

**CHAPTER  
13**

**WASTE MANAGEMENT**





- 13.1 Storm Water
- 13.2 Sewage
- 13.3 Bio Medical Waste
- 13.4 Municipal Solid Waste
- 13.5 Inferences

Managing waste is one of the most important issues in urban governance. With the rapid urbanization and a lack of due consideration for the conservation of natural environment, the issues related to urban waste has become difficult to manage.

### 13.1 Storm Water

The drainage network existing in the municipality consists of a system of natural drains, the continuity of which is hampered in many places by human intervention. This is supplemented by a set of disjointed road side drains. The existing drainage network is shown in Figure 13.1.

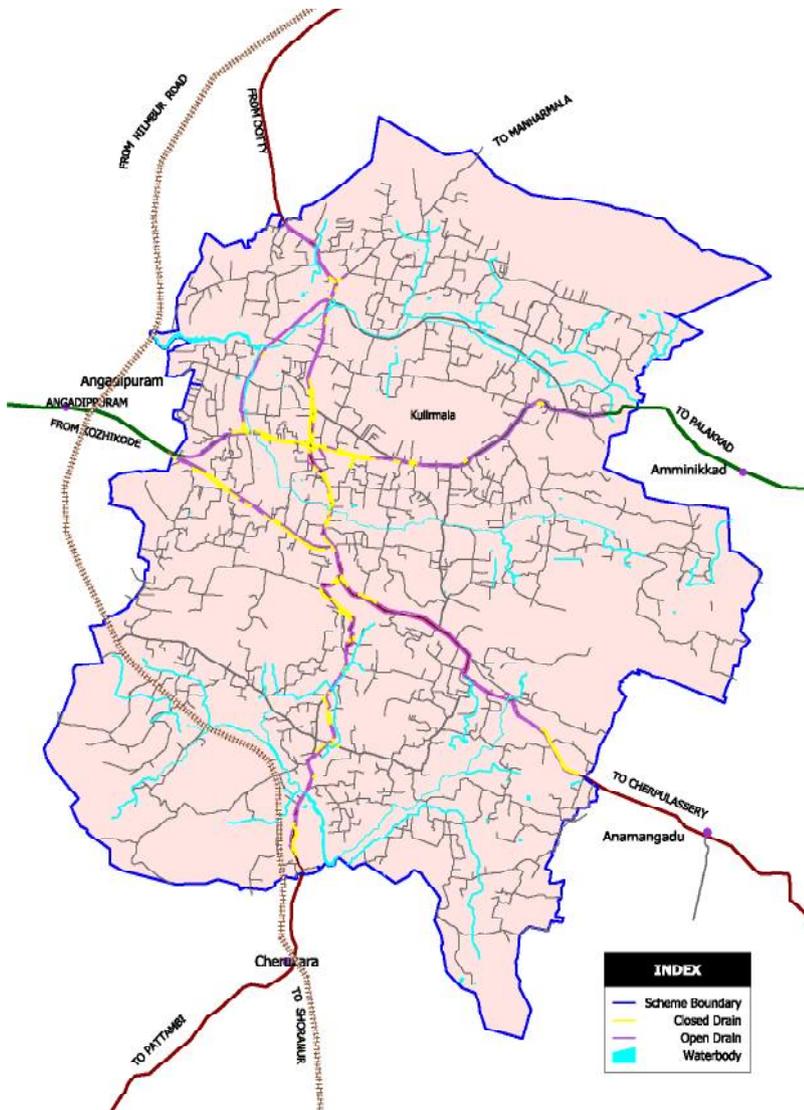


Figure 13.1 Existing Drainage Network  
(Source: Landuse Survey, 2012)

### 13.2 Sewage

There is no sewerage system in the town. All the households in the town have their own toilets. 88% of the people use toilets with leach pits and the rest 12% use toilets with septic tanks. With the presence of a large number of leach pits and the majority of plot size being 10 or less than 10 cents, the quality of water available from the wells is questionable. With the increase in population projected and the envisaged densification of the town, a sewerage system is inevitable.

### 13.3 Bio Medical Waste

The town has a number of medical institutions and hence proper disposal of bio-medical waste is of high priority. Currently the biomedical waste generated by the health care institutions in the municipality is collected by the the Indian Medical Association and transported to its a centralized collection and treatment facility at Palakkad under the project IMAGE (Indian Medical Association Goes Eco friendly).

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“Cleanliness and order are not matters of instinct, they are matters of education, and like the most great things you must cultivate a taste for them.”

- Benjamin Disraeli  
(former British Prime Minister)

*The untreated or partially treated waste water from the hospitals is let out into natural drains which are a health hazard to the local population.*

However, another issue, which is partly bio-medical in nature, does persist in the town. The untreated or partially treated waste water from the hospitals is let out into natural drains which is a health hazard to the local population by way of infection and the immunity of the new strains of disease causing micro-organisms to the normally used drugs. This can be prevented by stringent control on the quality of effluent from health care institutions.

#### 13.4 Municipal Solid Waste

Growing municipal waste and inadequacy of treatment facilities is experienced by almost all towns in the State. The situation of Perinthalmanna is slightly better in this regard. The socio-economic survey reveals that almost all the households treat/dispose their waste in their own premises. The municipality collects waste to the tune of 16 T/day from street sweeping, market and commercial establishments. Segregation of waste is not done during collection. Three vehicles (municipality owned) are used to collect the waste twice a day. 42 workers are employed in the operation. Door to door household wastes collection has started recently. The collected wastes are directly transported to the treatment plant at Kalathilakkara where the biodegradable and non-biodegradable wastes are segregated. The bio-degradable wastes are subjected to windrow composting and the bio-fertilizer is sold by the agency running the plant. Even though the present system is adequate for the current needs, further increase in the load has to be taken care of in the immediate future. System upgradation, modernization and streamlining the operation shall be needed as the load picks up. The treatment plant is located in a plot of 13 acres under government ownership and hence the modernization and upgradation can be easily taken up.

#### 13.5 Inferences

The drainage system needs total revamping to form an efficient, effective and clean storm water drainage. The rising density of land use calls for a sewerage system in order to protect the water resources. Even though the hospitals contribute heavily to the economy of the town, their wastes needs stringent monitoring in public interest. The present municipal solid waste treatment system, though adequate for the current needs shall require periodic improvements in system design, technology and capacity.