

## EMISSION OF MERCURY RESULTING FROM THE OPEN BURNING OF WASTE

## General waste management scenario in Nigeria

Nigeria with a population of 182 million generates annually approximately 33Mt of municipal solid waste. The management of this waste is characterized by inefficient collection methods, insufficient coverage of the collection system and improper disposal. The management is generally based on co-mingled collection, transportation and co-disposal in designated open dumpsites, within which there is no designated area for any category of waste. In most cases, hazardous wastes are lumped together with municipal waste at dumpsites where scavengers manually segregate resources from the waste. In areas where wastes are not collected, they are dumped in undesignated areas where they are typically burned periodically to reduce their volume.

At the designated dumpsites, open burning of waste occurs either due to intentional fires set by scavengers to reduce waste volume and recover valuable waste streams or spontaneous combustion as a result of emission of methane gas from anaerobic decomposition of organic materials and elevated temperature.

To address the problem of open burning and other waste management isues, The Federal Government is promoting the Integrated Waste Management Programme implementation of (IWMP) through Public-Private Partnerships (PPP) in major cities the country. The IWMP programme includes across kev infrastructure such as: materials recovery facilities; compositing plants; incinerators where needed; landfill cells; methane recovery system; leachate treatment facility; and plastic recycling plant.

## Emission of mercury resulting from open burning of waste

The Minamata Convention on Mercury Initial Assessment report for Nigeria in June 2017, estimated the total mercury releases from open waste burning as approximately 11 tonnes Hg/yr.