**National Law**

ACT No. 18 Year 2008 of Waste Management

Regulation of the Minister of Public Works No. 14/PRT/M/2010 of Minimum Service Standards for Public Works and the field of Spatial Planning

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**TARAKAN ISLAND**

1. Area (km²) = 657.33
2. Total Population (people) = 239,787

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**Waste Generation of Tarakan City**

1,039 Liter/day  
Total 253.7 m³/day  
Transported waste 189 m³/day  
Untransported waste 55.45 m³/day

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**Sources of municipal waste in Tarakan**

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>54%</td>
</tr>
<tr>
<td>Commercial Shop</td>
<td>1%</td>
</tr>
<tr>
<td>Institution</td>
<td>1%</td>
</tr>
<tr>
<td>Commercial Restaurant</td>
<td>1%</td>
</tr>
<tr>
<td>Market</td>
<td>4%</td>
</tr>
<tr>
<td>Street sweepings</td>
<td>29%</td>
</tr>
<tr>
<td>School</td>
<td>5%</td>
</tr>
<tr>
<td>Hotel</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: DKPP, 2011

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**Fig. 2 Waste Source in Tarakan City**

- Household: 54%
- Commercial Shop: 4%
- Institution: 1%
- Commercial Restaurant: 1%
- Market: 4%
- Street sweepings: 29%
- School: 5%
- Hotel: 6%

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**Fig. 3 Household waste composition**

- Organic Waste: 40%
- Plastic: 17%
- Glass: 1%
- Grass and Wood: 12%
- Etc.: 8%
- Paper: 10%
- Rubber: 1%
- Metal: 1%
- Tiles: 1%

Source: DKPP, 2011
**VISION:**
"AS THE BEST CLEANING AGENCY IN KALIMANTAN BY 2014 AND THE BEST CLEANING AGENCY IN INDONESIA BY 2020"

**MISSION:**
1. The increased quantity and quality Hygiene Services, Garden and Cemetery;
2. Increase Community Participation;
3. Building Coordination of partnership between government, business and society;
4. Doing Guidance;
5. Doing Supervision.

- Waste management with S3R system
- Waste management in household level
- Waste treatment in landfills
- Applicated solid waste bank (Taling)
- Out sourcing worker
- ADIPURA area
- Foreign cooperation

**TARGET**
- Keeping hygiene in the area operational
- Reducing waste generation
- Further processing into zero waste
- Participation from all the elements of society
- Changing the mindset of waste
- Changing the habit into the way of life

**Long Term Policies**
1. Promote waste separation at household level
2. Establish 20 composting programmes (5 composting programmes established)
3. Reduce the volume of waste (Target 20%)
4. Socialize waste reduction programmes to schools, offices, companies, and community
5. Building partnership with media and academic groups
6. Develop compost standards

**Short Term Actions within next 6 months (2012)**

<table>
<thead>
<tr>
<th>Short terms</th>
<th>Current Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop waste management in school and household</td>
<td>Disseminating 3R program's</td>
</tr>
<tr>
<td>Waste Separation in Source in 2 village</td>
<td></td>
</tr>
<tr>
<td>Implementing composting program using takakura</td>
<td>4 MRF and several communities are involved in implementing community-based composting programmes using Takakura, Open windrow and barrel composter</td>
</tr>
<tr>
<td>Establish waste bank and MRF</td>
<td>Established MRF in Kampung satu</td>
</tr>
<tr>
<td>&quot;Tabungan Lingkungan&quot; (TALING) in 20 Schools of Adiwiyata</td>
<td>Disseminate and implement Taling programs and Adiwiyata 7 schools of pilot project</td>
</tr>
</tbody>
</table>
**Waste Reduction**

The effectiveness of TPS3R (MRF) in neighborhood is 96%.

Waste reduction from junkshop is 2.64% of city waste generation.

Average waste reduction from TALING 1kg/week/student.

Note: Count for TALING still in progress.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of TPS3R</th>
<th>Location</th>
<th>Source of waste</th>
<th>Waste a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KSM Lestari</td>
<td>Kr. Rejo</td>
<td>Neighborhood, market</td>
<td>0.1 tons / day</td>
</tr>
<tr>
<td>2</td>
<td>KSM Aset</td>
<td>Kr. Anyar Pantai</td>
<td>Neighborhood</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>KSM Ramah</td>
<td>Kamp. 6</td>
<td>Neighborhood</td>
<td>&quot;</td>
</tr>
<tr>
<td>4</td>
<td>KSM Nibung</td>
<td>Kamp. 1</td>
<td>Neighborhood</td>
<td>&quot;</td>
</tr>
<tr>
<td>5</td>
<td>TIS KEBAL</td>
<td>Boon pannjang</td>
<td>Market</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Every TPS3R has 4 custodians.
They using Takakura method and using shredding machine.
They selling the compost to community, school and the companies.

*Note still in progress*

**Waste reduction in Tarakan 3 years later**

Government commitment is to establish 1 TPS3R in 1 village.
By 3 years later, Tarakan will have 10 TPS3R.
It will reduce about 1 ton organic waste / day.

Taling will establish in 104 schools.
Waste reduction by students is about 1.2 tons anorganic waste / day.

**Seminar KitaQ composting system (2011)**

1. **Waste Management with 3R system**

   ![Image of waste management with 3R system]

2. **Sorted Trash Bin**
   To make separating rubbish easier. There are 250 units of it scattered throughout the city.

   ![Image of sorted trash bins]
3. Community waste sorting program
DKPP provide 3S3R counseling and classified plastic bag to community

4. Environment Saving (TALING)
Inspired by the eco-savers from Marikina in the Philippines
Launched at February, 21th 2012


There are 7 pilot project schools that running this program
Addition of 20 schools by August 2012

Challenges
- Community participation
- Field Team
- Improvement and development of existing systems
- Healthy environment is affordable

Lessons for other cities.

There are some activities that are emulated by other cities such as “Green n Clean” contest

Some city invited custodian of TPS3R to provide training

END OF PRESENTATION