



Final Action plan for Ahmedabad Municipal Corporation to conform to

## The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013

September 2015

Urban Management Consulting Pvt. Ltd.



Prepared by Urban Management Consulting Pvt. Ltd. (UMC)  
September 2015

All photographs are by UMC unless otherwise mentioned.  
Data from this document may be used and quoted with due  
acknowledgement to the organization and the program.

Project Team  
Anurag Anthony, Jay Shah, Krunal Parmar,  
Manvita Baradi and Meghna Malhotra



The Urban Management Consulting Pvt. Ltd. (UMC) works towards professionalizing urban management in India and worldwide. UMC provides technical assistance and support to city governments and facilitates change through peer-to-peer learning processes. It enhances the capacity of city governments by providing expertise and ready access to innovations on good governance implemented in India and abroad. UMC extensively works in the areas of urban water and sanitation, heritage management, planning, urban health, municipal finance, urban management, urban transportation and institutional restructuring. Visit our website: [www.umcasia.org](http://www.umcasia.org).

# Action plan for Ahmedabad Municipal Corporation to conform to The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013

Final Action Plan  
September 2015

Submitted to:



Ahmedabad Municipal Corporation

Prepared by



Urban Management Consulting Pvt. Ltd.

A 202, GCP Business Centre  
Near Vijay Crossroads, Navrangpura  
Ahmedabad – 380009  
info@umcasia.org

## Disclaimer

The scope of this report is to prepare an action plan for Ahmedabad Municipal Corporation (AMC) to comply with the provisions of 'The Prohibition of employment as Manual Scavengers and their Rehabilitation Act, 2013' within their jurisdiction.

In the course of our assignment, Urban Management Consulting Pvt. Ltd. (UMC) was provided with both written and verbal information supplemented by hand drawn sketches, archive pictures, maps and drawings. In addition, UMC conducted primary surveys during the course of the project. During the survey, the team made observations and was provided with feedback by the respondents. Nothing has come to our attention to cause us to believe that the data (written, verbal and observations) provided by various sources are not true.

In case this document is to be made available or disclosed to any third party, this disclaimer along with all the limiting factors must be issued to the concerned party.

Images used in this report are of UMC unless explicitly stated otherwise. This document is a joint copyright of AMC and of UMC.

## Acknowledgements

UMC would like to thank Ms. D Thara (IAS), the Municipal Commissioner, AMC and Mr. G P Mohapatra (IAS), Former Municipal Commissioner, AMC for entrusting Urban Management Consulting Pvt. Ltd. for preparing this action plan for AMC.

We would like to thank the staff of AMC including Mr. C R Kharsan, Deputy Municipal Commissioner; Mr. Harshad Solanki, Director, SWM Department; Mr. Prashant Pandya, Deputy Director, SWM Department; Mr. Naresh Rajput, Former Director, SWM Department; Dr. Bhavin Solanki, Medical Officer of Health; Dr. S P Kulkarni, Retired Medical Officer of Health; Mr. Vijay Mistry, JD (Mechanical), deputy health officers of all zones, municipal sanitary inspectors and sanitation workers. The AMC team has provided valuable inputs at various stages of the project and provided assistance during the field visits and surveys.

UMC is grateful to Mr. H P Mishra, Managing Director, Kaamdaar Swasthya Suraksha Mandal (KSSM) for providing his guidance during field visits and to understand the conditions of sanitation workers. We appreciate the inputs provided by Mr. Purshottam Solanki, Director, Manav Garima, ESI- Jayeshbhai Patel, on several aspects of the project.

UMC has prepared the report in consultation and discussions with the AMC officials. Numerous drafts have been presented and worked upon. This is the final deliverable of the study initiated in May 2014.

Manvita Baradi  
Director – UMC

## Executive Summary

The Government of India (GoI) launched its National Urban Sanitation Policy (NUSP) in November 2008 with the goal of making India “community driven, totally sanitized, healthy and liveable cities and towns.” The policy advocates that all cities would become open defecation (OD) free, all human waste and liquid wastes will be collected and safely treated and adequate resources will be available for the operation and maintenance of the sanitation facilities. The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013’ was prepared to provide for prohibition of employment as manual scavengers, rehabilitation of manual scavengers and their families.

The GoI also launched Swachh Bharat Mission (SBM) on October 02, 2014 for 4041 urban local bodies (ULBs). Under the SBM, the cities should become open defecation free and zero waste by the year 2019. The Millennium Development Goals (MDGs) enjoin upon the signatory nations to extend access to improved sanitation to 100% by 2025 (United Nations, n.d.). This implies extending coverage to households without improved sanitation, and providing proper sanitation facilities in public places to make cities open defecation free.

This strong impetus on sanitation has improved the quality of life for some. However, with increasing operations and maintenance (O&M) challenges in sanitation sector, manual scavenging may occur if preventive actions are not taken by the ULBs in time.

Recognising these provisions, Ahmedabad Municipal Corporation (AMC) entrusted Urban Management Consulting Pvt. Ltd. (UMC) to prepare an action plan for AMC to conform to The Act.

The action plan identifies vulnerable areas where manual scavenging may occur and identified the issues for each vulnerable area. The action plan then provides preventive strategies and action points to AMC to address the issues and in turn, would prevent any violation of the Act. The recommendations include improvements in process and operating procedures, infrastructure and equipment provision, training and capacity building of sanitation workers, and methods to strengthen AMC’s monitoring of sanitation activities. The action plan provides a block cost budget to AMC for one-time investment and a recurring annual cost to sustain the initiative.

### **Existing Sanitation Situation in Ahmedabad**

AMC has undertaken several efforts targeted towards sanitation with a focus on slums and other disadvantaged communities. AMC conducted a slum survey (in 1976) identifying more than 82,000 huts in 1200 slum pockets and provided each family a card making them eligible to receive individual services. During early 1980s, AMC introduced a ‘Toilet Scheme’ to provide individual toilets to poor households with 80:20 ratio of funding by AMC and beneficiary, later modified to 90:10. In 1996, AMC introduced the ‘Slum Networking Program’ (SNP) to provide land tenure and individual water-sanitation facilities to slum households. In 2001, AMC conducted a fresh slum survey and introduced the NOC-500 scheme to provide individual water-sanitation facilities. Under the Nirmal Gujarat Sanitation Program (NGSP) of the Government of Gujarat, AMC constructed individual toilets in the city (Mehta & Mehta, 2011).

In 2010, Honourable Gujarat High Court passed oral order to do survey for finding practice of Manual Scavenging in the city. In 2011, AMC initiated preparation of City Sanitation Plan (CSP) for Ahmedabad. AMC conducted a technical audit of around 1,600 public conveniences in Ahmedabad 2012. AMC prepared solid waste management (SWM) master plan to achieve zero waste, information-education-communication (IEC) campaign for SWM,

road map for zero waste in partnership with United Nations Centre for Regional Development (UNCRD) and public health bye-laws.

AMC has now prepared this action plan to comply with the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.

### **Existing situation of manual scavenging in Ahmedabad**

#### **Manual scavengers in Ahmedabad**

Tata institute of Social Science (TISS) submitted a report to Department of Social Justice and Environment, Government of Gujarat on 21<sup>st</sup> November 2006 stating that a total 2,456 workers in Gujarat were undertaking manual scavenging work including 281 workers in Ahmedabad (Patel, 2006). AMC conducted a cross-verification survey and reported an could find 216 workers who submitted a declaration stating that they do not engage in manual scavenging anymore (Internal Communication of Ahmedabad Municipal Corporation, 2008). According to AMC all manual scavengers identified in Ahmedabad have been rehabilitated.

There are no manual scavengers reported in Ahmedabad. Therefore, survey on manual scavengers as suggested by the Draft Rules for The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 has not been conducted.

In general, there are six main reasons due to which manual scavenging may occur. These include

- i) manual clearing of waste from insanitary latrines
- ii) manual cleaning of open defecation spots
- iii) manual cleaning of sewer lines
- iv) manual cleaning of on-site sanitation systems
- v) manual cleaning of faecal matter in public toilets
- vi) manual cleaning of railway tracks. While cleaning of railway tracks is done by the Indian Railway, all other locations of manual scavenging come under the municipal purview.

#### **1. Cleaning of open defecation spots**

Ahmedabad city has 96 percent coverage by access to individual toilets of all households. While the rest depend on community toilets. Despite 96 percent coverage of individual toilets and 1,600 public conveniences, AMC identified 494 open defecation (OD) spots (Ahmedabad Municipal Corporation, 2011). AMC then revised this survey in 2012 and reported 157 open defecation spots (Urban Management Centre, 2013a). As of 2014, AMC reports 134 total OD spots in the city. AMC requested UMC to revisit all 494 OD spots. The survey found that 194 spots still exist. Surprisingly, OD was reported at some locations which were within the public toilet premises. Poor maintenance of public toilets was reported as the biggest reason for OD within their premises. According to AMC, as of January 2016, the above spots are cleaned using the manure lifting machines.

The following strategies would be helpful for AMC to achieve open defecation free city.

- a) **Process and management:** AMC should provide individual toilets to all households as per the provisions of MGSM; AMC should undertake micro-design of community and public toilets to ensure its suitable location, adequacy and increase its usability; AMC should enforce the recently approved Public Health Bye-laws
- b) **Infrastructure and equipment:** AMC should create an MIS to monitor cleanliness of public conveniences, provide individual/ shared toilets to all households, provide public toilets at bus stands, markets, etc.; AMC should fix a cleaning regime of facilities and develop a framework for citizen based monitoring of cleaning activities; AMC should provide mobile toilets at exhibition spaces and public gatherings

- c) **Behavioural change**: AMC should conduct IEC campaign to promote use of toilets by all members of the households. The IEC campaign should address these behavioural issues and focus on children.
- d) **Monitoring and evaluation**: AMC should monitor provision of toilets at all construction sites and provide mobile toilets (on a chargeable basis) upon request; AMC should ensure regular maintenance of manure lifting machines operating in the city; AMC should establish a cleanliness monitoring committee which should re-visit OD spots to ensure OD free status.
- e) **Training and capacity building**: AMC should train sanitation workers (AMC's own staff, daily wage staff and private contractor's staff) to comply with the SOP for cleaning of public conveniences; AMC should train sanitation workers to use manure-lifting machine

## **2. Clearing of waste from dry latrines**

According to census 2011, there were 188 dry latrines in Ahmedabad. AMC has converted the dry latrines by providing water facility and drainage connection in the Central Zone

## **3. Cleaning of on-site sanitation systems**

In Ahmedabad, around 92,500 households are dependent on on-site sanitation (OSS) options. AMC provides septic tank cleaning service 'on-call' basis and is equipped with 53 septage sucking machines and 10 additional on hire. AMC received around 10,000 OSS cleaning requests between August 2014 and August 2015 for four zones. In addition to AMC, private contractors clean septic tanks and in some cases, informal workers are employed by residential societies which may potentially lead to the act of manual scavenging. As observed during field visits, AMC's staff does not use protective gear regularly.

As per the 'Guidelines for Open Defecation Free Gujarat' issued by Mahatma Gandhi Swachhta Mission (MGSM), any toilet without proper waste water disposal method is considered an insanitary toilet.

AMC does not have an inventory of properties with various types of OSS systems. The OSS systems can be of any type- single-pits, twin-pits, septic tank-soak pit and decentralised system. Since many OSS systems comprise of single-pits, the sludge settles at the bottom of the pit and hardens. Usually the owners do not get it cleaned until effluent overflows, which may take anything between 3 to 10 years depending on the size of the pit, its usage and local soil conditions. In this timeframe, the sludge usually hardens and it becomes difficult to clear using suction machines. As a result, other methods including manual disaggregation of hardened sludge is adopted and then removed. AMC does not clear sludge from the OSS and collects only the effluent. Some private contractors clear the sludge using jetting cum suction machines. There are many unlicensed contractors/ workers provide septic tank cleaning service and AMC has little control over disposal of sludge potentially leading to manual scavenging.

Strategies to prevent manual cleaning of septic tank/soak pits/ pits

- a) **Process and Management**: AMC should prepare an inventory of properties which rely on various types of OSS capturing details about the type of OSS, its capacity, compliance with standards of construction and frequency of cleaning; AMC should list private contractors who clean septic tanks indicating their capacity, staff and equipment; AMC should empty sludge from the septic tanks in addition to the effluent.



- b) **Infrastructure and Equipment:** Once AMC lists all private contractors, it can procure new machines if needed; AMC should provide sludge removing facility as well and dispose it in the sludge drying facility at its STPs.
- c) **Behavioural change:** As suggested in 'Process and Management' section, AMC should survey all properties which are not connected to underground drainage; AMC should conduct awareness campaign with these property occupants to clean septic tanks/ pits once in two years through AMC or its listed contractors.
- d) **Monitoring and Evaluation:** AMC should monitor properties with OSS for their cleaning regime; AMC should maintain a database of properties being cleaned by listed private contractors; AMC should monitor disposal of sludge and effluent by private contractors in AMC's STP.
- e) **Training and Capacity Building:** AMC should train its staff to follow SOP<sup>1</sup> for septage management; AMC should comply with the provisions in the '**OBLIGATIONS OF THE EMPLOYER TOWARDS ITS EMPLOYEES ENGAGED FOR THE CLEANING OF SEWER OR SEPTIC TANK**', (Clause (d) of sub-section (1) of section 2 of the Act.)

#### **4. Cleaning of sewerage system**

Eighty five percent of the city's area and 90 percent of residential properties have access to the city's sewer network. AMC has a fleet of 4 super sucker machines, 24 combined jetting cum suction machines, 3 jetting machines, 4 gully-emptier machines, 12 high flow jetting machines, 8 tempo mounted jetting machines, 2 super sucker machines, 4 suction machines and 1 power rodding machine (Sewage Treatment Plant Department, 2014). Despite the equipment, in some cases, manual cleaning of manholes has been reported by the media (Sinha, 2013).

AMC received more than 200,000 complaints between July 2013 and August 2014 for choking/ blockage/ overflow of sewerage lines and 8,000 complaints for improper disposal of silt from sewer manholes. These complaints were addressed by AMC through its own staff as well as contractors. There is high possibility of human contact with faecal matter while redressing these complaints.

AMC has a comprehensive tender for 'Work of removing debris/ silt from existing sewer line/ storm water drainage line with super sucker machine situated in different zones of Ahmedabad Municipal Corporation'. The tender has several clauses to ensure that cleaners do not come in direct contact with sewage.

#### **Strategies to prevent manual cleaning of sewer lines/manholes**

AMC should ensure that a worker enters the sewerage network or the sewerage manhole only if no other option is available. In case, a human has to enter the sewerage network, s/he shall fully comply with the guidelines in the CPHEEO manual.

- a) **Infrastructure and Equipment:** AMC should provide appropriate equipment and safety gear to all its workers who are required to enter a manhole, should the need arise. AMC should also ensure that all its listed private contractors follow the precautions as provided by the CPHEEO manual.

#### **5. Cleaning of faecal matter in public toilets**

During the technical audit of 1585 public conveniences (community toilets, pay & use toilets and stand-alone urinals), faecal matter was found in and around 300 facilities. Cleaning of facilities in such cases may lead to manual scavenging. AMC does not have standard operating procedures (SOP) for cleaning of public conveniences.

---

<sup>1</sup>The complete SOP is available at [http://umcasia.org/UserFiles/umc/FSM\\_Sanitation\\_Septage\\_SOP\(1\).pdf](http://umcasia.org/UserFiles/umc/FSM_Sanitation_Septage_SOP(1).pdf).

Strategies to prevent human contact with faecal matter for sanitation workers in public toilets

- a) **Infrastructure and Equipment:** AMC should ensure that cleaners of all public and community toilets are provided with the items listed in the Standard Operating Procedures for Cleaning of Public Toilets<sup>2</sup>. For the full SOP document prepared by UMC.
- b) **Monitor and evaluation:** AMC should train cleaners and supervisors of public conveniences to comply with the SOP for cleaning of public conveniences.
- c) **Behavioural Change:** AMC should display information in the public conveniences about correct method to use toilets and about keeping the facility clean.

**Financial requirement to comply with the recommendations**

The strategies and action plan discussed in the previous chapter have been summarised with a block cost estimate. The table below provides the one-time capital cost required for compliance with The Act.

Category of action	Action item	Quantity	Rate	Block cost estimate (INR)
Process and management	a) Prepare ward level plans for locating community and public toilets	64	2,00,000	128,00,000
	b) Conduct a survey of properties not connected to sewerage network.	1	15,00,000	15,00,000
	c) Register/ empanel/ enlist septic tank cleaning service providers. Use this list to monitor OSS cleaning	To be included in administrative budget		
	d) Empty sludge from the septic tanks in addition to the effluent	No budgetary allocation required		
Infrastructure and equipment	a) Regularly maintain manure AMC operated lifting machines and ensure the same from private operators	To be included in private contractor's budget		
	b) Create an MIS to monitor cleanliness of all public conveniences	1	10,00,000	10,00,000
	c) Develop a framework for citizen based monitoring of cleaning activities	1	1,00,000	1,00,000
	d) Provide individual/ shared toilets to all households	To be included in MGSM budget		
	e) Unclog drainage lines regularly at public conveniences	To be included in Sewerage Department's annual budget		
	f) Fix a cleaning regime of facilities	No budgetary allocation required		
	g) Provide mobile toilets at exhibition spaces and public gatherings	No budgetary allocation required		
	h) Provide appropriate equipment and safety gear to all its workers (who may enter sewers and/ or septic tanks) as per the Draft Rules of The Act	196 <sup>3</sup>	1000 <sup>4</sup>	1,96,000
<b>Total for capital cost</b>				<b>1,55,96,000</b>

<sup>2</sup>The SOP has been prepared under the Ahmedabad Sanitation Action Lab (ASAL). More information about ASAL can be found at <http://www.umcasia.org/asal>.

<sup>3</sup>As per the data provided by AMC, 98 sanitation workers are provided additional safety kit twice a year.

<sup>4</sup>It is assumed that the cost of 1 kit is INR 1,000/-.

Action Plan for Ahmedabad Municipal Corporation to conform to  
'The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013'.

*The budget is prepared based on estimates as of 2015-16.*

The table below provides the annual recurring cost required for compliance with The Act.

Category of action	Action item	Quantity	Rate	Block cost estimate (INR)
Behavioural change	Conduct IEC campaign to promote			
	a) use of toilets by all members of the households	12	1,00,000	12,00,000
	b) display information in the public conveniences about correct method to use toilets and about keeping the facility clean	1,600	500	8,00,000
	c) with properties connected to OSS for its cleaning once in two years	12	1,00,000	12,00,000
Monitoring and evaluation	a) Check all construction sites for availability of adequate toilets. If unavailable, provide mobile toilets on a chargeable basis	No budgetary allocation required		
	b) Establish a committee to periodically re-visit eliminated OD spots	1	1,00,000	1,00,000
	c) Establish Public Health Bye-laws enforcement squads	12	1,00,000	12,00,000
	d) Prepare a monitoring framework for mechanised cleaning (once in two years) of OSS	No budgetary allocation required		
	f) Monitor disposal of sludge and effluent from OSS in STPs	No budgetary allocation required		
Training and capacity building	a) Train public conveniences cleaners and supervisors based on SOP for cleaning of community and public toilets	To be included in Capacity Building budget		
	b) Train relevant staff (AMC's or AMC appointed contractor's) to use manure-lifting machine	To be included in Capacity Building budget		
	<b>Total for annual recurring cost</b>			<b>45,00,000</b>

*The budget is prepared based on estimates as of 2015-16.*

## Bibliography

- Bowen, C. F., & Furry, M. (2002). *Cleaning the bathroom*. Retrieved January 2015, from College of Agricultural Sciences: <http://pubs.cas.psu.edu/FreePubs/pdfs/ui306.pdf>
- Bureau of Indian Standards. (1993, March). *Selection, installation and maintenance of sanitary appliances: code of practice* (Second Edition ed.). New Delhi: Bureau of Indian Standards.
- College of knowledge. (no year). *ISSA/Hospital Housekeeping Training Manual*. Retrieved January 22, 2015, from Husky Brand: <http://huskybrand.com/documents/pdfs/thea3.pdf>
- Dometic Corporation. (2003, July). *Ecovac Sanitation System: Owner's manual*. Retrieved January 22, 2015, from Channel Blade: <http://media.channelblade.com/EProWebsiteMedia/3506/Eco%20Vac%20Toilet%20owners%20manual.pdf>
- Latino Hotel Association. (n.d.). *Latino Hotel & Restaurant Association*. Retrieved January 22, 2015, from [http://www.pdfspath.net/get/8/latino\\_hotel\\_association\\_housekeeping\\_room\\_attendant.pdf](http://www.pdfspath.net/get/8/latino_hotel_association_housekeeping_room_attendant.pdf)
- MOUD. (2013, November). Retrieved 2015, from Ministry of Urban Development: [http://moud.gov.in/sites/upload\\_files/moud/files/Chapter%209.pdf](http://moud.gov.in/sites/upload_files/moud/files/Chapter%209.pdf)
- Sen, S., & Ma, Y. (2005, December). *Improvement and maintenance management of public toilets in Lizhou: A study*. Retrieved January 31, 2015, from World Bank: <http://siteresources.worldbank.org/INTWSS/Resources/Improvement.pdf>
- Toubkiss, J. (2010). *How to manage public toilets and showers*. Retrieved January 22, 2015, from Programme Solidarité Eau: [http://www.pseau.org/outils/ouvrages/pdm\\_ps\\_eau\\_cms\\_guide\\_n\\_5\\_how\\_to\\_manage\\_public\\_toilets\\_and\\_showers\\_2010.pdf](http://www.pseau.org/outils/ouvrages/pdm_ps_eau_cms_guide_n_5_how_to_manage_public_toilets_and_showers_2010.pdf)
- UD&UHD, Government of Gujarat. (2014). *Sanitation Index Book*. (U. M. Centre, Ed.) Retrieved February 16, 2015, from Mahatma Gandhi Swachhata Mission: <http://www.mgsm-gujarat.in/SanitationIndex/SanitationIndexBook.html>
- Urban Management Centre. (2013). *Technical Audit of Public Conveniences Facilities in Ahmedabad*. Ahmedabad: Ahmedabad Municipal Corporation.
- Urban Management Centre. (2014). *UMC Audit of Public Conveniences in 4 cities of Gujarat*. Retrieved February 16, 2015, from [www.academia.edu](http://www.academia.edu): [https://www.academia.edu/10828858/UMC\\_Audit\\_of\\_Public\\_Conveniences\\_in\\_4\\_cities\\_of\\_Gujarat](https://www.academia.edu/10828858/UMC_Audit_of_Public_Conveniences_in_4_cities_of_Gujarat)



A 202, GCP Business Centre  
Near Vijay Crossroads, Navrangpura  
Ahmedabad – 380009 Tel: 91-79- 27546403/ 5303  
Email: [manvita@umcasia.org](mailto:manvita@umcasia.org)  
Web: [www.umcasia.org](http://www.umcasia.org)