

709 Ex TURBO INTERCOOLER

REGISTRATION  
GAU K  
TRAJ  
KAN-AVDA

# Orientation on FSSM – Balangir District

1 August 2019



## ମଳ ପରିଚ୍ଛେଦନା (ଏପ୍.ଏସ୍.ଏସ୍.ଏମ୍)



# FSSM Regulations 2018

## 1<sup>st</sup> State to release FSSM Regulations, 2018 for all the 114 ULBs

### Objective

- To ensure sustainability of FSSM

### Management and disposal of wastewater

- **Management and safe disposal of black water from premises**
- **Design, construction and maintenance of containment units as per standards and norms**
- **Scheduled desludging**

### Fecal sludge emptying and transport

- Registration of cesspool vehicle and operator
- Responsibility of cesspool vehicle operator
- Safety measures for desludging

### Septage treatment and disposal

- Treatment
- Responsibilities of the treatment plant operator
- Disposal

### Administration and enforcement

- **Administration and enforcement**
- **Special inspection powers**
- **Violations and penalties**

An important Regulation from the FSSM Regulations 2018 for Municipalities and NACs

As per Regulation 8 (1) No vehicle shall be engaged in the collection, transportation and disposal of faecal sludge and septage, unless it is registered as a Septage Transport Vehicle (STV) with the Municipality or NAC and possess a valid inspection certificate under these Regulations, and any person found doing so in contravention of these Regulations shall be liable to penalty as specified in Schedule-II and the vehicle along with equipment may be seized

# FSSM Regulations 2018

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## CHAPTER IV of FSSM Regulations, 2018: MANNER OF REGISTRATION OF SEPTAGE TRANSPORT VEHICLE AND RESPONSIBILITIES OF ITS OPERATORS

- Registration of Septage Transport Vehicle (STV) with the urban local body.
- Installation of GPS in the vehicles for tracking by the ULB.
- Emptying of Septage Transport Vehicles at Treatment Plant or designated Deep Row Entrenchment (DRE) by ULB
- In case of Accidental spillage, the vehicle operator shall be responsible to take immediate action to prevent further spillage of sludge or septage

Any STV in contravention of the above shall be fined under Schedule II “Penalties and Fines” of FSSM Regulations 2018.

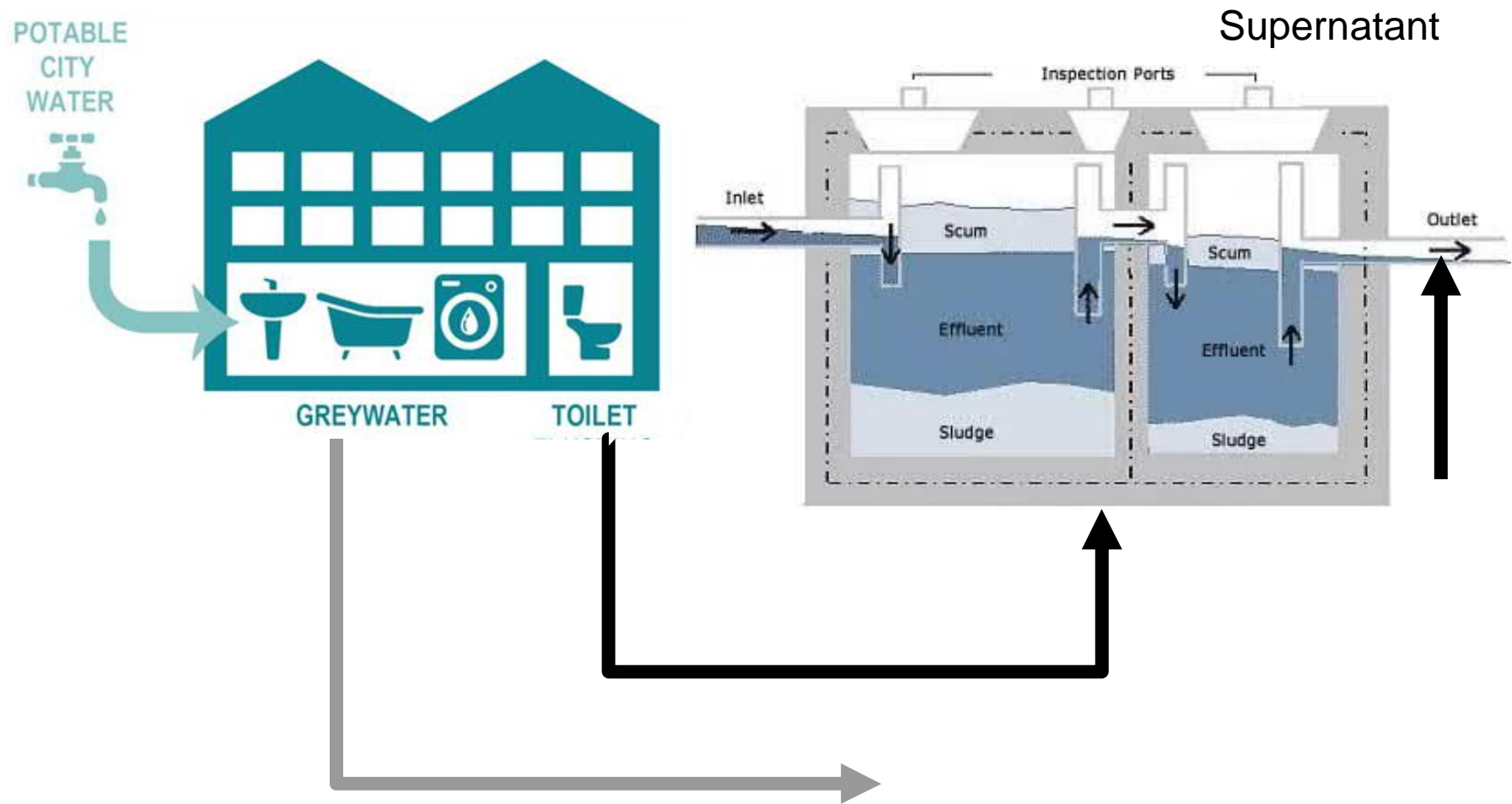
# FSSM Regulations 2018 and congruence with Police Act 2003

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Section 74 of The Orissa Urban Police Act, 2003 states that, "No person shall defile or cause to be defiled the water in any public well, tank, reservoir, pond, pool, aqueduct or part of a river, stream, nullah or other source or means of water supply, so as to render the same unfit for any purpose for which it is set apart by the order of the competent authority."

One cesspool vehicle  
indiscriminately discharging is  
equivalent to **5000**  
people defecating in the open

# Containment



# Emptying – Desludging



1 Registration of cesspool vehicle with ULB

2 Installation of GPS for tracking vehicles

3 Maintaining records of cesspool emptying services provided

4 Ensuring usage of Personal Protective Equipment by cesspool operator

5 Transporting sludge emptied from septic tanks to Septage Treatment Plant/ Deep Row Entrenchments

# Emptying - current practices

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# Current practices of cesspool emptying

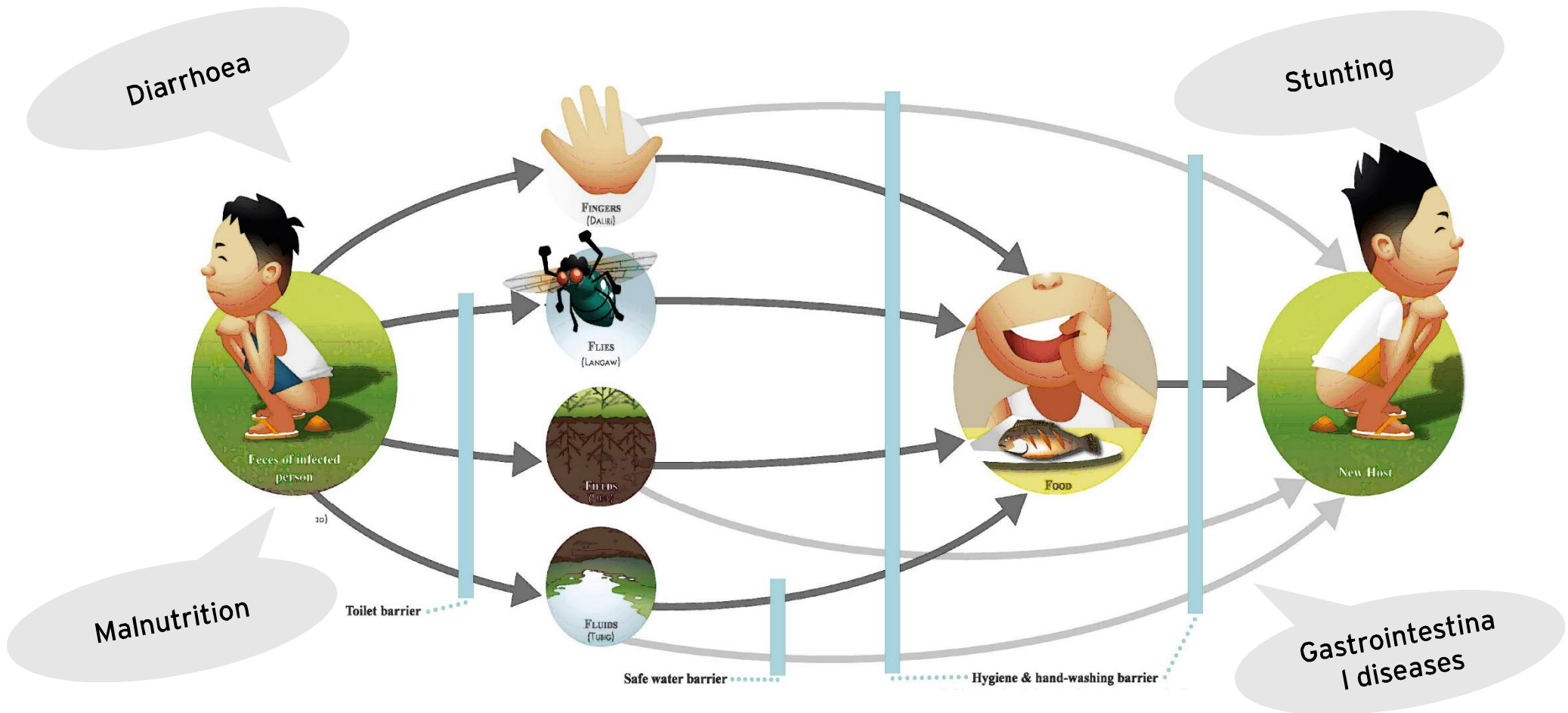
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# Current practices of sludge disposal

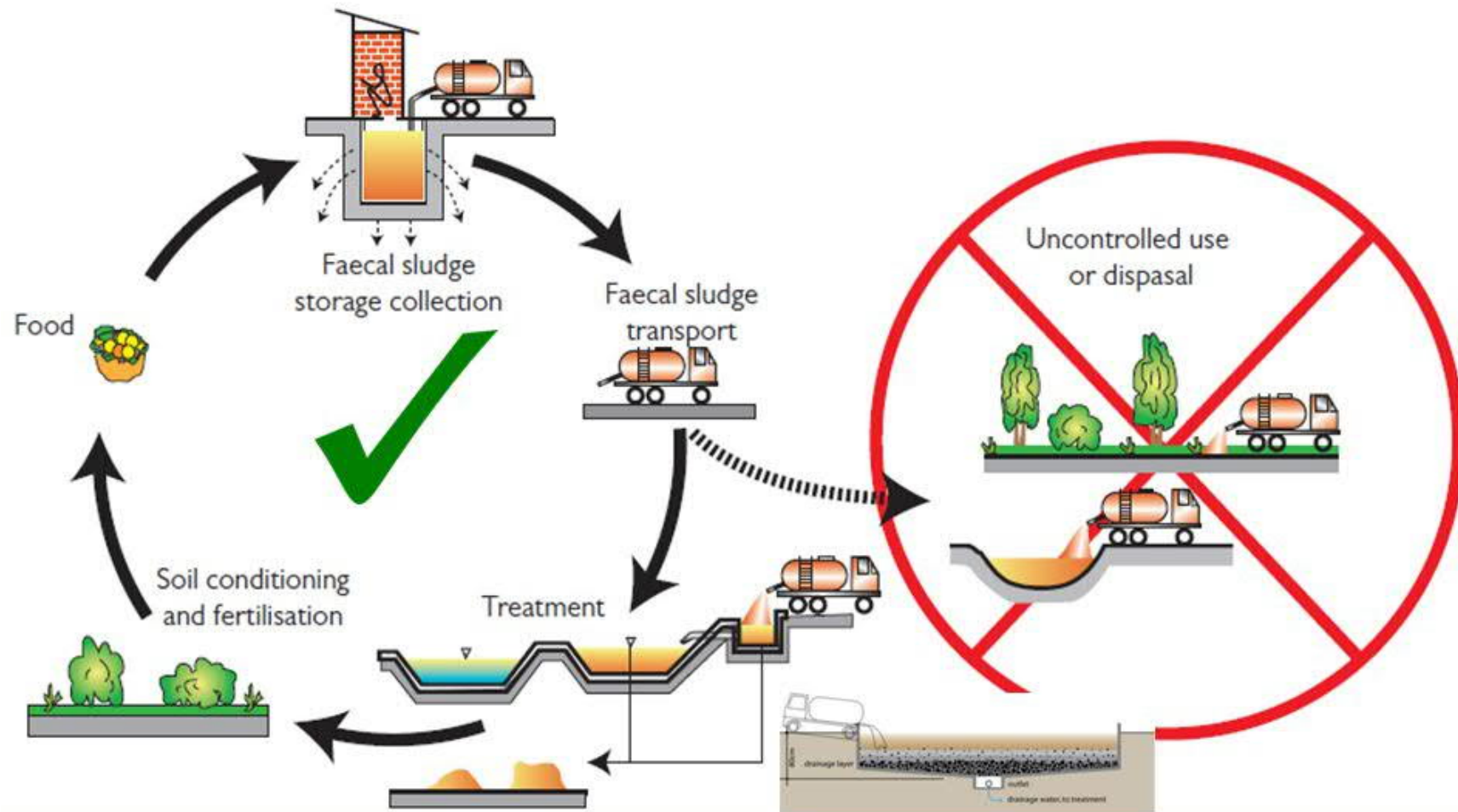


# Results due to current practices



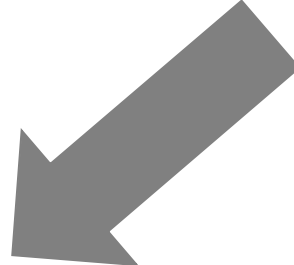
India loses INR 2.4 trillion per annum due to poor sanitation resulting per household losing out INR 10,000 per annum – World Bank, 2011

# Results due to current practices








Source: GiZ

# The right way to emptying and disposal



# Emptying septic tanks

Personal Protection Equipment (PPE) name	BIS Standard	Pictorial representation (for illustration only)
Neoprene gloves	IS 15354:2003 Rubber/neoprene gloves	
Rubber boots	IS 3976:2003 Protective rubber canvas boots IS 15298:2011 Personal protective equipment Part II and III	
Face mask	IS 14746:1999 Respiratory protective devices-half masks and quarter masks IS 8520:1977 Guide for Selection of Industrial Safety Equipment for Eye, Face and Ear Protection	
Eye protection	IS 5983:1980 Specification for Eye-Protectors IS 8520:1977 Guide for Selection of Industrial Safety Equipment for Eye, Face and Ear Protection	
Jumpsuit		

1

Wear PPE

# Emptying septic tanks



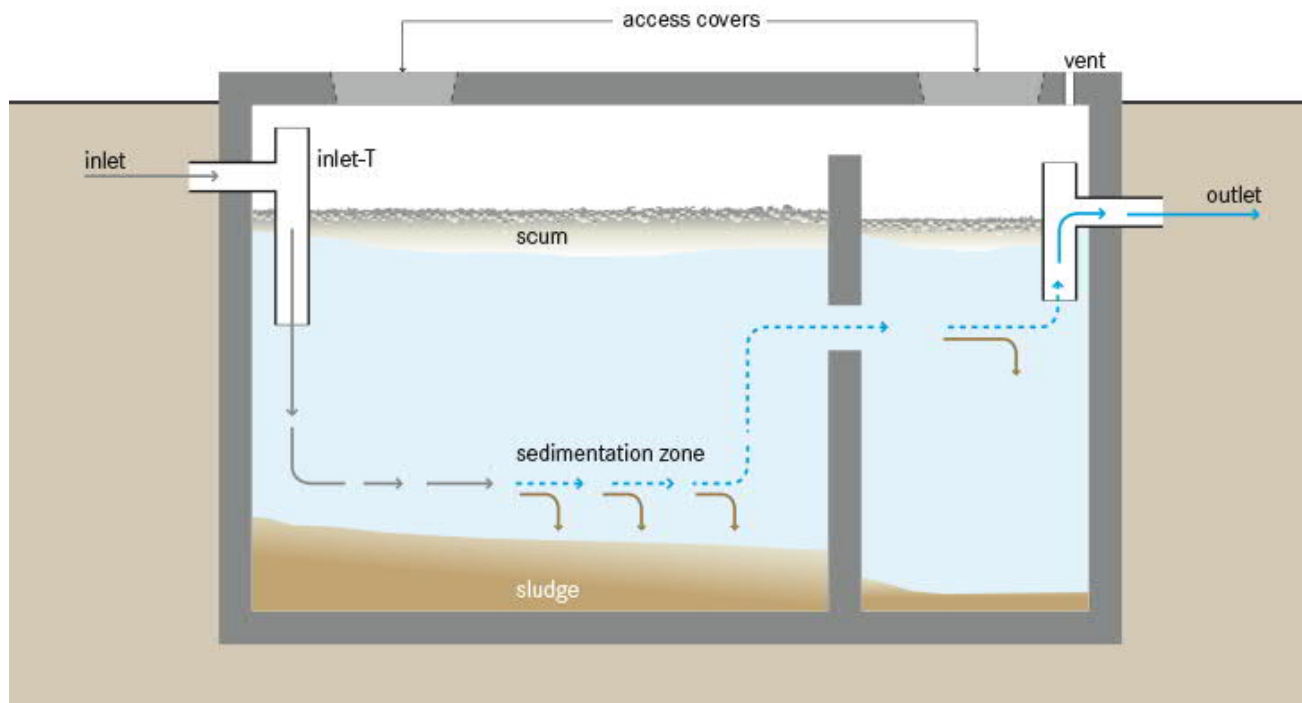
2

Lay out and connect the hoses from the truck to the tank or pit to be emptied. If extension pipes are used then connect only through coupling

# Emptying septic tanks

3

Locate septic tank and open it by removing access ports





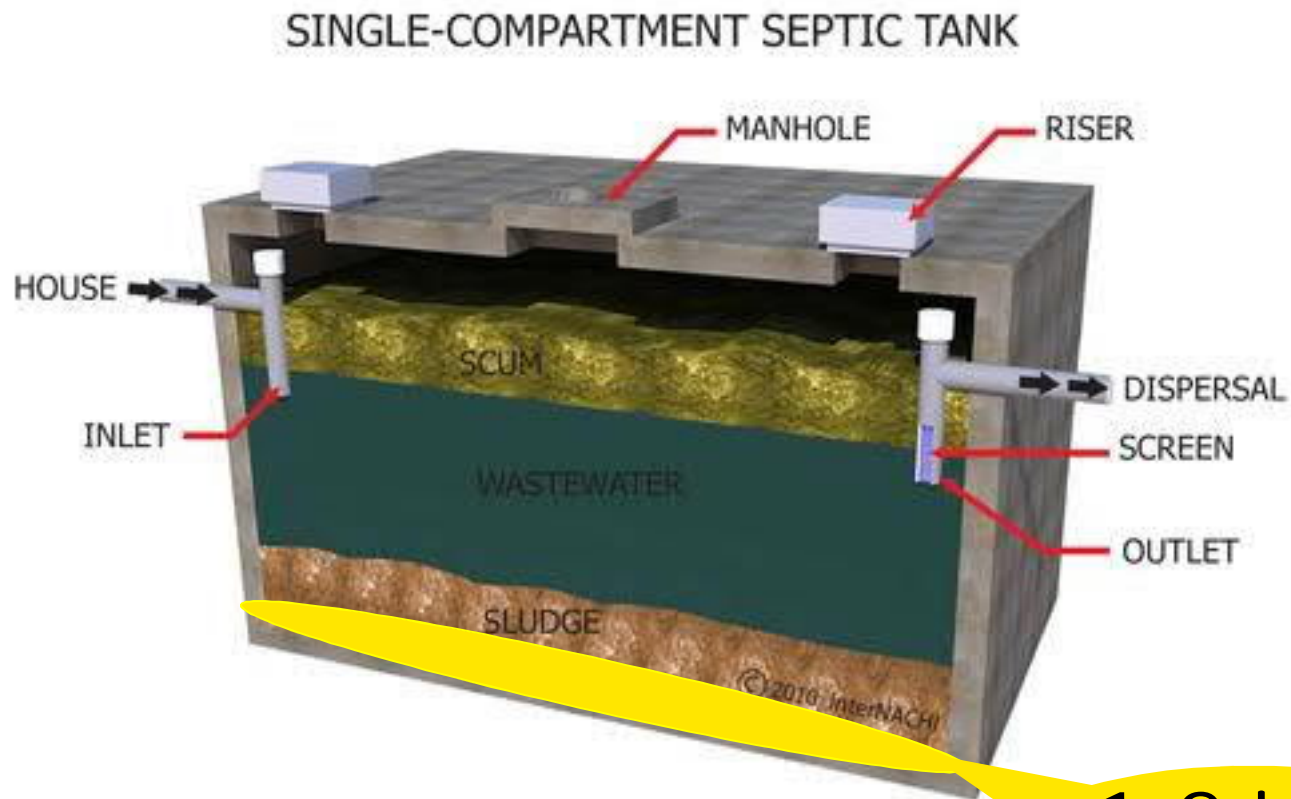
# Emptying septic tanks

4

Break scum layer. Add water to the layer of septage and let it rest for 1 hour (incase of dry sludge)



# Emptying septic tanks



5 Leave 1-2 inches of sludge in the pit/tank

1-2 inch sludge

# Controlling spillage



# Transportation to FSTP/DRE



Section 233 of OM Act, 1950 empowers all ULBs to issue notices for prohibition of desludging from cesspool vehicles to open drains/sites

Enforcement of regulations – INR 50,000 penalty for indiscriminate dumping – Additional Chief Secretary

# Deep Row Entrenchments



## Land Selection Criteria for Deep Row Entrenchments

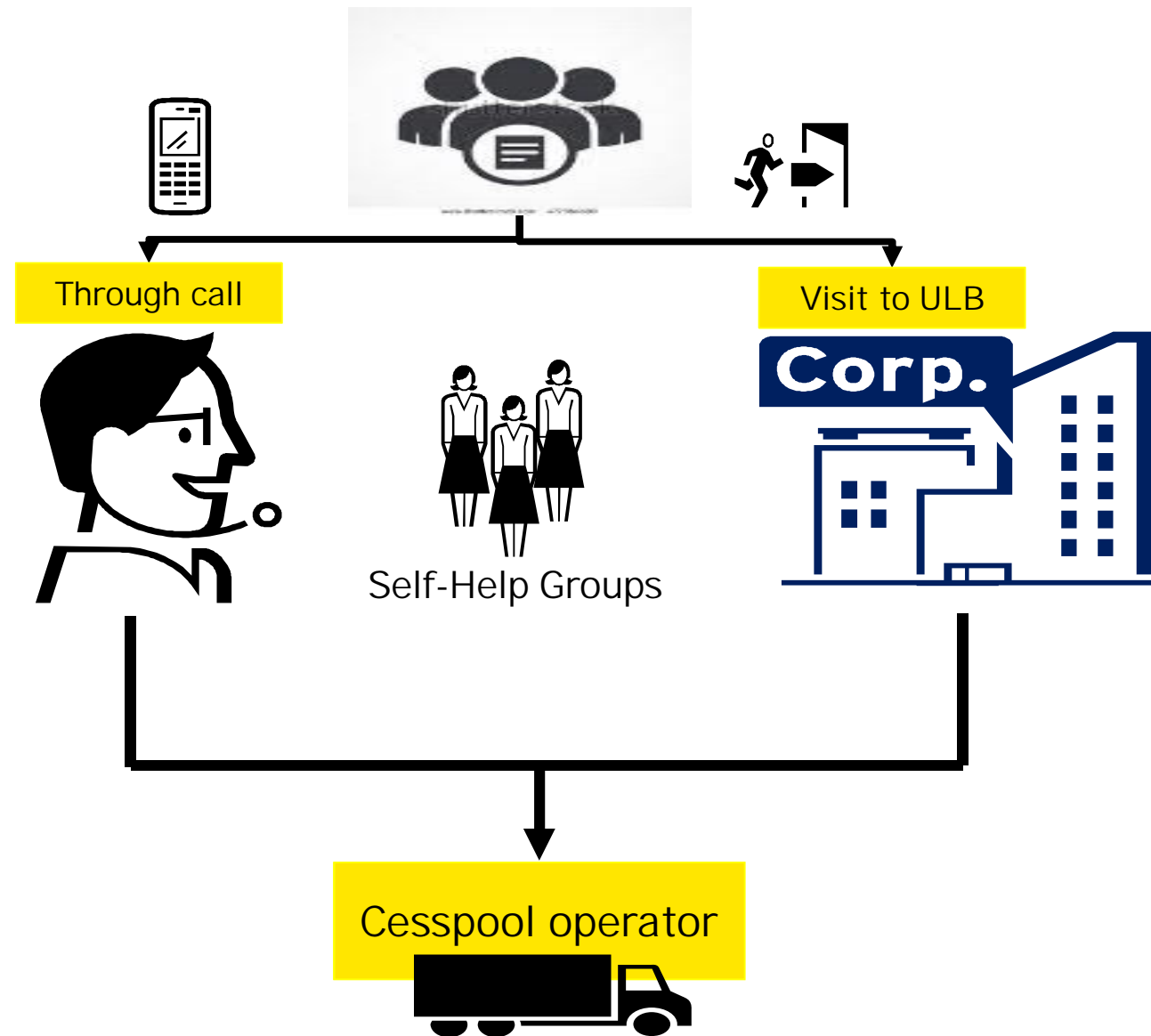
- Not flood prone or should be above recorded flood level
- Not water-logged
- Low water table
- Soil type – should be porous and allow soak away
- Reasonably flat
- Sufficient buffer distance to habitable properties (200 m minimum)
- Not close upstream of water intake, well, exposed aquifer (at least 2 km), no ground water use for potable or contact or agriculture purposes etc downstream (of aquifer)
- Accessible by vehicles (road strength, width, bridges, headroom, slope)
- Tanker movement should not cause nuisance to neighbourhood
- Compatible to adjacent and neighbouring properties usage
- Close enough to allow logistics of sludge transportation

# Treatment facilities in Odisha

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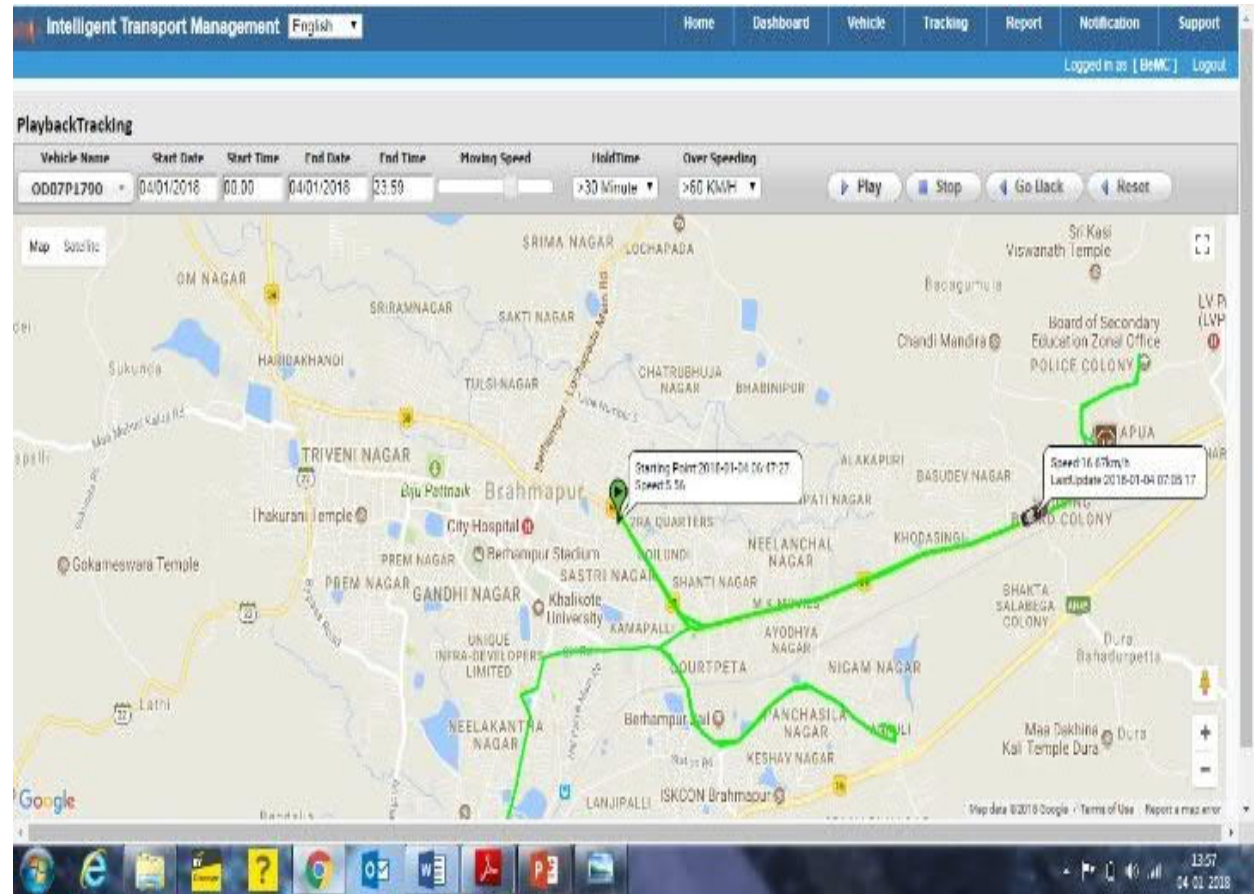
# Request and payment of cesspool services



## CHECKLIST FOR OPERATOR

1. Name
2. Phone number
3. Detail address
4. Road access for vehicle
5. Location of septic tank  
(inside, outside, cement concrete, under the floor or don't know)

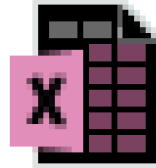
# Installation of GPS in cesspool vehicle








# Format for documentation – ULB vehicles

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Microsoft Excel  
Worksheet

# Community engagement in FSSM value chain

Stage	Actions	Target audience:	Key messages
CAPTURE 	Construction & usage of sanitary toilets (IHHL, CT)	<ul style="list-style-type: none"> <li>Households</li> </ul>	<ul style="list-style-type: none"> <li>Hazards of OD</li> <li>Importance &amp; need for using toilet</li> <li>O&amp;M of CT</li> </ul>
CONTAINMENT	<ul style="list-style-type: none"> <li>Safe containment by connecting toilets to septic tanks/pits</li> </ul>		<ul style="list-style-type: none"> <li>Hazards of insanitary toilets</li> <li>Need for periodic inspection of tanks</li> </ul>
EMPTYING & TRANSPORTATION	<ul style="list-style-type: none"> <li>Desludge septic tanks/pits</li> </ul>		<ul style="list-style-type: none"> <li>Desludge septic tanks/pits every 3 years through mechanized cesspool vehicles only. It prevents water borne diseases.</li> </ul>
TREATMENT 	<ul style="list-style-type: none"> <li>Being vigilant/aware about indiscriminate dumping &amp; the significance of septage treatment</li> <li>Being informed about the potential uses of treated septage</li> </ul>		<ul style="list-style-type: none"> <li>Benefits of SeTP in the city on health &amp; environment</li> <li>Dispelling myths &amp; misconceptions</li> <li>Linking to the sanitation value chain</li> </ul>
REUSE 	<ul style="list-style-type: none"> <li>Overcome barriers of using treated FSS as compost, fertilizer etc.</li> </ul>	<ul style="list-style-type: none"> <li>Farmers</li> </ul>	<ul style="list-style-type: none"> <li>Key benefits of using treated septage</li> <li>Options for business enterprises</li> </ul>

# Emptying – Demand generation

## ସହରର ପରିମଳ ବ୍ୟବସ୍ଥା ଆମ ଦାୟିତ୍ୱ

ସୁରକ୍ଷିତ ମଳ ପରିଚ୍ଛେଦନା କରି ଆମ ସହରକୁ ସଫା ରଖିବା



ଖୋଲା ସ୍ଥାନରେ ମଇଦାମାଳ କରିବା ନାହିଁ



ପଇସାମାନ ବ୍ୟବହାର କରିବା ଓ ପଇସାମାନ ପାଇପୁରୁ ଡ୍ରେନରେ ନ ପକାଇ ସେପ୍ଟିକ୍ ଟାଙ୍କି ସହିତ ଯୋଡ଼ିବା



ଝିନି ଦର୍ଶକେ ଥରେ ମୁନିସିପାଲିଟିର ସେପ୍ଟିକ୍ ଟାଙ୍କି ଦ୍ୱାରା ସେପ୍ଟିକ୍ ଟାଙ୍କିକୁ ସଫା କରିବା



**ଯୋଗାଯୋଗ:**



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## ନିର୍ମଳ ସହର, ସୁସ୍ଥ ପରିବେଶ

ସୁରକ୍ଷିତ ମଳ ପରିଚ୍ଛେଦନା କରି ଆମ ସହରକୁ ସଫା ରଖିବା



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# Emptying – Demand generation

## ସେସ୍‌ପୁଲ ଗାଡ଼ି ଦ୍ଵାରା ସେପ୍ଟିକ୍ ଟାଙ୍କିକୁ ସଫା କରନ୍ତୁ

- ପାଇଖାନା ପାଇପ୍‌କୁ ଖୋଲା ଭେନ୍‌ରେ ନ ପକାଇ ସେପ୍ଟିକ୍ ଟାଙ୍କି ସହିତ ଯୋଡ଼ନ୍ତୁ
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ଯୋଗାଯୋଗ:



ସହରର ପରିମଳ ବ୍ୟବସ୍ଥା ଆମ ଦାୟିତ୍ଵ

# Emptying – Demand generation



ଆପଣଙ୍କ ପାଇଖାନା ଟାଙ୍କି ସଫା କରିବା ପାଇଁ ପୁରୀ ମ୍ୟୁନିସିପାଲିଟି ଦ୍ୱାରା ନିର୍ଦ୍ଧାରିତ ଦରରେ ମ୍ୟୁନିସିପାଲିଟି ପ୍ରଚଳିତ ସେସ୍ପୋଲ୍ ଗାଡ଼ି ବ୍ୟବହାର କରନ୍ତୁ। ଦର ଗାଡ଼ି ପ୍ରତି ୭୯୦ଟଙ୍କା ମାତ୍ର।

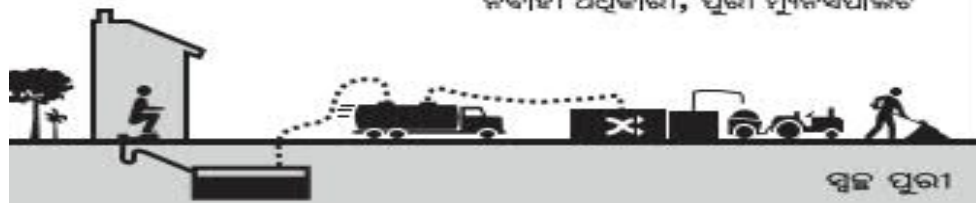
ଯୋଗାଯୋଗ ନଂ: ୦୬୭୫୨-୨୨୨୧୭୭

କୌଣସି ବ୍ୟକ୍ତି ଅଧିକ ମୂଲ୍ୟ ଦାବି କଲେ  
ନିମ୍ନ ଅଧିକାରୀଙ୍କୁ ସମ୍ପର୍କ କରନ୍ତୁ:

କାର୍ଯ୍ୟ ନିର୍ବାହୀ ଅଧିକାରୀ: ୯୪୩୮୬୫୫୯୭୭

ଅତିରିକ୍ତ କାର୍ଯ୍ୟ ନିର୍ବାହୀ ଅଧିକାରୀ : ୯୪୩୭୦୨୮୧୨୨

ନିର୍ବାହୀ ଅଧିକାରୀ, ପୁରୀ ମ୍ୟୁନିସିପାଲିଟି



Clean your septic tank  
Use cesspool vehicles of Puri Municipality  
Fixed rate of **Rs 790** per trip.

**Contact No: 06752-222177**

If any person charges / demands more  
or in case of any difficulty Contact:

EO: 9438655977

AEO: 9437028122

Enforcement Officer  
Puri Municipality



# Registration process for cesspool vehicles

## Application form

Name of the applicant (owner of STV): \_\_\_\_\_

2. Nationality: Indian \_\_\_\_\_ Other \_\_\_\_\_

3. Address: as per STV Registration \_\_\_\_\_  
Address for correspondence: \_\_\_\_\_

4. Registration Number \_\_\_\_\_ issued by authority \_\_\_\_\_ under (shop & establishment Act or registration with other competent authority) if any

5. Copy of PAN card of the Owner \_\_\_\_\_

6. Copy of Aadhaar card of the Owner \_\_\_\_\_ (Only in case of individuals)

7. Telephone No.: (O) \_\_\_\_\_ Mobile No \_\_\_\_\_ Email ID \_\_\_\_\_

8. RTO Registration No. of Vehicle: \_\_\_\_\_  
(Attach copy)

9. Vehicle Type: \_\_\_\_\_ (Cesspool Vehicle/Vacutug, etc.)

10. Vehicle Capacity: \_\_\_\_\_ (Liters)

11. Pollution certificate of the vehicle valid up to: \_\_\_\_\_  
(Attach copy)

11. Insurance of the vehicle valid up to: \_\_\_\_\_  
(Attach copy)

12. Fitness of the vehicle valid up to: \_\_\_\_\_  
(Attach copy)

13. Vehicle, whether fitted with GPS (Yes/No): \_\_\_\_\_

14. Processing fee INR \_\_\_\_\_ /- (Non-refundable)  
D.D. No. \_\_\_\_\_ Date \_\_\_\_\_ Bank \_\_\_\_\_

I/We certify that information given by me/us in column 1 to 14 are true to the best of my knowledge and belief. I also certify that I have read and understood the attached terms and conditions of RFA, all the regulations, policies and guidelines of septage and agree to abide by them. I agree that I will ensure safe disposal of sludge or septage at designated site. I agree that if any information given by me is found wrong the application for license will be liable for penalties / suspension / cancellation at any time.

Signature(s) of applicant(s) \_\_\_\_\_  
Date: \_\_\_\_\_  
No. of documents attached: \_\_\_\_\_

STV registration with \_\_\_\_\_ NAC / Municipality / Municipal Corporation  
Reference No. \_\_\_\_\_

In accordance with all the terms and conditions of the current \_\_\_\_\_ NAC's / Municipality's / Municipal Corporation's Regulations, the special permit conditions accompanying this permit, and all applicable rules, laws or regulations of Government of Odisha, permission is hereby granted to:

RTO REGISTRATION NUMBER \_\_\_\_\_  
TYPE OF VEHICLE \_\_\_\_\_  
CAPACITY: \_\_\_\_\_  
NAME OF OWNER: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

(Please issue a separate permit for each of vehicle)

For the transportation of septage within ULB area and up to the designated site. This Permit is based on information provided in the STV operator Permit application which constitutes the Registration Certificate for STV. This Permit is effective for the period set forth below, may be suspended or revoked for Non-Compliance of conditions set forth in fecal sludge and septage management regulations, 2018. The original certificate shall be produced on demand of the authorized personnel of the ULB.

EFFECTIVE DATE: \_\_\_\_\_

CHECK IF RENEWED PERMIT \_\_\_\_\_

Permit is liable to be cancelled in case of violations of any Acts, Rules and Regulations relating to the operation of Septage System or in cases of safety protocols not being adhered to or in case of non-permitted disposals.

Note:

This registration certificate does not replace or supplement the requirements under The Motor Vehicle Act.

Signature of Commissioner / Executive Officer \_\_\_\_\_

Date: \_\_\_\_\_

# Check points for ULB vehicles

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1. Documentation of all process - Signed copy of receipt from customer and FSTP operator
2. Scheduling of cesspool operations
3. Carry registration certificate with vehicle – Original
4. Adhere to time as per client requirement
5. ESCROW account is a must wherever the operation is outsourced from ULB to private agency
6. Money collected to be deposited to ULB within 24 hours (ULB operators)
7. GPS should be installed and functional in all cesspool vehicles
8. Penalty clause as per contract –
  - 50% money to be penalized of the trip if provision of service is not given within 3 days
  - 25% of money to be penalized of a trip if accidental spillage is not cleaned within 2 days
9. First aid kit and fire extinguisher are kept in the vehicle before it goes to the collection site

# Registration process for cesspool vehicles

## Documents to furnish

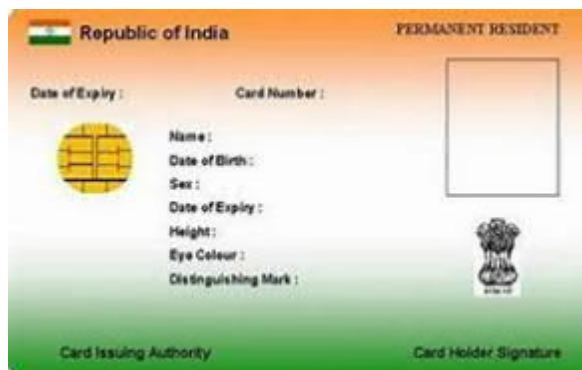
1



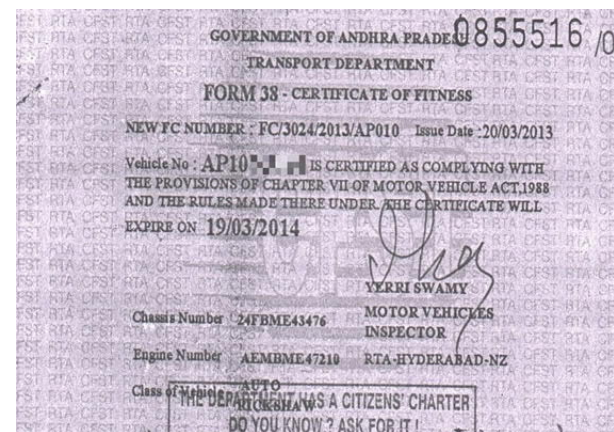
3



2



4



5





# Responsibility of cesspool operator

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1. The owner of the vehicle shall be responsible for safe transportation of faecal sludge and septage to the designated site notified by the ULB
2. The owner shall ensure that the STV shall not be used for the transportation of any other materials or liquids till the registration is in force.
3. Record keeping
4. Compliance with the PPEs and sanitary workers welfare Insurance or safety
5. And compliances for drivers