# An assessment of the effects of the dual co-disposal of phenol and waste activated sewage sludge with refuse on the refuse anaerobic fermentation and leachate quality

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## Abstract

Co-disposal with refuse into controlled landfill sites is the cheapest option for the disposal of hazardous wastes and, if carefully controlled, can be an effective treatment option. In this study a high-strength phenolic waste water together with thickened/ dewatered waste activated sewage sludge were co-disposed with refuse. The efficacy of phenol catabolism was assessed in the presence of various co-disposal strategies and leachate recycle was found to facilitate the highest rate. In contrast, batch mode- and single elution-operated microcosms adversely affected the refuse fermentation and, subsequently, leachate quality.