

ANNEX 2: CITY SOLID WASTE ACTION PLAN (CSWAP)°

(As referred in Chapter 2 and 6)

ULB's City Profile: (demographic and waste generation details)

1	Name of ULB :		Aurangabad Municipal Corporation	
2	Name of the district:		Maharashtra	
3	No. of Municipal Zones in ULB		9	
4	No. of wards in the ULB		115	
5	Population & Households in the ULB as per 2011 Census:			
	Population (P ₀)		Households (HH ₀)	
	1175116		235,023	
6	Population & Households in the ULB as per Current scenario :			
	Population (P ₁)		Households (HH ₁)	
	1,618,225		323645	
7	Projected population & Households in the ULB : 2025			
	Population (P ₂)		Households(HH ₂)	
	1,724,641		344928	
8	Institutional & Governance framework			
			Yes / No	If no, action to be taken to notify & timeline
A	Regulatory Framework	Whether Municipal SWM Bylaws notified? (conforming to SWM Rules 2016)(furnish details)	Yes, As per annexure (स्वमअ- 2019/प्र.क्र.143/नवि- 34 दि.13.02.2020	
		State SWM Strategy & Plan (available/ not available)		
B	Institutional Arrangement	Roles and Responsibilities for dealing with MSWM services.	Yes, As per annexure (स्वमअ- 2019/प्र.क्र.143/नवि- 34 दि.13.02.2020	
C	Governance Reforms -	Implementation of e-governance in ULBs (available / not available)	Yes	
D	ICT based Governance	ICT based monitoring of MSWM operations, services and complaint redressal (furnish details)	Yes	ICT based monitoring of segregation (31.11.2022)

9.	MSWM Service Level Benchmarks			
	Indicator	Benchmark	Before implementation of project(s)	After implementation of project(s)
1	Household level coverage of SWM services	100%	100%	100%
2	Efficiency of collection of municipal solid Waste	100%	100%	100%
3	Extent of segregation of municipal solid waste	100%	80%	100%
4	Extent of municipal solid waste recovered	80%	60%	80%
5	Extent of scientific disposal of municipal solid waste	100%	90%	100%
6	Efficiency in redressal of customer complaints	80%	80%	80%
7	Extent of cost recovery in SWM services	100%	80%	100%
8	Efficiency in collection of SWM-related user charges	90%	40%	90%
	State SWM Strategy & Plan (available / not available)	Available		

Current MSW Management:

1	Current MSW total generation in TPD (A): 450 TPD= Tonnes per day	Per Capita generation in gms: 278.08 ($A \times 10^6 / P_1$)
2	Total waste collected (TPD) : 450	
3	No. of wards & % of wards practicing source segregation:	
	No of wards	% of wards
	115	85 %
4	No. of wards & % of wards practicing 100% door to door waste collection:	
	No of wards	% of wards
	100%	100%
5	Total quantity transported in TPD to: Processing Plants :	
	Processing Plant	SLF
	450	Not available
6	Secondary collection points/Transfer Stations (TS) (only if TS is/ are existing, otherwise not applicable)	
	Waste stream	Number of TS
	NA	NA
		Capacity of TS (TPD)
		NA
7	On basis of Waste Characterization, quantity of segregated waste generated (in TPD), of given waste streams	
	MSW Waste Stream	Quantity in TPD
	Wet waste	270
	Dry waste	160
		% of MSW
		60%
		35.55%

	Sanitary waste	5	1.11%
	Domestic hazardous Waste	1	0.22%
	Other waste (Drain Silt & Inert)	18	4%
	C&D Waste	Qty in TPD	% of MSW
	Total C&D Waste generated	80	17.77 (expressed as % of A at row 1 above)
8	Total quantity of MSW currently processed (B) in TPD: 350		
9	Total design capacity* available of all types of processing plants in TPD:430 *All existing, under construction, approved and defunct plants (defunct plants that have not been written off) Note: This capacity will be equal to or greater than (B)		
10	Operation & Maintenance and Recovery of SWM fees Issues Prepare statement of previous 5 years OEM costs incurred in ULB for OEM and the collections of SWM use fees and analyses for sustainability of O&M		

Assessment of requirement of processing plants/facilities:

A	Projected waste generation@2025 in TPD:			
	Per capita generation for calculating waste generation: 550gms/capita			
	ULBs > 10 lakh population@550 gms/capita:			
	ULBs 1 lakh -10 lakh (both included) population@450gm/capita:			
	ULBs <1 lakh population@300gm/capita:			
B	Projected Waste generation streams for year 2025: 948 TPD			
	MSW Waste Stream	Fraction in MSW (Indicative –can be changed)	Projected waste generation	% of MSW
	Wet waste	60%	569	60%
	Dry waste	35%	337	35.55%
	Sanitary waste	Minor	10.54	1.11%
	Domestic hazardous Waste	10%	2.1	0.22%
	Other waste (Drain Silt & Inert)	20%	38	4%

Other components of MSW Management

C	Sanitary Landfill (SLF) (Filling CELL for 5 years only)			
	Waste sent to SLF restricted to 20% of total Municipal		142.28	
	SLF capacity for 5 years duly adding extra volume for daily cover, top cover etc. (as per Manual on MSWM) Tonnes/cum/day		337566	
D	Estimated cost for proposed components as per GAP analysis			
	Waste Management Component	Total proposed requirement (gap projected @ 2025)	Estimated cost / tonne (per machine for MRSs)	Proposed estimated cost
	Wet waste processing	359.13	3600000	129,28,68,000
	Dry waste processing	197.26	3300000	65,09,58,000
	C&D waste processing	168.63	5,60,000	12,64,72,500
	Dumpsite Remediation	12,35,294	550	67,94,11,700
Sanitary landfill	3,37,566	500	16,87,83,069	

	Transfer Station	948	16,00,000	151,68,00,000
	Mechanical Road Sweepers (MRSs)	4	90,00,000	36,00,00,000

Financing Planning of Fund Required for Addressing the GAPS (Rs. in Crore)

	Waste management Item	TotalProposedCost	ACAunderSBM-U 2.0	StateGovt.Fund	ULBfund	Other Fund (PPP, Others)
1	For wet waste processing	1292868000	323217000	206858880	762792120	
2	For Drywasteprocessing	650958000	162739500	104153280	384065220	
3	For C&D waste processing	94432800	23608200	15109248	55715352	
4	For Dumpsite Remediation	67,94,11,700	169852925	108705872	400852903	
5	For Sanitary landfill	168783069	42195767	27005291	99582011	
5	For Transfer Station	1516800000	379200000	242688000	894912000	
6	For Mechanical Road Sweepers	36000000	9000000	5760000	21240000	
	Grand Total	4439253569	1109813392	710280571	2619159606	

Module 1: MSW Processing GAP analysis & Action Plan

M 1.1 GAP Assessment for 100% Processing of MSW at ULB level

Processing Facility proposals	Existing Plants Capacity (TPD)	Status of Current Capacity- Deficit/ Surplus	GAP Projected @2025 (TPD)
Mixed Waste Processing Facility (continue to be used for either Wet OR Dry Waste) — Data taken for assessing capacities			No new mixed waste plant will be allowed
Composting Plants (for WET waste)	210	-60	359.13
Bio-methanation Plants (for WET waste)	30	0	0
Material Recovery Facilities MRF— (for DRY waste)	160	-20	197.26
Standalone RDF Plants (for DRY waste downstream of MRFs)(not part of composting plants)	20	0	0
Waste to Electricity (RDF based — only for ULBs > 10 lakh)	-	-	-
Others (describe the nature of plants, feed stock should be source segregated waste)	-	-	-

*(Operational/Under Constn. / in Tender Process, Non-Functional good condition)

Explanation for calculating the GAP.

Many ULBs have installed composting plants receiving mass waste, without segregation at source, but carry out segregation within the process. Such plants shall continue to be utilized for either wet or dry waste, for full design capacity with segregation at source. It will result in proposing plants for other waste stream only. Additional process may be added down the line to process RDF if not already being done in such plants.

After the GAP analysis, actions need to be taken for preparation of DPRs Identifying & earmarking land; documents for tenders etc.

M 1.2 ULB level Action Plan for achieving 100% scientific MSW Processing

Processing Facility proposals	Proposed Plant Capacity (TPD)	Estimated Cost	Plant Commissioning Date
Composting Plants (for WET waste)	359.13	129,28,68,000	31/09/2023
Bio-methanation Plants (for WET waste)	-	-	
Material Recovery Facilities MRF— (for DRY waste)	197.26	65,09,58,000	31/12/2023
Standalone RDF Plants (for DRY waste downstream of MRFs)(not part of composting plants)	-	-	
Waste to Electricity (RDF based — only for ULBs > 10 lakh)	-	-	
Others (describe the nature of plants -feed stock should be source segregated waste)			
TOTAL			
Other Proposals part of MSW Construction of SLF	337566	16,87,83,069	31/01/2023
Construction of TS, if required (ULBs >5lakh and haulage of fully load- ed vehicles is > 15Km	948	151,68,00,000	31/02/2023

M 1.3 ULB commitment timelines for Certification under Garbage-free Cities Star Rating

S.No	GFC Star Rating Certification	Committed Date
1	1-Star GFC Rating Certification	31/08/2022
2	3-Star GFC Rating Certification	(mandatory before 31.3.2026)
3	5-Star GFC Rating Certification	These Certifications are beyond the mandatory requirement under SBM 2.0. ULBs are encouraged to get these certifi- cations.
4	7-Star GFC Rating Certification	

M 1.4 State/ UT - Consolidated Financial Action Plan for MSW Processing: Financials in Rs. Crore

	FY 2021-22	FY 2022-23	FY 2023-24	TOTAL (equal to SBM 2.0 SWM allocation, Processing part only)
Action Plan Amount		1166295600	777530400	
No. of ULBs covered*				All ULBs in the State/ UT covered in APs by 2023-24
* Detailed ULB-wise, plant-wise Action Plan statement is to be furnished Action Plan approvals to be obtained by 31.3.2024 for all ULBS				

M 1.5 State / UT — Consolidated Certification- cum-Implementation Action Plan (only First time GFC Certifications to be considered)

Certification	Before SBM 2.0	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26
No. of ULBs rated I—Star				All ULBs to be I-Star rated by 31.3.2023		
No. of ULBs rated 3—Star*						
No. of ULBs with 100% waste processing		Institutional Arrangement				
* All ULBs to become 3-Star GFC Rated before 31.3.2026						

Module 2: Legacy Waste Dumpsites Remediation Action Plan

M2.1 ULB's Dumpsite Remediation Plan (applicable only if ULB has an existing dumpsite(s))

Total quantity of existing legacy waste in tonnes	12,35,294
Land occupied by the dumpsite, Acres	44
Proposed method for remediation*	Biomining
Action plan for recoverable material	RDF, Fill low area
Indicative Uses/ Utilization of Segregated Material	Forward to Recycling plants
Land to be recovered, Acres (extent of land from which waste is completely removed)	32
End uses of remediated dumpsite area	Garden
Estimated Cost for Remediation	67,94,11,700
Most likely date for complete remediation (not beyond 31.3.2023 for ULBs < 10 lakhs and 31.3.2024 for ULBs > 10 lakhs)	31-03-2024

* to be compliant irith extant NGT and Court orders

M2.2 State/ UT— Consolidated Financial Action Plan for Dumpsite Remediation:

Financials in Rs. Crore

	FY 2021-22	FY 2022-23	TOTAL (equal to SBM 2.0 allocation for dumpsite remediation for the State / UT)
Action Plan Amount	-	67.94 Cr.	67.94 Cr.
No. of ULBs covered*			all ULBs in the State/ UT
Action Plan approvals to be obtained by 31.3.2022 for all ULBs <10 Lakh and by 31.3.2023 for all ULBs >10 lakh			
* Detailed ULB-wise, dumpsite-wise Action Plan statement is to be furnished			

M2.3 State/ UT - Consolidated Dumpsite Remediation Implementation Action Plan

Remediation	Before SBM 2.0	By 31.7.2022	By 31.3 2023	By 31.3.2024	TOTAL
No. of ULBs completing remediation	0%	15%	60%	100%	to complete remediation by 31.3.2024

Module 3: CAD Waste Processing Action Plan (only for 154 non-complying (NCAP cities) and 5-lakh size ULBs)

M3.1 ULBs Gap Assessment for Processing of Construction and Demolition Waste (Applicable for ULBs > 5 lakh population and/or 154 Non-attainment cities)

Estimated C&D Waste generated @ 50gm/capita of total Municipal Solid Waste in TPD	86.23
Add 25% extra for bulk C & D waste generators, depositing with ULB	20.23
Add 20% over and above	121.37
Total CAD waste currently generated in TPD	101.14
Existing capacity of C&D waste processing plant available in TPD	00
Proposed capacity in TPD for 2025	146.59

M3.2 State/ UT - Consolidated Financial Action Plan for C&D Waste Processing: Financials in Rs. **Crore**

C&D Waste Processing	FY 2021-22	TOTAL (equal to SBM 2.0 allocation for CAD Waste Plants)
Action Plan Amount	9,44,32,800	Approvals to be obtained by 31.3.2022 for all the ULBs concerned in one go, thus prioritizing control of air pollution
Detailed Statement of ULB- wise C&D waste processing plant proposals are to be furnished		150 TPD processing plant will proposed for ULB

M3.3 State/ UT- Consolidated C&D Waste Processing Plants Implementation Action Plan

Setting up C&D Waste Processing Plants	Before/ Outside SBM 2.0	By 31.7.2022	By 31.3.2023	TOTAL
No. of ULBs	0	50%	100%	All ULBs > 5lakh + NCAP ULBs in the State/ UT to complete the plants by 31.3.2023

Module 4: Mechanical Road Sweepers Action Plan (only for 154 non-complying (NCAP) and 5-lakh size ULBs)

M4.1 Mechanical Road Sweepers (Applicable only for ULBs > 5 lakh population and/or 154 Non-attainment cities) - Assessment for a ULB:

Length of road to be swept daily(Only those roads which are 4-lane or more lanes)	220 Km
Detailed calculation of mechanical sweeping required in Lane-KMs	40 km
Proposed no. of Machines required to sweep the length No. of Machines currently operating /existing	6 required / 4 existing
Current requirement of machines (nos)	2

M4.2 State/ UT - Consolidated Financial Action Plan for Mechanical Road Sweepers: Financials in Rs. **Core**

	FY 2021-22	TOTAL (equal to SBM 2.0 allocation for Mechanical Road Sweepers)
Action Plan Amount		Approvals to be obtained by 31.3.2022 for all the ULBs concerned in one go, thus prioritizing control of air pollution
<i>Detailed Statement of ULB-wise Mechanical Road Sweepers proposals are to be furnished</i>		36000000

M4.3 State Government / UT Administration - Consolidated Mechanical Road Sweepers Implementation Action Plan

Equipping ULBs with Mech. Road Sweepers	Before/Outside SBM 2.0	By 31.7.2022	By 31.03.2023	TOTAL
	20 %	45%	75%	All ULBs > 5lakh + NCAP ULBs in the State/ UT to complete procurement of MRSs by 31.3.2023

STATE/ UT ANNUAL ROADMAP

I. State/ UT Annual Action Plans (Financial)

(Aggregate of action plans mentioned at MI.4, M2.2, M3.2 and M4.2 above)

	FY 2021-22	FY 2022-23	FY 2023-24	TOTAL
Sub-Action Plans:	-	-		
MSW Processing	-	2683095600	777530400	
Dumpsite Remediation	60000000	610000000		
CAD Waste Processing	--			
Mechanical Road Sweepers	-	36000000		
Cumulative Action Plan TOTAL	60000000	3329095600	777530400	(equal to SBM 2.0 allocation)
No. of ULBs covered	01	01	01	All ULBs in the State/ UT are to be covered in Action Plans by FY 2023-24 leaving adequate time for implementation

II. Roadmap for Deliverables:

MSWM compliances	Before SBM 2.0	By 31.3.2022	By 31.3.2023	By 31.3.2024	By 31.3.2025	By 31.3.2026
No. of ULBs with -						
100% MSW Processing	70	80	90	100		(all ULBs concerned)
100% Dumpsite Remediation	0	25	60	(all ULBs concerned)		
100% C&D Waste processing	0	50	(all ULBs concerned)			
Mechanical Road Sweeping			(all ULBs concerned)			
• All ULBS to become 3-Star RFC Rated before 31.3.2026						

III. Roadmap for Garbage Free City (GFC) Star Rating Certifications:

Certification	Before SBM 2.0	By 31.3.2022	By 31.3.2023	By 31.3.2024	By 31.3.2025	By 31.3.2026
No. of ULBs with GFC 3-Star Certification (mandatory under SBM 2.0) or higher certification	3 star	3 star	5 star	5 star	7 star	(All ULBs)

स्वच्छ भारत अभियान (नागरी) अंतर्गत नागरी
घनकचरा व्यवस्थापन प्रकल्पास सुधारित
प्रशासकीय मान्यता देण्याबाबत.

औरंगाबाद महानगर पालिका, जिल्हा औरंगाबाद.

महाराष्ट्र शासन
नगर विकास विभाग

शासन निर्णय क्रमांक:- स्वमअ-२०१९/प्र.क्र.१४३/नवि-३४

हुतात्मा राजगुरु चौक, मादाम कामा मार्ग,

मंत्रालय, मुंबई-४०० ०३२.

दिनांक: १३ फेब्रुवारी, २०२०

वाचा:-

१. शासन निर्णय, नगर विकास विभाग, क्रमांक: स्वभाअ-२०१५/प्र. क्र. २३/नवि-३४, दि. १५.०५.२०१५
२. शासन निर्णय, नगर विकास विभाग, क्रमांक:- स्वमअ-२०१८/प्र.क्र. १४३/नवि-३४, दि.१२.०४.२०१८
३. स्वच्छ भारत अभियान (नागरी) अंतर्गत गठीत उच्चाधिकार समितीच्या दिनांक ३०/०८/२०१९ रोजी संपन्न झालेल्या बैठकीचे इतिवृत्त.

शासन निर्णय :-

स्वच्छ महाराष्ट्र अभियान (नागरी) अंतर्गत औरंगाबाद महानगर पालिकेच्या रु. ९१,७९,५०,०००/- (रुपये एक्याण्णव कोटी एकोणऐंशी लक्ष पन्नास हजार फक्त) किंमतीच्या नागरी घनकचरा व्यवस्थापन प्रकल्पास संदर्भाय क्रमांक २ येथील शासन निर्णयानुसार प्रशासकीय मंजूरी देण्यात आली आहे.

२. सदर प्रकल्पास प्रशासकीय मंजूरी देताना औरंगाबाद शहरात निर्माण होणार्या सर्व घनकचर्यावर केंद्रीकृत पद्धतीने प्रक्रिया करण्याचे प्रस्तावित होते. तथापि, अशा प्रकारे केंद्रीकृत प्रक्रिया करण्यासाठी लागणारी जागा औरंगाबाद महानगर पालिकेस उपलब्ध न झाल्याने विकेंद्रीकृत पद्धतीने शहरातील तीन ठिकाणी प्रक्रिया केंद्र उभारण्याचे विभागीय आयुक्त, औरंगाबाद विभाग यांच्या अध्यक्षतेखाली गठित समितीने ठरविले. त्या अनुषंगाने मंजूर प्रकल्प अहवालात बदल करून त्यास सुधारित प्रशासकीय मान्यता देण्याची विनंती औरंगाबाद महानगर पालिकेने केली आहे.

३. यानुसार, औरंगाबाद महानगर पालिकेने रु. १४८,७९,०३,०००/- (रुपये एकशे अठ्ठ्याचाळीस कोटी एकोणऐंशी लक्ष तीन हजार फक्त) किंमतीच्या सुधारित अंदाजपत्रकास महाराष्ट्र जीवन प्राधिकरणाची तांत्रिक मान्यता घेऊन राज्य अभियान संचलनालयाकडे प्रस्ताव सादर केला आहे.

४. सदर प्रस्तावाची छाननी राज्य अभियान संचलनालयाच्या स्तरावर करून त्यास राज्यस्तरीय तांत्रिक समितीने मान्यता दिल्यावर सदर प्रस्ताव दिनांक ३०/०८/२०१९ रोजी झालेल्या उच्चाधिकार समितीच्या बैठकीत ठेवण्यात आला होता. सदर बैठकीत उच्चाधिकार समितीने औरंगाबाद महानगर पालिकेच्या सुधारित प्रकल्प अहवालास मान्यता प्रदान केली आहे.

५. औरंगाबाद महानगरपालिकेने सादर केलेल्या रु. १४८,७९,०३,०००/- (रुपये एकशे अठ्ठेचाळीस कोटी एकोणऐंशी लक्ष तीन हजार फक्त) किंमतीच्या प्रस्तावापैकी रु. ९१,७९,५०,०००/- (रुपये एक्याणव कोटी एकोणऐंशी लक्ष पन्नास हजार फक्त) किंमतीच्या (या शासन निर्णयासोबत जोडलेल्या विवरणपत्रातील रकाना क्र. २ व रकाना क्र. ३ मध्ये दर्शविल्यानुसार) प्रस्तावास संदर्भीय क्रमांक २ येथील शासन निर्णयान्वये प्रशासकीय मान्यता देण्यात आली आहे. औरंगाबाद महानगर पालिकेने सादर केलेल्या रु. १४८,७९,०३,०००/- (रुपये एकशे अठ्ठेचाळीस कोटी एकोणऐंशी लक्ष तीन हजार फक्त) किंमतीच्या (या शासन निर्णया सोबतच्या विवरणपत्रातील रकाना ४ व रकाना ५ मध्ये दर्शविल्यानुसार) सुधारित प्रकल्प अहवालात मूळ प्रकल्प अहवालातील काही बाबींची संख्या कमी केली आहे, काही बाबी वगळल्या आहेत तर, काही बाबी नव्याने समाविष्ट केल्या आहेत. यामुळे मूळ प्रकल्प अहवालात रु. ५६,९९,५४,७७८ (छप्पन्न कोटी नव्याणव लक्ष चोपन हजार सातशे अठ्याहत्तर फक्त) ने वाढ झाली आहे. उच्चाधिकार समितीने दिलेल्या मान्यतेच्या अनुषंगाने या शासन निर्णया सोबतच्या विवरणपत्रातील रकाना ६ मध्ये दर्शविलेल्या रु. ५६,९९,५४,७७८ (छप्पन्न कोटी नव्याणव लक्ष चोपन हजार सातशे अठ्याहत्तर फक्त) अधिक किंमतीच्या बाबी मंजूर करण्यास शासन मान्यता देत आहे

६. सदरच्या बदलामुळे औरंगाबाद महानगरपालिकेच्या सविस्तर प्रकल्प अहवालाची सुधारित किंमत रु. १,४८,७९,०३,९३७/- (रुपये एकशे अठ्ठेचाळीस कोटी एकोणऐंशी लक्ष तीन हजार नऊशे सदतीस फक्त) एवढी राहिल. तसेच, वित्तीय आकृतीबंध पुढील तक्त्यात नमुद केल्याप्रमाणे राहिल.

(किंमत रु. कोटीमध्ये)				
प्रकल्पाची मंजूर सुधारित किंमत	स्वच्छ भारत अभियान (नागरी) अंतर्गत अनुज्ञेय किंमत	केंद्र शासनमार्फत अनुज्ञेय अनुदान (अनुज्ञेय प्रकल्प किंमतीच्या ३५%)	राज्याचा अनुज्ञेय हिस्सा (६०:४० या प्रमाणात)	नागरी स्थानिक स्वराज्य संस्थेचा सहभाग (केंद्र व राज्य शासनमार्फत मंजूर अनुदाना व्यतिरिक्त)
१	२	३	४	५
१४८.७९०३	१४७.००००	५१.४५००	३४.३०	६३.०४०३ (यापैकी रु. ३८.२४ कोटी एवढा निधी राज्य शासन देईल तर उर्वरित रु २४.८००३ कोटी एवढा निधी औरंगाबाद महानगरपालिकेस द्यावा लागेल)

७. संदर्भीय क्रमांक २ येथील दिनांक १२.०४.२०१८ च्या शासन निर्णयात नमूद अटी व शर्तीचे पालन करणे बंधनकारक राहिल.

८. सदर शासन निर्णय महाराष्ट्र शासनाच्या www.maharashtra.gov.in या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा संकेतांक २०२००२१३१७१९४४७८२५ असा आहे. हा आदेश डिजीटल स्वाक्षरीने साक्षांकित करून काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने,

**Ajit Sahebrao
Palwe**

Digitally signed by Ajit Sahebrao Palwe
DN: CN = Ajit Sahebrao Palwe, C = IN,
S = Maharashtra, O = Government Of
Maharashtra, OU = Urban
Development Department
Date: 2020.02.17 11:23:57 +05'30'

(अजित पालवे)

कार्यासन अधिकारी, महाराष्ट्र शासन

प्रति,

१. मा. मुख्यमंत्री यांचे अपर मुख्य सचिव
२. मा. मंत्री, नगर विकास यांचे खाजगी सचिव,
३. मा. राज्यमंत्री नगरविकास विभाग यांचे खाजगी सचिव
४. अप्पर मुख्य सचिव, वित्त विभाग यांचे स्वीय सहायक
५. अप्पर मुख्य सचिव, नियोजन विभाग यांचे स्वीय सहायक
६. प्रधान सचिव, नगर विकास विभाग (२) यांचे स्वीय सहायक
७. सदस्य सचिव, महाराष्ट्र जीवन प्राधिकरण, मुंबई.
८. आयुक्त तथा संचालक, महानगरपालिका प्रशासन संचालनालय, मुंबई.
९. राज्य अभियान संचालक, स्वच्छ महाराष्ट्र अभियान संचालनालय, मुंबई.
१०. विभागीय आयुक्त, औरंगाबाद विभाग, औरंगाबाद.
११. जिल्हाधिकारी, औरंगाबाद.
१२. जिल्हा प्रशासन अधिकारी, औरंगाबाद.
१३. आयुक्त, औरंगाबाद महानगर पालिका
१४. निवडनस्ती, नवि-३४.

विवरणपत्र

(शासन निर्णय क्रमांक:-स्वमअ-२०१९/ प्र.क्र.१४३/नवि-३४ दिनांक: १३ फेब्रुवारी, २०२० सोबतचे विवरणपत्र)
(किंमत रु. मध्ये)

अनु. क्र.	मूळ प्रकल्प अहवालामध्ये अंतर्भूत बाबी	मूळ प्रकल्प अहवालामध्ये अंतर्भूत बाबीची किंमत	सुधारित प्रकल्प अहवालामध्ये अंतर्भूत करावयाच्या बाबी	सुधारित प्रकल्प अहवालामध्ये अंतर्भूत करावयाच्या बाबीची किंमत	फरक
(1)	(2)	(3)	(4)	(5)	(6)
1	Screening machine 9 non.	1,44,00,000	Screening Machine 4 Nos	58,75,000	-85,25,000
2	Balling machine @ 9 nos.	28,80,000	Bailing Machine 4 Nos	13,50,000	-15,30,000
3	single shaft shredder machine @ 9 nos	1,44,00,000	Single shaft shredder machine 4 No.	50,00,000	-94,00,000
4	Accessories	50,00,000	Accessories	50,00,000	0
5	IEC & Public Awareness (in phase wise manner)	1,00,00,000	IEC & Public Awareness (in phase wise manner)	2,00,00,000	+1,00,00,000
6	Compost pit shed	8,16,75,621	Compost pit shed	3,50,00,000	-4,66,75,621
For Long Term Plan					
7	Fencing with gate	18,88,60,919	Fencing with gate	86,85,48,767	+67,96,87,848
8	Material recovery facility @ 9 nos.		Material Recovery facility		
9	Weighbridge room		Weigh bridge room		
10	Tipping area		Tipping area		
11	Pre sorting shed		Pre sorting shed		
12	Windrow platform		Windrow platform		
13	Processing shed		Processing shed		
14	Curing area		Curing area		
15	Storage Shed for wet waste		Storage shed for wet waste		
16	Material Recovery Facility and Dry waste storage		Material Recovery facility		
17	Leachate tank		Leachate tank		
18	Internal Roads		Internal roads		
19	Drains		Drains		
20	Office Room		Office room		
21	Workers Room		Workers room		
22	Toilet	Toilet			
23	-	Office building at Processing plant			
24	-	Compound Wall			
25	-	Add 12% for GST (item 07 to item 24)			
26	Processing plant 300 TPD	7,00,00,000	Processing Plants at 3 places: Chikalthana, Padegaon & Harsool. @ Rs. 3,35,00,000 each	10,20,00,000	+3,20,00,000
27	Bio-methanation plant 30 TPD	12,00,00,000	Bio-methanation plant (30 TPD)	12,00,00,000	0
28	Brick Manufacturing plant	28,74,480	Brick manufacturing plant (CnD Plant Component)	2,00,00,000	+1,71,25,520
29	Weighbridge 1 no.	5,71,825	Weighing bridge	71,10,000	+65,38,175

अनु. क्र.	मूळ प्रकल्प अहवालामध्ये अंतर्भूत बाबी	मूळ प्रकल्प अहवालामध्ये अंतर्भूत बाबींची किंमत	सुधारित प्रकल्प अहवालामध्ये अंतर्भूत करावयाच्या बाबी	सुधारित प्रकल्प अहवालामध्ये अंतर्भूत करावयाच्या बाबींची किंमत	फरक
30	Water Tanker 2 nos.	31,12,144	Water Tanker: 1 no.	15,61,071	-15,51,073
31	Portable Water Pump @ 2 nos.	80,043	Portable water pump	80,043	0
32	Sanitary Landfill	3,96,12,339	Sanitary Landfill	4,28,73,033	+32,60,694
33	Scientific Capping of old dumped at Naregaov	25,00,00,000	Scientific Capping of old dumped at Naregaov	25,00,00,000	0
34	Fire Extinguishers	86,880	Fire Extinguishers	74,340	-12,540
35	Room @ Rs. 221141 for 27 locations	59,70,807	Deleted	0	-59,70,807
36	Granulator machine @ 5,00,000 for 4 nos.	20,00,000	Deleted	0	-20,00,000
37	Hadraulic excavator 1 no.	41,38,345	Deleted	0	-41,38,345
38	Collection & Transportation	10,22,85,756	Deleted	0	-10,22,85,756
39	-	0	EIA for Sanitary Landfill	11,23,000	+11,23,000
40	-	0	Leachate tank for Sanitary landfill	23,08,683	+23,08,683
	Grand Total	91,79,49,159	Grand Total	1,48,79,03,937	+56,99,54,778

3.6 Overall Compliance of SWM Rules

There are several rules and regulation which have been formulated pertaining to SWM. Relevant ones for Aurangabad are:

3.7 Salient features of MSW Rules, 2016

These rules apply to every ULB, outgrowths in urban agglomerations, and the census towns, notified areas, notified industrial townships, areas under the control of Indian Railways, airports, airbases, Ports and harbours, defence establishments, special economic zones, State and Central government organisations, places of pilgrims, religious and historical importance as may be notified by respective State government. The main highlights of the Rule are:

- The waste generator should segregate and store the waste in three separate streams i.e. bio-degradable, non-biodegradable and domestic hazardous wastes

- Store separately construction and demolition waste
- Waste generator cannot burn the waste
- The waste generators shall pay user fee for solid waste management
- All gated communities, institutions and RWAs shall ensure segregation of waste at source level

Key duties of the waste generators:

- Segregate, store and handover separately the waste generated by them in three separate streams namely bio-degradable or wet waste, non-bio- degradable or dry waste and domestic hazardous wastes. All gated communities, institutions and RWAs shall ensure segregation of waste at source level
- No waste generator shall throw the waste generated by him/her on the street, open spaces, drain or water bodies; or burn the waste in open
- Pay user fee or charge or fines as may be specified in the bye-laws of the urban local bodies

Key Duties of Commissioner or Director of Municipal Administration or Director of Local Bodies:

- Ensure implementation of MSW rules by all urban local bodies falling under his/her control.
- Undertake training and capacity building of urban local bodies for management of solid waste.
- Facilitate establishment of common regional sanitary landfill for a group of

cities and towns falling within a radial distance of fifty kilometres or more from the regional facility on a cost sharing basis and ensure professional management of such sanitary landfills.

Key Duties and Responsibilities of Urban Local Bodies:

- Prepare a solid waste management plan as per State Policy And Strategy on Solid Waste Management within six months from the date of notification of state policy
- Frame bye-laws, incorporating the provisions of these rules and ensure timely implementation.
- Prescribe and collect user fee from waste generators.

- Develop infrastructure for segregation, collection, transportation, storage, processing and disposal of solid waste in their respective jurisdiction either at its own or through public private partnership mode.
- Provide easy access to waste pickers and recyclers for collection of segregated recyclable waste.
- Facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure in house or with private sector participation using best suited technologies.
- Undertake in house or through any other authorised agency, construction, operation and maintenance of Sanitary landfill
- Make adequate provision of funds for capital investments as well as operation and maintenance of solid waste management services in the annual budget

Close down, remediate wherever feasible and cap the existing dumpsites, which are not engineered landfill sites as per the provision of these Rules

- Prepare and submit annual report on the status of compliance of these rules during the calendar year on or before the 30th April of the succeeding year to the Commissioner or Director Municipal Administration
- Create public awareness through Information, Education and Communication (IEC) campaign

Key Duties of the Operator of Solid Waste Processing and Treatment Facilities:

Identification and notification of land for setting up the solid waste processing and treatment facilities shall be the responsibility of the ULB. However the criteria for setting up of solid waste processing and treatment facilities and key responsibilities of the operator are:

- Design and set up the facility as per the technical guidelines issued by the Central Pollution Control Board in this regard from time to time and the manual of Central Public Health and Environmental Engineering Organization, New Delhi
- Obtain the approval from the State Pollution Control Board or Pollution Control Committee
- Ensure safe and environmentally sound operations of the solid waste processing and treatment facility and its closure and post closure phase as per the guidelines issued by Central Pollution Control Board from time to time and the Manual of Central Public Health and Environmental Engineering Organization, New Delhi.
- Submit annual report in the prescribed form

Maharashtra Plastic Carry Bags (Manufacture and Usage) Rules, 2006

- Prohibition of usage of carry bags-trade of recycled plastics
- No vendor shall use carry bags or containers made of recycled plastics less than 50 microns for storing, carrying, dispensing, or packaging of foodstuffs.

Regulatory Aspects/Provision of MSW Landfills:

Under section 6 (3) of the SWM Rules, 2016 State Pollution Control Board or Pollution Control Committee shall issue authorization in Form-III to the municipal authority or an operator of a facility within forty-five days stipulating compliance criteria and standards as specified in Schedule II, III and IV including such other conditions, as may be necessary. SPCBs/PCCs, after the receipt of application from the municipal authority or the operator of a facility including landfills, shall examine the proposal taking into consideration the views of other agencies like the State Urban Development department, the Town and Country Planning department. Airport or Air Base authority, the ground Water Board or any such other Agency prior to issuing the authorization

Chapter 7. Institutional Aspects and Capacity Building

The subject of solid waste management has remained neglected for the past several decades with the result that the level of service is highly inadequate and inefficient. For improving the solid waste management services it is essential to adopt modern methods of waste management, having a proper choice of technology, which can work in the given area successfully. Simultaneously, measures must be taken for institutional strengthening and internal capacity building so that the efforts made can be sustained over a period of time and the system put in place can be well managed. Institutional strengthening can be done by adequately decentralizing the administration, delegating adequate powers at the decentralized level, by including professionals into the administration and providing adequate training to the existing staff. NGO/private sector participation also needs to be encouraged to make the SWM services competitive and efficient.

7.1 Proposed Organizational Set-up

7.1.1 Decentralization of Administration

In the ULB, the SWM services can be performed effectively only if its administration is adequately decentralized at the ward level and prabhag level.

The SWM functions are proposed to be decentralized as under:

7.1.2 Ward Level & Prabhag 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 bulk community waste storage sites clearing debris and cleaning surface drains and public spaces. The cleaning of each street, lane by lane, markets

and public space should be regularly supervised by the ward level supervisors. The presence of all SWM officers of the ward in the field during and morning hours is most essential. A grievance redressal system should be put in place in each ward. Ward level efforts could be made in the following:

- Creating public awareness at the ward level
- Formation of Residents Association/ Neighbourhood Committees to ensure public participation in source segregation of recyclable waste and deposition of domestic waste in the handcarts on time during primary collection
- Involving school children to be watchdogs in preventing littering of streets by the people
- Interfacing with the people and officials and help in redressal of public grievances on SWM at the ward level
- Supporting the effort of cost recovery for the services rendered
- Encouraging NGO participation

7.1.3 City Level Administration

The city level administration should supervise and support the ward level administration. The SWM Department should be responsible for upkeep of vehicles, setting up and maintenance of processing plants as well as for managing the disposal sites in an environmentally acceptable manner.

The 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 wards and be answerable to the chief executive officer and elected body for the efficient functioning of the department. It should look after the recruitment of manpower, human resources development and training, etc.

7.2 Training & Capacity Building

Human resources development is very essential for internal capacity building for any organization. Training, motivation, incentives for outstanding service and disincentives for those who fail to perform are essential for human resources development.

Concerted efforts should be made by the Municipal Council to inculcate among its officers and staff a sense of pride in the work they do and to motivate them to perform and give their optimum output to improve the level of services of the city and the image of the Municipal Council.

7.2.1 Special Training to Unqualified Staff

Unqualified supervisory staff should be given service training to qualify for supervising sanitation works.

7.2.2 Refresher Courses for Supervisory Staff

Refresher courses should be conducted for the supervisory staff at least every 5 years or they should be sent for training to get an exposure to advance in this field.

7.2.3 Work Norms

The sweepers may be assigned "Pin point" individual work assignments to the density of the area to be swept.

Similarly work norms may be prescribed for variety of vehicles used depending upon the distance to be travelled and the places to be covered. These norms may be prescribed after conducting time and motion study.

The norms of work for the supervisor may also be prescribed and monitored by the Municipal Council, for the extent of sweeping areas and the number of garbage collection points to be inspected watch day by the various levels of supervisors and inspection of processing and disposal sites etc. to ensure adequate output of the supervisory staff.

For capacity building of the department, senior officials should be frequently exposed to developments taking place in various parts of the State and Country by sending them out on city visits and to attend seminars, workshops and training courses. They should also be involved in all decision-making processes

7.2.4 Course Content for Training to Staff/Officers

A. Training to sanitation workers

1 Importance of sanitation in urban areas.

2 Present scenario of solid waste management system in the urban areas, deficiency in the system etc.

3 Impact of inefficient SWM services on health and environment

4 Impact of inefficient SWM services on the health of sanitation workers.

5 Inefficiency of tools and equipments used and loss of manpower productivity.

6 Need for modernization of solid waste management practices.

7 Options available for improving the services.

8 Advantages of using improved tools and equipments for primary collection of waste and street sweeping.

9 Need for synchronization of storage of waste of source, primary collection of

waste and waste storage depots.

10 Proper upkeep of tools and equipments and waste storage depots.

B. Training to Sanitation Supervisors of Various levels

1 to 10 as per A above

11 Need for synchronization of transportation of waste with waste storage depot. 12

Transportation of waste on day to day basis

13 Waste processing and disposal options, advantages and disadvantages of various technologies.

14 Sanitary land filling.

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

17 Enforcement

C. Training for the officers looking after SWM Department

1 to 17 as per A & B above

18 SWM practices prevalent in other parts of the country and in the developed countries

19 Institutional strengthening, internal capacity building and human resource development.

20 Private sector participation in SWM 21 Management information system 22 Financial aspects

23 Health aspects

24 Legal aspects

D. Training modules of SBM

As a part of Swachh Bharat Mission (SBM) of GoI, an online e-portal has been created for training of municipal bodies. (<https://swachhbharat.cloudapp.net>). The portal draws from the leading practices in sanitation sector and introduces these to municipal functionaries who are at the forefront of delivering objectives of the Swachh Bharat Mission (SBM).

The various modules dwell into depth of each of the components of SBM and will be useful for officials of the state sanitation missions, city managers-engineers, administrators, field supervisors and sanitation workers in-charge of implementing SBM.

Successful completion will entitle the participant with a certificate from the Ministry of Urban Development, GoI. The ULB officials should be encouraged to complete the training modules of this portal.

The e-learning courses offered under this portal are as follows: i Municipal Solid Waste Management

ii Individual Household Toilets

iii Community and Public Toilets

iv IEC and Public Awareness Program v PPP and Financing Sanitation

vi Validated Sanitation Technologies

A certificate of completion is issued by the Ministry of Urban Development to the professional working in the government body, once the course is successfully completed.

Chapter 8. Community Awareness and Public Participation

The success of any solid waste management scheme can be measured through the extent of co-operation of people, effectiveness of the proposed system and operational efficiency. While the effectiveness of the system and operational efficiency can be improved through HRD and capacity building, the co-operation of people can be achieved through Information, Education and Communication (IEC) techniques. During such campaigns, strategies for waste reduction, Reuse and Recycling (R – & – R) may also be propagated for deriving long-term benefits.

8.1 Status of Public Participation in SWM

Solid waste management is not on the priority list for general public. The general approach to SWM has been 'Out of Sight, Out of Mind' and 'Not in my backyard' attitude. Community participation is not very active. Segregation of waste at source is not practiced religiously by all public. Waste is burnt in the open to get rid of the smell and junk. Public participation can be considered negligible when it comes to Solid Waste Management.

Waste is disposed off carelessly into the environment. The afterthought of waste processing is not considered. Thus, waste often ends up on fertile soil and water bodies contaminating our environment. There are cases where waste ends up in our drains and clogs the drain resulting in an ample amount of wastage of resources and energy.

Also, waste management is not considered as a dignified job and there is lack of leadership in taking the system of waste management to a higher level. Thus, there are many loopholes in the system that needs to be corrected and catered to.

8.2 Essential Steps of Public Participation

The success of SWM depends on building meaningful partnership with the stakeholders. Active involvement of the following community groups is essential especially in primary collection:

- ❖ Resident Welfare Associations
- ❖ Hotel owners Association
- ❖ Hospital owners association
- ❖ Merchants union
- ❖ Dairy owners association
- ❖ Builders (Building Contractors) Association

The ULB may organize the above groups through a series of interactive meetings with the office bearers before a phased programme for community awareness is launched.

NGOs can provide support in:

- ❖ Awareness creation programmes
- ❖ In developing pilot programmes
- ❖ In organizing door – to – door collection systems
- ❖ In setting up local processing units

Community awareness programme have to focus on:

- ❖ Awareness of the perils of the present practice, their role in keeping the surroundings clean.
- ❖ Not to litter on streets
- ❖ Storage of waste at source in two bins in a segregated manner
- ❖ Primary collection from doorstep
- ❖ Popularizing 4R strategy – Reduce, Reuse, Recycle, Recovery
- ❖ Discourage use of plastics
- ❖ Developing methodology for reaching schools to create awareness among children

8.3 Public Information, Education, Communication Programs (IEC)

For the successful implementation of any program involving public at large in SWM system, it is essential to spell out clearly and make them known the manner in which local body proposes to tackle the problem of waste management and extent to which public participation in Solid Waste Management is expected to keep the city clean and improve the quality of life in the city.

Based on the recommendations by the various government agencies, and the SWM Rule, 2016, the approach to an IEC plan could be:

- Organize the safaimitra, train them for providing professional services in field of Solid Waste Management.
- Provide safaimitra training and other capacity development to guarantee efficient, quality and timely waste management services including door to door collection of waste.
- Mobilize resident communities and bring awareness to segregate the waste and not to throw or dump waste in back-lanes and open plots
- Execute Awareness and information campaigns, organize SBM thematic drives, meetings etc. as instructed by officials and Consultant
- Training of field staff of ULB in solid waste management and door to door collection, route rationalizing of vehicles and it's planning and get it approved from officials and consultant.
- Awareness and training for segregation of waste at source to the citizens and staff of the ULB, organise meeting in consultation with Ward Corporator and RWA on weekly basis

Promote primary collection, secondary collection of waste and cleaning of entire ward area i.e. door to door collection in assign wards, collection and removal of road side waste dumps, collection and cleaning of waste bins, cleaning of drains and nallahs and cleaning of entire ward area and back- lanes.

Identification of open defecation points in the wards, creating awareness

involving RWA, local residents, female groups, children and helping ULB to make the wards ODF, identification of locations for constructing new community /public toilets, suggest up gradation if required in existing community /public toilets. Filling up of application forms for constructing house hold toilets in the wards.

Report weekly to the ULB officials and Consultant