

Praekkasa City Garbage Dumpsite

Operation Tor Saengchai Co.ltd.
General Manager Mr Punya Tungdenchai

Background

Praekkasa city garbage dumpsite is located Praekkasa area, Muang district, Samutprakan Province in Royal Kingdom of Thailand. The dumpsite was established in 1996 and the area can be filled with garbage for another 10 years. The landfill area is 20 ha and around 1,000 tons of garbage will be brought from Muang district every day.

EM Technology was introduced by Mr Kanit Mungnil in February 2002. Since then the dumpsite applied EM Technology for smells and flies control.

Application of EM

20,000 liters of Diluted Extended EM is sprayed on the heap of garbage at two times per day.

10 o'clock	10,000 liters of Diluted Extended EM
16 o'clock	10,000 liters of Diluted Extended EM
Total	20,000 liters of Diluted Extended EM / day

Extended EM is made using the following method-

EM : Molasses : Water = 1 : 1 : 20

Anaerobic condition is needed during fermentation period that will be take around 7 days in tropic region. The pH value of the mixture should be below 3.5 after the fermentation period. To keep the mixture in shady place is required, however, this Extended EM should be used as soon as possible.

Extended EM should be mixed with water just before spraying on the garbage site.

Mixing ratio of Extended EM and Water is 1 : 25.

- 400 liters of Extended EM will be added in 10,000 liters of water, when Diluted Extended EM are made.

Result

The general manager says that intensive smells and the number of flies have been decreased by 70%. There is no complaint from people who are living in near here.

Landfill area	20 ha
Amount of garbage	1,000 tons / day
Project period	15 years
Extended EM	EM : Molasses : Water = 1 : 1 : 20
Dilution ratio	Extended EM : Water = 400 : 10,000 [1 : 25]
Spraying amount	Diluted Extended EM 10,000 liters / time – 2 times / day [10AM & 04PM] Total 20,000 liters / day