DELHI MSW SOLUTIONS LTD.

DELHI MSW SOLUTIONS LTD.
(A Ramky Group Venture)
Duplex House No. 1, In Front of Impressive Homes,
Near Dronacharya Public School New Rajendra Nagar,
Raipur (Chhattisgarh) Pin Code - 492006
Phone - 0771-4024970

DMSWSL/P/RAIPUR/13062023/265
13.6.2023

To
The Executive Engineer
Raipur Municipal Corporation (RMC)
Nagar Nigam Head Office,
Near Mahila Thana,Gandhi Udyan
Raipur-492001

Project: Integrated Municipal Solid Waste Management Project Raipur Municipal Corporation State of Chhattisgarh through Public Private Partnership on Design, Build, Finance, Operate and Transfer (DBFOT) basis.

Sub: Submission of Form 3 as per the SWM rules 2016

Dear Sir,

We are hereby submitting the form -3 as per the terms & conditions of SWM rules 2016

Thanking you and assuring you of our best services at all times.

Yours faithfully,

Authorized Signatory

DELHI MSW SOLUTIONS LTD. RAIPUR (C.G.)

For M/s Delhi MSW Solution Ltd.

नगर निगम रायपुर S.B.M. Deptt. रायपुर (छ.ग.)

Towards sustainatia growth

Form – III
[see rule 19 (6), 24 (1)]
Format of annual report to be submitted by the operator of facility to the local body

1.	Name of the City/Town and State	Raipur
2.	Population	14 Lakh approximate
3.	Area in sq. kilometers	178 SQ Km
4.	Name & Address of the local body Telephone No.: Fax No.: E-mail:	Executive Engineer, Raipur Municipal Corporation, Mahatma Gandhi sadan, Raipur
5.	Name and address of operator of the facility	Delhi MSW Solutions Ltd
6.	Name of officer in-charge of the facility Phone No.: Fax No.: E-mail:	Yogesh Kumar 9958366444 Yogesh.kumar@resustainability.com
7.	Number of households in the city/town, Number of non-residential premises in the city Number of election/administrative wards in the city/town	2,96,000
8.	Quantity of Solid waste	520TPD
	Estimated of solid waste generated in the local body area per day in metric tones	575/tpd
	Quantity of solid waste collected per day	520/tpd (50 TPD inside composting)
	Per capita waste collected per day	400/gm/day
	Quantity of solid waste processed	520/tpd
	Quantity of solid waste disposed at landfill	Nil
9.	Status of Solid Waste Management (SWM) service	
	Segregation and storage of waste at source Whether solid waste is stored at source in domestic/commercial/institutional bins If yes, Percentage of households practice storage of waste at	Yes 100 %

	source in domestic bins Percentage of non-residential premises practice storage of waste at source in commercial/institutional Bins Percentage of households dispose of throw solid waste on the streets Percentage of non-residential premises dispose of throw solid waste on the streets Whether solid waste is stored at source in a segregated Form If yes, Percentage of premises segregating the waste at Source	100 % 100% 0 % No 0 % 100%
	Door to Door Collection of solid waste	Yes
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes
	If yes	
	Number of wards covered in D2D collection of waste	**70**
	No. of households covered	2,96,000
	No. of non-residential premises including commercial establishments, hotels, restaurants educational institutions/offices etc covered Percentage of residential and non-residential premises covered in door to door collected through: Motorized vehicle Containerized tricycle/handcart Other device	45,000 100% 100% NA Wheel bin/Refuse compactor
	If not, method of primary collection adopted	
	Sweeping of streets	Scope of RMC
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	Km
	Frequency of street sweepings and percentage of	Frequency: Daily / Alternate Days / Twice a / Occasionally

	population covered				week	
		% of population covered				
	Tools used	%				
	Manual sweeping	%				
	Mechanical sweeping	Yes/No				
	Whether long handle broom used by sanitation Workers	Yes/No				
	Whether each sanitation worker is given handcart/tricycle for collection of waste	Yes/No				
	Whether handcart/tricycle is containerized	Yes/No				
	Whether the collection tool synchronizes with collection/waste storage containers utilized					
	Secondary Waste Storage facilities					
	No. and type of waste storage depots in the city/town	No. Capacity in m^3				
	Open waste storage sites					
	Masonry bins	9 (transfer stations)				
	Cement concrete cylinder bins					
	Dhalao/covered rooms/space					
	Covered metal/plastic containers					
	Upto 1.1 m^3 bins					
	2 to 5 m^3 bins					
	Above 5m^3 containers					
	Bin-less city					
	Bin/population ratio	Bin free				
	Ward wise details of waste storage depots (attach):					
	Ward No:	Total 70 wards				
	Area:					
	Population:					
	No. of bins placed					
	Total volume of bins placed					

	Total storage capacity of waste storage facilities in cubic meters	2 bin each transfer station 32 cubic meter	
	Total waste actually stored at the waste storage depots daily		
	Give frequency of collection of waste from the depots Number of bins cleared	Frequency	No. of bins
		Daily	
		Alternate day	
		Twice a week	
		Once a week	
		Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes/No (if yes, add details) No. of green bins: No. of blue bins: No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage	(5) of Manual Lifting of SOLID WASTE	Mechanical
		(%) of Mechanical lifting	100 %
	If mechanical – specify the method used	Hook lifting	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Through transfer stations	
	Waste Transportation per day Type and Number of vehicles used (pl tick or add)	No. Trips 40 made Waste Transported	
	Animal cart Tractors Non tipping Truck		

	Tipping Truck Dumper Placers Refuse collectors Compactors Others JCB/loader	6 hook lifters 29 poratable compactors 7 Refuse compactors 3 Hyva
	Frequency of transportation of waste	Frequency (100%) of waste transported Daily
	Quantity of waste transported each day	520/tpd
	Percentage of total waste transported daily	100 %
	Waste Treatment Technologies used	Windrow Aerobic process & Size segregation in trommels
	Whether solid waste is processed	Yes
	If yes, Quantity of waste processed daily	520/tpd
	Land(s) available with the local body for waste processing (in Hectares)	27
	Land currently utilized for waste processing	67 acres of land is allotted for the processing facility.
	Solid waste processing facilities in operation	Yes
	Solid waste processing facilities under construction	NIL
	Distance of processing facilities from city/town boundary	Approx 20 kms from the city
	Details of technologies adopted	
	Composting	Qty. raw material processed **520 Metric tons per day** Qty. final product produced **20-25 metric ton per day** Qty. sold- As of now **2436 MT** we have sold the compost throughout the year Qty. Of residual waste landfilled **130-140**

		tons
	Vermin composting	Aerobic composting through windrow process
		Qty. sold Quantity of residual waste landfilled
	Bio-methanation	NA
	Refuse Derived Fuel	Qty. raw material processed – **520 metric tons per day** Qty. final product produced – **120-130 metric tons per day** is disposing to cement plants at free of cost Qty. sold – approx **120- 130 metric tons** is disposing in cement plants at free of cost Quantity of residual waste landfilled- **130-140 metric tons**
	Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give details)	Qty. raw material processed **NA** Qty. final product produced **NA** Qty. sold - **NA** Quantity of residual waste landfilled- **NA**
	Co-processing	Qty. raw material processed
	Combustible waste supplied to cement plant	**120-130 Tons per day is disposing in cement plants**
	Combustible waste supplied to solid waste based power plants	**NIL**
	Others	
	Solid waste disposal facilities	One
	No. of dumpsites sites available with the local body	ONE

	No. of sanitary landfill sites available with the local body	WE HAVE 7 NO'S OF SANITARY LANDFILLS CELLS
	Area of each such sites available for waste disposal	Total landfill area is proposed approx 24 acres at sakri
	Area of land currently used for waste disposal	10 acres
	Distance of dumpsite/landfill facility from city/town	20 Kms
	Distance from the nearest habitation	1 Kms
	Distance from waste body	1 Kms
	Distance from state/national highway	6 Kms
	Distance from Airport	11 Kms
	Distance from important religious places or historical	10 Kms (Mata Kausalya mandir)
	monument	
	Whether it falls in flood prone area	No
	Whether it falls in earthquake fault line area	No
	Quantity of waste landfilled each day	130-140 metric tons
	Whether landfill site is fenced	Yes
	Whether Lighting facility is available on site	Yes
	Whether Weigh bridge facility available	Yes
	Vehicles and equipments used at landfill (specify)	Bulldozer, Excavator, Vibro roller, compacters, Tippers etc.
	Manpower deployed at landfill site	Total of 105 (In 2 shifts) Manpower is deployed for the entire waste processing facility including compost plant, RDF plant, leachate treatment facility.
	Whether covering is done on daily basis	Yes
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	Soil
	Whether adequate covering material is available	Yes
	Provisions for gas venting provided	NA
	Provision for leachate collection	Collection through underground pipe system and the technology is MEE **(Multi effective evaporator)**

10.	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes
11.	What separate provisions are made for: Dairy related activities: Slaughter houses waste: C & D waste (construction debris):	In scope of RMC
12.	Details of Post Closure Plan	Provisions as per concession agreement
13.	How many slums are identified and whether these are provided with Solid Waste Management facilities:	Yes 36 slum area
14.	Give details of manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	C&T 720 Transfer stations 23 P&D Plant 105 Sweeping scope of RMC
15.	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	User charges collection is a big challenge
16.	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies	1. App based monitoring of all vehicles 2. App design for public use 3. Employment to rag pickers 4. Leachate water reuse in green belt and vehicle washing.

Signature of Operator

DELHI MSW SOLUTIONS LTD. RAIPUR (C.G.)

Date: 13/6/2023

Place: Raipur