

Standard Operating Procedure (SOP)

Cum

Macro Plan

FOR

Door to Door Collection of Segregated Municipal Solid Waste in



Chatta Zone, Agra

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Submitted by

Spaak Global Agra Waste Collection Private Limited

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Introduction

Spaak Global Agra Waste Collection Private Limited

Spaak is a sole proprietorship firm which was founded in 2006 by Mr PankulRathore. Initially established as an entity taking care of Land acquisition for industrial purposes. In Solid & Liquid waste management and committed towards creating a quality waste collection, transportation, processing & recycling program to assist the Organizations in treating their waste in a scientific & safe manner.

About us :SGAWCPvt. Ltd. An emergent & efficient service provider in the field of municipal solid waste management, construction & demolition waste management, Spaak has now steadily grown and diversified into the following business areas:

Civil Construction

- Waste to Energy
- Capping of Municipal Waste Dumps
- Door to Door Waste Collection and Transportation
- Project Advisory
- Pharmaceuticals Branding and Marketing

Backed by reach Industries Experience, we are engaged in successfully offering complete Project handling services that is aimed at building a clean, healthy and self-sustaining environment. Meant for welfare of human capital and environment, our wide range of services is backed by Extensive research that helps us to successfully accomplish various challenging projects. Our well planned & executed methodologies have also allowed us to successfully customers with services in a more streamlined manner.

Over the years, Spaak has been recognized for providing high quality, timely, competitive and innovative solutions for its clients across its full spectrum of services. Further in an attempt greater focus and independence to each of the business segment- all businesses have been put up under independent and professional management.

“Door to Door Collection of MSW” means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non-residential wastes, collected from the source of generation and transfer to the processing facility without touching ground in any case in the area Chatta zone under Agra Nagar Nigam.

Solid Waste management is fast coming to be recognized as priority area requiring intervention, if life in urban areas is to be sustained and improved. The menace of municipal solid waste/garbage and slaughter house waste is increasing everyday on account of growing population, limitations of existing infrastructure

and technologies for its management. In this light, M/s Spaak Global Agra Waste Collection Private Limited, Delhi has been engaged into municipal solid waste management in the city for the following services.

Scope of Work

- 1- Door to Door collection of Municipal Solid Waste within the allotted zone i.e. Chatta
- 2- Information, Education, Communication (IEC) for Segregation and storage of Domestic Hazardous waste
- 3- User charge collection from the service area and deposition in the account of Agra Nagar Nigam

Execution Plan

1- Primary (Door to Door) Collection of Municipal Solid Waste

The Methodology for door to door collection: following are the vehicles which shall be deployed for door to door collection according to roads/streets and density of the area. The capacity of the vehicle to cover house hold & commercial properties as below...

- 1- Auto Tipper: Approximately average coverage of 900 to 1500 properties
- 2- Tricycle: with Six detachable bins of 60 ltrs approximately coverage of 250 to 300 properties



AutoTipper (2CuM)

Tricycle with 6 Detachable Bins

- *Time of primary operations shall be in summer season from 06:00 hrs in the morning till 14:00 hrs. Some special and commercial collection shall be completed from 14:00 hrs to 22:00 hrs as and when desired and in winter season from 7.00 hrs to 15.00 hrs in first shift, from 16.00 hrs to 21.00 hrs in second shift as and when required .*

- *Door to Door collection shall be completed by 80% of total residential Properties using Mini tipper fitted with two hopper of 1 CuM each and auto tipper with 1.5 Cum fitted hopperto collect segregated waste & 20% of total residential properties by tricycle with 8 detached 60 Ltrs bin system for narrow and inner streets of the city.*
- *Commercial wastes under shop to shop collection shall be catered by Mini tipper fitted with 2.0 CuM two hopper of 1 CuM each to collect segregated waste*
- *Each vehicle for residential area will be having one driver & two helper only for collection of segregated waste.*
- *After collection of segregated waste from both Residential& Commercial areas, the Dry waste transfer to ISBT and Wet waste transfer to the composting plant.*
- *To wash and make disinfected SWM vehicles atleast thrice in a week.*
- *Provision of personal protective equipments(PPE)- including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid/liquid waste.*
- *Each vehicle for commercial area will be having one driver & Two helper for shop to shop collection*
- *A route chart of each vehicle shall be prepared, freeze and fixed to each vehicle, which bound to concern driver and helper for timely collection of waste. **(Format enclosed as Annexure A)***
- *Swachhta Music on each vehicle and whistle to each tricycle shall be fitted to intimate the users for giving their segregated stored waste*
- *All the vehicles deployed for door to door collection shall be equipped with GPS system which shall be monitored with a control room specially built for the purpose. The control room equipped for real time and resource management.*
- *Monitoring of timely collection and trips according to route chart will be recorded through GPS system every day*
- *An complaint redressal system shall be developed by providing a customer care number which shall be flashed in each document like UCC receipt banners etc. to resolve the complaints within the stipulated time*
- *An dedicated employee will be deployed for the customer complain handling and redressal system to ensure the timely and effective services*
- *One Supervisor in each ward called as **ward supervisor** will be deployed for implement, execution and monitoring the timely and effective services, who will be in touch with the concern sanitary inspector/ward official/Parshad for effectively implementation and instant resolution of any issue*

Ward Wise Vehicle & Manpower Deployment Plan

SPAAK GLOBAL AGRA WASTE COLLECTION PRIVATE LIMITED														
Deployment Plan for Door to Door Collection in Chatta Zone Agra														
			Asset Deployment Plan			Manpower Deployment Plan			Manpower Relievers		Total Manpower		Nos of Supervisors	Nos of UCC Collector
Sr No	Ward No	Nos of House Hold & Commercial Properties	Qty of waste generated/ M.T	Nos of Mini Tipper	Nos of Tricycles	Nos of Helper	Nos of Drivers	Nos of Supervisor	Nos of Helper	Nos of Drivers	Nos of Helper	Nos of Drivers		
1	1	4013	8	1	3	8	1	1	1	0	9	1	1	2
2	8	5703	12	1	5	12	1	1	1	0	13	1	1	1
3	13	4520	9	1	4	10	1	1	1	0	11	1	1	1
4	14	5551	11	1	5	12	1	1	1	0	13	1	1	1
5	16	4095	8	1	3	8	1	1	1	0	9	1	1	2
6	17	5427	11	2	4	10	2	1	1	1	11	3	1	1
7	23	3355	7	1	3	8	1	1	1	0	9	1	1	1
8	28	8503	17	2	5	14	2	1	1	1	15	3	1	2
9	32	3458	7	1	3	8	1	1	1	0	9	2	1	2
10	39	4583	9	1	3	8	1	1	1	0	9	2	1	2
11	40	4717	10	2	3	10	2	1	1	1	11	3	1	1
12	42	5415	11	2	3	10	2	1	1	1	11	3	1	1
13	50	4724	10	1	4	10	1	1	1	0	11	2	1	2
14	53	5911	12	1	4	10	1	1	1	0	11	2	1	1
15	54	5536	11	2	3	10	2	1	1	1	11	3	1	2
16	55	5247	11	1	3	8	1	1	1	0	9	2	1	1
17	58	4280	9	1	3	8	1	1	1	0	9	2	1	2
18	59	9398	19	2	5	14	2	1	1	1	15	3	1	2
19	64	7102	14	2	4	12	2	1	1	1	13	3	1	2
20	65	5465	11	1	4	10	1	1	1	0	11	2	1	2
21	66	5247	11	1	4	10	1	1	1	0	11	2	1	2
22	68	5749	12	2	3	12	3	1	1	1	13	4	1	2
23	76	5772	12	1	3	8	1	1	1	0	9	2	1	2

24	79	5159	10	1	3	8	1	1	1	0	9	2	1	2
25	83	5203	11	1	3	8	1	1	1	0	9	2	1	2
26	91	4668	9	1	4	10	1	1	1	0	11	2	1	1
27	95	8567	17	2	4	12	2	1	1	1	13	3	1	3
28	99	8189	17	2	6	14	1	1	1	0	15	2	1	3
29	100	4515	9	1	3	8	2	1	1	1	9	3	1	2
	Total	160072		39	107	290	40	29	29	10	319	63	29	50

Note: waste quantity calculated @ 450 gms per capita and one house hold having 4.5 person approx

2- IEC Activities for Awareness for segregation at source

- *Banners/Hoardings for awareness: Banners of Swachhta for awareness shall be displayed in all the public places subject to the availability of place to be allotted by Nagar Nigam Agra*
- *One special vehicle (e rickshaw) equipped with all promotional equipment's like banners, pamphlets & announcement etc. which will be covering approximately 250 house hold properties visited daily on random basis in each ward, in the campaign users shall be aware educate for segregation of waste and storage of domestic hazardous waste generated within the premise,*
- *In this process we are planning to achieve 100% segregation as separate storage of Dry waste (Blue), Wet waste (Green) & Domestic Hazardous waste (Red) and to achieve minimum two wards every month is the target.*

3- User charge collection from the service area and deposition in the account of Agra Nagar Nigam

- *Monthly user charges as per notification of rates, notified by Agra Nagar Nigam shall be collected and deposited in the bank account of Agra Nagar Nigam.*
- *Weekly list of defaulters (who are not paying user charges or not giving garbage) shall be submitted to the authority for penalization and support*

Ward wise User Charge Potential as per Rate List

Sr No	Ward No	Total Nos of Properties	Total UCC Projection (Rs)
1	1	4,013	1,60,520
2	8	5,703	2,28,120
3	13	4,520	1,80,800
4	14	5,551	2,22,040
5	16	4,095	1,63,800
6	17	5,427	2,71,350
7	23	3,355	1,34,200
8	28	8,503	3,40,120
9	32	3,458	1,38,320
10	39	4,583	1,83,320
11	40	4,717	2,35,850
12	42	5,415	2,70,750
13	50	4,724	1,88,960
14	53	5,911	2,36,440
15	54	5,536	2,76,800
16	55	5,247	2,09,880
17	58	4,280	17,120
18	59	9,398	3,75,920
19	64	7,102	3,55,100
20	65	5,465	2,18,600
21	66	5,247	2,09,880
22	68	5,749	2,29,960
23	76	5,772	2,30,880
24	79	5,159	2,06,360

25	83	5,203	2,08,120
26	91	4,668	1,86,720
27	95	8,567	3,42,680
28	99	8,189	3,27,560
29	100	4,515	1,80,600
	Total	1,60,072	65,30,770

Monthly Projected User Charge Target

Sr. No.	Name of Activities	May-19	June-19	July-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
1.	User Charge Collection	40%	40%	40%	40%	40%	70%	70%	80%	100%	100%

Required Support to achieve the above target of UCC

- 1- Ward ZSO/CSFI/SFI to support in achieving 100% services and 100 % source segregation& User Charge Collection.
- 2- All the workers of municipal corporation and their relatives to be penalized for involving in D2D activities and user charge collection..
- 3- Above monthly target of user charge may be achieved only after the strong support to be provided by ANN (authority) by penalizing to the defaulters within one week as per the defaulters list to be submitted by agency.
- 4- Regular street sweeping and drain cleaningby ANN is required to get the 100% collection of MSW and user charge as well.
- 5- Street bins(CP AND DP BINS) to be removed which are placed in residential areas as per plan finalized to achieve the targets.

Control Room and implementation of Smart System for Monitoring of daily operations

- *Control room will be set up in the office premises of Spaak Global Agra Waste Collection Private Limited Shaheed Nagar, RajpurChungi Near Police Chowki Agra from where the movement of vehicles can be monitored,*
- *A Customer care number+ whats app number (8178688313)and facebook link has been created and will be provided under complain redressal system for proper services and feedback of the services.*

- *Efficient training to the workers as drivers & helper for their scope of work for the execution of project shall be provided to make the project successful*
- *Biometrics Attendance machine for the monitoring of daily attendance of workers will be fixed for monitoring of manpower*
- *GPS devices shall be installed to each mechanized vehicle for the monitoring of daily movement*

Month wise Achievement Plan for Source Segregation of MSW

Sr No	Name of Activities	April 19	May 19	June 19	July 19	Aug 19	Sep 19	Oct 19	Nov 19	Dec 19
1-	IEC for Source Segregation and Storage of MSW	10%	25%	35%	45%	60%	70%	80%	90%	100%
2	Ward Numbers to be developed for 100% source segregation	40 50 100	65 55 76	54 95 1	17 39 66	65 59 32	91 8 58	83 13 16	14 23 28 99	53 79 68 42

Schedule of IEC Activities

Sr No	Item	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
		3 Wards	3 Wards	3 Wards	3 Wards	3 Wards	3 Wards	3 Wards	4 Wards	4 Wards
1	Tie ups with FM radio & local cable TV network for Awareness tag line, All the events will be covered with both still photographs & video recording,									
2	Event RWA Meetings/ Quiz Show/Painting Competition/School Assemblies/ NukkadNatak	3	3	3	3	3	3	3	4	4
3	Hoardings for Awareness (10*8) Complete Installation	3	3	3	3	3	3	3	4	4
4	Kiosk	3	3	3	3	3	3	3		4