 2488 -- Ecole Centrale de Nantes, 1 rue de la Noë, BP 92101, 44321 Nantes

In large cities, municipal landfills may have received waste coming from hospitals, but also green waste. The corresponding anthroposol might thus be a source of organic emerging substances such as pharmaceutical or phytosanitary substances. The occurrence and fate of organic emerging substances from such a former landfill in urban areas has been studied as part of a research program dealing with the observation and the monitoring of the environment. Of the 261 substances sought (30 pharmaceutical molecules, 223 phytosanitary products and 8 other emerging substances), 11 pharmaceutical molecules in particular have been quantified in the leachates, 2 endocrine disruptors (bisphenol A and triclosan) and 10 phytosanitary substances. Most of these substances are found also in groundwater immediately downstream of the site (including carbamazepine) at concentrations ranging between 0.1 µg/l and 10 µg/l. The number of detected substances appears much smaller a few hundred meters far from the landfill (bisphenol A and diclofenac in particular, with concentrations ranging from 0.1 to 1 µg/l and about 0.1 µg/l respectively). Natural attenuation occurs during transfer in the plume, as observed for PAHs or metals. Several mechanisms may explain the natural attenuation of the substances.