

**Minutes of the 35th Meeting of State Level Task Force on Solid waste management
for discussion on several issues of Solid Waste Management**

In the Chair : Director, SUDA

Meeting Date : 13th December, 2021

Meeting Venue : SUDA Conference Hall (2nd Floor)

Meeting Time : 12.00 Noon

Meeting Attendees :

➤ List of Members and participants : Annexed

Additional Director, State Urban Development Agency (SUDA) chaired the meeting.

At the outset, he welcomed all the members and explained the discussion points of the meeting. After that, a threadbare discussion was held among the members and following discussion and decisions were taken.

1. SUDA has engaged 6 Micro Planning/ Facilitation Organizations in 113 ULBs of West Bengal out of 124 ULBs except Kolkata MC. Now the Committee has recommended to allocate the remaining 11 ULBs to BITAN, Digambarpur Angikar, Hijli Inspiration, Amra Susama Jalaprapat and Germicide/Skillware, the 6 Micro Planners/Facilitation Organizations qualified in the bids furnished by SUDA.
2. The Committee has noted that all the Micro Planning/ Facilitation Organizations have organized orientation trainings to their already engaged programme coordinators at ULB level keeping a session for Prof. Arunabha Majumder, SWM Expert of SLTF.
3. The Committee has recommended to arrange a further orientation training at State Level for the Technical Persons and ULB level Programme coordinators of Micro Planning/ Facilitation Organizations in presence of the members of the State Level Task Force.
4. The Committee noted that State Government has issued AA&FS for engagement of agency for Fresh Waste processing for 20 ULBs (Raiganj, Islampore, Budge Budge, Barasat, Khardah, Rajpur Sonarpur, Bardhaman, Uluberia, Jalpaiguri, Halisahar, Durgapur MC (Legacy & Fresh), Santipur, Chandernagore MC, Madhyamgram, Murshidabad, Kalyani, Kharagpur, Titagarh, Barrackpur and Maheshtala). In this connection, the Committee recommended to issue the LoI immediately to the L-1 bidder. The Committee further recommended to issue SoP for fresh waste processing for circulating the same to the agencies to strictly adhere to. Prof. Arunabha Majumder has been requested to guide for preparation of SoP for fresh waste processing.
5. The Committee has noted that Government of India has launched an Integrated MIS Portal for uploading household wise, community wise and area wise data of solid waste management and sanitation for each ULB for preparation of different action plans like City Sanitation Plan, SWM Plan etc. and also monitoring the day-to-day progress of several components under SBM(U). Government of India has categorically mentioned that the release of fund under SBM 2.0 will depend on the progress to be reflected in the portal.

In this connection, the Committee recommended that the scope of the Micro Planning/ Facilitation Organizations may be amended by way of providing the responsibility of collection and collation of the data in the portal in support of the ULB. The Committee further recommended:

- ✓ Initially each Micro Planning/ Facilitation Organizations may be entrusted the responsibility of collection of the data for the MIS portal for 2 ULBs and let them comeback with the findings and present the same before the SLTF for further action.
 - ✓ Kolkata MC will invite the RfP for engagement of agency for collection and collation of data and fund may be provided from SUDA as per requisition.
6. The Committee recommended that ensuring Road Sweeping and Drain cleaning to be included in the scope of Micro Planning/ Facilitation Organizations.
 7. The Committee noted that Bidhannagar MC has submitted a proposal for allotment of fund for procurement of equipments/ machineries alongwith annual maintenance charge with total project cost of Rs.8.18 crore including procurement of 2 stationary compactors. SUDA has forwarded the same to Chief Engineer, Electro-Mechanical, KMDA for vetting.

In this connection the Committee recommended that in spite of sanctioning these in isolated manner, a detailed discussion needs to be organized between Officials Bidhannagar MC and SLTF members regarding the action plan of Bidhannagar MC on SWM as per SWM Rules, 2016.

The Committee further recommended to request the Commissioner, Bidhannagar MC to remain present in the next meeting of SLTF.

8. The Committee noted that KMDA has issued 67 work orders to several agencies for biomining & bio-remediation of legacy waste, out of that the work has been grounded in only 15 sites – Kalna, Bardhaman, Krishnanagar, Nabadwip, Berhampore, Garulia, Panihati, Barrackpore, Bankura, Midnapore, Kharagpur, Siliguri MC, Purulia, Chandernagore MC and Maheshtala. After being appraised by the Nodal Engineers of the State (engaged for monitoring the progress), the Committee noted that in most of the sites work has not been grounded, even where the work is in progress the SoP for Legacy Waste Processing is not being followed and in most cases no record has been observed regarding temperature, air quality monitoring, lab testing etc.

The Committee recommended that a review meeting at highest level in presence of Hon'ble MoS(IC) and Principal Secretary, UD&MA Department may be organized at the earliest where all the Agencies, KMDA and SLTF members may remain present, and the agencies will make their presentation on each site covering the following points.

- ✓ Name of Agency
- ✓ Name of Site
- ✓ Estimated Quantity of legacy waste
- ✓ Date of issue of work order
- ✓ target date for completion.
- ✓ Date of commencement of work (survey work, installation of machineries and start of processing separately to be mentioned).
- ✓ Which equipments/ machineries installed.
- ✓ Owing machine with real time monitoring system.
- ✓ Till date how much legacy waste processed.
- ✓ Technology being used.
- ✓ % of good earth, RDF, C&D Waste, Recyclable waste, Inert etc. generated.
- ✓ Disposal of generated articles.
- ✓ Agreement with the disposal agencies and certification of the same indicating purpose of use.
- ✓ Air quality monitoring (processes maintained and result).
- ✓ Whether air quality monitoring is being done on regular interval with a NABL accredited Laboratory.
- ✓ Information regarding temperature and lab testing of waste.

- ✓ Documented records.
- ✓ Monitoring mechanism of agency, KMDA and ULB.
- ✓ Monitoring of Material Balancing report.

9. The Committee took note of the financial bid submitted by the bidders for Municipal Fresh Waste Management for 4 ULBs i.e. Bansberia, Baruipur, Kanchrapara and Midnapore as detailed below:

Sl. No.	Tender Ref No.	ULB Name	No. of Call	Name of L1 Bidder	Quoted Rate per MT
1	SUDA-802/2020/2266 dated 20.07.2021	Bansberia Municipality	3 rd Call	Tide Technocrats Private Limited	Rs.372/-
2	SUDA-723/2020/2267 dated 20.07.2021	Baruipur Municipality	3 rd Call	Tide Technocrats Private Limited	Rs.372/-
3	SUDA-793/2020/2272 dated 20.07.2021	Kanchrapara Municipality	3 rd Call	Tide Technocrats Private Limited	Rs.372/-
4	SUDA-810/2020/2273 dated 20.07.2021	Midnapore Municipality	3 rd Call	Tide Technocrats Private Limited	Rs.372/-

The Committee recommended the acceptance of L-1 rates offered by the bidder and further recommended to place it before the Single Departmental Tender Committee for approval.

10. The Committee noted that all the 6 Micro Planning/Facilitation Organizations have placed only 2 Programme Coordinators to their assigned ULBs, but it is not sufficient for the ULBs having more than 25 wards. Then the Committee recommended the scale of engagement of Programme Coordinators as detailed below:

- ✓ 1st Programme Coordinator for 10 Wards
- ✓ 2nd Programme Coordinator for next 15 Wards
- ✓ 3rd Programme Coordinator for next 15 Wards
- ✓ 4th Programme Coordinator for next 15 Wards
- ✓ Total 5 Programme Coordinators to be engaged for Howrah MC
- ✓ Total 7 Programme Coordinators to be engaged for Asansol MC

11. The Committee made a threadbare discussion in earlier meeting regarding the thumb rule on per capita waste generation to be followed for calculation of requirement of manpower (Nirmal Bandhu, Nirmal Sathi, Supervisor) , primary & secondary vehicles, drivers, helpers etc. as detailed below:

Sl No.	Range of Population (as on 2020)	Per Capita Waste Generation (in gms per Day)
1	< 100000	308
2	>100000 to 150000	350
3	>150000 to 200000	375
	>200000 to 300000	425
	>300000 to 400000	475
	>400000 to 500000	500
	>500000	550

The data to be considered for the population of the year 2020.

Based on this thumb rule, for each ULB, requirement of manpower for collection and transportation of solid waste and requirement of primary & secondary vehicles & equipments have been calculated and placed before the committee.

The Committee noted the calculations and accepted the proposals. ULB wise assessment of manpower and primary & secondary vehicles are annexed.

With no other issue for discussion the meeting ended with vote of tanks to and from the chair.

 13.12.2023

(Joly Chaudhury)

Additional Director, SUDA

Calculation Sheet For Vehicle, Waste Generation etc.

Sl. No.	Name of the ULB	Population 2011 as submitted by ULB	Population 2020 as submitted by ULB	Household 2020 as submitted by ULB	Population 2021 (Calculated Figure reached as per Prof. A. Mazumder's Guidance)	Waste Generation in gpd.	Waste Generation in TPD	Dry Waste (in MT) @40% of the Waste.	Wet Waste (in MT) @60% of the Waste.	Pedal Tri Cycle Van (2 Trips) @ 61 Kg/trip/day for Dry waste	Pedal Tri Cycle Van (Max. Wet Waste)	Total Pedal Tri Cycle Van (Max. Wet Waste)	Vehicle That Req'd. for Dry Waste & Wet Waste	Total Pedal Tri Cycle including 20% Stand by (If only PTC to be used)	Pedal Tri Cycle Needed (2021) (Considering 70% of the Total Requirement of PTC as PTC)	Battery Operated Tipper (Assuming 30% of the Total Requirement of PTC as BOT)	Fuel Operated Tripper (2 Trips) @ 672 Kgs/trip/day of Dry waste	Fuel Operated Tripper (4 Wheeler (2 Trips) @ 896 Kgs/trip/day of Wet waste	Total Fuel Operated Tripper (Max. Vehicle That Req'd. including 20% Stand by (If only 4 wheeler used)	Fuel Operated Tripper Needed (2021) 4 Wheeler (Considering 60% of the total FOT to be carried by 4 Wheeler)	Fuel Operated Tripper Needed (2021) 3 Wheeler (Considering 40% of the total FOT to be carried by 3 Wheeler)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Bankura	1,37,386	1,60,000	37,000	1,61,600	375	61	24	37	197,000	228,000	228	228	192	53	18,000	21,000	21,000	26,000	16	17
3	Sonamukhi	29,085	36,500	12,000	36,865	308	11	4	7	33,000	43,000	43	43	37	10	3,000	4,000	4,000	5,000	3	3
4	Asansol MC	11,56,387	13,29,845	3,19,158	13,43,143	550	739	296	443	242,600	273,500	273	273	2298	632	221,000	246,000	246,000	296,000	178	189
5	Bardhaman	3,14,638	3,35,561	72,400	3,38,917	475	161	64	97	525,000	599,000	599	599	504	139	48,000	54,000	54,000	65,000	39	42
6	Dainhat	24,397	26,000	6,125	26,260	308	8	3	5	25,000	31,000	31	31	27	8	2,000	3,000	3,000	4,000	2	3
7	Durgapur MC	5,66,517	7,15,706	1,63,969	7,22,863	550	398	159	239	130,300	147,500	147	147	1239	341	119,000	133,000	133,000	160,000	96	102
8	Gushkara	33,374	39,704	10,796	40,101	308	12	5	7	41,000	43,000	43	43	37	10	4,000	4,000	4,000	5,000	3	3
9	Kalna	56,722	60,523	17,454	61,128	308	19	8	11	66,000	68,000	68	68	58	16	6,000	6,000	6,000	8,000	5	5
10	Katwa	81,615	90,710	25,200	91,617	308	28	11	17	90,000	105,000	105	105	89	25	8,000	9,000	9,000	11,000	7	7
11	Menari	41,455	45,692	13,089	46,149	308	14	6	8	49,000	49,000	49	49	42	12	4,000	4,000	4,000	5,000	3	3
12	Bolpur	80,210	1,05,877	21,754	1,06,936	350	37	15	22	123,000	136,000	136	136	115	32	11,000	12,000	12,000	15,000	9	10
13	Dubrajpur	38,041	45,044	11,400	45,494	308	14	6	8	49,000	49,000	49	49	42	12	4,000	4,000	4,000	5,000	3	3
14	Nulhati	41,244	46,742	12,436	47,209	308	15	6	9	49,000	56,000	56	56	48	14	4,000	5,000	5,000	6,000	4	4
15	Rampurhat	57,833	90,000	22,209	90,900	308	28	11	17	90,000	105,000	105	105	89	25	8,000	9,000	9,000	11,000	7	7
16	Sainthia	44,608	61,364	12,847	61,978	308	19	8	11	66,000	68,000	68	68	58	16	6,000	6,000	6,000	8,000	5	5
17	Suri	90,314	1,04,175	22,965	1,05,217	350	37	15	22	123,000	136,000	136	136	115	32	11,000	12,000	12,000	15,000	9	10
18	Cooch Behar	77,935	89,325	26,177	90,218	308	28	11	17	90,000	105,000	105	105	89	25	8,000	9,000	9,000	11,000	7	7
19	Dinhat	36,124	45,097	12,647	45,548	308	14	6	8	49,000	49,000	49	49	42	12	4,000	4,000	4,000	5,000	3	3
20	Haldibari	14,404	16,275	3,632	16,438	308	5	2	3	16,000	19,000	19	19	17	5	1,000	2,000	2,000	3,000	2	2
21	Mathabhanga	23,890	31,260	8,001	31,573	308	10	4	6	33,000	37,000	37	37	32	9	3,000	3,000	3,000	4,000	2	3
22	Mekhliganj	9,123	11,786	2,817	11,904	308	4	2	2	16,000	12,000	12	12	11	3	1,000	1,000	1,000	2,000	1	1
23	Tufanganj	20,998	24,368	5,904	24,612	308	8	3	5	25,000	31,000	31	31	27	8	2,000	3,000	3,000	4,000	2	3
24	Balughat	1,51,299	1,61,871	40,677	1,63,490	375	61	24	37	197,000	228,000	228	228	192	53	18,000	21,000	21,000	26,000	16	17
25	Buniadpur	34,280	40,354	9,044	40,758	308	13	5	8	41,000	49,000	49	49	42	12	4,000	4,000	4,000	5,000	3	3
26	Gangarampur	56,175	68,477	14,525	69,162	308	21	8	13	66,000	80,000	80	80	68	19	6,000	7,000	7,000	9,000	5	6
27	Darjeeling	1,20,414	1,50,000	30,000	1,51,500	375	57	23	34	189,000	210,000	210	210	177	49	17,000	19,000	19,000	23,000	14	15
28	Kalimpong	49,403	61,997	9,968	62,617	308	19	8	11	66,000	68,000	68	68	58	16	6,000	6,000	6,000	8,000	5	5
29	Kurseong	42,346	65,000	8,000	65,650	308	20	8	12	66,000	74,000	74	74	63	18	6,000	7,000	7,000	9,000	5	6
30	Mirik	11,513	12,000	3,500	12,120	308	4	2	2	16,000	12,000	12	12	11	3	1,000	1,000	1,000	2,000	1	1
31	Sifturi MC	5,13,264	6,30,923	1,43,315	6,37,232	550	350	140	210	114,800	129,600	129	129	1090	300	104,000	117,000	117,000	141,000	85	90
32	Howrah MC	13,62,561	16,44,315	2,74,672	16,60,758	550	913	365	548	299,200	338,300	338	338	2842	781	272,000	304,000	304,000	365,000	219	234
33	Uluberia	2,32,290	2,67,134	74,204	2,69,805	425	115	46	69	377,000	426,000	426	426	359	99	34,000	38,000	38,000	46,000	28	29
34	Arambagh	66,175	81,434	19,189	82,248	308	25	10	15	82,000	93,000	93	93	79	22	7,000	8,000	8,000	10,000	6	6
35	Baidyabati	1,21,110	1,34,514	39,900	1,35,859	350	48	19	29	156,000	179,000	179	179	151	42	14,000	16,000	16,000	20,000	12	13
36	Bansberia	1,03,920	1,08,000	19,049	1,09,080	350	38	15	23	123,000	142,000	142	142	120	33	11,000	13,000	13,000	16,000	10	10
37	Bhadreswar	1,01,477	1,26,731	28,000	1,27,998	350	45	18	27	148,000	167,000	167	167	141	39	13,000	15,000	15,000	18,000	11	12

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38	Chandpany	1,11,251	1,19,000	34,000	1,20,190	350	42	17	25	139.00	154.00	154	185	130	36	13.00	14.00	14.00	17.00	10	11
39	Chandannagore MC	1,66,867	1,91,897	47,621	1,93,816	375	73	29	44	238.00	272.00	272	327	229	63	22.00	24.00	24.00	29.00	17	19
40	Dankuni	94,966	1,04,466	28,700	1,05,511	350	37	15	22	123.00	136.00	136	164	115	32	11.00	12.00	12.00	15.00	9	10
41	Hooghly Chinsurah	1,77,259	1,80,000	45,000	1,81,800	375	68	27	41	221.00	253.00	253	304	213	59	20.00	23.00	23.00	28.00	17	18
42	Konnagar	76,172	83,089	24,187	83,920	308	26	10	16	82.00	99.00	99	119	84	23	7.00	9.00	9.00	11.00	7	7
43	Rishra	1,24,585	1,34,540	30,069	1,35,885	350	48	19	29	156.00	179.00	179	215	151	42	14.00	16.00	16.00	20.00	12	13
44	Serampore	1,83,339	2,10,000	42,000	2,12,100	425	90	36	54	295.00	333.00	333	400	280	77	27.00	30.00	30.00	36.00	22	23
45	Tarakeswar	30,947	34,087	7,360	34,428	308	11	4	7	33.00	43.00	43	52	37	10	3.00	4.00	4.00	5.00	3	3
46	Uttarpara Kotrung	1,62,386	1,82,833	52,185	1,84,661	375	69	28	41	230.00	253.00	253	304	213	59	21.00	23.00	23.00	28.00	17	18
47	Alipurdhar	65,232	67,072	15,990	67,743	308	21	8	13	66.00	80.00	80	96	68	19	6.00	7.00	7.00	9.00	5	6
48	Dhupguri	44,719	53,212	2,525	53,744	308	17	7	10	57.00	62.00	62	75	53	15	5.00	6.00	6.00	8.00	5	5
49	Jalpaiguri	1,07,341	1,42,560	28,472	1,43,986	350	50	20	30	164.00	185.00	185	222	156	43	15.00	17.00	17.00	21.00	13	13
50	Mal	25,218	30,000	8,225	30,300	308	9	4	5	33.00	31.00	31	38	27	8	3.00	3.00	3.00	4.00	2	3
51	English Bazar	2,05,521	3,22,328	80,582	3,25,551	475	155	62	93	508.00	574.00	574	689	483	133	46.00	52.00	52.00	63.00	38	40
52	Old Malda	84,012	1,05,015	18,057	1,06,065	350	37	15	22	123.00	136.00	136	164	115	32	11.00	12.00	12.00	15.00	9	10
53	Beldanga	29,182	35,601	12,366	35,957	308	11	4	7	33.00	43.00	43	52	37	10	3.00	4.00	4.00	5.00	3	3
54	Berhampore	1,95,363	2,16,966	48,200	2,19,136	425	93	37	56	303.00	346.00	346	416	292	80	28.00	31.00	31.00	38.00	23	24
55	Dhuliyan	95,706	1,10,144	21,742	1,11,245	350	39	16	23	131.00	142.00	142	171	120	33	12.00	13.00	13.00	16.00	10	10
56	Domkal	1,21,827	1,57,803	39,713	1,59,381	375	60	24	36	197.00	222.00	222	267	187	52	18.00	20.00	20.00	24.00	14	15
57	Jangipur	88,165	1,25,010	21,008	1,26,260	350	44	18	26	148.00	160.00	160	192	135	37	13.00	14.00	14.00	17.00	10	11
58	Jiaganj-Azinganj	51,790	68,877	15,114	69,566	308	21	8	13	66.00	80.00	80	96	68	19	6.00	7.00	7.00	9.00	5	6
59	Kandi	55,632	60,630	13,417	61,236	308	19	8	11	66.00	68.00	68	82	58	16	6.00	6.00	6.00	8.00	5	5
60	Murshidabad	44,064	64,064	12,865	64,705	308	20	8	12	66.00	74.00	74	89	63	18	6.00	7.00	7.00	9.00	5	6
61	Birnagar	30,799	39,927	7,998	40,326	308	12	5	7	41.00	43.00	43	52	37	10	4.00	4.00	4.00	5.00	3	3
62	Chakdah	95,203	1,04,724	30,375	1,05,771	350	37	15	22	123.00	136.00	136	164	115	32	11.00	12.00	12.00	15.00	9	10
63	Cooper's Camp	18,839	21,500	4,452	21,715	308	7	3	4	25.00	25.00	25	30	21	6	2.00	2.00	2.00	3.00	2	2
64	Gayeshpur	58,998	63,689	18,781	64,326	308	20	8	12	66.00	74.00	74	89	63	18	6.00	7.00	7.00	9.00	5	6
65	Haringhata	45,953	65,000	13,572	65,650	308	20	8	12	66.00	74.00	74	89	63	18	6.00	7.00	7.00	9.00	5	6
66	Kalyani	1,00,620	1,45,000	35,500	1,46,450	350	51	20	31	164.00	191.00	191	230	161	45	15.00	17.00	17.00	21.00	13	13
67	Krishnanagar	1,53,062	2,00,659	42,308	2,02,666	425	86	34	52	279.00	321.00	321	386	271	75	25.00	29.00	29.00	35.00	21	22
68	Nabadwip	1,25,528	1,40,000	35,463	1,41,400	350	49	20	29	164.00	179.00	179	215	151	42	15.00	16.00	16.00	20.00	12	13
69	Ranaghat	75,365	81,622	19,027	82,438	308	25	10	15	82.00	93.00	93	112	79	22	7.00	8.00	8.00	10.00	6	6
70	Santipur	1,51,777	1,79,605	39,062	1,81,401	375	68	27	41	221.00	253.00	253	304	213	59	20.00	23.00	23.00	28.00	17	18
71	Taherpur	20,894	21,500	6,250	21,715	308	7	3	4	25.00	25.00	25	30	21	6	2.00	2.00	2.00	3.00	2	2
72	Ashokenagar- Kalyanagar	1,21,592	1,34,592	33,221	1,35,938	350	48	19	29	156.00	179.00	179	215	151	42	14.00	16.00	16.00	20.00	12	13
73	Baduria	52,500	65,568	13,795	66,224	308	20	8	12	66.00	74.00	74	89	63	18	6.00	7.00	7.00	9.00	5	6

Sl. No.	Name of the ULB	Population 2011 as submitted by ULB	Population 2020 as submitted by ULB	Household 2020 as submitted by ULB	Population 2021 (Calculated Figure reached as per Prof A.Mazumder's Guidance)	Waste Generation in gpd. in the year 2021 in TPD	Dry Waste (in MT) @40% of the Waste.	Wet Waste (in MT) @60% of the Waste.	Pedal Tri Cycle Van (2 Trips) @ 61 Kg/trip/day for Dry waste	Pedal Tri Cycle Van @ 81 Kg/trip/day for Wet waste	Total Pedal Tri Cycle Vehicle That Req'd. for Dry Waste & Wet Waste)	Total Pedal Tri Cycle including 20% Stand by (If only PTC to be used)	Pedal Tri Cycle Needed (2021) (Considering 70% of the Total Requirement of PTC as PTC)	Battery Operated Tipper (assuming 30% of the Total Requirement of PTC as BOT)	Fuel Operated Tripper 4 Wheeler (2 Trips) @ 672 Kgs/trip/day of Dry waste	Fuel Operated Tripper 4 Wheeler (2 Trips) @ 896 Kgs/trips/day of Wet waste	Total FOT (Max. Vehicle That Req'd. For Dry Waste & Wet Waste)	Total Fuel Operated Tipper including 20% Stand by (If only 4 wheeler used)	Fuel Operated Tripper Needed (2021) (Considering 60% of the total FOT to be carried by 4 Wheeler)	3 Wheeler (Considering 40% of the total FOT to be carried by 3 Wheeler)
74	Baranagar	2,45,213	2,95,000	55,000	2,97,950	425	51	76	418.00	469.00	469	563	395	109	38.00	42.00	42.00	51.00	31	33
75	Barasat	2,78,435	4,00,000	1,22,694	4,04,000	500	81	121	664.00	747.00	747	897	628	173	60.00	67.00	67.00	81.00	49	52
76	Barrackpore	1,52,783	1,61,566	37,656	1,63,182	375	24	37	197.00	228.00	228	274	192	53	18.00	21.00	21.00	26.00	16	17
77	Basirhat	1,25,058	1,50,817	42,317	1,52,325	375	23	34	189.00	210.00	210	252	177	49	17.00	19.00	19.00	23.00	14	15
78	Bhatpara	3,85,867	4,50,000	1,49,264	4,54,500	500	91	136	746.00	840.00	840	1008	706	194	68.00	76.00	76.00	92.00	55	59
79	Bidhan Nagar M/C	6,34,107	7,01,264	1,55,836	7,08,277	550	156	234	1279.00	1444.00	1444	1733	1214	334	116.00	130.00	130.00	156.00	94	100
80	Bongaon	1,08,864	1,30,288	27,774	1,31,591	350	18	28	148.00	173.00	173	208	146	40	13.00	16.00	16.00	20.00	12	13
81	Dum Dum	1,14,786	1,40,039	48,356	1,41,439	350	20	30	164.00	185.00	185	222	156	43	15.00	17.00	17.00	21.00	13	13
82	Garulia	85,336	92,320	18,872	93,243	308	12	17	98.00	105.00	105	126	89	25	9.00	9.00	9.00	11.00	7	7
83	Gobardanga	45,392	52,175	17,115	52,697	308	6	10	49.00	62.00	62	75	53	15	4.00	6.00	6.00	8.00	5	5
84	Habra	1,47,221	2,00,000	50,000	2,02,000	425	34	52	279.00	321.00	321	386	271	75	25.00	29.00	29.00	35.00	21	22
85	Halisahar	1,24,851	1,28,597	35,500	1,29,883	350	18	27	148.00	167.00	167	201	141	39	13.00	15.00	15.00	18.00	11	12
86	Kamohuti	3,31,163	3,60,000	83,000	3,63,600	475	69	104	566.00	642.00	642	771	540	149	51.00	58.00	58.00	70.00	42	45
87	Kanchrapara	1,29,576	1,42,778	29,794	1,44,206	350	20	30	164.00	185.00	185	222	156	43	15.00	17.00	17.00	21.00	13	13
88	Kharchah	1,08,496	1,28,164	27,010	1,29,446	350	18	27	148.00	167.00	167	201	141	39	13.00	15.00	15.00	18.00	11	12
89	Madhyangram	1,96,127	2,79,732	75,000	2,82,529	425	48	72	393.00	444.00	444	533	374	103	36.00	40.00	40.00	48.00	29	31
90	Naihati	2,18,194	2,36,400	39,185	2,38,764	425	40	61	328.00	377.00	377	453	318	88	30.00	34.00	34.00	41.00	25	26
91	New Barrackpore	76,879	1,01,000	20,085	1,02,010	350	14	22	115.00	136.00	136	164	115	32	10.00	12.00	12.00	15.00	9	10
92	North Barrackpore	1,32,806	1,50,000	39,000	1,51,500	375	23	34	189.00	210.00	210	252	177	49	17.00	19.00	19.00	23.00	14	15
93	North Dum Dum	2,49,545	3,01,905	81,500	3,04,924	475	58	87	475.00	537.00	537	645	452	125	43.00	48.00	48.00	58.00	35	37
94	Panihati	3,77,351	4,75,000	1,22,000	4,79,750	500	96	144	787.00	889.00	889	1067	747	206	72.00	80.00	80.00	96.00	58	61
95	South Dum Dum	4,03,316	5,18,905	1,29,726	5,24,094	550	115	173	943.00	1068.00	1068	1282	898	247	86.00	96.00	96.00	116.00	70	74
96	Taki	38,263	46,000	11,260	46,460	308	6	8	49.00	49.00	49	59	42	12	4.00	4.00	4.00	5.00	3	3
97	Titagarh	1,16,541	1,28,195	24,819	1,29,477	350	18	27	148.00	167.00	167	201	141	39	13.00	15.00	15.00	18.00	11	12
98	Chandrakona	23,629	27,882	6,207	28,161	308	4	5	33.00	31.00	31	38	27	8	3.00	3.00	3.00	4.00	2	3
99	Ghatol	54,591	61,224	12,127	61,836	308	8	11	66.00	68.00	68	82	58	16	6.00	6.00	6.00	8.00	5	5
100	Jhargram	61,682	80,000	20,703	80,800	308	10	15	82.00	93.00	93	112	79	22	7.00	8.00	8.00	10.00	6	6
101	Kharagpur	2,07,604	2,95,610	75,554	2,98,566	425	51	76	418.00	469.00	469	563	395	109	38.00	42.00	42.00	51.00	31	33
102	Kharar	12,220	15,550	2,650	15,706	308	2	3	16.00	19.00	19	23	17	5	1.00	2.00	2.00	3.00	2	2
103	Khirpai	16,385	18,333	4,512	18,516	308	2	4	16.00	25.00	25	30	21	6	1.00	2.00	2.00	3.00	2	2
104	Midnapore	1,69,127	2,11,000	43,586	2,13,110	425	36	55	295.00	340.00	340	408	286	79	27.00	31.00	31.00	38.00	23	24
105	Ramjibanpur	19,611	21,821	4,323	22,039	308	3	4	25.00	25.00	25	30	21	6	2.00	2.00	2.00	3.00	2	2
106	Contai	92,226	1,24,352	26,011	1,25,596	350	18	26	148.00	160.00	160	192	135	37	13.00	14.00	14.00	17.00	10	11
107	Egra	30,148	37,032	8,732	37,402	308	5	7	41.00	43.00	43	52	37	10	4.00	4.00	4.00	5.00	3	3
108	Haldia	2,00,827	2,32,490	57,007	2,34,815	425	40	60	328.00	370.00	370	444	311	86	30.00	33.00	33.00	40.00	24	26
109	Panskura	57,932	72,053	13,965	72,774	308	9	13	74.00	80.00	80	96	68	19	7.00	7.00	7.00	9.00	5	6
110	Tamluk	65,312	85,326	16,598	86,179	308	11	16	90.00	99.00	99	119	84	23	8.00	9.00	9.00	11.00	7	7

Sl. No.	Name of the ULB	Population 2011 as submitted by ULB	Population 2020 as submitted by ULB	Household 2020 as submitted by ULB	Population 2021 (Calculated Figure reached as per Prof A.Mazumder's Guidance)	Waste Generation in gpd.	Waste Generation in the year 2021 in TPD	Dry Waste (in MT) @40% of the Waste.	Wet Waste (in MT) @60% of the Waste.	Pedal Tri Cycle Van (2 Trips) @ 61 Kg/trip/day for Dry waste	Pedal Tri Cycle Van @ 81 Kg/trip/day for Wet waste	Total Pedal Tri Cycle Van (Max. Vehicle That Req'd. for Dry Waste & Wet Waste)	Total Pedal Tri Cycle including 20% Stand by (If only PTC to be used)	Pedal Tri Cycle Needed (2021) (Considering 70% of the Total Requirement of PTC as PTC)	Battery Operated Tipper (assuming 30% of the Total Requirement of PTC as BOT)	Fuel Operated Tipper 4 Wheeler (2 Trips) @ 672 Kgs/trip/day of Dry waste	Fuel Operated Tipper 4 Wheeler (2 Trips) @ 896 Kgs/trip/day of Wet waste	Total FOT (Max. Vehicle That Req'd. for Dry Waste & Wet Waste)	Total Fuel Operated Tipper including 20% Stand by (If only 4 wheeler used)	Fuel Operated Tipper Needed 4 Wheeler (Considering 60% of the total FOT to be carried by 4 Wheeler) (2021)	Fuel Operated Tipper Needed 3 Wheeler (Considering 40% of the total FOT to be carried by 3 Wheeler) (2021)
111	Jhalda	19,540	21,704	4,420	21,921	308	7	3	4	25.00	25.00	25	30	21	6	2.00	2.00	2.00	3.00	2	2
112	Purulia	1,21,067	1,38,838	37,715	1,40,226	350	49	20	29	164.00	179.00	179	215	151	42	15.00	16.00	16.00	20.00	12	13
113	Raghunathpur	25,621	39,000	7,500	39,390	308	12	5	7	41.00	43.00	43	52	37	10	4.00	4.00	4.00	5.00	3	3
114	Baruipur	53,128	59,000	17,127	59,590	308	18	7	11	57.00	68.00	68	82	58	16	5.00	6.00	6.00	8.00	5	5
115	Budge Budge	76,858	95,000	14,752	95,950	308	30	12	18	98.00	111.00	111	134	94	26	9.00	10.00	10.00	12.00	7	8
116	Diamond Harbour	43,169	56,922	16,742	57,491	308	18	7	11	57.00	68.00	68	82	58	16	5.00	6.00	6.00	8.00	5	5
117	Jainagar-Mazilpur	25,922	27,996	6,336	28,276	308	9	4	5	33.00	31.00	31	38	27	8	3.00	3.00	3.00	4.00	2	3
118	Maheshwala	4,49,423	5,20,867	96,472	5,26,076	550	289	116	173	951.00	1068.00	1068	1282	898	247	87.00	96.00	96.00	116.00	70	74
119	Pujali	37,040	40,050	8,500	40,451	308	12	5	7	41.00	43.00	43	52	37	10	4.00	4.00	4.00	5.00	3	3
120	Rajpur-Sonarpur	4,23,724	4,98,419	1,49,447	5,03,403	550	277	111	166	910.00	1025.00	1025	1230	861	237	83.00	92.00	92.00	111.00	67	71
121	Dalkhola	37,063	48,000	6,500	48,480	308	15	6	9	49.00	56.00	56	68	48	14	4.00	5.00	5.00	6.00	4	4
122	Islampur	54,340	59,774	15,192	60,372	308	19	8	11	66.00	68.00	68	82	58	16	6.00	6.00	6.00	8.00	5	5
123	Kaliaganj	53,530	85,000	30,000	85,850	308	26	10	16	82.00	99.00	99	119	84	23	7.00	9.00	9.00	11.00	7	7
124	Raiganj	1,83,612	2,01,000	33,000	2,03,010	425	86	34	52	279.00	321.00	321	386	271	75	25.00	29.00	29.00	35.00	21	22
												33027	39633	27835	7687	2171	2316				

Calculation Sheet For Manpower Requirement.

Sl. No.	Name of the ULB	Waste Generation in the year 2021 in TPD	Nirmal Bondhu for PTC	Nirmal Bondhu /Helper for FOT	Total Nirmal Bondhu Required (Unskilled Labour)	Driver Required for BOT	Driver Required for FOT	Total Driver Required (Skilled Labour)
1	Bankura	61	251	31	282	0	31	31
2	Bishnupur	26	109	14	123	0	14	14
3	Sonamukhi	11	48	6	54	0	6	6
4	Asansol MC	739	2107	337	2444	580	337	917
5	Bardhaman	161	659	75	734	0	75	75
6	Dainhat	8	35	6	41	0	6	6
7	Durgapur MC	398	1136	182	1318	313	182	495
8	Gushkara	12	48	6	54	0	6	6
9	Kalna	19	75	10	85	0	10	10
10	Katwa	28	116	14	130	0	14	14
11	Memari	14	54	6	60	0	6	6
12	Bolpur	37	150	18	168	0	18	18
13	Dubrajpur	14	54	6	60	0	6	6
14	Nalhati	15	62	8	70	0	8	8
15	Rampurhat	28	116	14	130	0	14	14
16	Sainthia	19	75	10	85	0	10	10
17	Suri	37	150	18	168	0	18	18
18	Cooch Behar	28	116	14	130	0	14	14
19	Dinhata	14	54	6	60	0	6	6
20	Haldibari	5	21	4	25	0	4	4
21	Mathabhanga	10	41	6	47	0	6	6
22	Mekhliganj	4	14	4	18	0	4	4
23	Tufanganj	8	35	6	41	0	6	6
24	Balurghat	61	251	31	282	0	31	31
25	Buniadpur	13	54	6	60	0	6	6
26	Gangarampore	21	88	11	99	0	11	11
27	Darjeeling	57	231	27	258	0	27	27
28	Kalimpong	19	75	10	85	0	10	10
29	Kurseong	20	82	11	93	0	11	11
30	Mirik	4	14	4	18	0	4	4
31	Siliguri MC	350	1000	161	1161	275	161	436
32	Howrah MC	913	3722	416	4138	0	416	416
33	Uluberia	115	469	53	522	0	53	53
34	Arambagh	25	103	12	115	0	12	12
35	Baidyabati	48	197	23	220	0	23	23
36	Bansberia	38	157	19	176	0	19	19
37	Bhadreswar	45	184	21	205	0	21	21
38	Champdany	42	170	20	190	0	20	20
39	Chandannagore MC	73	210	34	244	58	34	92
40	Dankuni	37	150	18	168	0	18	18
41	Hooghly Chinsurah	68	279	33	312	0	33	33
42	Konnagar	26	109	14	123	0	14	14
43	Rishra	48	197	23	220	0	23	23
44	Serampore	90	367	42	409	0	42	42
45	Tarakeswar	11	48	6	54	0	6	6
46	Uttarpara Kotrung	69	279	33	312	0	33	33
47	Alipurduar	21	88	11	99	0	11	11
48	Dhupguri	17	69	10	79	0	10	10

Sl. No.	Name of the ULB	Waste Generation in the year 2021 in TPD	Nirmal Bondhu for PTC	Nirmal Bondhu /Helper for FOT	Total Nirmal Bondhu Required (Unskilled Labour)	Driver Required for BOT	Driver Required for FOT	Total Driver Required (Skilled Labour)
49	Jalpaiguri	50	204	25	229	0	25	25
50	Mal	9	35	6	41	0	6	6
51	English Bazar	155	632	72	704	0	72	72
52	Old Malda	37	150	18	168	0	18	18
53	Beldanga	11	48	6	54	0	6	6
54	Berhampore	93	381	44	425	0	44	44
55	Dhuliyani	39	157	19	176	0	19	19
56	Domkal	60	245	29	274	0	29	29
57	Jangipur	44	176	20	196	0	20	20
58	Jiaganj-Azimganj	21	88	11	99	0	11	11
59	Kandi	19	75	10	85	0	10	10
60	Murshidabad	20	82	11	93	0	11	11
61	Birnagar	12	48	6	54	0	6	6
62	Chakdah	37	150	18	168	0	18	18
63	Cooper's Camp	7	28	4	32	0	4	4
64	Gayeshpur	20	82	11	93	0	11	11
65	Haringhata	20	82	11	93	0	11	11
66	Kalyani	51	148	25	173	42	25	67
67	Krishnanagar	86	354	41	395	0	41	41
68	Nabadwip	49	197	23	220	0	23	23
69	Ranaghat	25	103	12	115	0	12	12
70	Santipur	68	279	33	312	0	33	33
71	Taherpur	7	28	4	32	0	4	4
72	Ashokenagar-Kalyangarh	48	139	23	162	39	23	62
73	Baduria	20	82	11	93	0	11	11
74	Baranagar	127	516	59	575	0	59	59
75	Barasat	202	822	93	915	0	93	93
76	Barrackpore	61	251	31	282	0	31	31
77	Basirhat	57	231	27	258	0	27	27
78	Bhatpara	227	924	105	1029	0	105	105
79	Bidhan Nagar MC	390	1113	178	1291	307	178	485
80	Bongaon	46	191	23	214	0	23	23
81	Dum Dum	50	204	25	229	0	25	25
82	Garulia	29	116	14	130	0	14	14
83	Gobardanga	16	69	10	79	0	10	10
84	Habra	86	354	41	395	0	41	41
85	Halisahar	45	184	21	205	0	21	21
86	Kamarhati	173	707	81	788	0	81	81
87	Kanchrapara	50	204	25	229	0	25	25
88	Khardah	45	184	21	205	0	21	21
89	Madhyamgram	120	489	56	545	0	56	56
90	Naihati	101	415	48	463	0	48	48
91	New Barrackpore	36	150	18	168	0	18	18
92	North Barrackpore	57	231	27	258	0	27	27
93	North Dum Dum	145	591	67	658	0	67	67
94	Panihati	240	978	110	1088	0	110	110
95	South Dum Dum	288	1175	133	1308	0	133	133
96	Taki	14	54	6	60	0	6	6
97	Titagarh	45	184	21	205	0	21	21

Sl. No.	Name of the ULB	Waste Generation in the year 2021 in TPD	Nirmal Bondhu for PTC	Nirmal Bondhu /Helper for FOT	Total Nirmal Bondhu Required (Unskilled Labour)	Driver Required for BOT	Driver Required for FOT	Total Driver Required (Skilled Labour)
98	Chandrakona	9	35	6	41	0	6	6
99	Ghatal	19	75	10	85	0	10	10
100	Jhargram	25	73	12	85	21	12	33
101	Kharagpur	127	363	59	422	100	59	159
102	Kharar	5	21	4	25	0	4	4
103	Khirpai	6	28	4	32	0	4	4
104	Midnapore	91	374	44	418	0	44	44
105	Ramjibanpur	7	28	4	32	0	4	4
106	Contai	44	176	20	196	0	20	20
107	Egra	12	48	6	54	0	6	6
108	Haldia	100	286	46	332	79	46	125
109	Panskura	22	88	11	99	0	11	11
110	Tamluk	27	109	14	123	0	14	14
111	Jhalda	7	28	4	32	0	4	4
112	Purulia	49	197	23	220	0	23	23
113	Raghunathpur	12	48	6	54	0	6	6
114	Baruipur	18	75	10	85	0	10	10
115	Budge Budge	30	123	15	138	0	15	15
116	Diamond Harbour	18	75	10	85	0	10	10
117	Jainagar-Mazilpur	9	35	6	41	0	6	6
118	Maheshtala	289	1175	133	1308	0	133	133
119	Pujali	12	48	6	54	0	6	6
120	Rajpur-Sonarpur	277	1128	128	1256	0	128	128
121	Dalkhola	15	62	8	70	0	8	8
122	Islampur	19	75	10	85	0	10	10
123	Kaliaganj	26	109	14	123	0	14	14
124	Raiganj	86	249	41	290	69	41	110
Total =		8946	33580	4237	37817	1883	4237	6120

Rate = Rs, 202.00 Rs, 303.00

Approximate Amount Required for Unskilled Labour = Rs, 76,39,034.00

Approximate Amount Required for Skilled Labour = Rs, 18,54,360.00

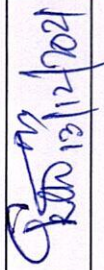
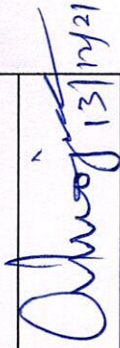
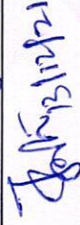
Total Amount Required per Day = Rs, 94,93,394.00

Total Amount Required per Month = Rs, 28,48,01,820.00

Total Amount Required per Year = Rs, 3,46,50,88,810.00

ATTENDANCE SHEET

35th Meeting of State Level Task Force on Solid waste management for discussion on several issues of Solid Waste Management

Date: 13.12.2021		Time: 12.00 Noon Onwards		Venue: Conference Hall of SUDA, (2nd Floor)		
Sl. NO.	Participant Name	Organization	Designation	Mobile No.	e-mail ID	Signature
1	Shri Supriya Ghoshal	SUDA	Director		supriya.directorsuda@gmail.com	
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