nding Enganj Indi.

0015

4

Slum Population (no. of slum pockets and approximate population, ward-wise list of slums and the area occupied by them, population)

		Siums	s and	the ar	ea occ	cupied by them, por	inu a	pproxi	mate	bonu	lation u
	S.No.		ווופרן	OIV	Ward	cupied by them, por	oulatio	on)			
			Nam		No.	Location (Cluster N	lame) Re	venue tt.	Nos Jhu	nis Own
	1			erved)		Indira Camp Surrou By Block-28,29&19 Puri Site-I	Indeo Trilo	k Eas	t	1200	Agen DUSI
ŀ		(Trilok Rese	rved)	209	Sanjay Camp Block Trilok Puri		Eas		300	
-		(rilok Rese	ved)	209	ndira Nagar Block-2 Frilok Puri		East		19	DUSI
4- 1	5	(<u> </u>	rilok I Reser rilok F	ved)		Sanjay Shakha Cam Block-15,16 Trilok P	Luei	East		105	DUSIE
5 6	58	(F	Reservice F	ved)	10 8	nastn Camp Block- Trilok Puri	6,7&	East	-	58	DUSIB
7	55	(F	lesen	/ed) 2		idira Camp Block-1, rilok Puri		East	2	15	DUSIB
8	55	(R	eservilok P	ed) 20		ajiv Camp Block-26 ilok Puri		East	7	9	DUSIB
9	55	(R	eserv	ed) 21	[[1][1]	arijan Camp Block-3 lok Puri		East	6	7	DUSIB
0	55	Tril	ok Pu	ri	520	nbedekar Camp Blo &34 Trilok Puri	ck-	East	95	50	DUSIB
1 2	56 56	Kor	serve Idli (S	C)21:	3 RIO	ck-24 Tirlok Puri ck-17 & 21 Kalyan F		East	29		DUSIB
<u>-</u> _3	56	,		C)213 C)213		ck-19,20 Kalyan Pu ra Camp Block-11,1	ei r	ast ast	13 34		DUSIB
4	56			C) 213	JJC	Block-18 Indica Car	JC.	ast	167		DUSIB
	56			()213	Bloc	k-1,6.7 Khichrinus	TIP E	ast	101	9 [USIB
ĺ	56)213	Bus	Stand Khichrinur	-	ast ———	150	D	USIB
	56	Kond		-	Mulia	K-13,14 Colony,Village	+	ast	94	D	DA
	56	Kond		-	JJ Cli	oli Uster Gazinur	-	st	287	DI	DA
	57	Patpa	rganj	220	Pandi	ning NH24 it Bismil Camp ni Garden Patpar	Ea		650	DI	DA
	57	Patpar			Dani	, Patpar Ganj	Eas	st	1159	DE	PA
E	7				Indira .	J Camp) Jhugie Jhompri	Eas	st	603	PΝ	/D
		Patpar	ganj	-10	Camp Khichri	Kalvanyas	Eas	t	50	DD,	A

22		1 6	5				
A Part	57 Patp	arganj 217 Ravidas	sh Morcha,	7		-	
h2 1			Camp Panda other Diary	IV E	ast	177	L
- 1	7 Patpa	iyani 219 Perbiar	Il Camp E			11/1	DE
24 5		IVIDOR No		E	ast	050	+
he L		h-Plock	Fact Vin			250	DD
25 5	Patpar	ganj 213 Near Gaz	,8 Khichri Pur	Hai E	ast	166	DD,
ba +	-	Phase-II	i Pur Drain	Ea	st	400	
26 57	Patpan	ganj 220 Hr. Sec. S	ichool behind		-	482	DUS
27 57		- Patpar Ga	n.	Eas	1	1	+-
F. 37	Patparg	ani 210 P-Block V	Vest Vinod			1624	DDA
28 58	Laxmi	Nagar		Eas	t	33	-
	Nagar	224 Sonia Cam	p near	+	-		DDA
29 58	Laxmi	Sayeed Per	Adams	East	1	357	DDA
	Nagar	221 Mazar, Ram	erwala ki		-		
00			P	East	- /1	84	DDA
30 58	Laxmi	Indira Camp	Elect 1	1-			JUA
	Nagar	221 Office Kishai Extension	n Kunj	East			
31 58	Laxmi	Harizan Co-		-40[30	07 0	DA
1	Nagar	Harizan Sam	iti Near		-	-	
	1	Mandavali	langal Bazar	East	20	0	DA
32 59	Vishwas	Mazboor Com	ID No.			1	JA.
-	Nagar	I OHOG CHOWA	d Mandavli	Shahad	lar		
33 59	Vishwas	The state of the s	a				Α
34 50	Nagar Vishwas	Phase-II		hahad	ar	-	
	Nagar -	Madhu Vihar D	hase I		221	DD/	4
35 59	Vishwas	Tatpar (Sani Denoi L	nahada	345	000	
	Vagar 2	FO MGCR Shabal	IO.	-		DDA	1
36 59	/ishwas	Rajiv Gandhi Ca Wihar EAST GURLLAN	a	uniaua	35	DDA	
1 1	-	Vihar Vihar	mp Chitra Sha	ahadai	-	-	
37 59 N	ishwas	EAST GURU AN	GAD a		375	DDA	- 1
	agar 22	LAJOURN MEVE	RADHU Sha	hadar	S. Street, etc.	1	-
38 59 M	shwas		a			DDA	- 1
Na Na	gar 22	C-Block, Jaina To Preet Vihar	wer Shall	nadar			
39 59 Vis	shwas gar 226	New Saniay Ameri	a	E	3	DDA	
140	hwas			adar 3	200		-
0 59 Vis	gar 226	10 Quarters Vieh	as Char	3	309	DDA	
0 59 Vis			To see the	adar 67	7	DDA	-
0 59 Vis Nag 1 59 Visi)Was	Library -				er 145	
0 59 Vist Nag 1 59 Vist Nag	iwas ar 225	Uhuggies Adjoining	Shahr	do		-	
0 59 Vist Nag 1 59 Vist Nag 60 Krist	nwas ar 225	Trailing V	Shaha	idar 52	8		-
0 59 Vist Nag 1 59 Vist Nag	nwas ar 225 hna ar 230	Uhuggies Adjoining Railway Line Anand Rani Garden Oppos Sec. School Shastri Infront of Block-12 C	Shaha Vihar a site Hr.	dar 52	8 0	DA	

A		-	h.	1	6
		-	Nagar		Colony
	44	60	Krishna Nagar	229	JJ Indira Camp Pust
	45		Krishna Nagar	229	Shakar Pur Chungi Thokar
	-	N	andhi agar andhi	236	New Seelampur East 292
	-	N.	agar andhi	234	Chander Puri Railway Lines Old Seelam Pur Along Railway Lanes
	49 6	1 Ga	gar Indhi gar		Aiit Nagar Old S
1	50 6	Ga Na	ndhi gar	233	Pusthta Buland Masjid Fast 2500
1	51 6	Nag	ici.	233 E	Block-C Shashtri Park,
5	3 61	Gar Nag Gan	ar 2	B	yamli Chirga, Near Police heck Post, Bihari uilding Yaumna Bridge aj Colony G.T. Road
54	-	Naga Shah	ar 2:	Pu Ok O Cre	d Seema Puri near
55	62	Shaho	dara 240	Pus See Gar Can	shta between Old emapuri, DIF Dilshad rden (Indira Nehru np Part-I)
6	62	Shahd	ara 240	See: Gard Cam	hta Between Old mapuri, DLF Dilshad Shahadar den (Indira Nehru a
7	62	Shahda		Borde Shah	hik Nagar, Dehi U.P. er G.T. Road Shahadar 365 DDA
	62	Shahda	and the same	Behin Jhilmi	nd Krishna Market Shahadar 1108 DUSID
	62	Shahdar	a 230	A&B-E	B Jhilmil Colony Shahadar 125 DUSIB Block Jhilmil rial Area Raj Nagar Colony (Sonia Shahadar a 509 DDA

7	
61 62 Shahdara 239 A&B-Block Jhilmil Industrial Area Raj Nagar Shahadar 295 DD	_
62 62 Shahdara 239 Industrial Area Raj Nagar Shahada	-
Shahdara 220 Deepak Colony Dilohad	1
Shahdara 239 H-Block Kalender Colony, Shahad	
66 62 Shahdara pag Dilebed Martell Shahadar	_
Shahdara 239 Dr. Rajinder Parsad Shahadara Shahadara	_
69 62 Shahdara has F-30 Wara Shahadar	
Puri 242 E-Block Seema Puri Shahada	1
72 63 Seema (Part-1) Shahadar a 470 DUSID	
73 63 Seema Sarhad Puri Road No.64 DUSIB	
Part-II Sarhad Puri Road No.64	
Opposite New Seema Puri a Shahadar 239 PWD	
Puri 242 Road No.64 Tahir Pur Shahadas	
63 Seema New Seema Puri Shahadar	
Puri 242 Block-F New Seema Puri Shahadaa	
Puri 241 Gram Khera Mansarover Shahadar 557 MCD	

1.0			7		
61 62		A&B-Block JI	hit is		
62 62	Shahdara	Sonia Colony Camp)	a Raj Nagar (Rajiv	Shahadar a	295 DDA
	Shahdara	Sonia Colony (Raj Nagar S Dr.	Shahadar 7	13 DDA
63 62		Deepak Colony Garden Behind Office	Dilah	hahadar 19	
64 62 65 62	Shahdara 23	H-Block Kalende	er Colony, Sh	ahadar 350	5 DDA
66 62	Shahdara 239	Dilshad Garden F	Part-II	ahadar	
60	Shahdara 239	Dr. Raiindar D	nahdara la	hadar 219	DDA
60 65	Shahdara 239 Shahdara 239	Colony at Dilshad Dilshad Garden E- Near Gurudwara	120 Shai	hadar 110	DDA
70 63 S	eema	Dilshad Garden	ny Shah	adar 250	DDA DDA
71 63 Se	eema Iri 242	E-Block Seema Pur D-Block New Seema (Part-1)	a Puri Shaha	adar 175	DUSIB
Pu	ri 242	D-Block, New Seema	a Puri Shaha	dar	DUSIB
73 63 See Puri	ema 242 (l'	arhad Puri Road No Near Shanti Samiti) pposite New Seema art-II	Shahad	ar	DUSIB
74 63 Seer Puri	na Sa Ne	rhad Puri Road No.	64		DDA
75 63 Seem	Par Par Nev	t-I	- 1	1 1	VD
76 63 Seem. 77 63 Seema	242 Roa	d No.64 Tahir Pur	iti) a Shahadar	·	A
Puri 78 63 Seema	New New	Seema Duri	Shahadar	188 DD	
Puri 79 63 Seema Puri	1	Mandir Block-B-1/35 ad Garden	Shahadar 8	41 000	
0 63 Seema Puri	241 Gram Park	-F New Seema Puri Khera Mansarover	Shahadar a Shahadar a	107 00	
	des en		a 55	7 MCD	



	81	83	Pur		241	Tahir Pur Road	8				
	82	63	See Puri		244	Block. G-3 G-5 C	No.64 Under	20	hada	K)	DDA
	83	63	Seer		244	Nagri F2 Block Sunder		a	hadar	999	DUS
	85	63	Seen Puri Seem		244	E-2 Block Nand N	anri	Shah	adar	188	DDA
		63	Puri			F1 Block, Sunder I		a Shaha a	Ider 9	3	DUSII
1			Puri		243 E	llock-D 1&2 Nand	Nagari	a Shaha a	dar 29	90	DDA
1	-		Rohtas Nagar	b	47 A	Block G T Paris	agar.	North	49	2 0	USIB
8	-	-	Rohtas Jagar	2		nahdara Block, Nand Nagri	Æ	ast	346	RI	.Y
90	-	N	ohtas agar	24	s Ra	Way Our	E	orth ast orth	168	DU	SIB
91	-	P		25	CP.	J-Block New S-	ea m No	st	0	DD,	4
92	65 65	Pu	elam r elam	250	Alor	g With Pushta ElJ	Ea:	st	753	DUS	3IB
)3	65	Pui	lam	250	Bloc	k.3/4K Brahampur i New Seelampur	r Eas	t	0	DUS	IB
4	65	Pur		250	BIOCK	-D, Seelamour	East	h)	DUSI	В
5	67	Pur		250	Block New 5	C-1 Imbira Pushta	East North	1		DUSIE	-
-	67	Baba		-08	Zafrab	ad Port	East Shaha	adar 39	07	DUSIB	
6	38	Gokal	-	59 82 B	afraba lock-C	Mazdoor Camp	Shaha a	dar 500	00 0	DDA DA	-
				G	okal P	uri-l	North East	735	1	DA	-

2.6 Main tourist spots in the city:-

- 1. 11.
- Akshardham Temple Common Wealth Village Ш.
- Yamuna Sport Complex IV.
- Sanjay Lake

2.7 Climate:

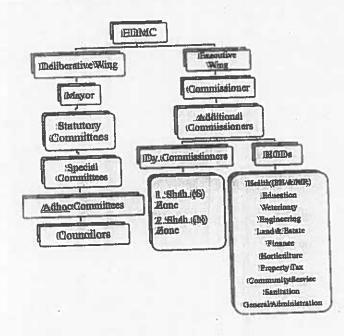
In general, the climate in Delhi is extreme. During the summer months of April, May & June temperature can rise to 40-45 Degree Celsius: ; winters are typically cold. The mean rainfall in Delhi is 784.5mm. May is the hottest months with average maximum temperature touching 39.5 degree Celsius. Most humid

7

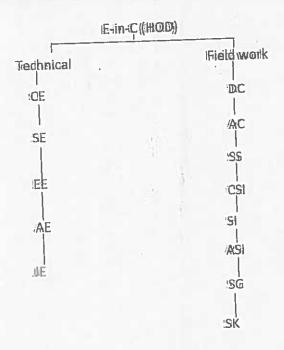
9

conditions are found in the monsoon, followed by winter, post monsoon and summer in that order. Wind directions vary with season.

2.8 Political & Administrative Set up of EDMC



2.9 Administrative Set up for Solid Waste Management of EDMC:



Supervisory staff:-

SS:-04

CSI :- 02

SI:- 60

ASI :-181

SG:- 174

Ward wise detail of area, population, number of SKs and Garbage generation;

-	.No	WA	RD	Ward Name		Area (Km	Sq	Popula	tlon	SK	Garbage generation (kg per day)
	4 212 5 213	9	Mayur Vihar Phas	e-i	1.250		4353	2	321	24400	
		21	0	Dallupura .	4	0.881		34826		249	19520
	4 212			Trilok Puri .	_	0.940		60945		175	34160
	+	212	-	New Ashok Nagar	.	1.954		60945		133	34160
	+	213	-	Kalyan Puri .	1	0.645		43532		202	24400
6	+	214	1	Khichripur.	1	5.235	100	52239		213	29280
7 215		Kondli .		1	2.143		60945		168	34160	
8	+	216	G	haroli.	1	2.134		43532		194	24400
9	-	217	V	inod Nagar .	1	1.017		87065	1	.32	48800
10	2	218	M M	andawali . ayur Vihar Phase -	1	0.834		52239	1	83	29280
11:		19	11.		- (2.630		89652	2.	16	39040
12		20	Pa	tpar Ganj .	2	2.602	1	21891	2.	10	68320
13		21	Kis	han Kunj .	1	.544	8	37065	21	1	48800
14	22		Lax	mi Nagar .	0	.930	18	32837	19	4	102480
5	22		Sha	ıkarpur .	1.	600	10	14478	24:	1	58560
6	22		Pan	dav Nagar .	1.	563	56	3592	210		31720
7	22	5	Ana	nd Vihar .	5.8	567	65	652	254		39040

ľ		ī		1			11				
-	18	2	26	Vishwash Naga	ır.	1.2	59	696	52	29	9 3904
-	19	22	27	I.P. Extention .		5.23	38	8706		179	9 4880
-	20	22	28	Preet Vihar .		4.01		3047		293	17080
-	21	22	9	Krishna Nagar .		1.97				325	34160
-	22	23	0	Geeta Colony .		1.402		60945		217	58560
1 2	23	231		Ghondli .		1.054		10447		217	31720
2	4	232		Anarkali .		1.061		56592	172	274	43920
2	5	233		Dharam Pura		1.151		78358		270	48800
2	6	234	- [Bandhi Nagar .		1.064		87065	+	361	48800
_ 27	7	235	- [zad Nagar .		0.996	-	87065	-	260	73200
_28	28 236		- 1	aghubar Pura .			+	130597		299	29280
29		237	1	hahdara .		1.178	-	52239		285	48800
30		238		ilmil .	-	1.126	+	87065	- 3	137	58560
31	2	39		vek Vihar	11	1.268		104478	-	89	
32	2	40		1		2.847	-	130597	-	35	73200
33		41		shad Colony .		1.012	-	60945	26	4	34160
34	24			shad Garden .	12	2.370	7	78358			43920
35	24			w Seema Puri .	1	.065	7	8358	21		43920
36	24			nd Nagri .	0	.679	4	3532	33		24400
37	24			der Nagari .	0.	879	6	5298	25		36600
38	246			ga Puri .	0.	905	60	0945	281		34160
39	247			ok Nagar .	1.0	002	78	358	231		43920
10				Nagar .	1.8	309	69	652	489		39040
	248			ome Colony .	1.0	83	78	358	356		43920
1	249	10	hau	han Bangar.	0.6	79	348	326	279	1	19520

No.	1	ì		1						-	12											
1		1	12	2	50	Zaffrabad .			1	0.69	16				19	3	40	\F0.				
		43 44 45 46 47 48 49 50 2	2	51	New Usman	our.			2.19			826	+	256			9520 920					
	-	44	1	25	2	Mauj Pur .				.708			358	+	283	+						
	1	45	-	25	3	Bhajanpura .			2.693		34826		+	193		. 198						
	-	46	-	254	1	Brahampuri .						522	39			292						
	-	47	+	255	- 1		Shonda .		0.672		+	60945		1	182	L	3410					
	-	48	1	256		amuna Vihar .			163	+-	5223	9	_	80		2928	30					
	1	49	1	257		ubhash Mohal		+	1.2	92	1 2	26119	9	_	81		1464	0				
	1	50	2	58	- 1	ardampuri .	ia.	+	0.559		12	2189	1891		239		68320)				
	52 260		59			-	+	1.34	1	34	1826		24	8	1	9520						
			n	1	nta Colony .	-	1	0.65	9	69	652		221	i	3	9040						
				Davai pur .			10	.727		26	119	T	151		14	1640	1					
	54		262		Jiwanpur .			1	748		348	326		182	1	19	520	-				
	55	1		1	Ookaipur.			. 1.	182		304		2	274	+	17	080	-				
1	56	1	263	1		ooli . sh Vihar .		sh Vihar		1.8	351		130		1	80	-	73	20	-		
-		+	264	+	lars					2.6	36	T	1741		22	24	-	976	30	1		
1	57		265	K	Shiv Vihar . Karawal Nagar East Nehru Vihar .		Shiv Vihar .			1.7	03	1	2176		19	8	1	220	20	-		
	58	1-2	266	+				1.50)5		26119		20	0		464						
	59	2	67	N			Nehru Vihar		Vehru Vihar .		Nehru Vihar .			0.22					176	+		952
	0	2	68	Mustafahad		Mustafabad .		Mustafabad .		Mustafabad .		1.19			34826		174	+		400		
6	1	26	39	Kh	ajoo	ri Khas .	1	1.536			13532		179	70								
62	2	27	0			r Pur .			-		4826	-	280	-		520						
63	+	27	1			Nagar West).533	+	_20	6119		254	_	146							
64	1	272				har.		.050	+	8	706	-			488			-				
						#	7.	217		13	059		82		732	0						

GENERAL INFORMATION TO BE COLLECTED AND UPDATED FROM TIME TO 2.10

- 1. Area of the city :- 105.98 sq km
- 2. Population of the city:- 40 Lacs
- 3. Decadal growth of population :- 14.00 Lacs
- 4. Number of wards, their area and population:- As above 5. Ward-wise information in regard to:

S.		Shah (S)	100	
1	Area		Shah (N)	Total
2	Populati	59.92 Sq.Km	46.06 sq km	105.98
-	Population	2237772	17704	Km.
3	No, of Households, shops and		1720156	3957928
4	-1	532939	549991	1082930
4	Vegetable/fruit/meat/fish markets	46	-	1002930
5	Musel	140	42	88
	Restaurants of Hotels &	757	559	
6	Number Of Hospitals		1 555	1316
7	Truising Homes	182	117	299
	Nos. of lanes	19498		
3	Percentage of area covered		28472	47970
	system under-Ground sewage	Mostly covered	except unautho	orized colonies
	Drains	260 51		
	Number of slaughter houses	262.5km	242.8km	505.30 Km
	ablic tollers	50		
		107		102
			22	289

CHAPTER - 3: PRESENT PRACTICES OF SOLID WASTE MANAGEMENT IN THE CITY

- Waste generation rate: (MSW generated in MT per day) 2000-2200 MT Per Day
- 3.2 Break-up of waste generation (domestic, markets, industrial etc.)
- 3.3 Storage of Domestic Waste at Source: (existing system of storage and segregation of waste at source at the household level)

Storage of market and trade waste at source: (existing system of storage and segregation of waste in the vegetable, fruit, meat or fish market)

About 300 dhalaos exist

3.5 Storage at slums

3.6 Segregation of Recyclable wastes

The segregation of waste is done in every house hold by the occupier by segregating papers, metals, plastic etc which can fetch some money to them. The next segregation is done by the rag pickers at Dhalao / Dustbins segregating polythene, papers, plastic, metals etc. which are left over by the occupier and earn some money papers, plastic, metals etc. which are left over by the occupier and earn some money from them. Thus 20 to 30% segregation of the garbage is done before it reaches the sanitary landfill site in the informal way.

Most of the recyclable waste is segregated at household level, which is being collected by kabadiwalas. Further, residence are being educated through workshop, holdings distribution of leaflets, print and electronic media. Segregation of MSW is being done by rag pickers available at dhalaos.

3.7 Primary Collection of Domestic, Trade and Institutional Wastes: (existing system of door-to-door collection, adequacy of community bin facilities etc.)

The EDMC is working in accordance with the section 352 of DMC Act 1957. In order to facilitate the owners and occupiers for dumping their rubbish, garbage, filth in the receptacles provided by the EDMC in their vicinity and near to their premises, the EDMC has deployed 1364 wheel barrows, 320 Cycle Rickshaw, 61 Tractor trolly, 302 Auto Tippers which go in the lanes collecting garbage from the houses / lanes. There is not no provision in the DMC Act 1957 for door to door collection of the garbage so it is not mandatory for EDMC to implement this scheme. However, the EDMC is under obligation for efficient collection of the garbage which is being performed by deploying the above said vehicles in the area / lanes.

- 3.8 Hospital and Nursing Home Waste: (no. of hospitals and nursing homes, estimated biomedical wastes generation, existing processing and disposal system)

 This pertains to DPCC.
- Hotels and Restaurants waste (nos. of hotels and system of primary collection)

 No separate collection from Hotel & Restaurant is being carried out. However waste is dumped at dhalao by the establishment.
- 3.10 Construction Waste (system of storage and its primary collection):

Solid Waste Management, which includes management of Construction & Demolition (C&D) Waste, is one of the most challenging issues being faced by a rapidly developing country like India. C&D waste consists of waste that is generated during new construction, remodeling, renovation, repair and alteration of residential, commercial, government or institutional buildings, industrial, commercial facilities and demolition of buildings, roads, bridges, dams, tunnels, railways and airports.

EDMC is in process of setting up a C&D waste processing plant of 500 TPD capacity at Shastri Park. In accordance to the Concession Agreement signed between East Delhi Municipal Corporation (EDMC) and IL&FS Environmental Infrastructure & Services Limited (IEISL) on 28.03.2013, IEISL will set up the Construction and

Demolition (C&D) Waste Processing Facility at Shastri Park, Delhi. The capacity of the project will be 500 Tons per Day (TPD) based on wet processing of C&D waste. Land ownership will be of EDMC. Concession period of the project will be 15 years. EDMC has allocated 2.5 ha. of land (28°40'10.86"N 77° 15'49.37"E) for the project in Shastri Park. Land has been handed over to IEISL on 30.04.2013

This processing plant shall sufficiently reduce the quantity of C&D waste at SLF Ghazipur sites and thus will help in increasing the life of Ghazipur SLF site, which has already out lived its life.

3.11 Street Sweeping: (Work norms and frequency of street sweeping, circle/ ward wise road length)

Frequency of street cleaning	Wards covered or % of street covered
Daily	100%
Alternate day	NA
Once a week	NA
Occasionally	NA

- 3.12 Tools Used: (availability of traditional/ containerized handcarts, long handled brooms etc.)
 Wheel Barrow, Richshaw, Auto Tipper, Tractor Trolleys, Belcha, Phawda, LH Brooms, Tokri etc.
- 3.13 Waste Storage Depots: As per annexure-A
- 3.14 Transportation of Waste: (frequency of transportation, mode of loading-manual/mechanized loader, vehicles-tractor, trucks, autos etc.)

Name of the Circle/ Ward	Frequency of lifting	Types of vehicle\$		No. of vehi	cles	
			Total	Functional	Out order	of
Shah (N) Zone 240 to 272	Daily	Tipper Trucks & Loaders	70	70	-	
			12	12		
Shah (S) Zone 209 to 239	Daily	Tipper Trucks & Loaders	70	70	-	
			12	12		

3.15 Waste Processing and Disposal Facilities:

PHYSICAL COMPOSITION OF MUNICIPAL SOLID WASTE IN DELHI

Parameters	Percentage (%)		
Biodegradable	38.6		
Paper	5.6		

16

Plastic	6.0
Metal	0.2
Glass and Crockery	1.0
Non-biodegradable (leather, rubber, bones and other synthetic material)	13.9
Inert (stones, bricks, ashes etc.)	34.7

CHEMICAL COMPOSITION OF MIXED MUNICIPAL SOLID WASTE IN DELHI

Parameters	Percentage (%)		
Moisture	43.8% 20.5% 0.9%		
Organic Carbon			
Nitrogen as N			
Phosphorus as P202	0.3%		
Potassium as K20	0.7%		
C/N ratio	24.10		
Calorific value	713 kCal/kg		

Setting up of construction and demolition waste plant

EDMC has issued a work order in the month of March, 2013 to M/s IL&FS for setting up a C&D waste processing plant of 500 TPD capacity at Shastri Park, New Delhi. The firm after obtaining all environmental clearances shall complete the work of Const. and installation of various machinery in this plant within 8 months period. Thereafter, the firm shall lift the C&D waste lying in various parts of the EDMC area and bring it to the processing plant where this waste shall be processed to produce various useful products. The operation of this plant shall not only result in cleanliness in the area, reduction in quantity of waste to be dumped at SLF Ghazipur but shall also result in saving of our natural resources. The clearance from DPCC has been obtained, work of the setting up the facility is in progress and plant is likely to be put in operation by June 2015.

Setting up of Automated Garbage Treatment Plant

A project to generate power from city garbage was awarded to M/s East Delhi Waste Processing Co. Pvt. Ltd. by Delhi Govt. at a piece of land measuring about 5.7 acres at Ghazipur dairy farm. EDMC is responsible for supplying 1300 TPD Municipal Solid waste at the entry gate of the plant. The trail run of the Waste to Energy plant, a project of Delhi Govt. has

already undertaken. After successful trial, the plant shall start receiving 1300TPD of fresh garbage for its processing. During 1st phase, the garbage shall be processed to produce RDF (refused derived fuel) and will be sold to various industries to use it as a fuel. The work of construction of IInd phase of the plant i.e. production of 12 MW power from RDF is in progress and likely to be started by mid of this year. The salient feature of the projects are:-

- The facility will be a totally enclosed facility to process 1300 TPD of MSW per day through RDF route.
- Generation of 12 MW of green electricity using RDF and biogas
- Treated sewage to be used as main source of process water
- Project to meet air quality norms that are even better than applicable statutory norms.

The operation of the plant not only consume 1300 TPD MSW but also result in reduction of MSW to be dumped at landfill as well as reduction in emission of green house gases into

Proper segregation system has been installed at waste to energy plant to ensure that only dry waste is fed into the boiler. EDMC is pursuing for increase of capacity of waste to energy plant from 1300 MT to 2000 MT per day. Green cover has been provided around the waste to energy plant. However, plantation around SLF is being carried out regularly. All the site / plants are centralized in EDMC e.g. SLF at Ghazipur and waste to energy plant.

3.16 Financial Aspects:

Budget Provision 2013-14 = 40133 lacs Actual Expenditure 2013-14= 36850 lacs.

GENERAL INFORMATION OF MSW TO BE COLLECTED AND UPDATED FROM 3.17 TIME TO TIME

Waste generation

- Average quantity of waste produced each day: 2000 to 2200
- Seasonal variations in daily waste generation: 150 to 200 tonne MT 2.
- Total quantity of waste produced annually last 2 years. 3.

727085 MT 2013-14 2014-15 (Up to 11th March) =

- 1. Number of sanitation workers deployed in the city for the collection of waste :- 15397
- Number of sanitation workers deployed for the transportation of waste: Appx. 1500
 Ward wise allocation of sanitation workers: As above
- 4. Sweeper population ratio in EDMC :- 1 Sk per 259 persons.

Waste storage depots

8566



1. Number of sites designated/notified for temporary of waste (Dust bins): 300 Nos.

2. Type and size of Dustbin provided in each ward: Average size 10mtr x 5mtr, height 6mtr

3. Ward-wise Quantum of waste generated each day:- As above

Transportation

1. Number Of vehicles available with the local body for the transportation of waste, their

Number of trips made by each vehicle per day. :- 550-600

3. Qty. of waste transported per day :- 2000-2200MT

Waste processing and disposal

1. Number of waste disposal sites in the city .:- 01

2. Their distances from the Centre of the city. :- 15km

3. The area of these sites: - 70 acres

The qty. of waste disposed of at each site :- 2000-2200 MT

5. The expected life of each land filled site :- Already saturated

6. Processing Unit :- 02 under construction

Financial aspects

Operating cost

a. Cost of collection per ton :- 1066/-

b. Cost of transportation per ton:-1155/-

c. Cost of disposal per ton :- 150/-

CHAPTER-4: PROPOSED ACTION PLAN FOR MSW MANAGEMENT (In accordance with the Municipal Solid Wastes (Management and Handling) Rules, 2000): 4.1

Storage of Waste at Source:

- Present door to door collection of MSW from households will be persisted with in both North and South Zones of EDMC since the performance of door to door system in the existing scenario is observed to be satisfactory.
- EDMC intends to improve the prevailing system of primary MSW collection and transportation to dhalaos in EDMC by improving the required infrastructure such as providing adequate number of vehicles, equipment (cycle rickshaws, wheelbarrows etc) and labour. EDMC intends to revise the current fleet size of vehicles and equipment engaged in collection and transportation of MSW.
- Large area is required for aerobic composting. There is scarcity of space in EDMC. However, efforts shall be made to treat MSW with latest available technology.
- The association of markets, shops and establishments should be requested to keep dustbins of adequate capacity deposit their waste in a designated

- place in the market area or within the premises of their shop which shall be collected at a fixed time in a day. Since they are bulk generators, they shall be charged a certain amount for collection of waste.
- Religious places, Institutions, Restaurants & Hotels, Community centers: The quantity of MSW generated by Religious places, Institutions, Restaurants & Hotels, Community centers varies on a daily basis. They would be requested to keep a bin within their premises which can be lifted once or twice a day depending upon the quantity of garbage. Since they are bulk generators, they shall also be charged a certain amount.
- Dairies, Daily sweeps, desilting and floating materials, waste from roadside bins: The
 garbage generated by dairies, daily sweeps, desilting and floating materials and waste
 in roadside bins is proposed to be collected and transported up to the dhalao on daily
 basis.
- Un-authorized dumpsites: Un-authorized dumpsites should be kept garbage free; the person/household would be penalised found otherwise.
- Garbage is being regularly lifted through auto tippers, rickshaw and wheel barrows from Jhuggies / colonies and the same is transported to the nearby dhalaos
- Street sweeping: The street sweeping shall be done daily. The street sweeping waste will be collected in 100 L wheelbarrows. In order to improve the system, all the roads and lanes having habitation or commercial activities may be covered on a day to day basis. This may be done by employing one person per 350 m in highly congested areas, 500 m in medium density area and 750 m in low density areas and on an average one man may be allocated for 500 m of road length which will enable the sanitation worker to clean the streets and the drains conveniently. If most of the households, shops and establishments are covered through door to door collection, hardly any domestic waste is expected to be on the streets to be picked by the street sweepers. Street cleaning needs to be undertaken on all days including Sundays and public holidays with special focus on busy centres, markets, Parks & open spaces
- Direct Collection System: A direct and separate collection system is recommended for Large and Medium Hotels and Restaurants, Hospitals (non-infectious component of hospital waste only). Waste from these sources should be collected from the source and transported to the treatment/disposal site directly by tractor trolleys, auto tippers. The objective of the system is to eliminate this waste at the secondary storage area.

Section 352 of the Delhi Municipal Corporation Act, 1957 stipulate that the Municipal Corporation shall provide receptacles, depots or places or dustbins for the temporary deposit of the rubbish, filth and shall also provide vehicles or other suitable means for the removal of rubbish. Section 353 of the Delhi Municipal Corporation Act, 1957 makes its mandatory for the owners and occupiers of all the premises to have the premises swept and cleaned and to cause all filth and rubbish to be deposited in public receptacles depots or places provided or appointed under section 352 for the temporary deposit or final disposal thereof.

The EDMC is working in accordance with the section 352 of DMC Act, 1957. In order to facilitate the owners and occupiers for dumping their rubbish, garbage, filth in the receptacles provided by the EDMC in their vicinity and near to their premises, the EDMC has deployed 1364 wheel barrows, 320 Cycle Rickshaw, 61 Tractor trolly, 302 Auto Tippers which go in the lanes collecting garbage from the houses / lanes. There is no provision in the DMC Act 1957 for door to door collection of the garbage so it is not mandatory for EDMC to implement this scheme. However, the EDMC is under obligation for efficient collection of the garbage which is being performed by deploying the above said vehicles in the area / lanes.

d. Segregation of Recyclable/ non-biodegradable Waste:

The segregation of waste is done in every house hold by the occupier by segregating papers, metals, plastic etc which can fetch some money to them. The next segregation is done by the rag pickers at Dhalao / Dustbins segregating polythene, papers, plastic, metals etc. which are left over by the occupier and earn some money from them. Thus 20 to 30% segregation of the garbage is done before it reaches the sanitary landfill site though informal sector.

4.3 Primary collection of waste

Section 352 of the Delhi Municipal Corporation Act, 1957 stipulate that the Municipal Corporation shall provide receptacles, depots or places or dustbins for the temporary deposit of the rubbish, filth and shall also provide vehicles or other suitable

means for the removal of rubbish. Section 353 of the Delhi Municipal Corporation Act, 1957 makes its mandatory for the owners and occupiers of all the premises to have the premises swept and cleaned and to cause all filth and rubbish to be deposited in public receptacles depots or places provided or appointed under section 352 for the temporary deposit or final disposal thereof.

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4.4 Sweeping of Streets and Public Spaces:

The street sweeping shall be done daily. The street sweeping waste will be collected in 100 L wheelbarrows. In order to improve the system, all the roads and lanes having habitation or commercial activities may be covered on a day to day basis. This may be done by employing one person per 350 m in highly congested areas, 500 m in medium density area and 750 m in low density areas and on an average one man may be allocated for 500 m of road length which will enable the sanitation worker to clean the streets and the drains conveniently. If most of the households, shops and establishments are covered through door to door collection, hardly any domestic waste is expected to be on the streets to be picked by the street sweepers. Street cleaning needs to be undertaken on all days including Sundays and public holidays with special focus on busy centres, markets, Parks & open spaces

4.5 Provision of Litterbins:

600 bins of 100 liter capacity are being procured for placing them in market areas under the jurisdiction of EDMC. In addition to this, request has been made to DSIIDC for providing dustbins under Corporate Social Responsibility (CSR) Scheme.

Garden Waste: There are 2058 parks in EDMC area out of which 113 parks are having area above 1 acre. Manure pits are being made in these large size park for making of manure using green waste / leaves. There is also a proposal of processing green waste at two locations to produce manure / bio fuel.

Dairy Waste: EDMC has planned to put up a 70 MT capacity paunch waste processing unit at Ghazipur which will utilized paunch / animal dung. Tender for the same has already been invited on PPP model. The output of the unit will be in the form of (i) Gas which will be utilized for Power generation and (ii) manure for agriculture purposes. The unit will be ready by the end of this year.

4.6 Temporary Waste Storage Depots for onward transportation of Waste

Garbage is collected from lanes/ roads and transported to nearby dhalao from where it is transported to sanitary landfill site. Being congested area, there is no need of placing large metallic containers.

4.7 Transportation of Waste

Secondary collection and transportation of MSW can be divided into two parts:

- Secondary collection of the garbage at dhalaos and its transportation to waste transfer stations (WTS)
 - Construction of dhalao at various location for collection of garbage from the area to the secondary point.
 - Lifting and transportation of garbage from dhalao to transfer station through mechanical means i.e. lifting of garbage through front end loaders an transportation through tipper truck.
 - The waste will be transported from dhalaos to the waste transfer stations. EDMC plans
 to construct two transfer stations each in Shahdara North and South zones. EDMC shall
 also operate and maintain these transfer stations.
 - ii. Transportation of MSW from transfer stations to designated sanitary landfill/processing site at Gazipur

- EDMC will roll out RFP for transportation of MSW from transfer stations to landfill in the
- MSW from transfer stations would be collected in mobile compactors. The mobile compactors would then transport the garbage to EDMC designated landfill site/ waste processing unit.

Waste Processing (Composting) and Disposal 4.8

It is proposed that suitable technologies or combination of technologies will be adopted for treatment of MSW so as to minimize the burden on land filling. The biodegradable waste shall be segregated at source and local level composting will be carried out. Mixed waste will be sent to Waste-to-energy plant. Waste containing recoverable material will be segregated and sent to recyclable industry. However, only inert / non process able waste and residue from the treatment of the waste shall be send to land fill. It is proposed that in future one waste-to-energy plant and one C&D waste processing plant will be required in Shah. (N) Zone area.

4.9

Wireless has been provided to Sanitation Superintendent, Chief Sanitary Inspector, Sanitary Inspector and higher officers for day to day monitoring of garbage lifting and its related issues for redressal without delay.

CHAPTER - 5: REQUIREMENT OF FUNDS FOR SETTING UP OF FACILITIES FOR MSW **MANAGEMENT** (Indicative equipments/ tools)

Requirement of funds is annexed as Annexure-B

Estimation of requirement of Sanitation workers, drivers etc. (indication)

The requirement of safari karamcharies for solid waste management as well as the sanitation services including road sweeping is 15000 numbers. The requirement of drivers to operate the tipper truck and loader is 150.

24

and requirement to implement Aforesaid proposals

Purpose	Locations	Area 6 sites@ 1 acre= 6 acres	
Transfer Stations	MSW- 2 zones @ 2 per Zone C&D- 1 per zone		
Workshops	1 per zone	2 sites @ 1 acre = 2 acres	
C&D processing Plant	1 plant	1 site @ 10 acres = 10 acres	
Waste Processing + Waste to	3 plant	3 plants @ 20 acres = 60 acres	
Energy Plant	3 sites	3 sites @ 40 acres = 120	
Landfill for MSW Ash & Rejects	"	acres 108 Acres	
Total		Approx. 198 Acres	

Amexisc-D 85)=

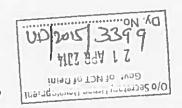
OFFICE OF THE MEDICAL OFFICER OF HEALTH HEALTH DEPARTMENT NEW DELHI MUNICIPAL COUNCIL PALIKA KENDRA, NEW DELHI

No. D-143/ CMO (N)

Dated: 20-4-15

To,

The Secretary (UD)
Govt. of NCT of Delhi,
Delhi Secretariat, I.P. Estate,
New Delhi



Sub.

Compliance of the Order of Hon'ble NGT Order dated 20.03,2015

With reference to NGT Order Item No. 70 dated 20.03.2015 on the application no. 199 of 2014, Almitra H. Patel & Anr. Vs. Union of India & Ors, the status report on Municipal Solid Waste Management in New Delhi Municipal Council area has been prepared which is placed below for information please.

(Dr. P.K. Sharma) Medical Officer of Health

Copy to :-

1. Sh. Kulanand Joshi, DPCC Environment Department, Govt. of NCT of Delhi

DETAILED STATUS REPORT FOR MANAGEMENT OF MUNICIPAL SOLID WASTE IN NEW DELHI MUNICIPAL COUNCIL AREA

CHAPTER - 1: INTRODUCTION

New Delhi Municipal Council has a fix population of around 3.0 lacs and floating population of around 25-30 lacs. The total area covered by NEW DELHI MUNICIPAL COUNCIL is around 42.76 sq. km. The Public Health Department, NEW DELHI MUNICIPAL COUNCIL is responsible for cleaning, sweeping, collection and transportation of the garbage from the roads, lanes, by-lanes, market, residential and other areas within its jurisdiction.

Objectives/ Scope of DPR:

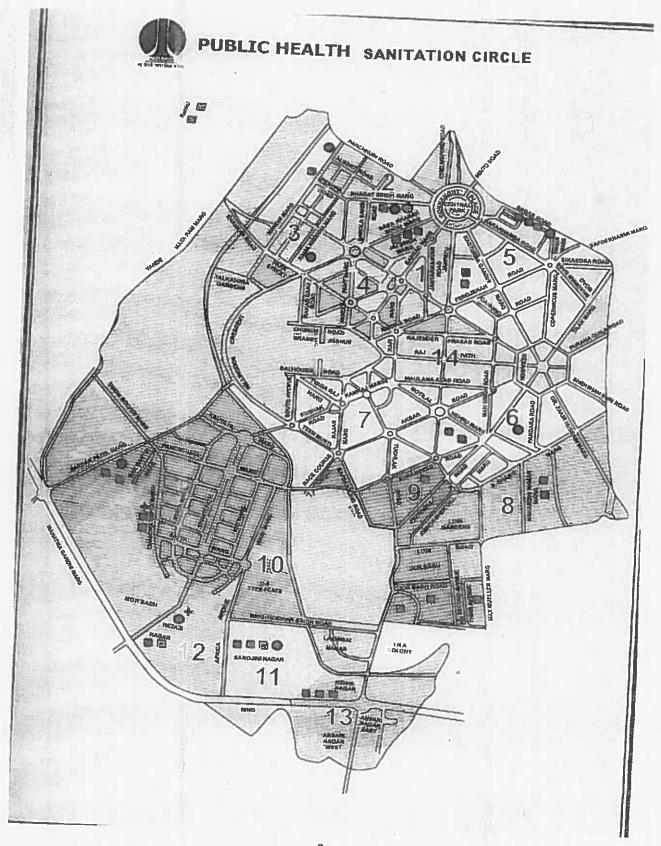
The preparation of DPR includes following objectives:

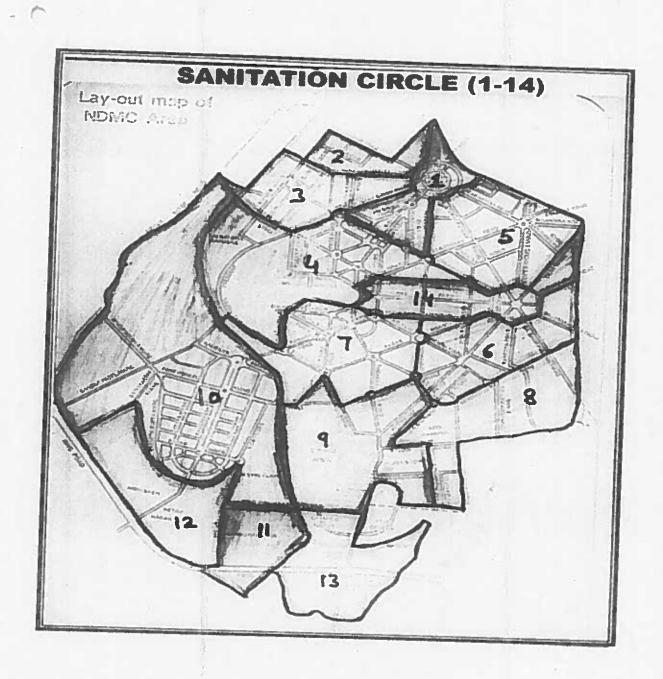
The Health Department, NDMC is providing environmental sanitation in its area and making utmost efforts to provide best possible hygienic standards. It would be relevant to point out here that NDMC has taken the following initiatives in regard to solid waste management:-

- Provide an 'end to end' solution to waste management as Integrated
 Waste management System.
- b. Increase efficiency and effectiveness of Waste Management activities.
- c. Complying with Municipal Solid Waste (Management and Handling)
 Rules, 2000.
- d. Reduce the burden on landfills by recovering reusable and other resources.

CHAPTER - 2: CITY PROFILE

2.1 New Delhi Municipal Council area is divided into 14 sanitation circles which are outline in the NDMC map given below:





CIRCLE NO. 1	CONNAUGHT PLACE
IRCLE NO. 2	MANDIR MARG
IRCLE NO. 3	GOLE MARKET
IRCLE NO. 4	PT. PANT MARG
IRCLE NO. 5	BENGALI MARKET
IRCLE NO. 8	PANDARA ROAD
IRCLE NO. 7	PM HOUSE
IRCLE NO. 8	LODHI COLONY
IRCLEINO. 9	JOR BAGH
IRCLE NO. 10	CHANAKYA PURI
IRCLE NO. 11	SAROJINI NAGAR
IRCLE NO. 12	MOTI BAGH
IRCLE NO. 13	KIDWAINAGAR
IRCLE NO. 14	CENTRAL VISTA

2.2 Historical Profile:

In 1911 the British Government decided to shift the capital of India from Calcutta to Delhi. On 12th December 1911, it was announced that Delhi would be the place of residence of the Viceroy and the new administrative centre. A Committee was constituted to select the site for the new capital.

The construction of the new capital was a task of great magnitude which resulted in the formation of the constitution of the Imperial Delhi Committee on 25th March, 1913. This was the beginning of the New Delhi Municipal Committee.

In the year 1932, the New Delhi Municipal Committee became a 1st class municipality. In the year 1916, this municipality was discharging the responsibility to cater only to the sanitation requirements of the workers engaged in the construction of the new capital. From 1925 onwards, the functions of the municipality increased manifold.

Thereafter an Administrator headed it till the introduction of new Act in May 1994. In May 1994, the NDMC Act 1994 replaced the Punjab Municipal Act 1911 and the Committee was renamed as the New Delhi Municipal Council. The Act has been passed by the Parliament. The Central Government appointed a Special Officer under Section 418 of NDMC Act 1994 till the nomination of the Members. The 1st meeting of the Council took place on 23rd Dec. 1995.

2.3 Tourist, religious or any other specific Profile of the city: In NDMC area lot of visitors from not only from different states of India but also from other countries to see historical places like India Gate, President

House of India, Parliament House, Vijay Chowk, Safdarganj Tomb, Lodhi Garden, National Museum, Birla Mandir, Connaught Place, etc. Because of easy accessibility of the transport system like metro, lot of public visit in NDMC area.

2.4 Area and Population:

New Delhi Municipal Council has a fix population of around 3.0 lacs and floating population of around 25-30 lacs. The total area covered by NEW DELHI MUNICIPAL COUNCIL is around 42.76 sq. km.

2.5 **Slum Population** (no. of slum pockets and approximate population, wardwise list of slums and the area occupied by them, population)

Total no. of JJ Cluster in NDMC area is 26 in numbers. The areas occupied by these slums various from as big as 31200 sq. mtr. at Sanjay Camp part-I, Chankya Puri to small 400 sq. mtr. at Talkatora Park Lane. The total population of the 26 JJ Clusters of NDMC area are about 40000.

2.6 Main tourist, religious spots:

In NDMC area lot of visitors from not only from different states of India but also from other countries to see historical places like India Gate, President House of India, Parliament House, Vijay Chowk, Safdarganj Tomb, Lodhi Garden, National Museum, Birla Mandir, Connaught Place, etc. Due to easy accessibility of the transport system and its central location lot of public visit in NDMC area. In NDMC area almost all the courtiers have their embassy so that lot of public visit for obtaining their visa / immigration etc.

- 2.7 Climate There is a diurnal variation in the generation of the garbage in the NDMC area. The leaf falling seasons started in the end of February and its continued till July and during rainy season lot of grass cutting / pruning of the trees are being carried out by the horticulture department. Because of that lot of horticulture waste which is voluminous in nature are collected and transported to Okhla Compost Plant.
- 2.8 **Political Set up** of the local body (no. of election wards etc.) In NDMC at present there are two elected members who are the area MLAs and one member of Parliament from New Delhi Constituency.

2.9 Administrative Set up of the local body:

In accordance with NDMC Act, 1994, an eleven-member council headed by a Chairperson governs the NDMC. Out of 10 members 5 are officials and 5 non-officials. Among non-officials, 2 members are members of the legislative assembly representing constituencies in the NDMC area, another 3 are drawn from amongst eminent personalities. The MP of New Delhi Parliamentary Constituency is a special invitee of the Council. The

council meeting is chaired by the elected legislative assembly of New Delhi if he or she is the Chief Minister of Delhi otherwise the MP of New Delhi Parliament Constituency will be chaired the council meeting.

The Chairperson of NDMC governs the NDMC who is assisted by the Secretary, NDMC under them there are various head of the Department like Public Health, Civil Engineering Department, Electric Department, Education Department, Horticulture Department, Welfare Department, Medical Department, Vigilance Department, Public Relation Department, Fire Department, Monitoring Department, Security Department, Tax Department, Law Department, Commercial Department, Architecture department.

The organization structure of municipal solid waste in NDMC:

The Municipal Solid Waste Management under New Delhi Municipal Council is headed by Medial Officer of Health. Under the Medical Officer of Health, two Chief Medical Officers (North and South), Sanitation Officer, Dy. Sanitation Officer, Chief Sanitary Inspectors, 14 Sanitary Inspectors and about 65 Assistant Sanitary Inspectors and approx. 2880 Safai Karamcharis are working.

Flow diagram of organization setup of Sanitation Wing of Health Department is attached.

Municipal Solid Waste Management Department: (health officer, assistant health officers, details of Supervisory staff etc.)

	No. of Municipal health officer	No. of CMO	No. of supervisors (SO, DSO, CSI)	No. of sanitary inspectors	No. of Assistant Sanitary Inspectors	No. of safai karamchari	Total area
14	1	2	7	20	61	2880	42.76 Sq. KM

CHAPTER - 3: PRESENT PRACTICES OF SOLID WASTE MANAGEMENT IN NEW DELHI MUNICIPAL COUNCIL

- A. COLLECTION OF GARBAGE
- B. TRANSPORTATION OF GARBAGE
- C. DISPOSAL OF GARBAGE

A. COLLECTION OF THE GARBAGE

- a. Primary Collection -
 - Door to Door Garbage Collection carried out under the new PPP project for collection and transportation of garbage

 At present, twenty six auto tipper trucks, seven small mechanical compactors, four big size mechanical compactors and ten private tipper trucks are being deployed for collection and transportation of garbage / horticulture waste from NDMC area. These 26 auto tipper

8-280

trucks are deployed for carrying out work of door to door garbage collection from the residential colonies / market areas of NDMC. The residential colonies / market areas where door to door garbage collection is being carried out under the new system are, viz Rabinder Nagar, Kaba Nagar, Bapa Bagar, Prithvi Raj Market and Resident Flats, Prithvi Raj Lane NDMC Flats, CPWD Type-I Quarter P R Lane, Aurangzeb Road (Kothi No. 1 to 12) Prithvi Raj Road Kothis, Jam Nagar House CPWD Type-I Flats behind UPSC, Dhobi Ghat Darbhanga Lane, 40 quarters NDMC type-I Pandara Park, Pandara Road Flats A&B Block, C-I & Central Revenue Department Flat Pandara Park, MS Flats Pandara Park CGHS Dispensary, Dr. Zakir Hussain Marg Complex, Lodhi Estate bunglows, Lodhi Road Quarters, Shahjahan Road Kothis, B. K. Dutt Colony, Karbala, Connaught Place and its surrounding area, Hanuman Mandir Complex, Hanuman Mandir Residential Complex, Sarojini Nagar Residential areas, Sarojini Nagar Market, Naroji Nagar Quarters, Nauroji Nagar Market, Pillanji Village, Moti Bagh Quarters, Netaji Nagar Quarters, Basrurkar Market Moti Bagh, Begam Zaidi Market Moti Bagh, Mandir Marg residential colony, Gole Market area, Whole of DIZ Gole Market area, Baird Lane Market, Babar Road residential area, Railway Line residential area, Bengali Market, big kothies of Circle No.5, Malcha Marg Market, Diplomatic area, Chanakya Puri Residential area, Vinay Marg residential area, Momo Market, Yashwant Place Market, West Kidwai Nagar residential area, Laxmi Bai Nagar residential area and market, East Kidwai Nagar Market (both), Tilak Marg residential area, Tilak Lane residential area and market, Tilak Marg police quarters.

These auto tipper trucks are fitted with Public Address System for carrying out awareness/announcement and informing the residents / market or the servant of the big kothies to deposit their household garbage directly into the auto tipper trucks so that there should not be any littering of garbage in above mentioned residential colonies. One helper along with driver for one auto tipper truck has also been deployed for smooth functioning of the door to door garbage collection system from these residential areas.

A team of health education unit has also been deployed along with the health education vehicle to carry out Information Education and Communication (IEC) activities at the above mentioned residential colonies / market areas. They start their activities in the morning and create awareness to the general public about not to litter the garbage and deposit the garbage directly into the auto tipper trucks. The appeal and other health education material have also been distributed to the households / shop owners of above mentioned residential colonies / market areas where door to door garbage collection has been started under the new system of collection and transportation of the garbage / horticulture in NDMC area.

SEGREGATION OF GARBAGE -

Under the scheme of Door to Door garbage collection, NDMC has also distributed twin bins to the residents of some of the identified residential colonies in NDMC area to keep dry and wet garbage separately in the year 2007-2008. In this scheme, NGO Chintan has been involved who employed sanitation volunteers who were previously working as rag pickers. NDMC has also given tricycle rickshaws to the said NGO which is having two compartment for keeping biodegradables and non-biodegradable garbage separately. They are charging some nominal fee in consultation with Resident Welfare Association from the residents for sustaining the door to door garbage collection scheme.

For removal of the dry leaves / horticulture waste, dedicated garbage vehicles have also been deployed for transportation of such green waste (horticulture waste) to the Okhla Compost Plant.

Health Education Unit of Health Department is also carrying out awareness activities by vehicle mounted PA System and organizing health talks / field meetings with the Resident Welfare Association / Market Traders Associations on the subject segregation of garbage into biodegradable and non-biodegradable separately at their houses / shops.

Auto Tipper Trucks who are engaged for door to door garbage collection are also involved in the collection of dry and wet waste separately from the resident / shopkeepers.

Shopkeepers are also been directed to keep two twin bins for dry and wet waste separately.

The Central Public Works Department (CPWD) are also being requested time to time to construct compost pit inside the big bungalows in the Lytuen area for IN SITU Composting.

NDMC has installed four DECENTRALIZED ORGANIC WASTE REPROCESSING UNIT at Lodhi Garden, Nehru Park, Talkatora Garden and NDMC nursery Purana Quila Road. These machines will convert horticulture waste/green leaves into cooking fuel pellets in an eco-friendly way.

Cleaning & sweeping –

All the roads, lanes, by lanes, streets and other public areas are cleaned and swept every day by the NDMC. The garbage so evolved by this, is immediately taken to the nearest garbage collection points.

· Manpower -

Manpower for cleaning, sweeping and transportation of garbage to the nearest collection point has been increased as per the demand of the area.

Conservancy Articles / Aprons –
 Adequate stock of conservancy article are being maintained at Sanitary Store as well as adequate articles are being provided to the various sanitation circles.

The fluorescent aprons and caps are provided to the safai karamchari. Green colored aprons with NDMC logo and fluorescent strip have been provided to all the safari karmacharis for their identification, protection and safety. The fluorescent strips preventing any roadside accidents during the execution of cleaning work.

Roadside twin bin set:The Blue and Green colour twin bins have been provided on the sides
of the roads, market areas and other busy places to check littering by
the general public.

Medical Facilities –
 Medical and treatment facilities have been provided to the safai karmacharis to increase their efficiency.

• Complaint Redressal/ Feedback Mechanism —
The complaints related to Solid Waste Management being received at Central Control Room at Palika Kendra, Sanitation Circle Offices (Circle 1 to 14), CMOs Offices, MOH Office, through telephone, online to higher officer of NDMC. The complaints received attended promptly with utmost efficiency.

Legal Action – All the SIs, CSIs, DSOs and SO have been empowered to challan the offenders. Municipal Magistrates are available to prosecute the offenders produced in their court through challans by various inspectorate staff and action is taken against officers as per the NDMC Act.

 Mechanical Road Sweepers –
 NDMC has procured two nos. mechanical road sweepers for
 efficiently clean the surface of roads, lanes etc. This mechanical
 sweeper sweeps with the help of rotating brushes located underneath
 or behind the chassis and can suck dry, wet, solid and semi solid
 waste through high pressure suction system even from road side
 gutters.

Evening / Night SweepingThe Health Department is carrying out evening / night sweeping in the commercial areas by deploying adequate number of safai karamcharis. At present this activity is being carried out in Connaught Place, Khan Market, Bengali Market, Sarojini Nagar Market, Gole Market, Delhi Haat, Gandhi Smriti, Tees January Marg,

Indira Gandhi Museum Safdarjung Road, Nehru Taramandal, Race Course Road, Prime Minister House and other busy places of NEW DELHI MUNICIPAL COUNCIL area.

b. Secondary collection

Garbage station/ pucca masonry dustbin- a survey by the inspectorate staff has been carried out and found that about 116 masonry dustbin / garbage station are situated at various locations in NDMC area for collection and deposition of the garbage.

Deployment of New Garbage Iron Trolleys - The NEW DELHI MUNICIPAL COUNCIL area is divided into 14 sanitation circles for effective supervision and monitoring. About 1275 new garbage iron trolleys of 1100 liter capacity have already been placed at various locations of 14 sanitation circles at the identified garbage collection points. In addition to 1275 above mentioned trolleys, about 203 old garbage iron bin trolleys are also placed for deposition of the garbage at various locations in NDMC area.

• Deployment of high capacity garbage collection bin:- The high capacity bin are to be deployed at the hot points where huge amount of the garbage comes like market areas, JJ Clusters etc in NDMC area. In such bins a whole are there to drain the leached or for

cleaning purpose.

Washing of the Garbage Iron Trolleys - The cleaning and washing of the garbage iron trolleys of 1100 ltr. capacity with insecticide soap and water are being regularly carried out. Water jet machines and permitted chemical and soap are being used for thorough cleaning of garbage iron trolleys.

Transfer Station at Old Arjun Das Camp, Raj Nagar, Sarojini Nagar:- Under the new system of collection and transportation of municipal solid waste in NDMC area, the concessionaire will built a transfer station having a ramp for the vehicle coming to climb and Silo, under which the large haulers would be placed, into which the vehicles would directly discharge the garbage for transfer to the Waste to Energy Plant/ Disposal site identified by NDMC. This transfer station will be having static compactors, receiving hooper, hook loaders and roll on roll off container.

These transfer stations will be mainly use for waste to be fed by the mini auto tipper trucks which will be deployed for door to door garbage collection and removal of small small dheries from the road side / indiscriminate garbage collection points. This transfer station not only increase the frequency of trips of small auto tipper trucks but also save a lot of cost on account of maintenance / diesel so this will reduce the air pollution level. Because small auto tipper trucks will not dispose their garbage to the okhla plant/ land fill site.

The construction of the transfer station at Old Arjun Dass Camp Raj Nagar is under process and will be constructed within one year.

B. TRANSPORTATION OF GARBAGE

- The collection and transportation of the garbage from all the 14 sanitation circles of NEW DELHI MUNICIPAL COUNCIL has been carried out by fleet of auto tipper trucks/ mechanical compactors and open tipper trucks on daily basis. From the hot garbage collection points, the garbage has been lifted out twice or thrice in a day to keep the area spic and span.
- In NDMC area on an average 250MT-300 MT. of garbage are being collected and transported to Waste to Energy Plant
- The auto tipper trucks are engaged for door to door garbage collection from residential / market area. Once the auto tipper trucks (engaged for door to door garbage collection and removal of indiscriminate garbage) completely filled up with the garbage, it will directly transfer the garbage into the big size mechanical compactor which is compatible with the auto tipper trucks. Once the compactor completely filled up with garbage, it will go directly into the Waste to Energy (TOWMCL) Plant, Okhla.
- The department has already purchased 74 tricycle rickshaws for collection and removal of small-small dharies / garbage on the main road / lane / by-lane, market areas etc. The Department has already awarded the work order to the firm for supply of 60 additional tri cycle rickshaws for Health Department for removal of garbage and horticulture waste.

C. DISPOSAL OF GARBAGE

The NDMC is disposing garbage at Integrated Waste to Energy (TOWMCL) Plant, Okhla by fleet of garbage vehicles. On an average about 250-300 MT of garbage par day are being disposed at Waste to Energy Plant, Okhla by New Delhi Municipal Council. This plant is having capacity of 1300 Mt. MSW (950 mts. from MCD and 200-400 mts. from New Delhi Municipal Council) to generate 16 mega watts of power. NDMC is also disposing horticulture waste at MCD Compost Plant at Okhla. New Delhi Municipal Council is also doing local composting in all the big gardens such as Lodhi Garden, Nehru Park, Talkatora Garden, NDMC horticulture nurseries. This has been done in view of IN SITU composting of horticulture waste.

OTHER ACTIVITIES:-

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- The inspectorate staffs of Health Department are regularly interacting with officials of Resident Welfare Associations and Market Trade Associations of NDMC area and sorted out their grievances related to sanitation.
- Nukkad natak / Awareness through Vehicle Mounted PA System / Health Talks and other IEC activities on the subject "No Littering / No Spitting / Door to Door Garbage Collection" are being carried out by the health department.
- Since 15-9-2014 the health department is organizing Sanitation Drive in NDMC area and is still continuing.
- Monitoring and supervision has been intensified by the Chief Sanitary Inspector, Dy. Sanitation Officer, CMOs, MOH. 14 Zonal officers of the rank of Director are also carrying out regular inspection of their concerned circles areas, who will monitor all the activities / work related to sanitation, civil, horticulture, enforcement department etc.

FINANCIAL ASPECT

The detailed report of budget expenditure for the year 2012-13, 2013-14, 2014-15 (upto December 2014) and budget estimate for the year 2015-16 is also attached below.

NEW INITIATIVE:-

- 1. New Delhi Municipal Council is also planning to convert the garbage stations /pucca masonry dustbins in a phase manner into the public toilet utilities for the general public and roll call shelters for the sanitation staff.
- 2. NDMC has installed four DECENTRALIZED ORGANIC WASTE REPROCESSING UNIT at Lodhi Garden, Nehru Park, Talkatora Garden and NDMC nursery Purana Quila Road. These machines will convert horticulture waste/green leaves into cooking fuel pellets in an ecofriendly way. This project is done on PPP mode by the firm M/s. NOOKODA. The capacity of one machine is 2 mt horticulture waste / organic waste per day.
- 3. DECENTRALIZED MINIATURIZED WASTE-TO-ENERGY PLANT IN NDMC AREA.

In order to ensure a scientific and environmentally friendly management of MSW in the NDMC area, it was deemed most feasible and practical to conceptualize a decentralized MSW disposal using cutting-edge technology in the domain, which not only requires addresses the problems of source segregation, manpower deployment, transportation costs etc, but also requires a minimum of land as well as officers some returns by way of clean power on a sustainable basis. NDMC envisaged plants, the state-of-the-art PLASMA-GASSIFICATION TECHNOLOGY in its area. Since, land is at a steep premium in the NDMC area, such

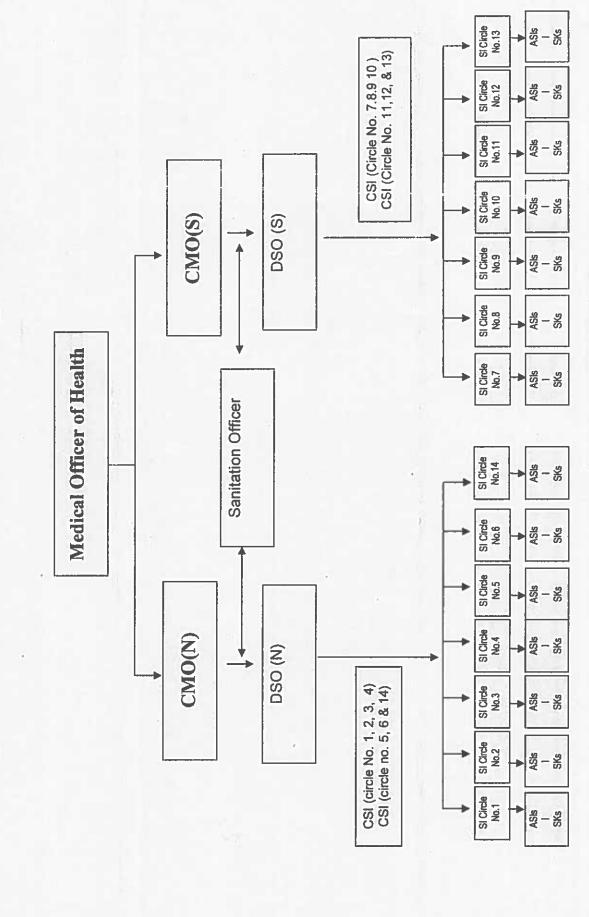
plant must necessarily address this concern, as well as offer clean electricity, without any toxic emissions or hazardous by-products. This is a decentralized approach cutting the transportation cost and shifting the bulk to distant disposal site.

The letter of intent has been issued to the firm M/s. Elephant Energy Private Limited. The work of installation of PLASMA-GASSIFICATION TECHNOLOGY plant at old Arjun Das Camp, west Kidwai Nagar opposite AIIMS Trauma Centre is under progress by the firm.

CHAPTER-4: PROPOSED ACTION PLAN FOR MSW MANAGEMENT

The action plan for solid waste management for the year 2015 is attached below.

Organizational Setup of Sanitation Wing, Health Department



HEALTH DEPARTMENT NEW DELHI MUNICIPAL COUNCIL

BUDGET EXPENDITURE

Sr. No.	Items	BUDO	BUDGET EXPENDITURE FOR THE YEAR	THE YEAR	BUDGET ESTIMATE FOR
		2012-2013	2013-2014	2014-15 (upto December, 2014)	
-	Collection & Transportation of Garbage (Tipping fee, Outstanding Dumping charges payment to MCD, Contractor Payment for Private Vehicles, Daily Labour Wages etc.)	Rs. 11,00,98,000/-	Rs. 13,56,48000/-	Rs. 15,00,00,000/-	Rs. 28,00,00,000/-
2	Procurement of Conservancy Articles and Aprons & Caps	Rs. 42,33,135/-	Rs. 11,13,751/-	Rs. 8,60,516/-	Rs. 10,00,000/-
ri	Procurement of Garbage Iron Trolleys (1100 Ltr capacity), Tri Cycle Rickshaw, Plastic Dustbins	*	Rs. 2,18,41,470/-	Rs. 4,00,34,000/-	Rs. 20 Lac for purchase of Plastic Dustbin

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HEALTH DEPARTMENT NEW DELHI MUNICIPAL COUNCIL

ACTION PLAN FOR SOLID WASTE MANAGEMENT 2015

S. o	Programmes / Sector/ Scheme	Objective / Outcome	Financial Projections	Physical Outputs	Projected Outcomes	Completion Time Period
-	2	3	4	5	9	7
	Collection and Transportation of Municipal Waste from NDMC Area	Lero Garbage in NDMC Area Involvement of RWAs / MTAs Regular field inspections by Zonal Officers and monthly meetings with RWAs & MTAs	Rs. 20 crores annual expenditure (for Approx. 250 MT per day for removal of garbage)	 Daily cleaning i sweeping of main roads, lanes / by lanes Complete removal of the garbage from NDMC area on daily basis Twice /Thrice removal of the garbage from hot points (where huge quantity of garbage collected) Dispose approx. 200 - 250 MT of garbage at treatment facility per day 	Improved environmental sanitation & zero garbage in NDMC Area. Clean and Healthy City Generation of 6 MW of electricity from waste at Okhla Plant Compost from compost from compost pit situated at big NDMC gardens	New system of collection and transportation of garbage from NDMC area has already implemented Routine work being carried out on day to day basis.
7	Door to Door Garbage Collection Scheme	Door to Door Garbage No Littering in Residential Collection Scheme & Market areas, Roads etc.	Rs. 52 Lacs for procurement of Tri Cycle Rickshaws	Garbage / waste removed from residential area, market area, main roads, lanes etc. by Auto Tipper Trucks and Tri Cycle	 Improved environmental sanitation & zero garbage in NDMC Area. Clean and Healthy City 	Routine work being carried out on day to day basis. Strengthened the sanitation activities by

providing on the spot supportive supervision by the supervisors	The process of deployment of additional ASI for strengthening the sanitation activities in evening and night shift will be completed within one year	Routine work carried out regularly
	Improved public satisfaction	Adopting healthy practices by general public
	Reduction in the absenteeism of Safai Karamcharis Effective utilization of garbage vehicles Quick response to complaints Reduction in number of complaints	Daily carrying out health Awaveness activity by programs activity by programs activity by programs activity by programs for Subzi Mandi / Pradhans, School Principals etc. on regular basis Regular organization of interactive sessions with RWAs, MTAs/Pradhan of Subzi Mandi Organization of Training programs for School Principals, Nodal Officers, Doctors, Para Medical Staff on water & vector borne
	Rs. 75,60,000/- for 28 additional deployment of Asstt. Sanitary Inspectors in Sanitation Wing of Health Department	Expenditure of Rs. 10 Lacs
	 Effective and efficient supervision and monitoring to the field staff Strengthening evening and night sanitation activities Effective monitoring of garbage disposal at Waste to Energy Plant 	Prevention & control of communicable and non-communicable disease in NDMC area by active community participation
	Strengthening of Manpower	Health Education Activities
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	Routine work being carried out on day to day basis.	Will take approx one year
	Increasing the aesthetic appeal in the NDMC area and prolonging the life of street comer bins	 Zero Garbage in NDMC Area. Clean and Green NDMC area
diseases Regular organization of Nukkad Nataks at Market Places and other busy places in NDMC area. Regular organization of rallies in schools for creating awareness reg. communicable diseases Regular organization of health talks and health camps at different locations of NDMC area	Cleaning, washing and repair of street corner bins by the concessionaire on regular basis	100 MT can be collected per day and compacted at Garbage transfer station
	Shall be bome by the concessionaire for the project of collection & transportation of MSW in NDMC area	Shall be bome by concessionaire for collection and transportation of garbage in NDMC area
	ar Cleaning of strong of strong of strong insectic set comer bill etic appeal area.	Collection and compaction of garbage at Garbage transfer station and then transfer of compacted garbage to treatment facility
	Maintenance of Street Corner Bins	Construction of Garbage Transfer Station
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or garbage • Parking of garbage Shall be borne rehicles vehicles vehicles street comer bins and transportation of street comer bins articles Sanitation Drive in NDMC area articles Sanitation Drive in NDMC area articles Sanitation are for the ASI and safail are fearility approx. Rs. 40 • Providing shelter facility for the place are separation of target sanitation staff aramchari at work place are separation of sanitation staff are shelter facility approx. Rs. 40 • Providing facility for ASI for sanitation staff areamchari at work place are separation of sanitation staff and safail are sanitation staff areamchari at work place are sanitation staff areamchari at work sanitation staff are sanitation staff areamchari at work place are sanitation staff areamcharical at work place area facility of the sanitation staff area facility are sanitation staff and safail field level area facility area facility and the sanitation staff area facility are sanitation staff and safail field level area facility area facility and the sanitation staff and safail field level area facility area facility and the same facility an	of being carried out on day to day life basis	Routine work being carried out regularly	Will be completed within one year
Parking of garbage Shall be bome vehicles Repair of vehicles / concessionaire collection garancher for collection garbage in NDMC area Regular organization of Rs. 75 lacs Sanitation Drive in NDMC approx. Annually Area Better shelter facility Approx. Rs. 40 for the ASI and safai Lacs karamchari at work place Parking of garbage in NDMC area Regular organization of Rs. 75 lacs popprox. Annually Area Better shelter facility Approx. Rs. 40 for the ASI and safai Lacs Parking of garbage in NDMC area Parking of garbage in NDMC area Regular organization of Rs. 75 lacs popprox. Annually Area Parking of garbage in NDMC area Parking of garbage i	Decrease breakdown of vehicles Increasing the life of street corner bins	Increase efficiency of the sanitation staff Improved quality of working condition at work place	for for
Parking of garbage Shall be bome vehicles Repair of vehicles / concessionaire street comer bins and transportation of garbage in NDMC area Regular organization of Rs. 75 lacs Sanitation Drive in NDMC area Area Better shelter facility Approx. Rs. 40 for the ASI and safai Lacs karamchari at work place	Regular maintenance infrastructure deployed collection and transportation garbage from NDMC area	 Reduction in the number of case of communicable diseases Reduction in the absenteeism 	 Providing shelter facility having male and female toilets blocks for the sanitation staff Providing facility for ASI for taking attendance of safai karamcharis
San San e		Rs. 75 approx. Ann	Approx. Rs. 40 Lacs
nual procurement of near procurement of near articles d personal protective uipments Il Shelters for the nitation Staff	 Parking of garbage vehicles Repair of vehicles / street comer bins 	Regular organization of Sanitation Drive in NDMC Area	Better shelter facility for the ASI and safai karamchari at work place
Sa S	Workshop tor garbage vehicles etc.	Annual procurement of conservancy articles and personal protective equipments	Construction of 13 Roll Call Shelters for the Sanitation Staff

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By Speed Post out today.

JS/m/3/2015/626

Telephone No.25693837

DCB/32/SN-1/NGT/2014-15 Office of the Delhi Cantonment Board Delhi Cantt.10

Dated O7 April, 2015

Som?

O/o Secretary Metros Mayologo And Govt of NCT of Deini 0 9 APR 2315 UP 2-15/2-888 Dy. No.....

Sh. Kulanand Joshi
Member Secretary
Delhi Pollution Control Committee
Department of Environment,
Govt. Of NCT of Delhi
4th Floor, ISBT Building Kashmere Gate,
Delhi-6

SUB:- Compliance of order of Hon'ble NGT dated 20.3.2015 OA No. 199/2014 in the matter of Almitra H. Patel & Another V/s Union of India & Others.

Reference your letter No. DPCC/WMC-II/2015/A-14/494-499 dated 28.03.15.

The report in respect of Delhi Cantonment Board in Compliance of order to Hon'ble NGT dated 20.03.15 is forwarded here with for your perusal and submission before the Hon'ble Court.

Drinks Oscas):

The secretary
 Urban Development,
 Govt. of Delhi 9th Level,
 Delhi Secretariat, New Delhi

(A.V. Dharma Reddy)
Chief Executive Officer
Delhi Cantonment Board

For information please

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SUB: COMLIANCE OF ORDER OF HON'BLE NGT DATED 20.3.2015 IN THE MATTER OF O.A NO 199/2014 TITLED AS ALMITRA H.PATEL & ANR VS UNION OF INDIA & ORS:

Chapter 1: Introduction

Delhi Cantonment Board is a deemed Municipality U/s 10 of the Cantonment Act, 2006 and is responsible for management of Municipal solid Waste of Delhi Cantonment area. Delhi Cantonment Board is giving due care in handling Municipal Solid Waste using best practices and Ministry of Urban Development, Govt. of India in December, 2014 Cantonment as Fifth cleanest city in India.

Objectives/Scope of DPR (Detailed project report)

As regards implementation of MSW processing/ treatment techniques are concerned, it is brought out that Delhi Cantonment is a small municipality and total population of Delhi Cantonment as per 2011 census is only 1,10,351 which comprises of both Army and Civilian population in almost equal proportion. Out of total area of Delhi Cantonment i.e. 10791 .988 acres the area under the management of the Board is only 265.951 acres. There are primarily two notified civil areas in Delhi Cantonment i.e. Sadar Bazar and Shastri Bazar and six urban villages. The rest of the area in Delhi Cantonment is under the control of local military authorities and these areas are restricted area for stay of troops. Delhi Cantonment Board is providing conservancy services for both civilian pockets and Army pockets. There is well established storage system in place for Municipal solid waste management including collection and storage in Army pockets and it is quite disciplined. The daily quantum of Municipal solid waste generation in Delhi Cantonment is quite less about fifty MT. Presently Delhi Cantonment not maintaining any trenching ground or landfill sites and Municipal waste of Delhi Cantonment being transported to Govt. of NCT of Delhi Approved land fill site at Okhla. Since the Quantum of Municipal solid waste Generated in Delhi Cantonment is quite less therefore, the scope for adopting MSW processing/ treatment techniques will neither be technically feasible nor economical.

<u>Chapter – 2 : City Profile</u>

2.1 & 2.2 : General profile and historical profile.

The Delhi Cantonment is spread over in 10791.988 acres located in South-West Delhi. The Delhi Cantonment was established in 1914 by the then British Government to house the British Troops. In 1924 the Cantonment Act was enacted for Civic Administration of the Cantonment. Since the Cantonments are established for the purpose of housing troops, the civilian population in the Cantonment is always remains very less. The Cantonments are not growing townships as the limits are fixed and no new lands are included in the Cantonments. The entire land in the Cantonment is owned by Ministry of Defence, Govt of India. However two notified civil areas are there namely Gopinath Bazar (Shastri Bazar) and Sadar Bazar, in which land is allotted to the civilians on lease for residential as well as commercial purposes. The notified bazaar areas are never extended due to which the growth of population is very minimal.

2.3 Tourist Religious or Any Other Specific Profile Of The City

There are no tourist places in the Cantonment worth mentioning. However there are small temples, Mosque and few Churches. There is a Gurudwara located in Sadar Bazar, a religious place of Sikh community which is quite popular and number of devotees visit this place. Also Sanatan Dharma Mandir is located in Sadar Bazar where number of pilgrims keep visiting. Both Gurudwara and SD Mandir managements are running two Schools.

2.4 Area and Population: - 10791.99 acre area and population as per 2011 census 1,10,351.

		Populat	Projected Population	
Census year	1981	1991	2001	2011
Population	85166	94393	124917	110351
Decadal Growth	-	(+)9227	(+)30524	(-)14566

2.5 Slum population (No. of slum pockets and approximately population, wardwise list of slum and the area occupied by them, population).

Details of JJ Clusters:-

S. No.	New Cluster Code	Location	No. of Jhuggies	C. No.	Land owning Agency	Area of JJ Cluster in Sqm
1	79	Barar Square Railway Station	500	38	Cantt Board	15881
2	80	CB Area Naraina	300	38	Cantt Board	3809
3	81	Dhobi Ghat Kirby Place	1500	38	Cantt Board	12851
4	82	Village Jharera Delhi Cantt	1275	38	Cantt Board	81314
5	83	Kandhar Line Delhi Cantt	18	38	Cantt Board	2461
6	84	Behind General Hospital Sadar Bazar	18	38	Cantt Board	403
7	85	Sadar Bazar behind 32 staff Qtrs	145	38	Cantt Board	5625

3756

122 344 ha

2.6 Main tourist spots in the city:

There is no tourist spots in Delhi Cantonment Area worth mentioning.

2.7 Climate:

The mercury touches 42°C in peak summer and 3°C in the peak winter in Delhi Cantonment. It is submitted that the temperature in the Cantonment always remains 2 to 3 degree less in comparison with neighboring city.

2.8 Political set up of local body (no. of election ward etc.)

The entire Delhi Cantonment is divided into 8 Wards. One member from each ward is Elected to represent in the Cantonment Board. For the purpose of Conducting Elections a separate Cantonment Electoral Rules-2007 are made under the Cantonment Act, 2006. Elections to the wards are conducted once in five years in accordance with CER-2007. The

Cantonment Board prepares Electoral Rolls ward wise for the purpose of conducting the elections. Every year draft Electoral Rolls are published on 1st July and final rolls are published on 15th September. The Cantonment Act provides for nomination of three Army officers to the Board, one officer from the Jurisdictional District Magistrate, Station Commander, Chief Executive Officer, Executive Engineer and Senior Executive Medical officer are Ex-officio Members of the Board. The Station Commander is designated as Ex-officio President of the Cantonment Board. The Chief Executive Officer is the Ex-officio Member-Secretary of the Board. Therefore the Cantonment Board is headed by President Cantonment Board having 15 Members in all (16 including President, Cantt Board).

Recently Elections were conducted and the Board has been reconstituted in Feb, 2015.

2.9 Administrative set up of the local body

The Administration is headed by the Chief Executive Officer who is posted from Indian Defence Estates Service which is organized Civil Service. The Chief Executive Officer is posted by the Ministry of Defence, Govt of India. There are sections namely General Section, Engineering Section, Sanitary Section, Revenue Section, Tax Section, Establishment Section, Store Section and Account Section which are headed by Section Heads who directly report independently to the CEO. The Office Supdt who heads the General Section co-ordinates among all the Sections. The Cantonment Board also runs 8 Schools and 01 General Hospital. Out of 8 Schools one School is exclusively run for Special Children.

2.9 Municipal Solid Waste Management Department (health officer, assistant health officer, details of Supervision staff etc.)

Name	of	No.	of	No.	of	No.	of	No.	of	Ward	Population
the		AHO	S	Sanita	ry	superv	isors	Swee	pers	Area	
Circle/wa	rd			Inspec	tors						
		1	1	2		21		1045		8	1,10,351
Total					- 10				Щ		

2.10 GENERAL INFORMATION TO BE COLLECTED AND UPDATED FROM TIME TO TIME.

Area of the Delhi Cantonment - 43.67 sq km
 Population of the Cantonment - 1,10,351
 Decadal of growth of population: - (-)14566
 Number of wards their area and population: - 08 Wards

The Cantonment is divided into Eight Wards

Ward Number	Population	Area in sq km	Density
1	4816	1.595	3019.43
11	3218	4.543	708.34
III	41825	4.240	9864.38
IV	17900	7.657	237.73
V	10028	5.849	1714.48
VI	17133	11.534	1485.43
VII	7603	3.868	1965.61
VIII	7828	4.386	1784.76

Note: the above data of population is as per the 2011 census. However actual population in the Cantonment is being ascertained during the current year by conducting a thorough survey.

5. Ward wise information in regard to:

Number of Households	1494	
Shops and Establishments	85	
Vegetables/Fruit market	01	
Meat/Fish Market	Nil (one small slaughter house and 3 retail meat shops are in the Cantonment)	
Number of Hotels	01	
Number of Restaurants	16	
Number of Hospitals	03	
Number of Nursing Homes	Nil	
Number of Industries	Nil	

Road area (Width/Length) being maintained by both Cantt Board, MES & PWD	The total roads in the Cantonment are being maintained by the Cantt Board and MES. The area under Cantt Board is 166 acres, the area under Army (MES) is 385 acres and under PWD is 71 acres.
Percentage of area covered with Under- Ground sewage system	95%
Percentage of area having surface Drains:-	100%
Percentage of area having no drainage facility	Nil .
Number of slaughter houses	01
Total number of Public Toilets	15
Number of Toilet Seats	272
Number of Nuisance spots	Nil

Chapter - 3: PRESENT PRACTICES OF SOLID WASTE MANAGEMENT IN THE CITY

- 3.1 Waste generation rate (MSW generated in MT per day).
 The Cantonment generates only 60 MT of Garbage daily.
- 3.2 Break-up of waste generation (Domestic, Markets, Industrial etc.)

 Domestic waste- 50 MT

 Market waste-10 MT

 Industrial Waste- Nil (No industries waste are existing in the Cantonment)
- **3.3** Storage of Domestic Waste at Source (existing system of storage and segregation of waste at source at the household level)

Domestic Waste is being collected from the door to door in the morning and transported to the landfill site being maintained by the MCD. Door to door collection of garbage is being collected which is segregated into biodegradable and non-biodegradable at source itself. There are 545 number of dustbins constructed for collection of garbage. Some of the un-segregated garbage which is collected by the Sanitary Department is brought to a segregation point at Tigris Road. An agency has been engaged to segregate the garbage at this point before being transported to the landfill maintained by MCD.

- 3.4 Storage of market and trade waste at source: (existing system of storage and segregation of waste in vegetable, fruit meat or fish market)
- Bazar, which generates very minimal waste. This waste is collected by the Safai Karamcharies through wheel barrows and handover to the nearest garbage point which will be collected by the garbage transporting trucks. This waste finally is transported to landfill being maintained by MCD in Okhla. The Cantonment Board maintains one small slaughter house in Old Nangal. The Meat waste generated in the slaughter house is being collected by an agency called the Best Meat Shop which has been engaged for this purpose by the Cantonment Board. The meat waste is being transported to MCD landfill at Ghazipur by the agency.
- 3.5 Storage at slum:- Nil

 There are two notified slums in the Cantonment. The Garbage is being collected from the slums on day to day basis.
- **3.6** Segregation of Recyclable waste
- The segregation of garbage into Bio-degradable and Non-Biodegradable is being done by engaging an NGO, at Tigris Road. The garbage being collected from door to door is being segregated at source itself.
- 3.7 Primary collections of Domestic Trade institutional Wastes (existing system of door to door collection, adequacy of community bin facilities etc.
- The entire Cantonment is being cleaned by deploying sufficient number of Safai Karamcharies by sweeping the roads. The garbage collected through sweeping is being dumped properly in the nearby dustbins. The garbage collection vehicles which are deployed for collecting the garbage collects from the dustbins. A time schedule and route map has been fixed for the garbage vehicles. The

Cantonment has been provided with 545 dustbins which are adequate.

- 3.8 Hospital and Nursing Home Waste: (no of hospitals and nursing homes, estimated bio-medical wastes generation, existing processing and disposal system).
- The Cantonment Board maintains a 100 bedded multi-specialty Hospital in Sadar Bazar. The Hospital waste generated in this Cantonment is being collected by Synergy Waste Management Company Pvt Ltd which has been engaged for this purpose. The Army maintains two Hospitals namely Research and Referral Hospital and Base Hospital. Both the Hospital have their own systems to depose off the Medical waste as per the established guidelines.
- 3.9 Hotels and Restaurants waste (nos. of hotels and system of primary collection)
- There are only two notified civil areas in which commercial activities are allowed. There are only 16 small restaurants/sweet shops/eating establishments in the Cantonment. The Hotel waste is collected from door to door from each hotel and transported to the designated landfill maintained by MCD.
- 3.10 Construction Waste (system of storage and its primary collection)
- Most of the constructions in the Cantonment are done by the Ministry of Defence, Govt of India through contracts. The contractors are responsible to dispose off the construction waste. However there are some unauthorize constructions taking place in the civilian pockets. The unauthorized dumps off construction waste is being collected from time to time by the Cantonment Board and is being dumped in the low lying/unused areas within the Cantonment. However efforts are being made to streamline the proper disposal of construction waste.

3.11 Street Sweeping: (Work norms and frequently of street sweeping circle/ward wise road length)

Frequently Of Street Cleaning	Ward Covered or % of Street Sovered
Daily=	100%
Alternate day	Not applicable
Once a week	Not applicable
Occasionally	In notified slum areas

- **3.12** Tools used: (Available of traditional containerized handcrafts, long handled brooms etc.)
- :- Tools used for sanitation is as under :
 - 1. brooms
 - 2. spades
 - 3. kantas
 - 4. kolchies
 - 5. Wheel barrows
- **3.13** Waste storage Depots; (circle ward wise nos. of waste storage depots mode of transmission of waste upto depots, condition of depots, nos. of litter bins provided etc.)
- There are no waste storage depots in the Cantonment. The garbage from all the dustbins is being picked up on daily basis and transported to the designated landfill maintained by MCD. However one garbage collection point is there at Tigris Road for the purpose of segregating the garbage into bio-degradable and non-biodegradable. From this point also the segregated garbage is being transported on daily basis.
- 3.14 Transportation of Waste: (frequency of transportation, mode of loading manual/ mechanized loader, vehicles-tractor, trucks, autos etc).

Name of	Frequency	Types of			
the Circle/Ward	of lifting	vehicles	No. of vehicles		
			Total	Function	Out of Order
1 to 8	Daily	Tippers and compactors	26	26	Nil

- 3.15 Waste processing and Disposal Facilities: Details of waste processing and disposal facility like year of commissioning, designed life, design capacity (MT/day), operation capacity (MT/Day), Scientifically operated or haphazard dumping in low lying areas, daily soil coverage provided or not, availability of weigh bridge facility, buffer zone, road facilities, status of authorization from SPCB Etc.)
- Delhi Cantonment Board is not having any waste processing plant. The garbage generated is being transported on daily basis to the landfill being maintained by the MCD. The necessary charges for this purpose is being made to the MCD.

3.16 Financial Aspects

Years	Actual Receipt including grant	Actual expenditure	Expenditure incurred on MSW management department		
			Expenditure on salary	Expenditure on infrastructure	
2001-2002	Nil	13,74,14,768-	3,54,68,289-		
2002-2003	Nil	17,22,16,754-	4,32,87,377-		
2003-2004	NII	19,09,74,432-	4,89,13,590-		

Note: Since the expenditure required pertains to 2001-2004, the break-up on salary and infrastructure could not be reflected.

3.17 General Information of MSW to be collected and updated from time to time.

The General information required to be updated under this head will be compiled from time to time as per the directions of the Hon'ble NGT.

Chapter 4: Proposed action plan for MSW management (in accordance with Municipal Solid Wastes (Management and Handling) Rules, 2000):

The guidelines/instructions under this chapter will be followed in handling the management of Solid Waste as provided in the Municipal Solid Waste (Management and Handling) Rules, 2000.

Chief Executive Officer
Delhi Cantonment
(A.V. Dharma Reddy)

GOVERNMENT OF NCT OF DELHI URBAN DEVELOPMENT DEPARTMENT 10TH LEVEL, C-WING DELHI SECRETARIA? I.P.ESTATE, NEW DELHI - 110002.

F. No.13/15 /NGT/UD/MB/UD/2015 13104-12

Dated: 13.04.2015

MINUTES OF MEETING

Pr. Secretary, Urban Development, GNCTD held a meeting in pursuance of order dated 20.03.2015 of Hon'ble National Green Tribunal in the case of O.A. No. 199/2014 titled Almitra H. Patel & Anr. Vs UOI & Ors. to discuss action taken on court orders.

The list of participants is enclosed as Annexure "A". None was present on behalf

of Delhi Cantonment Board.

Pr. Secretary read out the letter of Govt. Counsel Sh. Sushil Dutt Salwan and also the order Hon ble Court dated 20.03.2015. He directed that Municipal Bodies have to submit status report based on latest order of Tribunal. The report submitted by State of Haryana regarding establishing municipal solid waste plant following cluster approach should be the basis of the status report. All the directions have to be kept in mind and in case there is some variation same should be highlighted giving reason thereof.

We further direct all the concerned States to file comprehensive affidavit within four weeks in light of the judgement of the Tribunal in Original Application No. 40 (THC) of 2013 in the matter of People for Transparency through Kamal Anand V State of Punjab, decided on 25th November, 2014, and 20.03.2014 judgement with regard to the State of Haryana in the matter of Almitra H. Patel Vs Union of India, Original Application No. 199 of 2014 and report submitted by State of Haryana with regards to the establishment of MSW Plant following cluster approach.

Joint Secretary (MB) requested the representatives of different municipal bodies and Environment Department to submit the Detailed Project Report by Friday so that by

Monday i.e. 20.04.2015 report is filed in the Court.

The meeting ended with the votes of thanks to the chair.

(Prakash Chandra) Joint Secretary (MB)/UD

Dated: 13, 54, 2015

F. No.13/15 /NGT/UD/MB/UD/2015 3104-12 Copy to:-

1. The Secretary, Environment, Department of Environment, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-110002

2. The Commissioner, North Delhi Municipal Corporation, Civic Centre, Jawaharlal Nehru Marg, New Delhi.

3. The Commissioner, South Delhi Municipal Corporation, Civic Centre, Jawaharlal Nehru Marg, New Delhi.

4. The Commissioner, East Delhi Municipal Corporation, Udyog Sadan Industrial Area, Patparganj, Delhi.

The Chairperson, New Delhi Municipal Council, Palika Kendra, Parliament Street, New Delhi The Chief Executive Officer, Delhi Cantonment Board, Delhi Cant., Sadar Bazar, New Delhi-

7. The Member Secretary, Delhi Pollution Control Committee, 4th Floor, ISBT Building, Kashmere Gate, Delhi-06

Copy for information to:-1. P.S. to Chief Secretary, GNCT of Delhi. 2. P.A. to Secretary (UD)

(Prakash Chandra) / // Joint Secretary (MB)/UD

GOVERNMENT OF NCT OF DELHI URBAN DEVELOPMENT DEPARTMENT 10TH LEVEL, C-WING DELHI SECRETARIAT I.P.ESTATE, NEW DELHI - 110002.

F. No. 13/15 /NGT/UD/MB/UD/2015 /31 04-12

Dated: 17.04.2015

MINUTES OF MEETING

Pr. Secretary, Urban Development, GNCTD held a meeting in pursuance of order dated 20.03.2015 of Hon'ble National Green Tribunal in the case of O.A. No. 199/2014 titled Almitra H. Patel & Anr. Vs UOI & Ors. to discuss action taken on court orders.

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The meeting ended with the votes of thanks to the chair.

(Prakash Chandra) Dated: 13. 4.2015

F. No.13/15 /NGT/UD/M3/UD/2015 / ろしゅくーし

The Secretary, Environment, Department of Environment, 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-110002

The Commissioner, North Delhi Municipal Corporation, Civic Centre, Jawaharlal Nehru Marg, New Delhi.

3. The Commissioner, South Delhi Municipal Corporation, Civic Centre, Jawaharlal Nehru Marg, New Delhi.

4. The Commissioner, East Delhi Municipal Corporation, Udyog Sadan Industrial Area, Patparganj, Delhi.

5. The Chairperson New Delhi Municipal Council, Palika Kendra, Parliament Street, New Delhi 6. The Chief Executive Officer, Delhi Cantonment Board, Delhi Cant., Sadar Bazar, New Delhi-

The Member Secretary, Delhi Pollution Control Committee, 4th Floor, ISBT Building, Kashmere Gate, Delhi-06

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(Prakash Chandra)
Joint Secretary (MB)/UD