#### a. Ward Level Administration

The ward level administration should be fully responsible for ensuring storage of segregated waste at source, primary collection of waste, street sweeping and taking the waste to the bulk community waste storage site etc. The cleaning of each street, lane, by lane, markets, etc. should be regularly supervised by the ward level supervisors. Presence of all SWM officers of the Ward in the field during morning hours is most essential. Besides grievance re-dressal system has to be in place in each ward.

#### b. Zonal Administration

Administrative zones may be made for a group of wards. The zonal administration should effectively supervise and support the work of the ward administration and also provide zonal level support such as construction and upkeep of flooring under the communal waste storage sites transportation of waste from the communal storage sites to the transfer station, processing plant or to the disposal sites as may be determined by the local body. If the zones are not allotted adequate vehicles for the transportation of waste due to paucity of vehicles, the transportation of waste may be coordinated centrally for the optimum utilization of the fleet of vehicles in 2 or 3 shifts.

#### c. City Level Administration

The city level administration should emphasis on Monitoring of the System Training & capacity building of the staff. It will keep liaison with the zone level administration for periodical review of the operation of the system and take necessary support from it.

The city level administration should supervise and support the zone administration and in cases where the fleet of vehicles is not decentralized at the zone level, the central SWM Department should look after the transportation of waste from the community waste storage sites on a daily basis. The Central SWM Department should be responsible for construction and upkeep of transfer stations, setting up and maintenance of processing plants, incineration plants and vehicles as well as for managing the disposal of waste at the landfill sites in an environmentally acceptable manner. The central level administration should run the operation of the workshop for repairing of solid waste management vehicles and other accessories. It will also maintain the vehicles like, Road Sweeping Machine-1, Tractor-1, Ordinary Truck -2 and will deploy those vehicles as and when required at various zones.

The central SWM department should also be responsible for the procurement of vehicles, equipment and land for processing and disposal of waste. As a head office it should take policy decisions and co-ordinate the activities of all the zones and the wards and be answerable to the Chief Executive and elected body for the efficient functioning of the department. It should look after the recruitment of manpower, human resources development, training etc.

#### d. Interactive Meets And Communication

State Governments should organize interactive meets for the subordinate officers in charge of SWM in various local bodies for exchange of information and sharing of experiences.

#### 9) CREATION OF PLANNING & MONITORING UNIT

The provision of SWM infrastructure like waste collection, temporary storage, transfer, processing and disposal of waste should be made mandatory pre condition in urban planning.

So there should be a continuous planning and monitoring activity for solid management programme. A planning and monitoring unit headed by a person having qualification and experience in Public Health Engineering under the control of Municipal Engineering Directorate, Department of Municipal Affairs, Govt. of West Bengal should be created to perform this activity. The planning and monitoring unit should analyze and compare the standards, perform the environmental impact assessment, recommend various level of mechanization and labour involvement needed and feed back the analyzed data to the municipalities as well as Govt. for implementations and / or modification of the system. This unit will also monitor the production and quality control of Bio-gas and also render necessary help for marketing the product for the municipalities.

# PROPOSED SOLID WASTE MANAGEMENT SYSTEM DIRECTIVES FOR PROPER SURVEILLANCE AND SUSTAINABILITY



#### DOMESTIC SOLID WASTE

- Domestic Solid Waste is to be accumulated in individual premises in two separate containers; Bio-degradable SW in Green container and the non-degradable SW in Yellow container.
- Collect the two types of domestic SW daily in Wheel Barrow. Each Wheel Barrow should have four containers for bio-degradable and four non-degradable wastes of capacity 20 ltrs.
- Transfer the waste from Wheel Barrow to transportation vehicles kept at transfer stations. Each transfer station shall have a ramp of suitable height and slope for transferring the waste from Wheel Barrow to standing transportation vehicles directly (see fig given).
- Transport Bio-degradable SW to Composting Plant by covered vehicle. Transport non-degradable SW to sanitary LandFill Site by covered vehicle.
- Compost the Bio-degradable SW by the combination of Windrow Method and vermi composting.
- Dispose off the Residue from Compost Plant to LandFill site.
- Extract the recyclable materials from non-degradable SW.
- Dispose the residual non-degradable SW to LandFill site.

## MARKET SOLID WASTE

- Market Solid Waste (SW) is to be accumulated in bins located at a suitable place convenient for the smooth movement of transportation vehicle.
- Transport SW to Composting Plant by covered Vehicle as stated above in domestic waste.
- These markets produce large volumes of solid waste. Depending on the size of the market, the local body shall provide large size containers with lid or skips for the storage of market waste at suitable locations within the market.
- The shopkeepers shall not dispose of their waste in front of their shop / Establishment or anywhere on the street or open spaces and instead shall deposit their waste as and when generated into the large size container that may be provided for the storage of waste in the market.
- Compost the Market Waste by Windrow Method.
- Dispose the Residue from Compost Plant to Land Fill site.

#### WASTE FROM TRADE AND COMMERCE

- Waste from trade and commence in CBD (Central Business District) is to be collected by Wheel Barrow or by Wheel Barrow twice a day at suitable time.
- Business Houses are to be directed to dispose off their waste either to the door to door collecting vehicles or to the community bins at particular time in a day.
- Waste from trade and commerce is to be accumulated in Vats located at a suitable places.
- Transport SW to sanitary LandFill Site by covered Vehicle.
- Extract the recyclable materials from SW.
- Dispose the residual of waste to Landfill site.

### **DIRECTIVES TO HOTELS & RESTAURANTS**

All hotels and restaurants may be directed that: -

- Hostels and restaurants shall refrain from throwing their dry and wet solid waste / sweeping on the footpath, streets, open spaces etc.
- They shall also refrain from disposal of their waste into the municipal bins. They shall organize their own door step collection system or have this facility through ULB on full cost-recovery basis.
- They shall store their waste into sturdy metal HDPE / LDPE / Plastic or any other type of container having tight lid and no sharp edges. The container should have appropriate handle and rim at the bottom. The size of each container should not exceed 60 liter for easy handling of waste.

### DIRECTIVES TO VEGETABLE / FRUIT MARKET SHOP OWNERS

- These markets produce large volumes of solid waste. Depending on the size of the market, the local body shall provide large size containers with lid or skips for the storage of market waste at suitable locations within the market.
- The shopkeepers shall not dispose of their waste in front of their shop / Establishment or anywhere on the street or open spaces and instead shall deposit their waste as and when generated into the large size container that may be provided for the storage of waste in the market.

## **DIRECTIVES TO MEAT AND FISH SHOP OWNERS**

- The shopkeepers shall not throw any waste in front of their shops or any where on the streets or open spaces.
- They shall keep sturdy containers (of size not exceeding 60 liters) having lid, handle and rim at the bottom of the container with adequate spare capacity to handle unforeseen loads.

#### DIRECTIVES TO STREET FOOD VENDORS

All street food vendors may be directed not to throw any waste on the street or pavement. They must keep bins for the storage of waste that generate during their activity.

## DIRECTIVES FOR CONSTRUCTION & DEMOLITION WASTES

- No person should be allowed to dispose of construction waste / debris on the streets / open space / foot path or pavement etc.
- Construction waste shall be stored until removed only within the premises of the building or in containers where such facility to renting out containers is provided by the local body. In exceptional cases such waste may temporarily be stored till a specified date on public or private land with prior written permission of the Govt. or local authority.
- The local body shall prescribe the rate per M.T on for the collection, transportation and disposal of construction waste / debris and notify the same to the people.
- Every person who is likely to produce construction waste shall deposit with the 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 shall 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.
- The charges for removal of construction waste to be kept double for those who fail to deposit the amount in advance.
- Local bodies may make an endeavor to provide the facility of skips / containers on rent for the storage and transportation of construction waste.

## DIRECTIVES FOR INDUSTRIAL WASTES

- No industry should be allowed to dispose of its waste on the streets / open space or any other place without the permission of local body.
- Industrial waste shall be stored until removed only within the industry premises.
- The waste should be stabilized according to the nature of the waste before it is disposed of.
- Authorized agencies engaged by the industry/industries and approved by the local body shall transport and dispose of the industrial waste at sanitary landfill site of industrial waste as per the prescribed norms and procedure. The rate per MT on for the collection, transportation and disposal of Industrial waste shall be fixed by the mutual agreement between the industries and the authorized agencies for disposal of industrial waste.
- If the land is provided by the municipality then user charge should be recovered from the industries as well as the Authorized agencies.
- Local bodies may make an endeavor to provide the facility of skips / containers on rent for the storage and transportation of industrial waste on user charge basis.

## <u>Directives to Hospitals / Nursing Homes / Pathological Laboratories / Health Care Centers / Establishments etc.</u>



- ▶ These establishments produce bio-medical as well as ordinary waste.
- ► They shall refrain from throwing any bio-medical waste on the streets or open spaces, as well as into the municipal dust bins or the domestic waste collection sites.
- ► They shall also refrain from throwing any ordinary solid waste on footpaths, streets or open spaces.
- They shall keep colour-coded bins or bags as per the directions and guide lines of the Govt. of India, CPCBs & State PCBs for the storage of biomedical waste, amputated limbs, tissues, soiled bandages, used injections, syringes, etc. Another container with a lid for storage of food waste and other waste fit to be disposed of into the municipal domestic waste stream shall be separately provided.
- The mouth of the polythene bags containing bio-medical waste shall be tied with strong thread and at the end of each day such bags shall be removed from the wards, theatres, dressing room etc. and stored at a safe place in a packed condition for handing over to the municipal authorities for disposal on a daily basis.
- ▶ The instructions of the CPCB / State Pollution Control Boards in regard to Colour Code of bags and source segregation of bio-medical waste etc. shall be strictly followed by all concerned.

#### SUGGESTIONS AND RECOMMENDATIONS

- Standardization of hospital solid waste management system.
- Collect various types of hospital / clinical waste in four different containers as describe below
  - For microbiological, surgical, human anatomical organs, tissues, blood and blood fluid, pathological waste, soiled cotton, dressing, animal waste in yellow container.
  - For Disposables, plastic, PVC, polyethylene, sharps (e.g. needles, blades etc), discarded glass in red container.
  - For general waste i.e. food waste, kitchen waste, papers, cardboard, in green container.
  - For discarded medicine cytotoxic drugs in black container.
- Recommended colour coding for segregation of bio-medical waste at the point of generation and possible disposal options are given below.

#### TYPE OF CONTAINERS FOR DISPOSAL OPTIONS OF BIO-MEDICAL WASTE

Colour coding	Type of Container	Waste Category	Treatment options
Yellow	Leak Proof Plastic bag / Disinfected Container	Micro-biological, Surgical, Human Anatomical Organs, Tissues, Blood & Body Fluid, pathological Waste, Solled Cotton, Dressing, Animal Waste	Incineration & MSLF
Red	Punture Resistance, Impermeable, Rigid, Tamper Resistance	Disposables, plastic, PVC Polythelene, Sharps [e.g. Needle, Blades, etc.] Discarded Glass Wares	i. Autoclaving / Micro- Waving, Shredding, Incineration & MSLF ii. Chemical Treatment & MSLF
Green	Leak Proof Plastic Bag	General Waste i.e. Food Waste, kitchen Waste, papers, card Board	Incineration & or Sanitary Land Filling.
Black	Plastic Bag	Discarded Medicines, Cytotoxic Drugs	To be sent to the Manufacturer

- Handle and dispose off bio-medical waste as per the norms, prescribed by the Ministry of Environment and Forests under the Environmental Protection Act, 1986 vide Notification No. S. O. 746 (E) dated 16th Oct., 1997.
- Awareness development among hospital staff, waste handlers, rag pickers and the community as well.
- Introduction of statutory waste auditing system in all hospitals and disposal sites by environmental engineers both at micro level & macro level.
- Minimization of hospital waste.

- Non-degradable item specially PVC plastic should be used as minimum as possible.
- Location of Treatment & Disposal Site should be as follows.

Sl. No.	Location / Type of Hospital	Site of treatment / Disposal	Authority to whom Responsibility Should be Given for Transportation & Disposal
1.	Very Big Hospitals, where No. of beds >500. Sufficient land is available and is not situated in density populated area.	On-Site	Self (Hospital Authority)
2.	City / Big Urban Area Hospitals (if not as Sl. No. 1)	Off-Site	A consortium of Hospital authorities on commercial basis, Dr. by Municipal Aut.
3.	Urban/Sub-Division Town Hospital	Off-Site	Private Participation under the guidance of Local Municipal Authority
4.	Rural Hospitals	On-Site	Self (Hospital Authority)

## WHAT SHOULD NOT BE DONE



- Throwing of waste on the street
- Open waste storage in road side vats or in other unhygienic street bins
- Allow waste handlers without hand gloves and masks and shoes
- Transport waste into uncovered van
- Allow waste to touch ground in between collection and transportation
- Multiple handling of waste in the matter of collection, transportation and disposal of waste
- Use of unproven technologies
- Mix up construction debris into general waste
- Mix up hospital waste/ clinical waste (bio-medical waste) with general waste

## WHAT SHOULD BE DONE



- Impose fine on throwing waste on the street
- Storage of waste at source
- Door step collection of waste
- Sweeping of streets on all working days of the year
- Impose work norms sweeping of street
- Conservancy workers should be engaged for 8 working hours a day; at least 6 hours a day
- Provide litter bins at public places
- Transportation of waste to synchronize with waste storage facility dispense with manual loading of waste
- Before dumping the SW in landfill site the bottom of the site should be covered with a thin polythene sheet
- To increase the capacity of dumping the land-fill site may be excavated up to the depth above the permanent ground water table
- Create awareness about the hazards associated with solid waste
- Encourage N.G.O.s to take part in solid waste management system
- Encourage private sector participation in waste management
- Increase public participation in primary collection of waste
- Transport waste on day to day basis in closed body vehicle
- Dispose of waste in an environmentally accepted manner through establishment of sanitary landfill site
- Introduce element of cost recovery
- Creation of public grievances redressal mechanism
- Enforce sanitation laws and rules
- Create heavy a forestation surrounding the landfill site
- Conversion of Organic / Biodegradable Waste into Bio Organic fertilizer (compost)
- © Create management information system for solid waste
- Enactment of a public cleansing law and empowering the local bodies for its effective implementation
- Appropriate design for community containers, primary collection and transport vehicles, transfer locations and disposal facilities
- To evaluate better management and optimum utilization of man and materials

## PUBLIC PRIVATE PARTICIPATION {PPP}



#### <u>Various Forms Of Public Private Participation In Solid Waste</u> <u>Management System</u>

1. Engagement of local BPL persons or NGOs for door to door collection of solid waste.

(Implements for collections may be supplied by the municipalities and the collectors may be allowed to collect Rs.20/- to 30/- per month per APL family and Rs. 10/- to 12/- from BPL families, for house to house collection of waste.)

2. Engagement of private agencies for transportation of solid waste from transfer station to disposal sites.

(The private agency may be made responsible for transportation of total waste of the town to dumping ground on yearly contact basis. The total cost of vehicles and machineries and other necessary arrangement of transportation of waste and O & M cost should be borne by the private agency. It is advisable that the agreement with the private agency may be made for transportation of the total waste generated in the town as lump-sum contact basis irrespective of no. of trips or quantity of waste transported.)

3. Engagement of private agencies for solid waste processing

(The private agency may be made responsible for processing of bio-degradable waste in to gas and manure. The private agency would sell the manure produced from the waste and will pay a royalty to the municipality on yearly contact basis. The total cost of plant machineries and other necessary arrangement of processing unit of the waste and O & M cost should be borne by the private agency. The municipality will only send the waste to site and provide the land for compost plant.)

4. Engagement of private agencies for solid waste processing and disposal.

(The private agency would be responsible for processing of degradable waste in to gas, manure and sanitary disposal of non-degradable waste brought at site. The private agency would sell the gas, manure produced from the waste and will pay a royalty to the municipality on yearly contact basis. The total cost of plant & machineries and other necessary arrangement of processing unit of the waste and O & M should be borne by the private agency. The municipality will provide only the land.)

5. Engagement of private agencies for total solid waste management systems i.e. collection, transportation, processing and disposal of waste.

(The private agency may be made responsible for the entire process of SWM system i.e. collection—transportation-processing of degradable waste in to manure and sanitary disposal of non-degradable waste of the town. The private agency would sell the manure produced from the waste and will pay a royalty to the municipality on yearly contact basis. The total cost of plant & machineries and other necessary arrangement of processing unit of the waste and O & M cost should be borne by the private agency. The municipality will provide only the land.)

Municipal Authorities may go for Public Private Participation {PPP} in any or combination of two or more forms of PPP stated above. Detailed terms & conditions of PPP may be worked out on the merit of specific case.

## ENVIRONMENTAL IMPACT ASSESSMENT

#### 1.0 INTRODUCTION

The Municipal Engineering Directorate, Govt. of West Bengal has proposed development of Municipal Solid Waste (MSW) processing complex at Habra- Ashoknagarh Kalyangarh Cluster (comprising of Ashoknagar-Kalyangarh and Habra Municipalities), West Bengal for managing and processing the solid waste generated by the municipality.

The proposed project would involve segregation of the solid waste to biodegradable and different sets of non-biodegradable components. This will be followed by recycling the non-biodegradable components and converting the biodegradable parts to biogas and organic fertilizers. Additionally, there will be a Plastic to fuel facility and a composting plant.

The proposed facility is proposed at a site located 2 km from Habra town. The proposed plant at Habra Cluster dumpsite will be designed to process 60 TPD (Tons per Day) of MSW. The solid waste of Habra Cluster Municipality is proposed to be disposed of partly by processing and partly by sanitary landfill method. Bio-degradable part will be processed bio gas will be generated.

The proposed project falls under Item 7 (i) (Common Municipal Solid Waste Management Facilities) as per Environmental Impact Assessment Notification dated September 14, 2006.

The purpose of this Environmental Impact Assessment (EIA) study is to provide information on the nature and extent of environmental impacts arising from the construction and operation of the proposed project.

The solid waste at project site shall be provided by Habra Cluster Municipality. The proposed integrated waste processing facility will have a section for processing Municipal Solid Waste (MSW) which will involve manual segregation to separate both recyclables and biodegradables, thus produced will be utilized for the generation of biogas.

#### 2.0 SALIENT FEATURES OF PROJECT

The Salient features of the project are provided below:

Total Project Cost:

~Rs.21 Crores

· Land area:

5400 sq.m (for Biogas Facility) and 2.72 acres in total

· MSW processing capacity

**60 TPD** 

#### 3.0 SITE LOCATION & DESCRIPTION

#### 4.0 PROJECT UTILITIES/AMENITIES

The proposed integrated waste management facility will have a capacity to process 60 TPD of MSW to generate about 1800 kg of Biogas and 6 MT of organic manure per day.

Water

The Water Requirement for the Biogas Plant Facility will be fulfilled from a nearby ponds/lakes. Since the facility do not have any discharge, so it will have minimal impact on the water body.

#### Electricity

The Electricity requirement will be fulfilled primarily by the town authority. In the long run, the biogas facility will have provision to generate electricity from the biogas produced and will not require any external supply and will be operating self-sufficiently..

#### 5.0 ENVIRONMENTAL SETTING OF THE STUDY AREA

The baseline environmental status was assessed based on primary and secondary data collected through on-site field observations and obtained from other regulatory agencies. The following environmental components were focused at during this study:

Air Environment (Meteorology, Ambient Air Quality, Noise Levels, Traffic Pattern, etc.)

Water Environment (Quality and Quantity of Surface and Groundwater sources)

Land Environment (Geology, Hydrogeology, Landuse, Solid Waste generation and characteristics)

Ecological Environment (Terrestrial and Aquatic Flora & Fauna)

Socio-Economic Environment (Demographic profile, Occupational structure,

## Educational status, Literacy status, etc.)

The baseline status collated from analysis of secondary and primary data is summarized in the Table E-1 below.

Table E-1: Baseline Environmental Status

Attribute	Baseline status
Meteorology	A meteorological station was set up on site. The minimum temperature recorded was 8 °C and maximum temperature was found to be 45 °C annually. The average yearly rainfall is about 1480 m. m. and the average humidity is about 75%
Ambient Air Quality	The air quality of the municipality area is similar to other urban centers of the North 24 Parganas district. The overall air quality observed in September 2016 NO2; 49.68 Microgram per meter cube PM 10: 49.22 Microgram per meter cube SO2: 6.72 Microgram per meter cube.
Noise Levels	Noise monitoring was carried out at five locations. The results of the monitoring program indicated that both the daytime and night time levels of noise exceed NAAQSRN at all the five locations monitored.
Water Quality	The following table is a fir representation of long term water quality of the North 24 Parganas dSurface water samples on analysis and comparison with CPCB class "C" water showed that DO of the samples is good and ranges form 3.8 to 4.1 whereas BOD is high in comparison to maximum 3 mg/l. Surface water samples also showed the presence of total Coliform and faecal Coliform indicating organic contamination.

	C1	Acceptable lin	nit (in mg/L or ppm)
	Chemical	WHO	BIS
	Arsenic (As)	0.01	0.01/0.05#
	Fluoride (F <sup>-</sup> )	1.5	1.0/1.5#
	Chloride (Cl <sup>-</sup> )	*	250/1000#
	Residual Chlorine (Res. Cl <sub>2</sub> ) (used for disinfection)	0.2	0.2/1.0#
	Iron (Fe)	*	0.3
	Phosphate (PO <sub>4</sub> <sup>3-</sup> )	*	5
	Nitrate (NO <sub>3</sub> <sup>-</sup> )	50	45
	Nitrite (NO <sub>2</sub> <sup>-</sup> )	3	3
	Ammonium (NH <sub>4</sub> <sup>+</sup> )	*	5
	Total Alkalinity	97.51	-
	(in terms of CaCO <sub>3</sub> )	-	200/600#
	pH		6.5-8.5
	-		
	*Not of health concern at levels four *Pennissible limit in absence of alter		T.
Soil Quality	in the region.  The town is situated on the flat of the type of soil is alluvial. The dislowest part of the town is not most is tropical by nature. The average the average humidity is about 75 45° Celsius, while the lowest is about 75 and 15° Celsius.	fference of altitude than three few yearly rainfall %. The highest	ide of the highest and the ct. The climatic character is about 1480 m. m. and temperature often attain
Biological Environment	No protected or reserve forest far project site.  The main water body of the area project site. The project site does ecological sensitive zone. No the species are known to exist in and	flowing within not come within reatened or end	10 km from the propose n an existing or propose
Socio-economy	The complete study area falls used Cluster Municipality. Literacy range Ashoknagar-Kalyangarh in centrumber of people are found to be activity like Government/Private	ate is 89.98% for sus 2001. In the engaged as "other	or Habra and 91.99% for the study area maximum ther workers" in econom

## 6.0 ENVIRONMENTAL IMPACT ASSESSMENT & ENVIRONMENTAL MANAGEMENT PLAN

Environmental impact due to the construction and operation stages of the project was predicted quantitatively. Impacts were also evaluated qualitatively using engineering judgment and best management practices.

Adequate environmental management measures will be incorporated during the entire planning, construction and operation stages of the project to minimize the adverse environmental impacts and assure sustainable development of the area.

The impacts during the construction phase will be temporary in nature. This summary details the pollution sources and mitigation measures proposed for the project.

#### 6.1 AIR ENVIRONMENT

During the construction phase, operation of construction equipments and vehicles will be the main sources of pollution. A dust control plan will be implemented and regular maintenance of vehicles and equipment will be carried out.

During the operation phase, the main sources of pollution shall be odor emissions from waste handling and processing and emissions due to vehicular movement. Adequate mitigation measures shall be implemented.

#### 6.2 Noise Environment

During the construction phase, adequate mitigative measures such as controlled time of construction, job rotation etc. will be implemented.

During the operation phase, the sources of noise emissions shall be equipments such as shredders, generator etc and vehicular movement. Noise enclosures shall be provided wherever possible and workers shall be provided with ear plugs.

#### 6.3 WATER ENVIRONMENT

The leftover sludge from the Biogas Plant will be directed to Sludge tanks specially designed to rest and convert the unprocessed organic waste to organic manure.

#### 6.4 LAND ENVIRONMENT

During operation phase of the project, the recyclables from waste segregation system will be sold to suitable agencies. The organic waste shall be processed to Biogas and organic manures and sold to prospective customers. The remaining part of the MSW which can neither be processed nor sold as recyclables will be sent to the landfill facility.

#### 6.5 ECOLOGICAL ENVIRONMENT

There is no ecologically sensitive area within a 10 km radial distance of the project site. No wildlife sanctuary or national park is present within the study area. A peripheral greenbelt will be provided.

#### 6.6 SOCIO ECONOMIC ENVIRONMENT

The proposed project will lead to employment generation and will have a positive impact on the socio economic environment. Preference to local population shall be given and adequate mitigation measures will be ensured to reduce odor emissions and disease vectors from proposed site.

#### 7.0 ENVIRONMENTAL MANAGEMENT SYSTEM

For the effective implementation of the EMP, an Environmental Management System (EMS) will be established at the proposed project. The EMS will include the following:

- 1. An Environmental Management cell
- 2. Environmental Monitoring Program
- 3. Personnel Training
- 4. Regular Environmental Audits and Corrective Action
- Documentation Standard operating procedures Environmental Management Plans and other records.

#### **Environmental Monitoring**

Solid waste sites are prone to causing environmental degradation of all the possible elements including water, air, soil, groundwater besides spreading disease vectors like fly, mosquitos, and pigs. Setting up facilities like these needs to focus on minimizing the environmental impact on the area so that the eco system and the human residents do not have any impact on the living conditions. Therefore a careful monitoring protocol needs to be set up with the minimum of the following components embedded:

- 1. Regular (monthly) testing of water quality in the adjacent water bodies
- 2. Regular (weekly) testing of water samples leaving the site
- 3. Random (one a quarter) testing of the solid waste for presence of toxins

- 4. Continuous air quality measurement
- 5. Once a year testing of the groundwater quality
- 6. Monitor any fire causing activities in the area.

The parameters to be tester in surface water are:

- BOD
- COD
- pH
- Ammonia
- Phosphorus
- Cyanides
- Sulfur

The parameters to be tested in the groundwater are:

- Nitrates
- Nitrites
- pH
- COD
- Dioxins

The parameters to be tested in air are:

- Pm10
- SOx
- NOx
- CO

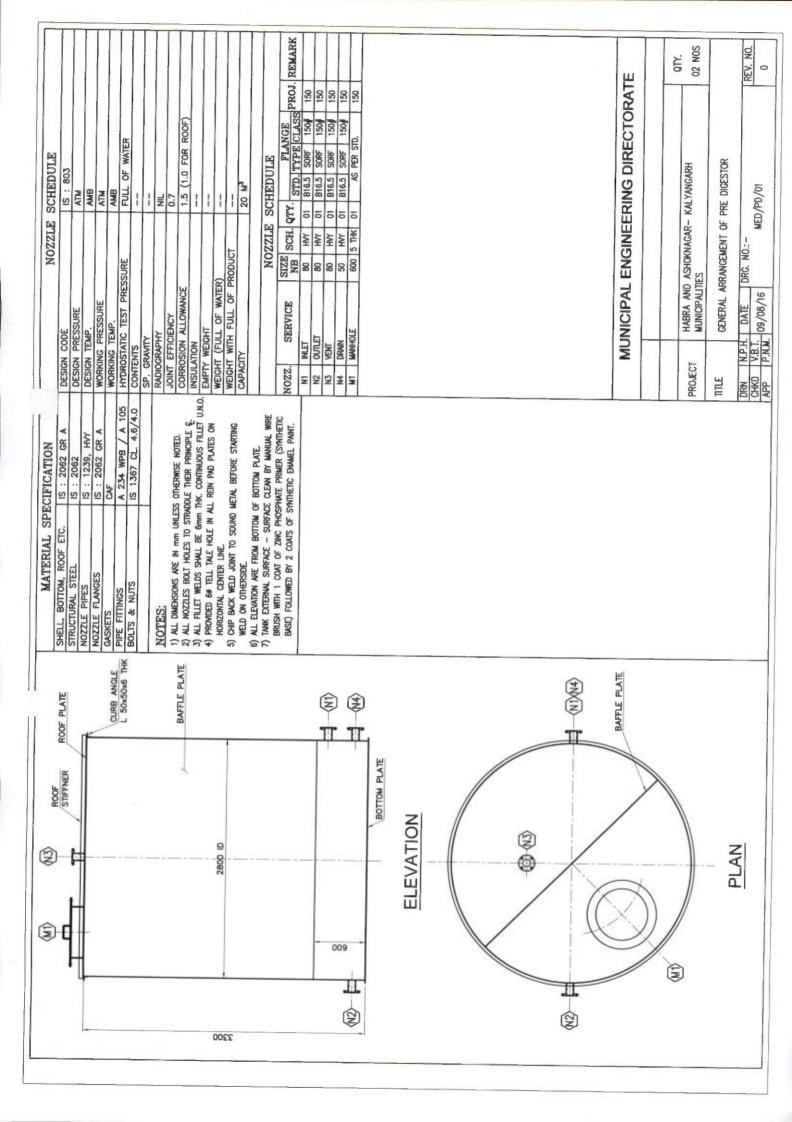
The parameters to be tested in the random solid waste sampling are:

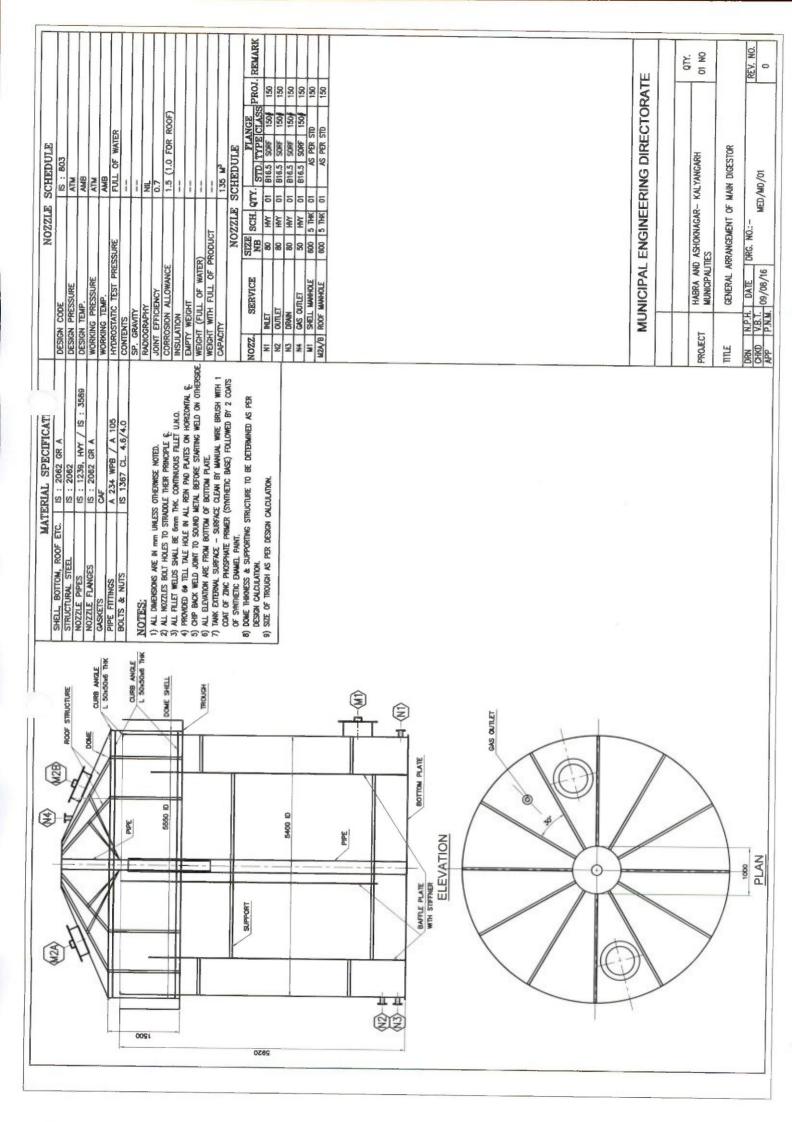
- BTEX (Benzene, Toluene, Ethyle-benzene and Toluene)
- Pesticides
- Toxicity

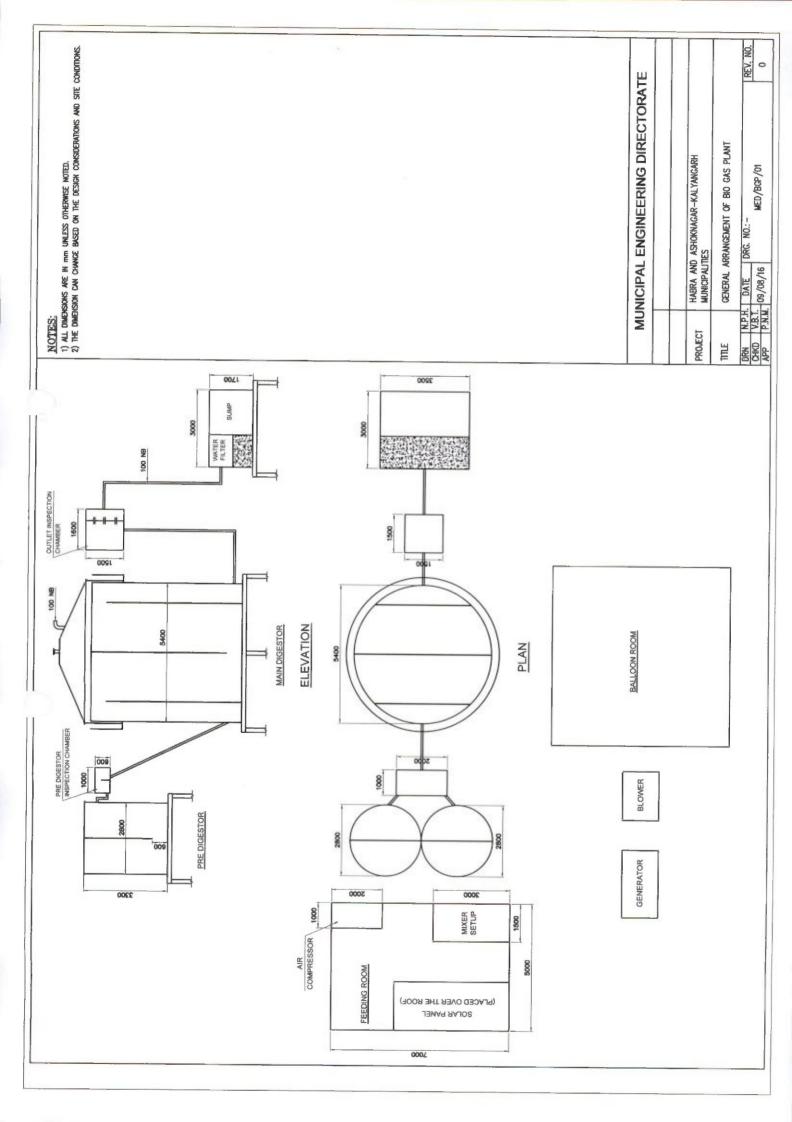
The data collected should be carefully maintained and any trend should be investigated. Any abnormal data should be investigated and cause mitigated.

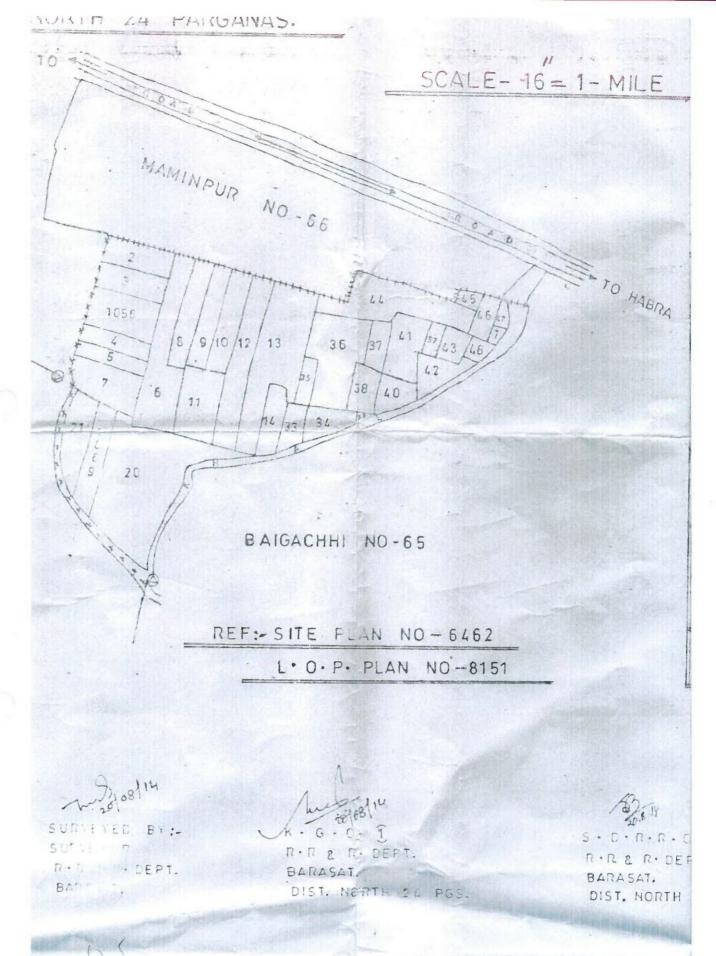
#### 8.0 CONCLUSION

All possible environment aspects have been adequately assessed and necessary control measures have been formulated to meet statutory requirements. Thus implementing this project will not have any appreciable negative impacts. Moreover, the landfill area requirement at Habra Cluster and other landfill sites will progressively reduce significantly as the solid waste will be converted to stable form (inerts) before being sent for disposal at landfill site. This would save upon the future requirements of area for land filling. Biogas generation would be an added advantage. Plastic to fuel plant facility will add to the future revenue as well.









140m 0/c-(n.n) n.n. n. DEPT.

BARASAT. DIST. NORTH 24 PARGANAS.

A · I

BALA

DIST.

#### Government of West Bengal Refugee Relief & Rehabilitation Department 16A. Brabourne Road, Kolketa-700001.

Ho. 50-Rehab-II/94-5/2014

Dated: 14.1.16.

From : The Commissioner-in-Department to the Govt, of West Bengal.

: The Assistant Secretary Ter Land and Land Reforms Deptt.. Covt. of West Sangal, Nabanna, 325, Sarat Chatteries Road. Howre -711102.

Sub: Inter Departmental transfer of lan for setting up a modern dumping ground for use of Mabra, Gobardangs and Ashoknagar-Kalvangarh Municipalities.

With respect to the above noted subject the undersigned is directed to state that the following schedule of land measuring 15.92 acre is hereby reliaquished to the L & LR Deptt. for its resumption and subsequent transfer in favour of the Municipal Affairs Deptt, for the purpose of setting up of a modern dumping ground for the use of three municipalities, nemely Habra, Goberdanga and Ashoknagar-Kalyangarh Municipalities.

#### Schedule of Land.

- \* Mouza ; Baigachni
- \* J.L.No.: 65
- r Ashoknagar
- . Worth 24-Parganas.
- \* G.A.Plot Nog :

Entire plot Nos. 35, 36, 37, 44, 45, 1056, 1057. Portion of Plot Nos. 12, 13, 14, 20, 21, 33, 34, 38, 40, 41, 46, 49, 1069.

A copy of the site plan is enclosed herewith.

Enclos As stated.

sd/- B.C.Barman

Commissioner-in-Department.

## No.50/1(9)-Rehab-II dt.14.1.16.

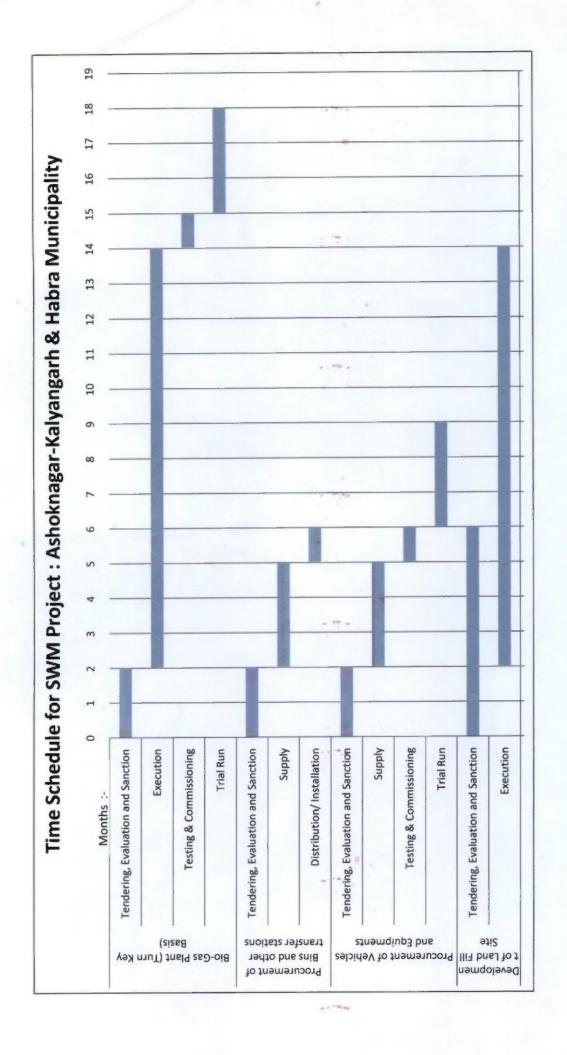
Copy forwarded for information and necessary action to :-

- The D.R.R.C., W.B., R.R.Directorate, V.T.I.Building. B/7, Rajarhat Action Area-III, Kolkata-700160.
- 2. The ADM(RR), North ? 4-Pgs.P.O.Barasat, Dist.North 24-Parganas.
- The Joint Secretary, Municipal Affairs Deptt., Govt.of W.B., 3. Writers' Buildings, Kolkata-700001.

The Chairmans, Ashoknagar Kalyangarh Municipality. 4

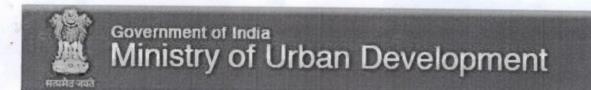
- The Chairman, Habra Municipality. 5.
- The Chairman. Gobardanga Municipality. 6.
- The P.S. to the MIC, RRSR Deptt., Writers' Buildings, Kol-1. 7.
- The P.S. to the MIC. Food & Supplies Deptt., Covt. of West Beng 8. Khadya Bhavan, 11/A, Mirza Ghalib St., Kolkata-700087.
- 9. Office copy.

Commissioner-in-Dep





## **Government of India**



## Guidelines for

## **Swachh Bharat Mission (SBM)**



December 2014



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#### 1. Introduction

- 1.1. According to Census 2011, India's urban population is 377 million or 31% of the total population. These numbers are expected to increase to 600 million by 2031. The Census 2011 also showed that in 4,041 statutory towns, close to eight million households do not have access to toilets and defecate in the open (7.90 million). Weak sanitation has significant health costs and untreated sewage from cities is the single biggest source of water resource pollution in India. This indicates both the scale of the challenge ahead of the Indian cities and the huge costs incurred from not addressing them.
- 1.2. The Swachh Bharat Mission (SBM) emanates from the vision of the Government articulated in the address of The President of India in his address to the Joint Session of Parliament on 9th June 2014:

"We must not tolerate the indignity of homes without toilets and public spaces littered with garbage. For ensuring hygiene, waste management and sanitation across the nation, a "Swachh Bharat Mission" will be launched. This will be our tribute to Mahatma Gandhi on his 150<sup>th</sup> birth anniversary to be celebrated in the year 2019"

SBM is being implemented by the Ministry of Urban Development (M/o UD) and by the Ministry of Drinking Water and Sanitation (M/o DWS) for urban and rural areas respectively. These guidelines are for the implementation of Swachh Bharat Mission (Urban).

## 2. Swachh Bharat Mission (SBM) Urban Overview

## 2.1. Mission Objectives

- 2.1.1. Elimination of open defecation
- 2.1.2. Eradication of Manual Scavenging
- 2.1.3. Modern and Scientific Municipal Solid Waste Management
- 2.1.4. To effect behavioral change regarding healthy sanitation practices
- 2.1.5. Generate awareness about sanitation and its linkage with public health
- 2.1.6. Capacity Augmentation for ULB's
- 2.1.7. To create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)



#### 2.2. Duration of the mission

The Mission will be in force till 2<sup>nd</sup> October 2019

#### 2.3. Mission components

The Mission has the following components:

- 2.3.1. Household toilets, including conversion of insanitary latrines into pour-flush latrines:
- 2.3.2. Community toilets
- 2.3.3. Public toilets
- 2.3.4. Solid waste management
- 2.3.5. IEC & Public Awareness
- 2.3.6. Capacity building and Administrative & Office Expenses (A&OE)

By Public Toilets, it is implied that these are to be provided for the floating population / general public in places such as markets, train stations, tourist places, near office complexes, or other public areas where there are considerable number of people passing by.

By Community toilets, it is implied that a shared facility provided by and for a group of residents or an entire settlement. Community toilet blocks are used primarily in low-income and/or informal settlements / slums, where space and/or land are constraints in providing a household toilet. These are for a more or less fixed user group.

## 2.4. Mission Coverage: Cities and target population

2.4.1. All Statutory towns will be covered under the Mission. Definition of statutory towns is at **Annexure I**.

## 2.5. Mission Strategy

- 2.5.1. Comprehensive Sanitation Planning, which includes
- (a) City Level Sanitation Plans
- (b) State Sanitation Concept As per Annexure IV
- (c) Sate Sanitation Strategy
- 2.5.2. Behavioral Change Strategy and IEC
- 2.5.3. Enabling Environment for Private sector participation
- 2.5.4. Capacity Building



#### 2.5.5. Special focus groups: The State Governments shall pursue the following:

- i. All manual scavengers in urban areas are identified, insanitary toilets linked to their employment are upgraded to sanitary toilets, and that the manual scavengers are adequately rehabilitated.
- ii. In their efforts to streamline and formalize SWM systems it shall be the endeavor of ULBs that the informal sector workers in waste management (rag pickers) are given priority to upgrade their work conditions and are enumerated and integrated into the formal system of SWM in cities.
- iii. All temporary accommodation for migrants and the homeless in urban areas have adequate provision for toilets either on the premises or linked to a public / community toilet.
- iv. Mandating that construction labour in urban areas have access to temporary toilets at all sites in urban areas, buildings, parks and roads where construction / maintenance work is taking place or where construction labour is temporarily housed.
- v. Priority shall be accorded pro-actively to cover households with vulnerable sections such as pensioners, girl children, pregnant and lactating mothers.

### 2.6. Mission Outlay

The estimated cost of implementation of SBM (Urban) based on unit and per capita costs for its various components is Rs. 62,009 Crore. The Government of India share as per approved funding pattern amounts to Rs. 14,623 Crore. In addition, a minimum additional amount equivalent to 25% of GoI funding, amounting to Rs. 4,874 Crore shall be contributed by the States as State/ULB share. The balance funds is proposed to be generated through various other sources of fund which are, but not limited to:

- a. Private Sector Participation
- b. Additional Resources from State Government/ULB
- c. Beneficiary Share
- d. User Charges
- e. Land Leveraging
- f. Innovative revenue streams
- g. Swachh Bharat Kosh
- h. Corporate Social Responsibility
- i. Market Borrowing
- i. External Assistance





### 3. Concept Sanitation Strategy:

It is understood that without a proper **city sanitation plan** and resulting **state sanitation strategy**, as indicated in National Urban sanitation policy-2008, comprehensive planning cannot be achieved to attain the objectives of Swachh Bharat Mission. However, both the activities require time and wide consultation at various levels including citizen engagements. It is also understood that although many states and cities have prepared these plans and strategy, many more have not done so.

In order to give a quick start to the Swachh Bharat Mission, it is, therefore proposed that all states may submit a **brief concept Note on state sanitation strategy**, as given in the **AnnexurelV** of these guidelines as a part of there initial proposal, in order to claim their first installment for individual household toilets, IEC and Capacity Building as well as the revolving fund for other components.

The concept note and proposal shall be submitted online to MoUD by state governments by 30 January 2015.

The states should however, simultaneously start preparing City sanitation plans for each city and State Sanitation strategy as per National Urban sanitation Policy 2008 as these will be required before any further release can be made to the states.

## 4. SBM (Urban) Component -I: Household toilets

- 4.1. SBM (Urban) aims to ensure that
  - a) No households engage in the practice of open defecation,
  - b) No new insanitary toilets are constructed during the mission period and
  - Pit latrines are converted to sanitary latrines.

The Target Group for construction of household units of Toilets, thus, is:

- (i) 80% of urban households engaging in open defecation
- (ii) All households with insanitary latrines
- (iii) All households with single-pit latrines

These will be targeted under this component for the construction of household toilets or individual household latrines during the mission period. The remaining 20% of households practicing open defecation are assumed to be catered by community toilets due to constraints of space.

4.2. Household toilets constructed under SBM (Urban) will have two main structures – the toilet *superstructure* (including the pan and water closet), and the

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substructure (either an on-site treatment system, or a connection to existing underground sewerage system).

- 4.2.1. Whenever a sewerage system is available within 30 metres from the proposed household toilet, only the toilet superstructure may be constructed and connected to the existing sewerage system. ULBs must facilitate these connections for household toilets under SBM (Urban), wherever applicable and economical.
- 4.2.2. In the event that a sewerage system is not available within 30 meters from the proposed household toilet, in addition to the construction of the toilet superstructure, an on-site treatment system (such as twin pits, septic tanks, bio-digesters, or bio-tanks) should also be constructed for the collection, treatment and/or disposal off sewage at, or near the point of generation.
- 4.2.3. ULBs should ensure that all household toilets being constructed under SBM are built in tandem with water supply arrangements in ULBs. Beneficiary households will be responsible for the operation and maintenance of the household toilets. Suggested technical specifications, technologies and tentative cost of household toilets are available at *Annexure II*
- 4.3. For this component, **beneficiary** shall mean any household that does not have access to an individual household toilet or has an insanitary toilet (dry/ bahou and single pit latrine). No other criteria is to be applied.
- 4.3.1. Selection of Beneficiary Household shall be as per the strategy adopted by ULB under the guidance of state government. However, the following guiding principals may be followed:
- (i) Initially, a campaign to create awareness may motivate beneficiaries to come forward on their own. This should be taken at the ULB level and followed up by accepting a simple application and undertaking, to be verified within 7 days and approved at ULB level.
- (ii) ULBs are expected to carry out a house-to-house survey. In so doing they shall also take into consideration Census 2011 data or any recent survey available to them. This baseline data shall be put in public domain by 15.02.2015.
- (iii) Any Claims and objections received shall be addressed in a transparent manner and continuous modifications can made in the baseline data.
- (iv) Based on this house to house survey, all households practicing open defecation shall be identified and ULB's need to approve either a Household toilet or plan for community toilets for each of such identified household/group of household.



- 4.3.2. Beneficiary households will be targeted under this scheme irrespective of whether they live in authorized/unauthorized colonies or notified / non-notified slums. Under SBM (Urban), tenure security issues are to be de-linked with benefits.
- 4.3.3. The states and ULB's must ensure that the maximum number of beneficiaries from individual households toilets will be normally limited to the numbers indicated in the Census of India 2011 for each town.
- 4.4. Central government incentive for the construction of household toilets will be Rs. 4,000 per household toilet for each identified beneficiary household.
- 4.4.1. 50% of the Central Government incentive (Rs. 2,000/-) will be released to the identified beneficiary household by the ULB as 1<sup>st</sup> installment on approval by the ULB along with share of the state government. There is no bar on releasing any extra funds at any stage using additional resources generated/provided by state government/ ULB.
- 4.4.2. The ULB shall verify each application before releasing any incentive. Verification of the application should be completed within 7 working days of its submission of application by the beneficiary.
- 4.4.3. The remaining 50% of Central Government incentive as 2<sup>nd</sup> installment should be released to the identified beneficiary household along with the State Government's incentives upon verification of physical progress of construction of the household toilet. The actual process of verification will be as per the directions of the respective State Government.
- 4.4.4. Final Verification of the construction of the household toilet should be supported by location-based technologies, wherein self-attested geo-tagged photographs of the construction, along with the applicant are taken out. These photographs must be uploaded to the SBM (Urban) MIS and be monitored by the ULBs and the States.
- 4.4.5. All financial incentives (government and /or private) for this component will be deposited directly (by electronic clearing service) into the bank accounts of the beneficiary households (including accounts opened under the *Pradhan Mantri Jan Dhan Yojana*). No cash/cheque disbursals shall take place.

The ULBs should ensure that financial incentives to beneficiary households are transferred in a timely and hassle-free manner. The State government should evolve standard norms for this throughout the state and ensure the monitoring of its implementation.

## 5. SBM (Urban) Component II: Community toilets

- 5.1. Under SBM (Urban), it is estimated that about 20% of the urban households in cities, who are currently practicing open defecation are likely to use community toilets as a solution due to land and space constraints in constructing individual household latrine.
- 5.2. Community toilet blocks will consist of a given number of toilet seats, as per requirements, toilet superstructure including the pan and water closet, and a substructure (either an on-site treatment system, or a connection to underground sewerage/septage system) shared by all the toilet seats and facilities for hand wash.
  - 5.2.1. Care should be taken to ensure that these facilities have adequate provision for separate toilets and bathing facilities for men, women and facilities for the disabled (e.g. ramp provision, braille signage, etc.).
  - 5.2.2. The norms for connection of the superstructure to an on-site system or connection to an underground sewerage system as defined in paragraphs 4.2.1 and 4.2.2 above will apply here.
  - 5.2.3. ULBs should ensure that all community toilets being constructed under SBM (Urban) are built in tandem with water supply arrangements in ULBs. Suggested technical specifications, technologies and tentative cost of community toilets are available at *Annexure II*.
- 5.3. For this component, *beneficiaries* shall be groups of households ("beneficiary household group") in urban areas whose members practice open defecation and who do not have access to household toilet, and for whom the construction of individual household toilets is not feasible. Beneficiary household groups under this component of SBM (Urban) shall be identified by the procedure as designed by the ULB. This may be application based or survey based, with or without participation of community based organisations. Involvement of civil society organisations is to be encouraged. NGO's, Area, Ward or Mohalla Sabha's may be used for this purpose. Beneficiary household groups will be targeted under this scheme irrespective of whether they live in authorized/unauthorized colonies or notified / non-notified slums. Under SBM (Urban), tenure security issues are to be de-linked with benefits.

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- 5.4. Once a sufficient number of households are identified as a group, the ULB shall identify suitable piece of land adjoining their houses/dwelling and design the toilet block. Efforts should be made to look into all possible sources of revenue generation by leveraging land ,use of rooftop or any other means.
- 5.5. Central government incentive for the construction of community toilets will be in the form of 40% Grant/VGF, for each community toilet block constructed. The remaining funds have to be generated as indicated in para 2.6 above.
- 5.6. Projects will be prepared and sanctioned by ULBs. In the entire project approval and procurement process, all provisions and procedures as prescribed by respective State Governments for ULBs must be followed in their entirety. The entire approval procedure except for release of Central funds will end at the ULB level. To this end the States are required to empower the ULBs if not already done so. This includes the delegation of powers to allot land (for this purpose) to ULB's and mechanisms to leverage this land to make the Community Toilet a viable project.
- 5.7. All community toilets constructed under SBM must have a minimum 5 year maintenance contract.
- 5.8. States will contribute a minimum of 25% funds towards community toilet projects to match 75% Central Share. (10% in the case of North East States and special category states).

## 6. SBM (Urban) Component -III: Public Toilets

- 6.1. Under SBM (Urban), States and ULBs will ensure that a sufficient number of public toilets are constructed in each city. All prominent places within the city attracting floating population should be covered.
- 6.2. Care should be taken to ensure that these facilities have adequate provision for men, women and facilities for the disabled (e.g. ramp provision, braille signage, etc.) wherever necessary. Suggested technical specifications, technologies and tentative cost of public toilets are available at **Annexure II**.
- 6.3. ULBs should ensure that all Public Toilets being constructed under SBM (Urban) are built in tandem with water supply arrangements in ULBs.
- 6.4. There will be no Central Government incentive support for the construction of public toilets under SBM (Urban). States and ULBs are encouraged to identify land for public toilets, and leverage this land and advertisements to encourage the private

sector to construct and manage public toilets through a PPP agreement. Additional funding support by any means other than Gol grant can be used for public toilets.

- 6.5. The Projects will be prepared, sanctioned and implemented by ULBs. In the entire project approval and procurement process, all provisions and procedures as prescribed by respective State Governments for ULBs must be followed in their entirety. The entire approval procedure should end at the ULB level. To this end the States are required to empower the ULBs if not already done so. This includes the delegation of powers to allot land (for this purpose) to ULB's and mechanisms to leverage this land to make the Public Toilet a viable project.
- 6.6. All Public Toilets constructed under SBM must have a minimum 5 year maintenance contract.

## 7. SBM (Urban) Component IV: Solid Waste Management

- 7.1. Municipal Solid Waste Management (MSWM) refers to a systematic process that comprises of waste segregation and storage at source, primary collection, secondary storage, transportation, secondary segregation, resource recovery, processing, treatment, and final disposal of solid waste. The Manual on Municipal Solid Waste Management, 2000 published by M/o UD and revised from time-to-time, may be referenced for DPR formulation and implementation.
- 7.2. ULB's are to prepare DPR for Solid waste management of their city in consultation with state governments. Smaller cities can form clusters to become viable entities to attract private investment. 100% Cost reimbursement for preparing the DPR shall be done by GoI as per unit cost and norms set up by NARC.
- 7.3. State governments may handhold ULB's in quickly preparing DPR's for SWM by empanelling /shortlisting /identifying private or government agencies for the same.
- 7.4. The DPR's should be bankable, having a viable financial model. These will be prepared emanating from the needs identified in the City Sanitation Plan. DPRs should be aligned with Govt. of India's goals outlined in the NUSP 2008, SWM rules, advisories, CPHEEO manuals (including cost-recovery mechanisms), O&M practices and Service-level Benchmark advisories released by M/o UD from time to time. Street Sweeping and litter control interventions will be part of DPR which is essential for a clean city.

- 7.5. In order to promote projects of waste to energy, it is clarified that the central government Grant / VGF may also be used for such projects, either upfront or as generation based incentive for power generated for a given period of time.
- 7.6. The State High Powered Committee (HPC) will authorize institutes of national repute for appraisal of DPRs for the technical and economic appraisal of DPRs for projects recommended by ULBs. No appraisal will be done by MoUD. The cost of DPR appraisal by these institutes shall be an admissible component under administrative costs, subject to norms as approved by MoUD.
- 7.7. The performance and quality of appraisal by these identified and authorized institutes will be evaluated and monitored by HPEC as well as NARC and corrective actions taken wherever necessary.
- 7.8. The State Level high power committee will approve the DPR as well as the financial model of solid waste management.
- 7.9. The implementation of SWM projects will be as per directions of State Level High Power Committee.
- 7.10. Central government incentive for the SWM projects will be in the form of a maximum of 20% Grant / VGF for each project. The remaining funds have to be generated as indicated in para 2.6 above.
  - 7.10.1. While considering projects under MSWM it will be ensured that there is no duplication in terms of funding under any other scheme or programme.
  - 7.10.2. Detailed technical and financial appraisal of the DPRs will be carried out in the manner prescribed in paragraph 10.5.4. O&M arrangements for the project shall necessarily be an integral part of the project in the DPR.
  - 7.10.3. SWM projects will be sanctioned by the State level HPC which shall include a representative of the MoUD. In the entire project approval and procurement process, all provisions and procedures as prescribed by respective State Governments must be followed in their entirety. The entire approval procedure for MSW projects except for release of Central funds will end at the State Level.
  - 7.10.4. The States shall be free to choose the technology for SWM projects, toilets and street sweeping. The Ministry of Urban Development shall, from time to time, bring to the notice of the States, through advisories and manuals, and other consultative mechanisms, various options available in these fields.

7.10.5. States will contribute a minimum of 25% funds for SWM projects to match 75% Central Share.(10% in the case of North East States and special category states).

## 8. SBM (Urban) Component -V: IEC & Public Awareness

- 8.1. A key strategy under SBM (Urban) is behavior change communication to ensure that sanitation as an issue is mainstreamed with the general public at large and should cover issues of open defecation, prevention of manual scavenging, hygiene practices, proper use and maintenance of toilet facilities (household, community or otherwise), etc., and its related health and environmental consequences. Communication material for behavior change shall be designed in consultation with the M/o Information and Broadcasting, M/o Health & Family Welfare, and should be in sync with the material being used under SBM (Rural).
- 8.2. A total of **15%** of the total central allocation will be earmarked for this component. Of this, **12%** will be earmarked for States to undertake massive public awareness campaigns on sanitation and establishing its link to public health, hygiene and the environment through various means including radio, social media, documentaries, plays, workshops, etc. The remaining **3%** will be earmarked for the MoUD to draw a national media campaign and developing standard campaign tools for effective awareness and communication on sanitation.
- 8.3. Expenditure on Newspaper and TV is not an admissible item under this component for the state government or for the ULB's as this is taken care by government of India ministries and organisations.
- 8.4. States shall prepare an annual action plan, with details of State funding commitment, for Public Awareness & IEC and State HPC shall approve it. At least 50% of the IEC fund in each annual plan, as approved by State HPC, must go to the ULB's for IEC activities at the grass root level.
- 8.5. HPEC at State level shall be the competent authority to authorize and delegate administrative powers for use of the state level funds within the approved plan. ULB's shall be competent to spend the minimum 50% part of the ULB level funds, as per approved plan.
- 8.6. Under no circumstance shall this fund be utilized for purchase of vehicles, construction and maintenance of buildings, creation of posts and payment of salary, and purchase of furniture and fixtures.

States will contribute a minimum of 25% funds towards IEC & Public awareness to match 75% Central Share (10% in the case of North East States and special category states) in each annual plan.

# 9. SBM (Urban) Component VI: Capacity Building and Administrative & Office Expenses (A&OE)

- 9.1. 3% of the total Central Government allocation under the mission will be earmarked for capacity building, administrative and office expenses of States and ULBs.
- 9.2. **2%** of the total Central Government allocation under the mission will be utilized at MoUD level for capacity building, convening national and regional workshops, various awards and best practice recognition, programme research, studies, international cooperation for capacity building and technology development, A&OE and various eligible purposes in consultation with the Integrated Finance Division (IFD) of the M/o UD.
- 9.3. States shall propose extensive capacity building activities to be implemented in a mission-mode manner, which will enable the progressive achievement of objectives of SBM (Urban) in a time-bound manner. These will be specified in the comprehensive annual action plan prepared by each state. This will be approved by State Level High Power Committee after sharing and considering suggestions from MoUD. At least 50% of this fund, in each annual plan, as approved by State HPC, must go to the ULB's for activities at the ULB level.
- 9.4. HPEC at State level shall be the competent authority to authorize and delegate administrative powers for use of these funds. ULB's shall be competent to use the minimum 50% fund, as per approved plan, passed on to them.
- 9.5. States will be encouraged to use other available capacity building funds to dovetail or integrate capacity building activities of ULB's.
- 9.6. States and ULBs should identify relevant officials (both senior level officials and field-level functionaries) for training and draw up a calendar of training for them. It will be the responsibility of the State Mission Director to ensure that identified officials undergo adequate capacity building / training to ensure the success of SBM (Urban) in the state. Additionally, states should also identify relevant officials / persons capable of spreading the training on sanitation under SBM (Urban) as "master trainers" who can attend central government training on SBM (Urban) and then organize subsequent training to diffuse the message of SBM (Urban) in the states.

- 9.7. All support structures for implementing the mission at the state and ULB levels defined in the Mission Management Structure (section 11 of the SBM (Urban) guidelines), *i.e.*, the Programme Management Units (PMUs) at the State level, the Programme Implementation Units (PIUs) at the city level, and Independent Project Review & Monitoring Agencies (IPRMA) etc., engaged on an outsourced basis, shall be funded under this head.
- 9.8. Under no circumstance shall this fund be utilized for purchase of vehicles, construction and maintenance of buildings, creation of posts and payment of salary, and purchase of furniture and fixtures.
- 9.9. States will contribute a minimum of 25% funds towards Capacity Building and Administrative & Office Expenses (A&OE) to match 75% Central Share.(10% in the case of North East States *and special category* states) in each annual plan.

### 10. Funding pattern and financial process

### 10.1. Funding pattern: Guiding Principals:

- a) First installment will be released to states on receipt and acceptance of proposal containing the brief concept state sanitation strategy as given in Annexure IV.
- b) For House Hold Toilets, Funds in the first installment will be released as per number of beneficiary household identified, in the concept sanitation plan, at the rate of Rs. 2000/- Central assistance.
- c) For Community Toilets and Solid Waste Management Projects, Adequate funds will be released on the proposal of the State Government for SWM and Community toilet projects. It will be ensured that funds do not remain parked with the state governments Gol share of grant / VGF may be drawn from this pool fund maintained at state level. This will be replenished on demand by states based on progress.
- d) For IEC, Capacity Building and Administrative expenditure, appropriate percentages of (a) and (b) above shall be added to the first installment.
- e) States will contribute a minimum of 25% funds towards all components to match 75% Central Share. This will be 10% in the case of North East and special category States.
- f) Subsequent installments shall be released based on utilization certificates of previous grants, physical and financial progress and other indicators as approved and desired by the National Advisory & Review Committee (NARC).



- 10.2.1. Under Swachh Bharat Mission, projects under PPP mode are encouraged, to invite private capital in urban infrastructure as well as to bring in private sector efficiency in delivery of urban services and O & M. It is also understood that in the current scenario, there may be a requirement for viability gap funding. For solid waste management, revenue streams such as Compost from organic waste, recycled construction material from C & D waste, Power from waste to energy plants can be leveraged.
- 10.2.2. All ULB's must first explore possibility to take up the projects in a PPP mode for the above reasons. Government of India funds as per prescribed funding pattern will be available for claiming VGF.
- 10.2.3. State governments can also add or generate funds for ULB's as additional incentives over and above minimum 25% share required to make the projects viable.
- 10.2.4. Release of VGF grants will be as per contractual arrangement with the private partner and as approved by state government. However, it will be ensured that funds do not remain parked with the state governments.
- 10.2.5. Adequate funds will be released on acceptance of the proposal of the State Government for SWM and Community toilet projects. ULBs will initiate project preparation and bidding as per the guidelines for community toilets and SWM.
- 10.2.6. States will release the Central Government share of VGF adding their share in conformity with the contractual requirements of the project taken up on PPP mode.
- 10.2.7. In case state government feels that a project is not suitable to be taken under PPP methodology, it may then consider the Gol share (as per funding pattern) to be treated as Grant from Gol to the ULB. It will be up to the state government and ULB to arrange for the balance resources for the project, which must be ensured at the time of approving a project.
- 10.2.8. For PPP Projects, state governments to follow their own policy and rules. No project shall be referred to Government of India.

### 10.3. Allocation of funds to States / UTs

10.3.1. The mission will be implemented with the following classification of funding to states:

S. No.	Classification	Percentage Allocation (Central Govt. funding)	Total Amount for Mission Period Rs. Crore	
i.	Project Fund based on Normative Criteria	60%	8773.80	
ii.	Performance Fund based on Performance Matrix	20%	2924.60	
iii.	Public Awareness & IEC Activities	15%*	2193.45	
iv.	Capacity Building & A&OE	3%	438.69	
V.	Research, Capacity Building & A&OE (M/o UD)	2%	292.46	

<sup>\*3%</sup> of which to be retained by M/o UD

## 10.3.2. The **Project Fund** specified in 10.3.1(i) above shall be allocated as follows:

i. The distribution of the Project fund will be as under: (Rs. in Crore.)

a.	Project Funds for States other than	80%	7019.04
	the North-East		
b.	Project Funds to North-East States	10%	877.38
C.	Flexi Funds*	10%	877.38

<sup>\*</sup>Flexi Funds in terms of the Department of Expenditure OM No. F.No.55(5)/PF.II/2011 dated 06.01.2014) will be available to states

- ii. Where ever it is required for fund allocation to be divided among States / UTs it will be done by giving :
  - A) 50% weightage to the ratio of urban population in each State / UT to the total urban population, and
  - B) 50% weightage to the ratio of number of statutory towns in each State / UT to the total number of statutory towns.

Both ratios shall use Census 2011 data. Details of distribution of Project Fund across States / UTs are at **Annexure III**.

- 10.3.3. The **Performance Grant** specified in 10.3.1(ii) above shall be kept with the SBM National Mission Directorate as Performance Grant and released as per the criteria mentioned below for rewarding performing states. The release of the performance grant shall be based on a Performance Matrix and Third Party Evaluation by the Independent Project Review & Monitoring Agency (IPRMA) on the following outcomes:
  - a. Elimination of open defecation
  - b. Conversion of insanitary latrines into pour-flush latrines
  - c. Eradication of manual scavenging
  - d. Prevention of pollution of water sources
  - e. Ensuring cleanliness and hygiene in public places
  - f. Awareness creation
  - g. Capacity building

The National Advisory & Review Committee (NARC) at the M/o UD may also design other relevant criteria for the release of these funds and shall take a final view regarding the release of this grant keeping in view the progress made and circumstances of each State. This will not be applicable in the first installment. No withholding of 20% shall be done while releasing the first installment to the states.

#### 10.4. Disbursal of funds to States / UTs and ULBs

- 10.4.1. States / UTs will submit a proposal for release of grant to the Central Government based on projections and authenticated targets with a Concept Note on State Urban Sanitation strategy in the format given in Annexure IV. This shall be submitted online to the SBM National Mission Directorate.
- 10.4.2. On acceptance of the State Government's proposal by the ministry, first installment of funds shall be disbursed to States / UTs in the following manner:
  - 50% of the project fund shall be divided among states as per the formula mentioned at 10.3.2 (see also Annexure III).
  - 12% of Project funds released above shall be released as IEC and the Public Awareness component and,

- iii. 3% of the Project funds released above shall be released or the Capacity Building and A&OE funds.
- iv. No withholding of 20% shall be done on account of performance grant, while releasing the first installment to the states.
- 10.4.3. Subsequent installments (including for Capacity Building & IEC, and the Public Awareness and A&OE) shall be released on
- (i) Submission of the Utilization Certificate for 75% of the fund released as 1<sup>st</sup> installments and,
- (ii) Satisfactory physical and financial progress as per NARC criteria.

The quantum of subsequent installments will be based on actual demands and projections of expenditure for admissible components as per funding pattern of SBM.

- 10.4.4. Release of central contribution towards Grants / VGF by States/UTs for projects shall be in a manner described in paragraph 10.1 and 10.2 above.
- 10.4.5. At the end of the 2<sup>nd</sup> and 3<sup>rd</sup> quarters of each Financial Year, the use of allocated funds by States / UTs under the mission shall be reviewed by NARC, and NARC may reallocated funds from non-performing states to performing states based on the potential to utilize funds in a given financial year.
- 10.4.6. State governments shall evolve a suitable mechanism to release funds along with state share to ULBs within 30 days of release of the central share by M/o UD. Interest at the rate specified by the M/o Finance from time-to-time shall be levied on the State for any delay in release of funds to ULBs beyond 30 days. This will be implemented by appropriate deductions from the state's next installment of fund release under the mission.

#### 10.5. Sanction of projects (DPRs)

- 10.5.1. Projects will be sanctioned by state government (HPEC) or ULBs as prescribed in these guidelines. This is specified for each component of SBM in these guidelines.
- 10.5.2. Only new projects will be considered under the Mission and it will be ensured that there is no duplication. Projects will be considered as "new" if they are not projects already sanctioned and ongoing under state and central schemes and externally-aided programmes.

- 10.5.3. Wherever Detailed Project Reports (DPRs) are to be prepared for project sanction, fund release and monitoring, the cost of DPRs for the projects under the Mission shall be reimbursed subject to norms set-up by the NARC.
- 10.5.4. The State High Powered Committee (HPC) will authorize institutes of national repute for appraisal of DPRs for the technical and economic appraisal of DPRs for projects recommended by ULBs. The cost of DPR appraisal by these institutes shall be an admissible component under administrative costs, subject to norms as approved by MoUD.
- 11. Mission Management Structure Swachh Bharat Mission (SBM)
  Urban will have a three-tier mission management structure as follows:

### 11.1 National Level

- 11.1.1. A National Advisory and Review Committee (NARC) headed by the Secretary, M/o UD, and comprising representatives of relevant line ministries will be notified by the M/o UD. NARC will meet as per the requirements, but will meet at least once in three months. The functions of NARC will be:
  - i. Overall monitoring and supervision of SBM (Urban)
  - ii. Advise the States / UTs to explore avenues for innovative resource mobilization of private financing and leveraging land for PPP in sanitation projects.
  - iii. Approve installments and release of installment of funds for states / UTs by Central Government under the mission.
  - iv. Develop and modify performance matrix and criteria for the release of performance grants to States / UTs as specified in paragraph 10.3.3.
  - v. Monitor outcomes and performance of projects sanctioned under SBM (Urban)
  - vi. NARC may delegate, as it considers appropriate, some of the functions within prescribed limits, to the National Mission Director (NMD) of the SBM National Mission Directorate to ensure speedy implementation of the mission
- vii. Any other issue which may be referred to it by the Government
- 11.1.2. The **SBM National Mission Directorate** will be headed by a National Mission Director (NMD) who will not be below the rank of Joint Secretary to the Government of India.
  - The NMD will be the overall in-charge of all activities related to SBM (Urban). NMD will be supported by a suitable team of officers at the

- National Mission Directorate and will be Member-Secretary of NARC for all matters.
- ii. The Mission Directorate shall be supported by a dedicated Project Management Unit (PMU) with 10-12 experts and support staff mainly on an outsourced basis. The PMU shall cover 4 verticals – Programme management, IEC & Media, Information Technology, and Monitoring & Evaluation.
- iii. The SBM National Mission Directorate will formulate a framework for support structure for the State Mission Directorates and issue appropriate guidelines / advisories to states from time-to-time.

### 11.2. State level

- 11.2.1. A **High Powered Committee (HPC)** under the chairpersonship of the State's Chief Secretary, and with members drawn from concerned departments (including a MoUD representative) shall be responsible for the management of SBM (Urban) at the State / UT level. The functions of the SLMRC will include:
  - Preparation, approval, and online publishing of the State Sanitation Strategy (SSS) for the respective state and City Sanitation Plan (CSP) for all cities covered under SBM (Urban), if not already done.
  - ii. Finalisation of the Concept Note on the Urban Sanitation Situation before submission to the SBM National Mission Directorate
  - iii. Empanel consultants of repute and experience for:
    - a. Preparation of DPRs under SBM
    - b. Conducting independent review and monitoring during execution of projects
  - iv. Empanel reputed Institutes like IITs, NIT's, State Technical Universities etc. for appraisal of DPRs.
  - v. Sanction projects relating to Solid Waste Management recommended by the ULBs.
  - vi. Plan for additional resource mobilization.
- vii. Plan for fund flow in the short, medium and long term
- viii. Recommend proposals for release of installments of funds for projects under the mission
- ix. Monitor outcome and O&M arrangements of projects sanctioned and completed under the mission

- x. Review the progress of Capacity Building, IEC, and Public Awareness activities under the mission and approve their annual action plan.
- xi. Address violation of norms and conditions
- xii. Ensure convergence of action for sanitation in the state and bring about inter-departmental coordination for this purpose as and when required.
- xiii. Ensure timely audits of funds released and review the "Action Taken Reports" on various Audit reports of the mission and other similar reports
- xiv. Review legal issues, if any
- xv. Take up any other matter relevant for the efficient implementation of the mission, or matters referred to it by the SBM National Mission Directorate
- 11.2.2. The **SBM State Mission Directorate** will be located within the Urban Development Department (UDD) in the State / UT.
  - The SBM State Mission Directorate will be headed by a State Mission Director (SMD) of appropriate seniority. The SMD will also function as Member-Secretary to the State Level HPC.
  - ii. The SMD will create / notify a uniform structure across the state for the planning, designing, project preparation, appraisal, sanction and implementation of sanctioned projects under the mission at the ULB level. This shall be done keeping in mind the advisories issued by the National Mission Directorate from time-to-time.
  - iii. The Mission Directorate shall be supported by a dedicated Project Management Unit (PMU) on an outsourced basis.

#### 11.3. ULB level

The SBM is envisaged as People's movement (Jana Andolan) for ensuring hygiene, waste management and sanitation across the country. It is therefore essential that in its implementation the ULBs elicit the active participation of the Ward Committees, Area Sabhas, Resident Welfare Associations, NGOs and Civil Society Groups.

### 12. Monitoring & Evaluation (M&E)

- 12.1. States / UTs will be required to send in Monthly Progress Reports (MPRs) / Quarterly Progress Reports (QPRs) in prescribed formats with regard to targets and achievements. Apart from these, the Mission Directorate may prescribe other reports that may be considered appropriate from time to time. Given the scale of the mission, a comprehensive and robust IT enabled MIS will be established for tracking of targets and achievements. States / UTs will be required to submit progress reports online once this MIS is operational.
- 12.2. Monitoring activities will include, but not be limited to, third party evaluation, impact evaluation studies, etc. The evaluation of the mission will be undertaken during the course of its implementation to effect mid-term correction and align the mission to achieve its objectives
- 12.3. A **District Level Review and Monitoring Committee (DLRMC)** will be constituted with a view to fulfill the objective of ensuring satisfactory monitoring of projects under the Chairpersonship of a Member of Parliament. Detailed guidelines for this purpose will be issued separately by the SBM National Mission Directorate.

### 13. Logo and Tag line

The Logo and Tagline for the SBM (Urban) is given in **Annexure V**. This shall be displayed prominently on all projects and literature/publications under the mission.

### Annexure I: Targets and definitions under SBM (Urban)

(Definitions reproduced from "House & Household Series Tables, Census of India 2011)

### Targets under SBM (Urban)

For the purpose of SBM (Urban), the following action will have to be taken:

S. No.	Objective	Action under SBM Census 2011 (Urban) (Targets) definition
i.		80% urban households defecating in the open to be targeted for construction of household toilets      No latrine within premises – open  No latrine within premises – open
ii.	Elimination of open defecation	20% urban households premises – open defecating in the open to be targeted for construction of community toilets
iii.		Construction of public toilets for floating population (presumed at 5% of total urban population)      Total urban population  Total urban population
iv.	Conversion of insanitary latrines	<ul> <li>100% of urban households having insanitary latrines to be targeted for construction of household toilets</li> <li>Night soil disposed into open drain</li> <li>Service latrine with night soil removed by humans</li> <li>Service latrine with night soil serviced by animals</li> </ul>
V.	Conversion of single pit latrines	60% of urban Pit latrines with slab households having Pit latrines with



S. No.	Objective	Action under SBM (Urban) (Targets)	Census 2011 definition
		pit latrines	ventilated improved pit  Pit latrines without slab / open pit
vi.	Solid Waste management	80% of the urban population to be covered by SWM services (allowing for a 2% increase year on year)	Total urban population

#### Definition of Types of latrines under Census 2011

As per the Census of India 2011, the following various types of latrine facilities were surveyed:

- Flush / pour flush latrine connected to piped sewer system: If a pour flush latrine is connected to a system of sewer pipes that collect both human excreta and waste water and removed them from the household environment
- Flush / pour flush latrine connected septic tank: If a pour flush latrine is connected to a septic tank that collects both human excreta and wastewater and removes them from the household environment
- Flush / pour flush latrine connected other system: If the pour or pour-flush latrine is connected to any system other than a piped sewer system or septic tank e.g. excreta and waste water gets flushed into the street, yard / plot, drainage ditch or any other location
- 4. <u>Pit latrines\*</u>: defecation into pits dug into the ground for reception of night soil directly without flushing.
  - a. <u>Pit latrine with slab</u>: A pit latrine with a squatting slab or platform or set firmly supported on all sides, and raised above the surrounding ground level to prevent surface water from entering the pit, and easy to clean.
  - b. <u>Pit latrine with ventilated improved pit</u>: Pit latrines with slabs that are ventilated by a pipe extending above the latrine roof and the open end of the vent pipe is covered with mesh or fly-proof net
  - c. <u>Pit latrine without slab / open pit</u>: Pit latrines without a squatting slab or platform or seat
  - \*Census 2011 does not distinguish between single pit and twin pit latrines. However for SBM single pit latrines will be considered insanitary and shall be converted. Definition of twin pit latrine see Annexure II.
- Night soil disposed into open drain: Where a latrine facility may exist, but the excreta and waste water is disposed directly into an open drain



- 6. <u>Service latrine</u>: where human excreta is collected in a bucket, or other container, or even allowed to collect in the open
  - a. With night soil removed by humans: where the human excreta is removed physically by human beings
  - b. With night soil serviced by animals: where the human excreta is removed physically by animals
- 7. No latrine within premises public latrine: Households have no latrines within the premises of the dwelling unit and use an available public latrine
- 8. <u>No latrine within premises open</u>: Households have no latrine within the premises of the dwelling unit and defecate in the open in areas such as open fields, bushes, rivers, streams, railway tracks, etc.
- 9. Insanitary latrine means a latrine which requires human excreta to be cleaned or otherwise handled manually, either in situ or an open drain or pit into which the excreta is discharged or flushed out, before the excreta fully decomposes in such manner as may be prescribed.(Chapter I Section 2(i)(e) The Prohibition of employment as manual scavengers & their Rehabilitation Act,2013)

The Census of India 2011 defines two broad kinds of urban areas as follows:

- Statutory towns are urban areas defined by administrative units that have been defined by 'statute' as urban such as municipal corporations, municipalities, cantonment boards, notified town area committees, town panchayats, or nagar palikas; and
- ii. **Census Towns**: All administrative units satisfying the following criteria: (i) it should have a minimum population of 5,000 persons; (ii) at least 75% of the male main working population should have been engaged in non-agricultural pursuits; and (iii) it should have a density of population of at least 400 persons per km<sup>2</sup> (1,000 per mile<sup>2</sup>)



### Annexure II: Technical options for toilets under SBM (Urban)

This note explains the technical options for toilets that are recommended under the Swachh Bharat Mission (SBM) Urban.

### On-Site Sanitation (OSS) vs. Underground Sewerage

Wherever a sewerage system is available within 30m from the proposed individual household, community or public toilets only the superstructure (i.e. toilets) may be constructed under SBM and connected to the existing sewerage system. No construction of treatment units such as twin pits, septic tank, bio-digester or bio- tank shall be allowed.

### Features of OSS Systems

When sewage is collected, treated and/or disposed off at, or near the point of generation, without the use of an underground sewerage system, the system is called "on-site sanitation" (OSS) system. OSS systems are sanitation facilities provided for the use of individual households, community and the floating population. There are a number of situations when an underground sewerage system may not be feasible or desirable. For example, for smaller cities where construction of sewerage infrastructure may be expensive, or those cities that are in hilly areas or in undulating terrain where it may not be practical to construct a sewer network, or even in many cities that have grown organically and where not all households are connected to the existing sewerage network.

OSS systems consists of two main structures, the toilet (superstructure, including the pan and water closet) and the treatment unit. OSS retains waste in the vicinity of the toilet either in a pit, tank or vault. The treatment ranges from a basic sanitary facility such as twin-pit latrines, to a simple type of treatment system by combining a septic tank and a soak pit, or a bio-digester toilet (aerobic and anaerobic).

The following technological options for OSS are recommended under Swachh Bharat Mission (SBM) Urban for construction of Individual Household Latrines (IHL) / household toilets, group / shared latrines, and, community and public toilets

S. No.	OSS Option	Kind of Latrines				
		IHL	Shared Latrines	Community Toilets	Public Toilets	Application
1.	Twin-pit latrines / Leach Pits	1				<ul> <li>In low- to medium- density areas, particularly peri-urban areas, where there is space to install pits and where the digested sludge can be applied to</li> </ul>



	220	Kind	of Latrines	3		
S. No.	OSS Option	IHL	Shared Latrines	Community Toilets	Public Toilets	Application
						local fields and/or gardens as a fertilizer and soil conditioner  • Where water use is in the range 30–50 liters per capita per day depending upon the characteristics of the soil or groundwater level
2.	Septic Tank System with soak pit	1	1	-	✓	<ul> <li>Septic tanks are widely used to provide partial treatment of wastewater from individual homes, household clusters or institutional buildings where there is no sewerage network.</li> <li>For soak pits to function, soil conditions must be suitable for infiltration of effluent from septic tanks</li> </ul>
3	Bio- digester toilets (Anaerobic – developed by DRDO)	~	✓	1	✓	<ul> <li>Widely used to provide 80% treatment of wastewater from IHL, household clusters or institutional buildings where there is no sewerage network.</li> <li>The effluent should be passed through a reed bed or soak pit before discharge.</li> <li>For soak pits to function, soil conditions must be suitable for infiltration of effluent from septic tanks</li> </ul>
4	Aerobic BioTank	1	1	1	1	Widely used to provide 100% treatment of

S. No.	000	Kind	Kind of Latrines			
	OSS Option	IHL	Shared Latrines	Community Toilets	Public Toilets	Application
						wastewater from IHL, clusters of houses or institutional building where there is no sewerage networks. The effluent can be directly discharged since it is completely safe;  Chlorination is followed after treatment

### Technical features and specification for toilets under SBM (Urban)

The details of technical features and specifications for toilets are given as under. The costs are simply estimates at this point of time and should be verified at the time of selection and installation of the technology.

### I. Twin-Pit Latrine

Description	It consists of superstructure (Toilet) and treatment units (two chambers). The two underground chambers (pits) are provided to hold fecal sludge. These are normally offset from the toilet and should be at least 1 meter apart. A single pipe leads from the toilet to a small diversion chamber, from which separate pipes lead to the two underground chambers. The pits should be lined with open-jointed brickwork. Each pit should be designed to hold at least 12 months accumulation of fecal sludge.  Wastewater is discharged to one chamber until it is full of fecal sludge. Discharge is then switched to the second chamber. Just before the second chamber is full of fecal sludge, the contents of the first pit are dug out. During the time of storage, digestion should ensure that it is odorless and free of pathogens.
O&M Requirements	The pits must be used alternately and the diversion chamber must be accessible so that flow can be diverted between chambers. Wastewater should never be diverted back to the first chamber before digested sludge has been removed from it.  Responsibility for O&M of the twin-pit latrine rests primarily with the householder, who needs to ensure that the pits are used in the correct sequence and are emptied at the appropriate time.



	DESIGN OF PITS UNDER DIFFERENT CONDITIONS
Normal conditions	A typical pour flush latrine with circular pits for normal conditions is shown in <b>Figure 2</b> . In rocky strata with a soil layer in between, the leach pits can be designed on the same principle as those for low subsoil water level and taking the long-term infiltrative capacity as 20 l/m2/d. However, in rocks with fissures, chalk formations, or old root channels, pollution can flow for very long distances; hence these conditions demand careful investigation and adoption of adequate pollution safeguards. Pits in

	black cotton soil should be designed taking infiltrative rate of 10 l/m²/d.
	A vertical fill (envelope) of 300 mm in width with sand, gravel or ballast of small sizes should be provided all round the pit outside the pit lining in rocky strata with fissures and in black cotton soil.
in water- logged areas	The pit top should be raised by 300 mm above the likely level of water above ground level at the time of water logging. Earth should then be filled well compacted all-round the pits up to 1.0 m distance from the pit and up to its top. The raising of the pit will necessitate the raising of latrine floor also. A typical pour flush latrine in water-logged areas is shown in <b>Figure 3</b> .
In high subsoil water level	Where the subsoil water level rises to less than 300 mm below ground level, the top of the pits should be raised by 300 mm above the likely subsoil water level and earth should be filled all round the pits and latrine floor raised as stated above. A typical pour flush latrine with leach pits in high subsoil water level is shown in Figure 4.
Where space is a constraint	Where circular pits of standard sizes cannot be constructed due to space constraints, deeper pit with small diameter (not less than 750 mm), or combined oval, square or rectangular pits divided into two equal compartments by a partition wall may be provided. In case of combined pits and the partition wall should not have holes. The partition wall should go 225 mm deeper than the pit lining and plastered on both sides with cement mortar. A typical pour flush latrine with combined pits is shown in Figure 5.

### II. Septic Tank

Description	A septic tank is a buried chamber that collects, stores and treats the wastewater under anaerobic conditions. Effluent from septic tanks should be discharged into a soak pit. A well-managed septic tank will remove about 50 to 60 % of the biological load in the wastewater
Mode of operation	Solids settle in the tank and digest anaerobically. This reduces sludge volume and enables wastewater to infiltrate into the ground without clogging the leaching system. Sludge settles in the tank and digests anaerobically over time, releasing methane and other gases.
O&M Requirements	Septage must be removed from septic tanks at least once every 2 or 3 years and transported off-site for treatment prior to disposal. Municipal utility or private contractors are required for desludging of septic tanks and to ensure safe disposal of septage at a treatment plant. However the responsibility for O&M of the septic tank itself lies with the owner of the property
Limitations	<ul> <li>Cost and space requirements for the soak pit.</li> <li>Though septic tanks are designed for receiving black water, they often receive both black and grey water. As a result, the retention time in the septic tank is insufficient and the soak pit becomes hydraulically overloaded. This means that the septic tanks need to be de-sludged regularly</li> </ul>
Specifications	<ul> <li>(a) Size options for toilet / super structure as shown in Fig. 1 <ul> <li>750 mm x 900 mm x 1900mm or</li> <li>800 mm x 1000 mm x 1900 mm</li> </ul> </li> <li>(b) Material – Brick work (as per Fig. 1) / FRP / Pre-cast Cylindrical Unit</li> <li>(c) Minimum Land requirement - 40 Sq. ft. to 50 Sq. ft. (depending upon the location of superstructure)</li> <li>(d) Soak-pit size - The seepage pit may be of any suitable shape with the least cross-sectional dimension of 0.90 m and not less than 1 m in depth below the invert level of the inlet pipe. The construction shall be of perforated brickwork</li> </ul>

(e) Recommended sizes of septic tanks for households (up to 20 users – group / shared toilets) is given in Table 2 below:

No. of users	Length (m)	Breadth (m)	Liquid depth (m) (Cleaning interval of)		
1107 07 00010			2 years	3 years	
5*	1.5	0.75	1.0	1.05	
10**	2.0	0.90	1.0	1.4	
15**	2.0	0.90	1.3	2.00	
20**	2.3	1.10	1.3	1.80	

<sup>\*-</sup> only for IHL

Note 1: The capacities are recommended on the assumption that discharge from only WC will be treated in the septic tank

Note 2: A provision of 300 mm should be made for free broad.

Note 3: The sizes of septic tank are based on certain assumption on peak discharges, as estimated in IS: 2470 (part 1) and while choosing the size of septic tank exact calculations shall be made.

## Cost (for 5 users)

- Tentative cost varies from Rs. 25,000/- to Rs. 30,000/- depending upon the construction material (toilet and septic tank).
- Pre fabricated septic tanks are available at lower cost in the market, which also may be explored to speed up the implementation.

### III. Biodigester Toilet (Developed by DRDO)

A bio-digester toilet is an anaerobic multi-compartment tank with inoculum (anaerobic bacteria) which digests organic material biologically. The details of bio-digester toilets are shown in **Figure 7**. This system converts faecal waste into usable water and gases in an eco-friendly manner.

### Description

**Advantages** 

It can be connected to the toilet or a series of toilets. The toilet can be a superstructure fixed on the bio-digester or a separate unit. Bio-digester has an inlet, an outlet and a gas pipe.

The tank has two components, namely, anaerobic microbial inoculum (seed bacteria) and specially designed fermentation tank. The tank can be made out of Stainless steel, Mild steel, FRP or concrete. Semi-treated water from bio-digester tank is needed to be further disposed into a soak pit or a reed bed arrangement for its treatment to acceptable levels of discharge.

## •

- As there is no sludge formation, there is no need for de-sludging and treatment. It is therefore more economical in the long-term as it conserves water and has minimum O&M
- Night soil degradation, occurs through microbial reaction which converts it into bio gas and odorless water.
- Technology is environmental friendly, maintenance free and efficient without depending on conventional energy sources.
- Permits use of toilet cleansing agents.
- Suitable for mobile and stationary platforms.
- Lifelong usage bio-digester tank does not need recharging, re-shifting or maintenance.
- Costs lesser than the conventional toilets.
- Easy to transport and install.

<sup>\*\*-</sup> Group household toilets

		fourth capacity of se	ptic tank			
1 I 16 - 41	Space requirement	nt is less.				
Limitations	Toilet Superstructure					
Specifications	• 750 mm • 800 mm (b) Material – Br  Bio tank  (a) Land require (b) Tank internal (c) Diagonal par (d) Tank is burie (SS316) and (e) FRP tanks of (f) Provision of (g) For 5-6 users a. Tota Whe to 1.4 b. Volu litres c. Tank	x 900 mm x 1900mi x 1900 mm x 1936 mm mm of anaerobic Common of an	200 mm x 1900 mm  ork (as per Fig. 1) / FRP/ Pre cast Cylindrical Unit  - 25 sq. ft.  ensions - 1336 mm x1036 mm x 900 mm  wall of 8mm thickness (adequately stiffened by ribs)  omm deep and anchored by 300mm long stainless olts at corners a thickness sealed outlet from the tank  acity: 700 litres (1000 mmX700 mm and 1000 mm dece is a constraint the depth of the tank can be incre  f anaerobic Compartment (30% of total capacity):  be constructed with masonry also.			
	Table 3 - Volume of bio-digester tank for various user groups:  No. of users  Size of bio-digester / bio-toilet			Remarks		
	4-8 (Single family		P / RCC material)	Individual		
	8-15 (two families		RP / RCC material)	Group / shared		
	30-50		RP / RCC material)	oroup romanou		
	100-120		6.0 m <sup>3</sup> (FRP / RCC material)			
	200-220		12.0 m³ (FRP / RCC material) Communit			
	500-600 30.0 m <sup>3</sup> (FRP / RCC material)		-			
	construction;		and Rs. 15,000 depe	ending on material of		
	Bio-digester tank ->		Material of construction			
Cost	No. of users /	Masonry	Precast	Fiber reinforced		
Estimates	Capacity	wasonry	Cylindrical Unit	plastic		
	5 to 7 users	17,100	11,600	22,000		
	(700 Litre)	11,100	11,000	22,000		
	10 to 12 users	19,000	13,600	24,000		
	(1000 Litre)*		,	,000		
	*Group / Shared toile	ts				

## IV. Bio Tank / Bio Toilets (Patented by private operators and approved by the Department of Science and Technology)

	This technology differs from that of the bio-digester toilets developed
Description	by DRDO since the process adopted is aerobic - which involves a
Description	different multi-strain of bacteria which breaks down the waste matter
	through oxidization. Bio-toilets consist of a purpose built multi-

	chambered bio-tank in which the waste is stored as shown in <b>Figure 8</b> . The movement of the waste is slowed down as the waste flows from one chamber to another by a special process in the Bio-tank such that the multi-strain bio-media present in the tank can digest the waste and convert it fully into non-toxic neutral water. This water then passes through the last chamber for disinfection. Here water is treated with Chlorine where the majority of the germs are killed. The resultant water is free from all sorts of E-coli and fecal coliforms.  The bricks and mortar Bio-tank is described in the last diagramme of Figure 8. The superstructure is made of bricks and mortar. These are
	available in both flush and non-flush models.
Advantages	<ul> <li>Aerobic bacteria are very efficient in breaking down organic waste and the waste is decomposed into water by the bacteria within 24 hours. The end products of aerobic degradation are carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O).</li> <li>The aerobic pathway also releases a substantial amount of energy.</li> <li>The Bio-toilet is available in both, portable as well as fixed models. The advantage of the portable model is that it can be shifted from one location to another as and when required, and the module can be assembled and disassembled easily.</li> <li>The Bio-toilet eliminates the need for any periodic sludge removal.</li> </ul>
Limitations	<ul> <li>The bacteria functions best in temperatures between 4 and 55 degrees centigrade</li> <li>Bio-toilets need proper bacteria inoculation periodically depending on the usage at particular sites. An in-depth understanding of the operation and use of toilets in a given area must be undertaken BEFORE choosing bio-toilets as a solution. Attention must be given to O&amp;M, especially in dense urban settlements where chances of blockage of bio-toilets increase, making it dysfunctional over a period of time if the inoculation is not done in time.</li> <li>Phenyl/ Harpic or any strong detergent/acid and bleaching powder should not be used to clean the pan. Only herbal / ayurvedic cleaning agents should be used.</li> <li>Chlorine dose is necessary for disinfection.</li> </ul>
	Responsibility of cleaning the toilet / superstructure is with the owner
M&O	of the household in the case of IHLs / shared latrines and with the
	ULB in the case of community / public toilets.
	(a) Size of Toilet/ Super Structure as shown in Fig. 1 –
Specifications	
	800 mm x 1000 mm x 1900 mm

(b) Material – Bricks and Mortar walls of Bio Digester tank and Superstructure, PCC tank floor, RCC toilet floor, PVC Door and Frame, RCC/PVC/GI sheet Toilet Roof.

### (c) The Bio-toilet system consists of:

- Bio digester Tank(Bricks & Mortar/FRP/Steel).
- Superstructure(Bricks & Mortar/FRP)
- Indian Pan/WC
- Size: 4 feet x 4 feet tank base, 4 feet tank height, 6 feet superstructure height.
- Maximum usage recommended: 30 defecations/ day/ bio-toilet (no limit on urination)

(d) Land requirement - 16 Sq. ft.

### Cost Estimates

The tentative cost of bio-toilet including super structure is approximately Rs.20,000/— depending upon material of construction. The bio-toilets should be supplied by the manufacturers, and the O&M for at least 5 years (including the feeding of inoculum in the periodicity needed) along with IEC (to train users for O&M) by the manufacturer / supplier also should be built into the undertaking.

### Norms & Specifications for Community and Public Toilets

Description	of residents used primari and/or land a this kind of O washing, batt the communi <b>Public toile</b> public in pla areas, where	ts are providences such as there is a con	settlement. Co ome informal s. Pour flush of t is also advisa nall incinerator ed for the flo- markets, train siderable num	ommunity toil settlements option is generable to provide in this block ating populating stations or ober of people	et blocks are where space erally used in e facilities like for the use of tion / general other public passing by.
		ed sizes of se ers) is given b	•	5.	
Septic tanks	No. of Length (m)	Breadth (m)	Liquid depth (cleaning interval of)		
for public / community	users		(111)	2 years	3 years
toilets	50	5.0	2.00	1.0	1.24
tonets	100	7.5	2.65	1.0	1.24
	150	10.0	3.00	1.0	1.24
	200	12.0	3.30	1.0	1.24
	300	15.0	4.00	1.0	1.24

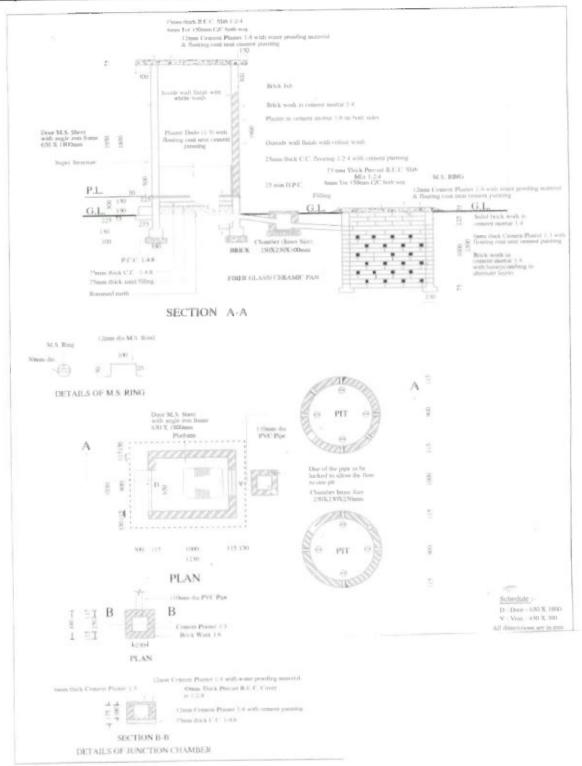
			ewerage and Sewage Treatme	nt Systems, 2013 Part A		
	Engineering					
	Note 1: A provision of 300 mm should be made for free board.  Note 2: The sizes of septic tanks are based on certain assumptions on peak					
	Note 2:	The sizes of s	septic tanks are based on certa	in assumptions on peak		
	discharges, as estimated in IS: 2470 (Part 1) and while choosing the size of septic tank exact calculations shall be made.  Note 3: For population over 100, the tank may be divided into independent parallel chambers of maintenance and cleaning  • One seat for 35 men;					
Community						
Toilet -			or 25 women			
			pathing facilities			
Norms for	_	Adequate	January racinates			
toilet seats		P 1 12 1	to formulation tallets one of	on in Table 6 holows		
	Norms for toilet sets for public toilets are given in <b>Table 6</b> below:					
	S. No.	Sanitary Unit	For Male	For Female (A)		
	1101		One per 100 persons	Two for 100 persons		
			up to 400 persons; For	up to 200 persons;		
		Water	over 400 persons, add	over 200 persons, add		
	i.		at the rate of one per	at the rate of one per		
		Closet				
			250 persons or part	100 persons or part		
			thereof	thereof		
Dublic Tailata	ii.	Ablution Taps	One in each W.C.	One in each W. C.		
Public Toilets - Norms for toilet seats		Ulvinole	One for 50 persons or	Nil		
	iii.	Urinals	part thereof	INII		
	Wash One per W. C. and One per W. C.					
	iv. basins urinal provided provided					
	Source			ent Systems, 2013 Part A		
	Source: Manual on Sewerage and Sewage Treatment Systems, 2013 Part A Engineering					
	Note:					
	i) It m	ay be assum	ed that two-thirds of the num	nber are males and one-		
		emales				
	ii) One water tap with drainage arrangements shall be provided for every					
			thereof in the vicinity of water			
			emale WCs may be Indian p			
			nay also be provided for trar			
	iv) Special arrangements may be made for physically challenged.					
Tuestweent	1.	Bio Digest	er with reed bed systems	soak pits		
Treatment	2.	Bio Tank				
units	3.	Septic Tar	nk with Soak Pits			
			cost for community toilets	s is Rs. 65,000/- per sea		
			s is Rs. 75,000/- per sea			
			depending upon the const			
Cost			e of treatment technolog			
			etc. However the cost of			
				toliet ili bio-digester give		
	by N	BCC are as	unaer.			

	Superstructure 5 Cubicle f	or 200 users			
	Pre Painted galvanized Sheets	Masonry Cement Board			
	Rs. 1,63,000.00/-	Rs.95,000.00/- Rs. 80,000.00/			
	Superstructure 10 Cubicle	for 400 users			
	Pre Painted galvanized Sheets	Masonry	Cement Board		
	Rs.3,26,000.00/-	Rs. 1,80,000.00/-	Rs. 1,60,000.00/-		
	Bio Digester Tank 10 KLD for every 200 users				
	Masonry				
	Rs. 1,74,000.00/- per 200 user				
Additional Infrastructure	It must be ensured that adequate water supply arrangement shall be made for proper functioning and upkeep of toilets. Wherever possible, ULBs should ensure that public and community toilets are outfitted with solar panels for the generation of electricity to ensure uninterrupted power supply and bring down O&M costs.				
Implementation Mode	All toilets shall be constru provision of O&M for at leas	•			

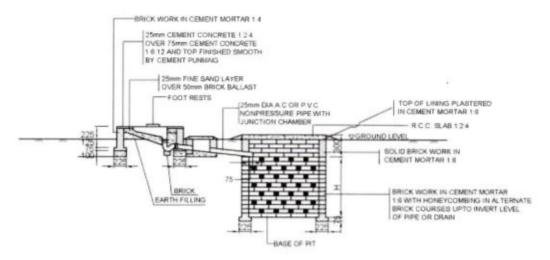
For additional details the guidelines developed by NBCC can be downloaded. (www.nbccindia.gov.in)

### **Figures**

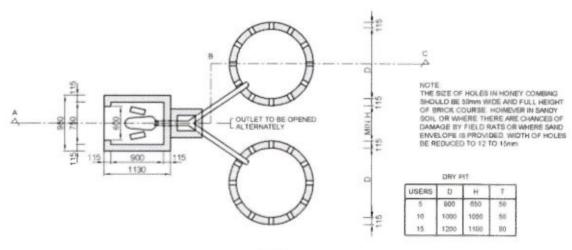
Figure 1: Detailed layout of toilet



### Figure 2: Pour-flush latrine with circular pits

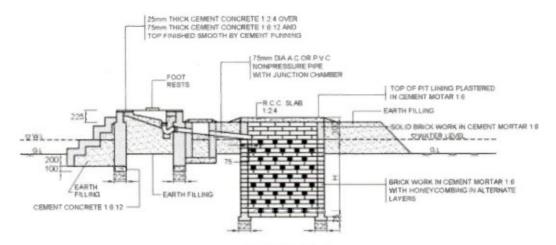


SECTION A B C

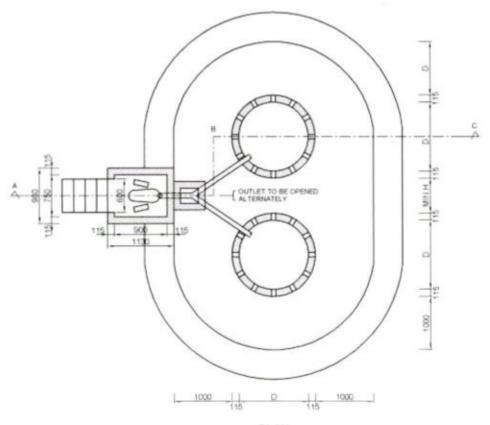


PLAN

Figure 3: Pour-flush latrine in water-logged areas

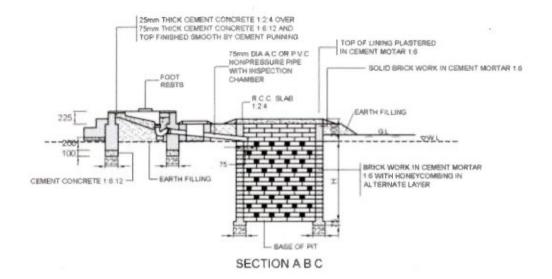


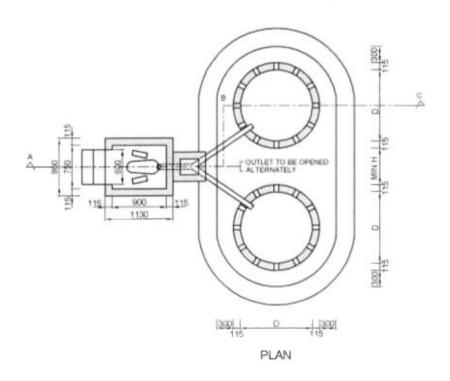
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PLAN

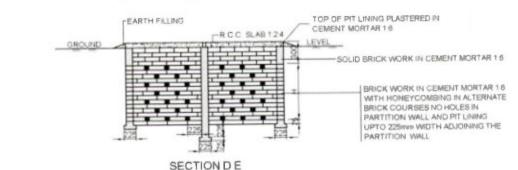
### Figure 4: Leach pits in high subsoil water level

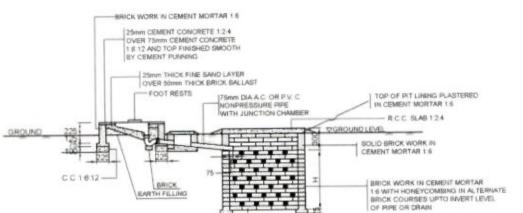




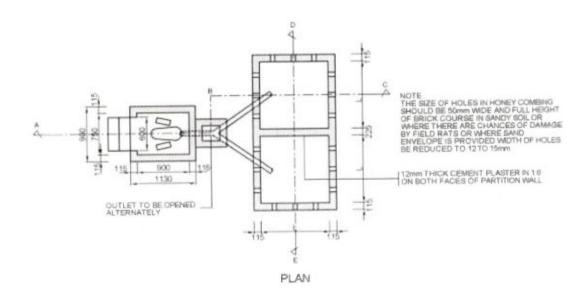
12

### Figure 5: Pour-flush latrine with combined pits





SECTION A B C



### Figure 6: Typical sketch of two-compartment septic tank for 5 users

(Source: Manual on Sewerage and Sewage Treatment Systems, 2013, Part A: Engineering)

(Dimensions in mm)

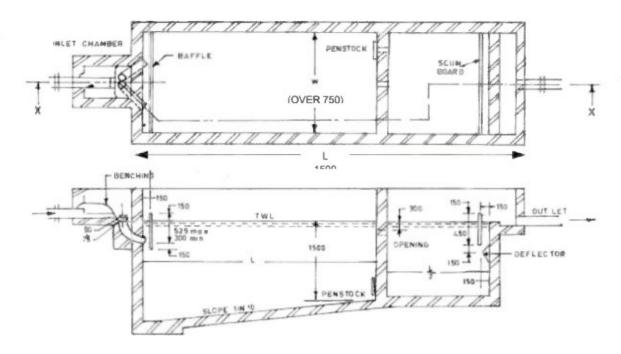
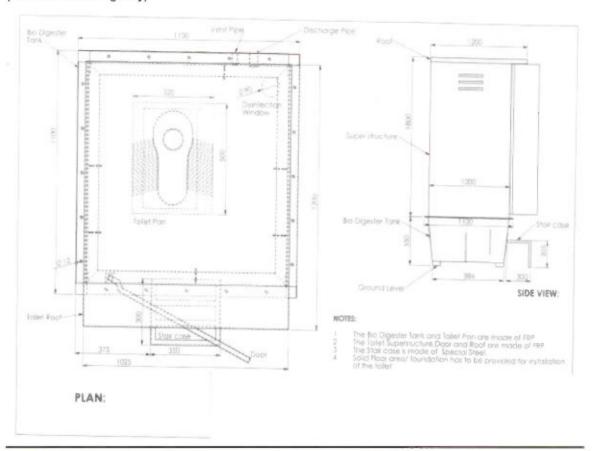
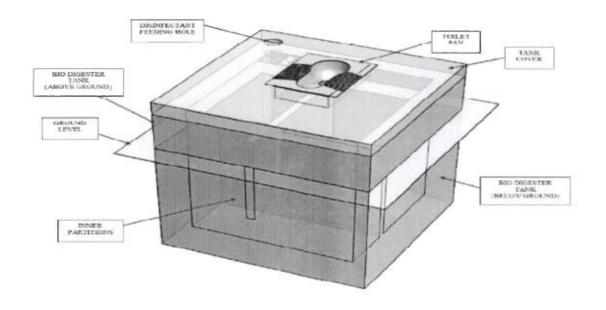


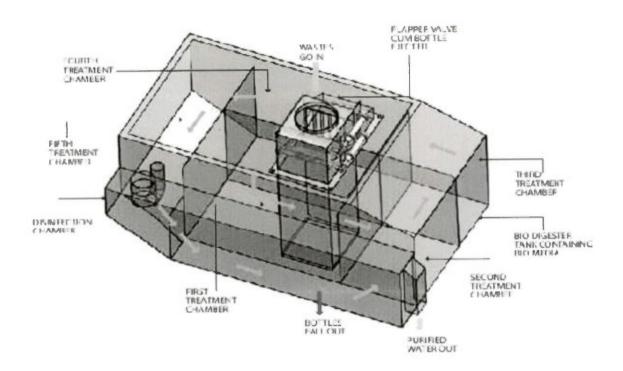
Figure 7: Details of bio-digester with reed bed (Source: DRDO) SINTEX

Figure 8: Details of Bio-Toilet

(Source: Private Agency)







Annexure III: Distribution of the Project Fund across States / UTs under SBM (Urban)

	POPULATION OF STATUTORY TOWNS	JTORY TOWNS	STATUT	STATUTORY TOWNS	OPEN DEFECATION	CATION	Fund Share*
States/UIs	Pop. (minus OG)	Population Share (%)	No.	ST Share %	HHS	HH Share %	(%)
ALL India	31,85,49,793		4,041	THE PARTY OF THE P	79,02,614	No of the last of	
NON-NE STATES	31,20,08,498		3,823		78,59,648		
ANDAMAN & NICOBAR ISLANDS	1,08,058	0.03%	П	0.03%	1,209	0.02%	0.03%
ANDHRA PRADESH	2,30,04,396	7.37%	125	3.27%	5,81,673	7.40%	5.32%
BIHAR	1,12,41,824	3.60%	139	3.64%	5,46,409	6.95%	3.62%
CHANDIGARH	9,61,587	0.31%	-	0.03%	6,397	0.08%	0.17%
CHHATTISGARH	56,87,885	1.82%	168	4.39%	4,15,147	5.28%	3.11%
DADRA & NAGAR HAVELI	98,265	0.03%	-	0.03%	1,992	0.03%	0.03%
DAMAN & DIU	68,273	0.02%	2	0.05%	678	0.01%	0.04%
GOA	4,01,929	0.13%	14	0.37%	5,788	0.07%	0.25%
GUJARAT	2,31,88,334	7.43%	195	5.10%	3,88,836	4.95%	6.27%
HARYANA	78,61,917	2.52%	80	2.09%	1,28,059	1.63%	2.31%
HIMACHAL PRADESH	6,58,036	0.21%	56	1.46%	10,911	0.14%	0.84%
JAMMU & KASHMIR	29,40,098	0.94%	98	2.25%	44,501	0.57%	1.60%
JHARKHAND	53,05,359	1.70%	40	1.05%	2,54,374	3.24%	1.37%
KARNATAKA	2,21,63,498	7.10%	220	5.75%	5,34,829	6.80%	6.43%
KERALA	52,47,614	1.68%	59	1.54%	18,429	0.23%	1.61%
MADHYA PRADESH	1,87,83,104	6.02%	364	9.52%	7,89,555	10.05%	7.77%
MAHARASHTRA	4,67,83,521	14.99%	256	6.70%	6,94,830	8.84%	10.85%
NCT OF DELHI	1,14,02,709	3.65%	e	0.08%	62,210	0.79%	1.87%
ODISHA	59,69,842	1.91%	107	2.80%	4,08,170	5.19%	2.36%
PUDUCHERRY	7,48,267	0.24%	9	0.16%	18,941	0.24%	0.20%
PUNJAB	95,55,705	3.06%	143	3.74%	1,02,026	1.30%	3.40%
RAJASTHAN	1.57.17.489	5.04%	185	4.84%	4.31.290	5.49%	4.94%

	POPULATION OF STATUTORY TOWNS	UTORY TOWNS	STATU	STATUTORY TOWNS	OPEN DEFECATION	ECATION	Fund Share*
States/UTs	Pop. (minus OG)	Population Share (%)	No.	ST Share %	HHs	HH Share %	(%)
TAMII NADU	2,98,32,766	9.56%	721	18.86%	11,28,692	14.36%	14.21%
UTTAR PRADESH	4,06,94,476	13.04%	648	16.95%	9,65,922	12.29%	15.00%
UTTARAKHAND	24,89,380	%08'0	74	1.94%	19,206	0.24%	1.37%
WEST BENGAL	2,10,94,166	6.76%	129	3.37%	2,99,574	3.81%	2.07%
NE STATES	65,41,295		218		42,966		
ARUNACHAI PRADESH	3,13,557	4.79%	26	11.93%	4,241	9.87%	8.36%
ASSAM	33,19,375	50.74%	88	40.37%	27,900	64.94%	45.56%
MANIPIIR	6,36,625	9.73%	28	12.84%	3,427	7.98%	11.29%
MEGHALAYA	3,75,930	5.75%	10	4.59%	1,887	4.39%	5.17%
MIZORAM	5,71,771	8.74%	23	10.55%	1,019	2.37%	9.65%
NAGALAND	5,05,440	7.73%	19	8.72%	2,279	5.30%	8.22%
SIKKIM	1,47,695	2.26%	00	3.67%	719	1.67%	2.96%
TRIPLIRA	6,70,902	10.26%	16	7.34%	1,494	3.48%	8.80%

### Annexure IV

### Concept Note on State Urban Sanitation Strategy for the State of \_\_\_\_\_

### PART A: Parameters determining the existing urban sanitation situation

1	State Profile	
1.1	Name of the state	
1.2	Total Urban Population as per 2011 Census	
1.3	Number of Statutory towns 1 as per Census 2011	
1.4	Number of Census towns 2 as per Census 2011	
1.5	Population of statutory towns (as per Census 2011)	
1.6	Population of census towns (as per Census 2011)	
1.7	Total number of urban households	

2	Status of Sanitation Situation as per Census 2011[FOR STATUTORY TOWNS ONLY]	Total nos. as per Annexure 1 (State)*
2.1	Number of urban households resorting to open defecation (not in premises - open)	
2.2	Number of urban households having pit latrines	
2.3	Number of urban households having insanitary latrines	

Solid waste management (tentative quantity based on per capita waste generation) [FOR STATUTORY TOWNS ONLY]	Total (State)*
Total Solid waste generated (in MT)	
Total Waste collected (in MT)	
Total Waste Transported (in MT)	
No. of cities with SWM Disposal Facility	
Total Waste treated (in MT)	
	generation) [FOR STATUTORY TOWNS ONLY]  Total Solid waste generated (in MT)  Total Waste collected (in MT)  Total Waste Transported (in MT)  No. of cities with SWM Disposal Facility

<sup>\*</sup>City-wise information may also be added wherever available.

## PART B: Institutional Mechanism for Swachh Bharat Mission (SBM) - Urban

		Provide Details		
Name of the Nodal Agency for SBM		of the Nodal Agency for [Provide name of Nodal Agency; else if not designated, provide details of process by which nodal agency will be appointed]		
	ne and Designation of Nodal cer with contact no.	[Provide name of Nodal Officer; else if not designated, provide details of process by which nodal officer will be appointed]		
Ins	titutional Mechanism		Start date (Month / Year)	End date (Month / Year)
a.	Constitution of the State- level High Powered Committee (S- HPC)	[Provide details of S- HPC; else if not constituted, provide details of process by which S- HPC will be constituted; timeline should be max. within 1 month of submission of concept note]		
b.	Setting up of State Mission Directorate	[Provide details of Mission Directorate; else if not constituted, provide details of process by which Mission Directorate will be constituted; timeline should be max. within 1 month of submission of concept note]		
c.	Setting up of PMU at the state-level under SBM	[Provide details of PMU set-up; else if not set- up, provide details of process by which PMU will be put in place; timeline should be max. within 3 months of submission of concept note]		
Sa Na Po Mi	bmission of State nitation Strategy as per the tional Urban Sanitation licy, 2008 (please refer nistry's website ww.moud.gov.in)		Start date (Month / Year)	Date of submission (Month / Year)

PART C: Component-wise action plan for Swachh Bharat Mission (SBM) - Urban

#### **Physical Targets**

1		Targets	Baseline 2014	Cumulative Estimated Projection upto2019	Reasons/Justification based on 2001-2011 data and other factors	Target 2014- 15	Target 2015- 16	Target 2016- 17	Target 2017- 18	Target 2018- 19 (up to Oct, 2019)	Cumulative Target (2014-19)
A*	a	Construction of new individual household latrines (IHL)									[100% of 2014 baseline]
	b	Conversion of pit latrines into sanitary latrines	[Part A, 2.2.4]								[60% of 2014 baseline]
	С	Conversion of insanitary latrines into sanitary latrines	[Part A, 2.2.5]								[100% of 2014 baseline]
B*		Construction of Community toilets [NORM: 1 seat / 25 women and 1 seat / 35 men]									[100% of 2014 baseline]
C*		Construction of Public Toilets [NORM: 1 seat / 50 women and 1 seat / 100 men up to specified numbers***]	[Part A, 1.2]								[5% of 2014 baseline]
D		Solid waste Management	[No. of cities proposed to be covered]								[100% excluding the on-going project]
E		Capacity Building	[Part A, 1.3]								[100% of cities]
F		Public Awareness & IEC	[Part A, 1.3]			. 301					[100% of cities]

#### **Financial Targets**

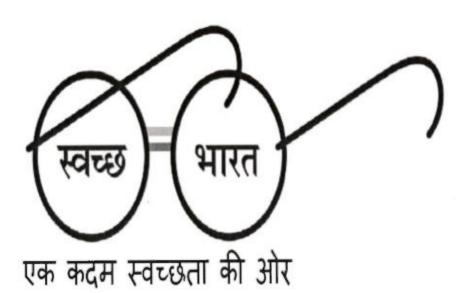
(Rs in Crores)

2	Funding [As per the funding	2014-2 (TOTA		2014-1	15	2015-	16	2016-1	7	2017-1	8	2018- Oct. 20	4 8	Remarks
	pattern in the SBM Urban Guidelines]	1111	Centra I Share	Tenta tive / estim ated	Central Share	Tenta tive / estim ated	Central Share	Tentat ive / estima ted	Centra I Share	Tentat ive / estima ted	Central Share		Central Share	
A	a. Construction of new individual household latrines (IHL)(Based on the cost													

<sup>\*</sup>Efforts shall be made to construct the toilets within two years i.e. upto 2016-17.

\*\*Please also refer Manual on Sewerage & Sewerage Systems, Part A for more details (page No. 8-16)

31														
	per household toilets)													
-	b. Conversion of													
- 1'							1							
	pit latrines			1			1							0
	into sanitary	- 1												
	latrines													
	(based on the													
	cost per													
1	household													1
	toilets)													
	c. Conversion of													
1	insanitary	1				1								
	latrines into													
	sanitary	ľ												
	latrines	-												
	(based on the	- 1									11 1			
	cost per					1								
	household	-							. 7					
	toilets)													
- I														
	Construction of													
	Community	-												
	toilets [NORM: 1													
	seat / 25 women	-												
	and 1 seat / 35	1												
	men] (based on													
	cost per seat)					-						-		
C	Construction of		-		-		-		-		-		-	
	Public Toilets					1								
	[NORM: 1 seat /													
	50 women and 1												1	1
	seat / 100 men								1					
	up to specified													
	numbers](Based													
	on cost per seat)													
D	Solid Waste													
D	Management			1					ì					
	(based on per							1			1			
	(baseu on per								1					
	capita cost of			1				1						
	Rs.1500/ capita										1	1		
	may be			1								1		
	considered less					1					1			
	or more with								1					
	proper					1								
	justification in a		Į.					1	1					
	separate sheet)				-	-	-	-	+	-	+	-	1	
E	Capacity							1			1			
	Building &													
	A&OE (5% on									1				
	Central share)								1		-	+	-	-
F	Public											1		
	Awareness &					И								
	IEC (15% on				1		1							
	Central share)												1	
<u> </u>	Total													
1	10001									1				-



No. 20/1/2016-SBM-I Government of India Ministry of Urban Development

18th July 2016

#### OFFICE MEMORANDUM

Sub: Revisions/ Modifications of the operational guidelines of Swachh Bharat Mission (Urban)

This is to notify that the following changes have been made to the guidelines with respect to Swachh Bharat Mission (Urban):

- State High Powered Committees (SHPCs) are given the flexibility to redetermine targets for IHHLs and CTs, subject to overall state-wise funds envelope (sum of allocation under IHHL and CTs, for the entire mission period) remaining unchanged.
- 2. Increase in base unit cost of CTs to Rs 98,000 per seat, wherein VGF/Grant will be upto 40% of project cost (i.e. VGF/Grant of Rs 39,200 per seat). This will be subject to overall state-wise funds envelope (sum of allocation under IHHL and CTs, for the entire mission period) remaining unchanged. This marks a shift from monitoring of toilet construction to monitoring of ODF status achievement.
- 3. Extension of VGF/Grant of upto 40% as available for CTs to Public Toilet projects as well (i.e. VGF/Grant of Rs 39,200 per seat). Unit cost of PTs to be same as CTs. Targets for PT to be set under CT component. This will be subject to overall state-wise funds envelope (sum of allocation under IHHL and CTs, for the entire mission period) remaining unchanged
- 4. Inclusion of urinals in ODF component, wherein VGF/grant of upto 40% to be given on lines of CTs/PTs, and base cost of urinals to be Rs. 32,000 per unit (i.e. VGF/Grant of Rs 12,800 per unit). Targets for urinals to be set under CT component. This will be subject to overall state-wise funds envelope (sum of allocation under IHHL and CTs, for the entire mission period) remaining unchanged.
- The central assistance for Municipal Solid Waste Management component be raised from present 20 percent to 35 percent. This will be subject to overall state-wise funds envelope, for the entire mission period, for SWM remaining unchanged.

This issues with the approval of competent authority.

(V.K. Kushwaha) 7.16

Under Secretary to the Government of India

Tel: 23062654

To:

1) Chief Secretaries of all States/ Union Territories

 Principal Secretaries/ Secretaries of Urban Development of all States/ Union Territories

3) Mission Directors (SBM) of all States/ Union Territories

Copy for information to: (i) PSO to Secretary (UD) (ii) JS&FA, MoUD (iii) JS (SBM) (iv) Director (SBM-I)/DS (SBM-II)

Add the State of the Salah

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Government of West Bengal

Panchayats & Rural Development Department Joint Administrative Building, (6<sup>th</sup> to 9<sup>th</sup> Floors)

Salt Lake, Block- HC-7, Sector-III, Kolkata-700106

No.:3681-RD/PH&S/S/1C-1/2015

Date:-09.08.2016 5

1.1 AUG 2016

#### ORDER

In partial modification of earlier Order No 4654/RD/PH&S/S/1C-1/2015 dated 29.09.2015 the Apex committee under Mission Nirmal Bangla is now constituted with inclusion of the following member to aid an advice the State Mission in implementation of the programme.

Apex committee under Mission Nirmal Bangla.

- 1. The Chief Secretary, West Bengal,- Chairperson.
- 2. The ACS/Principal Secretary/Secretary, Finance Department-Member
- 3. The ACS/Principal Secretary/Secretary, Health & Family Welfare Department-Member
- 4. The ACS/Principal Secretary/Secretary, Women & Social Welfare and Child Development Department-Member.
- 5. The ACS/Principal Secretary/Secretary, School Education Department-Member
- 6. The ACS/Principal Secretary/Secretary, Panchayats & Rural Development Department-Member
- 7. The ACS/Principal Secretary/Secretary, Public Health Engineering Department-Member
- 8. The ACS/Principal Secretary/Secretary Municipal Affairs Department -Member
- 9. The ACS/Principal Secretary/Secretary Department of Environment- Member.
- 10. The ACS/Principal Secretary/Secretary, Urban Development Department-Member
- 11. The ACS/Principal Secretary/Secretary, Information & Cultural Affairs Department -Member
- 12. The ACS/Principal Secretary/Secretary, Backward Classes Welfare Department-Member
- 13. The Commissioner, Kolkata Municipal Corporation-Member.
- 14. Representative of Ministry of Drinking Water & Sanitation ,Government of India-Member
- 15. Representative of Ministry of Urban Development Department, Government of India -Member
- 16. The SPD, PBSSM Member
- 17. The Director, ICDS-Member
- 18. The Director, SUDA-Member
- 19. Representative from UNICEF, West Bengal
- 20. The Mission Director, Mission Nirmal Bangla, Panchayats & Rural Development Department Convener- Member

This order issues with approval of the Chief Secretary to the Government of West Bengal

Sd/-(Saurabh Kumar Das ) Principal Secretary

Contd..

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Copy forwarded for information and necessary action to:

- 1. The ACS/Principal Secretary/Secretary, Finance Department,
- 2. The ACS/Principal Secretary/Secretary, Health & Family Welfare Department.
- 3. The ACS/Principal Secretary/Secretary, Women & Social Welfare and Child Development Department.
- 4. The ACS/Principal Secretary/Secretary, School Education Department.
- 5. The ACS/Principal Secretary/Secretary, Panchayats & Rural Development Department.
- 6. The ACS/Principal Secretary/Secretary, Public Health Engineering Department.
- 7. The ACS/Principal Secretary/Secretary Municipal Affairs Department.
- 8. The ACS/Principal Secretary/Secretary Department of Environment.
- 9. The ACS/Principal Secretary/Secretary, Urban Development Department.
- 10. The ACS/Principal Secretary/Secretary, Information & Cultural Affairs Department.
- 11. The ACS/Principal Secretary/Secretary, Backward Classes We fare Department
- 12. The Commissioner, Kolkata Municipal Corporation..
- 13. Representative of Ministry of Drinking Water & Sanitation, Government of India.
- 14. Representative of Ministry of Urban Development Department Government of India.
- 15. The SPD PBSSM
- 16. The Director, ICDS.
- 17. The Director, SUDA.
  - 18. Representative from UNICEF, West Bengal
  - 19. The Mission Director, Mission Nirmal Bangla, Panchayats & Rur I Development Department, Government of West Bengal
  - 20. The Senior P.A to the Chief Secretary for kind information of the Chief Secretary

908 Wb Commissioner in the P&R.D.Departmer

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## Government of West Bengal Department of Urban Development & Municipal Affairs Poura Prashasan Bhavan, DD-I, Sector- I, Salt Lake City, Kolkata – 700 064

No.297 /MA/C-10/1G-1/2015 Pt.

Dated, Kolkata, the 5th day of April, 2017

From : Joint Secretary to the Government of West Bengal

To :

The Director.

State Urban Development Agency,

ILGUS Bhavan, Block HA, Sector III, Salt Lake

Kolkata 700 106

Sub: Administrative Approval for Implementation of Integrated Solid Waste Management Project Sir.

With reference to above, I am directed to inform you that in principal Administrative approval for the schemes as stated in Annexure – I are hereby accorded to take necessary steps for Implementation of Integrated Solid Waste Management Project in different ULBs; subject to strict observance of all relevant rules & regulations of the State Government issued time to time including e-tendering.

Necessary fund will released in due course as per availability of fund upon receipt of the copy of the e-tender notice, work order and certificate regarding e-tender/-procurement from concerned ULBs.

This letter is issued with the approval of appropriate authority of this Department

Enclo. As stated

Yours faithfully,

Joint secretary to the Government of West Bengal

Enclosure of letter no.277 MA/C-10/1G-1/2015 (Pt.)

dt.05.04.2017

Name of the Project including ULB	U.O. No. & Date of F.D. (Gr'N')	Total Estimated Cost (Rs. In lakh)	Central Share (Rs. In lakh)	State Share (Rs. in lakh)	ULB Share (Rs. In lakh)
Integrated Solid Waste Management Project (Phase – I) within Dum Dum, North Dum Dum, South Dum Dum & Baranagar Municipality	3435 03.03.2017	5573.00	1950.66	3343.68	278.66
Integrated Solid Waste Management Project within Naihati Municipality	3395 01.03.2017	4021.00	1407.14	2412.23	201.63
Integrated Solid Waste Management Project Within Bhatpara Municipality	3472 07/03/2017	4182.0	1463.61	2509.a06	209.33
Integrated Solid Waste Management Project within Santipur Municipality	3925 23.03.2017	1819.14	636.699	1019.484	90.957
Integrated Solid Waste Management Project within Jalpaiguri Municipality	3927 23.03.2017	1288.15	450.85	772.89	64.41
Integrated Solid Waste Management Project in Nabadwip Municipality	3920 23.03.2017	1498.44	524.45	899.06	74.93
Integrated Solid Waste Management Project within Krishnagar Municipality	4011 27.03.2017	1833.81	641.83	1100.29	91.69
Integrated Solid Waste Management Project in Ashokenagar- Kalyangarh & Habra Municipality	3693 16.03.2017	3232.20	1131.27	1939.32	161.61
Integrated Solid Waste Management Project within Asansol Municipal Corporation	3926 23.03.2017	3440.00	1179.00	*	-

fore



#### STATEMENT - A

#### Administrative Approval and Plan Release

(For CS/CN form 'C' and for EAP form 'D' should also be used)

Name of the scheme with locational details

Type of the Scheme

 Whether a new scheme of the year or an ongoing scheme (Furnish a copy of G.O. regarding Administrative Approval in case of On going Scheme)

Date of Administrative Approval

5. Original Project Cost

6. Date of commencement of work

7. Expected Duration

8. Phasing of Expenditure

Integrated Solid Waste Management Project in Habra & Ashokenagar-Kalyangarh Municipality Centrally Sponsored Scheme

New Scheme

Year

Amount to be Spent

 Whether clearance from authorities like SPB/ SLSSFC/ GFC etc obtained, if so whether copies of their approval attached

Budget Provision (Excluding Incentive)
 Head of Account-wise

Cumulative Release
 Head of Account-wise (Proposed)

12. Balance Available
Head of Account-wise

 Expenditure Incurred Head of Account-wise

14. Physical Achievement

 Amount for which Utilisation Certificate submitted

 Amount requested for Release Head of Account-wise

17. Detailed Justification of the Project

Not required

1. 39-2215-02-789-SP-002-35-00 Rs.15000.00 lakh

2. 39-2215-02-789-SP-003-35-00 Rs.10000.00 lakh

1. 39-2215-02-789-SP-002-35-00 Rs.8736.771 Lakh

2. 39-2215-02-789-SP-003-35-00 Rs. 9681.78655 Lakh

1. 39-2215-02-789-SP-002-35-00 Rs. 7394.499 lakh

2. 39-2215-02-789-SP-003-35-00 Rs. 218.02135 Lakh

1. 39-2215-02-789-SP-002-35-00 Nil

2. 39-2215-02-789-SP-003-35-00 Rs. 7756.97865 Lakh

N.A.

1. 39-2215-02-789-SP-002-35-00 Rs.1131.27 lakh

2. 39-2215-02-789-SP-003-35-00 Rs. 100.00 lakh

Solid Waste Management Project in Habra & Ashokenagar-Kalyangarh Municipality to keep the city clean.

31.01.17.

82 2.17

Gautam De, WBSS
Devil of MA Deptt.
Undersigned Affairs Branch)
nment of West Bengal

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#### STATEMENT - C

## In case of Centrally Sponsored/Central Sector Schemes

1.	Funding Pattern – Ratio of Central Share & State Share		35:60
			5% of estimated cost will be
			borne by Ashokenagar-
			Kalyangarh & Habra
			Municipalities
			GOI has been approached to
2.	Total Amount sanctioned (*) by GOI	:	release a sum of Rs. 1131.27
			lakh
3.	Total Amount credited to State Account		N.A
4.	Matching State Share		Rs. 939.32 lakh
5.	Total amount (*) released so far	0	Nil
	a) Central Share	:	Nil
	b) State Share	:	Nil
6.	Whether copies of GOI sanction letter enclosed		N.A.
	(*) Cumulative figures or the year to be furnished.		

31.01.17

02.2.17.

Gautam De, WBSS
Deputy Secretary
UD & MA Deptt.
(Municipal Affairs Branch)
Government of West Bengal

We may have no objection to accord Administrative approval for the Integrated Solid Waste Management Project in Ashokenagar- Kalyangarh & Habra Mpty under Swaccha Bharat Mission ( Urban) at an estimated cost of Rs 3232.20 lakh subject to observance of all financial norms and subject to concurrence of group N as GOI's share (35%) in involved in this project.

Sd/- R.Bandyopadhyay

Date: 02.03.17

This Finance Department Gr.'N' may also accord approval for the scheme "Integrated Solid Easte Management Project in Ashokenagar- Kalyangarh and Habra Municipality" under Swachh Bharat Mission ( Urban)".The fund will be released subject to acceptance of Central Assistance.

Sd/- P.Chakraborty (A.S) 10.03.17

Sd/- S.K. Sinha (J.S) 14.03.17

Sd/- P.Yadav (Secretary) 14.03.17

Sd/- H.K Dwivedi ( Principal Secretary)

Date: 15.03.17

Group 'N' U.O.No :3693 U.O. Date : 16.03.17

To

The Department of Municipal Affairs

17.3.17

S.O. Finance Department, Gr-'R'

Finance Department
Group - R
U.O. No. 0297... Date 17.3.2017

JS. (S. Cahola)

21.03.mg

Concurrence & F.D. &(etr.N) obtained vide yelesed U.O.No. 3693 dt. 16.03. It. Fund will be relesed when the Same is entered in IFMs after fund released by GOT.



#### NOTE SHEET



Hence, the following Fund Sharing pattern of State Government and Ashoknagar-Kalyangarh and Habra Municipalities may be proposed for this Cluster Project of Integrated Solid Waste Management:

- a) Fund Share of Ashoknagar-Kalyangarh and Habra Municipalities may be 5% of the total Project Cost i.e. Rs. 1.62 Crore, and
- b) Fund Share of State Government may be remaining 60% of the total Project Cost i.e. Rs. 19.39 Crore

Now, as per decision of the State High Powered Committee (SHPC) under Mission Nirmal Bangla (Urban)/Swachh Bharat Mission (Urban), the above mentioned proposal for Fund Sharing patter between State Government and ULB may be moved to Finance Department, Government of West Bengal for concurrence.

Placed for kind approval.

Day My North

(B. N. Kar)

Additional Director, ILGUS &
Additional State Mission Director, MNB (U)

Director, SUDA &
State Mission Director, MNB (U)

Secretary De proposal many kindly be apply

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Please process for obtaining

Posted Dalland Proposal

File S-14/2017

Sumanbaby

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#### **NOTE SHEET**



# 2017 STATE URBAN DEVELOPMENT AGENCY NOTE SHEET File No. SUDA-14/2017

Sub: DPR of Integrated Solid Waste Management Project of Ashoknagar-Kalyangarh and Habra Municipalities (In Cluster Mode)

The Detailed Project Report (DPR) for implementation of Integrated Solid Waste Management Project in Ashoknagar-Kalyangarh and Habra Municipalities (Placed at CP-57) was prepared by the ULB itself and adopted by their Board of Councillors (BoC) [placed at CP-67 to CP-71]. Municipal Engineering Directorate (MED) has appraised the DPR (placed at CP-58 to CP-59) and it has finally been approved (placed at CP-77 & 80) in the 1<sup>st</sup> Meeting of the State High Powered Committee (SHPC) under Mission Nirmal Bangla (Urban)/Swachh Bharat Mission (Urban). Order of Constitution of SHPC and the Minutes of the 1<sup>st</sup> meeting are placed at CP-55 to CP-56 and CP-72 to CP-80 respectively.

The Salient features of the Project are:

- · Primary (Door to Door) Collection Segregation at source
- Secondary Transportation Separate Transportation Chain for Bio-degradable and Non-bio-degradable wastes
- · Optimization of Transportation Facilities including utilization of existing system.
- Further Segregation & Sorting (if required)
- Waste to Bio-gas generation through Bio-methanation with the capacity of 60
   Million Ton Per Day (MTPD)
- · Development of Land fill site
- Land required 7.10 acre, available 15.92 acre, owner is Ashoknagar -Kalyangarh Municipality
- Population Coverage: all the 121592 no. of population of Ashoknagar-Kalyangarh Municipality and 147221 no. of population of Habra Municipality
- Project Implementation Period: 2 Years
- Total anticipated Project Cost is Rs. 32.32 Crore

Government of India, in the Guideline of Swachh Bharat Mission (Urban) at Para-7.10 & 7.10.5 [placed at **CP-41 & 42**] and in the Office Memorandum for Revision/Modification of MoUD [placed at **CP-54**] mentioned that for Solid Waste Management Projects Gol share will be 35% of the total project cost subject to the condition that the State contribution will be minimum 25% funds to match 75% Central Share i.e. 1/3<sup>rd</sup> of Central Share.

Hence, out of the anticipated total project cost of Rs. 32.32 Crore, Gol Share is Rs. 11.31 Crore (35%) and Mandatory State Share is Rs. 3.77 Crore.

In the1<sup>st</sup> Meeting of the State High Powered Committee (SHPC) under Mission Nirmal Bangla (Urban)/Swachh Bharat Mission (Urban) under the Chairmanship of the Chief Secretary to the Government of West Bengal, it was decided that (placed at **CP-79**) beyond the Government of India share i.e. 35% or as admissible of the Project Cost, the remaining will be borne by the State Government and ULB. This fund sharing pattern is approved in principle and UD & MA Department will finally obtain approval from Finance Department.



SUDA

The apenda note for the meeting of State High Powered Committee under Mission Hirman Bangla (U+Lam) to be held on 05.01.2017 at Nabanna is placed in the file for kind approval and circulation to the members.

Add SMD, ANNB(U)

May be approved. And hold May hirsty to persed dayord

Director, Subt

Sorvetory, UD2

ma pepp and chair nom SUDA

10 DPR of solid waste management covering WKMC, & Asamsol, By Dum Dun/Abrah Dinn Jun South Dum Dum/Brangen, (4) Haba Dokengen (6) Jalpaigurs

(6) Krishagan (7) Santigun (8) xladadrip (9) Chatpara and To Maihati are prepared and technically appraised. These DPR's will be placed in meeting of CS or 05th Jan 2017, if approved.

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6-4/1/17





## Mission Nirmal Bangla (Urban) /Swachh Bharat Mission (Urban)

## Agenda Item No.-1

#### **DPRs for Solid Waste Management Projects**

1. Approval of Integrated Solid Waste Management Project for Kolkata Municipal Corporation with a total project cost of Rs. 152.83 Crore, earlier appraised by CPHEEO.

The Salient features of the Project:

- Primary Collection and Storage System including procurement of Push Carts, Wheel Barrow, Pedal Tricycle Van, Auto Tippers, Movable & Stationary Compactors etc.
- Transfer Stations for one, two, three and four container Compactor Stations.
- Transportation: Procurement of Hookloaders, Movable Compactors with Tip Cart and Container.
- Disposal: Composting materials recovery facilities and RDF facilities (on PPP basis)
- Land available 100 hector, owner is KMC.
- The Gol contribution is 35% of the Project Cost i.e. Rs. 53.49 Crore and State Share is Rs. 17.83 Crore. Remaining amount Rs. 81.51 Crore to be borne by KMC.
- 2. Approval of DPR of Rs. 34.40 Crore in Asansol Municipal Corporation on MSWM prepared by MoUD, Gol

The Salient features of Phase-I with total cost involvement of Rs. 34.40 Crore are:

- Primary Collection
- Secondary Operation
- Waste Transfer Stations
- Service Station for Collection Tools, Vehicles, Repair etc.
- Land required 32.70 acre, available 70 acre, owner is ULB
- Out of the anticipated cost of Rs. 34.40 Crore, Rs. 0.72 Crore will be available from MP LAD fund and 35% (Rs. 11.79 Crore) from Gol share. The remaining amount Rs. 21.90 Crore has been proposed to be obtained from HUDCO as loan.

In the Phase-II of the Project (not included in the present DPR and to be taken up later), Scientific Processing & Disposal of MSW including composting, RDF based Processing with zero waste to land fill have been proposed with a total capital cost of Rs. 36.93 Crore (Central Share Rs. 12.93 Crore and PPP Contribution Rs. 24.00 Crore)

3. A DPR (Waste to Compost & Energy) of four ULBs (in Cluster Mode) namely Dum Dum, North Dum Dum, South Dum Dum and Baranagar Municipalities with a total project cost of Rs.55.73 Crore prepared by MED and appraised by Institute of Public Health Engineer (IPHE), India.

The Salient features of Phase-I of the Project:

- Primary Collection
- · Secondary Operation
- · Segregation & Sorting
- · Bio-gas generation through Bio-methanation (50 MT)
- Composting through Windrow method (50 MT)
- Capping of existing land fill (5 Acres)
- Land required 7.44 acre, available 21.73 acre, owner is Baranagar Municipality
- Out of the anticipated cost of Rs. 55.73 Crore, 35% (Rs. 19.51 Crore) from Gol share and 6.5 Crore from state share and remaining amount Rs. 29.72 Crore needs to be arranged from other sources.



Capping & Processing of rest part and further improvement of infrastructure will be taken up in Phase-II.

4. A DPR (Waste to Energy) of Two ULBs (in Cluster Mode) namely Habra and Ashoknagar-Kalyangarh Municipalities with a total project cost of Rs. 32.32 Crore prepared by two ULBs and appraised by MED.

The Salient features of the Project:

- · Primary Collection
- Secondary Operation
- Segregation & Sorting
- Bio-gas generation through Bio-methanation
- · Development of Land fill site
- Land required 7.10 acre, available 15.92 acre, owner is Ashoknagar Kalyangarh Municipality
- Out of the anticipated cost of Rs. 32.32 Crore, Rs. 11.31 Crore (35%) from Gol share and 3.77 Crore from state share and remaining amount Rs. 17.24 Crore needs to be arranged from other sources.
- 5. A DPR (Waste to Energy) of Jalpaiguri Municipality with a total project cost of Rs. 12.88 Crore prepared by the ULB and appraised by MED.

The Salient features of the Project:

- Primary Collection
- Secondary Operation
- · Segregation & Sorting
- · Bio-gas generation through Bio-methanation
- · Development of Land fill site
- Land required 1.90 acre, available 4.63 acre, owner is ULB
- Out of the anticipated cost of Rs. 12.88 Crore, Rs. 4.51 Crore (35%) from GoI share and 1.50 Crore from state share and remaining amount Rs. 6.87 Crore needs to be arranged from other sources.
- 6. A DPR of Krishnanagar Municipality with a total project cost of Rs. 18.33 Crore prepared by the ULB and appraised by MED.

#### The Salient features of the Project:

- · Primary Collection
- Secondary Operation
- Segregation & Sorting
- · Bio-gas generation through Bio-methanation
- · Development of Land fill site
- Land required 2.70 acre, available 3.60 acre, owner is ULB
- Out of the anticipated cost of Rs. 18.33 Crore, Rs. 6.42 Crore (35%) from GoI share and 2.14 Crore from state share and remaining amount Rs. 9.77 Crore needs to be arranged from other sources.
- A DPR of Santipur Municipality with a total project cost of Rs. 18.19 Crore prepared by the ULB and appraised by MED.

The Salient features of the Project:

- Primary Collection
- Secondary Operation
- Segregation & Sorting



- · Bio-gas generation through Bio-methanation
- · Development of Land fill site
- Land required 2.60 acre, available 6.73 acre, owner is ULB
- Out of the anticipated cost of Rs. 18.19 Crore, Rs. 6.37 Crore (35%) from GoI share and 2.12 Crore from state share and remaining amount Rs. 9.7 Crore needs to be arranged from other sources.
- 8. A DPR of Nabadwip Municipality with a total project cost of Rs. 14.98 Crore prepared by the ULB and appraised by MED.

The Salient features of the Project:

- Primary Collection
- · Secondary Operation
- · Segregation & Sorting
- · Bio-gas generation through Bio-methanation
- · Development of Land fill site
- Land required 2.70 acre, available 5.53 acre, owner is ULB
- Out of the anticipated cost of Rs. 14.98 Crore, Rs. 5.24 Crore (35%) from GoI share and 1.75 Crore from state share and remaining amount Rs. 7.99 Crore needs to be arranged from other sources.
- 9. A DPR of Bhatpara Municipality with a total project cost of Rs. 41.82 Crore prepared by the ULB/Agency and appraised by KMDA.

The Salient features of the Project:

- Primary Collection
- Secondary Operation
- · Composting through Windrow method
- · Sanitary Land Fill
- Land required 5.58 acre, available 10.50 acre, owner is ULB
- Out of the anticipated cost of Rs. 41.82 Crore, Rs. 14.64 Crore (35%) from GoI share and 4.88 Crore from state share and remaining amount Rs. 22.30 Crore needs to be arranged from other sources.
- A DPR of Naihati Municipality with a total project cost of Rs. 40.21 Crore prepared by the ULB/Agency and appraised by KMDA.

The Salient features of the Project:

- · Primary Collection
- Secondary Operation
- · Composting through Windrow method
- Sanitary Land Fill
- Land required 6.67 acre, available 9.94 acre, Owner is ULB.
- Out of the anticipated cost of Rs. 40.21 Crore, Rs. 14.07 Crore (35%) from GoI share and 4.69 Crore from state share and remaining amount Rs. 22.45 Crore needs to be arranged from other sources.



## Agenda Item No.-2

#### Approval of Annual Action Plan for 2016-17 & Claim of Fund from Gol

SI No.	Components	Action Plan	Estimated Project Cost	Total Central Share (Rs. in Crore)		
1	IHHL	Construction of 120000 Unit	Rs.131.88 Crore (@10990/-)	48.00		
2	СТ	Construction of 2000 Seats	Rs. 19.60 Crore (@98000/- per seat)	7.84		
		Construction of 1000 Toilet Seats	Rs. 9.80 Crore (@98000/- per seat)	3.92		
3 PT	PI	Construction of 1000 Urinal Seats	Rs. 3.2 Crore (@32000/- per seat)			
4	SWM	Coverage of 80 Lakh population in Projects of prioritised 10 cities				
5	IEC	Miscellaneous IEC activities in State, District, ULBs	Action Plan of Rs. 24 Crore has already been submitted to MoUD vide Memo no. SUDA- 37/2015/938 dated 17.05.2016	18.00		
6	CB & A&OE	Miscellaneous CB activities and A&OE Expenses	Action Plan of Rs. 13 Crore has already been submitted to MoUD vide Memo no. SUDA- 37/2015/938 dated 17.05.2016	9.75		
		TOTAL		424.79		

Approval of Fund to be claimed from Government of India as Central Share in the Year 2016-17 under Swachh Bharat Mission (Urban) is Rs. 329.93 Crore, detailed placed below:

Rs. in Crore

									7157 777	CIVIC
SI No	Financial Year	Installment	SWM Amount	IHHL Amount	CT Amount	PT Amount	PT - Urinal Amount	IEC Amount	CB & A&OE Amount	Total Amount
1	2014-15	2nd	34.54	21.12	0	0	0	6.68	1.67	64.01
2	2015-16	2nd	0	53.52	0	0	0	0	0	53.52
3	2016-17	1st	168	24	3.92	1.96	0.64	9	4.88	212.4
	TOT	AL	202.54	98.64	3.92	1.96	0.64	15.68	6.55	329.93



## Agenda Item No.-3

#### **IEC and Capacity Building**

## Information Education & Communication (IEC):

1. Approval of Action Plan for IEC (Rs. 24 Crore) for the year 2016-17 since submitted to Government of India.

SI. No.	Items & Particulars	Amount (Rs. in lakhs
	Advertisements through Mass Media	
1.	Radio Spots (AIR + FM + Available Community Radio Stations) including Sponsored Programmes on different components of SBM for both AIR/FM and Community Radios	300.00
	Advertisements through Print Media	
2.	Stickers/Flexes (Bus Panels, Bus Tickets, Seats), (Autos/Cycle Rickshaw Panels)	170.50
3.	Printing of Logo and Messages on:  - Notebook (Circulated for CB & T) Front and Back Cover Pages  - Inside and back cover pages of free textbooks and notebooks	350.00
4.	Leaflets, Pamphlets, Posters, Booklets etc.	120.00
5.	Temporary Hoardings/Bill Boards	145.00
6.	Wall Paintings	75.00
	Awareness Camps & Traditional Media	
7.	Folk Media & Fairs	300.00
8.	Social Media	20.00
	Narrow Cast	
9.	Short Films for showing in local cable channels/tagged with folk media screening	75.00
10.	Production of audio CDs, audio-visual CDs, Documentary/ Docu- Drama/ Docu-Feature Films on innovations and best practices for awareness generation	100.00
	Interpersonal Communication & Campaigns	
11.	Other activities under IEC, viz. Senior Citizen's Programme, Quiz Programme in Schools & Colleges, Road Shows & Tableau, School Children Awareness Programmes and Theme Based Cleanliness Drive	149.50
12.	Campaigns by SHGs and Federations	265.00
13.	Celebration of National & International Days such as Environment Day (5 <sup>th</sup> June), Hand Washing Day (15 <sup>th</sup> October), World Toilet Day (19 <sup>th</sup> November)	75.00
	Development of Website and Formation of Monitoring Syste	
14.	Development of Website for the Programme Sub-Components and also for MIS, M&E (with ULB login) (This includes O&M of [Infrastructure & Maintenance])	5.00





SI. No.	Items & Particulars	Amount (Rs. in lakhs
15.	Establishment of Monitoring Systems/Committee at the ULB levels:  1. For evolving local mechanisms to ensure that there is no open defecation, people are using toilets, cleanliness drives initiated by schools and colleges and Anganwadi centres etc.  2. For updating data, audio-video clips, photographs	250.00
	Grand Total	2400.00

#### **Capacity Building:**

2. Approval of Action Plan for Capacity Building (Rs. 13 Crore) for the year 2016-17 since submitted to Government of India.

Sl. No.	No. Items & Particulars						
	Capacity Building						
1.	Capacity Building and Training Programmes for various stakeholders on Swachh Bharat Mission	300.00					
2.	Workshops on Thematic Issues for various stakeholders	300.00					
3.	Capacity Building and Training Programmes on IEC	400.00					
4.	Exposure Visits to better performing ULBs both at the Districts, State and inter-state levels that have demonstrated innovative models of sanitation and best practices like innovative School sanitation models, Solid and Liquid Waste Management(SLWM) projects managed by women SHGs, eco-friendly toilet construction sites etc.	300.00					
	Grand Total	1300.00					

## Agenda Item No.-4

Miscellaneous Issues

Any other issue will be raised.

## Minutes of the 1<sup>st</sup> Meeting of State High Powered Committee under Mission Nirmal Bangla (Urban)/Swachh Bharat Mission (Urban)

Date: 5th January 2017

Time: 11.30 AM

Venue: Conference Hall of the Chief Secretary at Nabanna

List of the Members and other Participants Present: Placed at Annexure-VI

The Chief Secretary to Government of West Bengal and the Chairman of the State High Powered Committee under Mission Nirmal Bangla (Urban)/Swachh Bharat Mission (Urban) chaired the meeting.

At the outset, the Secretary, Urban Development & Municipal Affairs Department, Government of West Bengal welcome all the members of the Committee and explained the overall plan and activities under Mission Nirmal Bangla (Urban). He made a detailed presentation on the agendas of the meeting.

Detailed discussion took place on the Concept, Plan and Process of the proposed Solid Waste Management Projects, Action Plan of all Components for the year 2016-17 including IEC & Capacity Building Plans, Claim of fund from Government of India in the year 2016-17 and Miscellaneous issues.

Salient features of discussions and decisions taken:

#### Solid Waste Management:

- 1. DPRs of following 10 Solid Waste Management Projects of 14 ULBs of West Bengal have been placed before the Committee for consideration. The SWM Projects are technically appraised by Reputed Institutes/Technical Wings of the Government and approved by the concerned ULBs. Lands are available with the ULBs in each case. After detailed deliberation, the Committee has approved the DPRs of following SWM Projects:
  - a) DPR of four ULBs (in Cluster Mode) namely Dum Dum, North Dum Dum, South Dum Dum and Baranagar Municipalities.
  - b) DPR of two ULBs (in Cluster Mode) namely Habra and Ashoknagar-Kalyangarh Municipalities.
  - c) DPR of Jalpaiguri Municipality.
  - d) DPR of Krishnanagar Municipality.
  - e) DPR of Santipur Municipality.
  - f) DPR of Nabadwip Municipality.
  - g) DPR of Bhatpara Municipality.
  - h) DPR of Naihati Municipality.
  - i) DPR of Kolkata MC
  - j) DPR (Phase-I) of Asansol Municipal Corporation.

Details of the Projects are placed at Annexure-I

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2. It was decided that beyond the Government of India share i.e. 35% or as admissible of the Project Cost, the remaining will be borne by the State Government and ULB. This fund sharing pattern is approved in principle and UD & MA Department will finally obtain approval from Finance Department.

## IEC/Interpersonal Behavioural Change Communication:

3. It was discussed that the major challenge of the Solid Waste Management Projects is awareness generation through Interpersonal Behavioural Change Communication. For this, it was decided that a Combined Interpersonal Behavioural Change Communication Process will be developed by UD & MA Department and P&RD Department jointly utilizing the support of UNICEF. In this regard, support of the Department of Information & Cultural Affairs will be very much essential.

#### Annual Action Plan for the Year 2016-17:

4. The Committee has approved the Information, Education & Communication (IEC) Action Plan of Rs. 24 Crore for the year 2016-17, which has already been submitted to Government of India.

Details of the IEC Action Plan is placed at Annexure-II

 The Committee has approved the Capacity Building Action Plan of Rs. 13 Crore for the year 2016-17, which has already been submitted to Government of India.

Details of the Capacity Building Action Plan is placed at Annexure-III

6. The Committee has approved the Annual Action Plan of all Components for the year 2016-17 amounting to total GoI Share of Rs. 424.79 Crore, which has already been submitted to Government of India.

Details of the Annual Action Plan of all Components is placed at Annexure-IV

#### Claim of Fund from GoI in the Year 2016-17:

7. The Committee has approved the Claim of Fund amounting to Rs. 329.93 Crore from Government of India in the year 2016-17, which has already been submitted to Government of India.

Details of the Claim of Fund from Government of India is placed at Annexure-V

#### Miscellaneous:

8. It was discussed that a data base on existence of Open Drains in the ULBs should be developed and it was decided that a low cost scheme will be designed for covering those open drains in Urban Areas. In this regard, UD & MA Department will take necessary action.



9. It has been observed that the market areas & its nearby drains of urban areas remain very much dirty due to accumulation of wastes. For this, it was decided to prepare a plan for Cleanliness and Waste Management including drainage system in the markets of Urban Areas. Taking these aspects into account a new model of market may be designed and Kolkata MC will implement a pilot project in this respect. In this regard, UD & MA Department will take necessary action.

Meeting ended with thanks to and from the chair.

(Basudeb Banerjee)

Chief Secretary to Government of West Bengal

& Chairman, SHPC, MNB (U)

#### Annexure-I

#### Details of the SWM Projects approved by SHPC

- a) A DPR (Phase-I) of four ULBs (in Cluster Mode) namely Dum Dum, North Dum Dum, South Dum Dum and Baranagar Municipalities with a total project cost of Rs.55.73 Crore prepared by MED and appraised by Institute of Public Health Engineer (IPHE), India.
- b) A DPR of Two ULBs (in Cluster Mode) namely Habra and Ashoknagar-Kalyangarh Municipalities with a total project cost of Rs. 32.32 Crore prepared by two ULBs and appraised by Municipal Engineering Directorate (MED).
- c) A DPR of Jalpaiguri Municipality with a total project cost of Rs. 12.88 Crore prepared by the ULB and appraised by MED.
- d) A DPR of Krishnanagar Municipality with a total project cost of Rs. 18.33 Crore prepared by the ULB and appraised by MED.
- e) A DPR of Santipur Municipality with a total project cost of Rs. 18.19 Crore prepared by the ULB and appraised by MED.
- f) A DPR of Nabadwip Municipality with a total project cost of Rs. 14.98 Crore prepared by the ULB and appraised by MED.
- g) A DPR of Bhatpara Municipality with a total project cost of Rs. 41.82 Crore prepared by the ULB/Agency and appraised by Kolkata Metropolitan Development Authority (KMDA).
- A DPR of Naihati Municipality with a total project cost of Rs. 40.21 Crore prepared by the ULB/Agency and appraised by KMDA.
- A DPR of Rs. 152.83 Crore of Integrated Solid Waste Management of Kolkata MC prepared by Kolkata MC and already appraised by CPHEEO.
- j) A DPR (Phase-I) of Rs. 34.40 Crore in Asansol Municipal Corporation on MSWM prepared by MoUD, GoI has been received. The Ministry vide D.O. No. JS-MD/MoUD/SBM/OS-2016/34 dated 27.10.2016 informed that as MoUD has prepared this DPR, so no Third Party Evaluation/Appraisal is required for this DPR.

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Annexure-II

Details of the IEC Action Plan for 2016-17 approved by SHPC

Sl. No.	Items & Particulars	Amount (Rs. in lakhs)
<b>美国科技</b>	Advertisements through Mass Media	
1.	Radio Spots (AIR + FM + Available Community Radio Stations)	300.00
	including Sponsored Programmes on different components of	
	SBM for both AIR/FM and Community Radios	
20 SHREET TW	Advertisements through Print Media	
2.	Stickers/Flexes (Bus Panels, Bus Tickets, Seats), (Autos/Cycle	170.50
	Rickshaw Panels)	
3.	Printing of Logo and Messages on:	350.00
	- Notebook (Circulated for CB & T) Front and Back Cover	
	Pages	
	- Inside and back cover pages of free textbooks and notebooks	
4.	Leaflets, Pamphlets, Posters, Booklets etc.	120.00
5.	Temporary Hoardings/Bill Boards	145.00
6.	Wall Paintings	75.00
A STREET	Awareness Camps & Traditional Media	
7.	Folk Media & Fairs	300.00
8.	Social Media	20.00
a test or	Narrow Cast	
9.	Short Films for showing in local cable channels/tagged with folk	75.00
	media screening	
10.	Production of audio CDs, audio-visual CDs, Documentary/	100.00
	Docu-Drama/ Docu-Feature Films on innovations and best	
	practices for awareness generation	
T CONTRACTOR	Interpersonal Communication & Campaigns	CALL STREET
11.	Other activities under IEC, viz. Senior Citizen's Programme,	149.50
	Quiz Programme in Schools & Colleges, Road Shows &	
	Tableau, School Children Awareness Programmes and Theme	
	Based Cleanliness Drive	
12.	Campaigns by SHGs and Federations	265.00
13.	Celebration of National & International Days such as	75.00
	Environment Day (5 <sup>th</sup> June), Hand Washing Day (15 <sup>th</sup> October),	
	Environment Day (5 <sup>th</sup> June), Hand Washing Day (15 <sup>th</sup> October), World Toilet Day (19 <sup>th</sup> November)	
d marks	Development of Website and Formation of Monitoring Syst	tems
14.	Development of Website for the Programme Sub-Components	5.00
	and also for MIS, M&E (with ULB login) (This includes O&M	
	of [Infrastructure & Maintenance])	
15.	Establishment of Monitoring Systems/Committee at the ULB	250.00
	levels:	
	1. For evolving local mechanisms to ensure that there is no open	
	defecation, people are using toilets, cleanliness drives initiated	
	by schools and colleges and Anganwadi centres etc.	
	2. For updating data, audio-video clips, photographs	
	Grand Total	2400.00



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## Annexure-III

## Details of the Capacity Building Action Plan for 2016-17 approved by SHPC

Sl. No.	Items & Particulars	Amount (Rs. In lakhs)
	Capacity Building	<b>建筑地</b> 地
1.	Capacity Building and Training Programmes for various stakeholders on Swachh Bharat Mission	300.00
2.	Workshops on Thematic Issues for various stakeholders	300.00
3,	Capacity Building and Training Programmes on IEC	400.00
4.	Exposure Visits to better performing ULBs both at the Districts, State and inter-state levels that have demonstrated innovative models of sanitation and best practices like innovative School sanitation models, Solid and Liquid Waste Management(SLWM) projects managed by women SHGs, eco-friendly toilet construction sites etc.	300.00
	Grand Total	1300.00



#### Annexure-IV

## Details of the Annual Action Plan of all Components for 2016-17 approved by SHPC

Sl No.	Components Action Plan		Estimated Project Cost	Total Central Share (Rs. in Crore)
1	Individual Household Latrine	Construction of 120000 Unit	Rs.131.88 Crore (@10990/-)	48.00
2	Community Toilet	Construction of 2000 Seats	Rs. 19.60 Crore (@98000/- per seat)	7.84
2		Construction of 1000 Toilet Seats	Rs. 9.80 Crore (@98000/- per seat)	3.92
3 Public Toilet		Construction of 1000 Urinal Seats	Rs. 3.2 Crore (@32000/- per seat)	1.28
4	Solid Waste Management	Coverage of 80 Lakh population in Projects of prioritised 10 cities	Rs. 960 Crore (@1200/- per capita)	336.00
5	IEC	Miscellaneous IEC activities in State, District, ULBs	Action Plan of Rs. 24 Crore has already been submitted to MoUD vide Memo no. SUDA- 37/2015/938 dated 17.05.2016	18.00
6	CB & A&OE	Miscellaneous CB activities and A&OE Expenses	Action Plan of Rs. 13 Crore has already been submitted to MoUD vide Memo no. SUDA- 37/2015/938 dated 17.05.2016	9.75
	7	TOTAL		424.79

Note: The priority of IHHL component implementation is being set as per District-wise priority of Panchayat & Rural Development Department, Government of West Bengal



## Annexure-V

## Details of Claim of Fund from Government of India in the year 2016-17 approved by SHPC

Rs. in Crore

Sl No	Financial Year	Installment	SWM Amount	IHHL Amount	CT Amount	PT Amount	PT - Urinal Amount	IEC Amount	CB & A&OE	Total Amount
1	2014-15	2nd	34.54	21.12	0	0	0	6.68	1.67	64.01
2	2015-16	2nd	0	53.52	0	0	0	0	0	53.52
3	2016-17	lst	168	24	3.92	1.96	0.64	9	4.88	212.4
	TOTA	AL	202.54	98.64	3.92	1.96	0.64	15.68	6.55	329.93



#### Annexure-VI

#### List of Members and Other Participants Present

- 1. Sri Basudeb Banerje, IAS, Chief Secretary, GoWB
- 2. Sri Arnab Roy, IAS, Principal Secretary, Environment Department
- 3. Sri A. Bhattacharya, IAS, Principal Secretary, I & C.A Department
- 4. Sri Onkar Singh Meena, IAS, Secretary, UD & MA Department
- 5. Sri Khalil Ahemed, IAS, Municipal Commissioner, Kolkata MC.
- 6. Sri D. Nariala, IAS, Secretary, School Education Department
- 7. Sri A. Bhattacharyya, IAS, Commissioner, H & FW Department
- 8. Sri N. G. Hira, IAS, Commissioner, CD, WD & SW Department
- 9. Sri Dibyendu Sarkar, IAS, Commissioner, P & RD Department
- 10. Sri Sudipta Chatterjee, IAS, S.P.D., PBSSM, School Education Department
- 11. Sri Anil Kumar, Under Secretary, Ministry of Urban Development, Gol
- 12. Sri Bikash Ranjan Podder, Chief Engineer, Public Health Engineering Department
- 13. Sri Sunit Ranjan Sikdar , D.L.B., UD & MA Department
- 14. Sri Amit Das, Chief Engineer, MED, UD & MA Department
- 15. Sri Debkumar Chakraborti, Senior Consultant (WASH), UNICEF
- 16. Dr. Kaninika Mitra, Health Specialist, UNICEF
- 17. Smt Meital Rusdia, Chief Field Office, UNICEF
- 18. Sri Sutanu Kar, IAS, Additional Secretary, UD & MA Department
- 19. Sri Upendra Nath Sarkar, Special Secretary & Director, SUDA, UD & MA Department
- 20. Sri B. N. Kar, Additional Director, ILGUS, UD & MA Department
- 21. Sri Santanu Mukherjee, Joint Secretary, UD & MA Department
- 22. Sri R. M. Chatterjee, D.G.O., KMDA, UD & MA Department
- 23. Dr. Sujay Mitra, Poverty Monitoring Expert, CMU, UD & MA Department
- 24. Sri Subhasish Chattopadhyay, D.G.(SWM), Kolkata MC
- 25. Sri Saumya Bandyopadhyay, Assistant Engineer, M.E.D, UD & MA Department
- 26. Sri Sudhin Kar, C.M., SLB, Lbd, United Bank of India, H.O.

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## ASHOKENAGAR-KALYANGARH MUNICIPALITY P.O. ASHOKENAGAR, DIST. NORTH 24-PARGANAS

PIN-743222

Memo No.-AKM/ 2007

/Dum. Ground /2016

Date-24/11/2016

To

The Director, SUDA

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State Mission director, SBM(U)

ILGUS BHAVAN, H-C Block, Sector-III

Bidhannagar

Kolkata-700 106



9378 29 NOV 2016

Subject:- Setting up of a modern Dumping Ground for use of Habra and Ashokenagar-Kalyangarh Municipalities. -D.P.R. reg.

Ref.:- Your letter no.-SUDA-287/2016/2047(12) dated-24/11/2016.

5 limes

Sir

I would like to refer to your memo no.- SUDA-287/2016/1933(12) dt.- 17/11/2016 regarding the D.P.R. of Solid Waste Management Project pertaining to Habra and Ashokenagar-Kalyangarh Municipalities and to say that it is evident from the D.P.R. that the project costs have been estimated to the tune 32.32 crore wherein this U.L.B.'s share has been estimated to the tune of Rs. 8.62 crore.

In the above context it may be stated that ours is a "C" category Municipality and it is hardly possible on our part to meet the entire amount of the share of the project cost mentioned hereinabove. The matter was discussed in the B.O.C.'s meeting held on 22/11/2016 and it was resolved therein {vide resolution no.- 7(A)} that this U.L.B. is not able to bear more than 5 to 6 percent of the said project cost for reasons detailed therein. A copy of the said resolution is, however, annexed hereto for your kind perusal and such action as is deemed necessary.

With thanks

Yours faithfully

Enclo:- as stated.

(Prabodh Sarkar)

Chairman

Ashokenagar-Kalyangarh Municipality

Prabodh Sarkar Chairman

Ashokenagar-Kalyangarh Municipality

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#### পৌর কাউন্সিলারদের অফিস

## অশোকনগর - কল্যাণগড় পৌরসভা

ডাকঘর - অশোকনগর, জেলা- উত্তর ২৪-পরগণা পিন-৭৪৩২২২

> বোর্ড অব কাউন্সিল্রস সভা তারিখ =– ২২/১১/২০১৬ সভার স্থান =– পৌরসভার অধিবেশন কক্ষ।

সিদ্ধান্ত :- ৭ (ক)

णामाकनगत्न-कला।पगज् थ शवज़ (भौतमजात किम्हा।ग आस्नाकनगत्न-कला।पगज़ (भौत थलाकारा थकि खणाधूनिक जिल्ला शिक्ष एती शव। उक्ष श्रकाद्वत कि.शि.आत., थम.शे.कि. शेणिमासा श्रमण काताह थवः प्रशित्तेत्वत, मूण थवः (शेष्ठे मिन्नन प्रशित्तेत्वत, थम.वि.थम.(शेष्ठे) गण ४५/४४/४०४७ णाति।थ (योथजात केन्य्र (भौतमजाक निारा थकि मज काताहन यााण जामता जानाण शातनाम या, श्रकद्व मूला पाँज़िसाह होका- ७२,७२,००,०००/-। थत मासा किन्दीरा मतकावित (भराति होका- ४४,००,०००/-। थत मासा किन्दीरा मतकावित (भराति होका- ४४,००,०००) काि थवः आसाकनगत-कलागणज्ञ (भराति श्रम्भत अर्थ) काि ।

धित्यारा जामता १७ २२/১১/२०১৬ णाति। । तार्छ- अत्-काछिन्मिनतम मछारा मकन मप्नमाक जविष्ठ कता एराहि, जाँप्त अनुमापानत जना। मकन काछिन्मिनत श्रसाविण श्रकद्मि क्रियारा कतात श्रास्क मएमण (शासन काताहन। किन्न जामाप्ति मण 'मि' काि गितम्छात (तिष्ठि मात्रश्लाम एराना। मूणतार जामाप्ति शास (आसाकनगत-कना। गणराम शितम्छा) श्रकद्म कारात ए । ।

উপরিউক্ড সিদ্ধান্ত সর্বসম্মতিকাদ গৃহিত ए'ল।



Prabodh Sarkar
Chairman
Ashokenagar-Kalyangarh Municipality

১৯/ (গ্রাবাধ সরকার) পৌরগুধান আশাকনগর–কল্যাণগড় পৌরসভা

Phone No.: 03216 270572 Fax No.: 03216 237031





## HABRA MUNICIPALITY

(ESTD.-1979)

#### POURA BHAWAN

PROMODE DASGUPTA SARANI, P.O. HABRA, NORTH 24 PARGANAS, PIN-743263 e-mail: habramunicipality@yahoo.com

Ref. No. HM 1728 PWD 16

Date 01-12-2016

To
The Director
State Urban Development Agency
ILGUS Bhawan,
HC Block, Sector-III,
Bidhannagar, Kolkata – 700 106

Sub.: Submission of BOC Resolution declaring ULB Share for implementation of Solid Waste Management Project.

Sir,

In reference to the discussion in the meeting held on 17-11-2016 in the Conference Hall of SUDA, this is to inform you that Habra Municipality has decided to share 5% of the total project cost of Rs 32.32 Crores for implementation of Solid Waste Management at Habra and Ashoknagar-Kalyangarh Municipality.

I am enclosing herewith the resolution of Board of Councillors' meeting held on 30.11.2016.

This is for your kind information and taking necessary action.

Thanking you.

Enclo. As stated.

Yours sincerely,

Chairman Habra Municipality



## হাবড়া পৌরসভা হাবড়া, উত্তর ২৪-পরগনা বোর্ড অব কাউন্সিলর্স-এর সাধারন সভা

তারিখ ঃ ৩০শে নভেম্বর ২০১৬ (বুধবার) সময় ঃ বিকাল ৪-০০ ঘটিকা স্থান ঃ অধিবেশন কক্ষ (পৌরভবন)

## উপস্থিত কাউন্সিলরদের নাম ঃ

ऽ। श्री	নীলিমেশ দাস		পৌরপ্রধান	
	ী রাখী দাস	-	উপ-পৌরপ্রধান	
ত। শ্রী	তারক নাথ দাস		কাউন্সিলর	
8। श्री	সদারঞ্জন বসু		,,	
	তপতী দত্ত	2	9 9	
৬। শ্রীমতী	গাগী ঘোষ	_	,,	
৭। শ্রীমতী	গোপা দাস	-	, ,	
৮। श्री	প্রসেনজিৎ দত্ত	_	,,	
৯। শ্রীমতী	শান্তা ভট্টাচার্য্য		,,	
১০। গ্রী	শ্যামল কুমার দাস		,,	
১১। শ্রী	নারায়ন চন্দ্র সাহা		>>	
১২। শ্রীমতী	নন্দা চক্রবত্তী		75	
	গৌতম বিশ্বাস	1	,,	
১৪। খ্রী			55	-
১৫। শ্রীমতী	পূর্নিমা (দাস) সরকার	-	9 9	
১৬। শ্রী	কৃষ্যপদ দাস	-	5 5	
५१। श्री	সুজিৎ বিশ্বাস	_	,,	
১৮। শ্রী	অশোক কুমার সাহা		9 9	
১৯। শ্রীমতী	সোমা রায় (দাস)	_	757	
২০। শ্রীমতী	রুমা চ্যাটাজ্জী	_	/ , ,	
		(		

অদ্যকার সভায় সভাপতিত্ব করেন পৌরপ্রধান বা নীলিমেশ দাস বহাশয়।

Certified true copy

CHAIRMAN HABRA MUNICIPALIN

	***************************************	
	সিদ্ধান্ত ঃ	
	31	
	21	
	৩। হাবড়া পৌরসভা ও অশোকনগর কল্যানগড় পৌরসভার যৌথ উদ্যোগে প্রস্তাবিত ডাম্পিং গ্রাউন্ভের জন্য	
	विकास कर्मा विकास कर्मा विकास कर्मा विकास कर्मा विकास विकास विकास कर्मा	
	MED দ্বারা প্রস্তুত করা DPR -এর সর্বমোট Project Cost ৩২ কোটি ৩২ লক্ষ টাকার সর্বাধিক	
	৫% টাকা হাবড়া পৌরসভা ব্যয় করবে।	
	আর কোন আলোচ্য বিষয় না থাকায় পৌরপ্রধান স্কলকে ধন্যবাদ জানিয়ে অদ্যকার সভার	
	সমাপ্তি ঘোষনা করেন।	
-		tel <sub>e</sub> dent
-	হাবড়া	-
	वाक्त - शा नालिस्य पाप्त	
	CHAIRM IN JANITY	
	HABRU.	

## GOVERNMENT OF WEST BENGAL OFFICE OF THE CHIEF ENGINEER

Municipal Engineering Directorate

Bikash Bhawan, South Block (1<sup>st</sup> Floor) Salt Lake, Kolkata - 70009 1
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No. ME/ 1962/18-48/2015

Dated 17/11/16

From: The Chief Engineer

M. E. Dte.

Bikash Bhayan

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To: The Director, SUDA, &
The State Mission Director,
Swachh Bharat Mission (Urban)
ILGUS Bhaban, H.C.Block, Sector-III,

Salt Lake, Kolkata- 700 106.

ARRIMON 2016 Mul 216

Sub: Appraisal Report of Municipal Solid Waste Management Projects within Jalpaiguri, Santipur, Nabadwip in stand alone mode and Ashoknagar-Kalyangarh & Habra in cluster mode

Ref: Your Memo No. SUDA-50/2016/1904 dt. 15.11.16

Sir.

With reference to the subject cited above I am sending herewith appraisal reports of four DPRs covering 5 non-KMA towns as listed below along with copy of DPRs for your kirld perusal and taking further course of necessary action:

SI.	Project	Appraised Amount
No.		(in lakh)
1.	Solid Waste Management Project under Jalpaiguri Municipality	1288.15
2.	Solid Waste Management Project under Nabadwip Municipality	1498.44
3.	Solid Waste Management Project under Shantipur Municipality	1819.14
4	Solid Waste Management Project under Ashoknagar- Kalyangarh & Habra Municipality	3232.20

Enclo:- As stated above.

Yours faithfully,

Chief Engineer, MED

## APPRISAL REPORT

1.	Name of the Project	et	Solid Waste Manag	gement Project under Jalpa	iguri Mun icipality
2.	Sectoral area		Urban		
3.	Total Financial out	lay	1288.15 Lakh		
4.	Financial arrangen		<u> </u>		
		Funds being ma			
Imple	ementing agency	Gol Share	State Share	Others, if any( Addl. State share)	Total
Jalpaigu	ari Municipality	450.85 Lakh	150.28 Lakh	687.02 Lakh	128 8.15 lakh
5.	Project o		24 Months		
		nths/years)		alitatia Iolaniausi Dictrict V	Jost Rongal
6.		of project		ality in Jalpaiguri District, V	vest bengan
7.	Previous ph	ases, if any	No		thauter and as Chata
8.	Statutory	required	Electricity Board, PWD etc. (whereve		oard (SPCB), Highways,
9.	Statutory	obtained	To be obtained aft	er approval of the project	by the ULB.
10.	Details of Feasibili	ty Studies done (if		nically and financially feas	
11.	Implementing agency		Jalpaiguri Municip West Bengal	ality with technical assista	nce from MED, Govt. of
12.	Basic design of the project				
i)	Goals and Objectives		generation of b		manure and proper
ii)	Activities	involved	manure and sellir	ortation, separation and ng of recyclables, sanitary uals and guidelines of Govt	land filling for inert as
iii)	Outputs of	the project	Waste free city with minimum discharge to landfills.  The day to day hazards of waste mechanism will be addressed with		
			The day to day ha	zards of waste mechanism	will be addressed with
_iv)_	Outcome o	f the project	municipal revenu	to socio-economic view e infrastructure will be	soundly built in a nev
			form.		
13.		opulation	107241	contract and analysis of the property of the contract of the c	
i)		nsus 2011	107341		
ii)		ar (2018)	117316		
iii)		e Year (2028)	132256		00.0
iv)		ar (2038)	148127		
14.		nditure proposed	D 4700 05		
i)		us population 2011	Rs. 1200.05		
ii)	Considering Base Year population (2018)		Rs. 1098.02		
15.		Quantitative and qualitative (verifiable) target Indicators		anual published by MoUD	
16.	Environmental sur	stainability of the	be cut. No wate	not affect the green bel ir body is affected by the re also affected by the proposed soil erosion.	e proposed project. N

17.	Land acquisition / Resettlement and Rehabilitation involved	Land already procured
18.	Operation and Maintenance	Jalpaiguri Municipality
19.	Finance Plus Criteria	
(i)	Innovations and piloting of new approaches	Waste to energy (Bio-gas)
(ii)	Innovations in financing and leveraging	Surplus income will be generated after meeting Operation and Maintenance costs.
20.	Whether the project is recommended for Sanction or not (Y/N).	Yes
21.	If not, please mention reasons and area for improving DPR.	Not Applicable
22.	Estimated cost for consideration & approval (INR Lakh)	Rs. 1288.15 Lakh

Chief Engineer

Municipal Engineering Di rectorate

Govt. of West Bengal

## APPRISAL REPORT

1.	Name of the Projec	t	Solid Waste Manag	gement Project under Nabac	wip Mun icipality
2.	Sectoral area		Urban		
3.	Total Financial outle	ву	1498.44 Lakh		
4.	Financial arrangem	ent			
		Funds being mad	de available by		
Impl	Implementing agency Gol Share		State Share	Others, if any( Addl. State share)	Total
Nabady	wip Municipality	524.45 Lakh	174.82 Lakh	799.17 Lakh	1498.44 lakh
5.	Project d (dates/mon		24 Months		
6.	Location o		Nabadwip Municip	pality in Nadia District, West	Bengal
7.	Previous ph		No		
8.	Statutory		Electricity Board, PWD etc. (wherev		ard (SPCB), Highways,
9.	Statutory	obtained	To be obtained aft	er approval of the project b	y the ULB.
10.	Details of Feasibility Studies done (if any)			nically and financially feasib	
11.	Implementing agency		Nabadwip Munici of West Bengal	pality with technical assistan	ce from MED, Govt.
12.	Basic design of the project				
i)	Goals and Objectives		generation of to		manure and proper
ii)	Activities	Activities involved Collection, transportation, separation and production of Bio-g manure and selling of recyclables, sanitary land filling for inert per relevant manuals and guidelines of Govt. of India.			and filling for inert as
iii)	Outputs of	the project	Waste free city with minimum discharge to landfills.  The day to day hazards of waste mechanism will be addressed with		
The control of the co					
- Marine and the	The second secon	Consultor Consultor Made		to socio-economic view	
iv	- Outcome of	the project		e infrastructure willebe se	
COPPER.	Japan services our extension of	A SHEET OF BUILDING MAN AS A STORY	form.	references assume the control of the second	CL STATES OF THE STATE OF THE STATES OF THE
13.	Target po				
i)	As per Cei		125543		
ii)	Base Yea		128339		
iii)	Intermediate Year (2028)		131585		
iv)	Final Yea		133957		
14.		diture proposed			
i)	Considering Censu		Rs. 1193.57		
ii)	Considering Base (20	Year population 18)	Rs. 1167.56		
15.	Quantitative and q		As per CPHEEO N	lanual published by MoUD,	Govt. of India

16.	Environmental sustainability of the project	The project does not affect the green belt. No tree is required to be cut. No water body is affected by the proposed project. No natural outlays are also affected by the proposed project. There is no possibility of soil erosion.
17.	Land acquisition / Resettlement and Rehabilitation involved	Land already procured
18.	Operation and Maintenance	Nabadwip Municipality
19.	Finance Plus Criteria	
(i)	Innovations and piloting of new approaches	Waste to energy (Bio-gas)
701	Innovations in financing and	Surplus income will be generated after meeting Operation and
_ (ii)	leveraging	Maintenance costs.
20.	Whether the project is recommended for Sanction or not (Y/N).	Yes
21.	If not, please mention reasons and area for improving DPR.	Not Applicable
22.	Estimated cost for consideration & approval (INR Lakh)	Rs. 1498.44 Lakh

Chief Engineer
Municipal Engineering Directorate
Govt. of West Bengal

## APPRISAL REPORT

1.	Name of the Project	t	Solid Waste Manag	gement Project under Shanti	pur Municipality
2.	Sectoral area		Urban		
3.	Total Financial out	ay	1819.14 Lakh		
4.	Financial arrangem				
		Funds being mad	le available by	878	
Imple	Implementing agency Gol Share		State Share	Others, if any( Addl. State share)	Total
Shantipu	ır Municipality	636.70 Lakh	212.23 Lakh	970.21 Lakh	1819.14 lakh
5.	Project of (dates/mor		24 Months		
6.	Location of	of project	Shantipur Municip	pality in Nadia District, West	Bengal
7.	Previous ph	ases, if any	No		
8.	Statutory		Electricity Board, PWD etc. (wherev	sion from concerned auth State Pollution Control Boa er applicable).	ard (SPCB), Highways,
9.	Statutory obtained			ter approval of the project b	
10.	Details of Feasibility Studies done (if any)			nnically and financially feasib	
11.	Implementing agency		Shantipur Municip West Bengal	pality with technical assistan	ce from MED, Govt. of
12.	Basic design of the project				•
i)	Goals and Objectives		generation of	tive is conversion of wast bio-gas, preparation of ecyclables.	manure and proper
ii)	Activities	involved	manure and selli	oortation, separation and page of recyclables, sanitary uals and guidelines of Govt.	and filling for inert as
	Outputs of	the project	Waste free city w	ith minimum discharge to la	ndfills.
<u>iii) — </u>	- Outputs Or	the project	The day to day h	azards of waste mechanism	will be addressed with
			Trave Importance	to socio-economic view	points, as well the
iv)	Outcome o	f the project	municipal revent form.	ue infrastructure will be s	oundly built in a new
13.	Target p	opulation			
i)		nsus 2011	151777		
ii)		ar (2018)	167897		
iii)		e Year (2028)	190611		
iv)		ar (2038)	213289		
14.	Per capita expe	nditure proposed			
- i)		us population 2011	Rs. 1198.56		
ii)	-	e Year population 018)	Rs. 1083.49		
15.	Quantitative and (verifiable) target		As per CPHEEO	Manual published by MoUD,	Govt. of India

16.	Environmental sustainability of the project	The project does not affect the green belt. No tree is required to be cut. No water body is affected by the proposed project. No natural outlays are also affected by the proposed project. There is no possibility of soil erosion.
17.	Land acquisition / Resettlement and Rehabilitation involved	Land already procured
18.	Operation and Maintenance	Shantipur Municipality
19.	Finance Plus Criteria	
(i)	Innovations and piloting of new approaches	Waste to energy (Bio-gas)
(ii)	Innovations in financing and leveraging	Surplus income will be generated after meeting Operat ion and Maintenance costs.
20.	Whether the project is recommended for Sanction or not (Y/N).	Yes
21.	If not, please mention reasons and area for improving DPR.	Not Applicable
22.	Estimated cost for consideration & approval (INR Lakh)	Rs. 1819.14 Lakh

Chief Engineer

Municipal Engineering Di rectorate

Govt. of West Bengal

## APPRISAL REPORT

1.			Solid Waste Management Project under Ashoknagar-Kal yangarh & Habra Municipality			
2.	Sectoral area		Urban			
3.	Total Financial outlay		3232.20 Lakh			
4.	Financial arrangement					
		Funds being mad	de available by			
Implementing agency		Gol Share	State Share	Others, if any( Addl. State share)	Total	
Ashoknagar-Kalyangarh & Habra Municipality		1131.27 Lakh	377.09 Lakh	1723.84 Lakh	3232.20 lakh	
5.	Project duration (dates/months/years)		24 Months			
6.	Location of project		Ashoknagar-Kalyangarh & Habra Municipality in North 24 Parganas District, West Bengal			
7.	Previous ph	Previous phases, if any		No		
8.	Statutory required		Clearance/Permission from concerned authority such as State Electricity Board, State Pollution Control Board (SPCB), Highways, PWD etc. (wherever applicable).			
9.	Statutory obtained		To be obtained after approval of the project by the ULB.			
10.	Details of Feasibility Studies done (if any)		The project is technically and financially feasible			
11.	Implementing agency		Ashoknagar-Kalyangarh & Habra Municipality with technical assistance from MED, Govt. of West Bengal			
12.	Basic design	Basic design of the project				
i)	Goals and Objectives		The main objective is conversion of waste to energy through generation of bio-gas, preparation of manure and proper management of recyclables.			
ii)	Activities involved		Collection, transportation, separation and production of Bio-gas manure and selling of recyclables, sanitary land filling for mert as per relevant manuals and guidelines of Govt of India			
		AL CONTRACTOR	Wasto free city w	ith minimum discharge to la	ndfills.	
iii)	Outputs of	Outputs of the project		The day to day bazards of waste mechanism will be addressed wit		
			dua importance	to socio-economic view	points, as well th	
iv)	Outcome o	Outcome of the project		ue infrastructure will be so	oundly built in a new	
13.	Target p	Target population				
i)		As per Census 2011		269133		
ii)		Base Year (2018)		292162		
- iii)		Intermediate Year (2028)		332772		
iv)		Final Year (2038)		383014		
14.		Per capita expenditure proposed				
i)		Considering Census population 2011		Rs. 1200.97		
ii)	Considering Base Year population (2018)		Rs. 1106.30			
15.	Quantitative and qualitative (verifiable) target Indicators		As per CPHEEO Manual published by MoUD, Govt. of India			

16.	Environmental sustainability of the project	The project does not affect the green belt. No tree is required to be cut. No water body is affected by the proposed project. No natural outlays are also affected by the proposed project. There is no possibility of soil erosion.		
17.	Land acquisition / Resettlement and Rehabilitation involved	Land already procured		
18.	Operation and Maintenance	Ashoknagar-Kalyangarh & Habra Municipality		
19.	Finance Plus Criteria			
(i)	Innovations and piloting of new approaches	Waste to energy (Bio-gas)		
(ii)	Innovations in financing and leveraging	Surplus income will be generated after meeting Operati on and Maintenance costs.		
20.	Whether the project is recommended for Sanction or not (Y/N).	Yes		
21.	If not, please mention reasons and area for improving DPR.	Not Applicable		
22.	Estimated cost for consideration & approval (INR Lakh)	Rs. 3232.20 Lakh		

Chief Engineer

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Govt. of West Bengal