## WORLD HEALTH ORGANIZATION REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN



# ORGANISATION MONDIALE DE LA SANTÉ BUREAU RÉGIONAL POUR LA MÉDITERRANÉE ORIENTALE

SHORT COURSE ON SOLID WASTES COLLECTION AND DISPOSAL

Damascus, 20 -30 May 1968

EM/Wastes Course/C5 4 April 1968

ORIGINAL IN ARABIC

#### METHODS OF DISPOSAL OF SOLID WASTES IN UAR CITIES

bу

Mr. Mohamed A.H.H. Abed

and

Mr. Mohamed M. Agamleh

Methods of disposal of solid wastes in UAR cities may be summarized as follows:

#### I In Cairo and Alexandria

#### 1. Disposal in Dumps

Sanitary landfill methods which consist of crushing solid wastes with rollers, then covering them with a layer of earth not less than 25 cms in thickness. The quantity of garbage transported to dumps is estimated at 80% of the total quantity of garbage collected by the cleaning services, and amounts to 4 500 cubic meters in Cairo.

## 2. Transformation of Garbage into Organic Fertilizer

The "Pimianopiko" method which consists of storing the garbage in special pits permitting aerobic and non-aerobic activation to take place, after which it is sorted out and ground. The quantity of garbage transformed into organic fertilizer represents 10% of the total quantity of garbage collected.

Director-General, Department of Public Utilities & Licensing, Cairo Governorate

Director-General, Department of Planning, General Organization of Housing and Construction, Ministry of Housing and Public Utilities, Cairo

## 3. Incineration

A small incinerator exists in Cairo which, when operated, could incinerate 10% of the total garbage collected.

#### 4. For Pig Feeding

In Cairo, the quantity of garbage collected from houses through contractors amounts to 1 000 cubic meters per day approximately. Most of this garbage is utilized in pig feeding in farms situated around Cairo.

In general, the quantity of wastes collected in Cairo per day amounts to 5 500 cubic meters approximately, and consists of:

	Cubic Meters
- House garbage not collected by contractors	2 500
- Earth and debris collected from streets estimated at	1 000
- Public places, commercial and industrial wastes estimated at	1 000
- House garbage collected by contractors	1 000
	5 500

The quantity of garbage that is collected through cleaning services in the Governorate of Cairo is estimated at about 4 500 cubic meters per day.

### II In other UAR Cities

Garbage is transformed into organic fertilizer by disposal in layers, after sorting out solid non-organic wastes. Garbage is piled in heaps not exceeding 1.5 meter in height. Heaping the garbage in layers takes place daily, and drain wastes or water are added to them. When a heap reaches the determined height, it is covered with earth to prevent mosquito breeding. It is then left for a period of three months during which time it is aerated and sprayed once more with water. Thereafter, it is re-heaped, covered anew with

earth and left for a further period of three months, during which time it is again sprayed with water or drain wastes, until it is transformed into fertilizer.

III In the United Arab Republic, comprehensive studies are under way to develop methods of wastes disposal which will allow of the establishment of fertilizer plants and by devising other means of wastes disposal.