

PROFORMA FOR SUBMITTING INFORMATION ON SOLID WASTE MANAGEMENT

Name of City/Town:	Jalandhar	District:	Jalandhar
Name of Municipal Body:	Municipal Corporation of Jalandhar	Division:	Municipal Corporation of Jalandhar
Address:	Municipal Corporation of Jalandhar	State:	Punjab
Telephone:	2227015	Fax:	
Email:		Website:	M.C.Jalandhar.com
• DEMOGRAPHY			
.1	Name of Officer In-Charge	Mr. A.K. Praphakar (Addl. Comm)	
.2	Area of Municipal Corporation /Council (Please provide map showing legal limits of municipal body) (km ²)	110 km ²	
.3	No. of wards / zones	55 Wards	
.4	Total population (as per 1991 census)	-----	
.5	Total population (as per 2001 census)	7, 09, 255	
.6	Population	7 Lacs (approx)	
	• Urban		
	• Slums		
.1	Floating population		
.2	Total no. of household		
.3	Average maximum temperature (°C)		
.4	Average minimum temperature (°C)		
.5	Average yearly maximum rainfall (mm)		
.6	Average maximum humidity		
.7	Average minimum humidity		
.8	Average depth of water table		
.9	Altitude (<i>i.e.</i> mean sea level)		

- **GENERATION OF MUNICIPAL SOLID WASTE**

.1 Total MSW generation (MT/day) 350

.2 MSW generation (gms/capita/day)

.3 Of the total MSW generated

- Quantity of domestic MSW (MT/day)
- Quantity of commercial MSW (MT/day)
- Quantity of industrial (non-toxic and non-hazardous) waste (MT/day)
- Quantity of waste from markets (MT/day)
- Quantity of waste from hotels and restaurants (MT/day)

.1 Composition of MSW (Attach separate sheet)

- Physical characteristics
 - Biodegradable (%)
 - Paper (%)
 - Plastic (%)
 - Glass (%)
 - Metal (%)
 - Inert, ash, debris (%)
- Chemical characteristics
 - Carbon (%)
 - Nitrogen (%)
 - Phosphorous as P_2O_5 (%)
 - Potassium as K_2O (%)
 - C/N ratio
 - Calorific value (kCal/kg)
 - Density of MSW (kg/m^3)

- **SWEEPING**

.1 Total length of roads (with or without footpath)
(km)

	• Total length of cement-concrete roads (km)	
	• Total length of asphalted roads (km)	
	• Total length of Kutchha roads (km)	
.1	Total no. of sweepers employed	1426 (Presently 1233 working)
	• Departmental	1426
	• Contracted	242 Mohalla Sudhar Committee
.1	Working hours of sweepers	6.00 a.m to 11.00 a.m 3.00 p.m to 5.00 p.m 8 hrs daily
.2	Norms of sweeping (e.g. one sweeper per ... population, or one sweeper per ... sq. m. area, or one sweeper per ... RMT road)	1 km area for one sweeper
.3	Sweeping carried out at a location by	○ One sweepers
.4	Sweeping waste is put in a...	○ Open dump
.5	Frequency of sweeping	○ Six days in a week
.6	Total no. of wheel barrows provided	
.7	Total no. of containerised handcarts provided	
.8	Total capacity of wheel barrow (kg)	
.9	No. of containers and its capacity in 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)	No
	• COLLECTION, STORAGE AND TRANSPORTATION	
.1	Area covered for collection of MSW	80% -90% area
.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?	Collection carried out only through Municipal Authority
.5	Is the segregation is carried out at source? If no, what steps have been taken?	No
.6	Total quantity collected (MT/day)	
.7	MSW collected in mixed form (MT/day)	350

.8	MSW collected in segregated form (MT/day)	Yes
.9	Whether littering is prohibited by the municipality?	No.
.10	Whether litterbins are provided?	Yes/No
.11	Frequency of waste collection	Once in 24 hours
.12	Is waste collected every day <i>i.e.</i> 7 days a week and 365 days a year? If no, give details	Yes
.13	Total number, type, size, and capacity of storage bins / container / trailers provided	Total bins 1 M ³ capacity : 75 Nos Total bins 4.5 M ³ capacity : 100 Nos
.14	Whether the bins are open or closed?	OPEN as well as closed
.15	Whether all bins are attended/cleaned daily? <i>(i.e.</i> 7 days a week and 365 days a year) If no, mention details	Yes Through refuse collectors & dumper placers
.16	Whether the lifting of waste from the bins is manual or mechanical?	Mechanical

.17 Vehicle details					
Type	Total No.	Capacity (MT)	Daily required	At present available	Additional proposed
Compactor (mobile)	2 Nos	14 M ³ capacity	Yes	Yes	1 No.
Dumper placer (with 2.5 m ³ containers)	---	----	-----	-----	-----
Dumper placer (with 4.5 m ³ / 7 m ³ containers)	8 Nos	4.5 M ³ capacity	Yes	Yes	NIL
Open truck	-----				
Open truck with tipping	5 Nos	6M ³ capacity	Yes	Yes	2 Nos.
Tractor-trailer with tipping	5 Nos	1.5 M ³ capacity	Yes	Yes	----
Tractor-trailer without tipping	-----				
Auto rickshaw with or without tipping	27 Nos	500 kg	Yes	Yes	----
Tricycle with or without tipping	----	-----	-----	-----	-----
Any other type (please mention)					
Loaders	3 Nos	-----			
Mini Tippers	3 Nos	2.5 MT	Yes	Yes	-----

.18 Collection details								
Type of vehicle	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
Compactor (mobile)	2 Nos	1	14M ³ capacity	2 Nos	10-15 kms	14M ³		2
Dumper placer (with 2.5 m ³ containers)	----	----	-----					
Dumper placer (with 4.5 m ³ / 7 m ³ containers)	8 Nos.	1	4.5 M ³ capacity	5/6 Trips	Total 100 Kms	150-200 M ³		2
Open truck	----							
Open truck with tipping	5 Nos	1	6M ³	5 trips	100 km each vehicle	150 M ³ approx		2
Tractor-trailer with tipping	5 Nos	1	1.5 M ³	2 trips	20 kms each	20M ³		4 to 5
Tractor-trailer without tipping								
Auto rickshaw with/ without tipping	27 Nos	1	500 kg	4-5 trips daily	75-100 kms	2.5 MT each		1
Tricycle with/without tipping								
Any other type	3 Nos		2.5 M ³	3 trips each daily	100 kms daily	2.5 M ³ capacity		4-5 persons
Mini tipper								
Total								
.19 If the vehicles are open to atmosphere, are				Yes/No				

they covered with temporary plastic sheet?

Few vehicles like R.C, Dumper placer are covered. Few are uncovered

• **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 (debris, earth, etc.)
- .2 No. of premises / establishments
 - Households
 - Shops, commercial establishments
 - Slums, households, population
 - Vegetable and fruit markets
 - Fish and meat markets
 - Hawkers
- .3 No. of hotels, restaurants, eating houses
 - Grade / class I
 - Grade / class II
 - Grade / class III
 - No. of star hotels
- .4 Guesthouses
- .5 Marriage halls
- .6 Hostels
- .7 Cinema halls
- .8 Theatres
- .9 Stables and no. of animals
- .10 Hospitals/ clinics/ nursing homes
Total no. of beds
- .11 Parks, gardens, recreation places like lakes,

	amusement parks	
.12	Building sites (under construction)	
.13	Slaughter houses	
	PROCESSING AND DISPOSAL OF MSW	
.1	Total quantity of MSW processed (MT/day)	350
.2	Technology / technologies adopted	Composting (Plant under construction)
	o Composting (MT/day)	
	o Vermiculture (MT/day)	
	o Pelletisation (MT/day)	
	o Waste to energy (MT/day)	
.3	Composting	
	Compost produced (MT/year)	Organic Manure (Plant under construction)
	Is it done mechanically?	Yes/No
	Is it the compost sold?	Yes/No
	If yes, the quantity sold (MT/year)	
	• Total revenue generated (Rupees/year)	
.1	Vermi-composting	
	Vermi-compost produced (MT/day)	
	Is the vermi-compost sold?	Yes/No
	If yes, the quantity sold (MT/year)	
	• Total revenue generated (Rupees/year)	
.1	Pelletisation	
	Pellets produced (MT/day)	
	Are the pellets sold?	Yes/No
	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	Landfill sites
	• MSW disposed off by open dumping (MT/day) [mixed/inert]	Yes 250-350 MT garbage being dumped daily
	• MSW disposed off by controlled dumping (MT/day) [mixed/inert]	Mixed
	• MSW disposed off by sanitary landfill (MT/day) [mixed/inert]	
	• No. of dumping grounds/ landfill sites	One
	Whether municipality legally owns them?	Yes
	• Area of each dumping ground/ landfill site	14 acres land
	• Whether the area will be sufficient for next 25 years	Yes
	• If no, then what steps have been taken to acquire land?	----
	• Distance (in km) of dumping ground / landfill site from ...	
	o Habitation	2 KMS
	o Drinking water source	1 KM
	o Religious or monument places	2 KMS
	• Distance from airport or airbase	----NA ---
	• Has it been designed scientifically	Yes
	• Has the existing dumping ground been upgraded as required by MSW Rules, 2000	Yes/No Being upgraded
	If no, what steps have been taken (provide details)	-----
.1	Whether the following facilities are provided	

• Weighbridge	Yes/No	To be provided by the contractor
• Fencing	Yes/No	Provided
• Approach roads/ internal roads	Yes/No	---- do ----
• Lighting facility	Yes/No	---- do -----
• Site office with monitoring equipment	Yes/No	To be provided by the contractor
• Managerial staff and manpower	Yes/No	Site given to private contractor installing MSW plant on lease basis
• Covering material used daily as per Rules 2000	Yes/No	
Is it available in sufficient quantity?	Yes/No	
• Gas venting arrangement	No	
• Leachate collection system	Yes	
• INSTITUTIONAL ARRANGEMENTS		
.1 SWM services provided in the city/town by		Municipality/ Private contractor
.2 Total no. of Supervisory Staff provided (e.g. Health officer/ Assistant Health officer/ Chief Sanitary Inspector/ sanitary Inspector/ Sanitary Supervisors, etc.)		Health officer - 1 No. Sanitary Inspectors - 1 No Chief Sanitary Inspector – 16 Nos. Sanitary Supervisors – 36 Nos. Sweepers – 1233 working
.3 Total no. of sweepers/ Pourakarmikas/ labourers/ Mukadam/ Jathedars/ Daffedars, etc.		Sanctioned sweepers – 1426 Working at present - 1233
.4 Organisational structure		(Furnish separate sheet)
• PRIVATISATION		
.1 Whether any of the following service is privatised?		
• Sweeping	Yes	
• Door-to-door collection	Yes	
• Community collection	----	
• Transportation	No	
• Processing of MSW	Yes (Plant construction under process)	
• Sanitary landfilling	Yes	
If yes, provide details		
If no, whether any future plans for privatisation		

<ul style="list-style-type: none"> • Details of NGO/ CBO/ Residential groups involved in any schemes/ projects initiated by municipal body in SWM/ clean city program 	<p>242 Mohalla Sudhar Committees</p>
<ul style="list-style-type: none"> • COST IMPLICATIONS IN SWM 	
<p>.1 Expenditure (in Rupees/Year)</p> <ul style="list-style-type: none"> • Total cost of SWM services under various heads • Establishment including salaries, uniforms, <i>etc</i> • Tools, equipment, and consumables including disinfectant • Operation and maintenance of garbage vehicles including fuel, oil, spare parts, tyres, batteries, <i>etc</i> • Hiring charges for contractors' vehicle & machinery, bulldozers, JCBs, <i>etc</i> • Other miscellaneous expenses 	
<p>.1 The above total cost in terms of following activities (Rupees/Year)</p> <ul style="list-style-type: none"> • Sweeping cost • Collection cost • Transportation cost • Processing cost • Disposal / sanitary landfill cost 	
<p>.1 Cost recovery</p> <ul style="list-style-type: none"> • Tipping fee or trade refuse charges (Rupees/Year) • Revenue generation (by sale of compost, vermi-compost, energy/ gas, <i>etc.</i>) (Rupees/Year) • Annual expenditure for SWM services <p>Cost of SWM services in Rupees per capita per year</p> <p>Cost of SWM services in Rupees per tonne of MSW</p>	<p>NIL as yet</p>
<ul style="list-style-type: none"> • OTHER FACILITIES 	
<p>.1 What facilities are provided for the following?</p>	

• Biomedical waste	Bio Medical Waste is being despatched to Ludhiana for treatment
• Diary related activities	Dairies are being shifted to Dairy Complex shortly
• Slaughter house and unauthorised slaughtering	No slaughter house at present
• 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?	Yes/No
Recovery of administrative charges	
Fines under Municipal/Police Act	
Recourse to Municipal Act bye-laws	
• Whether any cases are registered and settled during last three years?	Yes/No
No. of cases registered during last three years	
No. of cases settled during last three years	
Total recovery during last three years	
• SPECIAL/ UNIQUE SCHEMES OR INITIATIVES¹	
.1 Recycling schemes for plastic, PET bottles	Yes/No
.2 Encouraging community activity such as ALM ² formation	Yes/No
.3 Encouraging people's participation by building-wise or building complex-wise waste segregation and processing of organic waste by vermi-composting or composting	Yes/No
.4 Training needs for sanitary workers on health and safety issue	Yes/No
.5 Development of tools and implements	Yes/No
.6 Please provide list of potential NGO for implementing any of the initiatives (any association registered with municipal body/	

¹ Details of schemes can be provided on a separate sheet

2 Advance Locality Management

unregistered local area management)

• **AWARENESS**

- .1 Are you aware of the various notifications of the Ministry of Environment and Forests, Government of India Yes
- Municipal Solid Waste (Management and Handling) Rules, 2000 Yes
 - Recycled Plastics Manufacture and Usage Rules, 1999
 - Biomedical Waste (Management and Handling) Rules, 1998 Yes
 - Coastal Regulatory Zones Rules, 1991 (amended up to 2002)

Place:

Date:

Signature of the Municipal Commissioner /
The Health Officer/ The Chief Engineer (SWM)

Stamp

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.*