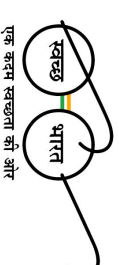




 Ministry of Housing
 and Urban Affairs
 Government of India



Ensuring Safety of Sanitation Workers

A Ready Reckoner for Urban Local Bodies

Ministry of Housing and Urban Affairs

All images are by UMC unless stated otherwise

Sanitation workers have been the foundation of the sanitation improvement story of urban India.

Sanitation sector and various services provided under it are hazardous in nature – some are moderately hazardous while many of them are extremely hazardous.

The working environment puts sanitation workers to a wide range of health risks and diseases due to exposure to harmful pathogens, chemicals and sharp objects. Consequently, there is an urgent need to ensure safety and humane working condition in all aspects and activities of sanitation.

Under various legislations, ULBs are responsible for ensuring a safe working environment for the sanitation workers. Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013 has banned hazardous manual

cleaning of sewer and septic tanks and provides legal framework for rehabilitation of manual scavengers. The Prohibition of Employment as Manual Scavengers & their Rehabilitation Rules, 2013 and Solid Waste Management Rules 2016, mandate the employers to provide protective gears and safety devices to the employees. In 2019,

Ministry of Housing and Urban Affairs (MOHUA) issued an advisory to all states for establishing an Emergency Response Sanitation Unit (ERSU) in all cities/ Urban Local Bodies (ULBs) with an objective to systemize human entry into sewer/ septic tank through organization of a professional, well trained, motivated and appropriately equipped establishment. The COVID-19 pandemic brings back the focus on importance of

providing safe working conditions and ensuring welfare of the sanitation workers, as they continue providing essential services, despite mounting risks to their health and safety. The ULBs are a critical stakeholder responsible for ensuring health, safety and dignity of all sanitation workers.

The current edition of Swachh Survekshan 2021 has also emphasized on improving the safety of sanitation workers. This reckoner guides the ULBs to ensure safety and dignity of sanitation workers engaged in their respective cities/ jurisdictions.

MOHUA would like to acknowledge the contribution of Urban Management Centre in developing the ready reckoner.

List of abbreviations

CPHEEO – Central Public Health and Environmental Engineering Organisation	PPE – Personal Protective Equipment
CT – Community Toilet	pSEP – Private Sewage Entry Professional
DAY-NULM – Deendayal Antodaya Yojana - National Urban Livelihoods Mission	PSSO – Private Sanitation Service Organisation
EPF – Employees’ Provident Fund	PT – Public Toilet
ERSU – Emergency Response Sanitation Unit	QP – Qualification Pack
IEC – Information, Education and Communication	RPL – Recognition of prior learning
FC – Finance commission	RSA – Responsible Sanitation Authority
FSSM – Fecal Sludge and Septage Management	SBM – Swachh Bharat Mission
FSTP – Fecal Sludge Treatment Plant	SEP – Sewage Entry Professional
MoHUA – Ministry of Housing and Urban Affairs	SOP – Standard Operating Procedure
MoEFCC – Ministry of Environment, Forests and Climate Change	STP – Sewage Treatment Plant
NSDC – National Skill Development Council	SWM – Solid Waste Management
	U-LEARN – Urban Livelihood e-learning and Resource Network
	ULB – Urban Local Body

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1

Need for ensuring safety of sanitation workers

1.1 Issues faced by sanitation workers

- Sanitation workers are viewed as **unclean and stigmatized**; scant value is given to the work they do.
- Little or **no protective equipment** is provided to them, leading to regular accidents resulting in fatalities
- Mismatch between **high occupational hazards and low skill level** of sanitation workforce
- Little support for **rehabilitation and self-employment**
- Unfair and untimely **payment of wages**
- **Lack of financial and social safety coverage**



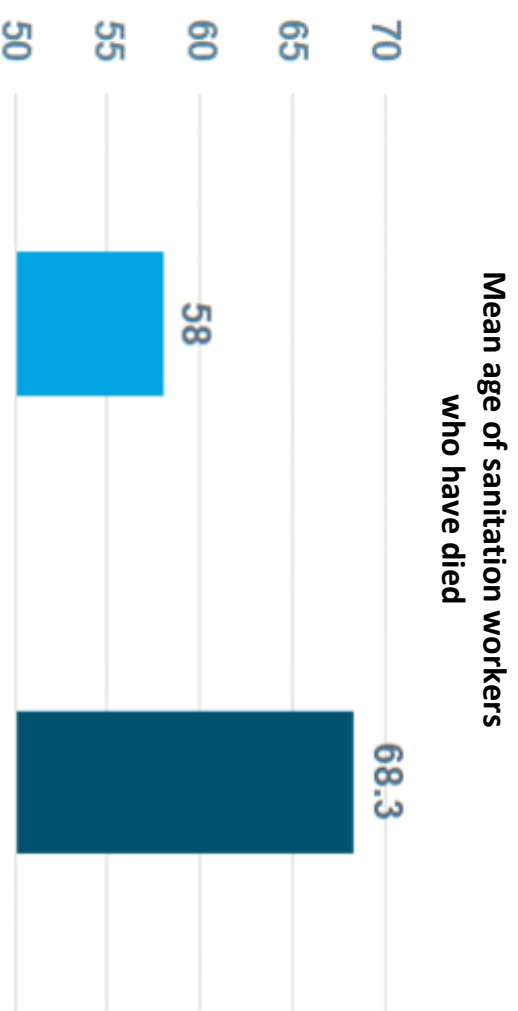
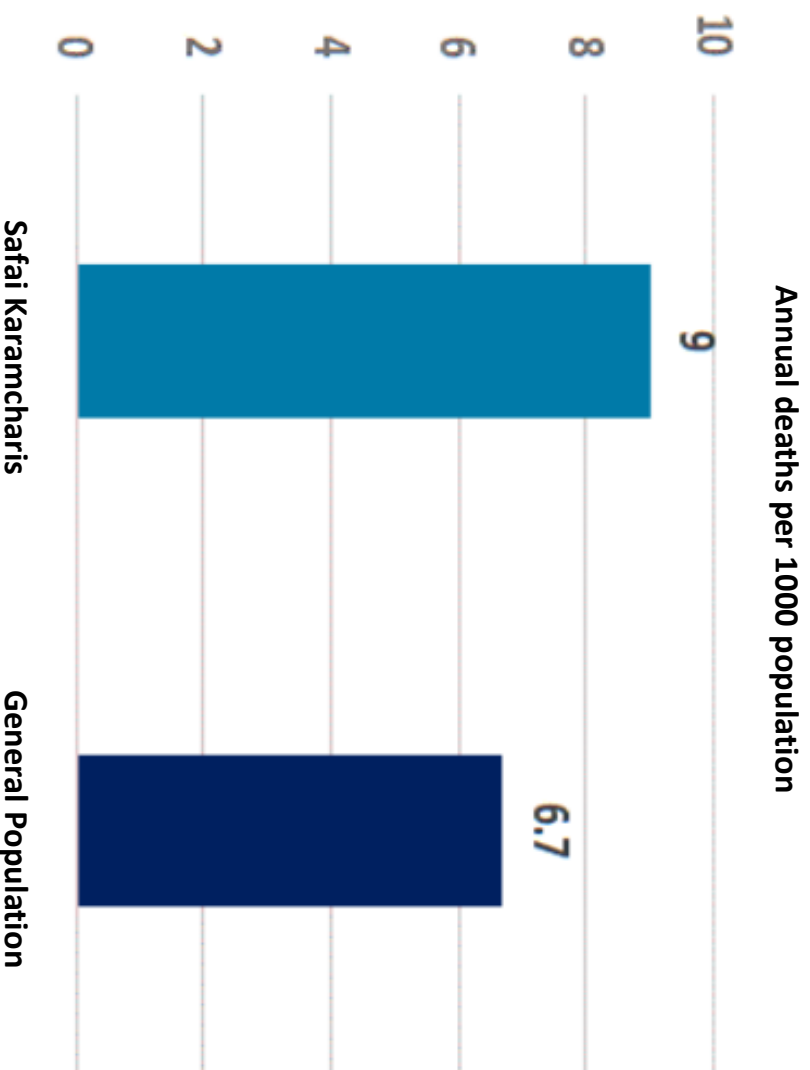
1.1 Issues faced by sanitation workers

- **Poor contractual mechanisms** and lack of SOPs in local governments
- Lack of **awareness and sensitivity** for sanitation workers' safety among service seekers
- No provision of **insurance** considering the **hazardous nature** of sanitation work
- No provision of **periodic health check ups**
- Lack of facilities to maintain **hygiene**



1.2 Sanitation workers' death

Sanitation workers regularly deal with hazardous waste and sometimes, enter high-risk confined spaces like sewers and septic tanks, for cleaning and maintaining the vast sanitation infrastructure. The working environment exposes them to a wide range of health risks and diseases due to harmful pathogens, chemicals and sharp objects.



Source: S Kamaleshkumar, K & Murali, Lokesh & Prabhakaran, V & Anandhakumar, G. (2016). Analyzing manual scavenging death rate over a critical circumstances and methods to ensure safety.

Source: Salve Pradeep, Safai Karamcharis in vicious cycle: A study in the perspective of caste, April 2017

1.3 Recent media reports on sanitation workers' plight

INSIDE DEVELOPMENT | WASH

In India, a sanitation worker dies every 5 days. Here's how to change that.

By *Rebecca Root* // 19 November 2019

Water & Sanitation | Global Health | The Max Foundation | WaterAid | WHO | India

Two sanitation workers in Odisha choke to death in manhole

In a tragic incident, two sanitation workers of a family died of suffocation while cleaning a sewer line of Public Health Engineering Organisation at IRC village on Wednesday.



Published: 18th May 2017 06:27 AM | Last Updated: 18th May 2017 06:27 AM

'Stigmatised, ostracised': Sanitation workers in Tamil Nadu battle COVID-19

In recent days, many sanitation workers have tested positive for COVID-19 in Tamil Nadu. With contract jobs and no pay during recovery, the workers battle societal stigma and ostracisation.

Odisha: Sanitation worker dies of asphyxiation after entering septic tank

The deceased, SK Muna was suffocated to death after he entered the septic tank at the house of one SK Anis of the village.



Published: 02nd June 2020 09:44 AM | Last Updated: 02nd June 2020 09:44 AM

Coronavirus: Sanitation Worker Forced to Drink Disinfectant in UP's Rampur, Dies

The incident took place after the victim mistakenly sprayed the disinfectant on a man, who then, along with his aides, allegedly inserted the sanitising machine's pipe into the sanitation worker's mouth, forcing him to drink the disinfectant.

Published: April 19, 2020 2:16 PM IST

Sweeper faints, dies after fogging in Uttar Pradesh

Four Covid-19 patients have died in Uttar Pradesh so far while 343 people have tested positive

COVID-19 CASES **astava** in Lucknow
Deaths 0, 2:33 AM • Updated 9:04:20, 2:33 AM

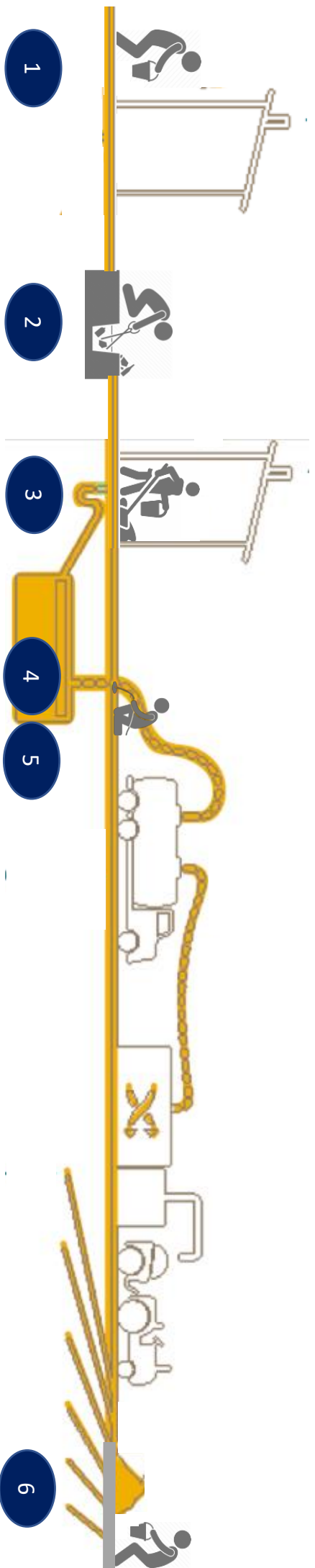
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2

Types of sanitation workers and risks associated with them

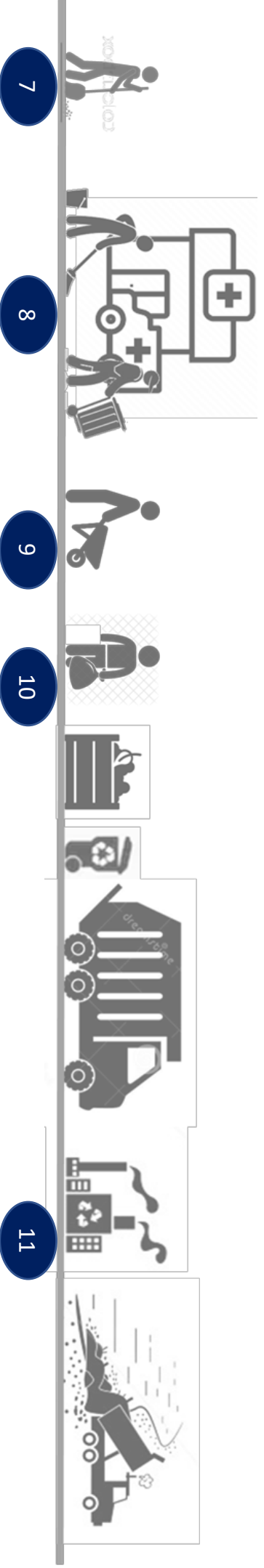
2.1 Types of sanitation workers

Types of sanitation workers in liquid waste management



1. Latrine Cleaner 2. Drain Cleaner 3. Community Toilet/ Public Toilet Cleaner 4. Septic Tank Desludger 5. Sewer Cleaner 6. Treatment Plant Worker

Types of sanitation workers in solid waste management



7. Street Sweeper 8. Institutional Waste Collector (Hospitals And Quarantine Centres) 9. Domestic Waste Collector 10. Informal Waste Picker 11. Worker At Waste Processing Facility

2.2 Occupational risks and hazards

1. Disease burden

Asthma, cholera, typhoid, hepatitis, polio, trauma, eye and skin burns, gastroenteritis

2. Risk of **chemical hazards** due to harmful gases that may be present (ammonia, sulphur dioxide, carbon monoxide). It can cause workers to lose consciousness or die

3. Risk of **microbial hazards** as the waste has a high concentration of fungi and bacteria

4. Risk of getting

musculoskeletal disorders due to excessive manual labour, lifting of heavy weight and working long hours in detrimental postures

5. They come into direct/close contact with **fecal matter**

6. They work in **confined** and often dangerous **spaces**

7. **Injuries and infections** caused by sharp objects such as razors, syringes or broken glass

Sanitation workers who are not protected by adequate health and safety measures risk injury, infection, disease, mental health issues, and death

2.2 Occupational risks and hazards

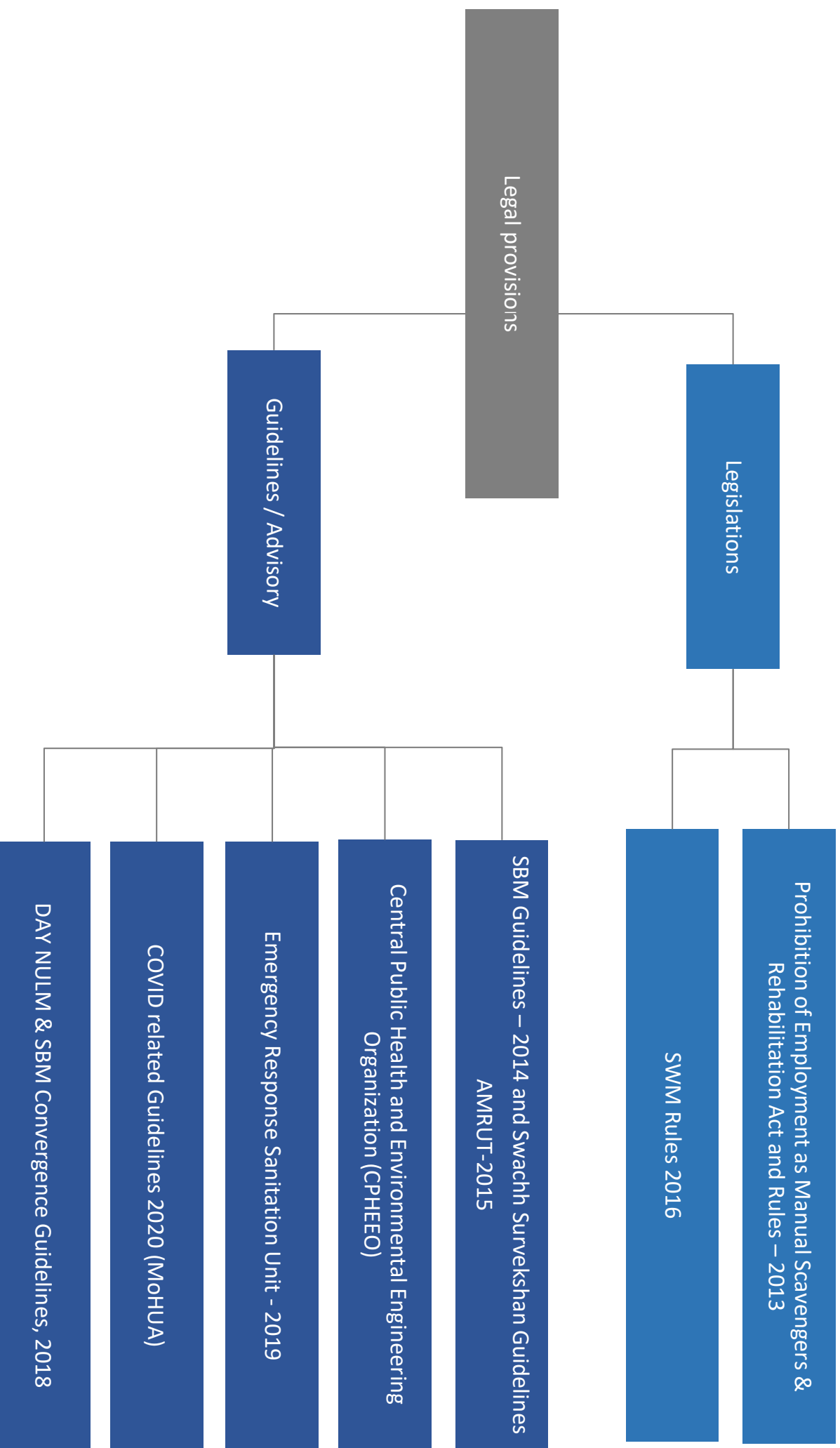
	Category of sanitation workers					
	Street sweeper/ Informal Waste Picker	Domestic Waste collector/ Institutional Waste Collector	CT/PT cleaner, latrine cleaners	Open drain cleaner	Septic tank de- sludger/ sewer network maintenance	Treatment plant workers
Musculoskeletal disorders	✓	✓	✓	✓	✓	✓
Respiratory problems	✓			✓	✓	✓
Dermatological problems	✓	✓	✓	✓	✓	
Gastrointestinal problems	✓			✓	✓	
Biological hazards		✓	✓	✓	✓	✓
Electrical hazards			✓			✓
Chemical hazards			✓	✓	✓	
Mechanical hazards		✓		✓	✓	✓
Injuries due to trips and falls, especially in confined spaces				✓	✓	

Note: Manual cleaning of sewers and septic tanks is banned barring exceptions. While the risks and hazards associated with manual cleaning are same as mechanical, the intensity of them is very high, which may lead to death of sanitation workers.

3

Legislations and guidelines

3. Legislations and guidelines



3.1 Legislation | Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013

'No person, local authority or any agency shall engage or employ, either directly or indirectly any person for hazardous cleaning of a sewer or a septic tank.'

Provisions related to safety of sanitation workers:

- ULB to conduct survey to identify any person engaged or employed in manual scavenging within its jurisdiction.
- Rehabilitation of the identified persons in the survey, as prescribed:
 - i. Person shall be given a photo ID, with details of his family dependents and one-time cash assistance
 - ii. Children entitled to education as per relevant state or central scheme.
 - iii. Allotted residential plot and financial assistance for house construction.
 - iv. One person from that family to be provided livelihood skill training
 - v. Provide subsidy or concessional loans for taking up alternative occupation on a sustainable basis.
 - vi. Provided legal and programmatic assistance as the State or Central Government may notify.
- Use of appropriate technological appliances for cleaning of sewers, septic tanks and other spaces to eliminate the need for manual handling of excreta in the process of cleaning.
- **Provision of the 44 items of protective gear and safety devices** (mentioned in the Rule 4 of Prohibition of Employment as Manual Scavengers & their Rehabilitation Rules, 2013) by the employer to the employee engaged for cleaning of sewers and safety tank.
- **Following of safety precautions** before a person is engaged in the cleaning of sewer or a septic tank:
 - i. There shall be a minimum of three employees present all the time, one of whom shall be a supervisor.
 - ii. The atmosphere within the confined space shall be tested for oxygen deficiency and toxic and combustible gases.
 - iii. Before starting the cleaning, it is determined if the sewer serves any industries nearby to anticipate any hazardous atmosphere that may be encountered.
- **Life Insurance policy of at least Rs. 10 lakh for the person assigned for cleaning of sewer and septic tanks**; premium for which shall be paid by the employer

Refer - <https://rb.gy/e9u1hi>

3.2 Legislation | Solid Waste Management Rules, 2016

The Union Ministry of Environment, Forests and Climate Change (MoEFCC) notified Solid Waste Management Rules (SWM), 2016.

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 8th April, 2016

S.O. 1357(E)—Whereas the draft of the Solid Waste Management Rules, 2015 were published under the notification of the Government of India in the Ministry of Environment, Forest and Climate Change number G.S.R. 451 (E), dated the 3rd June, 2015 in the Gazette of India, part II, Section3, sub-section (i) of the same date inviting objections or suggestions from the persons likely to be affected thereby, before the expiry of the period of sixty days from the publication of the said notification on the Solid Waste Management Rules, 2015 in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000;

And whereas, copies of the said Gazette were made available to the public on the 3rd June, 2015;

And whereas, the objections or comments received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 3, 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986) and in supersession of the Municipal Solid Waste (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby makes the following rules for management of Solid Waste, namely:-

Clause 15 . Duties and responsibilities of local authorities

- (zd) ensure that the operator of a facility **provides personal protection equipment** including uniform, fluorescent jacket, hand gloves, raincoats, appropriate footwear and masks to all workers handling solid waste and the same are used by the workforce

Refer - <https://rb.gy/eburzv>

Chapter 9: Occupational Health Hazards And Safety Measures

Personal Protection	Protective Devices
1 Head Protection	Hard hats
2 Face and Eye protection	Goggles, face shields, protective creams
3 Hands and lower arms	Protective sleeves, gloves, finger pads
4 Body	Diver suit/ aprons
5 Legs and feet	Shoes
6 Ear protection	Earpads/ earplugs
7 Respiratory protection	Mask

CPHEEO manual prescribes using protective devices. It also mentions use of safety belt, portable ventilators, safety fences and safety signs wherever required.

Refer - <https://bit.ly/2DtxRPN>



MANUAL ON SEWERAGE AND SEWAGE TREATMENT SYSTEMS

PART B: OPERATION AND MAINTENANCE

FIRST EDITION

MINISTRY OF URBAN DEVELOPMENT, NEW DELHI

<http://moud.gov.in>

CENTRAL PUBLIC HEALTH AND
ENVIRONMENTAL ENGINEERING ORGANIZATION

IN COLLABORATION WITH



JAPAN INTERNATIONAL COOPERATION AGENCY

NOVEMBER 2013

IS 11972, CPHEEO manual and SOP released by MoHUA emphasize on using mechanical sewer cleaning equipment for O&M of wastewater infrastructure

- **When it is beyond the capability of machines** – trained sanitation workers, properly equipped and authorized should only be employed under supervision of designated authority
- Fatal accidents among people tasked to enter septic tanks/sewers have been reported due to:
 - Not observing laid down safety procedures
 - Lack of training
 - Not wearing proper protective equipment required
 - Lack/ absence of supervision

Refer - <https://rb.gv/gdt07b>



3.4 Guidelines | Emergency Response Sanitation Unit

Section 7 of Prohibition of Employment as Manual Scavengers & Rehabilitation Act, 2013

‘No person, local authority or any agency shall engage or employ, either directly or indirectly any person for hazardous cleaning of a sewer or a septic tank.’

In the event that mechanical cleaning of sewer/septic tanks does not work and human entry is required, it should be done through an Emergency Response Sanitation Unit (ERSU)

MoHUA issued a notification in 2019 to set up ERSUS

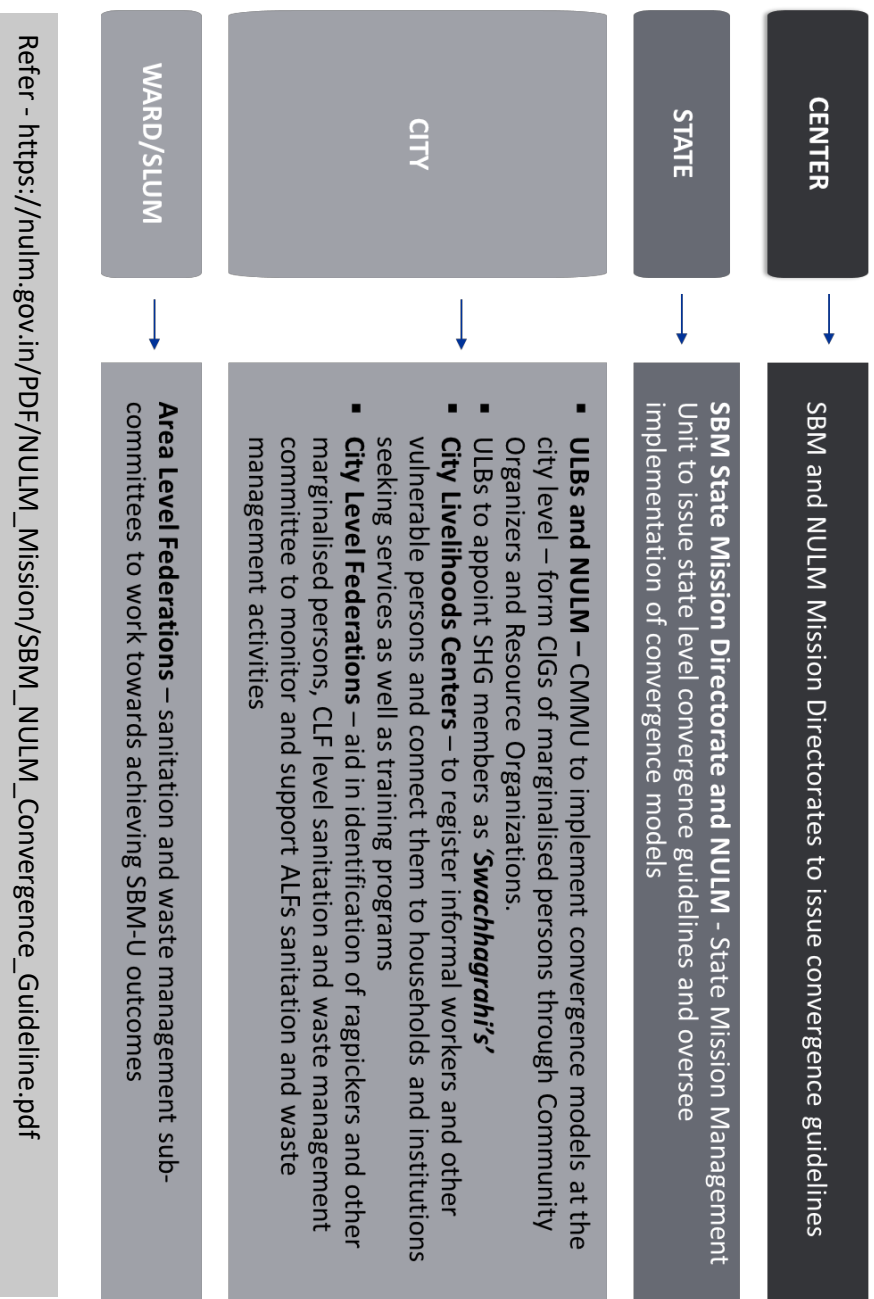
The notifications asks ULBs to:

1. Set up ERSUS
2. Undertake IEC campaign to educate employers and citizens about provision of Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013 and hazardous cleaning of sewers and septic tanks
3. Promote mechanised cleaning
4. Issue directions to file FIR against employers in cases of hazardous cleaning of sewer/septic tanks



Refer - <https://rb.gy/ttyaa1>

3.5 Guidelines | SBM and DAY-NULM Convergence Guidelines



EMPOWERING MARGINALIZED GROUPS - CONVERGENCE BETWEEN SBM AND DAY-NULM

March 2018

Deendayal Antyodaya Yojana-
National Urban Livelihoods Mission



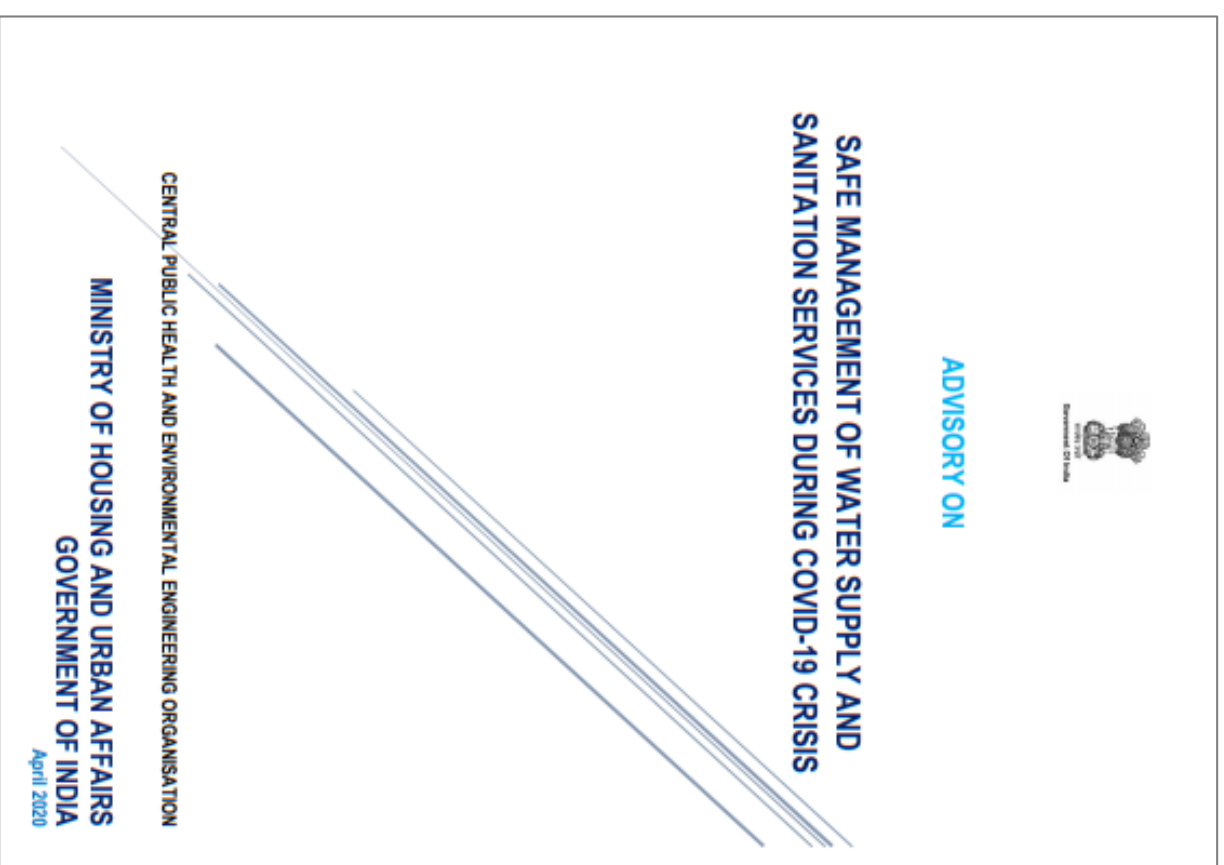
Ministry of Housing
and Urban Affairs
Government of India



3.6 Guidelines | COVID 19 related guidelines by MoHUA

- Sanitation workers in India are particularly vulnerable to water and sanitation related risks and are at the frontline of the essential services including sanitation, solid waste management, etc. Therefore, their safety and welfare must be accorded highest priority by ULBs and other urban utilities. Proper PPE gear to be provided and their use should be encouraged.
- Personal protective equipment (PPE) includes protective outerwear, gloves, boots, long-sleeved gown, goggles or a face shield, and a mask.

Refer - <http://mohua.gov.in/pdf/5edf84915e23aCOVID%2019%20-%20Advisory%20on%20Water%20and%20Sanitation%20Services.pdf>



4

What should ULBs do for safety of sanitation workers?

4. What should ULBs do for safety of sanitation workers?

A

Regulation of sanitation work

- 4.1 Enumeration of sanitation workers
- 4.2 Empanelment of private service providers
- 4.3 Adoption of standard operating procedures
- 4.4 Mechanization of sanitation work
- 4.5 Prohibition of manual scavenging
- 4.6 Setting up an ERSU

B

Training

- 4.7 Training of sanitation workers
- 4.8 Capacity building of ULB staff

C

Provision of entitlements

- 4.9 Service level benefits for sanitation workers
- 4.10 Health and safety of sanitation workers
- 4.11 Social security benefits for sanitation workers and their families

D

Enablers

- 4.12 Grievance redressal system for sanitation workers
- 4.13 Sensitizing citizens
- 4.14 Recognition of sanitation workers

4

What should ULBs do for safety of sanitation workers?

A. Regulation of sanitation work

4.1 Enumeration of sanitation workers

ULB should maintain records of all sanitation workers engaged in their jurisdiction either directly or via contractors or engaged informally.

a. Need of enumeration

The first step is to know how many sanitation workers* are currently engaged in the city. ULB should conduct survey of all sanitation workers and assess extent of linkage to government schemes. Following the survey, all workers should be registered with the ULB.

Registering sanitation workers engaged in performing sanitation jobs in the city will aid the ULBs in planning for PPE provision - what type of PPEs that should be provided to each sanitation worker category, the sizes and numbers of each PPE to be provided, replenishment of PPEs plan etc. .

b. How can the survey be carried out?

In order to carry out the survey and registration process, ULBs can reach out to sanitation workers by either their own sanitation staff or by engaging:

- NULM teams stationed at the state departments
- Self-help groups/ common interest groups formed under NULM program in their cities
- Local organizations working with sanitation workers

c. Information to be captured in the survey

The survey form should ask for the following information from the sanitation workers

- i. Personal details
Name, address, information about dependents
- ii. Details about the sanitation work
Types of sanitation jobs done, wage received, modality of engagement etc.
- iii. Aadhar card to eliminate any duplicacy in the registration process
- iv. Access to social security schemes
 - a. Access to health care - Ayushman Bharat/ State specific health card
 - b. Access to insurance – PM/ Atal Pension Yojana
 - c. Access to other social security schemes – Pradhan Mantri Jan Dhan Yojana
 - v. Membership of any SHG

* Sanitation workers include workers engaged across the solid and liquid waste management value chains.

Refer annexure B for sanitation workers survey form

4.2 Empanelment of private service providers

All sanitation work should be regulated by the ULB or through agencies empaneled by the ULB. For empanelment, following steps should be followed:

1. Publish notice asking all private contractors to register/empanel with the ULB

The ULB should issue a public notice asking all private contractors engaged in desludging of septic tanks and emptying of soak pits to register themselves with the ULB. Such registration is mandatory for carrying out operations in the city. Unregistered contractors should be penalized.

Refer – Model Contract for desludging contractors

2. ULB should issue details, terms & conditions of empanelment on their portals

When empaneling contractors, ULBs should ensure that the contractor has adequate staff and equipment for carrying out the work. ULB should specify the validity of registration of private contractors upon empanelment and contractors should re-register after the specified period.

3: Training for de-sludging and emptying of septic tanks and soak pits

The ULB should ensure that all staff engaged by them directly or through private contractors is adequately trained in standard operating procedures and safety related aspects.

Refer – 1. Participant handbook for desludgers

<https://umcasia.org/assets/Handbook-for-Desludging-Operator-English.pdf>

2. Training handbook on PPEs

<https://umcasia.org/assets/Training-of-sanitation-workers-on-use-of-PPEs.pdf>

Annexure 4: Application Form for the License of Collection, Transportation and Disposal of Septage in Telangana

1. Name of the Applicant: Mr./Ms.

2. Nationality: Indian Other:

3. Address: Regd. Office:

Head Office:

4. Telephone No.:(0) Mobile No.

Email id:

5. Registration No. of Vehicle:

6. Pollution Certificate of the Vehicle valid up to:

7. Insurance No. and Date valid up to:

8. Fitness of the Vehicle: valid up to:

9. Whether Vehicle is Fitted with GPS (Yes/No)

10. Details of the Vehicle (Model, Type, Capacity, Labe-proof, Odour, Spill-proof, having proper Vacuum/Suction and Desludging Arrangement (relevant Document Proof may be enclosed),

11. Processing Fee for License: Rs.1000/- (Non-refundable)

D.D. No.: Date: Bank:

12. I/we certify that information given by me/us in columns 1 to 11 are true to the best of my knowledge and belief. I also certify that I have read and understood the attached terms and conditions 1 to 13 and agree to abide by them. I agree that if any information given by me is found wrong, the application for license will be liable for cancellation at any time.

No. of documents attached: Signature(s) of Applicant(s)

Date:

Documents to be enclosed:

1. Copy of registration certificate | 2. Pollution under control certificate | 3. Copy of the driving license of the driver

4. Insurance copy | 5. Fitness certificate

Source: FSSM Policy Telangana

Model clauses for any contract

To ensure safety of sanitation workers, a typical contract by ULB should include the following points :

a. Scope of work

1. Provide required equipment & devices
2. Use of safety devices and equipment like gas monitor
3. Safe transport and disposal of solid and liquid waste

b. Provision of cleaning equipment and vehicles

The contractor will be required to provide for, and operate cleaning equipment and vehicles and also provide all the necessary materials for maintenance of these

c. Capacity building

1. Orientation on their rights and entitlements
2. Training on SOPs
3. Training on use, O&M and safe disposal of PPE

d. Access to entitlements

1. Registration/ ID card
2. Paid leaves
3. Regular health check-up
4. Facilitating linkage with existing schemes

e. Provision of safety equipment for staff

1. No worker will come into physical contact with the fecal sludge, during emptying or otherwise.
2. Each worker should be given, and be wearing, safety equipment. For instance:
 - i. Safety googles or glasses with side splash protection
 - ii. Dust mask that fits over nose and mouth
 - iii. Clean rubber gloves
 - iv. Dedicated body suit
 - v. Footwear like gumboots or safety shoes
 - vi. Battery operated torch
3. The Contractor also needs to provide workers access to clean water, soap, disposable paper towels, and a first aid kit in the workstation/ office.

Source: Format adapted from Model Bid document available on www.pas.org.in

After Greater Warangal Municipal Corporation (GWMC) passed a resolution on FSM regulations, licenses were made mandatory for fecal sludge operators/truck owners.

Empanelment of fecal sludge operators was done through open notification from GWMC for 3 FSTPs; while unlicensed operators were barred and penalties were imposed on unlicensed desludging operators.

Further, training was provided on safe/protective desludging practices. A service agreement has been designed for service providers.

File No.HLTH-GEN/2016-SR AST1 HLT HOF

PROCEEDINGS OF THE COMMISSIONER (FAC) :: GREATER WARANGAL MUNICIPAL CORPORATION

Present: Sri Shalid Masood, B.Com.

Res.No.HLTH-GEN/20/2016/Permit-03/2016 Dated:27.10.2016.

Sub: Greater Warangal Municipal Corporation - Public Health Branch - License for collection, Transportation and disposal of septage - Orders - Issued.
Ref: Your application dated 01/09/2016

-00-

ORDER:

In accordance with all the terms and conditions of the By-laws / Regulations, Municipal Corporation Act/Rules, the special license conditions accompanying this license and applicable rules and laws of Government of Telangana, permission is hereby granted to:


Shri. Dhill Sampath Rao S/o. Ramana is hereby authorized to undertake desludging of the septic tanks and pits from the individual households, institutions, commercial entities and to transport for disposal at a designated site as notified by GWMC duly following the "Operative Guidelines on Septage Management (Collection, Transportation Treatment and Disposal) in Greater Warangal Municipal Corporation (GWMCI) - 2016".

To
Municipal Health Officer
Greater Warangal Municipal Corporation

Copy to the Deputy Commissioner-II (Sanitation), GWMC
Copy submitted to the Commissioner, GWMC for favour of kind information.
Copy submitted to the Honble Mayor, GWMC for favour of kind information.

Received Copy

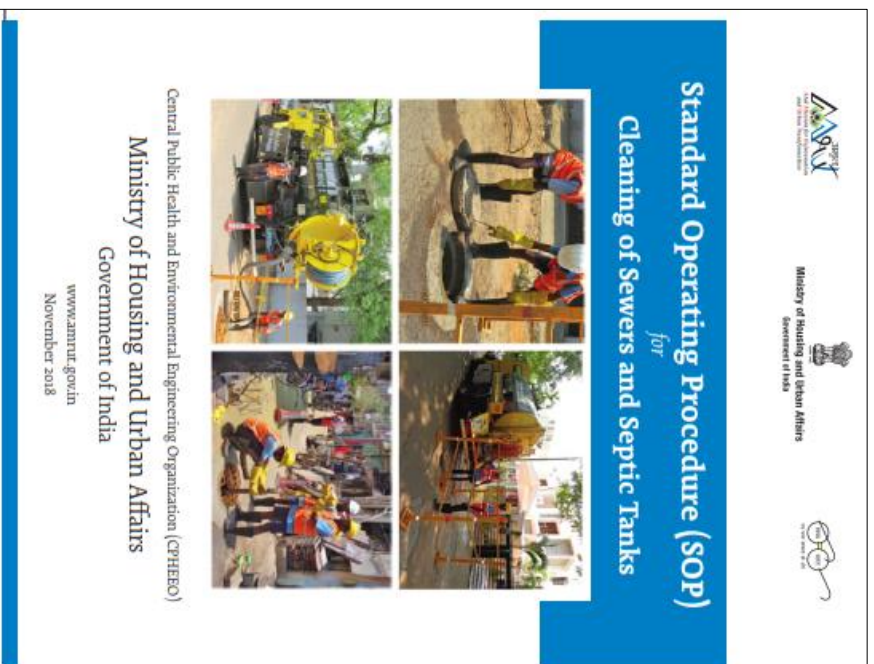
Signature valid

Digitally signed by S. DHVA
SADANNA A
Date: 2016.10.27 14:49 IST
Reason: 
Version: PKCS#101

4.3 Adoption of standard operating procedures

ULBs should adopt standard operating procedures for all sanitation jobs. The ULB staff and the sanitation workers should be trained to follow the standard procedures while performing their tasks.

You can refer to the SOP for Cleaning of Sewers and Septic Tanks and Operation and Maintenance of Public/Community Toilets Manual for clear step-by-step procedures to be followed by the service providers.



Refer: <https://bit.ly/3jkkYwU>



Refer - https://umcasia.org/assets/SOP-for-OM-of-PT-CTs_English_Final_2nd-Edition_Spread.pdf

4.4 Mechanization of sanitation work

- The first step towards safety in sanitation work is elimination of risk by limiting the need of human contact with fecal matter. ULBs should procure machines to eliminate manual cleaning of septic tanks and sewers.
- Along with desludging, there have been numerous innovations like Bandicoot, Sewer croc, jetting machines for cleaning of public conveniences to reduce direct contact of workers with fecal matter
- ULBs should consider the following selection criteria for procurement or renting of the appropriate vehicle:

Criteria for selection of appropriate vehicle

- Road widths/ condition/ terrain
- Quantity of fecal sludge and septage generated
- Financial resources available
- Availability of skilled human resources to operate and maintain the vehicles
- After sale service/ skill for repair of the vehicle
- Method of desludging – (will affect the number of vehicles)
- The demand for vehicles can be calculated by calculating the septage generation, as shown in the next page



Source – <https://currentaffairs.adda247.com/guwahati-gets-manhole-cleaning-robot-bandicoot/>



Source – <http://www.sanitor.in/SewerCrocandRoboticCameraSystem.html>

Leading practice

Mobilization of sanitation workers to adopt mechanization

The Dalit Indian Chamber of Commerce & Industry (DICCI), Telangana chapter developed a road map for transforming manual scavengers and their dependents into entrepreneurs and at the same time ensuring elimination of direct contact with fecal matter.

134 Sanitation workers involved in scavenging practices were motivated to quit manual scavenging and instead use machinery and equipment for providing sanitation services. With help of DICCI, these workers prepared project proposals, applied for cheaper loans and procured vehicle.

With handholding and support of DICCI, these workers participated in tendering process and have been given contract by HIMWSSB to clean septic tank and sewer network. This is a successful model of manual scavengers turning into entrepreneurs.



Calculate the estimate desludging demand in the city

Mechanization of desludging is a critical component to eliminate manual scavenging. Each ULB should have adequate no. of desludging vehicles to be able to meet the demand of septage management. These vehicles could be owned by the ULB or can be available through empanelled desludgers. ULBs can use the following method to calculate the estimated septage generation in the city.

The ULB needs to have the following data for calculating the demand

1. Population
2. Total households (HHs)
3. HHs having toilets with septic tanks
4. No. of community/ public toilets having septic tanks
5. Septic tank cleaning cycle for HHs (In years)
6. Septic tank cleaning cycle for CT/PT (in days)
7. No. of working days in a year
8. No. of trips possible per emptying vehicle per day (trips/day/vehicle)

1

Calculating no. of tanks to be emptied in a day

- HHs toilets connected to septic tank/ cleaning cycle for HHs = _____
- CTs connected to septic tank/ cleaning cycles for CTs = _____

2

Calculating no. of trucks required

- No. of tanks to be emptied in a day/ No. of trips per day= _____

3

Calculating volume of septage to be treated

- Average volume of HHs and CTs septic tanks * No. of tanks to be emptied in a day = _____

Refer – Fecal Sludge and Septage Management: An Orientation Module <https://scbp.niua.org/?q=content/fssm-orientation-module-part-b-learning-notes>

4.5 Prohibition of Manual Scavenging



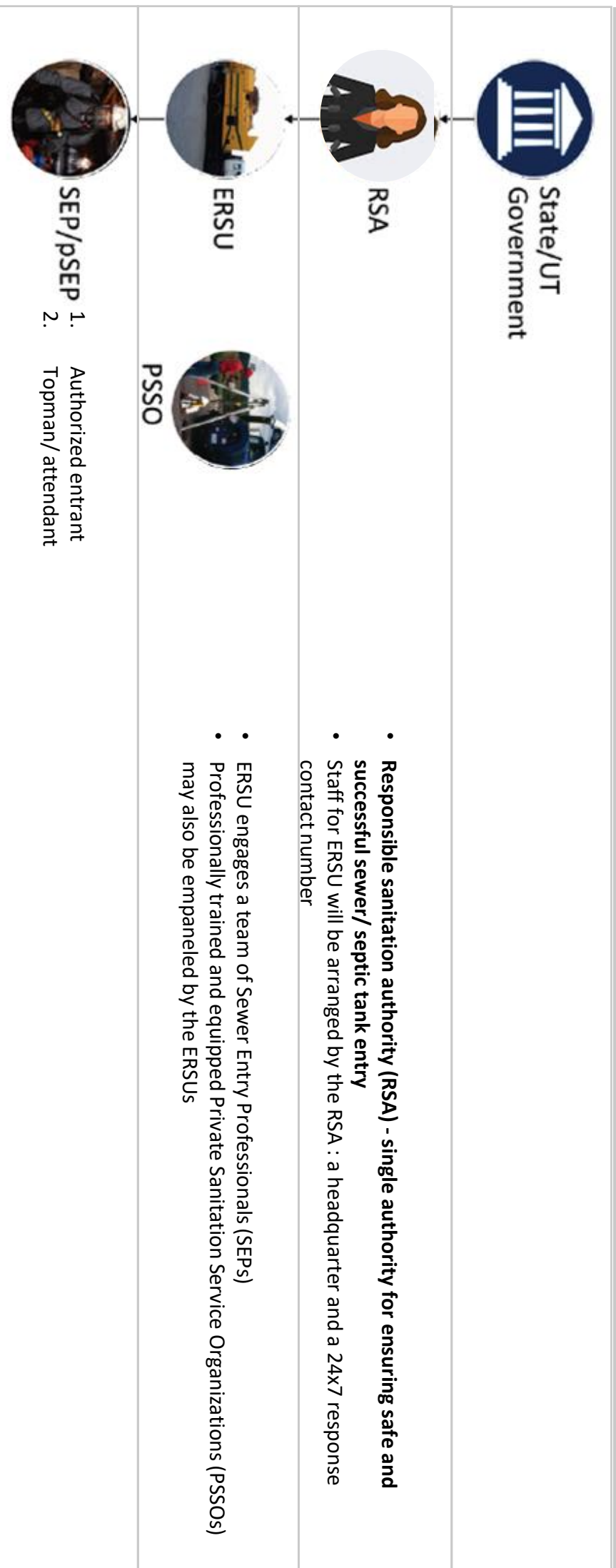
- Under the section 7 of Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013 - **'No person, local authority or any agency shall engage or employ, either directly or indirectly any person for hazardous cleaning of a sewer or a septic tank.'**
- In 2014, the Supreme Court has ordered ULBs to provide **compensation of Rs. 10 lakh each to families of all deceased manual scavengers** since 1993.
- MoHUA had issued a notification to set up ERSU (2019), it directs to file **FIR against employers in cases of hazardous cleaning of sewer/septic tanks** (where hazardous cleaning is manual cleaning without using PPEs and under no supervision).

4.6 Setting up an ERSU

- Under the section 7 of Prohibition of Employment as Manual Scavengers & their Rehabilitation Act, 2013 - 'No person, local authority or any agency shall engage or employ, either directly or indirectly any person for hazardous cleaning of a sewer or a septic tank.'
- The main objective of the Emergency Response Sanitation Unit (ERSU) is to provide professional, well trained, motivated and appropriately equipped workforce for the maintenance and management of sewers

- **and septic tanks**, thereby eliminating the deaths caused by entry of workers into sewers and septic tanks without proper PPEs & training and nonadherence to security protocols.
- The ULBs should set up an ERSU with the following members to ensure that only authorized sanitation workers enter sewer/ septic tank under the supervision.

Composition of ERSU



4

What should ULBs do for safety of sanitation workers?

B. Training of sanitation workers and ULB staff

4.7 Training of sanitation workers

Training of sanitation workers is essential to ensure that they practice the safety guidelines as per standards. ULBs should conduct trainings periodically.

1: ULBs should prepare a training calendar for sanitation workers

Both technical skills (related to safety, standard procedures and use of equipment) and soft skills (communication, negotiation skills etc.) are required on the job. Hence, ULBs should adopt a quarterly training calendar to enhance the capacity of sanitation workers. The training calendar will guide the ULB to conduct training in an organized manner and enable the sanitation workers to participate in an effective manner.

Safety related training	Soft Skills	Technical skills
Potential hazards, Rules for risk management at workplace	Work ethics and etiquettes	For all categories of sanitation workers - Desludgers, drain cleaners, street sweepers, door-to-door waste collectors, FSTP/STP operators, community toilet/ public toilet cleaners
PPE– use and maintenance	Working effectively with coworkers	<ul style="list-style-type: none"> Standard operating procedures for collection, storage, transport, treatment and disposal of waste Best practices in respective sanitation jobs
Immunization, health and safety	Digital literacy, Financial literacy	
Emergency planning, Components of first aid box	Entrepreneurship	

2: ULBs should regularly organize training of SWs and ULB on various aspects of sanitation

Following standard procedures at work is critical for preventing accidents and occupational diseases. Thus, ULBs should organize training workshops to help and encourage the workers to upgrade their skill sets. ULBs may engage NGO and local CSOs having credible experience of working with and training sanitation workers. Separate budget must be earmarked for ensuring smooth conduct of training sessions. These should also include sanitation workers engaged by contractors.

National skill development corporation provides training programmes for:

1. Certification of existing skills
2. Upgradation of skills and certification

4.7 Training of sanitation workers

3. Certification of existing skills through Recognition of Prior Learning (RPL) program

ULBs should organize RPL training programs to promote certification of existing skills of the sanitation workers. It is usually a training program of 2-5 days wherein participants receive certification upon completion. Skill Council for Green Jobs provides RPL training on the following sanitation jobs.

- Safai Karamchari
- Wastepicker
- Manager- Waste Management
- Recyclable Waste Collector & Segregator
- Wastewater Treatment Plant Helper
- Wastewater Treatment Plant Technician

4. Upgradation of skills and certification through NSDC approved quality packs

ULBs should organize trainings for sanitation workers to develop new skills. Qualification Packs approved by National Skill Development Corporation are available for different sanitation jobs including:

1. Desludging operator
2. FSTP O&M Technician
3. Septic Tank technician
4. Safai Karamchari
5. Waste Picker
6. Helpers at treatment plants and community toilets

Visit: <https://skillindia.nsdcindia.org/qpllistings>



SCGJ
SKILL COUNCIL FOR
GREEN JOBS



N.S.D.C.
National
Skill Development
Corporation

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR GREEN JOBS



Contents:

1. Introduction and Contacts	[P1]
2. Qualifications Pack.....	[P2]
3. Glossary of Key Terms	[P3]
4. OS Units.....	[P5]
5. Annexure: Nomenclature for QIs and OS. [P27]	
6. Assessment Criteria.....	[P29]

Introduction

Qualifications Pack- Desludging Operator

SECTOR: GREEN JOBS
SUB-SECTOR: Waste Management
OCCUPATION: Operation & Maintenance
REFERENCE ID: SGI/O6403
ALIGNED TO: NCO-2015/9613.0500

Brief Job Description: The Desludging Operator, also known as Sludge Emptier is an individual, who is responsible for emptying, transport and disposal of faecal sludge from the septic tank to desludging site / Faecal Sludge Treatment Plant. He /She has to operate pumps, suction hoses and other machinery/equipment to empty the septic tank and appropriately dispose the sludge. Desludging Operator would further specializes as an entrepreneur, he/she would be trained to venture into desludging services for managing Faecal Sludge.

Personal Attributes: The individual is expected to be physically fit and should be able to work across various location/site conditions. He/ She should be self-motivated and able to produce good quality work. He/ She must have good communication skill, team spirit, be courteous and polite. He should be efficient in working with proper planning skills.

What are Occupational Standards (Os)?

➤ OS describe what individuals need to do, know and understand in order to carry out a particular job role or function

➤ OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:
 Skill Council for Green Jobs,
 CRII Building, Malcha Marg, Chanakyapuri New Delhi – 110021
 Ph. 011- 41792866
 E-mail: info@sssgji.in

4.8 Capacity building of ULB staff

Capacity building of ULB staff is crucial so that they understand the safety measures that should be practiced and can ensure compliance of the same.

ULBs should mandate its staff to take up 3 e-courses per quarter

SBM e-learning platform has a total of 179 modules on various aspects of sanitation. Users receive certification upon completion of courses. ULBs should make it mandatory for staff to complete minimum three number of courses per month.

Course 123: Prevention of Manual Scavenging in cities



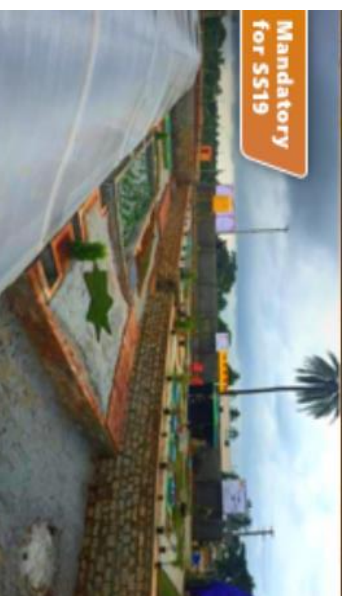
Course 209: Mainstreaming Waste Pickers in SWM, PMC_UMC



Course 208: Mainstreaming Waste Pickers in SWM, PMC_UMC



Course 703: Fecal Sludge Treatment Plant in Devanahalli



SBM e-learning portal

**9 SERIES 179 MODULES
301 LESSONS 165 QUIZZES**

Refer – <https://swachhbharat.azurewebsites.net/#/>

4

What should ULBs do for safety of sanitation workers?

C. Provision of entitlements

4.9 Service level benefits for sanitation workers

1. Provision of PPEs

- Sanitation workers should use suitable PPEs for performing their work. PPEs should be procured based on the requirement for different categories of sanitation work. Sanitation workers should be trained on the use and maintenance of PPEs so that PPEs are used effectively.
- ULBs should ensure that there are changing and bathing facilities where the workers can wear and remove PPEs and they can ensure their personal hygiene. Lockers for storing PPEs should also be provided.

a. Why are PPEs essential ?

PPE safeguard health of workers by minimizing their exposure to hazards that can cause serious workplace injuries and illness.

These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. PPE include items such as gloves, safety glasses, safety shoes, helmets, masks or respirators, or coveralls, vests and full body suits

b. Whose responsibility is to provide PPEs?

As per the Prohibition of Employment as Manual Scavengers & their Rehabilitation Act 2013, it is the duty of the employers, either ULB or a private agency, to provide PPEs to sanitation workers.

The ULBs should provide PPEs to sanitation workers engaged by them irrespective of modality of engagement. The ULBs should also ensure that private contractors provide PPEs to the sanitation workers engaged by them. To facilitate enforcement of Prohibition of Employment as Manual Scavengers & their Rehabilitation Act 2013 and smooth monitoring of private agencies, the ULB should empanel all private service providers and ascertain adoption of standard operating protocols to ensure safety of sanitation workers. Please refer section xxx for empanelment procedure.

1.2.1 Procurement of PPEs for different sanitation jobs

1.2.2 Training for sanitation workers on the use, maintenance, storage and safe disposal of PPEs




1.2.3 Provision of handwash stations and changing facilities at the workplace

1.2.4 Timely replenishment of damaged PPEs

4.9.1 Provision of PPEs

c. Procurement of PPEs for different sanitation jobs

Each sanitation job requires protection against different set of risks and hazards. The Prohibition of Employment as Manual Scavengers & their Rehabilitation Rules 2013, CPHEEO guidelines and advisory prescribe various PPEs. ULBs should ascertain total number of sanitation workers under each category of sanitation work and procure relevant PPE accordingly.













 <p>Nitrile Gloves – 13” in length</p>	 <p>Particulate Mask with a nose clip</p>	 <p>Cotton sun hat</p>	 <p>Safety Goggles with or without strap.</p>	 <p>Nitrile Gloves – 18” in length</p>	 <p>Particulate Mask with a nose clip</p>
 <p>Comfortable shoes without steel toe</p>	 <p>PVC water proof apron</p>	 <p>High visibility reflective jacket</p>	 <p>Barrier Cone & Caution Board</p>	 <p>Comfortable shoes without steel toe</p>	 <p>PVC water proof apron</p>

PPEs for street sweeper, informal waste picker, domestic waste collector, institutional waste collector and workers at waste processing facility

PPEs for CT/PT cleaner and latrine cleaner









4.9.1 Provision of PPEs

c. Procurement of PPEs for different sanitation jobs

<p>Thigh waders with attached boots</p> 	<p>Nitrile Gloves – 18” in length</p> 	<p>Particulate Mask with a nose clip</p> 	<p>Barrier Cone & Caution Board</p> 	<p>Nitrile Gloves – 13” in length</p> 	<p>Particulate Mask with a nose clip</p> 
<p>Safety helmet made of polypropylene co-polymer with air vent, chin strap, headband and sweatband</p> 	<p>Barrier Cone</p> 	<p>Safety goggles with straps</p> 	<p>Safety helmet made of polypropylene co-polymer with air vent, chin strap, headband and sweatband</p> 	<p>Comfortable shoes without steel toe</p> 	<p>PVC water proof apron</p> 
<p>PPEs for drain cleaners</p>			<p>PPEs for FSTP/ STP operators</p>		

4.9.1 Provision of PPEs









c. Procurement of PPEs for different sanitation jobs

 <p>Safety helmet made of polypropylene co-polymer with air vent, chin strap, headband and sweatband</p>	 <p>Full face respirator</p>	 <p>PVC water proof apron</p>	 <p>Nitrile Gloves – 18” in length</p>
 <p>Gumboots without steel toe</p>	 <p>Caution board</p>	 <p>Barrier Cone</p>	 <p>First aid kit</p>

PPEs for desludgers (mechanical)

4.9.1 Provision of PPEs

c. Procurement of PPEs for different sanitation jobs

<p>Safety helmet and head lamp</p> 	<p>Breathing apparatus with modular airline supply trolley system</p>  <p>SCBA</p>	<p>Diver's suit and gum boots</p> 	<p>Nitrile Gloves – 18” in length</p> 
<p>1. Barrier cone 2. Caution board 3. Search light</p> 	<p>1. Gas monitor 2. Air compressor and blower</p> 	<p>Safety tripod set with nylon rope ladder, body harness and safety belt</p> 	<p>1. Emergency medical oxygen resuscitator kit 2. First aid kit 3. Life guard pad</p> 

PPEs for sewer line cleaners

4.9.1 Provision of PPEs

d. Training for use and maintenance of PPEs

If the PPEs are not used properly, they will be ineffective in protecting users from likely accidents or infections. Improper use can make the users prone to accidents and hinder work speed. To prolong the life of PPE and avoid frequent wear and tear, PPEs should be cleaned and stored properly. PPE should also be safely disposed so that they do not lead to any contamination of surrounding environment.

Thus, it is essential that all sanitation workers are trained in the following.

- How to wear PPEs?
- How to remove PPEs?
- Do's and Don'ts of using PPEs
- How to disinfect PPEs after work?
- How to store and maintain PPEs?
- How to safely dispose damaged PPEs?

The Government of Telangana has issued a guidelines on “PPE for sanitation work forces” instructing the ULBs to ensure the safety and well being of sanitation workers. The guideline outlines the types of PPE required for different categories of sanitation workforce in a pictorial format. It details material specification and provides an indicative list of PPE manufacturers and vendors.

To access the advisory, please check <https://cdma.telangana.gov.in/1/coir/Grid.aspx> (Serial no. 40 in the circulars and proceedings tab)



Training of Sanitation Workers on use of Personal Protective Equipment

Refer annexure A for PPE handbook

4.9.1 Provision of PPEs

e. Provision of handwash stations

From a rapid assessment study conducted in June 2020, 80% of sanitation workers do not have access to handwashing and changing facilities at their workplace. In absence of it:

1. They are not able to maintain their personal hygiene
2. They do not have access to water and soap to clean their PPEs after work
3. Especially female sanitation workers do not have access to changing rooms after their shifts.

ULBs should ensure there are facilities of washing and changing for the sanitation workers at their workplace. There should be provisions for lockers for workers to store their PPEs. ULBs could make these provisions at the muster station/ ward offices where the sanitation workers typically go to mark their attendance or certain PTs near their workplace.



Low-cost portable foot-operated hand washing facility



Changing facility for sanitation workers

4.9.1 Provision of PPEs

f. Periodic replenishment of PPEs

Different PPEs last for different time duration depending on their quality, usage, maintenance etc. The ULB should maintain a register of PPE distribution and ensure PPEs are periodically replenished or provided timely in case of damage, either by ULB or by private employer. ULBs can follow the advised replenishment frequency* as mentioned in the adjacent table.

PPE	Frequency of replenishment
Gloves	At least once in 2 months
Shoes	At least twice a year
Eyewear	At least twice a year
N95 Mask	At least once in 7 days
Apron	At least twice a year
Helmet	At least once a year
Wader suit	At least once a year
Gumboots	At least twice a year

*Note: The replenishment frequency is suggestive and will vary across various categories and models of PPEs

Sample estimation: Annual cost of PPE for a street sweeper

PPE	Quantity required per Year	Cost per unit (in Rs.)	Total cost (in Rs.)
Gloves	6	95	570
Shoes	1	200	200
Eyewear	2	80	160
Mask	48	45	2160
Helmet	1	320	320
Total cost per worker			3420

Cost per worker per month is Rs. 285

Leading practice

PPE provision in Warangal

The Greater Warangal Municipal Corporation (GWMC) has a total of 2754 sanitation workers. GWMC provided PPEs to all permanent and outsourced sanitation workers instead of relying on private contractors. Additionally, they have been successful in identifying common problems in the usage of PPEs and have resolved them using various strategies as listed in the table below. It has resulted in:

- High morale of sanitation workers due to GWMC's initiatives
- Increased trust between administration and sanitation workers
- No COVID-19 cases reported amongst sanitation workers as of 10 Aug 2020.

Challenge	Solution
Disposable gloves were not reaching the workers timely	Workers were given reusable, washable gloves that could last 3 months
Workers were using kerchiefs instead of provided surgical masks	Workers were given cloth masks stitched by local SHGs
Workers were not changing out of work clothes once reaching home	Workers will receive 2 sets of work uniforms each.



4.9.2 Minimum wages for sanitation workers & EPF

Minimum Wages

- The Minimum Wages Act, 1948 mandates payment of minimum rates of wages fixed by the Government to the employees engaged in the notified scheduled employments by the concerned employers
- All the states issue their own list of scheduled employments States like Tripura, Bihar, Telangana, Jharkhand, Himachal Pradesh, Gujarat, Kerala, already have a separate category of sanitation workers in their respective schedules
- There should be a separate category of sanitation work in the list of schedule employments to ensure sanitation workers get a minimum wage
- Once the state notifies minimum wages for sanitation workers, ULBs should ensure its enforcement for all workers engaged through their contractors as well

Employees' Provident Fund

- ULBs should ensure that the benefits of EPF are extended to the sanitation worker as per the provisions of Employees' Provident Funds Act, 1952 (19 of 1952).

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TRIPURA GAZETTE



Published by Authority

EXTRAORDINARY ISSUE

Agartala, Thursday, June 25, 2020 A. D., Asadha 4, 1942 S. E.

PART-1— Orders and Notifications by the Government of Tripura, The High Court, Government Treasury etc.

GOVERNMENT OF TRIPURA
LABOUR DEPARTMENT

No.F.87 (1)-LAB/ENF/MW/89/3212-25

Dated, Agartala the 3rd June 2020.

NOTIFICATION

In continuation of this Department's Notification No.F.87 (1)-LAB/ENF/MW/89/ 2970-83 dated 4th June,2019 and in furtherance of the aforesaid Notification, the State Government hereby revises the Variable Dearness Allowance (VDA) on the basis of 6-monthly average Consumer Price Index Numbers for the period of six months commencing from 01-07-2019 and ending on 31-12-2019 over the previous 6-monthly average viz 4811 over 4788 average Consumer Price Index for the workers engaged in the employment of "Sofai Karmachari" in Tripura as under and directs that the Variable Dearness Allowance shall be payable with effect from 01-04-2020 by the employers to the workers/employees employed in the aforesaid employment as per the following schedule :

SCHEDULE

Average Increase of CPI	Category of Workers	Minimum Basic Wages (per day)	Previous VDA	Present VDA	Total minimum rates of wages (3+4+5)
1	2	3	4	5	6
Zb	SofaiKarmachari	Rs 204.00	Rs 19.15	Rs 1.11	Rs 224.00 per day

4.9.3 Insurance & disability support

Health insurance

Sanitation workers are exposed to hazardous situations on a daily basis; it makes them and their families vulnerable to health hazards.

- **ULBs should provide for health insurance for sanitation workers**
- **Premium of the health insurance should be borne by the ULB**
- **Sanitation workers should be linked to national schemes such as Jeevan Jyoti Yojana/ PM Suraksha Yojana**

Life insurance

- **Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 asks employers to provide a life insurance policy of at least Rs. 10 lakh for the person assigned for cleaning of sewer and septic tanks. Its premium shall be paid by the employer**
- **Considering the hazardous nature of sanitation work, sanitation workers should be covered with life insurance**
- **ULBs should provide for life insurance for sanitation workers**
- **Premium of the life insurance should be borne by the ULB**

Disability support

- **Sanitation workers are prone to injuries and infections which may lead to partial and permanent disability**
- **ULBs should provide for compensation through ex-gratia payment**

Leading practice

Garima Scheme in Odisha

The Government of Odisha has launched a scheme for safety and dignity of sanitation workers on 11th September 2020. The main Components of the scheme include the following:



The poster features the Garima logo on the left and the Odisha State Emblem on the right. The central text reads: 'Scheme for Safety & Dignity of Core Sanitation Workers'. Below this, it states: 'For protection & welfare of Core Sanitation Workers dealing with faecal matter in toilets / septic tank/ sewer and treatment facilities'. At the bottom, it identifies the 'Government of Odisha Housing & Urban Development Department'. The background is blue with a row of white icons representing various sanitation and social welfare aspects.

IDENTIFICATION & ENUMERATION OF CORE SANITATION WORKFORCE

SOCIAL SECURITY BENEFITS FOR SANITATION WORKERS & THEIR

FAMILIES

- Health & life insurance
- Education grant for brighter future of children
- Support for pucca housing
- Enhancing mobility through two-wheeler support

FINANCIAL & SERVICE LEVEL BENEFITS

- Special category of wages
- Risk and hardship allowance
- EPF and post-retirement benefit
- Reduced working hours
- Disability support
- Making alternative livelihoods accessible

SKILL DEVELOPMENT & TRAINING OF SANITATION WORKERS

SAFE WORKING CONDITIONS

- Appropriate PPEs and mechanised cleaning
- Standardised contracts for empowering sanitation workers
- Mandatory registration of private service providers

4.10 Health and safety of sanitation workers

What can the ULBs do to ensure the well-being of sanitation workers?

1. Provide regular health check-ups

(At least twice a year and this should be frequent in COVID- 19 pandemic context)

- If necessary, provide vaccinations against tetanus, leptospirosis fever and so on.
- Tie up with Primary Health Centers and maintain health records for all sanitation workers.
- Include sanitation workers engaged by contractors as well

2. Mental well being to be checked

- Ensure the mental well being of workers through periodical check-ups organized by the ULBs.

Following should be examined in a health check up:

- Examine medical history
- Examine subjective symptoms and other objective symptoms
- Check height, weight, vision and hearing ability
- Chest X-ray examination
- Blood pressure measurement
- Check for anaemia
- Check for liver functions
- Check for lipids in blood
- Check blood sugar level
- Urine analysis
- Electrocardiogram analysis

Refer: http://cpheeo.gov.in/upload/uploadfiles/files/operation_chapter9.pdf

4.11 Social security benefits for sanitation workers & their families

Linkage with government schemes

There are a number of existing government schemes for the benefit of sanitation workers and their families.

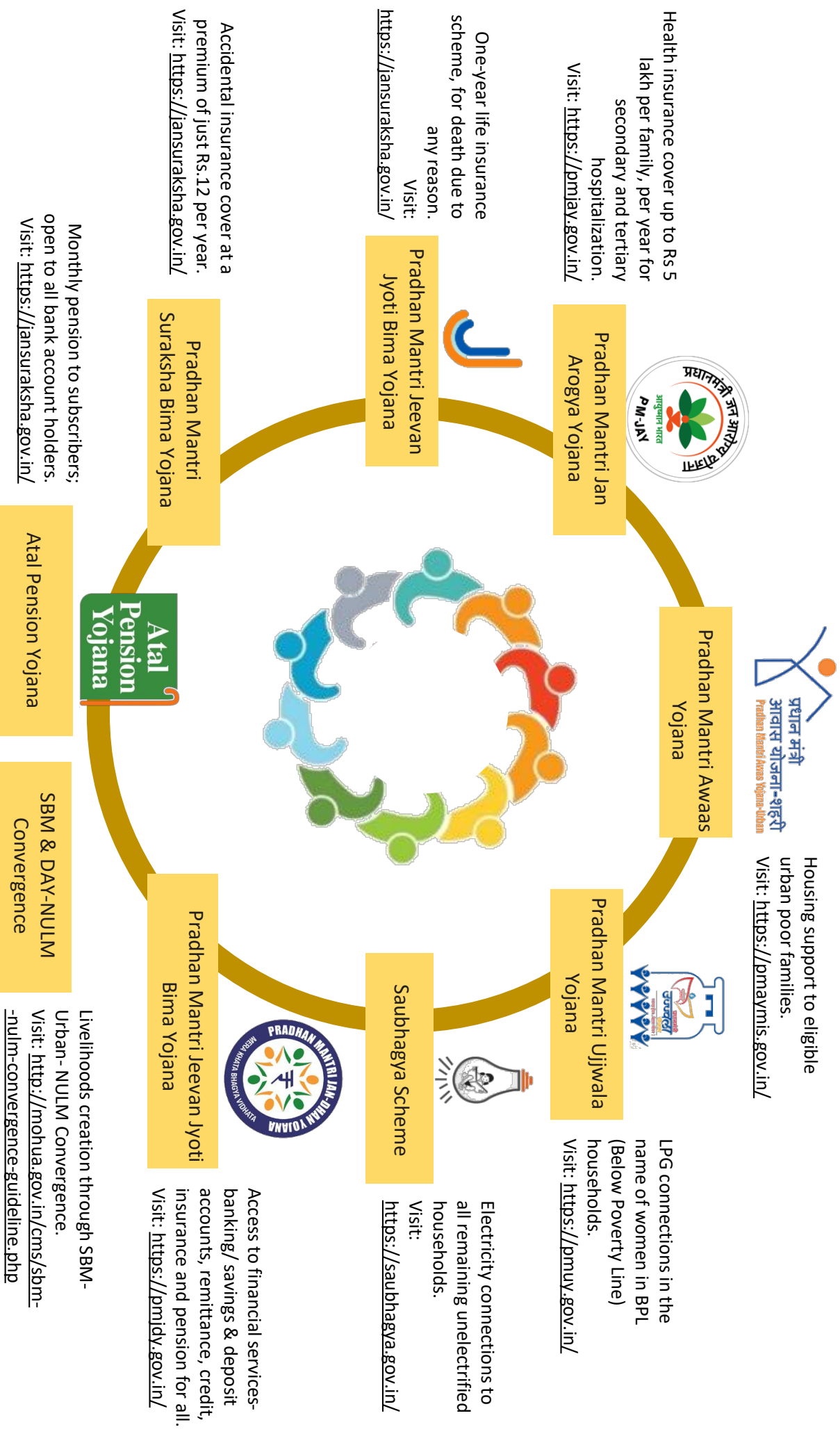
- ULBs should map the sanitation workers against the government schemes they are eligible for. This has also been encouraged by the Swachh Survekshan 2021
- Based on the eligibility of the workers, ULBs should link sanitation workers to existing schemes so that they are able to access their entitlements

The ULBs can do the following to link workers with relevant government schemes.

1. Organize camps where officers of relevant schemes put up their stalls. They should assist sanitation workers in registering for various schemes
2. Use IEC for building awareness about the date of organizing camp and inviting all sanitation workers to attend the camp
3. Engage community groups / self help groups to mobilize sanitation workers and participate in the camp
4. Ensure sanitation workers on contract are included



National social & financial safety schemes



U-LEARN Portal for training on sanitation-based livelihood

U-LEARN: Urban Livelihood e-Learning and Resource Network

The Ministry of Housing and Urban Affairs (MoHUA) is leading a paradigm change in the lives of urban poor through the Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM).

The U-Learn e-learning portal aims to build capacities of all functionaries of the DAY-NULM Mission (NMMU, SMMU, CMMU, Community Organisers, Community Resource Persons, Resource Organizations, members of Area Level Federations and Self Help Groups and for elected and executive officials of urban local bodies. The U-Learn portal will also serve as a knowledge portal for NGOs and research organizations working in urban poverty and livelihoods sector.

The DAY-NULM work force is highly mobile and they need a learning solution which they can carry with them. Technology-aided learning can help training the DAY-NULM field teams who are mostly out-of-office.

U-LEARN is a one stop place to refer guidelines, advisories case studies on DAY-NULM. U-LEARN is more than just watching a presentation on a computer screen. Through mobile phones, viewers can use a lot of learning content such as easy to understand tutorials in the form of videos, case studies on leading practices, and other reference documents. On viewing the tutorial and successful completion of the quizzes, the viewers will also receive certificates from MoHUA.



Source: <https://www.u-learn.in/>



**Tutorial 14: Shehri
Sahbhagita Manch**



**TUTORIAL 11: Ab Hamari
Awaaz Suni Jayegi (Our
voice will be heard)**

4

What should ULBs do for safety of sanitation workers?

D. Enablers

4.12 Grievance redressal system for sanitation workers

- Under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, State governments are required to designate an authority for taking up grievances of sanitation workers and ensuring their rights are protected
- Currently 8 states have Safai Karamchari Commissions to safeguard the interests of sanitation workers
- Haryana State Commission for Safai Karamcharis has launched an online portal in June 2020 for resolving grievances and complaints of sanitation workers. The commission works with various bodies including the urban local bodies and public health department to ensure sanitation workers get their entitlements like ex gratia payment, EPF etc.
- **ULBs should ensure that there is a platform for sanitation workers to raise their issues and that their grievances are redressed in a time bound manner**

HARYANA STATE COMMISSION FOR SAFAI KARAMCHARIS

Home About Us Act/Notification Schemes for Welfare Complaints Gallery Contact Us

Complaint

Name of Complainant *
Enter Name of Complainant

Date of Complaint
21-09-2020

State *
Haryana

District *
Select Option

Working for Department *
District Elementary Education

Gender *
Male

Tehsil *
Select Option

Postal Address *
Allow only space,comma,dot,numbers and alphabets

Email
Enter Email Address

Union *
 Yes No

Mobile Number *
Enter Mobile Number

Town *
Select Option

Complainant Employment Detail
Contractual

Complaint Description

4.13 Sensitizing citizens

Create public awareness about engaging registered desludging services only

Citizen participation is essential in ensuring delivery of safe sanitation work.

1. ULBs should sensitize citizens to take services from only registered service providers

1. ULBs should take up IEC campaigns to sensitize citizens about the hazardous nature of sanitation work
2. There should be a dedicated enquiry number for all sanitation services
3. Citizens should have a platform to report any unsafe sanitation work being practiced in the city

2. ULBs should use several media platforms to spread awareness about registered desludging services being provided in the city

1. Put information of all the registered service providers on the ULB website
2. Provide contact information of the local registered sanitation provider at the back of the bills – property tax, water tax etc.

CONSUMPTION TREND (Units)

Month	Consumption (Units)
May-17	361
Jun-17	368
Jul-17	381
Aug-17	523
Sep-17	394
Oct-17	376
Nov-17	381
Dec-17	385
Jan-18	391
Feb-18	396
Mar-18	400
Apr-18	403
May-18	403

CONSUMER GRIEVANCE REDRESSAL FORUM
 Customers not satisfied with the resolution provided by the regulator may approach the CGRF with their grievances. The address and contact details are as under:
 The Chairman, Consumer Grievance Redressal Forum (CGRF),
 Survey House, Laxmi Nagar, Ring Road Near Airport, Ahmedabad-380013. Phone: 079-25222881. E-mail: SMC, Fax: 079-21932222. E-mail: SMC@cgri.gov.in. Email: consumer@cgri.gov.in
 Toll-free: 1800-430-4304 on all working days.

ELECTRICITY OMBUDSMAN
 Customers not satisfied with the resolution provided by the Consumer Grievance Redressal Forum may approach the Electricity Ombudsman. The address and contact details are as under:
 Electricity Ombudsman, Barakhamba, 2, Rajkot Road, Ahmedabad-380015.
 E-mail: ombudsman@cgri.gov.in

Zax7 HELPLINE / ૨૪x૭ બેઝહીલ્
 2255 1912 / 6655 1912

PAYMENT OPTIONS
 Easy Pay Services
 Sarthak Medical
 13 Mahatma Soc, New Model Road
 Newno Crystalion
 67 GF-01, Fountain Circle, Rajiv Gandhi Park, A,
 opp Newno School, New Road
 Peddipattar Hotel
 444A, 2nd, Anandipura, Sankarji Bhaiji, New Model
 Maheshwari Education Street
 Shop no. 8, Daxa, Vastana Apt., Kankarbagh, Mahatma Bridge

For emptying your septic tank,
 Ketan Soni | Mahesh Joshi
 989980 12345 | 909999 54321

Contact details of service provider at the back of the bill by a ULB in Gujarat

Leading practice

Malasur Campaign for awareness on safe sanitation



Source: https://cdn.cseindia.org/attachments/0.64201700_1592642559_malasur-toolkit.pdf



4.14 Recognition of sanitation workers

Often, sanitation work goes unnoticed by the public. ULBs should acknowledge the importance of sanitation workers and the services they provide. Providing appreciation to the best performing sanitation workers can boost the morale of sanitation workers and create a better working condition.

1. ULBs should set the criteria of performance assessment

ULBs should set the criteria of performance assessment and inform the sanitation workers to build a healthy competition among them. It can include:

- Punctuality
- Regular use of PPEs
- Delivery of quality work within deadline

2. ULBs should incentivize performance

ULBs can incentivize performance of workers by giving them cash rewards, vouchers, awards or displaying the names of well-performing sanitation workers on appreciation boards.

Leading practice

Vouchers to best performing sanitation workers in the city of Indore

In a bid to appreciate citizens spreading awareness and maintaining cleanliness in the city, Indore Municipal Corporation launched the distribution of “Swachh Card”. This card has points which can be redeemed every month in shopping malls, restaurant, movie halls, salon, medicine stores and other shops.

Launched in 2019, the Card is distributed to sanitation workers who provide critical services of cleaning Public toilets, door-to-door waste collection etc.



Leading practice

Felicitation of sanitation workers by Greater Hyderabad Municipal Corporation

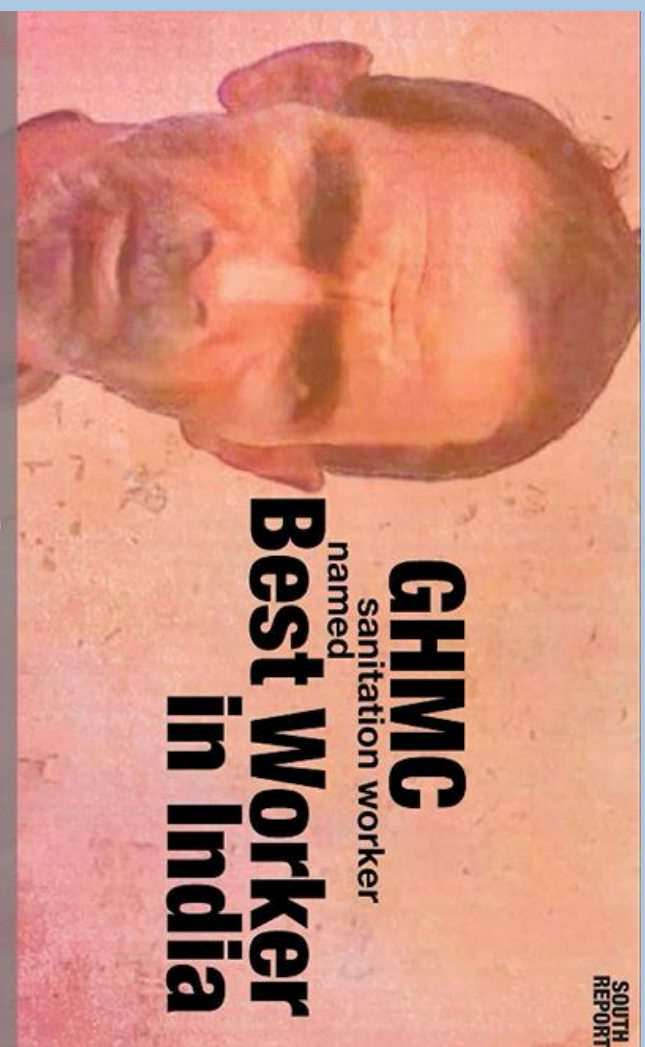
Under Swachh Bharat Mission, ULBs were asked to nominate best sanitary workers based on their performance. T. Venkaiiah, a sanitation worker with the Greater Hyderabad Municipal Corporation (GHMC) was named as one of the three “Best worker in India” by the Ministry of Urban Development in 2016.

Additionally, GHMC celebrates first Saturday of each month as ‘Good Practice Day’. The event is attended by citizens, elected representatives and ULB officials. Sanitation workers who ensure the city remains clean and NGOs working in the same direction are felicitated.

It encourages the workers and the organisations to continue working to keep the initiatives takes under Swachh Bharat Mission running.

These initiatives have helped the public acknowledge the work of sanitation workers. People have begun to know the workers in their local areas by their name and the workers have reported more respectful behavior from the public.

Source: <https://swachhbharat.azurewebsites.net/#/course/170/item/1599>



5

Provisions to be ensured during Covid-19 pandemic

5. Provisions to be ensured during Covid-19 pandemic

- Thermal screening, regular health check up
- No deduction of wages and provision of additional pay in case of increased work responsibilities
- Physical distancing while training, attendance, work etc.
- Link sanitation workers to CT/ PTs to ensure they have access to soap/ sanitizer and hand washing facilities
- Transportation support during lockdowns
- Provision of adequate PPEs, especially gloves and masks
- Provision of quarantine facility for sanitation workers and their family, in case of contracting Covid-19
- ULBs should utilize untied grants under the 15th FC, AMRUT and other possible sources for supporting sanitation workers and related expenses
- Capacity building of ULB officials for implementation of protocols and guidelines

For further comprehensive resources on Covid-19 pandemic management, refer to this guidebook at https://scbp.niua.org/sites/default/files/1._covid19_safe_sanitation_practices_Highlighted_0.pdf



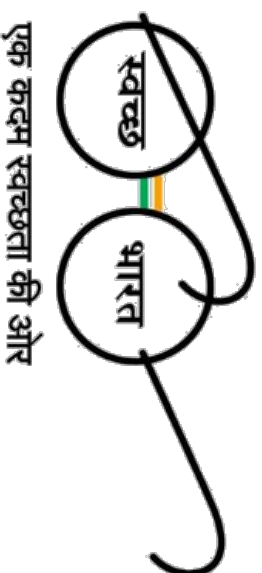
6

Swachh Survekshan 2021

6. Swachh Survekshan 2021 - Indicators for sanitation workers' safety

With an objective to encourage cities to improve urban sanitation, Ministry of Housing and Urban Affairs (MoHUA) conducts annual 'Swachh Survekshan' survey for rating the cities.

The sixth edition of the survey includes various indicators targeted specifically for improving safety of sanitation workers.



6. Swachchh Survekshan 2021 - Indicators for sanitation workers' safety

1

Benefits extended to all sanitary workers
(60 marks)

1.1 Link them with government schemes (at least 3)

Refer 4.1, 4.10

1.2 Provide Personal Protective Equipment (PPE)

Refer 4.8.1

1.3 Give recognition to sanitary workers

Refer 4.13

2

Capacity building of sanitation workers and ULB staff
(30 marks)

2.1 Train sanitary workers

Refer 4.6

2.2 Train ULB staff

Refer 4.7

3

Registration, training & monitoring of de-sludging operators, sewer maintenance staff
(55 marks)

3.1 Register private desludging operators

Refer 4.2

3.2 Train all desludging staff

Refer 4.2

3.3 Ensure desludging vehicles' capacity meets the demanded capacity

Refer 4.4

3.4 Inform citizens about registered desludging services

Refer 4.12

3.5 Ensure manual entry into sewers/ septic tanks is not practiced

Refer 4.5

7

Annexures

A. PPE handbook

B. Sanitation worker survey form



Training of Sanitation Workers on use of Personal Protective Equipment



Topics covered

- Introduction
- PPEs for different sanitation jobs
- Order of wearing the PPEs
- Process of wearing and removing the PPEs
- Order of removing the PPEs
- Safe Disposal of PPEs
- Maintaining Hand Hygiene

3

Purpose of the handbook

We have made this handbook to guide sanitation workers on the correct use of personal protective equipments (PPEs). It includes the correct process of donning & doffing PPEs, its maintenance as well as disposal.

It covers PPEs for the following category of sanitation workers:

1. Street sweepers
2. Door to door waste collectors
3. Public & community toilet cleaners
4. Open drain cleaners
5. Fecal sludge treatment plant and sewage treatment plant operators
6. Desludgers (mechanical)



4

Source: <https://umcasia.org/whatwedo/wash/?preview=true>

Introduction

- You, as a sanitation worker, are exposed to occupational health and safety hazards. The work involves risk of coming in contact with hazardous biological and chemical agents
- PPEs are a crucial barrier between you and disease-causing agents at the work site
- It has been observed that the usage of PPEs is low. Fellow sanitation workers of yours have shared major reasons for this- wearing PPE causes discomfort, reduces efficiency to perform work, involves additional cost and maintenance



5

Introduction

- Due to the COVID-19 pandemic, everyone has started wearing masks regularly. Even though it was uncomfortable, we have developed a habit in order to protect ourselves. Similarly, there is a need to make the habit of using other personal protective equipment as well
- Workers in other industries who work in difficult situation like yours also wear PPEs for their protection. For example, miners, construction workers etc. Hence, even after the study is completed, continue using PPEs during work-hours
- It might take some time to get used to working while wearing PPEs. But it will protect you from injuries and diseases. Your safety and good health is of prime importance



6

A. PPE handbook

PPes for different sanitation jobs

Street sweepers and door to door waste collectors

 Particulate Mask with a nose clip	 Nitrile Gloves - 13" in length	 PVC water proof apron
 Comfortable shoes without steel toe	 High visibility reflective jacket	 Cotton sun hat
 Safety Goggles with or without strap	 Nitrile Gloves - 18" in length	 Particulate Mask with a nose clip
 PVC water proof apron	 Comfortable shoes without steel toe	 High visibility reflective jacket



PPes for different sanitation jobs

Open drain cleaners

 Particulate Mask with a nose clip	 Nitrile Gloves - 18" in length	 Safety helmet
 Thigh waders with attached boots	 High visibility reflective jacket	 Safety goggles with straps
 Safety helmet	 Nitrile Gloves - 18" in length	 Particulate Mask with a nose clip
 PVC water proof apron	 Gumboots without steel toe	 High visibility reflective jacket

PPes for different sanitation jobs

Desludgers (mechanical)

 Respirator	 Nitrile Gloves - 18" in length	 Safety helmet
 Gumboots without steel toe	 High visibility reflective jacket	 Safety goggles with straps

Order of wearing PPEs before starting work

Please ensure that your PPEs are clean before wearing them

- 1 Put on apron
- 2 Put on mask
- 3 Put on goggles
- 4 Put on gloves
- 5 Wear boots/wader suit

Apron

While wearing

- 1 Wash your hands before putting apron
- 2 Put the apron over your head and fasten the strap at the back of your waist
- 3
- 4

While removing

- 5 Do not touch the apron while handling the waste
- 6 Remove the apron with gloved hands

Taking care of PPE

- 7 Wash the apron with soap/detergent after completion of work
- 8 Dry it in shade. Do not store wet apron

Mask

While wearing

- 1 Wash your hands before putting mask
- 2 Hold the mask. Find the top side without metal piece or stiff edge to prevent mask
- 3 Secure the loops, ties or elastic behind your ears or around your head

While removing

- 4 If there is a metal or wire piece, press it to fit the shape of your nose
- 5 Cover your nose and mouth fully and maintain the amount of gaps

Taking care of PPE

- 6 Do not touch the mask while using it. If you touch it, wash your hands right away
- 7 First remove the glasses, then with clean hands remove the mask
- 8 Take off the mask from behind by holding the loop, ties or elastic
- 9 If possible, put the mask in safe after use

A. PPE handbook

Goggles

While Wearing

-  Wash your hands before putting safety goggles.
-  Place over face and eyes and adjust to fit.

While working

-  Do not scratch goggles with dirty hands.
-  Wash your face and eyes at least 15 minutes if water splashes into your eyes.
-  Always report any eye injury, no matter how minor.

While Removing

-  Remove your gloves before removing the goggles. Ensure that your hands are clean while removing the goggles.

Taking care of PPE

-  Store safety goggles in a cover or a clean and dry place to avoid scratching, falling or being stepped on.



13

Gloves

While wearing

-  Clean hands before putting on gloves.
-  Dry hands before putting on gloves.

While working

-  Do not touch your face when wearing gloves.
-  Leave the outside of one glove at the wrist. Do not scratch your bare skin.
-  Remove the second glove by pulling your fingers under the glove at the top of your wrist.
-  Careless putting the glove down bringing the material.

While removing

-  Wash your gloves after work with soap/detergent and dry them.

Taking care of PPE

-  Do not use gloves if they are damaged.

14

Helmet

While wearing

-  Wear the helmet right way round. Tighten the headband.
-  Tighten the chin strap so that there are no chances of the helmet falling.
-  Do not wear the helmet in direct sunlight or over the nose.

While working

-  Do not scratch the helmet with dirty hands.
-  Check the helmet regularly for any signs of damage.

Taking care of PPE

-  Regularly clean your helmet with a wet cloth. Rinse with water and use mild soap if required.
-  Do not store the helmet in direct sunlight or over the surfaces.

15

Wader Suit

<p>1</p> <p>While wearing</p>  <p>Clean your feet before wearing the wader suit</p>	<p>2</p> <p>While working</p>  <p>Do not touch unclean waders with bare hands</p>
<p>3</p> <p>While removing</p>  <p>After work, remove the wader suit with gloved hands</p>	<p>4</p> <p>Taking care of PPE</p>  <p>Do not use brushes or abrasive cloths to clean the inside of your waders.</p>
<p>5</p> <p>Taking care of PPE</p>  <p>Rinse your waders off with clean water after use</p>	<p>6</p> <p>Taking care of PPE</p>  <p>Hang the waders either upside-down or lay them flat to dry. Do not store your wet waders.</p>

16

Gumboots

<p>1</p> <p>While wearing</p>  <p>Clean your feet and dry them before wearing the gumboots</p>	<p>2</p> <p>While working</p>  <p>Do not touch your gumboots with bare hands</p>
<p>3</p> <p>While removing</p>  <p>After work, remove your gumboots with gloved hands</p>	<p>4</p> <p>Taking care of PPE</p>  <p>Do not use brushes or abrasive cloths to clean the inside of your gumboots.</p>
<p>4</p> <p>Taking care of PPE</p>  <p>Clean your gumboots with water after completion of the work</p>	<p>5</p> <p>Taking care of PPE</p>  <p>Dry them in shade</p>

17

Order of removing PPEs after work

Please clean your PPEs after work and ensure they are dry before storing them

- 1** Remove boots with gloved hands
- 2** Remove helmet
- 3** Remove apron
- 4** Remove gloves
- 5** Remove goggles
- 6** Remove mask

18

A. PPE handbook

While using PPEs, always ensure

- 1 To keep gloved hands away from face
- 2 To avoid touching or adjusting other PPE while working
- 3 To limit surfaces and items touched
- 4 To keep the PPEs out of reach of children. Do not let children play with the PPEs

Disposing PPEs

- You should always throw discarded PPEs in bio-medical bins (yellow coloured bins)
- If the bin is not available, please wrap your used PPE properly in a bag, mark it with red colour and throw it in a dustbin
- Please wash your hands after disposing the PPE



How to maintain hand hygiene?

Always clean hands with soap and water or sanitizer at these critical times

- When you reach your work-station
- Before you start wearing PPEs, especially mask and gloves
- During breaks, especially before you are going to drink tea or water and have food
- After your break is over
- After you remove all PPEs, especially mask and gloves
- After changing work clothes
- After reaching home



19

20

21

B. Sanitation worker survey form

This is an indicative form and may be modified by ULBs to fit their needs.

Survey Form / Self-Identification Form- Sanitation Worker

1. **Name of the applicant:** Mr/Ms
2. **Address:**
 - a. **Name of slum/ society/ govt. colony**
 - b. **Ward No.**
 - c. **House/ plot no.**
 - d. **Landmark**.....
3. **Ownership status:** **Own** **Rented**
4. **Number of years of stay in the locality:**
5. **Aadhar ID:**
6. **Telephone/ Mobile No.:**
7. **Email Id:**
8. **Age:**
9. **Gender:** Male/ Female/ Transgender
10. **Social background:** SC/ ST/ OBC/ General/ Others

B. Sanitation worker survey form

11. **Education Status:** Not Literate/Class 1-7/ Class 8-12/ Diploma or Technical Education/ Graduate/ Post-graduate
12. **Economic category:** APL/ BPL/ U. Poor/ Others, Specify _____
13. **Do you have a bank account?** Yes/ No
If yes, please share the following details:
- a. **Bank name:**
 - b. **Account No.:**
 - c. **IFSC code:**
 - d. **Branch name:**
14. **Do you or any family member have a smartphone (android phone)?** Yes/No
15. **Do you or any family member have internet service in your phone?** Yes/No
16. **Are you covered under any health or life insurance scheme?** Yes/ No
If yes, which scheme are you registered with:
- a. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana
 - b. Employees Service Insurance
 - c. Biju Swasthya Kalyan Yojana
 - d. Other schemes
17. **Does your family have the following?**
- a. **APL Ration Card (Yes/ No)**
 - i. If yes, what is the APL ration card no.? _____
 - b. **BPL Ration Card (Yes/ No)**
 - i. If yes, what is the BPL ration card no.? _____
 - c. **Antyodaya Ration Card (Yes/ No)**
 - i. If yes, what is the Antyodaya ration card no.? _____

B. Sanitation worker survey form

18. Do you have a caste certificate? Yes/ No
 a. If yes, what is the certificate no.? _____
19. Do you have a motorized two-wheeler? Yes/ No
20. What sanitation related work do you perform?

S. No.	Type of sanitation work	Please tick mark against all the relevant options	Avg. wages earned per day (in Rs.)	No. of years of experience	Type of Employment (Permanent/ Contractual/ Daily Wage/ Jajmani)- Choose one	Employer (Central government/ ULB/ private contractor/ private institution/	No. of days employed
1	Desludging of onsite sanitation systems						
2	Sewerage network maintenance						
3	Open drain cleaning						
4	Operation and maintenance of sewage treatment plants/ faecal sludge treatment plants						
5	Operation and maintenance of public and community toilets						
6	Street Sweeper						
7	Door-to-door waste collector						
8	Dry latrine cleaner						
9	Rag/ waste pickers						
10	Any other sanitation category						

B. Sanitation worker survey form

21. Are you engaged in any alternate non-sanitation livelihoods too? Yes/ No

a. If yes, please share what and since how long?

22. Dependent family members

S. No.	Name	Gender (M/F/T)	Age on x.x.2020)	Marital Status code	Relationship with Applicant Sanitation Worker of the HH (code)	Education Qualification code	Current Occupation code	Monthly Income (Amt. in Rs.)	Requirement if any, for			Are you covered by any Insurance? (Y/ N)
									Education	Skill Training	Loan for any work	

Codes: Marital Status: 1. Married 2. Unmarried 3. Divorced/Widow
 Relationship: 1. Father 2. Mother 3. Brother 4. Sister 5. Grandfather 6. Grandmother 7. Father-in-Law 8. Mother-in-Law 9. Self 10. Son 11. Daughter 12. Wife 13. Husband 14. Others (Specify) _____
 Education: 1. Illiterate 2. Primary 3. Middle 4. Secondary 5. 10+2 6. Graduate and above 7. Diploma
 Occupation: 1. Agricultural Labour 2. Housewife/husband 3. Student 4. Farmer 5. Wage Labourer 6. Self-employed 7. Permanent Sanitation worker in Government 8. Contractual/Casual Sanitation Worker 9. Other Service/Job 10. Others (Specify).....

23. Are you or any family members part of any SHG/ CI/ G/ sanitation workers' group? If yes, please specify the name of SHG

.....

Signature/ thumb print of the sanitation worker

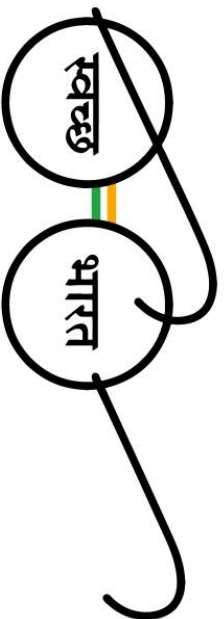
Date

Name of enumerator

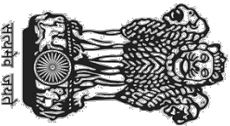
Signature

Additional Resources

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11. WaterAid India (2019) “The hidden world of sanitation workers in India”, Available at: <https://www.wateraidindia.in/sites/g/files/jkxoo0f336/files/the-hidden-world-of-sanitation-workers-in-india.pdf>



एक कदम स्वच्छता की ओर



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