PROFORMA FOR SUBMITTING INFORMATION ON SOLID WASTE MANAGEMENT

Name of City/Town : Bansberia District: Hoogly

Name of Municipal Body : Bansberia Division:

Address: : Office of the Municipal State: West Bengal

Councillors of Bansberia, Rudra

Main Road, Bansberia

Telephone: : 26346324, 26346807 Fax:

Email: Website:

DEMOGRAPHY

.1 Name of Officer In-Charge :Sri Pratap Nandan, S.A.E, Sri AmitBhattacharjee, S.I.

 Area of Municipal Corporation /Council (Please provide map showing legal limits of municipal body) (km²)

.3 No. of wards / zones

.4 Population as per 2001 census : 1,04,412

Urban

Slums

.1 Floating population

GENERATION OF MUNICIPAL SOLID WASTE

.1 MSW generation (gms/capita/day) per person

.2 Total MSW generation (MT/day) : approx. 46-47 tonnes per day

.3 Of the total MSW generated MT/day

 Sources: domestic, commercial MSW, industrial, markets, hotels and restaurants waste (MT/day)

.1 Composition of MSW

Physical characteristics

Biodegradable (%) Paper (%) Plastic (%) Glass (%) Metal (%)

Inert, ash, debris (%) Rags (%) Stone (%) Rubber/Tyre (%) Coconut shell (%)

Chemical characteristics

Carbon (%) Nitrogen (%) Phosphorous as P2O5 (%) Potassium as K2O (%)

C/N ratio Calorific value (kCal/kg) Density of MSW (kg/m³) Moisture content (%)

SWEEPING

.1 Area: (Total length with or without footpath) in

various types of road (km)

Cement-concrete roads (km) Asphalted roads (km) Kutchha roads (km)

.2	Total no. of sweepers employed	Departmental	Contracted			
.3	Working hours of sweepers					
.4	Norms of sweeping					
one	one sweeper per population / one sweeper per sq. m. area / one sweeper per RMT road					
.5	Sweeping carried out at a location by					
.6	Sweeping waste is put in a					
.7	Frequency of sweeping					
.8	Total no. of wheel barrows, containerised handcarts provided					
.9	Total capacity of wheel barrow, containers (kg)					
.10	Type of broom provided					
.11	Any other equipment provided (e.g. spade, shovel, tikow)					
.12	Protective gear provided (e.g. leather hand gloves, gumboots, mask)					
•	COLLECTION, STORAGE AND TRANSPORTATIO	N				
.1	Area covered for collection of MSW	: 22 wards				
.2	No. of households covered					
.3	No. of households covered under door-to-door collection (bell ringing)					
.4	Is the collection carried out by municipal authority or private contractor or NGO?					
.5	Is the segregation is carried out at source?					
	If no, what steps have been taken?					
.6	Total quantity collected (MT/day)	: approx. 40-42 tonnes per day				
.7	MSW collected in mixed, segregated form (MT/day)					
.8	Whether littering is prohibited by the municipality?					
.9	Whether litterbins are provided?					
.10	Frequency of waste collection					
.11	Is waste collected every day i.e. 7 days a week and 365 days a year?					
	If no, give details					
.12	Total number, type, size, and capacity of storage bins / container / trailers provided	: 250 bins- 4'3'2'				
.13	Whether the bins are open or closed?					

.14		er all bins are lays a week		eaned daily? s a year)					
	If no, m	ention detail	s						
.15		er the lifting on the hanical?	of waste from	n the bins is m	ianual : r	manual			
.16	Collecti	on details							
Typ veh		No. of vehicles used	No. of shifts	Capacity (MT)	No. of trips/ shift	Distance travelled / shift	Quantity of MSW carried / shift (MT)	Quantity of MSW carried out / day (MT)	No. of workers / vehicle
Compa									
Dumpe placer (2.5 m ³ contain	r (with								
Dumpe placer (4.5 m ³ , contain	(with / 7 m ³								
Open to	ruck								
Open to									
Tractor with tipp									
Tractor without tipping		5							
Auto ric with/ wi tipping									
Tricycle with/wit tipping		15							
Any oth	ner								
Total									
.17		ehicles are o d with tempo		sphere, are th sheet?	ey Yes	s/No			

COLLECTION SYSTEM

.1 Approximate MSW collected (MT)

Household (urban) Slums Street sweeping Shops & commercial establishments

Markets Hotels Restaurants Eating houses

Gardens Parks Fairs Slaughter houses

Building sites

.2 No. of premises / establishments

Households Shops Commercial establishments Slums Households

Population Vegetable and

fruit markets Fish and meat markets Hawker

- .3 No. of hotels, restaurants, eating houses
 - Grade / class I
 - Grade / class II
 - Grade / class III
 - No. of star hotels
- .4 Guesthouses, Marriage halls, Hostels, Cinema halls, Theatres, Stables and no. of animals,
- .5 Hospitals/ clinics/ nursing homesTotal no. of beds
- Parks, gardens, recreation places like lakes, amusement parks, Building sites (under construction), Slaughter houses

PROCESSING AND DISPOSAL OF MSW

- .1 Total quantity of MSW processed (MT/day)
- .2 Technology / technologies adopted
 - Composting (MT/day)
 - Vermiculture (MT/day)
 - Pelletisation (MT/day)
 - Waste to energy (MT/day)
- .3 Composting

Compost produced (MT/year)

Is it done mechanically?

Is it the compost sold?

If yes, the quantity sold (MT/year)

•	Total revenue	generated	(Rupees/year)
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.1 Vermi-composting

Vermi-compost produced (MT/day)

Is the vermi-compost sold?

If yes, the quantity sold (MT/year)

• Total revenue generated (Rupees/year)

.1 Pelletisation

Pellets produced (MT/day)

Are the pellets sold?

If yes, the quantity sold (MT/year)

• Total revenue generated (Rupees/year)

- .1 Waste to energy
 - Energy produced (MW/MT/day)

Incineration, Pyrolysis, Bio-methanation, Any other (Please mention)

- Revenue generated (Rupees/year)
- .1 Dumping grounds/landfill sites
 - MSW disposed off by open dumping (MT/day) [mixed/inert]
 - MSW disposed off by controlled dumping (MT/day) [mixed/inert]
 - MSW disposed off by sanitary landfill (MT/day) [mixed/inert]
 - No. of dumping grounds/ landfill sites

Whether municipality legally owns them?

- Area of each dumping ground/ landfill site
- Whether the area will be sufficient for next 25 years
- If no, then what steps have been taken to acquire land?
- Distance (in km)
 of dumping ground / landfill site from ...
 - Habitation
 - Drinking water source
 - Religious or monument places

Sanitary landfilling

- Distance from airport or airbase
- Has it been designed scientifically
- Has the existing dumping ground been upgraded as required by MSW Rules, 2000

If no, what steps have been taken (provide details)

- .1 Whether the following facilities are provided
 - Weighbridge, Fencing, Approach roads/ internal roads, Lighting facility, Site office with monitoring equipment, Managerial staff and manpower,
 - Covering material used daily as per Rules 2000 Is it available in sufficient quantity?
 - Gas venting arrangement
 - Leachate collection system

INSTITUTIONAL ARRANGEMENTS

- .1 SWM services provided in the city/town by
- .2 Total no. of Supervisory Staff provided (e.g. Health officer/ Assistant Health officer/ Chief Sanitary Inspector/ sanitary Inspector/ Sanitary Supervisors, etc.)
- .3 Total no. of sweepers/ Pourakarmikas/ labourers/ Mukadam/ Jathedars/ Daffedars, etc.
- .4 Organisational structure

PRIVATISATION

Transportation

.1 Whether any of the following service is privatised?

Sweeping Door-to-door collection Community collection Processing of MSW

If yes, provide details

If no, whether any future plans for privatisation

Details of NGO/ CBO/ Residential groups involved in any schemes/ projects initiated by municipal body in SWM/ clean city program

COST IMPLICATIONS IN SWM

- Expenditure (in Rupees/Year) .1
 - Total cost of SWM services under various heads

- Establishment including salaries, uniforms, etc
- Tools, equipment, and consumables including disinfectant
- Operation and maintenance of garbage vehicles including fuel, oil, spare parts, tyres, batteries, etc
- Hiring charges for contractors' vehicle & machinery, bulldozers, JCBs, etc
- Other miscellaneous expenses
- .1 The above total cost in terms of following activities (Rupees/Year)
 - Sweeping cost, Collection cost, Transportation cost, Processing cost, Disposal / sanitary landfill cost
- .1 Cost recovery
 - Tipping fee or trade refuse charges (Rupees/Year)
 - Revenue generation (by sale of compost, vermicompost, energy/ gas, etc. (Rupees/Year)
 - Annual expenditure for SWM services

Cost of SWM services in Rupees per capita per year

Cost of SWM services in Rupees per tonne of MSW

OTHER FACILITIES

- .1 What facilities are provided for the following?
 - Biomedical waste, Diary related activities, Slaughter house and unauthorised slaughtering, Construction, demolition, debris and silt, Encroachments on footpaths, in parks
 - How many slums have been identified and whether there are provided with sanitation facilities?
 - Is there any enforcement wing for taking renal actions?

Recovery of administrative charges

Fines under Municipal/Policy Act

Recourse to Municipal Act bye-laws

: 88 out of these 50% are covered by sanitation facilities.

•	Whether any cases are registered and settled during last three years?	
	No. of cases registered, settled during last three years	
•	SPECIAL/ UNIQUE SCHEMES OR INITIATIVES ¹	
.1	Recycling schemes for plastic, PET bottles	
.2	Encouraging community activity such as ALM ² formation	
.3	Encouraging people's participation by building- wise or building complex-wise waste segregation and processing of organic waste by vermi- composting or composting	
.4	Training needs for sanitary workers on health and safety issue	
.5	Development of tools and implements	
.6	Please provide list of potential NGO for implementing any of the initiatives (any association registered with municipal body/ unregistered local area management)	
•	AWARENESS	
.1	Are you aware of the various notifications of the Ministry of Environment and Forests, Government of India	
•	Municipal Solid Waste (Management and Handling) Rules, 2000	
•	Recycled Plastics Manufacture and Usage Rules, 1999	
•	Biomedical Waste (Management and Handling) Rules, 1998	
•	Coastal Regulatory Zones Rules, 1991 (amended up to 2002)	
	Place:	
	Date:	Signature of the Municipal Commissioner / The Health Officer/ The Chief Engineer (SWM)
		Stamp

¹ Details of schemes can be provided on a separate sheet

2 Advance Locality Management

Note: Please provide small note on the geographical and historical background of the city, tourist places, monuments, pilgrimage places, main industrial areas, industries, GNP, GDP, Airport, Airbase, main events and main people of national and international importance, *etc*.