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Draft Report

CHHATTISGARH

SUGGESTIONS OVER MODEL ACTION PLAN OF MUNICIPAL SOLID WASTE MANAGEMENT

(As stated in appel no. 70 of 2012 Capt. Mall Singh and others Vs Panjab PCB and others.)

[Before The National Green Tribunal, Principal Bench, New Delhi]

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Sr. No	Points under consideration	Status in Proposed DPR	Opinion	Reason/Remark
1	<p>Management Principles</p> <p>The solid municipal waste plant should be based on following important principles:-</p> <ul style="list-style-type: none"> • Effective segregation, collection and transportation • Maximum resources recovery • Effective treatment • Safe disposal 	<p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p>		
2	<p>Collection and segregation (at each city level)</p> <ul style="list-style-type: none"> • Urban local bodies (ULBs) should provide daily waste collection service to all households, shops and establishments for the collection of putrescible organic waster from the <u>doorstep</u> because of the hot climatic conditions in the country. • This service must be regular and reliable • Recyclable material can be collected at longer regular intervals as may be convenient to the waste producer and the waste collector, as this waste does not normally decay and need not be collected daily. 	<p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p>	<p>Agree</p>	<p>For Organic Waste, Recyclable waste and for hazardous 3 separate bins shall be provided. Organic waste shall be collected daily.</p> <p>Recyclable waste shall be collected on <u>weekly</u> bases.</p>

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	<ul style="list-style-type: none"> Domestic hazardous waste is produced occasionally. Such waste need not be collected from the doorstep. People could be advised or directed to deposit such waste in special bins in the city for disposal. 	Already Exist in our DPR		Hazardous waste shall be collected on <u>weekly</u> bases.
	<ul style="list-style-type: none"> Collection of waste can be done by: Municipal workers themselves. Contracting the collection of wastes to a competent organization. Privatizing through ragpickers and kabaris or any suitable agencies. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Procedure of collection: The entire city should be divided into zones and the zones should be further divided into beats. Each of the beats should be manned with adequate number of sanitary workers with adequate required facilities. 	We are working on micro module mechanism*		*micro module mechanism means - School, College, Malls, Residential Colony, Slum, Public Parks, Office Buildings and Bus Stand etc.
	<ul style="list-style-type: none"> Cycle rickshaws or similar vehicle should be provided to each of the sanitary workers. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> The rickshaw should be equipped with 4 and 8 bins of about 60 and 80 litre capacity. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Each of the sanitary workers should be made responsible for 200 and 400 houses depending on the workload. 		Agree	For 200 House Holds
	<ul style="list-style-type: none"> These worker should go to the houses on pre determined time to collect the waste. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Community bins should be installed, if no door to door collection is possible in certain areas like congested narrow lanes or slums and residents should be made aware of putting their wastes into the bins in segregated manner as specified. 	Already Exist in our DPR		3 bins shall be provided for different waste.
3	Regulatory measures			
	3.1 Residents Following should be regulated by stringent law and vigilance monitoring for all the waste generators including households, restaurant, hotels, shops, offices, institutions, workshops:		Agree	
	<ul style="list-style-type: none"> They shall not throw any solid waste in their neighbourhood, on the street, open spaces, and vacant plots or into drains. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> They shall (a) keep the food waste / bio-degradable as and when generated, in any type of domestic waste container, preferably with a cover, and (b) keep dry / recyclables wastes preferably in bags or sacks. 	Already Exist in our DPR		

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	<ul style="list-style-type: none"> Wet wastes should not be disposed of in plastic carry bags. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Keep domestic hazardous waste listed above separately, for disposal at the place may be as arranged for by the ULB. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> A private society, association of flats/multistoried buildings etc. shall provide a community bin i.e. a being large enough to hold the waste generated by the members of their society/association for storage of wet domestic wastes and instruct all residents to deposit their domestic waste in this community bin to facilitate collection of such waste by the local body from the designated spot. 		Agree	
	<ul style="list-style-type: none"> In case of multi storied buildings where it may be difficult for the waste collector to collect recyclable waste from the doorstep, the association of such buildings may optionally keep one more community bin for storage of recyclable material. 		Agree	
	<ul style="list-style-type: none"> In slums, where because of lack of access or due to narrow lanes, it is not found convenient to introduce house-to-house collection system, community bins of suitable sizes should be placed at suitable locations by the local body to facilitate the storage of waste generated by them. They may be directed to put their waste into community bins before the hour of clearance each day. 		Agree	
	<p>3.2 Vegetable/Fruit Markets Waste</p>			
	<ul style="list-style-type: none"> These markets produce large volumes of solid waste and local bodies should direct the association of the market to provide large size containers which match with the transportation system of the local body or depending on the size of the market, local body itself may provide large size containers with lid or skips as illustrated below for storage of market waste at suitable locations within markets on full cost/partial cost recovery from the market association. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Shopkeepers should be directed that they shall not dispose of waste in front of their shops/establishments or anywhere on the streets or in open spaces and instead shall deposit their waste as and when generated into the large size container that may be provided for storage of waste in the market. 	Already Exist in our DPR		
	<ul style="list-style-type: none"> Such wastes should be removed on a daily basis either departmentally or through contractors on full or part-cost-recovery basis as may be deemed appropriate by local bodies. 	Already Exist in our DPR		

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	<ul style="list-style-type: none"> Large containers kept in the fruit and vegetable markets should be removed during night time or non-peak hours and the waste from meat and fish markets should be collected through closed pick-up vans service by engaging a contractor, or departmentally as deemed expedient by the local body. 		Agree	
	<p>3.3 Marriage Halls/Kalyan Mandaps/Community Halls</p>			
	<ul style="list-style-type: none"> A lot of waste is generated when marriage or social functions are performed at these places and unhygienic conditions are created. Suitable containers with lids which may match with the primary collection or transportation system of local bodies should be provided by these establishments at their cost and the sites of their placement should be finalized in consultation with urban local bodies to facilitate easy collection of waste. On-site bio-digesters for food waste should be encouraged. The special arrangement should be made for collection of waste from marriage halls, kalyan mandaps, community halls, etc. daily on a full-cost recovery basis. The cost of such collection could be built into the charges for utilizing such halls. This service may be provided preferably through a contractor or departmentally as the local bodies deem fit. On-site, processing of food wastes by bio-methanation and composting may be encouraged. 		Agree	
	<p>3.4 Hospitals/Nursing Homes/Pathological Laboratories/Health Care Centres These establishments produce bio-medical as well as ordinary waste. They should be directed that:</p>			
	<ul style="list-style-type: none"> They shall refrain from throwing any bio-medical waste on the streets or open spaces, as well as into municipal dust bins or domestic waste collection sites. They shall also refrain from throwing any ordinary solid waste on footpaths, streets or open spaces. 			Bio Medical Waste Rules shall be followed.
	<ul style="list-style-type: none"> They are required to store waste in colour-coded bins or bags as per the directions of the Govt. of India, Ministry of Environment Bio-Medical Waste Management & Handling Rules, 1998, and follow the directions of Central Pollution Control Boards and State Pollution Control Boards from time to time for the handling, transportation, treatment and disposal of biomedical waste. 	Already Exist in our DPR		
		Already Exist in our DPR		

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	<p>3.5 Construction & Demolition Wastes Directions should be given that:</p>			
	<ul style="list-style-type: none"> No person shall dispose of construction waste or debris on the streets, public spaces, footpaths or pavements. 		Agree	
	<ul style="list-style-type: none"> Till finally removed construction waste shall be stored only within the premises of buildings, or in containers where such facility of renting out containers is available. In exceptional cases where storage of construction waste within the premises is not possible, such waste producers shall take prior permission of the local authority or the State Government as may be applicable for temporary 15 storage of such waste and having obtained and paid for such permission, may store such waste in such a way that it does not hamper the traffic, the waste does not get spread on the road and does not block surface drains or storm water drains. 		Agree	
	<ul style="list-style-type: none"> To facilitate the collection of small quantities of construction and demolition waste generated in a city, suitable sites may be identified in various parts of the city and people notified to deposit small quantities of construction and demolition waste. Containers could be provided at such locations and small collection charge levied for receiving such waste at such sites and for its onward transportation. Rates may be prescribed for such collection by local bodies. Contracts could also be given for managing such sites. 		Agree	
	<ul style="list-style-type: none"> Local bodies should prescribe the rate per tonne for the collection, transportation and disposal of construction waste and debris and notify the same to the people. 		Agree	
	<ul style="list-style-type: none"> Every person who is likely to produce construction waste may be required to deposit with the concerned local body an approximate amount in advance at the rates as may be prescribed by the local body from time to time, for the removal and disposal of construction waste from his premises by the local body. Such amount may be deposited at the time when the building permission is being sought and in cases where such permission is not required, at any time before such waste is produced. 		Agree	
	<ul style="list-style-type: none"> The charges for removal of construction waste to be doubled for those who fail to deposit the amount in advance. 		Agree	
	<ul style="list-style-type: none"> Large local bodies may provide skips (large containers) to the waste producers on rent for the storage of construction waste so that double handling of the waste can be avoided or use front end loader & trucks to pick up such waste. In small towns this may be done manually using trucks, tractors and manpower. 		Agree	

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	<p>3.6 Garden Waste</p>			
	<ul style="list-style-type: none"> Private gardens should as far as possible compost and re-use all plant wastes on-site. Where it is not possible to dispose of garden waste within the premises and the waste is required to be disposed of outside the premises, it shall be stored in large bags or bins on-site and transferred into a municipal system on a weekly basis on payment. The generation of such waste should as far as practicable be regulated in such a way that it is generated only a day prior to the date of collection of such waste. It should be stored in the premises and kept ready for handing over to the municipal authorities or the agency that may be assigned the work of collection of such waste. 		Agree	
	<ul style="list-style-type: none"> Garden waste and fallen leaves from avenue trees within large public parks and gardens should be composted to the extent possible. However, if such waste has to be disposed of, large skips may be kept, which match with the municipal transportation system for transportation of such waste. Such skips may be provided by local bodies or State Governments owning such parks and gardens. In case of private parks and gardens they should make 16 their own storage arrangement which matches with the municipal primary collection and transportation system. 		Agree	
	<ul style="list-style-type: none"> The waste stored in public and private parks, gardens, lawn plots etc. should be collected on a weekly basis by arranging a rotation for collecting such waste from different areas, on different days to be notified to the people to enable them to trim the trees and lawns accordingly and keep the waste ready. This waste may be got collected through a contractor or departmentally as deemed appropriate by the urban local authorities. Cost recovery may be insisted upon, based on the volume of waste collected. 		Agree	
	<p>3.7 Dairy and Cattle-Shed Waste</p>			
	<ul style="list-style-type: none"> The dairies and cattle breeders having sheds within the city limits should be asked to move the cattle sheds outside the city limits and until this is implemented they should be directed not to stack the cow dung, grass or other stable wastes within their premises or on the roadside. They must transfer the waste produced by them daily into the specified municipal storage containers nearby, which should be collected at regular intervals by local bodies for which they should pay based on quantity. 		Agree	

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4	<p>Provision of litterbins on streets and public places</p> <ul style="list-style-type: none"> • With a view to ensure that streets and public places are not littered with wasted materials such as used cans, cartons of soft drinks, used bus tickets, wrappers of chocolates on empty cigarette cases and the like generated while on a move, litter bins may be provided on important streets, markets, public places, tourist spots, bus and metres of 250 metres depending on the local condition. Similar bins for disposal of animal droppings could be placed in posh areas. • Removal of waste from these litterbins should be done by beat sweepers during their street cleaning operations. Waste from the litterbin should be directly transferred into the handcarts of the sweepers. • Such facilities of litterbins can be created at no cost to local bodies by involving the private sector and giving them advertisement rights on the bins for a specified period or by allowing them to put their names on the bins as a sponsor. Litterbins should be put in posh as well as poor areas in the proportion decided by local bodies. 		Agree	
5	<p>Storage Depots</p> <p>All the waste collected through Primary Collection System, from the households, shops and establishments should be taken to the processing or disposal site either directly necessitating a large fleet of vehicles and manpower or through cost effective systems which are designed to ensure that all the waste collected from the sources of waste generation is transported within reasonable time. The system of providing waste generation is transported unhygienic and unscientific, posing a serious threat to the public health and environment. This means that is should be:</p> <ul style="list-style-type: none"> • Out of reach of stray animals • Should not obstruct the traffic or spread on road. • Easily accessible in terms of distance for the user. • Fully covered and not exposed. • Able to hold the expected waste generated, depending on the size and population of the area. • Aesthetically acceptable. • Designated to be easy to operate, handle, transfer and transport. 		Agree	For cities of Population more than three Lacs.
			Agree	
			Agree	
			Agree	
			Agree	
			Agree	
			Agree	
			Agree	
			Agree	

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6	<p>Transportation of waste</p> <ul style="list-style-type: none"> Transportation of the waste stored at waste storage depots at regular intervals is essential to ensure that no garbage bin/container overflows and waste is not seen littered on streets. Waste should be transported in covered vehicles. These vehicles must be designated as below: Multi- container vans. Covered, as the waste must not be visible to the eyes or be exposed to the open. Bins or containers of wastes must be cleared and transported at regular intervals. 		Agree	
	<p>Transportation should be done:</p> <ul style="list-style-type: none"> Daily at community bins. Before they start overflowing, if required, twice or thrice a day. Depending on the characteristic of waste, they should follow different routes, as the disposable site is different for the different type of wastes. 		Agree	
7	<p>Disposal of waste (at cluster level, as proposed)</p> <ul style="list-style-type: none"> ULBs shall adopt suitable technology or combination of such technologies to make use of wastes so as to minimize the burden on landfills. The biodegradable wastes shall be processed by composting, vermin-composting, anaerobic digestion or any other appropriate biological processing for stabilization of wastes. It must be ensured that compost or any other end product shall comply with standards. Mixed waste containing recoverable resources shall follow the route of recycling or other appropriate technologies. Land filling shall be restricted to non-biodegradable, inert waste and other waste that are not suitable either for recycling or for biological processing. Land filling shall also be carried out for residues of waste processing facilities as well as pre-processing rejects from waste processing facilities. Land filling of mixed waste shall also be avoided unless the same is found unsuitable for waste processing. 	<p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p> <p>Already Exist in our DPR</p>		

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8	<p>MSW Processing / Treatment Techniques</p> <p>Current treatment strategies are directed towards reducing the amount of MSW that needs to be land filled, as well as recovering and utilizing the material present in the discarded waste as a resource to the largest possible extent. Different methods are used for treatment of MSW and the choice of proper method depends upon refuse characteristics, land area available and disposal cost as follows:</p> <p>Thermal conversion of MSW : This process transforms MSW into gaseous, liquid and solid conversion products. This process also generates energy due to burning of materials, different methods are explained below</p> <p>8.1 Incineration</p> <p>It is a controlled combustion process for burning solid wastes in presence of excess air (oxygen) at high temperature of about 1000 oC and above to produce gases and residue containing non-combustible material. One of the most attractive features of the incineration process is that it can be used to reduce the original volume of combustible MSW by 80-90%. In some of the newer incinerators designed to operate at temperatures high enough to produce a molten material before cooling it may be possible to reduce the volume to about 5% or less. A complete sterilization is achieved due to burning of even biologically hazardous waste, thus avoiding epidemics. MSW can also be co-fired as an additional source in coal-based power plants.</p> <p>8.2 Incineration with Heat recovery</p> <p>The incineration process, which is used for volume reduction, may also lead to heat recovery. With existing incinerators, waste heat boilers can be installed to extract heat from combustion gases without introducing excess amounts of air or moisture.</p> <p>8.3 Pelletisation / Refuse Derived Fuel (RDF)</p> <p>Pelletisation is a process of producing fuel pellets from MSW. The raw MSW is processed for concentrating the combustible fraction of it by segregating the non-combustible portion. The complete process involves drying, removal of non-combustibles by air separation (density separation), grinding or shredding of combustible fraction usually by a hammer mill, mixing and production of pellets under high pressure. The pellets can be transported easily and stored for many months without any disintegration. These pellets could be used for heating in the boilers and the generated steam, in turn, is used to produce power. Pellets also, can be used along with conventional fuels for industrial operations.</p>		Partially Agree	Cost of treatment system is high and it depends upon the available quantity of waste. Disposal technology suited to small and medium towns is not available.
			Partially Agree	Not viable for our State
			Partially Agree	Not viable for our State
			Agree	

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	8.4 Recovery of Biological Conversion Products (Biological Process)			
	Biological conversion of MSW is becoming more and more popular these days. End products include compost, methane, alcohols and variety of other intermediate organic compounds. Principal processes used for biological conversion are: aerobic composting, biomethanation and vermicomposting. Brief description of these processes has been given in subsequent sections.		Agree in Principle	
	8.5 Aerobic composting			
	Composting is the most responsible technical solution for many small towns in the country, especially, where the climate is arid and the soil is in serious need of organic supplements.		Agree	
	The objectives of this treatment are stabilization of the organic matter in order to reduce possible environmental impacts (odors, pathogens...) and sanitary risk, mass and volume reduction of waste, production of compost to be used as soil conditioner. The end product is non odorous and free of pathogens and weed seeds.		Agree	
	8.6 Biomethanation (anaerobic digestion)			
	Anaerobic digestion is the process for biological decomposition of organic wastes in the absence of air (oxygen). The organic wastes are hydrolyzed, liquefied and gasified with the help of methanogenic bacteria. In anaerobic process, the organic compounds are converted to methane and carbon dioxide.		Agree	
	8.7 Vermicomposting			
	Vermicomposting involves stabilization of organic waste through the joint action of earthworms and aerobic 19 microorganisms. Initially, microbial decomposition of biodegradable organic matter occurs through extra cellular enzymatic activity (primary decomposition). Earthworms feed on partially decomposed matter consuming 5 times their body weight of organic matter per day. The ingested food is further decomposed in the gut of the worms resulting in particle size reduction. The material or worm cast excreted is a fine, odorless, granular product. This can be used serve as a bio-fertilizer in agriculture. Besides providing micro and macro nutrients this is also a rich source of beneficial microorganisms and exudates of worms, which can stimulate plant growth and enhance productivity.		Agree	

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9	<p>Ultimate Disposal of MSW</p> <p>9.1 Landfilling</p> <p>Landfilling is the most simple and economical measure as far as natural decomposition occurs at the disposal site. Unscientific and ordinary Landfilling is the common practice for MSW disposal in most of the towns. This is causing serious environmental degradation in the area. Compaction and leveling of waste and final covering by earth are rarely observed practices at disposal sites, and these low-lying disposal sites, being devoid of a leachate collection system. As, no segregation of MSW at source takes places, all the wastes including hospitals infectious waste generally find its way to the disposal site. Sanitary landfill is an acceptable and recommended method for ultimate disposal of MSW. It is necessary component of MSWM, since all other options produce some residue that must be disposed of through landfilling.</p>		Agree	However, there is no viable alternative at present
	<p>9.2 Sanitary Landfills</p>		Agree	Shall be adopted for inert waste.
10	<p>Financial Aspect</p> <p>Solid Waste Management (SWM) is the responsibility of ULBs under the Constitution of India. However, they are not able to provide this service efficiently and effectively mainly due to financial shortage. To carry out this essential activity an annual provision for the recurring and capital expenditure is made in the municipal budget. The municipal budget is based on the total income from various revenue sources and other funds including the grants from Central and State Government. The provision of funds for solid waste management is commonly observed to be made on adhoc basis and is not related to the requirement. Solid Waste Management receives a comparatively inadequate share out of the total municipal budget as the municipal agencies assign a low priority to this work resulting in poor services. Today, there is an urgent need to overhaul the system by making substantive changes in management & technology, which would inevitably</p>			Stage one Cost of the Project is estimated at Rs. 1500/- per person for infrastructure and Rs. 25/- per person for O&M expenses.

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	<p>require capital investment far beyond the current budgetary capacity of the municipal agencies. Any solid waste management system will require provision of financial resources for its smooth running. The present structure of revenue does not contain any instrument specifically dedicated to the needs of SWM. It is also obvious that in future the municipal agency will find it increasingly difficult to draw the required amounts from the existing revenue resource. As per the Manual on Solid Waste Management by 20 the Ministry of Urban Development, 2000, the annual requirement of funds for efficient SWM reveals that when the principle of Full Cost Pricing is applied the Total Annual requirements are often 2-3 times the amount being allocated at present. Thus, it is important that the beneficiaries also share the responsibility of waste management following the 'Polluters pay principle'. The SWM will have to provide SWM Tax/Cess, and to cover not only the annual cost of operation, required to be repaid but also the indirect costs. This alone will assure the financial viability of the effective solid waste management in the cities. The concerned ULBs should work out the SWM Tax/Cess to be charged from the beneficiaries depending upon their economic status. A provision of cross-subsidy should be included in such exercise. The present solid waste cleansing tax is charged as a percentage of property tax. It should be based on the frequency of service, volume/weight of the waste or combination of both or on family basis. It can be multiplied by a factor based on assessment of location, building value and income of occupant. However, provision of cross subsidy for slum areas is desirable. Separate structure of tariff will have to be specified for community bin system and for house to house collection system. It should also lay down the method of charging and recovery of charges for transportation of acceptable industrial solid waste and demolition waste. There should be a provision for revision of the rates at specific intervals. For specific identified occupations, contracting out of work should be considered. However, such contracts should be performance based and appropriately framed with in-built monitoring and penalty mechanisms.</p>			

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11	<p>Mobile Sanitation Courts</p> <p>It is the tendency of the public to take their civic responsibilities lightly. It is therefore necessary that while on one hand people are motivated to participate effectively in keeping the cities clean, there should be a fear of punishment if they fail to discharge their civic obligations. Provision of Mobile Sanitation Courts is therefore very useful to ensure littering of roads and disobedience of other legal provisions or orders to improve the sanitary conditions. The mobile sanitation court would be able to recover its full cost from the fines that may be imposed by the court. There is, therefore, no likelihood of any financial burden on the local body.</p>		Agree	
12	<p>Redressal of Public Grievances</p> <p>The local body should draw up a citizen's charter clearly stating what level of service it proposes to provide to the citizens and how soon citizens can expect their grievances to be attended. Sanitation being very vital for health and environment, efficient machinery should be organized by the local body to receive public complaints and attend to them expeditiously. Formats may be prescribed for receiving such complaints, replying to the applicants as soon as the complaints have been redressed and for monitoring the pending complaints.</p>		Agree	
13	<p>Management Aspects</p> <p>With a view to avoiding the problems of lack of coordination and passing of the responsibility on others, it is necessary to have one person exclusively in charge of SWM in the city. The overall control in relation to collection, transportation, processing and disposal of all waste, including workshop facilities, should lie with him. He should also be responsible for the cleaning of open drains under 24 inches depth, 21 collection of silt, construction waste and debris and vehicle deployment and maintenance. There should be work allocation norms for the sweepers, transport system and other workers. Advanced work schedule should be prepared and followed every month. SWM services are highly labour intensive on account of increased wage structure of the Government and municipal employees this service is becoming more and more expensive. Besides, the efficiency of the labour force employed in the urban local bodies is far from satisfactory. Hence, possibility to outsource certain work should be explored.</p>		Agree	

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	13.1 Institutional Setting		Agree	
	The fact of ownership has to be settled. With ownership must come the assumption of full responsibility for the long term sustainable performance of the Solid Waste Management System. The ULBs should be mandated to replace inadequately qualified and inefficient staff with staff necessary to maintain the solid waste management system. For outsourcing the job, a stringent pre-qualification criterion should be developed for the contractors, which inter-alia should include sufficient number of sufficiently qualified persons and the contract agreement should be performance based for which necessary performance indicators should be evolved.			
	13.2 Management Plan		Agree	
	Rules for operation and maintenance of the solid waste management system must be established in the form of a handbook together with a legal requirement to keep honest records of specified parameters that refer to the performance of the system including the quality of work performed by each individual. Apart from the enhancement of capacities of ULBs, there should also be additional checks by a local committee of qualified civil society representatives, health officers and officers from other departments who should be empowered to visit and issue a note of caution when any component of SWM system is not working or inadequately working.			
	13.3 Standardised Procedures			
	A manual of standardised procedures should be established for the activities of the entire MSWM system.		Agree	
	<ul style="list-style-type: none"> These procedures should be mandatory and penalties established for each default. The same penalties should apply whether the system is operated directly by a ULB or by an external contractor. 		Agree	
	<ul style="list-style-type: none"> A surveillance mechanism should be created to investigate every instance of non-compliance reported to the ULBs using fast and modern communication means such as SMS by mobile to the authorities. 		Agree	
	<ul style="list-style-type: none"> The staff responsible for solid waste management should be professionally qualified and trained. 		Agree	
	<ul style="list-style-type: none"> The operation manual should be available to each staff. 		Agree	

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	<ul style="list-style-type: none"> Each staff member should be given responsibility in terms of specific activity alongwith date and time in writing. 		Agree	
	<ul style="list-style-type: none"> The duty assignment records should be maintained in a Master File which should be checked by officers of Nodal office and State Pollution Control Board on regular basis. 		Agree	
	<ul style="list-style-type: none"> Training of the MSWM staff should be planned and implemented properly. 		Agree	
	<ul style="list-style-type: none"> Strict action is required to be taken against the staff in case of default. 		Agree	
	<ul style="list-style-type: none"> Each staff member should submit a monthly report indicating duty performed by him and how it is matching with the assignment given to him. 		Agree	
	<ul style="list-style-type: none"> In case of deviation, sufficient reason should be recorded. 		Agree	
	<ul style="list-style-type: none"> Every ward should be monitored for its cleanliness and satisfaction of the citizen. 		Agree	
	<ul style="list-style-type: none"> The monitoring results should be compiled on monthly basis and submitted to the Nodal office in the form of a monthly report. 		Agree	
	<ul style="list-style-type: none"> The report should be reviewed by the Nodal Office. In case of any problem in SWM system, the Nodal Officer should discuss it with incharge of the SWM System and suggest remedial measures. 		Agree	
	<ul style="list-style-type: none"> There should be a quarterly meeting of all the incharges of the all the wards of a city including lower staff to discuss the problems and remedial measures. 		Agree	
	<ul style="list-style-type: none"> The outcome of the meeting should be recorded in form of minutes and communicated to State Pollution Control Board within 15 days of the meeting. 		Agree	
	<ul style="list-style-type: none"> There should be a separate cell in the State Pollution Control Board for monitoring management of MSWM System in the State. 		Agree	
	<ul style="list-style-type: none"> This cell should constantly interact with the Nodal Officer on performance of MSWM System and other related issues. 		Agree	
	<ul style="list-style-type: none"> The cell should also conduct vigilance monitoring of the MSW System atleast once in a month. 		Agree	
	<ul style="list-style-type: none"> The monitoring should include checking of ward wise records of the MSW System and their functioning to evaluate their performance and compliance of MSW Rules. 		Agree	
	<ul style="list-style-type: none"> In case of unsatisfactory observations, the cell should issue notice to the Nodal Officer under EPA, 1986. 		Agree	

Sl. No.	Points under consideration	Status in Proposed DPR	Opinion	Reason/Remark
	<ul style="list-style-type: none"> An annual report on the performance of city wise MSW System record should be prepared city-wise and submitted to the State Boards highlighting all the important points including deficiencies and annual expenditure. 		Agree	
	<ul style="list-style-type: none"> It may be useful to involve local communities in monitoring the functioning of the entire MSWM System. 		Agree	
	<ul style="list-style-type: none"> It is necessary to have a cadre of professional staff in municipalities headed by technically qualified chief executives for planning and implementation of MSWM System.” 		Agree	