

Appendix 1.1

Regularity framework governing management of waste

(Reference: Paragraph 1.2)

Sl. No.	Type of Waste	Regulatory framework
1	Solid Waste	<ul style="list-style-type: none"> • Solid Waste Management Rules, 2016 • Manual of Municipal Solid Waste Management, 2016 issued by GoI in April 2016.
2	Plastic Waste	Plastic Waste Management Rules, 2016
3	E-Waste	E-Waste (Management) Rules, 2016
4	Bio-Medical Waste	Bio-Medical Waste Management Rules, 2016
5	Construction and Demolition Waste	Construction and Demolition Waste Management Rules, 2016
6	Hazardous Waste	Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

(Source: Rules and Manuals issued by GoI)

Appendix 1.2

Details of ULBs sampled for the Performance Audit

(Reference: Paragraph 1.5.3)

Sl No	District	Nagar Nigam	Nagar Palika Parishad	Nagar Panchayat
1	Auraiya		Auraiya	
2	Azamgarh			Jiyanpur
3	Bagpat			Tikri
4	Bahraich			Jarwal
5	Balrampur		Utraula	
6	Ballia			Chitbaragaon Reoti
7	Bareilly		Baheri	
8	Basti			Rudhauri Bazar
9	Bijnor			Jhalu Sahaspur
10	Budaun		Dataganj	Usawan
11	Bulandshahr		Bulandshahr	Khanpur
12	Chitrakoot		Chitrakootdham Karwi	Rajapur
13	Deoria		Deoria	
14	Etawah			Bakewar
15	Etah		Etah	
16	Gautam Buddh Nagar			Jewar
17	Ghaziabad	Ghaziabad	Loni	
18	Ghazipur			Saidpur
19	Hardoi		Shahabad	
20	Hathras		Sikandra Rao Hathras	
21	Kanpur Nagar	Kanpur		Bithoor
22	Kushinagar			Kaptanganj
23	Lucknow	Lucknow		
24	Maharajganj			Anandnagar
25	Mahoba		Mahoba	Kulpahar
26	Mathura			Baldeo
27	Muzaffarnagar		Muzaffarnagar	
28	Pilibhit		Pilibhit	Jahanabad Bilsanda
29	Raebareli		Raebareli	
30	Saharanpur		Deoband	
31	Shamli		Shamli	
32	Shahjahanpur			Katra
33	Sitapur		Mahmudabad	
34	Varanasi		Ramnagar	
	Total Units	3	20	22

Appendix 2.1

Details of notified bye-laws and their provisions in test-checked ULBs

(Reference: Paragraph 2.5)

Sl No	Name of ULB	Name of bye – laws	Date of Notification	Provisions under bye-laws
ULBs which notified SWM bye-laws				
1	NN Ghaziabad	Solid Waste (Management and Handling) bye-laws, 2016	19 June 2017	Incentive and penalty clauses for segregation of waste, penalty for littering, provisions for recovery of user charges.
2	NPP Muzaffarnagar	Solid Waste Management and Cleanliness bye-laws, 2020	22 September 2021	Penalty clauses for segregation of waste, collection of waste, penalty for littering and burning, provisions for recovery of user charges.
3	NPP Sahabad Hardoi	Solid Waste Management and Polyethene Prohibition along with Caring charge bye-laws, 2019	09 March 2019	Duty of waste producer and fee recovery from waste generator, penalty for using prohibited polyethene, provision of penalty including for open littering burning.
4	NPP Bulandshahr	Solid Waste Management and Cleanliness bye- laws, 2017	06 January 2020	Duty of waste generator, collection, segregation, storage and transportation of solid waste, penalty and incentive clauses for segregation of waste, penalty for littering and burning, provisions for recovery of user charges.
5	NP Khanpur Bulandshahr	Solid Waste Management and Cleanliness bye-laws, 2020	29 December 2020	Incentive clause for composting from bio-degradable waste, provision for segregation and collection of solid waste, user charge recovery and penalty clauses for littering and burning.
ULBs which formulated bye-laws of user charges and caring/penalty charges				
1	NN Kanpur	User charges bye-laws, 2006	29 March 2006	Provisions for recovery of user charges.
2	NPP Loni Ghaziabad	User charges bye-laws, 2018	04 October 2018	Provisions for recovery of user charges for door-to-door collection and penalty for littering and burning.
3	NPP Hathras	User and Caring charges bye-laws, 2018	06 June 2019	Provision for segregation, collection and dumping of waste in processing plant, provisions for recovery of user charges, penalty clauses for littering/burning and incentive clause.
4	NPP Deoria	Miscellaneous fee bye-laws, 2018	27 February 2020	Penalty clauses for littering, use of prohibited polyethene and user charges recovery for door-to-door collection.
5	NPP Chitrakootdham Karwi Chitrakoot	Miscellaneous fee bye-laws, 2017	06 October 2017	Penalty clauses for littering, penalty for using prohibited polyethene and user charges recovery for door-to-door collection.
6	NPP Baheri Bareilly	Caring charges bye-laws, 2017	13 February 2018	Provision of penalty for littering.
7	NPP Raebareli	Caring charges bye-laws, 2019	02 July 2020	Provision of penalty for littering and burning on waste generator.

(Source: Test-checked ULBs)

Appendix 2.2

Status of waste generation in test-checked ULBs during the years 2016-22

(Reference: Paragraph 2.6)

(Qty. in TPD)

Sl. No.	Name of ULB	Waste generation					
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1.	NN Lucknow	865.21	944.60	1051.94	1110.69	1145.47	1634.84
2.	NN Ghaziabad	852.95	886.03	880.27	1035.62	1035.62	1280.00
3.	NN Kanpur	1500.00	1595.00	1009.00	1370.00	1370.00	1370.00
4.	NPP Raebareli	50.68	53.00	58.00	62.00	65.00	70.00
5.	NPP Baheri Bareilly	23.90	23.90	23.90	23.90	23.90	23.90
6.	NPP Dataganj Budaun	5.66	5.66	5.66	9.19	9.19	9.19
7.	NPP Auraiya	16.00	19.00	19.00	21.00	22.00	24.00
8.	NPP Utraula Balrampur	8.06	8.25	8.44	8.64	8.86	9.06
9.	NPP Chitrakootdham Karwi Chitrakoot	14.10	14.30	14.35	15.20	15.50	15.78
10.	NPP Muzaffarnagar	150.00	153.00	153.00	160.00	160.00	170.00
11.	NPP Loni Ghaziabad	285.00	285.00	305.00	305.00	310.00	310.00
12.	NPP Sikandara Rao Hathras	14.00	15.00	16.00	16.50	17.00	19.87
13.	NPP Hathras	45.26	47.64	50.16	50.16	32.25	74.00
14.	NPP Etah	44.28	44.88	45.00	48.12	48.12	49.77
15.	NPP Mahoba	29.09	30.54	32.07	33.67	35.35	37.11
16.	NPP Deoria	48.00	50.00	54.00	56.00	58.00	60.00
17.	NPP Ramnagar Varanasi	18.08	18.44	18.82	19.21	19.60	20.00
18.	NPP Bulandshahr	12.98	12.98	106.85	67.50	90.00	90.08
19.	NPP Pilibhit	88.76	88.76	88.76	64.95	64.95	47.74
20.	NPP Shamli	30.00	32.00	33.00	35.00	36.00	36.00
21.	NPP Deoband Saharanpur	18.00	18.00	18.00	25.00	50.00	50.00
22.	NPP Sahabad Hardoi	15.00	16.00	16.50	17.35	22.57	26.10
23.	NPP Mahmudabad Sitapur	22.19	13.64	22.84	22.78	19.55	19.55
24.	NP Jhalu Bijnor	4.26	4.26	4.26	5.34	5.34	5.34
25.	NP Sahaspur Bijnor	4.75	4.90	5.20	5.75	6.30	6.80
26.	NP Jarwal Baharaich	3.20	3.22	3.23	3.25	3.28	3.30
27.	NP Anandnagar Maharajganj	3.50	3.80	4.00	4.00	7.78	7.78
28.	NP Rajapur Chitrakoot	1.78	1.87	1.97	2.07	2.17	2.27
29.	NP Usawan Budaun	2.85	3.32	3.80	4.27	4.75	5.22
30.	NP Bakewar Etawah	1.80	1.80	1.80	1.99	2.00	2.00
31.	NP Rudhauri Bazar Basti	3.00	3.20	3.80	4.00	4.20	3.90
32.	NP Jewar G B Nagar	10.55	11.00	12.00	13.00	13.50	10.37
33.	NP Tikri Bagpat	3.00	3.00	5.00	5.00	5.00	5.00
34.	NP Kulpahar Mahoba	5.50	6.00	6.30	6.60	6.90	7.20
35.	NP Jiyanpur Azamgarh	2.08	2.12	2.17	2.21	2.25	2.30
36.	NP Chitbaragaon Ballia	3.80	3.90	3.95	4.20	4.20	4.20
37.	NP Reoti Ballia	7.40	7.53	7.67	8.00	8.00	8.00
38.	NP Katra Shahjahanpur	8.20	8.31	8.42	9.17	9.29	9.42
39.	NP Saidpur Ghazipur	8.87	8.87	9.76	9.90	9.90	9.90

Sl. No.	Name of ULB	Waste generation					
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
40.	NP Khanpur Bulandshahr	3.97	4.10	4.73	3.60	5.30	5.30
41.	NP Jahanabad Pilibhit	3.55	3.55	3.55	3.23	3.23	2.89
42.	NP Bilsanda Pilibhit	4.10	4.10	7.66	3.32	6.44	6.77
43.	NP Baldeo Mathura	2.50	2.50	4.00	2.07	2.07	2.07
44.	NP Bithoor Kanpur Nagar	0.20	3.00	3.00	2.18	2.18	2.25
45.	NP Kaptanganj Kushinagar	7.00	7.00	7.08	7.16	7.24	7.32
Total		4253.06	4476.97	4143.91	4687.79	4780.25	5566.59

(Source: Test-checked ULBs)

Appendix 2.3

Details of sanctioned post, person-in-position and vacant post in test-checked ULBs as of March 2022

(Reference: Paragraph 2.9)

SI No	Name of ULB	ZSO			CSI			SFI			SS/Safai Nayak			Sanitary worker			
		SS	PIP	shortage	SS	PIP	Shortage	SS	PIP	shortage	SS	PIP	shortage	SS	PIP	shortage	Outsourced
1	NN Lucknow	3	2	-1	6	4	-2	35	34	-1	95	48	-47	5196	2881	-2315	10258
2	NN Kanpur	5	3	-2	12	4	-8	42	30	-12	184	104	-80	8105	3375	-4730	2101
3	NN Ghaziabad	1	0	-1	2	2	0	4	4	0	26	25	-1	1428	3701	2273	634
Total (NNs)		9	5	-4	20	10	-10	81	68	-13	305	177	-128	14729	9957	-4772	12993
1	NPP Loni Ghaziabad	0	0	0	0	0	0	0	0	0	1	1	0	432	153	-279	920
2	NPP Raebareli	0	0	0	0	0	0	2	2	0	8	5	-3	433	374	-59	181
3	NPP Baheri Bareilly	0	0	0	0	0	0	1	1	0	5	5	0	190	112	-78	101
4	NPP Dataganj Budaun	0	0	0	0	0	0	0	0	0	1	0	-1	76	17	-59	59
5	NPP Utraula Balrampur	0	0	0	0	0	0	0	0	0	1	0	-1	79	46	-33	37
6	NPP Chitrakootdham Karwi Chitrakoot	0	0	0	0	0	0	1	1	0	4	3	-1	162	67	-95	137
7	NPP Muzaffarnagar	0	0	0	1	1	0	3	0	-3	19	19	0	818	659	-159	252
8	NPP Auraiya	0	0	0	0	0	0	1	1	0	5	3	-2	205	155	-50	145
9	NPP Bulandshahr	0	0	0	0	0	0	2	2	0	15	3	-12	455	241	-214	308
10	NPP Pilibhit	0	0	0	0	0	0	2	2	0	18	11	-7	338	175	-163	250
11	NPP Shamli	0	0	0	0	0	0	2	2	0	6	1	-5	330	174	-156	177
12	NPP Sahabad Hardoi	0	0	0	0	0	0	1	1	0	4	3	-1	228	109	-119	96
13	NPP Mahmudabad Sitapur	0	0	0	0	0	0	0	0	0	1	1	0	134	80	-54	46
14	NPP Deoband Saharanpur	0	0	0	0	0	0	1	1	0	6	6	0	202	137	-65	207
15	NPP Sikandara Rao Hathras	0	0	0	0	0	0	1	0	-1	5	2	-3	111	66	-45	88
16	NPP Hathras	0	0	0	0	0	0	3	3	0	10	8	-2	335	201	-134	523
17	NPP Etah	0	0	0	0	0	0	1	0	-1	6	6	0	286	187	-99	120
18	NPP Mahoba	0	0	0	0	0	0	1	0	-1	3	3	0	160	121	-39	141
19	NPP Deoria	0	0	0	0	0	0	2	2	0	9	8	-1	351	196	-155	203
20	NPP Ramnagar Varanasi	0	0	0	0	0	0	0	0	0	5	4	-1	148	58	-90	80
Total (NPPs)		0	0	0	1	1	0	24	18	-6	132	92	-40	5473	3328	-2145	4071
1	NP Jhalu Bijnor	0	0	0	0	0	0	0	0	0	1	0	-1	59	32	-27	27
2	NP Sahaspur Bijnor	0	0	0	0	0	0	0	0	0	0	0	0	71	37	-34	22
3	NP Jarwal Bahraich	0	0	0	0	0	0	0	0	0	1	0	-1	49	12	-37	46

SI No	Name of ULB	ZSO			CSI			SFI			SS/Safai Nayak			Sanitary worker			
		SS	PIP	shortage	SS	PIP	Shortage	SS	PIP	shortage	SS	PIP	shortage	SS	PIP	shortage	Outsourced
4	NP Anandnagar Mahrajganj	0	0	0	0	0	0	0	0	0	3	1	-2	42	24	-18	51
5	NP Rajapur Chitrakoot	0	0	0	0	0	0	0	0	0	1	0	-1	45	12	-33	36
6	NP Bakewar Etawah	0	0	0	0	0	0	0	0	0	1	1	0	40	28	-12	40
7	NP Katra Shahjahanpur	0	0	0	0	0	0	0	0	0	0	0	0	38	19	-19	80
8	NP khandpur Bulandshahr	0	0	0	0	0	0	0	0	0	1	1	0	40	21	-19	30
9	NP Bithoor Kanpur Nagar	0	0	0	0	0	0	0	0	0	1	1	0	37	25	-12	10
10	NP Baldeo Mathura	0	0	0	0	0	0	0	0	0	1	1	0	32	24	-8	30
11	NP Bilsanda Pilibhit	0	0	0	0	0	0	0	0	0	1	1	0	39	23	-16	25
12	NP Jahanabad Pilibhit	0	0	0	0	0	0	0	0	0	0	0	0	28	24	-4	36
13	NP Saidpur Ghazipur	0	0	0	0	0	0	0	0	0	1	1	0	37	30	-7	40
14	NP Kaptanganj Kushinagar	0	0	0	0	0	0	0	0	0	1	1	0	15	11	-4	70
15	NP Jewar G B Nagar	0	0	0	0	0	0	0	0	0	0	0	0	83	82	-1	59
16	NP Tikri Bagpat	0	0	0	0	0	0	0	0	0	0	0	0	44	10	-34	38
17	NP Kulpahar Mahoba	0	0	0	0	0	0	0	0	0	0	0	0	32	25	-7	29
18	NP Jiyanpur Azamgarh	0	0	0	0	0	0	0	0	0	1	0	-1	37	14	-23	35
19	NP Chitbaragaon Ballia	0	0	0	0	0	0	0	0	0	1	1	0	63	39	-24	22
20	NP Reoti Ballia	0	0	0	0	0	0	0	0	0	1	1	0	67	54	-13	50
21	NP Usawan Budaun	0	0	0	0	0	0	0	0	0	0	0	0	18	18	0	45
22	NP Rudhauri Bazar Basti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
Total (NPs)		0	0	0	0	0	0	0	0	0	16	10	-6	916	564	-352	896

(Source:Test-checked ULBs)

Appendix 2.4

Status of avoidable expenditure due to excess engagement of sanitation workers in NPP Hathras

(Reference: Paragraph 2.9.1)

Year	Month	Sanitation workers required as per norms	Existing sanitation workers (regular and contractual)	Sanitation workers required to be outsourced	Sanitation workers actually outsourced	Excess number of sanitation workers engaged	Number of days for which outsourced and payment was made	Required number of mandays	Number of mandays for which actually outsourced (as per bill)	Excess number of mandays for which sanitation workers outsourced and paid	Rate of payment per mandays (in ₹)	Total avoidable payment (in ₹)
(1)	(2)	(3)	(4)	(5) = (3) - (4)	(6)	(7) = (6) - (5)	(8)	(9) = (5)X(8)	(10)	(11) = (10) - (9)	(12)	(13) = (12)X(11)
2020-21	Jun-20	440	203	237	286	49	26	6162	8161	1999	308	615692
	Aug-20	440	203	237	301	64	26	6162	7727	1565	308	482020
	Oct-20	440	203	237	301	64	24	5688	7224	1536	308	473088
	Nov-20	440	203	237	301	64	23	5451	7382	1931	308	594748
	Dec-20	440	203	237	301	64	27	6399	7926	1527	308	470316
	Jan-21	440	203	237	301	64	26	6162	7735	1573	308	484484
	Mar-21	440	203	237	412	175	27	6399	10896	4497	308	1385076
	Sub-total											45,05,424
2021-22	May-21	444	201	243	436	193	26	6318	11124	4806	308	1480248
	Jun-21	444	201	243	443	200	26	6318	11350	5032	308	1549856
	Jul-21	444	201	243	454	211	27	6561	12042	5481	308	1688148
	Aug-21	444	201	243	460	217	26	6318	11730	5412	308	1666896
	Sep-21	444	201	243	462	219	26	6318	11827	5509	308	1696772
	Oct-21	444	201	243	478	235	26	6318	12130	5812	336	1952832
	Nov-21	444	201	243	458	215	26	6318	11724	5406	336	1816416
	Dec-21	444	201	243	515	272	27	6561	13698	7137	336	2398032
	Jan-22	444	201	243	523	280	26	6318	13425	7107	336	2387952
	Feb-22	444	201	243	523	280	24	5832	12400	6568	336	2206848
Sub-total												1,88,44,000
Grand total												2,33,49,424

(Source: NPP Hathras)

Appendix 2.5

Status of fund utilised at State level and transferred to ULBs for IEC&PA activities

(Reference: Paragraph 2.10)

(₹ in crore)

Year	Opening balance	Fund received	Fund available	Fund transferred to ULBs	Expenditure at SMD level	Fund utilised/ transferred	Closing balance	Percentage of fund transferred to ULBs
Col. (1)	Col. (2)	Col. (3)	Col. (4) = Col. (2+3)	Col. (5)	Col. (6)	Col. (7) = Col. (5+6)	Col. (8) = Col. (4-7)	Col. (9)
2016-17	7.49	0.00	7.49	1.50	0.18	1.68	5.81	20.03
2017-18	5.81	124.69	130.50	4.15	0.77	4.92	125.58	3.18
2018-19	125.58	0.00	125.58	77.58	11.66	89.24	36.34	61.78
2019-20	36.34	98.11	134.45	81.08	4.81	85.89	48.56	60.30
2020-21	48.56	26.59	75.15	10.72	1.48	12.20	62.95	14.26
2021-22	62.95	0.00	62.95	37.51	2.29	39.80	23.15	59.59
Total		249.39		212.54	21.19	233.73		

(Source: Director ULB)

Appendix 2.6

Status of utilisation of fund for IEC&PA activities in test-checked ULBs during 2016-22

(Reference: Paragraph 2.10)

(₹ in lakh)

Sl. No.	Name of ULB	Opening balance as on 01.04.16	Fund received	Total	Fund utilised	Closing balance (un -utilised fund as of 31.03.2022)	Unutilised fund (in per cent)
1	NN Lucknow	31.45	1003.35	1034.80	964.11	70.69	7
2	NN Ghaziabad	18.40	500.93	519.33	503.94	15.39	3
3	NN Kanpur	28.00	873.67	901.67	830.02	71.65	8
4	NPP Raebareli	0.00	81.74	81.74	38.45	43.29	53
5	NPP Baheri Bareilly	0.00	40.92	40.92	40.17	0.75	2
6	NPP Dataganj Budaun	0.29	24.36	24.65	17.54	7.11	29
7	NPP Auraiya	0.00	42.84	42.84	33.45	9.39	22
8	NPP Utraula Balrampur	0.00	28.17	28.17	9.42	18.75	67
9	NPP Chitrakootdham Karwi Chitrakoot	0.00	30.85	30.85	9.71	21.14	69
10	NPP Muzaffarnagar	4.39	104.66	109.05	96.83	12.22	11
11	NPP Loni Ghaziabad	0.00	131.33	131.33	47.00	84.33	64
12	NPP Sikandara Rao Hathras	0.64	28.87	29.51	22.81	6.70	23
13	NPP Hathras	1.89	132.56	134.45	57.86	76.59	57
14	NPP Etah	1.32	55.56	56.88	40.15	16.73	29
15	NPP Mahoba	1.06	40.54	41.60	8.44	33.16	80
16	NPP Deoria	1.44	64.65	66.09	59.12	6.97	11
17	NPP Ramnagar Varanasi	0.55	52.12	52.67	17.09	35.58	68
18	NPP Bulandshahr	2.48	90.71	93.19	32.50	60.69	65
19	NPP Pilibhit	0.00	82.83	82.83	38.00	44.83	54
20	NPP Sahabad Hardoi	0.90	37.12	38.02	30.71	7.31	19
21	NPP Mahmudabad Sitapur	0.00	32.36	32.36	19.05	13.31	41
22	NPP Shamli	1.20	52.09	53.29	28.38	24.91	47
23	NPP Deoband Saharanpur	0.00	30.53	30.53	30.09	0.44	1
24	NP Usawan Budaun	0.15	12.82	12.97	12.30	0.67	5
25	NP Jhalu Bijnor	0.23	13.56	13.79	6.49	7.30	53
26	NP Sahaspur Bijnor	0.27	15.58	15.85	12.69	3.16	20
27	NP Bakewar Etawah	0.17	13.00	13.17	11.62	1.55	12
28	NP Jarwal Baharaich	0.22	14.58	14.80	8.11	6.69	45
29	NP Anandnagar Maharajganj	0.11	15.30	15.41	10.12	5.29	34
30	NP Rajapur Chitrakoot	0.15	12.20	12.35	4.48	7.87	64
31	NP Rudhauri Bazar Basti	0.00	13.64	13.64	12.14	1.50	11
32	NP Jewar G B Nagar	0.36	19.05	19.41	15.58	3.83	20
33	NP Tikri Bagpat	0.16	13.53	13.69	5.52	8.17	60
34	NP Kulpahar Mahoba	0.22	14.72	14.94	10.79	4.15	28
35	NP Jiyanpur Azamgarh	0.00	13.38	13.38	12.18	1.20	9
36	NP Reoti Ballia	0.29	15.94	16.23	13.77	2.46	15
37	NP Chitbaragaon Ballia	0.00	14.52	14.52	10.68	3.84	26
38	NP Bithoor Kanpur Nagar	0.11	25.06	25.17	19.84	5.33	21
39	NP Baldeo Mathura	0.13	15.37	15.50	9.51	5.99	39
40	NP Khanpur Bulandshahr	0.84	14.81	15.65	15.65	0.00	0
41	NP Jahanabad Pilibhit	0.20	15.30	15.50	5.54	9.96	64
42	NP Bilsanda Pilibhit	0.22	11.94	12.16	10.75	1.41	12
43	NP Katra Shahjahanpur	0.00	8.50	8.50	6.56	1.94	23
44	NP Saidpur Ghazipur	0.34	28.07	28.41	13.20	15.21	54
45	NP Kaptanganj Kushinagar	0.27	10.89	11.16	3.69	7.47	67
Total		98.45	3894.52	3992.97	3206.05	786.92	20

(Source: Test-checked ULBs)

Appendix 2.7

Details of fund received and expenditure incurred under Capacity Building and Administrative & Office Expenditure in test-checked ULBs during the years 2016-22

(Reference: Paragraph 2.11)

(₹ in lakh)					
Sl. No.	Name of ULB	Period	Fund received	Expenditure	Balance
Details of ULBs which training was imparted					
1	NN Ghaziabad	2016-22	6.11	2.79	3.32
2	NPP Chitrakootdham Karwi Chitrakoot	2016-22	12.21	11.74	0.47
3	NPP Deoria	2016-22	12.12	9.89	2.23
4	NPP Bulandshahr	2016-22	13.37	12.49	0.88
5	NPP Pilibhit	2016-22	13.37	11.48	1.89
6	NPP Sahabad Hardoi	2016-22	0.29	0.29	0.00
7	NPP Shamli	2016-22	12.30	4.74	7.56
8	NP Kulpahar Mahoba	2016-22	0.07	0.00	0.07
9	NP Jiyanpur Azamgarh	2016-22	122.00	115.76	6.24
10	NP Reoti Ballia	2016-22	0.10	0.10	0.01
11	NP Chitbaragaon Ballia	2016-22	0.10	0.00	0.10
12	NP Rudhauri Bazar Basti	2016-22	0.00	0.00	0.00
Total			192.04	169.28	22.77
Details of ULBs which training was not imparted					
1	NN Lucknow	2016-22	10.46	9.86	0.60
2	NN Kanpur	2016-22	3.27	3.27	0.00
3	NPP Raebareli	2016-22	13.24	11.86	1.38
4	NPP Baheri Bareilly	2016-22	13.81	13.45	0.36
5	NPP Dataganj Budaun	2016-22	0.19	0.19	0.00
6	NPP Auraiya	2016-22	13.16	13.16	0.00
7	NPP Utraula Balrampur	2016-22	0.12	0.06	0.06
8	NPP Muzaffarnagar	2016-22	14.55	8.09	6.46
9	NPP Loni Ghaziabad	2016-22	0.48	0.48	0.00
10	NPP Sikandara Rao Hathras	2016-22	0.21	0.21	0.00
11	NPP Hathras	2016-22	0.49	0.47	0.02
12	NPP Etah	2016-22	12.98	12.79	0.19
13	NPP Mahoba	2016-22	26.01	25.74	0.27
14	NPP Ramnagar Varanasi	2016-22	12.73	0.96	11.77
15	NPP Mahmudabad Sitapur	2016-22	0.00	0.00	0.00
16	NPP Deoband Saharanpur	2016-22	16.59	11.91	4.68
17	NP Usawan Budaun	2016-22	0.06	0.05	0.01
18	NP Jhalu Bijnor	2016-22	0.08	0.08	0.00
19	NP Sahaspur Bijnor	2016-22	0.08	0.08	0.00
20	NP Bakewar Etawah	2016-22	0.05	0.00	0.05
21	NP Jarwal Baharaich	2016-22	0.07	0.07	0.00
22	NP Anandnagar Maharajganj	2016-22	0.10	0.00	0.10
23	NP Rajapur Chitrakoot	2016-22	0.10	0.10	0.00
24	NP Jewar G B Nagar	2016-22	0.12	0.00	0.12
25	NP Tikri Bagpat	2016-22	0.05	0.00	0.05
26	NP Bithoor Kanpur Nagar	2016-22	0.08	0.00	0.08
27	NP Baldeo Mathura	2016-22	12.04	10.94	1.10
28	NP Khanpur Bulandshahr	2016-22	0.12	0.12	0.00
29	NP Jahanabad Pilibhit	2016-22	0.00	0.00	0.00
30	NP Bilsanda Pilibhit	2016-22	0.00	0.00	0.00
31	NP Katra Shahjahanpur	2016-22	2.45	0.49	1.96
32	NP Saidpur Ghazipur	2016-22	0.00	0.00	0.00
33	NP Kaptanganj Kushinagar	2016-22	0.00	0.00	0.00
Total			153.69	124.43	29.26
Grand total			345.73	293.71	52.03

(Source: Test-checked ULBs)

Appendix 3.1

Details of delay in release of central share along with state share to SMD

(Reference: Paragraph 3.1)

(₹ in crore)

Component	Details of release of central share		Details of release of central share along with state share to SMD by State Government		Delay release of fund ¹ (in days)
	(1)	(2)	(3)	(4)	
	Sl. No.	Amount	Date	Amount	Date
SWM	1.	94.49	30.03.2018	269.97	04.07.2018
	2.	245.67	09.04.2018	510.02	04.07.2018
	3.	10.43	24.03.2020	10.43	13.10.2020
	4.	190.00	30.04.2020	190.00	13.10.2020
	5.	189.72	01.05.2020	189.72	13.10.2020
	6.	0	0	209.84*	23.01.2021
CB and A&OE	7.	46.56	23.10.2017	46.56	16.12.2017
	8.	0	0	15.52**	25.11.2020
	9.	19.94	23.12.2020	26.59	03.02.2021
Total		796.81		1468.65	

(Source: Director ULB)

* State share of ₹ 209.84 crore was released to match central share of ₹ 10.43 crore, ₹ 190.00 crore and ₹ 189.72 crore mentioned in sl. no. 3, 4 & 5 of the Table.

** State share of ₹ 15.52 crore was released to match central share of ₹ 46.56 crore mentioned in sl. no. 7 of the table.

¹ Fund was to be released to ULBs within 30 days of release of the central share.

Appendix 3.2

Details of irregular payment of GST to outsourcing firms

(Reference: Paragraph 3.5)

(₹ in lakh)

Name of ULB	Year		Name of contractor	Total amount of the bill	Payment to sanitary workers	Amount of GST paid to contractor
NP Rudhauri Bazar Basti	2/2019 to 3/2019		Lakshya Foundation Basti	29.99	12.41	2.23
	4/2019 to 03/2020		Lakshya Foundation Basti	212.43	90.59	19.29
	4/2020 to 3/2021		Lakshya Foundation Basti	224.19	112.31	20.59
NP Jewar GB Nagar	7/2018 to 03/2019		S K Associates MS Gautam Buddh Nagar	57.02	37.29	6.05
	04/2019 to 05/2019		S K Associates MS Gautam Buddh Nagar	15.15	9.93	1.79
NP Kulpahar Mahoba	04/2019 to 03/2020		Mexono Securities Service Pvt. Ltd., Kulpahad, Mahoba	76.20	26.30	4.73
	04/2020 to 03/2021		Mexono Securities Service Pvt. Ltd., Kulpahad, Mahoba	89.66	28.11	5.06
	04/2021		Mexono Securities Service Pvt. Ltd., Kulpahad, Mahoba	7.33	1.95	0.35
Total				711.97	318.89	60.09

(Source: Test-checked ULBs)

Appendix 3.3

Status of short recovery of user charges in NN Lucknow

(Reference: Paragraph 3.6.1)

(Amount in ₹)

Year	For households		For other establishment		Total recoverable user charges (col 3 + col5)	User charges recovered (in ₹)	User charges not recovered (col. 6 - col. 7)
	Number of residential households covered from DTDC	Recoverable user charges by minimum rate @ ₹ 40/per HH per month (col. 2 x 40 x 12)	No. of other establishment	Recoverable user charges by minimum rate @ ₹ 100/per establishments per month (col.4 x 100 x 12)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2017-18 (July 2017 to March 2018)	231787	41721660	22924	10315800	52037460	50857101	1180359
2018-19	290499	83663712	28731	20686320	104350032	88945831	15404201
2019-20	342489	123296040	33873	30485700	153781740	63257194	90524546
2020-21	403950	145422000	39951	35955900	181377900	125793610	55584290
Total		394103412		97443720	491547132	328853736	162693396

(Source: NN Lucknow)

Note: (1) 50 per cent, 60 per cent and 75 per cent of total amount of user charges billable on the monthly basis for first year, second year and third year respectively. The concessionaire was responsible for collection of minimum user charges/billable with effect from 1 July 2017.

(2) Recoverable user charges was calculated on the basis of minimum rates for households (₹ 40/- per households per month) and other establishment (₹100/- per other establishment per month) during the period 2017-21.

Appendix 3.4

Short recovery of user charges in NN Ghaziabad

(Reference: paragraph 3.6.2)

(₹ in lakh)

Year	Number of residential HHs	Recoverable annual user charges at minimum rate of ₹ 30/month	Number of other establishments	Recoverable annual user charges from other establishments at minimum rate of ₹ 70/month	Total recoverable amount	User charges recovered	User charges short realised
(1)	(2)	(3) {= (col 2) x ₹ 30 x 12}	4	(5) {=(col. 4) x ₹ 70 x 12}	(6) = col. (3) + col. (5)	7	Col. 8=(col. 6-col. 7)
2018-19	292868	1054.32	32541	273.34	1327.66	27.94	1299.72
2019-20	338474	1218.51	26220	220.25	1438.76	161.88	1276.88
2020-21	340969	1227.49	27427	230.39	1457.88	168.66	1289.22
2021-22	420230	1512.83	31314	263.04	1775.87	118.57	1657.30
Total		5013.15		987.02	6000.17	477.05	5523.12

(Source: NN Ghaziabad)

Appendix 4.1
Status of MRF centre in test-checked ULBs
(Reference: Paragraph 4.1.2)

(₹ in lakh)

Sl. No.	Name of ULBs	Fund for civil work		Fund for machinery		Status as per State Government reply (June 23)
		Fund received	Expenditure	Fund received	Expenditure	
Land not available						
1	NPP Chitrakootdham Karwi Chitrakoot	33.67	0	0	0	Status not furnished.
2	NPP Raebareli	33.67	0	0	0	Status not furnished.
3	NP Jarwal Bahraich	33.67	0	0	0	Status not furnished.
4	NP Bakewar Etawah	33.67	0	0	0	Status not furnished.
5	NP Chitbaragaon Ballia	33.67	0	0	0	Status not furnished.
Total		168.35	0	0	0	
Land available but civil work not started						
1	NPP Utraula Balrampur	33.67	0	0	0	Status not furnished.
2	NPP Ramnagar Varanasi	33.67	0	0	0	Status not furnished.
3	NP Katra Shahjahanpur	33.67	0	0	0	Status not furnished.
Total		101.01	0	0	0	
Civil work in progress						
1	NPP Etah	33.67	14.85	16.98	0	Status not furnished.
2	NPP Shamli	33.67	0	0	0	Status not furnished.
3	NP Bithoor Kanpur Nagar	33.67	23.30	0	0	Status not furnished.
4	NP Bilsanda Pilibhit	33.67	27.70	0	0	Status not furnished.
5	NP Jhalu Bijnor	33.67	0	0	0	Status not furnished.
6	NP Anandnagar Maharajganj	33.67	0	0	0	Status not furnished.
7	NP Reoti Ballia	33.67	21.94	16.98	0	Status not furnished.
8	NP Rajapur Chitrakoot	33.67	5.40 ²	0	0	Civil work was in progress at new site.
Total		269.36	93.19	33.96	0	
Construction work started but was stopped						
1	NPP Dataganj Budaun	33.67	33.22	16.98	0	Status not furnished.
2	NPP Sikandra Rao Hathras	33.67	11.56	16.98	0	Status not furnished.
3	NPP Loni Ghaziabad	33.67	0	0	0	State Government stated that purchase of machinery for four MRF centres was in progress. However, as per information furnished by NPP (July 2024), work of MRF centre stopped due to public protest.
Total		101.01	44.78	33.96		
Civil work completed but machinery was not purchased						
1	NN Ghaziabad ³	33.67	31.43	0	0	Status of MRF centre at Vaishali not furnished,
2	NPP Mahoba	33.67	34.06	16.98	0	Status not furnished.
3	NPP Hathras	33.67	33.67	16.98	0	Status not furnished.
4	NPP Pilibhit	33.67	37.53	16.98	0	Status not furnished.
5	NPP Shahabad Hardoi	33.67	27.99	16.98	0	Status not furnished.
6	NPP Baheri Bareilly	33.67	35.71	16.98	0	Status not furnished.
7	NPP Muzaffarnagar	33.67	33.67	16.98	0	The work of MRF centre was in progress.
8	NPP Auraiya	33.67	43.10	16.98	0	Machinery not purchased.

² Civil work was initially commenced on an unsuitable site near river Yamuna. The site was later changed rendering expenditure of ₹ 5.40 lakh on civil work wasteful. The work has now been commenced on another site.

³ NN informed (January 2023) that the MRF centre constructed in Vaishali Sector -1 Ghaziabad could not be made functional due to public protest. However, State Government stated (June 2023) that MRF centres were established at five other locations.

Sl. No.	Name of ULBs	Fund for civil work		Fund for machinery		Status as per State Government reply (June 23)
		Fund received	Expenditure	Fund received	Expenditure	
9	NP Saidpur Ghazipur	33.67	0 ⁴	16.98	0	Status not furnished.
10	NP Rudhauri Bazar Basti	33.67	31.77	16.98	0	Status not furnished.
11	NP Kulpahar Mahoba	33.67	34.95	16.98	0	Status not furnished.
12	NP Jahanabad Pilibhit	33.67	33.67	16.98	0	Status not furnished.
Total		404.04	377.55	203.76		
Civil work completed and machinery purchased but not installed						
1	NPP Deoria	33.67	34.04	16.98	16.95	Status not furnished.
2	NP Baldeo Mathura	33.67	39.23	16.98	16.97	Status not furnished.
Total		67.34	73.27	33.96	33.92	
Civil work completed and machineries were installed but MRF centre was not functional						
1	NPP Mahmudabad Sitapur	33.67	33.67	16.98	16.97	Action underway for electric connection, manually operated presently.
2	NP Khanpur Bulandshahr	33.67	54.20	16.98	16.97	Status not furnished.
3	NP Jewar GB Nagar	33.67	33.28	16.98	0	Manually operated presently.
4	NP Sahaspur Bijnor	33.67	8.65	16.98	15.96	Machinery purchased.
5	NP Tikri Bagpat	33.67	33.67	16.98	16.98	State Government stated that civil work MRF centre was completed. NPP further informed (July 2024) that MRF centre was being operated manually.
Total		168.35	163.47	84.90	66.88	
Functional						
1	NN Lucknow	33.67	33.67	16.98	16.97	-
2	NN Kanpur	33.67	0 ⁵	16.98	0	Construction of 10 MRF centres in different location was in progress.
3	NPP Deoband Saharanpur	33.67	33.59	16.98	16.97	-
4	NPP Bulandshahr	33.67	33.67	16.98	16.98	State Government stated that work of MRF centre was in progress. NPP further informed (July 2024) that MRF centre was functional.
5	NP Kaptanganj Kushinagar	33.67	33.67	16.98	16.98	State Government stated that work of MRF centre completed. NPP further informed (July 2024) that MRF centre was functional.
6	NP Usawan Budaun	33.67	33.67	16.98	16.98	State Government stated that machinery was purchased for MRF centre. NP further informed (July 2024) that MRF centre was functional.
7	NP Jiyanpur Azamgarh	33.67	33.15	16.98	16.50	State Government stated that work of MRF centre was in progress. NPP further informed (July 2024) to MRF centre was functional.
Total		235.69	167.75	118.86	101.38	

(Source: State Government and test-checked ULBs)

⁴ Amount of ₹ 50.65 lakh of SBM grant was blocked at ULB level while a MRF centre was constructed utilising the fund from Namami Gange scheme in NP Saidpur (Ghazipur)

⁵ Overall fund received from SBM grant was returned to Directorate by NN Kanpur. However, a MRF centre was functional under the ambit of plant area using the fund from 15th FC.

Appendix 4.2 (A)

Status of waste collection in test-checked ULBs during the years 2016-22

(Reference: Paragraph 4.2.1)

(Quantity in TPD)

Sl No	Name of ULB	Waste collection					
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	NN Lucknow	865.21	944.60	1051.94	1110.69	1145.74	1634.84
2	NN Ghaziabad	852.95	886.03	880.27	1035.62	1035.62	1280.00
3	NN Kanpur	1500.00	1595.00	1009.00	1000.00	1000.00	1104.00
4	NPP Raebareli	50.68	53.00	58.00	62.00	65.00	70.00
5	NPP Baheri Bareilly	23.90	23.90	23.90	23.90	23.90	23.90
6	NPP Dataganj Budaun	5.66	5.66	5.66	9.19	9.19	9.19
7	NPP Auraiya	16.00	19.00	19.00	21.00	22.00	24.00
8	NPP Utraula Balrampur	8.06	8.25	8.44	8.64	8.86	9.06
9	NPP Chitrakootdham Karwi Chitrakoot	13.30	13.70	14.15	15.20	15.50	15.78
10	NPP Muzaffarnagar	150.00	153.00	153.00	160.00	160.00	170.00
11	NPP Loni Ghaziabad	285.00	285.00	305.00	305.00	310.00	310.00
12	NPP Sikandara Rao Hathras	14.00	15.00	16.00	16.50	17.00	19.87
13	NPP Hathras	45.26	47.64	48.50	48.50	32.25	74.00
14	NPP Etah	44.28	44.88	45.00	48.12	48.12	49.77
15	NPP Mahoba	29.09	30.54	32.07	33.67	35.35	37.11
16	NPP Deoria	48.00	50.00	54.00	56.00	58.00	60.00
17	NPP Ramnagar Varanasi	18.08	18.44	18.82	19.21	19.60	20.00
18	NPP Bulandshahr	12.98	12.98	106.85	67.50	90.00	90.00
19	NPP Pilibhit	88.76	88.76	88.76	64.95	64.95	47.74
20	NPP Shamli	30.00	32.00	33.00	35.00	36.00	36.00
21	NPP Deoband Saharanpur	18.00	18.00	18.00	25.00	50.00	50.00
22	NPP Shahabad Hardoi	15.00	16.00	16.50	17.35	22.58	26.10
23	NPP Mahmudabad Sitapur	21.50	13.41	22.48	22.48	19.55	19.55
24	NP Jhalu Bijnor	4.26	4.26	4.26	5.34	5.34	5.34
25	NP Sahaspur Bijnor	4.75	4.90	5.20	5.75	6.30	6.80
26	NP Jarwal Baharaich	3.20	3.22	3.23	3.25	3.28	3.30
27	NP Anandnagar Maharajganj	3.50	3.80	4.00	4.00	7.78	7.78
28	NP Rajapur Chitrakoot	1.76	1.86	1.96	2.07	2.17	2.27
29	NP Usawan Budaun	2.85	3.32	3.80	4.27	4.75	5.22
30	NP Bakewar Etawah	1.80	1.80	1.80	1.99	2.00	2.00
31	NP Rudhauri Bazar Basti	3.00	3.20	3.80	4.00	4.20	3.90
32	NP Jewar G B Nagar	10.55	11.00	12.00	13.00	13.50	10.37
33	NP Tikri Bagpat	3.00	3.00	5.00	5.00	5.00	5.00
34	NP Kulpahar Mahoba	5.50	6.00	6.30	6.60	6.90	7.20
35	NP Jiyanpur Azamgarh	2.08	2.12	2.16	2.21	2.25	2.30
36	NP Chitbaragaon Ballia	3.80	3.90	3.95	4.20	4.20	4.20
37	NP Reoti Ballia	7.40	7.53	7.67	8.00	8.00	8.00
38	NP Katra Shahjahanpur	8.20	8.31	8.42	9.17	9.29	9.29
39	NP Saidpur Ghazipur	8.66	8.67	9.76	9.90	9.90	9.90
40	NP Khanpur Bulandshahr	3.97	4.10	4.73	3.60	5.30	5.30
41	NP Jahanabad Pilibhit	3.55	3.55	3.55	3.23	3.23	2.89
42	NP Bilsanda Pilibhit	1.58	1.58	6.67	3.32	6.38	6.46
43	NP Baldeo Mathura	2.50	2.50	4.00	2.07	2.07	2.07
44	NP Bithoor Kanpur Nagar	0.20	3.00	3.00	2.18	2.18	2.25
45	NP Kaptanganj Kushinagar	7.00	7.00	7.08	7.16	7.24	7.32
Total		4248.82	4473.41	4140.68	4315.83	4410.47	5300.07

(Source: Test-checked ULBs)

Appendix 4.2 (B)

Status of quantum of waste generated and collected in the State and in test-checked ULBs

(Reference: Paragraph 4.2.1)

(Quantity in TPD)

Year	State				Test-checked ULBs			
	Generated	Collected	Uncollected	Percentage of uncollected	Generated	Collected	Uncollected	Percentage of uncollected
2016-17	15500	12000	3500	23	4253	4249	4	0.09
2017-18	15500	12000	3500	23	4477	4473	4	0.09
2018-19	15500	13950	1550	10	4144	4141	3	0.07
2019-20	14468	13955	513	4	4688	4316	372	8
2020-21	14710	14292	418	3	4780	4410	370	8
2021-22	14710	14710	0	0	5567	5300	267	5
Total	90388	80907	9481		27909	26889	1020	

(Source: Director ULB & test-checked ULBs)

Appendix 4.3

Details of households covered under door-to-door waste collection facility in Lucknow city

(Reference: Paragraph 4.2.3.1)

Year	Total no. of households	Total no. of households covered with door-to-door collection facility	Total no. of households, not covered with door-to-door collection facility	Percentage of households, not covered with door-to-door collection facility
2017-18	538149	254711	283438	53
2018-19	553839	319230	234609	42
2019-20	558172	376362	181810	33
2020-21	566037	443901	122136	22
2021-22	571697	451984	119713	21

(Source: NN Lucknow)

Appendix 4.4 (A)

Details of excess payment made to firm due to claim for higher number of households (HHs) and commercial properties in NPP Hathras

(Reference: Paragraph 4.2.3.1)

(Amount in ₹)

Month	Number of properties claimed in the bill		Actual number of properties		Excess payment calculated at the rate of 60 per cent of the prescribed rate (HHs @ ₹ 50 per month and commercial @ ₹ 100 per month) as allowed by the NPP in view of agreement			Coverage of household as per bill		Penalty imposed by the NPP on bill (in %)	Amount of Penalty	Excess payment
	HHs	Commercial	HHs	Commercial	HHs = (b-d) x ₹50 x 60%	Commercial (c-e)* ₹100 x 60%	Total (f+g)	%	Amount (h x i%)		J x K%	J-L
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(L)	(M)
Oct-20	19483	5056	15716	2503	113010	153180	266190	85	226262	10	22626	203636
Nov-20	19483	5056	15716	2503	113010	153180	266190	87	231585	10	23159	208426
Dec-20	16950	4399	15716	2503	37020	113760	150780	100	150780	12	18094	132686
Jan-21	17145	4449	15716	2503	42870	116760	159630	100	159630	12	19156	140474
Feb-21	17535	4550	15716	2503	54570	122820	177390	100	177390	10	17739	159651
Mar-21	18119	4702	15716	2503	72090	131940	204030	100	204030	5	10202	193828
Apr-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
May-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Jun-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Jul-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Aug-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Sep-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Oct-21	18119	4702	15802	2571	69510	127860	197370	100	197370	5	9869	187501
Nov-21	18119	4702	15802	2571	69510	127860	197370	100	197370	40	78948	118422
Dec-21	18119	4702	15802	2571	69510	127860	197370	100	197370	40	78948	118422
Jan-22	18119	4702	15802	2571	69510	127860	197370	100	197370	40	78948	118422
Feb-22	18119	4702	15802	2571	69510	127860	197370	100	197370	20	39474	157896
Mar-22	18119	4702	15802	2571	69510	127860	197370	100	197370	20	39474	157896
Total					1266690	2325960	3592650		3518117		495851	3022266

(Source: NPP Hathras)

Appendix 4.4 (B)

Details of excess payment made to firm due to deduction of 40 per cent instead of 50 per cent from the bills of the firm contrary to the terms of RFP

(Reference: Paragraph 4.2.3.1)

(Amount in ₹)

Month	Bill amount	Deduction		Provision of excess payment	Penalty imposed on bill (in percentage)	Amount of penalty (in ₹)	Net excess payment made to the firm
		Allowed in bills (40 per cent)	Due as per RFP (50 per cent)	(iv-iii)		(v) x (vi)/100	(v-vii)
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)
Sept 2021	1376168	550467	688084	137617	5	6881	130736
Oct 2021	1376150	550460	688075	137615	5	6881	130734
Nov 2021	1376160	550464	688080	137620	40	55048	82572
Dec2021	1376160	550464	688080	137620	40	55048	82572
Jan 2022	1376150	550460	688075	137615	40	55046	82569
Feb 2022	1376150	550460	688075	137615	20	27523	110092
March 2022	1376150	550460	688075	137615	20	27523	110092
Total				963317		233950	729367

(Source: NPP Hathras)

Appendix 4.5 (A)

Details of avoidable payment made to firm for tippers engaged in DTDC in NPP Loni

(Reference: Paragraph 4.2.3.2)

(Amount in ₹)

Month	No. of tippers for which payment was made	Required number of tippers	Excess no. of tippers for which payment was made	Excess payment on hiring tippers @ ₹ 18,000 per tipper per month
(A)	(B)	(C)	(D) = (B) – (C)	(E) = (D)*18000
November 2018	55	28	27	486000
December 2018	55	28	27	486000
January 2019	55	28	27	486000
February 2019	55	28	27	486000
March 2019	55	28	27	486000
April 2019	55	28	27	486000
May 2019	55	28	27	486000
June 2019	Bill not available			
July 2019	55	28	27	486000
August 2019	55	28	27	486000
September 2019	53	28	27	486000
October 2019	53	28	27	486000
November 2019	55	28	27	486000
December 2019	55	28	27	486000
January 2020	53	28	25	450000
February 2020	51	28	23	414000
March 2020	53	28	25	450000
April 2020	54	28	26	468000
May 2020	44	28	16	288000
June 2020	45	28	17	306000
July 2020	44	28	16	288000
August 2020	44	28	16	288000
Sept. 2020	Bill not available			
October 2020	44	28	16	288000
November 2020	44	28	16	288000
Total				9846000

(Source: NPP Loni Ghaziabad)

Appendix 4.5 (B)

Details of avoidable payment made to firm for manpower engaged in DTDC in NPP Loni

(Reference: paragraph 4.2.3.2)

(Amount in ₹)

Month	Details for excess posted drivers and payment their against						Details for excess posted sweepers and payment their against						Total payment on excess posted manpower
	Required no. of drivers	No of drivers actually posted	Excess posted drivers	Details as per paid bill		Excess payment on excess posted drivers	Required no. of sweepers	No. of sweepers actually posted	Excess posted sweepers	Details as per paid bill		Excess payment on excess posted sweepers	
				No. of drivers	Amount					No. of sweepers	Amount		
(A)	(B)	(C)	(D)= (C-B)	(E)	(F)	(G)= (F*D)/E	(H)	(I)	(J)= (I-H)	(K)	(L)	(M)= (L*J)/K	(N)= (G+M)
November 2018	28	55	27	60	749112	337100	56	165	109	956	8389644	956560	1293660
December 2018	28	55	27	60	707424	318341	56	165	109	993	8540511	937478	1255819
January 2019	28	55	27	62	788673	343454	56	165	109	943	8334366	963357	1306811
February 2019	28	55	27	62	711678	309924	56	165	109	932	7651492	894863	1204787
March 2019	28	55	27	60	781016	351457	56	165	109	926	8333450	980935	1332392
April 2019	28	55	27	61	762724	337599	56	165	109	945	8299245	957267	1294866
May 2019	28	55	27	60	781442	351649	56	165	109	914	8233584	981904	1333553
June 2019	Bill not available												
July 2019	28	55	27	59	765277	350212	56	165	109	921	8371319	990742	1340954
August 2019	28	55	27	55	715506	351248	56	165	109	939	8521576	989193	1340441
September 2019	28	53	27	57	717206	339729	56	159	109	944	8315737	960186	1299915
October 2019	28	53	27	57	729505	345555	56	159	109	944	8647222	998461	1344016
November 2019	28	55	27	59	745708	341256	56	165	109	994	8578806	940734	1281990
December 2019	28	55	27	58	754641	351298	56	165	109	994	8825351	967770	1319068
January 2020	28	53	25	58	739328	318676	56	159	103	944	8584045	936607	1255283
February 2020	28	51	23	58	707849	280699	56	153	97	950	8212381	838527	1119226
March 2020	28	53	25	59	771231	326793	56	159	103	950	8683280	941450	1268243
April 2020	28	54	26	59	752940	331804	56	162	106	1050	9707670	980012	1311816
May 2020	28	44	16	59	736775	199803	56	132	76	1050	8470635	613113	812916
June 2020	28	45	17	58	658504	193010	56	135	79	1050	8099587	609397	802407
July 2020	28	44	16	59	733372	198881	56	132	76	1050	8964957	648892	847773

Performance Audit of Solid Waste Management in Urban Areas

Month	Details for excess posted drivers and payment their against						Details for excess posted sweepers and payment their against						Total payment on excess posted manpower	
	Required no. of drivers	No of drivers actually posted	Excess posted drivers	Details as per paid bill		Excess payment on excess posted drivers	Required no. of sweepers	No. of sweepers actually posted	Excess posted sweepers	Details as per paid bill		Excess payment on excess posted sweepers		
				No. of drivers	Amount					No. of sweepers	Amount			
(A)	(B)	(C)	(D)= (C-B)	(E)	(F)	(G)= (F*D)/E	(H)	(I)	(J)= (I-H)	(K)	(L)	(M)= (L*J)/K	(N)= (G+M)	
August 2020	28	44	16	58	732096	201958	56	132	76	1050	8820728	638453	840411	
September 2020	Bill not available													
October 2020	28	44	16	58	749112	206652	56	132	76	1050	9189003	665109	871761	
November 2020	28	44	16	58	728693	201019	56	132	76	1050	8891610	643583	844602	
Total						6888117							20034593	26922710

(Source: NPP Loni Ghaziabad)

Appendix 4.6

Details of expenditure incurred on excess procurement of bins in NP Chitbaragaon and NP Reoti

(Reference: Paragraph 4.2.4.2)

(₹ in lakh)										
SI No	Name of ULB	Population 2011	Estimated population 2021	Norm as per MSWM manual	No. of bins required as per norms	Bins purchased	Date of payment	Excess bins purchased	Rate per bin	Excess expenditure
1	NP Chitbaragaon Ballia	21879	24132	1 bin for 5000 population	5	15	08.05.2020	10	1.18	11.80
2	NP Reoti Ballia	26359	30693		6	15	17.12.2019	9	1.00	9.00
						3	13.04.2020	3	1.24	3.72
Total										24.52

(Source: NP Chitbaragaon & NP Reoti Ballia)

Appendix 4.7

Details of partitioned/covered vehicles used for transportation of MSW in test-checked ULBs

(Reference: Paragraph 4.3.1)

Sl. No.	Name of ULB	Tipper			Tractor			Status of vehicle as per Government Reply (June 2023)
		Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	
1	NN Lucknow	883	604	714	116	0	0	The ULB had compartmented DTDC vehicles and other tipping trucks are covered during transportation of MSW. However, the reply was in contradiction of data furnished by NN Lucknow that 279 tippers were not partitioned.
2	NN Ghaziabad	232	138	232	28	0	0	GNN is using majority of partitioned vehicle and in three zone DTDC is outsourced using partitioned vehicle. The reply is not acceptable, as only partial tippers were partitioned and tractors were neither covered nor partitioned.
3	NN Kanpur	123	0	0	0	0	0	As far as possible partitioned vehicles are used. The reply is not tenable, as no vehicle was partitioned/covered.
4	NPP Loni Ghaziabad	25	25	25	33	0	0	No reply.
5	NPP Deoria	20	20	20	0	0	0	DTDC vehicles are compartmented and other tipping trucks are properly covered while transporting MSW.
6	NPP Ramnagar Varanasi	6	0	6	4	0	0	All partitioned vehicles are being used. The reply is not acceptable, as none of the tippers were partitioned and tractors were neither covered nor partitioned.
7	NPP Sikandara Rao Hathras	7	7	7	3	0	0	No reply.
8	NPP Hathras	30	27	27	18	0	0	Segregated waste is being collected through 27 tippers.
9	NPP Etah	30	30	30	3	0	0	25 tippers are partitioned. However, reply is not tenable, as none of the tractors were neither partitioned nor covered.
10	NPP Mahoba	7	7	7	6	0	0	DTDC vehicles are compartmented and covered while transporting waste. The reply is not acceptable, as no tractor was partitioned or covered
11	NPP Bulandshahr	43	43	43	7	0	0	No reply.
12	NPP Shamli	3	0	0	8	0	0	DTDC vehicles are compartmented and other tipping trucks are properly covered while transporting MSW. The reply is not tenable, as neither tractor nor tipper was partitioned and covered.
13	NPP Deoband Saharanpur	13	13	13	16	16	16	DTDC vehicles are compartmented and other tipping trucks

Sl. No.	Name of ULB	Tipper			Tractor			Status of vehicle as per Government Reply (June 2023)
		Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	
								are properly covered while transporting MSW
14	NPP Mahmudabad Sitapur	3	3	3	3	0	0	No vehicle is being used without partition. However, the reply is in contradiction to the fact that none of the tractors were either partitioned or covered.
15	NPP Pilibhit	28	28	24	7	7	0	No reply.
16	NPP Shahabad Hardoi	17	17	17	7	0	0	No reply.
17	NPP Raebareli	36	36	36	6	6	0	DTDC vehicles are compartmented and other tipping trucks are covered while transporting MSW. The reply is not tenable, as no tractor was covered.
18	NPP Baheri Bareilly	9	9	8	5	0	0	No reply.
19	NPP Dataganj Budaun	6	6	6	8	0	8	No reply.
20	NPP Auraiya	10	10	10	2	0	0	No partitioned vehicle is available for source segregation.
21	NPP Utraula Balrampur	5	5	2	1	0	0	Compartmented vehicles are being used for DTDC. The reply is not tenable, as only a few tippers were covered and tractor was neither partitioned nor covered.
22	NPP Chitrakootdham Karwi Chitrakoot	12	5	5	4	0	0	Tippers are with partition and other vehicles are covered during transportation of MSW. However, the reply is in contradiction of the data furnished by the ULB.
23	NPP Muzaffarnagar	40	40	40	18	0	0	Partitioned and covered vehicles are being used. However, the reply is not acceptable, as none of the tractors were either partitioned or covered.
24	NP Jiyanpur Azamgarh	2	0	0	2	0	0	No reply.
25	NP Reoti Ballia	7	0	0	2	0	0	Seven partitioned vehicles used for source segregation. However, the reply is in contradiction of the data furnished by the ULB.
26	NP Kulpahar Mahoba	6	2	2	3	0	0	Compartmented vehicles are being used for DTDC and tractors are being covered while transporting waste. However, the reply is in contradiction of the data furnished by the ULB.
27	NP Chitbaragaon Ballia	2	2	2	1	0	0	Segregated waste is being transported. The fact remains that tractor was neither partitioned nor covered.
28	NP Jewar G B Nagar	6	6	6	4	0	0	No reply
29	NP Tikri Bagpat	3	3	3	3	0	0	No reply
30	NP Rudhauri Bazar Basti	6	2	2	2	0	0	No reply
31	NP Kaptanganj	2	2	2	3	0	0	DTDC vehicles are compartmented and other tipping trucks

Performance Audit of Solid Waste Management in Urban Areas

Sl. No.	Name of ULB	Tipper			Tractor			Status of vehicle as per Government Reply (June 2023)
		Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	Total number of vehicles	Number of partitioned vehicles	Number of covered vehicles	
	Kushinagar							are covered while transporting MSW. The reply is not tenable, as no tractor was partitioned/covered.
32	NP Saidpur Ghazipur	4	4	0	2	0	0	No partitioned vehicle is available for source segregation.
33	NP Katra Sahjahanpur	5	5	1	4	0	0	DTDC vehicles are compartmented and other tipping trucks are properly covered while transporting MSW. The reply is not tenable, as only one out of five tippers was covered and no tractor was partitioned/ covered.
34	NP Baldeo Mathura	2	2	0	3	0	0	No vehicle is being used without partition. The reply is not tenable, as no tipper was covered and none of the tractors were neither partitioned nor covered.
35	NP Bithoor Kanpur Nagar	2	0	0	1	0	0	NP Bithoor operates two tippers with separate bins. However, the reply is in contradiction to the fact that none of the vehicles were either partitioned or covered.
36	NP Khanpur Bulandshahr	3	0	1	3	0	0	No reply.
37	NP Jahanabad Pilibhit	4	4	4	2	2	0	No reply.
38	NP Bilsanda Pilibhit	0	0	0	2	0	0	No reply.
39	NP Usawan Budaun	3	3	3	3	3	0	No reply.
40	NP Jhalu Bijnor	2	2	2	7	0	0	There is no partitioned vehicle for source segregation.
41	NP Sahaspur Bijnor	3	3	3	4	4	4	Vehicles are partitioned for source segregation.
42	NP Bakewar Etawah	2	2	2	2	0	0	No partitioned vehicle is available.
43	NP Jarwal Bahraich	3	1	1	2	0	0	Motorized vehicles are being used for separate collection of waste.
44	NP Anandnagar Mahrajganj	2	0	0	2	0	0	DTDC vehicles are compartmented and other tipping trucks are properly covered while transporting MSW. However, the reply is in contradiction of the data furnished by the ULB.
45	NP Rajapur Chitrakoot	2	2	2	2	0	0	No reply.
Total		1659	1118	1311	362	38	28	

(Source: Test-checked ULBs)

Appendix 4.8

Details of transportation vehicles used without authorisation in test-checked ULBs as of March 2022

(Reference: Paragraph 4.3.2)

SI No.	Name of ULB	Details of vehicle					Total number of vehicles	Number of vehicle registered	Number of vehicle insured	Number of vehicle with fitness certificate	Status of vehicle as per Government reply (June 2023)
		Tipper	Tractor	Dumper	Dumper placer	Compactor					
1	NN Lucknow	883	116	0	73	74	1146	931	324	108	Vehicles are registered and insured. The reply is not acceptable, since as per data furnished by the ULB, a number of vehicles remained unregistered and uninsured
2	NN Ghaziabad	232	28	20	12	26	318	318	110	318	No reply.
3	NN Kanpur	123	0	0	35	20	178	177	177	177	As far as possible, NN was trying to use vehicle with fitness certificates.
4	NPP Loni Ghaziabad	25	33	0	4	1	63	62	62	62	No reply.
5	NPP Deoria	20	0	0	0	3	23	23	3	0	Vehicles are registered and insured. The reply is not acceptable, as a number of vehicles remained uninsured.
6	NPP Ramnagar Varanasi	6	4	1	0	0	11	2	3	0	Vehicles are registered. The reply is not acceptable, as a number of vehicles remained unregistered.
7	NPP Sikandara Rao Hathras	7	3	0	0	1	11	2	7	0	No reply.
8	NPP Hathras	30	18	0	2	2	52	35	33	0	No reply.
9	NPP Etah	30	3	0	1	3	37	34	37	0	Timely vehicles are insured and fitness certified. The fact remains that none of the vehicles were fitness certified.
10	NPP Mahoba	7	6	2	0	1	16	9	7	7	Vehicles are registered and

Performance Audit of Solid Waste Management in Urban Areas

SI No.	Name of ULB	Details of vehicle					Total number of vehicles	Number of vehicle registered	Number of vehicle insured	Number of vehicle with fitness certificate	Status of vehicle as per Government reply (June 2023)
		Tipper	Tractor	Dumper	Dumper placer	Compactor					
											insured. The reply is not acceptable, as vehicles were registered only partially, insured and fitness certified.
11	NPP Bulandshahr	43	7	0	0	5	55	3	0	0	No reply.
12	NPP Shamli	3	8	0	0	0	11	0	0	0	Vehicles are registered and insured. However, the reply is in contradiction to the data provided by ULB.
13	NPP Deoband Saharanpur	13	16	0	0	2	31	13	0	13	Vehicles are registered and insured. The reply is not tenable, as only a few vehicles were registered and no vehicle was insured.
14	NPP Mahmudabad Sitapur	3	3	0	0	0	6	0	0	0	The process of obtaining fitness certificate after registration for the remaining vehicles is in progress. The fact remains that none of the vehicles were registered, insured and fitness certified.
15	NPP Pilibhit	28	7	0	1	3	39	32	32	32	No reply.
16	NPP Shahabad Hardoi	17	7	0	1	1	26	22	0	0	Vehicles are registered and insured. The reply is not tenable, as only partial vehicles were registered and no vehicle was insured.
17	NPP Raebareli	36	6	0	5	3	50	25	50	0	Vehicles are registered and insured. The fact remains that only a few vehicles were registered.
18	NPP Baheri Bareilly	9	5	0	1	0	15	8	11	0	No reply.
19	NPP Dataganj Budaun	6	8	0	1	0	15	14	0	0	No reply.

SI No.	Name of ULB	Details of vehicle					Total number of vehicles	Number of vehicle registered	Number of vehicle insured	Number of vehicle with fitness certificate	Status of vehicle as per Government reply (June 2023)
		Tipper	Tractor	Dumper	Dumper placer	Compactor					
20	NPP Auraiya	10	2	0	2	1	15	0	1	0	No reply.
21	NPP Utraula Balrampur	5	1	0	0	0	6	3	6	3	Four vehicles are registered and for remaining vehicles registration and fitness certificate work is under progress.
22	NPP Chitrakootdham Karwi Chitrakoot	12	4	0	0	2	18	9	11	0	No reply.
23	NPP Muzaffarnagar	40	18	0	6	2	66	42	17	0	Registration, insurance and fitness certification work is under progress.
24	NP Jiyanpur Azamgarh	2	2	0	0	0	4	2	0	0	No reply.
25	NP Reoti Ballia	7	2	0	0	0	9	2	0	0	No reply.
26	NP Kulpahar Mohaba	6	3	0	0	0	9	9	0	0	Registration, insurance and fitness certification work is under progress.
27	NP Chitbaragaon Ballia	2	1	1	1	0	5	5	0	0	Insurance and registration work is under process.
28	NP Jewar G B Nagar	6	4	0	1	0	11	6	6	0	No reply.
29	NP Tikri Bagpat	3	3	0	0	0	6	1	2	0	No reply.
30	NP Rudhauri Bazar Basti	6	2	0	0	0	8	0	0	0	No reply.
31	NP Kaptanganj Kushinagar	2	3	0	0	0	5	0	0	0	Vehicles are registered and insured. The reply is contradictory to the information provided by the ULB.
32	NP Saidpur Ghazipur	4	2	0	0	0	6	3	0	0	No reply.
33	NP Katra Sahjahanpur	5	4	0	1	0	10	0	0	0	No reply.
34	NP Baldeo Mathura	2	3	0	1	0	6	0	0	0	Registration and fitness work is under process.
35	NP Bithoor Kanpur Nagar	2	1	0	0	0	3	1	1	0	No reply.
36	NP Khanpur Bulandshahr	3	3	0	0	0	6	3	0	0	No reply.
37	NP Jahanabad Pilibhit	4	2	0	0	0	6	6	6	2	No reply.

Performance Audit of Solid Waste Management in Urban Areas

SI No.	Name of ULB	Details of vehicle					Total number of vehicles	Number of vehicle registered	Number of vehicle insured	Number of vehicle with fitness certificate	Status of vehicle as per Government reply (June 2023)
		Tipper	Tractor	Dumper	Dumper placer	Compactor					
38	NP Bilsanda Pilibhit	0	2	0	0	6	8	0	0	0	No reply.
39	NP Usawan Budaun	3	3	0	0	0	6	2	0	2	No reply.
40	NP Jhalu Bijnor	2	7	0	0	0	9	4	0	2	No reply.
41	NP Sahaspur Bijnor	3	4	0	0	0	7	5	0	3	No reply.
42	NP Bakewar Etawah	2	2	0	0	0	4	4	3	1	No reply.
43	NP Jarwal Bahraich	3	2	0	0	0	5	0	0	0	Four vehicles are registered and registration of one vehicle is under process. The reply is contradictory to the information provided by the ULB.
44	NP Anandnagar Mahrajganj	2	2	0	1	0	5	2	0	0	No reply.
45	NP Rajapur Chitrakoot	2	2	0	0	0	4	2	0	0	No reply.
Total		1659	362	24	149	156	2350	1821	909	730	

(Source: Test-checked ULBs)

Appendix 4.9

Details regarding monitoring of waste transportation vehicles through GPS in test-checked ULBs

(Reference: Paragraph 4.3.3)

Sl. No.	Name of ULB	Details of vehicle					Total number of vehicles	GPS enabled vehicle
		Tipper	Tractor	Dumper	Dumper placer	Compactor		
1	NN Lucknow	883	116	0	73	74	1146	1056
2	NN Ghaziabad	232	28	20	12	26	318	300
3	NN Kanpur	123	0	0	35	20	178	178
4	NPP Loni Ghaziabad	25	33	0	4	1	63	0
5	NPP Deoria	20	0	0	0	3	23	20
6	NPP Ramnagar Varanasi	6	4	1	0	0	11	0
7	NPP Sikandara Rao Hathras	7	3	0	0	1	11	0
8	NPP Hathras	30	18	0	2	2	52	0
9	NPP Etah	30	3	0	1	3	37	0
10	NPP Mahoba	7	6	2	0	1	16	7
11	NPP Bulandshahr	43	7	0	0	5	55	0
12	NPP Shamli	3	8	0	0	0	11	0
13	NPP Deoband Saharanpur	13	16	0	0	2	31	0
14	NPP Mahamudabad Sitapur	3	3	0	0	0	6	0
15	NPP Pilibhit	28	7	0	1	3	39	0
16	NPP Shahabad Hardoi	17	7	0	1	1	26	17
17	NPP Raebareli	36	6	0	5	3	50	0
18	NPP Baheri Bareilly	9	5	0	1	0	15	10
19	NPP Dataganj Budaun	6	8	0	1	0	15	0
20	NPP Auraiya	10	2	0	2	1	15	0
21	NPP Utraula Balrampur	5	1	0	0	0	6	5
22	NPP Chitrakootdham Karwi Chitrakoot	12	4	0	0	2	18	14
23	NPP Muzaffarnagar	40	18	0	6	2	66	61
24	NP Jiyanpur Azamgarh	2	2	0	0	0	4	0
25	NP Reoti Ballia	7	2	0	0	0	9	0
26	NP Kulpahar Mahoba	6	3	0	0	0	9	0
27	NP Chitbaragaon Ballia	2	1	1	1	0	5	0
28	NP Jewar GB Nagar	6	4	0	1	0	11	0
29	NP Tikri Bagpat	3	3	0	0	0	6	0
30	NP Rudhauri Bazar Basti	6	2	0	0	0	8	0
31	NP Kaptanganj Kushinagar	2	3	0	0	0	5	0
32	NP Saidpur Ghazipur	4	2	0	0	0	6	0
33	NP Katra Sahjahanpur	5	4	0	1	0	10	0
34	NP Baldeo Mathura	2	3	0	1	0	6	0
35	NP Bithoor Kanpur Nagar	2	1	0	0	0	3	0
36	NP Khanpur Bulandshahr	3	3	0	0	0	6	0
37	NP Jahanabad Pilibhit	4	2	0	0	0	6	0
38	NP Bilsanda Pilibhit	0	2	0	0	6	8	0
39	NP Usawan Budaun	3	3	0	0	0	6	6
40	NP Jhalu Bijnor	2	7	0	0	0	9	0
41	NP Sahaspur Bijnor	3	4	0	0	0	7	0
42	NP Bakewar Eatawah	2	2	0	0	0	4	3
43	NP Jarwal Bahraich	3	2	0	0	0	5	0
44	NP Anandnagar Mahrajganj	2	2	0	1	0	5	0
45	NP Rajapur Chitrakoot	2	2	0	0	0	4	0
Total		1659	362	24	149	156	2350	1677

(Source: Test-checked ULBs)

Appendix 4.10

Details of vehicles required in ULBs and gap analysis for SWM

(Reference: Paragraph 4.3.4.1)

Sl. No.	Name of ULB	Forecast population of 2019 ⁶	No of vehicles required in the ULBs, as per norm ⁷		No of Vehicles available in the ULBs as of 2018-19		No of vehicles required in the ULBs as per gap analysis of 2019-20 at directorate level		Total number of vehicles in the ULBs including the number of vehicles on the basis of gap analysis		Percentage of excess provision of vehicles in gap analysis	
									(6)+(8)	(7)+(9)	(10-4) *100/(4)	(11-5) *100/(5)
			Tri-cycle	LCV	Tri-cycle	LCV	Tri-cycle	LCV	Tri-cycle	LCV	Tri-cycle	LCV
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	NPP Bulandshahr	262313	52	22	60	9	35	25	95	34	83	55
2	NPP Pilibhit	133353	27	11	80	2	15	22	95	24	252	118
3	NPP Shahabad Hardoi	90972	15	8	0	3	20	15	20	18	33	125
4	NPP Muzaffarnagar	445883	89	38	0	26	100	75	100	101	12	166
5	NPP Deoria	148717	30	13	0	5	25	20	25	25	NA	92
6	NPP Etah	131003	26	11	0	6	30	25	30	31	15	182
7	NPP Hathras	155570	31	13	50	8	25	22	75	30	142	131

(Source: Director ULB & test-checked ULBs)

⁶ Estimated population given in *Appendix 8*⁷ Considering 75 per cent coverage of door-to-door waste collection through LCV/mini tripper and 25 per cent through tricycle if city population is more than one lakh and 80 per cent of door-to-door waste collection through LCV/mini tripper and 20 per cent through tricycle, if a city population is less than one lakh (Tricycle 1 per 1,250 population and LCV 1 per 8,750 population).

Appendix 4.11

Details of availability of vehicles for primary transportation in test-checked ULBs

(Reference: Paragraph 4.3.4.1)

Sl. No.	Name of ULB	Population as per 2011 census	Forecasted population 2021 ⁸	No. of required vehicles, as per norms ⁹	No. of vehicles available as of 2021-22	Excess vehicles as of 2021-22 (6)-(5)	Percentage of excess of vehicles 7*100/(5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Details of excess LCV/mini tipper for primary transportation of waste							
1	NPP Hathras	143339	158461	14	30	16	114
2	NPP Bulandshahr	222519	273378	23	43	20	87
3	NPP Deoria	129479	153467	13	25	12	92
4	NPP Etah	118517	133461	11	30	19	173
5	NPP Pilibhit	127988	133978	11	28	17	155
6	NPP Shahabad Hardoi	80305	93753	9	17	8	89
Details of excess Tricycle for primary transportation of waste							
1	NPP Muzaffarnagar	392454	458489	92	200	108	117
2	NPP Bulandshahr	222519	273378	55	100	45	82

(Source: Test-checked ULBs)

Appendix 4.12

Details of funds released to ULBs for purchase of refuse compactors

(Reference: Paragraph 4.3.4.2)

(₹ in lakh)

Name of ULB	Population as per census 2011	Population (2019 ¹⁰)	Compactors sanctioned		Expenditure incurred
			Number	Amount	
NPP Utraula Balrampur	32171	35091	1	30.00	0
NPP Shahabad Hardoi	80305	90972	1	30.00	29.97
NPP Sikandara Rao Hathras	46155	52706	1	30.00	29.79
Total			3	90.00	59.76

(Source: Test-checked ULBs)

⁸ Estimated population given in *Appendix 8*

⁹ Considering 75 per cent coverage of door-to-door waste collection through LCV/mini tripper and 25 per cent through tricycle if city population is more than one lakh and 80 per cent of door-to-door waste collection through LCV/mini tripper and 20 per cent through tricycle, if a city population is less than one lakh (Tricycle 1 per 1250 population and LCV 1 per 8750 population)

¹⁰ Estimated population given in *Appendix 8*

Appendix-5.1 (A)

Status of waste processed in the State and test-checked ULBs during the years 2016-22

(Reference: paragraph 5.1)

(Quantity in TPD)

Year	State					Test-checked ULBs				
	Generated	Collected	Processed	Percentage of processing against generation	Percentage of processing against collection	Generated	Collected	Processed	Percentage of processing against generation	Percentage of processing against collection
2016-17	15500	12000	3115	20	26	4253	4249	0	0	0
2017-18	15500	12000	3115	20	26	4477	4473	1577	35	35
2018-19	15500	13950	4615	30	33	4144	4141	1469	35	35
2019-20	14468	13955	5395	37	39	4688	4316	624	13	14
2020-21	14710	14292	7818	53	55	4780	4410	1475	31	33
2021-22	14710	14710	10433	71	71	5567	5300	3365	60	63
Total	90388	80907	34491			27909	26889	8510		

(Source: Director ULB & test-checked ULBs)

Appendix 5.1 (B)

Status of waste processed in test-checked ULBs during the years 2016-22

(Reference: Paragraph 5.1)

Sl No	Name of ULB	Processing (in TPD)					
		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
1	NN Lucknow	0	937.00	627.00	622.00	1016.00	1020.85
2	NN Ghaziabad	0	0	0	0	0	1280
3	NN Kanpur	0	640.00	842.00	0	455.00	1062.00
4	NPP Raebareli	0	0	0	0	0	0
5	NPP Baheri Bareilly	0	0	0	0	0	0
6	NPP Dataganj Budaun	0	0	0	0	0	0
7	NPP Auraiya	0	0	0	0	0	0
8	NPP Utraula Balrampur	0	0	0	0	0	0
9	NPP Chitrakootdham Karwi Chitrakoot	0	0	0	0	0	0
10	NPP Muzaffarnagar	0	0	0	0	0	0
11	NPP Loni Ghaziabad	0	0	0	0	0	0
12	NPP Sikandara Rao Hathras	0	0	0	0	0	0
13	NPP Hathras	0	0	0	0	0	0
14	NPP Etah	0	0	0	0	0	0
15	NPP Mahoba	0	0	0	0	0	0
16	NPP Deoria	0	0	0	0	0	0
17	NPP Ramnagar Varanasi	0	0	0	0	0	0
18	NPP Bulandshahr	0	0	0	0	0	0
19	NPP Pilibhit	0	0	0	0	0	0
20	NPP Shamli	0	0	0	0	0	0
21	NPP Deoband Saharanpur	0	0	0	0	0	0
22	NPP Shahabad Hardoi	0	0	0	0	0	0
23	NPP Mahmudabad Sitapur	0	0	0	0	0	0
24	NP Jhalu Bijnor	0	0	0	0	0	0
25	NP Sahaspur Bijnor	0	0	0	0	0	0
26	NP Jarwal Baharaich	0	0	0	0	0	0
27	NP Anandnagar Maharajganj	0	0	0	0	0	0
28	NP Rajapur Chitrakoot	0	0	0	0	0	0
29	NP Usawan Budaun	0	0	0	0	0	0
30	NP Bakewar Etawah	0	0	0	1.99	2	2
31	NP Rudhauri Bazar Basti	0	0	0	0	0	0
32	NP Jewar G B Nagar	0	0	0	0	0	0
33	NP Tikri Bagpat	0	0	0	0	0	0
34	NP Kulpahar Mahoba	0	0	0	0	0	0
35	NP Jiyanpur Azamgarh	0	0	0	0	0	0
36	NP Chitbaragaon Ballia	0	0	0	0	0	0
37	NP Reoti Ballia	0	0	0	0	1.55	0
38	NP Katra Shahjahanpur	0	0	0	0	0	0
39	NP Saidpur Ghazipur	0	0	0	0	0	0
40	NP Khanpur Bulandshahr	0	0	0	0	0	0
41	NP Jahanabad Pilibhit	0	0	0	0	0	0
42	NP Bilsanda Pilibhit	0	0	0	0	0	0
43	NP Baldeo Mathura	0	0	0	0	0	0
44	NP Bithoor Kanpur Nagar	0	0	0	0	0	0
45	NP Kaptanganj Kushinagar	0	0	0	0	0	0
Total		0.00	1577.00	1469.00	623.99	1474.55	3364.85

(Source: Test-checked ULBs)

Appendix 5.2

Status of establishment of 32 solid waste processing plants under JNNURM, AFT and State sector schemes in the State

(Reference: Paragraph 5.2.1)

(₹ in crore)						
Sl. No.	Name of ULB	Name of district	Name of scheme	Capacity of plant	Date of sanction	Sanctioned cost
Operational Plant						
1	NN Lucknow	Lucknow	UI&G ¹¹	1300	3.12.07	52.83
2	NN Varanasi	Varanasi	UI&G	600	26.10.07	48.68
3	NN Prayagraj	Prayagraj	UI&G	600	13.12.07	30.41
4	NN Aligarh	Aligarh	UIDSSMT	220	8.9.06	16.07
5	NPP Muzaffarnagar	Muzaffarnagar	UIDSSMT	120	10.11.06	6.58
6	NPP Etawah	Etawah	UIDSSMT	75	10.11.06	5.82
7	NPP Kannauj	Kannauj	UIDSSMT	25	8.9.06	4.62
8	NPP Pilkhwa	Hapur	UIDSSMT	45	1.7.11	8.98
9	NN Kanpur	Kanpur Nagar	UI&G	1500	3.12.07	56.24
10	NN Agra	Agra	UI&G	750	12.3.07	30.84
11	NPP Jaunpur	Jaunpur	UIDSSMT	80	16.7.07	12.20
12	NN Mathura	Mathura	UI&G	180	26.02.08	9.91
13	NN Moradabad	Moradabad	UIDSSMT	280	10.11.06	13.16
14	NN Meerut	Meerut	UI&G	600	23.1.07	22.59
15	NPP Ballia	Balia	UIDSSMT	40	9.8.06	6.82
Total						325.75
Non-operational plant						
16	NPP Raebareli	Raebareli	UIDSSMT	70	10.11.06	8.78
17	NPP Barabanki	Barabanki	UIDSSMT	30	16.7.07	5.25
18	NPP Mainpuri	Mainpuri	UIDSSMT	30	10.11.06	4.28
19	NPP Fatehpur	Fatehpur	UIDSSMT	55	16.7.07	9.38
20	NN Bareilly	Bareilly	Air field Town	300	28.3.05	13.86
Total						41.55
Civil work completed but machinery not installed						
21	NPP Loni	Ghaziabad	UIDSSMT	120	16.7.07	11.81
Under construction						
22	NN Gorakhpur	Gorakhpur	UIDSSMT	280	10.11.06	15.63
23	NN Jhansi	Jhansi	UIDSSMT	200	8.9.06	12.16
24	NN Firozabad	Firozabad	UIDSSMT	130	10.11.06	7.14
25	NPP Sambhal	Sambhal	UIDSSMT	75	8.9.06	6.55
26	NPP Budaun	Budaun	UIDSSMT	55	8.9.06	5.78
27	NPP Mirzapur	Mirzapur	UIDSSMT	100	16.7.07	11.01
Total						58.27
Land unavailable						
28	NPP Basti	Basti	UIDSSMT	40	8.9.06	5.86
29	NPP Nazibabad	Bijnaur	State Sector	60	Not provided	17.27
Total						23.13
Land dispute						
30	NPP Bhadohi	Bhadohi	State Sector	40	21.11.14	17.35
31	NN Ghaziabad	Ghaziabad	Air field Town	300	27.9.05	13.52
32	NPP Rampur	Rampur	State Sector	150	17.11.14	24.02
Total						54.89

(Source: Director ULB and C&DS UP Jal Nigam)

¹¹ UI&G: Urban Infrastructure and Governance, UIDSSMT: Urban Infrastructure Development Scheme for Small and Medium Towns, both were sub components of Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

Appendix 5.3

**Blockade of funds released for establishment of 32 solid waste processing plants
of the State**

(Reference: Paragraph 5.2.1)

(₹ in crore)

Sl. No.	Name of ULBs	Name of district	Name of scheme	Capacity of plant	Amount released	Amount utilized	Balance amount	Interest on balance amount
1	NN Lucknow	Lucknow	UI&G	1300	52.83	50.12	2.71	0.00
2	NN Varanasi	Varanasi	UI&G	600	40.16	32.97	7.19	2.01
3	NN Prayagraj	Prayagraj	UI&G	600	30.41	29.51	0.9	0.00
4	NN Aligarh	Aligarh	UIDSSMT	220	16.06	15.98	0.08	0.28
5	NPP Etawah	Etawah	UIDSSMT	75	5.78	5.42	0.36	0.19
6	NPP Barabanki	Barabanki	UIDSSMT	30	5.25	5.25	0	0.01
7	NPP Kannauj	Kannauj	UIDSSMT	25	4.61	4.56	0.05	0.00
8	NPP Mainpuri	Mainpur	UIDSSMT	30	4.22	3.74	0.48	0.09
9	NPP Muzaffarnagar	Muzaffarnagar	UIDSSMT	120	6.58	5.80	0.78	0.09
10	NPP Raebareli	Raebareli	UIDSSMT	70	8.14	7.38	0.76	0.00
11	NPP Pilkhwa	Hapur	UIDSSMT	45	8.98	8.78	0.2	0.00
12	NN Kanpur	Kanpur Nagar	UI&G	1500	56.24	56.02	0.22	3.80
13	NN Agra	Agra	UI&G	750	30.84	22.01	8.83	8.08
14	NN Moradabad	Moradabad	UIDSSMT	280	13.12	12.24	0.88	0.59
15	NPP Fatehpur	Fatehpur	UIDSSMT	55	9.38	9.38	0	0.00
16	NN Mathura	Mathura	UI&G	180	9.91	9.90	0.01	0.44
17	NN Bareilly	Bareilly	Air field town	300	13.86	13.84	0.02	0.03
18	NN Meerut	Meerut	UI&G	600	15.36	9.01	6.35	2.38
19	NN Gorakhpur	Gorakhpur	UIDSSMT	280	8.07	2.98	5.09	1.54
20	NN Jhansi	Jhansi	UIDSSMT	200	10.79	5.95	4.84	2.60
21	NN Firozabad	Firozabad	UIDSSMT	250	3.05	1.53	1.52	0.56
22	NPP Basti	Basti	UIDSSMT	40	2.93	0.51	2.42	0.97
23	NPP Nazibabad	Bijnaur	State Sector	40	6.90	6.90	0.00	0.00
24	NPP Loni	Ghaziabad	UIDSSMT	120	5.91	5.91	0	2.64
25	NPP Bhadohi	Bhadohi	State Sector	40	0.51	0.12	0.39	0.08
26	NN Ghaziabad	Ghaziabad	Air field town	300	6.76	6.76	0.00	0.35
27	NPP Jaunpur	Jaunpur	UIDSSMT	80	12.04	10.89	1.15	0.00
28	NPP Sambhal	Sambhal	UIDSSMT	75	4.15	3.26	0.89	1.15
29	NPP Budaun	Budaun	UIDSSMT	55	5.78	4.51	1.27	0.58
30	NPP Mirzapur	Mirzapur	UIDSSMT	100	6.98	6.46	0.52	0.47
31	NPP Ballia	Ballia	UIDSSMT	40	6.48	4.26	2.22	1.04
32	NPP Rampur	Rampur	State sector	150	9.60	0	9.60	0.00
Total				8550	421.68	361.95	59.73	29.97

(Source: Director ULB)

Appendix 5.4

Status of civil work of solid waste processing plants sanctioned under
SBM (Urban) scheme in the State

(Reference: paragraph 5.2.2)

(₹ in lakh)

Sl. No.	Name of the ULB	Capacity of plant (in TPD)	Financial sanction of civil works		Instalment released			Expenditure	Physical progress (in per cent)
			Date	Amount	Date	Amount	Total		
	Civil work not started								
1	NPP Kasganj	50	22.10.2021	675.55	10.12.2021	337.78	337.78	00.00	00
2	NPP Shamli	50	18.10.2021	383.48	30.10.2021	191.74	191.74	00.00	00
Total		100		1059.03			529.52		
	Civil work stopped due to dispute								
1	NPP Tanda	50	24.11.2021	742.36	03.12.2021	371.18	371.18	45.32	12
	Civil work in progress								
1	NN Firozabad	250	24.11.2021	1710.98	30.11.2021 06.10.2022 13.03.2023	427.75 427.75 427.75	1283.25	1080.00	70
2	NPP Etah	60	08.10.2021	558.68	30.10.2021 13.02.2023	279.34 279.34	558.68	363.73	90
3	NN Ayodhya	140	24.11.2021	1749.98	30.11.2021 25.08.2022 18.01.2023 27.06.2023	437.50 437.50 437.50 350.00	1662.50	1312.47	95
4	NPP Maunath Bhanjan	130	01.12.2021	1407.24	10.12.2021 16.03.2023	351.81 351.81	703.62	351.81	63
5	NN Bareilly	500	12.10.2021	2404.18	11.11.2021 10.03.2022 02.05.2022 13.03.2023	601.05 601.05 601.05 480.84	2283.99	2082.99	95
6	NPP Bahraich	75	24.11.2021	969.53	03.12.2021 27.02.2023	484.77 484.77	969.5	762.21	90
7	NN Gorakhpur	500	09.12.2021	2840.16	15.12.2021 25.02.2023	710.04 710.04	1420.08	1420.08	80
8	NPP Kushinagar	55	12.10.2021	614.77	11.11.2021 25.02.2023	307.39 307.39	614.78	575.48	95
9	NPP Lakhimpur	65	12.10.2021	686.19	11.11.2021 14.11.2022	343.10 343.10	686.20	536.00	78
10	NPP Bhadohi	55	12.10.2021	566.59	03.11.2021	283.30	283.30	215.64	62
11	NPP Kairana	50	12.12.2021	473.97	30.10.2021 22.03.2023	236.99 236.99	473.98	412.15	95
12	NPP Rampur	140	08.12.2021	1568.76	10.12.2021 18.01.2023 22.06.2023	392.19 392.19 392.19	1176.57	1170.26	81
13	NPP Ghazipur	50	01.12.2021	583.52	10.12.2021 09.06.2023	291.76 291.76	583.52	291.76	70
14	NN Jhansi	320	24.11.2021	2762.41	06.01.2022	1709.31 914.99	2624.30	2421.17	98
Total		2390		18896.96			15324.27	12995.75	

Sl. No.	Name of the ULB	Capacity of plant (in TPD)	Financial sanction of civil works		Instalment released			Expenditure	Physical progress (in per cent)
			Date	Amount	Date	Amount	Total		
	Civil work completed								
1	NN Shahjahanpur	130	24.11.2021	1269.71	03.12.2021 02.05.2022 5.08.2022 15.02.2023	317.43 317.43 317.43 253.94	1206.23	932.11	100
2	NPP Deoria	75	12.10.2021	748.02	11.11.2021 16.01.2023	374.01 374.01	748.02	650.45	100
3	NPP Orai	90	01.12.2021	1094.40	10.12.2021 15.02.2023 14.03.2023 06.06.2023	273.60 273.60 273.60 218.88	1039.68	1018.00	100
4	NPP Gangaghat	50	12.10.2021	516.43	30.10.2021 06.10.2022	258.22 258.22	516.44	425.03	100
5	NPP Chandausi	50	01.12.2021	727.73	10.12.2021 16.01.2023	363.87 363.87	727.74	679.32	100
Total		395		4356.29			4238.11	3704.91	
	Civil work completed and handed over								
1	NPP Hathras	60	12.10.2021	577.06	12.10.2021 25.02.2023	288.53 288.53	577.06	527.00	100
2	NPP Pilibhit	60	12.10.2021	616.51	30.10.2021 23.08.2022	308.26 308.26	616.52	523.84	100
3	NPP Banda	55	01.12.2021	727.71	10.12.2021 03.11.2022	363.86 363.86	727.72	616.59	100
4	NPP Padrauna	50	12.10.2021	504.17	30.10.2021 16.01.2023	252.09 252.09	504.18	504.17	100
5	NPP Lalitpur	75	12.10.2021	808.44	11.11.2021 03.11.2022	404.22 404.22	808.44	808.44	100
6	NPP Farrukhabad	120	12.10.2021	1273.30	30.10.2021 02.05.2022 25.08.2022 03.11.2022 28.06.2023	318.33 318.33 318.33 254.66 63.67	1273.32	1209.65	100
7	NPP Hardoi	50	12.10.2021	511.50	30.10.2021 16.08.2022	255.75 255.75	511.50	511.50	100
8	NPP Unnao	65	12.10.2021	672.57	11.11.2021 18.01.2023	336.29 336.29	672.58	588.38	100
9	NPP Khurja	50	12.10.2021	524.86	30.10.2021 07.10.2022	262.43 262.43	524.86	402.43	100
10	NPP Sikandrabad	50	12.10.2021	526.52	30.10.2021 16.01.2023	263.26 263.26	526.52	360.60	100
11	NPP Khoda Makanpur	90	12.10.2021	783.82	30.10.2021 03.11.2022	391.91 391.91	783.82	695.95	100
12	NPP Nagina	50	12.10.2021	496.73	30.10.2021 25.08.2022	248.37 248.37	496.74	496.73	100
13	NN Saharanpur	320	24.11.2021	2235.57	30.11.2021 02.05.2022 14.11.2022 25.02.2023	558.89 558.89 558.89 447.11	2123.78	2123.79	100
14	NPP Loni Ghaziabad	275	21.10.2020	1728.00	27.05.2021 21.09.2021 30.03.2022 21.07.2022	432.00 432.00 432.00 432.00	1728.00	1686.00	100
Total		1370		11986.76			11875.04	11055.07	
Grand total							32338.12	27801.05	

(Source: Director ULB)

Appendix 5.5

Shortcomings noticed in the solid waste processing plant at Shivri, Lucknow

(Reference: Paragraph 5.3.1.1)

Sl. No.	Title of the shortcomings	Details of shortcomings
1	Deficient capacity of processing plant	<p>The solid waste processing plant of 1,200 MTD capacity had been established since 2009 located at Shivri in Lucknow city. As per census 2011, the population of Lucknow city was 28.17 lakh and projected population in 2021 was 34.80 lakh, thus, population increased by 6.63 lakh from 2011 to 2021. The estimated quantity of waste generation in the city during 2021-22 was 1,635 ton per day. However, the existing capacity of the plant was not increased due to which quantity of legacy waste was increasing day by day at the plant level.</p> <p>In reply (June 2023), State Government stated that DPR was prepared for legacy waste management and C&DS was in process of issuing the NIT for biomining activities.</p>
2	Non- maintenance of processing plant by the concessionaire	<p>As per schedule II (A) (c) of SWM Rules 2016, in case of breakdown or maintenance of plant, waste intake shall be stopped and arrangements be worked out for diversion of waste to the temporary processing site or temporary landfill sites which will be again reprocessed when plant is in order.</p> <p>Clause 6.30.4 of Concession agreement stipulated that the concessionaire shall be responsible for maintaining the project facilities, which shall include but is not limited to all day-to-day maintenance and repairs of the project facility and replacement of equipment/consumables.</p> <p>During joint physical verification of the plant, it was found that most of the machines of the processing plant were in a dilapidated condition, indicating that the firm was negligent towards the maintenance of the plant.</p> <p>In reply (June 2023), State Government stated that several notices were issued against the concessionaire and legal actions would be taken against the same.</p>
3	Operation of plant against CPCB guidelines	<p>Rule 19 (5) of SWM Rules 2016 stipulates that the operator of the facility shall be responsible for the safe and environmentally sound operations of the solid waste processing as per the guidelines issued by the CPCB from time to time and the Manual on MSWM published by the MoUD and updated from time to time.</p> <p>During joint physical verification, it was found that leachate treatment sub-plant was not established due to which toxic water was spreading inside the plant and foul odour was diffusing in the entire plant and surrounding areas.</p> <p>In reply (June 2023), State Government stated that several notices were issued against the concessionaire and legal actions would be taken against the same.</p>
4	New Vehicles/ equipment used without verification	<p>As per Section II (6.5 & 7.2) of the concessionaire agreement, before using any vehicle, it shall be subject to inspection by the Independent Engineer and shall be used only after obtaining the “Fit for Use” certificate from the Independent Engineer.</p> <p>Audit observed that no inspection was carried out before using any vehicle and equipment, since Independent Engineer was not appointed for the plant.</p>
5	Non disposal of RDF and INERT	<p>As per schedule II (A) (d) of SWM Rules 2016, pre-process and post process rejects shall be removed from the processing facility on regular basis and shall not be allowed to pile at the site. Recyclables shall be routed through appropriate vendors. The non-recyclable high calorific fractions to be segregated and sent to waste to energy or for RDF production, co-processing in cement plants or to thermal power plants. Only rejects from all processes shall be sent for sanitary landfill site.</p>

Sl. No.	Title of the shortcomings	Details of shortcomings
		Audit noticed that 7.71 lakh MT of RDF and 3.89 lakh MT of INERT were dumped at the plant area. However, during joint physical verification, it was found that RDF and inert were not being segregated in the plant before being dumped in the plant area. Neither waste to energy plant was established nor RDF was transported to any cement plant <i>etc.</i> Moreover, the facility of sanitary landfill was not available in order to dispose off INERT. Consequently, RDF and INERT could not be disposed off yet.

(Source: NN Lucknow)

Appendix 5.6

Results of Joint Physical Verification of the solid waste processing plant at Shivri, Lucknow

(Reference: Paragraph 5.3.1.1)

- The approach road leading to the plant was not in proper condition.
- The internal road of the processing plant was damaged and soil was swampy due to which the movement of vehicles was not possible.
- Due to the prolonged closure and lack of maintenance, all the machines installed in the plant were deteriorating and rusting day by day.
- The power supply system in the plant was not satisfactory.
- Despite the plant being non-operational, the processing of waste was being shown in the records, due to which the ambiguity of the data was clear in the records.
- Leachate treatment plant was not installed due to which leachate was spreading throughout the plant.
- There was foul odour inside and outside the plant.
- At a distance of about 500 meters from the plant, there was a dumping ground, where waste collected from the city was being dumped.
- INERT and RDF were not in separated form in the plant.
- There was no system to prevent fire in the plant.

(Source: NN Lucknow)

Appendix 5.7

Details of difference between bill submitted and payment to the firm in NN Lucknow

(Reference: Paragraph 5.3.1.1)

Month	As per bill submitted by the firm				After deduction by NN Lucknow			
	Details of bills of tipping fee presented against transportation and processing of waste				Details of bills of tipping fee paid against transportation and processing of waste			
	Collection and transportation charges of waste from all zones	Transportation and processing of waste	Processing charges	Bill amount (₹ in lakh)	Collection and transportation charges of waste from all zones	Transportation and processing of waste	Processing charges	Amount paid (₹ in lakh)
Jan 2018	26047.58	0.00	0.00	417.80	15305.69	10741.69	0.00	332.16
Feb 2018	23738.22	0.00	110.16	381.65	12755.90	10982.32	110.16	293.39
Mar 2018	23101.47	2476.47	1406.24	392.85	14122.60	11455.30	1406.24	321.27
Apr 2018	18567.54	7957.51	1089.54	363.82	11563.20	14961.85	1089.54	307.98
May 2018	21055.51	7018.50	13.11	394.37	11537.83	16536.18	7021.78	283.70
Jun 2018	21584.48	7194.83	2076.74	407.69	10031.00	18748.31	7714.00	277.36
Jul 2018	25519.10	10936.76	380.52	498.19	15269.73	21186.12	9209.09	370.85
Aug 2018	25197.15	8399.05	9703.05	474.07	5957.33	26177.49	8386.91	267.52
Sep 2018	20370.70	6790.23	4630.76	389.18	2240.04	24908.19	7944.75	205.16
Oct 2018	24628.48	8209.50	15.84	461.30	12686.81	20126.03	24621.51	352.34
Nov 2018	20929.06	6976.35	1741.78	394.86	9466.30	18439.11	22235.39	291.24
Dec 2018	14589.56	0.00	12211.67	254.19	7876.58	6712.98	20100.92	189.60
Jan 2019	14857.28	0.00	13709.09	269.21	10728.38	4074.52	30160.79	230.32
Feb 2019	17345.64	0.00	18512.57	308.80	5950.28	11395.36	32272.39	212.03
Mar 2019	16187.49	0.00	18859.00	290.96	7477.92	8709.57	31631.84	215.72
Apr 2019	17213.69	0.00	15775.41	302.16	4767.50	12375.16	29625.89	196.93
May 2019	18192.00	3958.21	13799.17	346.52	4656.92	17493.29	32354.49	232.68
Jun 2019	17539.94	2973.04	15294.04	330.58	3284.40	17228.58	25064.91	199.20
Jul 2019	19056.89	2320.09	18790.62	355.43	8161.89	13575.09	4052.76	211.23
Aug 2019	19532.72	0.00	19927.70	346.22	9452.21	10080.51	3946.04	207.19
Sep 2019	17989.37	0.00	19408.64	320.61	4177.60	13881.77	3739.60	154.89
Oct 2019	17215.04	0.00	15202.62	301.24	3985.98	13229.06	29175.39	190.42
Nov 2019	16788.68	0.00	14920.86	293.94	3724.08	13064.60	3170.96	142.64
Dec 2019	12586.78	773.20	13099.13	229.77	3361.14	9998.84	13229.55	134.37
Jan 2020	15679.79	1216.36	13485.86	283.59	3044.94	13851.21	22786.51	170.32
Feb 2020	14192.30	1191.48	12909.86	258.58	4865.27	10518.51	25464.28	179.55
Mar 2020	14495.14	4831.98	15043.44	296.35	11524.14	7803.76	34371.34	272.66
Apr 2020	13978.40	4659.47	10107.03	278.50	11828.64	6809.23	10107.03	261.36
May 2020	14914.69	4971.56	14668.75	303.57	12157.00	7690.69	14707.31	281.34
Jun 2020	14977.63	4992.54	14981.83	305.27	13053.42	6916.75	14981.83	286.29
Jul 2020	16939.06	5646.35	14765.60	341.64	7750.00	14835.41	14765.60	272.02
Aug 2020	12753.22	4251.07	13980.71	261.95	8060.00	8944.29	25967.63	216.24
Sep 2020	11400.27	9986.76	10906.97	281.45	9008.10	12378.93	26321.00	252.51
Oct 2020	12894.67	5526.29	0.00	251.41	9422.57	8998.38	0.00	193.30

Performance Audit of Solid Waste Management in Urban Areas

Month	As per bill submitted by the firm				After deduction by NN Lucknow			
	Details of bills of tipping fee presented against transportation and processing of waste				Details of bills of tipping fee paid against transportation and processing of waste			
	Collection and transportation charges of waste from all zones	Transportation and processing of waste	Processing charges	Bill amount (₹ in lakh)	Collection and transportation charges of waste from all zones	Transportation and processing of waste	Processing charges	Amount paid (₹ in lakh)
Nov 2020	20500.86	0.00	13245.10	350.71	9938.28	10562.58	25309.47	252.57
Dec 2020	27907.97	0.00	8045.03	460.93	17019.74	10888.23	30140.00	364.53
Jan 2021	28474.84	0.00	10821.16	474.61	22477.37	5678.79	11355.78	425.11
Feb 2021	27583.37	0.00	12362.75	463.03	21370.23	5711.03	39946.12	409.53
Mar 2021	29911.16	0.00	19136.90	513.04	21746.69	6907.09	50048.06	439.88
Apr 2021	28950.59	0.00	66146.09	573.63	19339.02	7781.70	95096.68	485.26
May 2021	31732.25	0.00	64780.66	617.64	22192.34	7291.08	97513.00	527.16
Jun 2021	33424.08	0.00	49950.00	563.45	29123.80	4289.08	49950.00	529.07
Jul 2021	36885.54	0.00	3999.00	596.77	31887.14	4998.40	15214.10	516.00
Aug 2021	36463.94	1982.24	36608.00	585.11	34008.14	2455.77	15405.00	530.52
Sep 2021	39220.78	0.00	50958.00	648.56	33432.77	5788.39	50998.00	602.41
Oct 2021	42030.86	0.00	11472.85	693.13	36753.47	5277.25	53503.71	651.05
Nov 2021	38291.29	0.00	10820.15	632.06	34672.91	3618.36	0.00	522.10
Dec 2021	40806.76	0.00	45963.10	730.46	34309.58	6497.19	0.00	535.34
Jan 2022	42427.95	0.00	7171.61	692.39	33200.38	9227.57	0.00	536.90
Feb 2022	49950.32	0.00	0.00	801.20	46487.68	3462.64	0.00	691.09
Mar 2022	50440.75	0.00	47918.71	804.90	46758.67	3682.08	0.00	696.40
Total	1217062.85	125239.84	810927.42	21589.34	783973.60	548946.31	1072217.35	16920.70

(Source: bills of EEPL processed for payment by NN Lucknow)

Appendix 5.8

Details of doubtful payments to the firm for processing of solid waste

(Reference: Paragraph 5.3.1.1)

Period	Quantity of the waste (in MT)	Rate per MT (in ₹)	Payment (in ₹)
01.09.2019 to 30.09.2019	3739.601	165.18	617707.29
01.10.2019 to 31.10.2019	29175.394	165.18	4817274.17
01.11.2019 to 30.11.2019	3170.964	165.18	523779.83
01.12.2019 to 31.12.2019	13229.555	165.18	2185257.89
01.01.2020 to 31.01.2020	22786.508	165.18	3763875.39
01.02.2020 to 29.02.2020	25464.276	165.18	4206189.00
01.03.2020 to 31.03.2020	34371.34	165.18	5677457.94
01.04.2020 to 30.04.2020	28744.9	165.18	4748082.58
01.05.2020 to 31.05.2020	34555	165.18	5707794.90
01.06.2020 to 30.06.2020	34952	165.18	5773371.36
01.07.2020 to 31.07.2020	37351.01	165.18	6169639.83
01.08.2020 to 31.08.2020	25967.632	165.18	4289333.45
01.09.2020 to 30.09.2020	26321.895	165.18	4347851.00
Total	319830.075	Total	52827614.63

(Source: NN Lucknow)

Appendix 5.9

Significant deficiencies noticed during Joint Physical Verification of the solid waste processing plant at Kanpur

(Reference: Paragraph 5.3.2)

1. Leachate treatment plant was not established in the plant area due to which the leachate was spreading throughout the plant area.
2. The boundary wall was constructed on only two sides of the plant area, due to which stray animals were wandering in the plant area.
3. The mixed waste was being dumped at the plant level.
4. RDF was dumped at the plant area but no action was taken for disposal.

(Source: NN Kanpur)

Appendix 5.10

Insufficient land allocated to ULBs for SWM against requirement

(Reference: Paragraph 5.4.1.2)

Sl No	Name of ULB	Population as per census 2011 ¹²	Requirement of land for (hectare)			Availability of land (hectare)	Percentage of shortage of land against requirement
			Processing plant	SLF	Total		
Nagar Palika Parishads							
1	NPP Bulandshahr	222519	2.23	5.56	7.79	2.24	71
2	NPP Pilibhit	130428	1.3	3.26	4.3	4.06	6
3	NPP Shamli	107233	1.07	3	4.07	1.62	60
4	NPP Deoband Saharanpur	97037	1	4	5	0.61	88
5	NPP Shahabad Hardoi	80305	1	4	5	0.86	83
6	NPP Mahmudabad Sitapur	50777	1	4	5	0.67	87
7	NPP Loni Ghaziabad	516082	5.16	7.74	13.16	8.29	37
8	NPP Sikandra Rao Hathras	46155	1	4	5	1.00	80
9	NPP Hathras	143339	1.43	4	5.43	4.04	26
10	NPP Etah	118517	1.19	3	4.19	2.04	51
11	NPP Mahoba	95454	1	4	5	1.72	65
12	NPP Deoria	129479	1.29	3	4.29	1.59	63
13	NPP Ramnagar Varanasi	49132	1	4	5	0.166	97
14	NPP Dataganj Budaun	26279	1	4	5	0.822	84
15	NPP Utraula Balrampur	32171	1	4	5	0.1250	98
16	NPP Auraiya	87785	1	4	5	1.2000	76
17	NPP Chitrakootdham Karwi Chitrakoot	89677	1	4	5	4.371	13
18	NPP Baheri Bareilly	68413	1	4	5	1.007	80
Nagar Panchayats							
1	NP Bithoor Kanpur Nagar	11298	1	4	5	0.42	92
2	NP Baldeo Mathura	13559	1	4	5	2.53	49
3	NP Khanpur Bulandshahr	17252	1	4	5	0.45	91
4	NP Jahanabad Pilibhit	14328	1	4	5	0.54	89
5	NP Katra Sahjahanpur	32430	1	4	5	0.74	85
6	NP Kaptanganj Kushinagar	23526	1	4	5	1.74	65
7	NP Saidpur Ghazipur	24438	1	4	5	0.6	88
8	NP Jewar GB Nagar	32269	1	4	5	1.486	70
9	NP Tikri Bagpat	14099	1	4	5	0.3	94
10	NP Kulpahar Mahoba	20108	1	4	5	1.00	80
11	NP Jiyanpur Azamgarh	11348	1	4	5	0.671	87
12	NP Rudhauli Bazar Basti	20165	1	4	5	0.253	95
13	NP Usawan Budaun	13327	1	4	5	2.638	47
14	NP Sahaspur Bijnor	24511	1	4	5	0.506	90
15	NP Jhalu Bijnor	21010	1	4	5	0.845	83
16	NP Jarwal Baharaich	19942	1	4	5	0.500	90
17	NP Anandnagar Mahrajganj	10113	1	4	5	0.201	96
18	NP Rajapur Chitrakoot	13439	1	4	5	1.000	80

(Source: Test-checked ULBs)

¹² Population given in *Appendix 8*

Appendix 5.11

Details of ULBs in which more than five TPD solid waste generated

(Reference: Paragraph 5.4.1.4)

Sl. No	Name of ULB	District	Availability of land for solid waste management project (Yes/No)	Availability of processing facility (Yes/No)	Waste Generation of the year 2021-22 (Qty. in TPD)
1	NN Lucknow	Lucknow	Yes	Yes	1634.84
2	NN Ghaziabad	Ghaziabad	Yes	Yes	1280
3	NN Kanpur	Kanpur Nagar	Yes	Yes	1370
4	NPP Raebareli	Raebareli	Yes	Yes	70
5	NPP Baheri	Bareilly	Yes	No	23.9
6	NPP Dataganj	Budaun	Yes	No	9.19
7	NPP Auraiya	Auraiya	Yes	No	24
8	NPP Utraula	Balrampur	Yes	No	9.06
9	NPP Chitrakootdham Karwi	Chitrakoot	Yes	No	15.78
10	NPP Muzaffarnagar	Muzaffarnagar	Yes	Yes	170
11	NPP Loni	Ghaziabad	Yes	No	310
12	NPP Sikandara Rao	Hathras	Yes	No	19.87
13	NPP Hathras	Hathras	Yes	No	74
14	NPP Etah	Etah	Yes	No	49.77
15	NPP Mahoba	Mahoba	Yes	No	37.11
16	NPP Deoria	Deoria	Yes	No	60
17	NPP Ramnagar	Varanasi	Yes	No	20
18	NPP Bulandshahar	Bulandshahar	Yes	No	90
19	NPP Pilibhit	Pilibhit	Yes	No	47.74
20	NPP Shamli	Shamli	Yes	No	36
21	NPP Deoband	Saharanpur	Yes	No	50
22	NPP Shahabad	Hardoi	Yes	No	26.1
23	NPP Mahmudabad,	Sitapur	Yes	No	19.55
24	NP Jhalu	Bijnor	Yes	No	5.34
25	NP Sahaspur	Bijnor	Yes	No	6.8
26	NP Anandnagar	Maharajganj	Yes	No	7.78
27	NP Usawan	Badau	Yes	No	5.22
28	NP Jewar	G B nagar	Yes	No	10.37
29	NP Tikri	Bagpat	Yes	No	5
30	NP Kulpahar	Mahoba	Yes	No	7.2
31	NP Reoti	Ballia	Yes	Yes	8
32	NP Katra	Shahjahanpur	Yes	No	9.42
33	NP Saidpur	Ghazipur	Yes	No	9.9
34	NP Khanpur	Bulandshahar	Yes	No	5.3
35	NP Bilsanda	Pilibhit	No	No	6.77
36	NP Kaptanganj	Kushinagar	Yes	No	7.32

(Source: Test-checked ULBs)

Appendix 5.12

Status of legacy waste of 72 ULBs of the State

(Reference: Paragraph 5.4.2)

Sl. No.	Division	District	ULB	Population (as per 2011 census)	Quantity of legacy waste (in MT)
1	Lucknow	Lucknow	NN Lucknow	2817105	650000
2	Kanpur	Kanpur Nagar	NN Kanpur	2765348	900000
3	Meerut	Ghaziabad	NN Ghaziabad	1643000	400000
4	Agra	Agra	NN Agra	1576138	600000
5	Meerut	Meerut	NN Meerut	1305429	50000
6	Varanasi	Varanasi	NN Varanasi	1201198	275000
7	Prayagraj	Prayagraj	NN Prayagraj	1142718	500000
8	Bareilly	Bareilly	NN Bareilly	938985	406975
9	Moradabad	Moradabad	NN Moradabad	887267	280000
10	Aligarh	Aligarh	NN Aligarh	874408	131424
11	Saharanpur	Saharanpur	NN Saharanpur	701401	200000
12	Agra	Firozabad	NN Firozabad	603797	135000
13	Meerut	Ghaziabad	NPP Loni	512296	72000
14	Jhansi	Jhansi	NN Jhansi	505693	500000
15	Agra	Mathura	NN Mathura & Vrindavan	411570	180000
16	Saharanpur	Muzaffarnagar	NPP Muzaffarnagar	367133	220400
17	Bareilly	Shahjahanpur	NN Shahjahanpur	344819	60000
18	Moradabad	Rampur	NPP Rampur	320573	500000
19	Azamgarh	Mau	NPP Maunath Bhanjan	278745	5000
20	Kanpur	Etawah	NPP Etawah	256790	16000
21	Mirzapur	Mirzapur	NPP Mirzapur	234170	6705
22	Meerut	Bulandsahar	NPP Bulandsahar	222519	10000
23	Moradabad	Sambhal	NPP Sambhal	221364	95000
24	Ayodhya	Ayodhya	NN Ayodhya	221330	77760
25	Meerut	Hapur	NPP Hapur	211983	72000
26	Moradabad	Amroha	NPP Amroha	197135	150000
27	Prayagraj	Fatehpur	NPP Fatehpur	193801	34000
28	Lucknow	Raebareilly	NPP Raebareilly	191056	438000
29	Devipatan	Bahraich	NPP Bahraich	187188	35000
30	Varanasi	Jaunpur	NPP Jaunpur	181009	31025
31	Lucknow	Unnao	NPP Unnao	177658	160000
32	Bareilly	Budaun	NPP Badaun	159221	245280
33	Chitrakoot	Banda	NPP Banda	154428	16425
34	Jhansi	Jalaun	NPP Orai	139318	10000
35	Agra	Mainpuri	NPP Mainpuri	135284	10080
36	Jhansi	Lalitpur	NPP Lalitpur	133041	90000

Sl. No.	Division	District	ULB	Population (as per 2011 census)	Quantity of legacy waste (in MT)
37	Meerut	Ghaziabad	NPP Modinagar	130325	10000
38	Aligarh	Hathras	NPP Hathras	126355	132300
39	Aligarh	Etah	NPP Etah	118517	34646
40	Basti	Basti	NPP Basti	114657	20000
41	Moradabad	Sambhal	NPP Chandausi	114254	4260
42	Ayodhya	Ambedkar Nagar	NPP Akbarpur	111594	9275
43	Varanasi	Ghazipur	NPP Ghazipur	110698	4500
44	Azamgarh	Azamgarh	NPP Azamgarh	110000	25603
45	Ayodhya	Sultanpur	NPP Sultanpur	107914	16650
46	Agra	Firozabad	NPP Shikohabad	107300	25850
47	Saharanpur	Shamli	NPP Shamli	107233	22000
48	Azamgarh	Ballia	NPP Ballia	104425	18883
49	Meerut	Bagpat	NPP Baraut	103764	12000
50	Meerut	Bulandsahar	NPP Sikandrabad	97379	51935
51	Chitrakoot	Mahoba	NPP Mahoba	95454	10000
52	Meerut	Ghaziabad	NPP Muradnagar	95074	10000
53	Meerut	GB Nagar	NPP Dadri	91189	175200
54	Lucknow	Hardoi	NPP Shahabad	80226	7300
55	Meerut	Bulandsahar	NPP Jahangirabad	59858	12000
56	Moradabad	Bagpat	NPP Khakada	48753	14600
57	Meerut	Hapur	NPP Garhmukhteshwar	46059	33778
58	Moradabad	Moradabad	NPP Thakurdwara	44069	15703
59	Saharanpur	Muzaffarnagar	NP Budhana	39867	25000
60	Moradabad	Amroha	NPP Dhanaura	29971	38333
61	Saharanpur	Muzaffarnagar	NP Mirzapur	29283	13000
62	Meerut	Bulandsahar	NPP Anupshahr	29082	38220
63	Saharanpur	Muzaffarnagar	NP Purquazi	27516	12000
64	Lucknow	Hardoi	NPP Sandi	26112	13000
65	Jhansi	Jhansi	NPP BaruaSagar	25086	8322
66	Azamgarh	Ballia	NP Belthara Road	20404	6500
67	Saharanpur	Muzaffarnagar	NP Bhokarhedi	17829	14000
68	Lucknow	Hardoi	NP KachhaunaPatseni	15647	20800
69	Meerut	Bulandsahar	NP Bugrasi	15008	8600
70	Basti	Siddharth Nagar	NP Barhani Bazar	14492	7000
71	Meerut	Bagpat	NP Tikri	13976	12500
72	Meerut	GB Nagar	NP Dankaur	12999	10950
Total					8457782

(Source: Director ULB)

Appendix 5.13

Status of bio-remediation in 20 ULBs

(Reference: Paragraph 5.4.2)

Sl No	Name of ULB	District	Estimated quantity of legacy waste (MT)	Agreement cost (₹ in crore)	Selected firm for remediation of legacy waste	Stipulated period for work commencement and completion		Physical progress (in per cent) (up to August 2022)	Paid amount (₹ in Crore) (up to August 2022)
						Date of work start	Date of work completion		
1	NPP Muzaffarnagar	Muzaffarnagar	224655	9.86	M/S Environmental Techno, Agra & M/S Daya Charan and company, New Delhi	5.1.22	4.9.22	30	00
2	NPP Mainpuri	Mainpuri	173343	8.06	M/S Environmental Techno, Agra & M/S Daya Charan and company, New Delhi	5.1.22	4.7.22	50	1.84
3	NPP Unnao	Unnao	42532	2.21	M/S Rekart Innovations Pvt Ltd Gurugram & M/S Hind Agro & Chemicals Kolhapur	5.1.22	4.5.22	80	00
4	NPP Hathras	Hathras	77184	3.67	M/S Environmental Techno, Agra & M/S Daya Charan and company, New Delhi	1.1.22	1.6.22	55	00
5	NPP Ballia	Balia	337715	15.20	M/S BVG India Ltd. Pune	7.1.22	6.12.22	0	0
6	NPP Lalitpur	Lalitpur	51739	2.79	M/S SR Map Technologies Gwalior & M/S Samarth Softech Solutions Pvt. Ltd. Mumbai	5.1.22	4.7.22	25	0
7	NPP Etawah	Etawah	81314	4.68	M/S SR Map Technologies Gwalior & M/S Samarth Softech Solutions Pvt. Ltd. Mumbai	5.1.22	4.8.22	25	0
8	NPP Raebareli	Raebareli	62770	3.08	M/S Rekart Innovations Pvt Ltd Gurugram & M/S Hind Agro & Chemicals Kolhapur	5.1.22	4.7.22	35	0
9	NPP Fatehpur	Fatehpur	41205	1.80	M/S Ecostan Infra Pvt Ltd Noida & M/S Om Sai Ventures Bangalore	5.1.22	4.5.22	65	0

Sl No	Name of ULB	District	Estimated quantity of legacy waste (MT)	Agreement cost (₹ in crore)	Selected firm for remediation of legacy waste	Stipulated period for work commencement and completion		Physical progress (in per cent) (up to August 2022)	Paid amount (₹ in Crore) (up to August 2022)
						Date of work start	Date of work completion		
10	NPP Etah	Etah	88726	4.21	M/S Environmental Techno, Agra & M/S Daya Charan and company, New Delhi	5.1.22	4.7.22	35	1.38
11	NPP Hapur	Hapur	85171	3.37	M/S Ecostan Infra Pvt Ltd Noida & M/S Om Sai Ventures Bangalore	5.1.22	4.8.22	45	00
12	NPP Amroha	Amroha	49061	1.67	M/S FR Engimech , Ahmadabad & M/S 3R Management Private Ltd.	6.1.22	5.6.22	68	1.04
13	NPP Sambhal	Sambhal	49061	1.84	M/S FR Engimech , Ahmadabad & M/S 3R Management Private Ltd.	5.1.22	4.8.22	5	0
14	NPP Budaun	Budaun	46247	1.93	M/S Saipro Infrastructure Pune	28.3.22	27.7.22	10	0
15	NPP Rampur	Rampur	163823	8.03	M/S Environmental Techno, Agra & M/S Daya Charan and company, New Delhi	17.3.22	16.9.22	42	0
16	NPP Pilibhit	Pilibhit	38645	1.77	M/S Puja Consultation Company Sonipat Haryana	27.3.22	26.7.22	76	00
17	NPP Mirzapur	Mirzapur	8804	0.28	M/S MJ Greens Infra Pvt. Ltd Pratapgarh & M/S Ecostan Infra Pvt Ltd Noida	28.3.22	27.6.22	75	00
18	NPP Kannoj	Kannauj	33385	1.82.	Not provided by the unit	5.7.22	4.11.22	5	0
19	NPP Bahraich	Bahraich	30139	Firm not selected					
20	NPP Sitapur	Sitapur	20882	Firm not selected					

(Source: Director ULB and C&DS UP Jal Nigam)

Appendix 6.1

Details of occupier/operator for BMW in the State during 2017-21

(Reference: Paragraph 6.1.2)

Year	Total number of occupiers	Total number of operators of CBWTF plant	Total number of occupiers in operation without applying for authorization or whose application rejected	Percentage of unauthorized occupier
2017	12876	17	5232	41
2018	16075	18	6840	43
2019	25602	18	4950	19
2020	31474	21	5444	17
2021	37927	22	6772	18

(Source: UPPCB)

Appendix 6.2

Details of generation and disposal of BMW in the State

(Reference: Paragraph 6.1.3)

Calendar Year	Generation	Disposal	(Quantity kg/day)
			Balance for disposal
2016	37655	36422	1233
2017	43554	42603	951
2018	46401	46401	0
2019	52500	52500	0
2020	64038	64038	0
2021	71264	71264	0

(Source: UPPCB)

Appendix 6.3

Details of manufacturer, refurbisher, collection centres, dismantlers and recyclers for management of e-waste in the State

(Reference: Paragraph 6.2)

Year	Total number of units established in the state	Total number of registered units	Total number of not registered units	Percentage of units not registered
2017	30	24	06	20
2018	43	37	06	14
2019	59	45	14	24
2020	68	59	09	13
2021	116	116	0	0

(Source: UPPCB)

Appendix 6.4

Details of estimated generation and recycling of plastic waste in the State

(Reference: Paragraph 6.3)

Year	Estimated plastic waste generation per year (in MT)	Plastic waste recycled per year (in MT)	Plastic waste generation per day (in MT)	Capacity of available disposal infrastructure (in TPD)
2016-17	152492.64	NIL	417.78	Not Available
2017-18	206733.45	NIL	566.39	Not Available
2018-19	254401.80	NIL	696.98	Not Available
2019-20	161147.50	159600	441.50	693
2020-21	375950.00	263712.5	1030	722.5
Total	1150725.40	423312.5		

(Source: UPPCB)

Appendix 6.5

Details of prohibited thermocol/plastic /carry bag seized in ULBs

(Reference: Paragraph 6.3.1)

Sl. No.	Name of ULB	Year	Seized quantity (in Kg)	Penalty recovered (in ₹.)	Disposed quantity (in Kg)	Method of disposal	Undisposed quantity (in Kg)
1	NN Lucknow	2018-22	51210	9551310	51210	Sent to LDA for road construction/cement factory	Nil
2	NN Ghaziabad	upto-2022	142697.09	14195190	142697	used in road construction	0.09
3	NN Kanpur	2016-22	79914.09	4901800	0	No disposal	79914.09
4	NPP Raebareli	2018-22	187	89000	187	Not provided	Nil
5	NPP Baheri Bareilly	2019-22	133.7	170460	133.7	Transferred to NN Bareilly	Nil
6	NPP Dataganj Budaun	2018-22	39.99	83200	0	No disposal	39.99
7	NPP Utraula Balrampur	2019-20	12	12000	12	Transferred to NN Ayodhya	Nil
8	NPP Loni Ghaziabad	2016-22	243.565	672450	243.565	Transferred to NN Ghaziabad	Nil
9	NPP Sikandara Rao Hathras	2016-22	326.3	269250	326.3	Burnt	Nil
10	NPP Hathras	2016-22	749.5	67800	749.5	Transferred to NN Aligarh	Nil
11	NPP Etah	2016-22	4762.3	602000	0	No disposal	4762.3
12	NPP Mahoba	2019-20	153.16	58000	153.16	Transferred to Satna Cement Factory	Nil
13	NPP Deoria	upto-2022	45.6	116800	0	No disposal	45.6
14	NPP Ramnagar Varanasi	2016-22	8.95	66000	0	No disposal	8.95
15	NPP Bulandshahr	2021-22	42.8	0	1.2	Not provided	41.6
16	NPP Muzaffarnagar	2018-22	824.74	486500	0	No disposal	824.74
17	NPP Auraiya	2018-19	15.69	107200	0	No disposal	15.69
18	NPP Chitrakootdham Karwi Chitrakoot	2018-19	0 ¹³	50000	0	Buried	Nil
19	NP Jhalu Bijnore	2018-22	60.6	35000	60.6	Transferred to NPP Bijnore	Nil
20	NP Sahaspur Bijnore	2018-22	48.98	70760	48.98	Transferred to NPP Bijnore	Nil
21	NP Jarwal Bahraich	2018-21	2.33	23250	0	No disposal	2.33
22	NP Anand Nagar Mahrajanj	2018-22	41.32	98000	0	No disposal	41.32
23	NP Rajapur Chitrakoot	2018-22	291.05	47900	291.05	Transferred to Nodal NPP	Nil

¹³ In NPP Chitrakootdham Karwi Chitrakoot, 38 bundle of prohibited plastic cup and 118 bags of thermocol items were seized and buried in the ground.

Sl. No.	Name of ULB	Year	Seized quantity (in Kg)	Penalty recovered (in ₹.)	Disposed quantity (in Kg)	Method of disposl	Undisposed quantity (in Kg)
24	NP Usawan Budaun	2019-22	0.35	3500	0.35	Transferred to NPP Badaun	Nil
25	NP Bakewar Etawah	2018-19	5	15500	5	Transferred to NPP Etawah	Nil
26	NP Tikri Bagpat	2016-22	5.6	5350	5.6	Transferred to NPP Bagpat	Nil
27	NP Jewar G B Nagar	2016-22	3600	98500	3550	Transferred to NPP Dadri	50
28	NP Kulpahar Mahoba	upto-2022	31.37	121000	28.66	Not provided	2.71
29	NP Rudhauri Bazar Basti	upto-2022	145.02	157500	0	No disposal	145.02
30	NP Jyanpur Azamgarh	2016-22	37.5	12000	0	No disposal	37.5
31	NP Chitbaragaon Ballia	2016-22	4.5	3100	4.5	Transferred to NPP Azamgarh	Nil
32	NP Reoti Ballia	2016-22	14.9	15000	0	No disposal	14.9
33	NP Khanpur Bulandshahr	2017-22	147.3	119200	147.3	Transfer to NPP Bulandshahr	Nil
34	NP Jahanabad Pilibhit	2021-22	1.2	0	1.2	Transferred to NN Bareilly	Nil
35	NP Bilsanda Pilibhit	2019-22	9000	0	0	No disposal	9000
36	NP Saidpur Gazipur	2019-22	4020	88000	4020	Transferred to NPP Gazipur	Nil
Total			298823.495	32412520	203876.67		94946.83
						Say 94.95 MT	

(Source: Test-checked ULBs)

Appendix 6.6

Status of establishment of C&D waste processing plant

(Reference: Paragraph 6.4.3)

Sl. No.	Name of ULB	Capacity of C&D waste plant (in MT)	Approved cost (₹ in crore)
1	NN Aligarh	100	5.51
2	NN Meerut	100	5.51
3	NN Moradabad	100	5.51
4	NN Gorakhpur	50	2.65
5	NN Mathura	50	2.65
6	NN Firozabad	50	2.39
7	NN Jhansi	50	2.39
8	NN Ayodhya	20	1.91
9	NN Kanpur	200	7.95
Total		720	36.47

(Source: Director ULB)

Appendix 7.1

Pollution control norms

(Reference: Paragraph 7.4)

Schedule I (D) of SWM Rules 2016: Criteria for pollution prevention:
In order to prevent pollution from landfill operations, the following provisions shall be made, namely:-
<p>(i) The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the landfilling site and leachets from solid waste locations do not get mixed with the surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimise leachet generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions.</p> <p>(ii) Non-permeable lining system at the base and walls of waste disposal area. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) shall have liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo-membrane or geo-synthetic liners or equivalent. Overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1×10^{-7} cm/sec. The highest level of water table shall be at least two meter below the base of clay or amended soil barrier layer provided at the bottom of landfills.</p> <p>(iii) Provisions for management of leachets including its collection and treatment shall be made. The treated leachet shall be recycled or utilized as permitted, otherwise shall be released into the sewerage line, after meeting the standards specified in schedule-II. In no case, leachet shall be released into open environment.</p> <p>(iv) Arrangement shall be made to prevent leachet runoff from landfill area entering any drain, stream, river, lake or pond. In case of mixing of runoff water with leachet or solid waste, the entire mixed water shall be treated by the concern authority.</p>
Schedule I (E) of SWM Rules 2016: Criteria for water quality monitoring:
<p>(i) Before establishing any landfill site, baseline data of ground water quality in the area shall be collected and kept in record for future reference. The ground water quality within 50 meter of the periphery of landfill site shall be periodically monitored covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated.</p> <p>(ii) Usage of groundwater in and around landfill sites for any purpose (including drinking and irrigation) shall be considered only after ensuring its quality.</p>
Schedule I (F) of SWM Rules 2016: Criteria for ambient air quality monitoring:
<p>(i) Landfill gas control system including gas collection system shall be installed at landfill site to minimize odour, prevent off-site migration of gases, to protect vegetation planted on the rehabilitated landfill surface. For enhancing landfill gas recovery, use of geo membranes in cover systems along with gas collection wells should be considered.</p> <p>(ii) The concentration of methane gas generated at landfill site shall not exceed 25 <i>per cent</i> of the lower explosive limit.</p> <p>(iii) The landfill gas from the collection facility at a landfill site shall be utilized for either direct thermal applications or power generation, as per viability. Otherwise, landfill gas shall be burnt (flared) and shall not be allowed to escape directly to the atmosphere or for illegal tapping. Passive venting shall be allowed in case if its utilisation or flaring is not possible.</p> <p>(iv) Ambient air quality at the landfill site and at the vicinity shall be regularly monitored. Ambient air quality shall meet the standards prescribed by the Central Pollution Control Board for Industrial area.</p>

(Source: SWM Rule 2016)

Appendix 8

Projected population in test-checked ULBs¹⁴ adopting incremental increase method as per section 1.4.5.1.2 of MSWM Manual 2016

(Reference: Paragraph 2.9.1, Appendix 4.10, Appendix 4.11, Appendix 4.12 and Appendix 5.10)

S. N.	Name of ULBs	Population				Average of increase in population (x)	Incremental increase in population (y)	Projected population					
		1981	1991	2001	2011			2016 (Population of $2011+0.5*x+0.5*(0.5+1)/2*y$)	2017 (Population of $2011+0.6*x+0.6*(0.6+1)/2*y$)	2018 (Population of $2011+0.7*x+0.7*(0.7+1)/2*y$)	2019 (Population of $2011+0.8*x+0.8*(0.8+1)/2*y$)	2020 (Population of $2011+0.9*x+0.9*(0.9+1)/2*y$)	2021 (Population of $2011+n*x+n*(n+1)/2*y$)
1	NN Kanpur	1486522	1879420	2551337	2765348	426275	-89444	2944944	2978180	3010521	3041968	3072521	3102179
2	NN Lucknow	947990	1619115	2185927	2817105	623038	-19974	3121134	3181340	3241347	3301154	3360761	3420169
3	NN Ghaziabad	275815	454156	968256	1648643	457609	251023	1971581	2043699	2118328	2195467	2275116	2357275
4	NPP Loni Ghaziabad	10259	36561	120945	516082	168608	184418	669543	705767	743836	783749	825507	869108
5	NPP Muzaffarnagar	171816	247624	331668	392454	73546	-7511	426410	432976	439467	445883	452223	458489
6	NPP Bulandshahr	103436	127201	176425	222519	39694	11165	246553	251695	256948	262313	267790	273378
7	NPP Raebareli	89697	129904	169333	191316	33873	-9112	204836	207266	209605	211854	214011	216077
8	NPP Hathras	92962	113285	126355	143339	16792	-1670	151109	152613	154100	155570	157024	158461
9	NPP Deoria	55720	82168	104227	129479	24586	-598	141548	143944	146333	148717	151095	153467
10	NPP Pilibhit	88548	106605	124245	127988	13147	-7157	131878	132441	132932	133353	133701	133978
11	NPP Etah	53784	78458	107110	118517	21578	-6634	126818	128279	129674	131003	132265	133461
12	NPP shamli	51850	70853	90055	107266	18472	-896	116166	117919	119663	121398	123125	124842
13	NPP Deoband Saharanpur	51270	66208	81641	97037	15256	229	104751	106301	107852	109407	110963	112522
14	NPP mahoba	39262	56247	78782	95454	18731	-157	104761	106617	108472	110326	112178	114028
15	NPP Auraiya	35815	50772	64740	87877	17354	4090	98088	100253	102458	104705	106993	109321
16	NPP Sahabad Hardoi	43386	53657	67751	80305	12306	1142	86886	88237	89599	90972	92357	93753
17	NPP Baheri Bareilly	29680	46008	58492	68744	13021	-3038	74115	75098	76051	76973	77865	78727
18	NPP Chitrakootdham Karwi Chitrakoot	27465	37595	48892	57402	9979	-810	62088	63001	63905	64802	65691	66571
19	NPP Mahmudabad	15945	32606	41920	50777	11611	-3902	55119	55871	56583	57256	57891	58486

¹⁴ NP Usawan Badayun, NP Bakewar Etawah, NP Jahanabad Pilibhit and NP Rudauli Bazar Bast were newly constituted, hence, these ULBs are excluded from the appendix.

Performance Audit of Solid Waste Management in Urban Areas

S. N.	Name of ULBs	Population				Average of increase in population (x)	Incremental increase in population (y)	Projected population					
		1981	1991	2001	2011			2016 (Population of $2011+0.5*x+0.5*(0.5+1)/2*y$)	2017 (Population of $2011+0.6*x+0.6*(0.6+1)/2*y$)	2018 (Population of $2011+0.7*x+0.7*(0.7+1)/2*y$)	2019 (Population of $2011+0.8*x+0.8*(0.8+1)/2*y$)	2020 (Population of $2011+0.9*x+0.9*(0.9+1)/2*y$)	2021 (Population of $2011+n*x+n*(n+1)/2*y$)
	Sitapur												
20	NPP Ramnagar Varanasi	23297	30116	40619	49132	8612	847	53756	54706	55664	56631	57607	58591
21	NPP Sikandra Rao Hathras	21659	29823	37938	46155	8165	27	50248	51067	51887	52706	53527	54347
22	NPP Utraula Balarampr	17593	24950	27502	32171	4859	-1344	34097	34441	34773	35091	35395	35686
23	Npp Dataganj Budaun	11088	15402	21685	26279	5064	140	28864	29385	29907	30431	30956	31483
24	NP Katra Sahjahanpur	14204	19187	26367	32430	6075	540	35670	36334	37004	37679	38359	39045
25	NP Saidpur Ghazipur	12937	18217	21568	24438	3834	-1205	25903	26160	26405	26638	26858	27067
26	NP Kaptanganj Kushinagar	7677	9525	11494	23526	5283	5092	28077	29140	30254	31419	32634	33901
27	NP Khanpur Bulandshahr	8311	11093	12789	17252	2980	841	19057	19444	19838	20242	20653	21073
28	NP Bilsanda Pilibhit	7137	9141	13472	16047	2970	286	17639	17966	18296	18629	18965	19303
29	NP Baldeo Mathura	6256	7709	9684	13559	2434	1211	15230	15601	15983	16378	16785	17204
30	NP Bithoor Kanpur Nagar	5318	7444	9652	11298	1993	-240	12205	12379	12550	12720	12887	13051
31	NP Tikari Bagpat	11315	12784	13427	14099	928	-399	14413	14464	14511	14554	14593	14628
32	NP Kulpahar Mahoba	11515	13814	17442	20108	2864	184	21609	21915	22222	22532	22843	23156
33	NP Jyanpur Azamgarh	5246	7314	10305	11348	2034	-513	12173	12322	12467	12606	12740	12869
34	NP Jewar G.B. Nagar	15275	21376	27016	32269	5665	-424	34943	35464	35982	36496	37005	37510
35	NP Reoti Ballia	14384	17978	22082	26359	3992	342	28483	28918	29357	29799	30244	30693
36	NP Chitbadagaon Ballia	14885	16690	20229	21879	2331	-78	23015	23240	23464	23688	23910	24132

S. N.	Name of ULBs	Population				Average of increase in population (x)	Incremental increase in population (y)	Projected population					
		1981	1991	2001	2011			2016 (Population of $2011+0.5*x+0.5*(0.5+1)/2*y$)	2017 (Population of $2011+0.6*x+0.6*(0.6+1)/2*y$)	2018 (Population of $2011+0.7*x+0.7*(0.7+1)/2*y$)	2019 (Population of $2011+0.8*x+0.8*(0.8+1)/2*y$)	2020 (Population of $2011+0.9*x+0.9*(0.9+1)/2*y$)	2021 (Population of $2011+n*x+n*(n+1)/2*y$)
37	NP Jhalu Bijnor	12461	14808	18704	21010	2850	-21	22427	22710	22993	23275	23557	23839
38	NP Sahaspur Bijnor	14296	18198	22606	24511	3405	-999	25839	26074	26300	26516	26721	26917
39	NP Jarwal Bahraich	8543	11741	15780	19942	3800	482	22023	22453	22889	23329	23774	24224
40	NP Anandnagar Maharajganj	5951	7798	10214	10113	1387	-974	10441	10478	10504	10521	10529	10526
41	NP Rajapur Chitrakoot	10258	9871	12752	13439	1060	537	14170	14333	22790	14674	14852	15036

(Source: Compendium of Urban Data Uttar Pradesh available on RCUES website, Director ULB)