

TABLE OF CONTENTS

PARTICULARS	Reference	
	Paragraph	Page
Preface	-	vii
Executive Summary	-	ix
CHAPTER-I		
Introduction		
Brief snapshot of the Chapter	-	1
Introduction	1.1	1
Regulatory framework for management of waste	1.2	1
Overall status of solid waste management in Uttar Pradesh	1.3	2
Organisational set-up	1.4	3
Audit framework	1.5	4
Audit objective	1.5.1	4
Audit criteria	1.5.2	5
Audit scope	1.5.3	5
Audit methodology	1.5.4	6
Structure of the report	1.6	7
Acknowledgement	1.7	7
CHAPTER-II		
Planning and strategy for solid waste management		
Brief snapshot of the Chapter	-	9
Entities involved in SWM	2.1	9
State policy and strategy of SWM	2.2	10
Absence of SWM plan	2.3	11
Status of Detailed Project Report for SWM	2.4	11
Framing of bye-laws	2.5	12
Generation and assessment of waste	2.6	13
Decentralised Waste Management Systems	2.7	14
Non-integration of the Informal Sector	2.8	14
Manpower for SWM activities in ULBs	2.9	15
Avoidable expenditure due to excess engagement of sanitation workers in NPP Hathras	2.9.1	16
Information, Education & Communication and Public Awareness (IEC&PA) activities	2.10	17
Status of Capacity Building	2.11	20
CHAPTER-III		
Financial management		
Brief snapshot of the Chapter	-	23
Source and utilisation of fund for solid waste management	3	23
Funds for SWM activities under SBM (Urban)	3.1	23
Utilisation of SBM (Urban) fund at the test-checked ULBs level	3.1.1	25
Funding for SWM from other than SBM (Urban) Grants	3.2	26

PARTICULARS	Reference	
	Paragraph	Page
Expenditure on SWM in test-checked ULBs from other than SBM (Urban) grants	3.2.1	26
Release of funds to firm without entering into agreement and non-refund of ₹ 15 lakh by firm	3.3	27
SWM projects for ULBs located alongside river Ganga not executed	3.4	28
Failure of NP Saidpur, Ghazipur in implementation of action plan approved by SHPSC	3.4.1	28
Irregular payment on account of GST to outsourcing firm	3.5	29
Recovery of user charges	3.6	29
Unrealised user charges in NN Lucknow	3.6.1	30
Short realisation of user charges in NN Ghaziabad	3.6.2	31
CHAPTER-IV		
Segregation, collection and transportation of waste		
Brief snapshot of the Chapter	-	33
Segregation	4.1	33
Segregation of waste	4.1.1	34
Status of establishment of Material Recovery Facility (MRF) centre	4.1.2	36
Collection	4.2	38
Status of waste collection	4.2.1	38
Absence of weighbridge	4.2.2	39
Door-to-door collection (DTDC) of waste	4.2.3	39
Irregularities in purchase of community bins/storage bins	4.2.4	44
Transportation	4.3	46
Use of vehicles without partition/open vehicles for transportation of Municipal Solid Waste	4.3.1	46
Use of transportation vehicles without authorisation	4.3.2	47
Monitoring of transportation vehicles	4.3.3	47
Erroneous gap analysis for assessment of Vehicles	4.3.4	48
CHAPTER-V		
Processing and disposal of solid waste		
Brief snapshot of the Chapter	-	51
Status of processing of solid waste	5.1	51
Establishment of Solid Waste Processing plant	5.2	52
Status of processing plants sanctioned under JNNURM, AFT and State Sector Schemes	5.2.1	53
Status of processing plants sanctioned under SBM scheme	5.2.2	54
Status of processing plants funded under CFC grants	5.2.3	55
Operation and maintenance of solid waste processing plant	5.3	58
Status of solid waste processing plants at Lucknow	5.3.1	58
Status of solid waste processing plant at Kanpur	5.3.2	61
Status of solid waste processing plant at Raebareli	5.3.3	61

PARTICULARS	Reference	
	Paragraph	Page
Status of solid waste processing plant at Muzaffarnagar	5.3.4	62
Status of solid waste processing plant at Reoti Ballia	5.3.5	63
Disposal of Waste	5.4	64
Status of landfill	5.4.1	64
Disposal of legacy waste	5.4.2	71
CHAPTER-VI		
Management of special waste		
Brief Snapshot of the Chapter	-	75
Management of Special Waste	6	75
Bio Medical Waste (BMW)	6.1	75
Non-segregation of BMW generated by households	6.1.1	76
Unauthorised Occupiers	6.1.2	76
Incomplete Annual Report	6.1.3	76
Third party audit of common bio-medical waste treatment facility	6.1.4	77
Electric and electronic waste (e-waste)	6.2	77
Status of compliance to e-waste Management Rules	6.2.1	78
Management of Plastic Waste	6.3	80
Disposal of banned plastic seized by ULBs	6.3.1	80
Construction and Demolition (C&D) Waste	6.4	81
Status of generation of C&D waste	6.4.1	81
Non-identification of site for disposal of C&D waste	6.4.2	82
Status of establishment of C&D waste processing plant	6.4.3	83
CHAPTER-VII		
Monitoring of solid waste management		
Brief snapshot of the Chapter	-	85
Lack of monitoring at State level	7.1	85
District Level Review and Monitoring Committee	7.2	86
Achievements against Service Level Benchmarks	7.3	86
Pollution control norms in disposal process of MSW	7.4	88
Compost quality specifications	7.5	88

APPENDICES		
PARTICULARS		Reference Page
Appendix-1.1	Regularity framework governing management of waste	91
Appendix-1.2	Details of ULBs sampled for the Performance Audit	92
Appendix-2.1	Details of notified bye-laws and their provisions in test -checked ULBs	93
Appendix-2.2	Status of waste generation in test-checked ULBs during the years 2016-22	94
Appendix-2.3	Details of sanctioned post, person-in-position and vacant post in test-checked ULBs as of March 2022	96
Appendix-2.4	Status of avoidable expenditure due to excess engagement of sanitation workers in NPP Hathras	98
Appendix-2.5	Status of fund utilised at State level and transferred to ULBs for IEC&PA activities	99
Appendix-2.6	Status of utilisation of fund for IEC&PA activities in test-checked ULBs during 2016-22	100
Appendix-2.7	Details of fund received and expenditure incurred under Capacity Building and Administrative & Office Expenditure in test-checked ULBs during the years 2016-22	101
Appendix-3.1	Details of delay in release of central share along with state share to SMD	102
Appendix-3.2	Details of irregular payment of GST to outsourcing firms	103
Appendix-3.3	Status of short recovery of user charges in NN Lucknow	104
Appendix-3.4	Short recovery of user charges in NN Ghaziabad	105
Appendix-4.1	Status of MRF centre in test-checked ULBs	106
Appendix-4.2 (A)	Status of waste collection in test-checked ULBs during the years 2016-22	108
Appendix-4.2 (B)	Status of quantum of waste generated and collected in the State and in test-checked ULBs	109
Appendix-4.3	Details of households covered under door-to-door waste collection facility in Lucknow city	109
Appendix-4.4 (A)	Details of excess payment made to firm due to claim for higher number of households (HHs) and commercial properties in NPP Hathras	110

PARTICULARS		Reference Page
Appendix-4.4 (B)	Details of excess payment made to firm due to deduction of 40 <i>per cent</i> instead of 50 <i>per cent</i> from the bills of the firm contrary to the terms of RFP	111
Appendix-4.5 (A)	Details of avoidable payment made to firm for tippers engaged in DTDC in NPP Loni	112
Appendix-4.5 (B)	Details of avoidable payment made to firm for manpower engaged in DTDC in NPP Loni	113
Appendix-4.6	Details of expenditure incurred on excess procurement of bins in NP Chitbaragaon and NP Reoti	115
Appendix-4.7	Details of partitioned/covered vehicles used for transportation of MSW in test-checked ULBs	116
Appendix-4.8	Details of transportation vehicles used without authorisation in test -checked ULBs as of March 2022	119
Appendix-4.9	Details regarding monitoring of waste transportation vehicles through GPS in test-checked ULBs	123
Appendix-4.10	Details of vehicles required in ULBs and gap analysis for SWM	124
Appendix-4.11	Details of availability of vehicles for primary transportation in test-checked ULBs	125
Appendix-4.12	Details of funds released to ULBs for purchase of refuse compactors	125
Appendix-5.1 (A)	Status of waste processed in the State and test-checked ULBs during the years 2016-22	126
Appendix-5.1 (B)	Status of waste processed in test-checked ULBs during the years 2016-22	127
Appendix-5.2	Status of establishment of 32 solid waste processing plants under JNNURM, AFT and State sector schemes in the State	128
Appendix-5.3	Blockade of funds released for establishment of 32 solid waste processing plants of the State	129
Appendix-5.4	Status of civil work of solid waste processing plants sanctioned under SBM (Urban) scheme in the State	130
Appendix-5.5	Shortcomings noticed in the solid waste processing plant at Shivri, Lucknow	132
Appendix-5.6	Results of Joint Physical Verification of the solid waste processing plant at Shivri, Lucknow	134

PARTICULARS		Reference Page
Appendix-5.7	Details of difference between bill submitted and payment to the firm in NN Lucknow	135
Appendix-5.8	Details of doubtful payments to the firm for processing of solid waste	137
Appendix 5.9	Significant deficiencies noticed during Joint Physical Verification of the solid waste processing plant at Kanpur	137
Appendix- 5.10	Insufficient land allocated to ULBs for SWM against requirement	138
Appendix -5.11	Details of ULBs in which more than five TPD solid waste generated	139
Appendix -5.12	Status of legacy waste of 72 ULBs of the State	140
Appendix -5.13	Status of bio-remediation in 20 ULBs	142
Appendix- 6.1	Details of occupier/operator for BMW in the State during 2017-21	144
Appendix -6.2	Details of generation and disposal of BMW in the State	144
Appendix -6.3	Details of manufacturer, refurbisher, collection centres, dismantlers and recyclers for management of e-waste in the State	144
Appendix- 6.4	Details of estimated generation and recycling of plastic waste in the State	145
Appendix -6.5	Details of prohibited thermocol/plastic /carry bag seized in ULBs	146
Appendix -6.6	Status of establishment of C&D waste processing plant	147
Appendix -7.1	Pollution control norms	148
Appendix – 8	Projected population in test-checked ULBs adopting incremental increase method as per section 1.4.5.1.2 of MSWM Manual 2016	149