

The area is under operation for last 10 years and has capacity to receive waste further for only three more years. As climate of the area is hot, it increases evaporation of leachate and hence may add volatile organic compounds in the air, causing air pollution. The leachate from landfill usually is composed of four types of compounds: inorganic macro components, dissolved organic matter, xenobiotic and heavy metals (Kjeldsen et al., 2002). The waste is produced by domestic and commercial entities of the Makkah city and consisted of food wastes, plastic, paper and aluminum cans. The compactors are used to compress the waste to reduce its volume, whereas, bulldozers are used for leveling of the land after waste dumping. The landfill receives 4–6 thousand tons of waste on daily basis and the amount is increased up to 10 thousand tons during peak seasons of Hajj and Ramadan month. The solid waste is received by trucks and processed by different machineries i.e. bulldozers, shovels, graders, and compactors.