

PROFORMA FOR SUBMITTING INFORMATION ON SOLID WASTE MANAGEMENT

Name of City/Town:	Rishikesh	District:	Dehradhun
Name of Municipal Body:	Nagar Palika Parishad Rishikesh	Division:	Dehradhun
Address:	Haridwar Road, Rishikesh	State:	Uttranchal
Telephone:	2430015	Fax:	
Email:		Website:	
• DEMOGRAPHY			
.1	Name of Officer In-Charge	Chairman	
.2	Area of Municipal Corporation /Council (Please provide map showing legal limits of municipal body) (km ²)	10 sq. kms	
.3	No. of wards / zones	15 wards	
.4	Total population (as per 1991 census)	44,487	
.5	Total population (as per 2001 census)	56,117	
.6	Population		
	• Urban		
	• Slums		
.1	Floating population	20,000	
.2	Total no. of household		
.3	Average maximum temperature (°C)	40°C	
.4	Average minimum temperature (°C)	2°C	
.5	Average yearly maximum rainfall (mm)	220 mm	
.6	Average maximum humidity		
.7	Average minimum humidity		
.8	Average depth of water table		
.9	Altitude (i.e. mean sea level)	639 mts	

- **GENERATION OF MUNICIPAL SOLID WASTE**

.1 Total MSW generation (MT/day) 20 MT/day

.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) 2.10 t/d
- 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) 84.74 kms
(km)

	• Total length of cement-concrete roads (km)	8.70 kms
	• Total length of asphalted roads (km)	34.84 kms
	• Total length of Kutchha roads (km)	4.70 kms
	• Total length of bricks roads (km)	36.50 kms
.1	Total no. of sweepers employed	
	• Departmental	99
	• Contracted	71
.1	Working hours of sweepers	6.00 a.m. to 10.00 a.m. & 3.00 p.m. to 6.00 p.m.
.2	Norms of sweeping (e.g. one sweeper per ... population, or one sweeper per ... sq. m. area, or one sweeper per ... RMT road)	One sweeper per 100 mts (app.)
.3	Sweeping carried out at a location by	<ul style="list-style-type: none"> ○ One sweepers ○ Two sweepers ○ Three or more sweepers
.4	Sweeping waste is put in a...	<ul style="list-style-type: none"> ○ Box type wheel barrow ○ Containerised handcart ○ Cane or bamboo basket ○ Roadside bin ○ Open dump ○ Directly in the vehicle
.5	Frequency of sweeping	<ul style="list-style-type: none"> ○ All seven days a week ○ Six days in a week ○ Alternate days ○ Any other frequency (Please mention)
.6	Total no. of wheel barrows provided	----
.7	Total no. of containerised handcarts provided	15
.8	Total capacity of wheel barrow (kg)	----
.9	No. of containers and its capacity in kg	4 m ³ (app.)
.10	Type of broom provided	○ Long handle (No.:)
.11	Any other equipment provided (e.g. spade, shovel, tikow)	Spade, tikow, etc.
.12	Protective gear provided (e.g. leather hand gloves, gumboots, mask)	Gum boots, cloths, hand gloves for dumping site

• **COLLECTION, STORAGE AND TRANSPORTATION**

.1	Area covered for collection of MSW	10 sq. mts
.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?	Municipal Authority
.5	Is the segregation is carried out at source?	No
	If no, what steps have been taken?	----
.6	Total quantity collected (MT/day)	20 MT/D
.7	MSW collected in mixed form (MT/day)	20 MT/D
.8	MSW collected in segregated form (MT/day)	----
.9	Whether littering is prohibited by the municipality?	No
.10	Whether litterbins are provided?	No
.11	Frequency of waste collection	<input type="radio"/> Once in 24 hours <input checked="" type="radio"/> Twice in 24 hours <input type="radio"/> Thrice in 24 hours <input type="radio"/> Alternate days <input type="radio"/> Any other frequency (Please mention)
.12	Is waste collected every day <i>i.e.</i> 7 days a week and 365 days a year? If no, give details	Six days a week
.13	Total number, type, size, and capacity of storage bins / container / trailers provided	15 containers and capacity of 2.5 m ³
.14	Whether the bins are open or closed?	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	6 days a week ----
.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
Dumper placer (with 4.5 m ³ / 7 m ³ containers)					1
Open truck					1
Open truck with tipping	1	5 MT	Yes	Yes	No
Tractor-trailer with tipping	3	3 MT	Yes	Yes	2
Loader	1	----	Yes	Yes	1
Handcarts	125	3.5 cu ft	Yes	Yes	200

.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
Open truck								
Open truck with tipping	1	2	5 MT	4	1-3 kms			4/6
Tractor-trailer with tipping	3	2	3 MT	4	1-3 kms			4/6
Handcarts	125	2	3.5 cu ft					1

Total

.19 If the vehicles are open to atmosphere, are they covered with temporary plastic sheet? Yes

• **COLLECTION SYSTEM**

.1 Approximate MSW collected (MT)

- Household (urban)
- Slums
- Street sweeping
- Shops & commercial establishments
- Markets 2.10 Tonnes/day
- Hotels, restaurants, eating houses
- Gardens, parks, fairs
- Slaughter houses
- Building sites (debris, earth, etc.)

.2 No. of premises / establishments Households, shops, workshops, offices, institutions, industries and others = 6,823

- Households
- Shops, commercial establishments
- Slums, households, population
- Vegetable and fruit markets
- Fish and meat markets Main industry in the city is Stadia chemical
Main tourist spot in the city is Triveni Ghat

	o Hawkers	
.3	No. of hotels, restaurants, eating houses	Hotels = 26
	o Grade / class I	Restaurants = 21
	o Grade / class II	
	o Grade / class III	
	o No. of star hotels	
.4	Guesthouses	Tourist Bungalow
.5	Marriage halls	
.6	Hostels	
.7	Cinema halls	
.8	Theatres	
.9	Stables and no. of animals	
.10	Hospitals/ clinics/ nursing homes	Quantity of biomedical waste = 1 MT/d
	Total no. of beds	No. of beds = 15,400
.11	Parks, gardens, recreation places like lakes, amusement parks	Tourist spot is Ram bridge & Laxman bridge
.12	Building sites (under construction)	
.13	Slaughter houses	
	• PROCESSING AND DISPOSAL OF MSW	
.1	Total quantity of MSW processed (MT/day)	Nil
.2	Technology / technologies adopted	Nil
	o Composting (MT/day)	
	o Vermiculture (MT/day)	
	o Pelletisation (MT/day)	
	o Waste to energy (MT/day)	
.3	Composting	
	Compost produced (MT/year)	
	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	(Proposed) to the Government by Palika
	Pyrolysis	
	Bio-methanation	
	Any other (Please mention)	
	• Revenue generated (Rupees/year)	
.1	Dumping grounds/landfill sites	Govind Nagar, Haridwar Road
	• MSW disposed off by open dumping (MT/day) [mixed/inert]	All
	• MSW disposed off by controlled dumping (MT/day) [mixed/inert]	No
	• MSW disposed off by sanitary landfill (MT/day) [mixed/inert]	----
	• No. of dumping grounds/ landfill sites	1
	Whether municipality legally owns them?	No
	• Area of each dumping ground/ landfill site	0.5 acres
	• Whether the area will be sufficient for next 25 years	No
	• If no, then what steps have been taken to acquire land?	Site looking in the forest covered area of about 2 hectors
	• Distance (in km) of dumping ground / landfill site from ...	
	○ Habitation	Less than one kms.
	○ Drinking water source	0.5 kms from Ganga river
	○ Religious or monument places	Less than 0.5 kms from Ashram

•	Distance from airport or airbase	20 kms from Jolly airport
•	Has it been designed scientifically	No
•	Has the existing dumping ground been upgraded as required by MSW Rules, 2000	No
	If no, what steps have been taken (provide details)	Managing for other area for dumping of waste
.1	Whether the following facilities are provided	
•	Weighbridge	No
•	Fencing	No
•	Approach roads/ internal roads	No
•	Lighting facility	No
•	Site office with monitoring equipment	No
•	Managerial staff and manpower	No
•	Covering material used daily as per Rules 2000	No
	Is it available in sufficient quantity?	No
•	Gas venting arrangement	No
•	Leachate collection system	No
•	INSTITUTIONAL ARRANGEMENTS	
.1	SWM services provided in the city/town by	Municipality
.2	Total no. of Supervisory Staff provided (e.g. Health officer/ Assistant Health officer/ Chief Sanitary Inspector/ sanitary Inspector/ Sanitary Supervisors, etc.)	Medical/Executive Officer = 2 Sanitary Inspector = 8 Safai Naik = 6
.3	Total no. of sweepers/ Pourakarmikas/ labourers/ Mukadam/ Jathedars/ Daffedars, etc.	170 Sweepers
.4	Organisational structure	(Furnish separate sheet)
•	PRIVATISATION	
.1	Whether any of the following service is privatised?	No

•	Sweeping	No = 71 Sweepers on contract basis
•	Door-to-door collection	No
•	Community collection	No
•	Transportation	No
•	Processing of MSW	No
•	Sanitary landfilling	No
	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	
.1	Expenditure (in Rupees/Year)	2000-2001 = 6959174 2001-2002 = 7866682
•	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	
.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, vermi-compost, 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	No
•	Diary related activities	No
•	Slaughter house and unauthorised slaughtering	No slaughter house in the palika limits
•	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
	Recovery of administrative charges	----
	Fines under Municipal/Police Act	By complaints, Rs. 100 to Rs. 400 fine
	Recourse to Municipal Act bye-laws	
•	Whether any cases are registered and settled during last three years?	Yes = Four to eight cases per months or SWM
	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	No
.2	Encouraging community activity such as ALM ²	No

¹ Details of schemes can be provided on a separate sheet

	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	No
.4	Training needs for sanitary workers on health and safety issue	No
.5	Development of tools and implements	No
.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	Yes
•	Recycled Plastics Manufacture and Usage Rules, 1999	Yes
•	Biomedical Waste (Management and Handling) Rules, 1998	Yes
•	Coastal Regulatory Zones Rules, 1991 (amended up to 2002)	No
	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.

A celebrated spiritual centre, Rishikesh enjoys a calm environment, impressive waterfront and dense forest hills. Virtually a town of saints, sages and scholars, Rishikesh is a large religious centre situated on the right bank of river Ganga. There are no. of Ashrams where religious discourses are held for the benefit of the

visitors. The place is also a renowned centre for yoga teachings. River rafting is another attraction for Rishikesh.

The places to be seen nearby are Triveni Ghat, Bharat temple, Venkateshwar temple, Muni-Ki-Reti, Laxman jhoola , Ram jhoola, Swargashram, Geeta Bhawan, Parmarth Niketan, Divine Life Society.

A number of organisations have established their camps 15 kms upstream.