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Investigation of different control and refinery methods of latex in burial sites of municipal wastes, disposal standards and reusing in agriculture

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In our country approximately 92% of wastes are buried, about 25% of which is buried according to hygiene & standard method, and the remaining is buried & dumped in a non-hygienic method. In most burial sites, the latex is produced out of decomposition of organic matter or exterior materials such as surface water draining, raining, or the underground water. The amount of latex production in burial sites relates directly to the balance of water in the buried cell, which is calculated by the water balance method (WBM) and HELP model. The latex composition depends on the burial site lifetime and sampling time. Latex contains various type of organic & inorganic substances in form of suspended or dissolved and also contains different kinds of pathogen agents and toxic compounds (heavy metals & toxic organic matter). In order to settle in affair and management of the latex, different methods are applied such as latex vaporization, recirculation of latex to the buried cell (in place refinery), discharging to the collection network of the wastewater, refinery of latex, by different physiochemical & biological methods and finally it is possible to dispose the wastewater to the lake & river or soil or utilize it for reusing in the agriculture. The purpose of this paper is to perform different organizing and collection management methods, treatment & reusing of latex for disposal in the water and soil and finally reusing in agricultural lands.

Keywords: solid waste, environmental pollution, latex control, latex refinery, disposal standard & reuse in agriculture

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