ANNEXURE – 19.1

TYPICAL ORGANISATION CHART FOR A CITY OF 30 LACS POPULATION

Explanation to the organizational chart.

The Central Workshop shall provide the required number of vehicles to the Executive Engineer in charge of transportation who shall manage the fleet of vehicles through Assistant Executive Engineer in charge of transportation. The Assistant Executive Engineer shall be assisted by three Assistant Engineers at the rate of one assistant engineer per shift. In the cities where no operations are carried out in the third shift, two assistant engineers could be placed on duty in the first shift to manage the transportation effectively.

The Assistant Executive Engineers in charge of collection for every 10 lacs population shall maintain a liaison with Assistant Executive Engineer in charge of transportation who shall have one assistant engineer in each shift to ensure that vehicles reach the respective divisions on time and in adequate numbers.

The Assistant Executive Engineer processing and disposal shall also have three assistant engineers, one for each shift to look after both processing and disposal sites to be supported by lower level of supervisors for each site. In the cities where no night operations are conducted and major load is taken in the first or second shift, the night shift assistant engineer could be utilized in the first or second shift.

The Assistant Engineers in charge of collection shall look after the collection in their respective areas with the assistance of sanitation officers, sanitary inspectors, etc., and maintain all the waste storage depots constructed in their areas in a perfect condition and ensure that all the tools given to sweepers for primary collection are kept in order and properly repaired and maintained.

STAFFING AND QUALIFICATION NORMS FOR DIFFERENT SIZES OF CITIES

City Population	1 Lac	2 Lac	5 Lac	20 Lac	40 Lac	Over 40 Lac
SWM Supervisory cadre						
C.E. = Chief Engineer to be a Public Health/Environmental Engineer in Charge of city of SWM Deptt. in cities about 40 lakh	-	-	-	-	-	1
S.E.= Superintending Engineer to be a Public Health/Environmental Engineer of cities above 20 lac @ (1 per 40 lakh pop or part)	-	-	-	-	1	1+
E.E.= Executive Engineer to be a Public Health/Environmental Engineer for cities above 5 lac population @ (1 per 20 lac pop or part)	-	-	-	1	2	2+
A.E.E = Asstt. Executive Engineer to be a Public Health/Environmental Engineer in the cities above 2 lac population @ (1 per 5 lac pop or part)	-	-	1	4	8	8+
A.E.= Asstt. Engineer to be a Public Health/Environmental Engineer in cities above 1 lac population @ (1 per 2 lac pop or part)	-	1	2	8	16	16+
S.O.= Sanitary Officer to have Sanitary Diploma (1 per 1 lac pop)	1	2	5	20	40	40+
S.I.= Sanitary Inspector to have Sanitary Diploma (1 per 50,000 pop or 1 per 80 sweepers* whichever is less)(1 per 2 SSI)	2	4	10	40	80	80+
S.S.I = Sanitary Sub-Inspector, a diploma holder in Sanitation (1 for 25,000 pop or 1 per 40 Sweepers, whichever is less(?? Or per 2 SS ??)	4	8	20	60	80	160+
Mukadam or Jamadar or Daffadar or Maistry who is literate, (1 for 12,500 pop or 1 per 20 sweepers, whichever is less)	8	16	40	160	320	320+
Sweepers as per norms(para 3.8)						

ANNEXURE-19.2

Brief course content for training to various levels of staff/Officers

A. **Training to sanitation workers**.

1. Importance of sanitation in urban areas.
2. Present scenario of solid waste management system in the urban areas, deficiency in the system, etc.
3. Impact of inefficient SWM services on health and environment
4. Impact of inefficient SWM services on the health of sanitation workers.
5. Inefficiency of tools and equipments used and loss of manpower productivity.
6. Need for modernization of solid waste management practices.
7. Options available for improving the services.
8. Advantages of using improved tools and equipments for primary collection of waste and street sweeping.
9. Need for synchronization of storage of waste at source, primary collection of waste and waste storage depots.
10. Proper upkeep of tools and equipments and waste storage depots.

B. Training to Sanitation Supervisors of various levels.

1 to 10 as per A above.

11. Need for synchronization of transportation of waste with waste storage depot.
12. Transportation of waste on day to day basis.
13. Waste processing and disposal options, advantages and disadvantages of various technologies.
14. Sanitary land filling.

15. Public and NGO participation in waste management.
16. Building public awareness.
17. Enforcement.

C. Training for the officers looking after SWM Department.

1 to 17 as per A & B above.

18. SWM practices prevalent in other parts of the country and in the developed countries
19. Institutional strengthening, internal capacity building and human resources development.
20. Private sector participation in SWM
21. Management information system.
22. Financial aspects.
23. Health aspects.
24. Legal aspects.