

## Solid Waste Management in Large Cities

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## Solid Waste Management An Essential Service

- All Humans discard solid wastes daily. There is no way to stop discards.
- Public health is best protected when such discards are picked up, transferred, processed and safely disposed.
- It is as essential a service as water supply, sewerage, power supply and telephone.
- It must be directly paid for sustainability

## What is happening to solid waste now in South Asia

- It is being open dumped and often dumps are on fire.
- They produce leachate that contaminates ground and surface waters.
- Burning dumps create severe air pollution and public health problems that adversely affect children and the elderly
- Vermin in open dumps spread contagious diseases.
- Tourism, a major industry, does not benefit from open dumps.

### Typical Large City Dump

A serious environmental and public health problem



## Informal recycling in a big city dump



## Animal Foraging in Open dumps

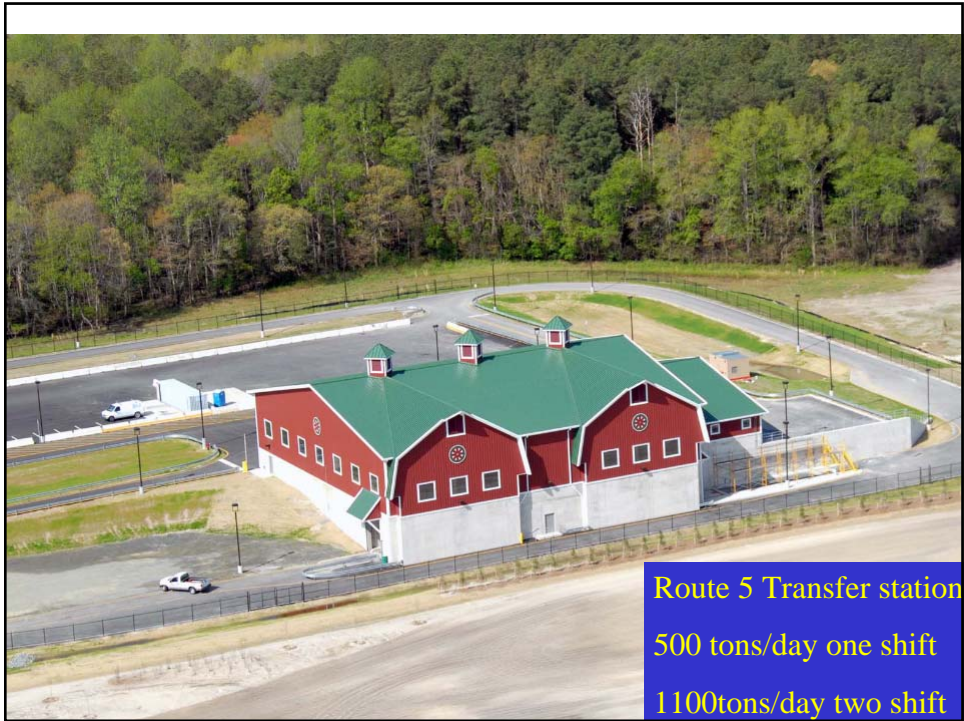


## **Financing Solid Waste Management Systems.**

- Currently the cost of providing solid waste services is generally hidden in the local municipal tax structure.
- Many large city governments rely on Superior government grants for solid waste system improvements.
- Large city leaders are reluctant to initiate User fee systems to pay for sustainable services.
- Large city governments look for short term politically expedient solutions.

## **Waste management facilities must be clean and attractive**

- Good buffer zones (at least 100 meters wide) must be set aside to improve the image using native trees.
- If that is well done, NIMBY could be reduced to some extent despite CAVE (Citizens against virtually everything).
- Local officials must be required to include, as a design factor, sensitivity to neighbors concerns ( traffic, dust, odor, clean roads etc)



## Improving Skills

- Large city government workers need training in collection, transport, processing and disposal of solid wastes to build self esteem.
- The training should include impressing them about improving local environmental quality public health.
- Clean community pride is a motivating factor.
- Closing open dumps and developing modern landfills should be given the highest priority.
- ISWA has good training courses for this.

## Monthly Solid Waste Service

(Kerbside collection, transfer and disposal)

Item	Cost/home \$	Percentage
Recyclables collection	4.00	19
Solid waste collection	12.36	59
Disposal	4.64	22
Total	21.00	100

## Comparison of Cost of goods & services per person per day

- |                                 |         |
|---------------------------------|---------|
| • 20 oz. Soft Drink             | \$1.00  |
| • Coffee                        | \$ 0.80 |
| • Sandwich                      | \$1.75  |
| • Newspaper                     | \$ 0.50 |
| • Garbage Collection & Disposal | \$ 0.25 |
| • Digital cable TV              | \$ 0.64 |

## Is Solid Waste Management Expensive?

- Solid waste service expense as a fraction of annual family income?
- Delaware median family income is about \$ 62,600 per year (2006).
- Annual solid waste service cost is about \$ 288 per family.
- That is less than 0.5% of the family income
- One could use 0.25 to 0.5 % of median family income as credible target service fees for solid waste services.

**OUR BACK YARD!**

