

**Özkartallar Campak Joint Venture**

# **Solid Waste Management Plan for Saeed Park (UC-08)**

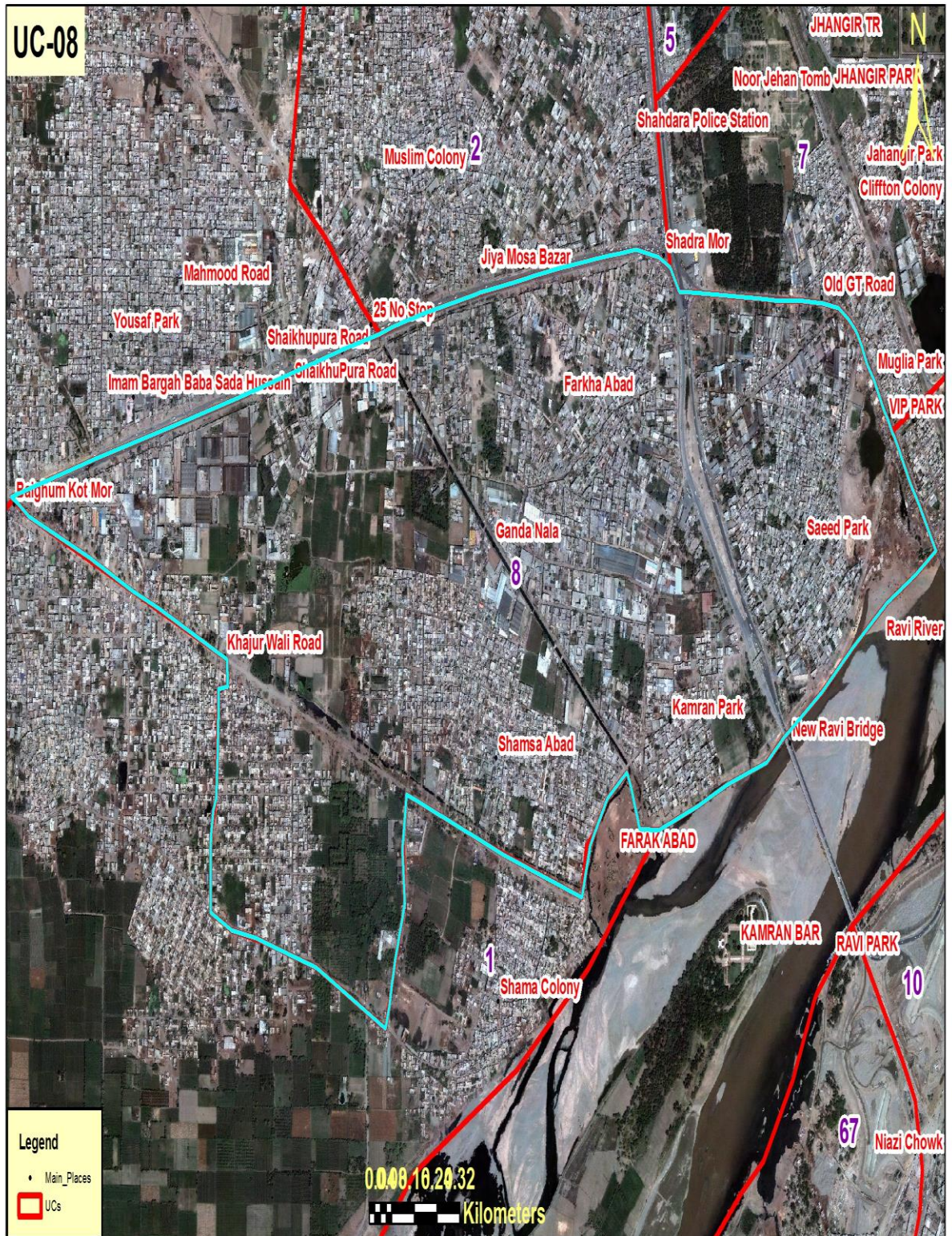


**By**

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# Map of UC 08 Shadra



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## 1. INTRODUCTION

Union Council – (Saeed Park) is located in Ravi Town. Total population of UC-08 is 72292 with area 2164330 m<sup>2</sup> and predominantly low income area with unplanned settlement/infrastructure.



*Fig: 1. Pictorial View of Important Areas of UC-08*

### 1.1. IMPORTANT PLACES OF UNION COUNCIL-08

From Sanitation point of view Union Council-08 has important Places like Commercial Markets, Parks, Graveyard Important Roads, and Mosques etc.

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#### **Graveyards**

- Qabristan road mian zaka house

#### **Important Roads**

- Metro route
- Sheikhpura road
- Bara dari road

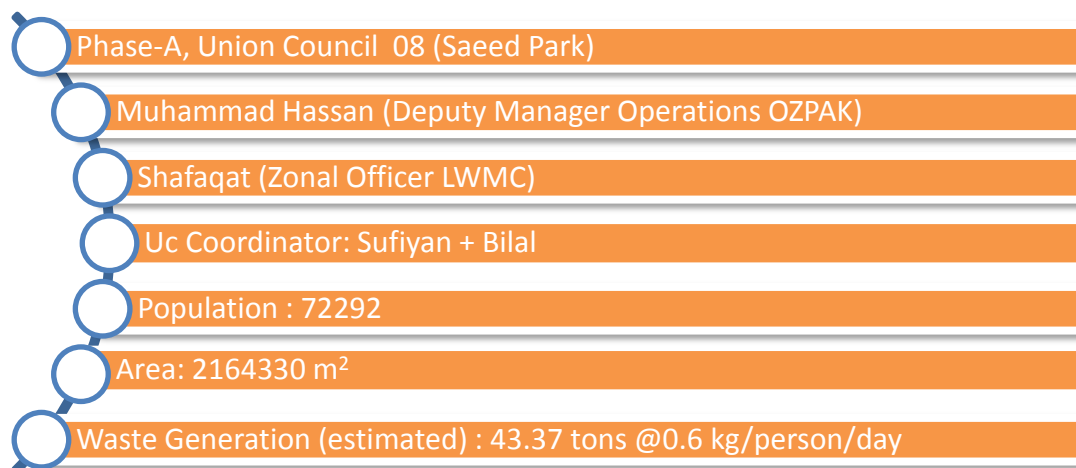
#### **Mosques**

- Jamia mosque bilal
  - Jamia mosque nimra
  - Jamia mosque allah ho
  - Jamia mosque hanifia rizwia
  - Jamia mosque faroq e azam
  - Jamia mosque quba
  - Jamia osque tuheed
  - Jamia mosque siddiqia
- 

### 1.2. SOLID WASTE GENERATION

Estimated solid waste generation is 43.37 metric tons per day @ waste generation rate of 0.6 kg/person/day.

### 1.3. PARTICULARS



## 2. SOLID WASTE MANAGEMENT PRACTICES

This area is under control of M/s. OZPak J.V for solid waste management. Existing arrangements for SWM based upon actual operations are as follows:

### 2.1 . OPERATIONAL ACTIVITIES - FIRST SHIFT PLAN

#### MANUAL SWEEPING OPERATION

Manual sweeping of the roads, streets, markets, footpaths and every paved and unpaved passageway is being done with Sanitary Workers equipped with all necessary operational tools and PPE's (Personal protective equipment's)

- ✓ Manual sweeping in first shift is carried out from 6AM to 2PM.
- ✓ Personal protective equipment's include Proper uniform, Gloves, Mask, Proper Shoes, Long Boots and Rain Coat in case of monsoon Season.
- ✓ Operational Requirement for Sanitary Worker includes Broom, Shovel, Wheelie Bin, Waste Bags, Scrapper and Hand Cart.



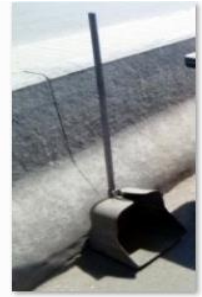
Broom



Hand Cart



Whellie Bin



Shovel



Proper Uniform with PPE's



Waste Bag



Scraper



Shovel 1

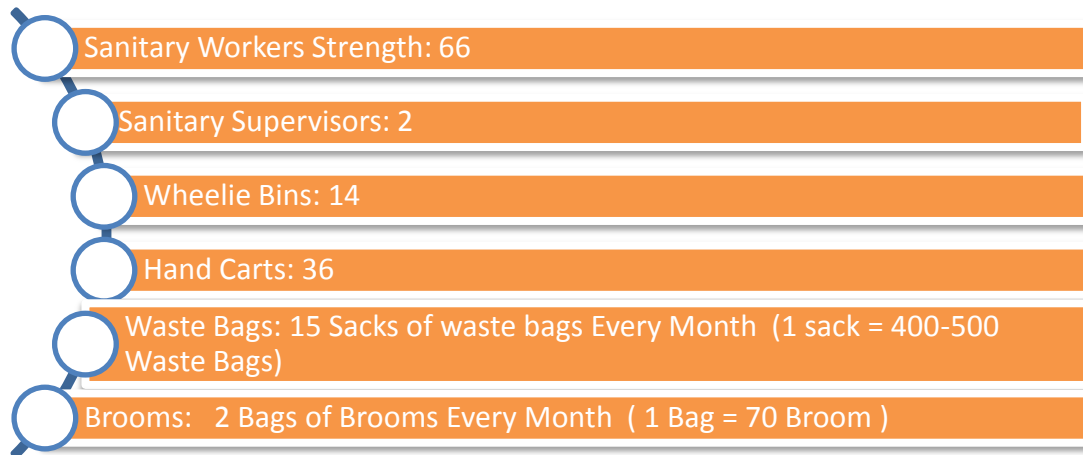


Monsoon SOP's (Long Boats & Rain Coat)

**Fig: 3. Pictorial View of Operational Equipment's, PPE's & Monsoon SOP's for Sanitary Worker**

- ✓ Sanitary Workers are managed by Sanitary Supervisors in Union Council and each sanitary worker has its own defined Beat (Area).
- ✓ During Manual Sweeping Operation in 1<sup>st</sup> Shift, Waste is also collected by sanitary workers from households i.e. collected from their house entrance.
- ✓ Waste Bags are also used by sanitary workers to collect waste from the roads, streets and households which are then hauled through wheellie bins and hand carts to the waste containers.
- ✓ Furthermore to increase the efficiency of waste collection we are distributing waste bags daily to every vendor on main roads(to stop littering and open heaps of waste)

## MANUAL SWEEPING OPERATION DETAILS



## OPEN PLOT CLEARANCE OPERATION

Large Number of open plots are present in Union Council 8 and as it is a cattle free area with poor infrastructure of roads and sewerage, access of machinery is not possible in every area of Union Council which results into daily throwing of waste in open plots by house holds.



baradari road opp hospital.jpg



chaman calony opp masjid.jpg



kamran park 8.jpg



kamran park 9 game wala.jpg



kamram park3.jpg



kamran park 6.jpg



kamran park 10 qober wala.jpg



kamran park1.jpg



kamran park2.jpg



kamran park4.jpg



mehboob park 17.jpg



mehboob park1.jpg





kamran park5.jpg



kamran park7.jpg



mehboob park2.jpg



mehboob park3 nursery wala.jpg



mehboob park4.jpg



mehboob park5.jpg



mehboob park8.jpg



mehboob park9 naly wala.jpg



mehboob park6.jpg



mehboob park7.jpg



mehboob park10.jpg



mehboob park11.jpg



mehboob park12.jpg



mehboob park13.jpg



mehboob park16.jpg



qayum park1.jpg



mehboob park14.jpg



mehboob park15.jpg



qayum park2.jpg



qayum park3.jpg



qayum park4.jpg



qayum park5.jpg



saied park3.jpg



saied park4.jpg



saied park1.jpg



saied park2.jpg



saied park5.jpg



saied park6 patwar khana.jpg



saied park7 foji ground.jpg



saied park8 foji ground.jpg



usaman park1.jpg



usman park2.jpg



shaihupara road opp ptcl.jpg



soi gas road.jpg



usman park3.jpg



usman park4.jpg

wazir park



wazir park.jpg



bara dari road (1).jpg



bara dari road (2).jpg



bara dari road (5).jpg



bara dari road (6).jpg



bara dari road (3).jpg



bara dari road (4).jpg



bara dari road (7).jpg



bara dari road (8).jpg



25 number (1).jpg



25 number (2).jpg



fszal park (1).jpg



fszal park (2).jpg



fszal park (5).jpg



fszal park (6).jpg



fszal park (3).jpg



fszal park (4).jpg



fszal park (7).jpg



fszal park (8).jpg



fszal park (9).jpg



fszal park (10).jpg



fszal park (13).jpg



fszal park (14).jpg





fszal park (11).jpg



fszal park (12).jpg



fszal park (15).jpg



fszal park (16).jpg



hanif park.jpg



nadeem park (1).jpg



nadeem park (2).jpg



bashir park (1).jpg



bashir park (2).jpg



shemsa bad (1).jpg



shemsa bad (2).jpg



sattar colony (1).jpg



sattar colony (2).jpg



sattar colony (5).jpg



sattar colony (6).jpg



sattar colony (3).jpg



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sattar colony (11).jpg



sattar colony (12).jpg



sattar colony (15).jpg



sattar colony (16).jpg



tergher (1).jpg



tergher (2).jpg



tergher (5).jpg



tergher (6).jpg



tergher (3).jpg



tergher (4).jpg



tergher (7).jpg



tergher (8).jpg



yousaf park (1).jpg



yousaf park (2).jpg



yousaf park (3).jpg



yousaf park (4).jpg



tergher (9).jpg



tergher (10).jpg

## WORKING PLAN FOR MANUAL CLEARANCE OF OPEN PLOTS

Manual Clearance of Open plots is conducted after 11am Daily in Group Working and daily 3-4 plots are cleared in Union Council 8.

UNION COUNCIL 8	
Day	Open Plots Plan
Monday	Saeed park(2 plots)
Tuesday	Saeed park(2 plots)
Wednesday	Kamran Park (2 plots)
Thursday	Kamran Park (2 plots)
Friday	Kamran Park (2 plots)
Saturday	Chaman Colony(3 plots)
Monday	Chaman Colony(3 plots)
Tuesday	Wazeer Park(3 plots)
Wednesday	Wazeer Park(3 plots)
Thursday	Mehboob Park(4 plots) Amount of waster is large
Friday	
Saturday	
Monday	Qayyom Park(3 plots)
Tuesday	Eid Gah Road + 1 plot
Wednesday	Fazal Park (4 plots) Amount of waster is large
Thursday	
Friday	



## EMPTY AREAS MANUAL SWEEPING PROTOCOL

Large Population of shadra expanded over vast area of land. That's why we have many empty areas where we have no sanitary worker to provide regular waste collection and sweeping services. So we cover these empty areas in group working after 11am according to fix schedule.

## EMPTY AREAS UC-8

UNION COUNCIL 8
<u>Sadiq</u> Park
Nadeem park
<u>Fazal</u> Park half portion
Aziz Park floor mil
Usman park streets
Malik Park <u>Sheedan chaki wali</u> streets
<u>Sitara</u> colony half portion
Saeed park <u>foji</u> ground
<u>Qayyom</u> Park
Sui Gas Road <u>Chaman Colony</u>
<u>Hashmat</u> Shah Road
Foreman Road
Service Road <u>Mian Sarfaraz</u>
Kamran Park School Streets
Rasheed Park
<u>Khula</u> road near foreman road
<u>Chaman</u> Colony + <u>Targar</u> area

## GROUP WORKING PLAN UC-8

Union Council-8	
Day	Areas to Cover
Monday	Yousaf Park + Saeed Park
Tuesday	Kamran park + Fazal Park + Service Road
Wednesday	Malik Park + Chaman Colony
Thursday	Hashmat Shah Road with Attached Streets + Targarr
Friday	Mehboob Park + Nadeem Park
Saturday	Qabrastan Road + Qayyom Park + Rasheed Park

## SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION & DOOR TO DOOR COLLECTION)

Solid waste collection process is done through two ways.

1. Container Collection
2. Door to Door Collection

### CONTAINER COLLECTION

Solid waste generated is stored in waste containers(Collection Capacity is 250kg/0.25 tons) which are placed all over the Union Council. These waste containers are lifted by Hydraulic Compactor Vehicles moving in the union council on a specific route for the purpose of waste collection. This waste is than dumped at dumping Site (Mehmood Booti).

- ✓ Total 77 waste containers are in place in Union Council at 55 different Points.
- ✓ Total waste storage capacity in 77 containers is 19.25 tons in one time lifting.
- ✓ These Waste Containers are lifted by Hydraulic Compactor Vehicles having a Compaction Ratio of 1:3.
- ✓ Two large Compactor are deployed for waste collection in Union Council 8. Compactor has two helpers equipped with all necessary operational tools and PPE's (Personal protective equipment's).
- ✓ Compactor's responsibility is to lift all the containers in its route during the shift and also to collect all open heaps from the roads and linked streets to maintain efficient cleanliness standards.



Compactor Hydraulic System



Compactor



Proper Uniform with PPE's



Broom

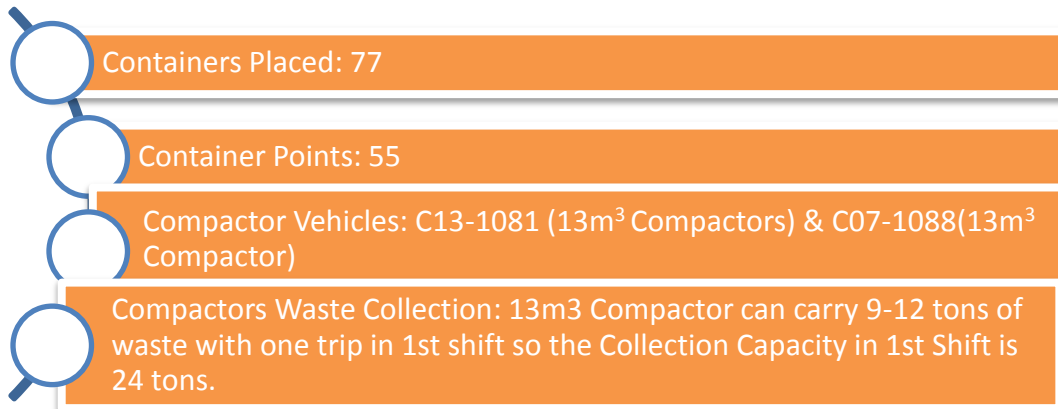


Shovel 1

*Fig: 4. Pictorial View of Vehicles & Operational Equipment's for Helpers*

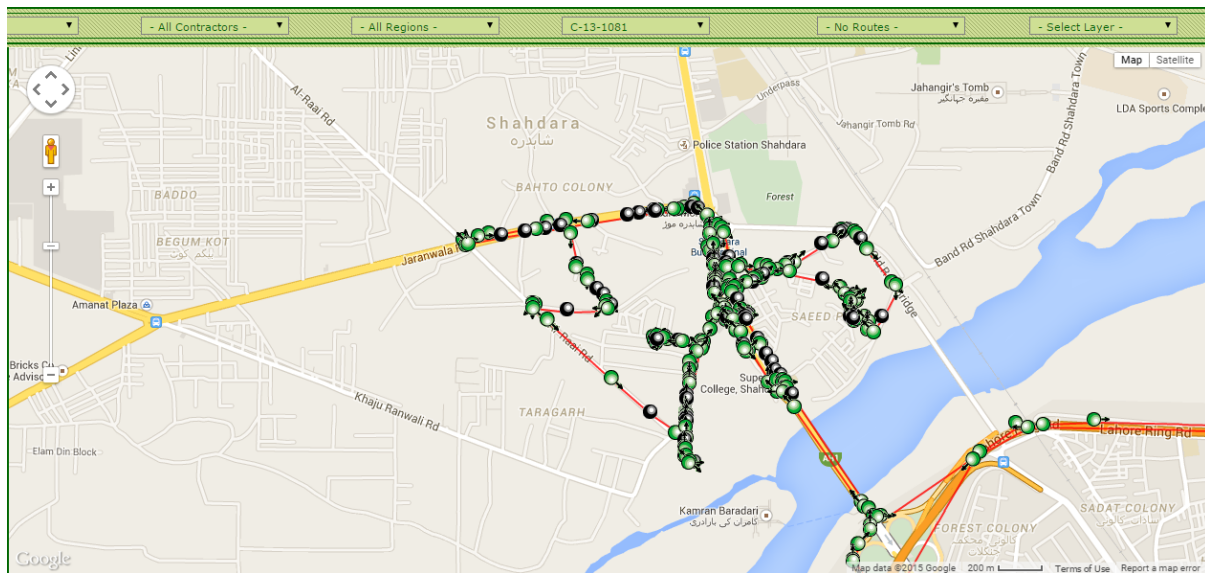


## SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION) DETAILS

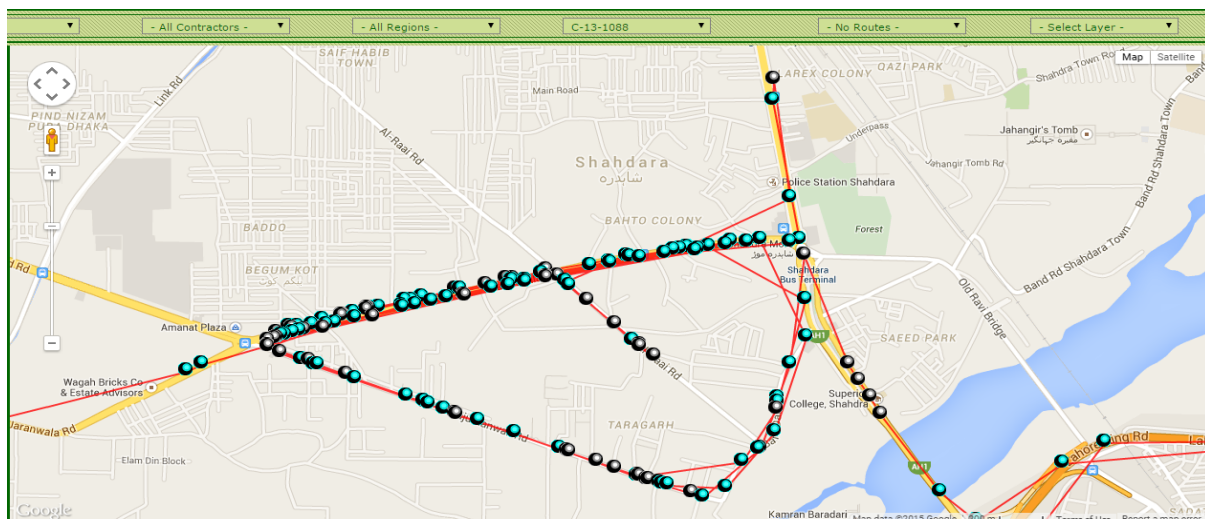


### COMPACTOR WORKING 1<sup>ST</sup> SHIFT

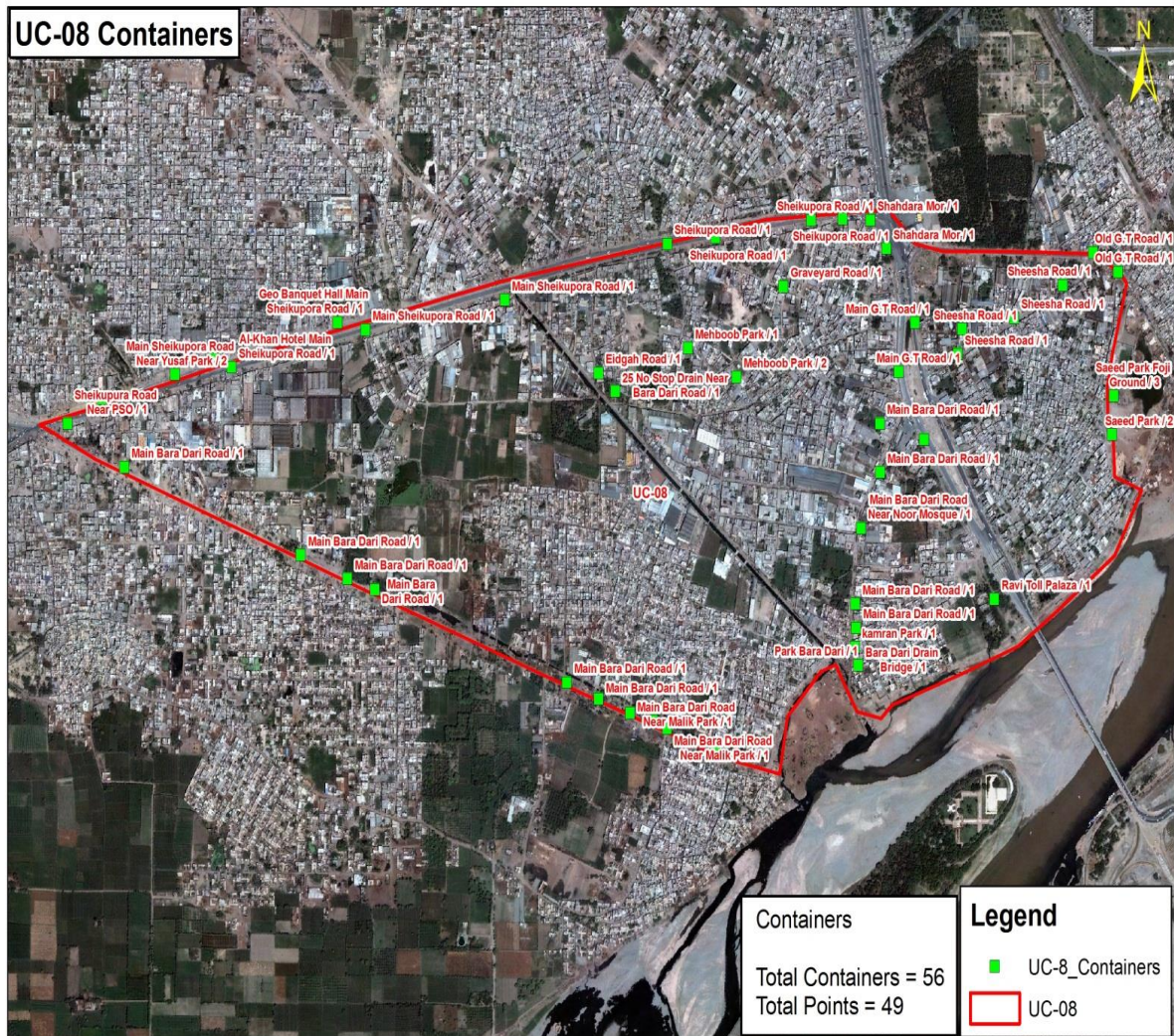
#### C13-1081



#### C13-1088



## CONTAINER LOCATIONS ON MAP UC 08



Map: 01. Location of Containers

### DOOR TO DOOR COLLECTION

- ✓ Door to Door Waste Collection is the backbone of Solid Waste Management Operation. But it is very difficult to implement Door to Door Waste Collection service in area like Shadraa with low income rate, low literacy rate, Poor roads and sewerage infrastruture. But still we have successfully implemented Door to Door Service in Union Council 8(Areas having access and infrastructure for Door to Door Collection)
- ✓ MD-58 is the code of mini dumper which is deployed for UC-08 working with OZPAK JINGLE collecting Door to Door waste. Door to Door Waste Collection time is from 08:00AM to 01:00PM.

**Note:** Door to Door Waste Collection service is provided to houses having access of Mini Dumper. Our sanitary workers are collecting waste from areas where infrastructure is poor with narrow streets and sewerage problems.



Mini Dumper Hydraulic System



Mini Dumper



Proper Uniform with PPE's



Broom



Shovel 1



Waste Bag



### DOOR TO DOOR COLLECTION DETAILS

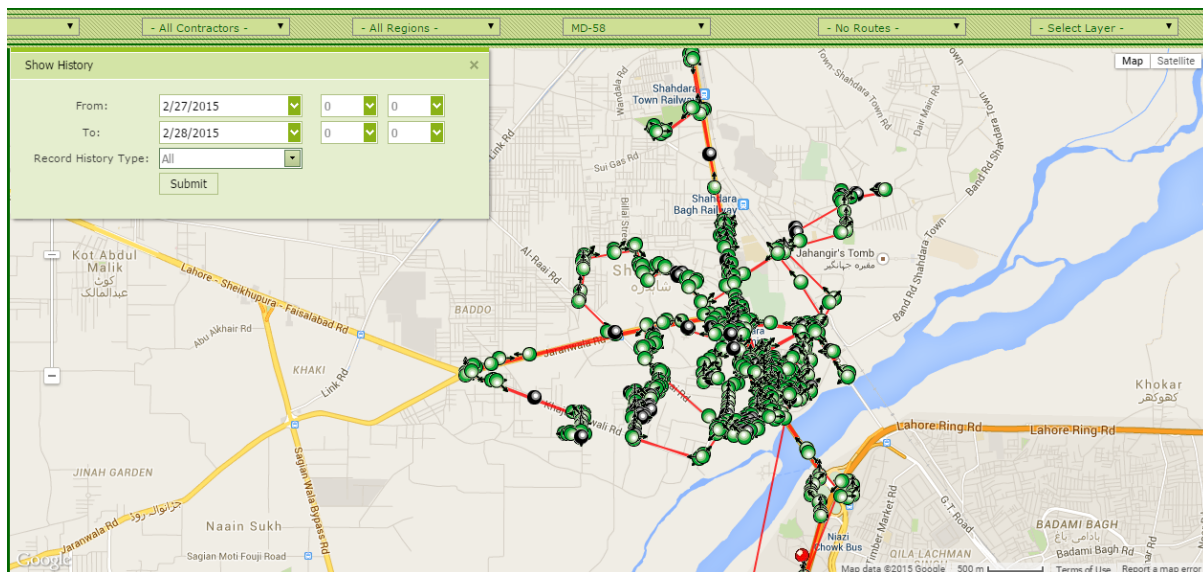


Mini Dumper: MD-58



Mini Dumper Driver: Irfan Ali(3464437325) with 1 Helper (Properly Equipped)

## DOOR TO DOOR WORKING OF MINI DUMPER IN UNION COUNCIL 8



### LIFTING OF WASTE BAGS FILLED DURING GROUP WORKING

Manual Open Plot Clearance is a major part of solid waste management operation in Shadra. Due to involvement of Mini Dumper in DTD Collection. It was big problem to lift waste filled bags from narrow streets with mini dumper during 1<sup>st</sup> shift. For this purpose we are using one extra mini dumper to lift waste bags daily from plots all over the shadra zone in 2<sup>nd</sup> Shift.



### 2.2. OPERATIONAL ACTIVITIES - SECOND SHIFT PLAN

#### MANUAL SWEEPING OPERATION

Manual sweeping of the Main roads, Important markets, 1139 complaints is done with Special Gang (Group of Sanitary Workers) equipped with all necessary operational tools and PPE's (Personal protective equipment's)

- ✓ Manual sweeping in 2nd shift with Special Gang is carried out from 2PM to 10PM.

- ✓ Personal protective equipment's include Proper uniform, Gloves, Mask, Proper Shoes, Long Boots and Rain Coat in case of monsoon Season.
- ✓ Operational Requirement for Special Gang includes Broom, Shovel, Wheelie Bin, Waste Bags, and Scrapper.

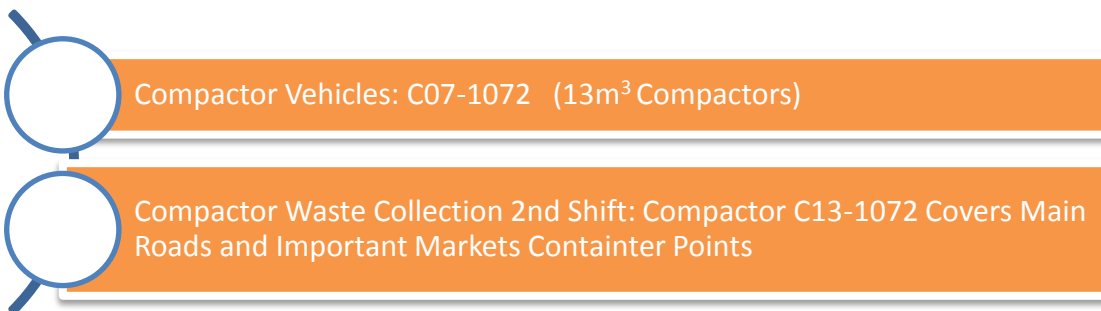
#### MANUAL SWEEPING OPERATION DETAILS



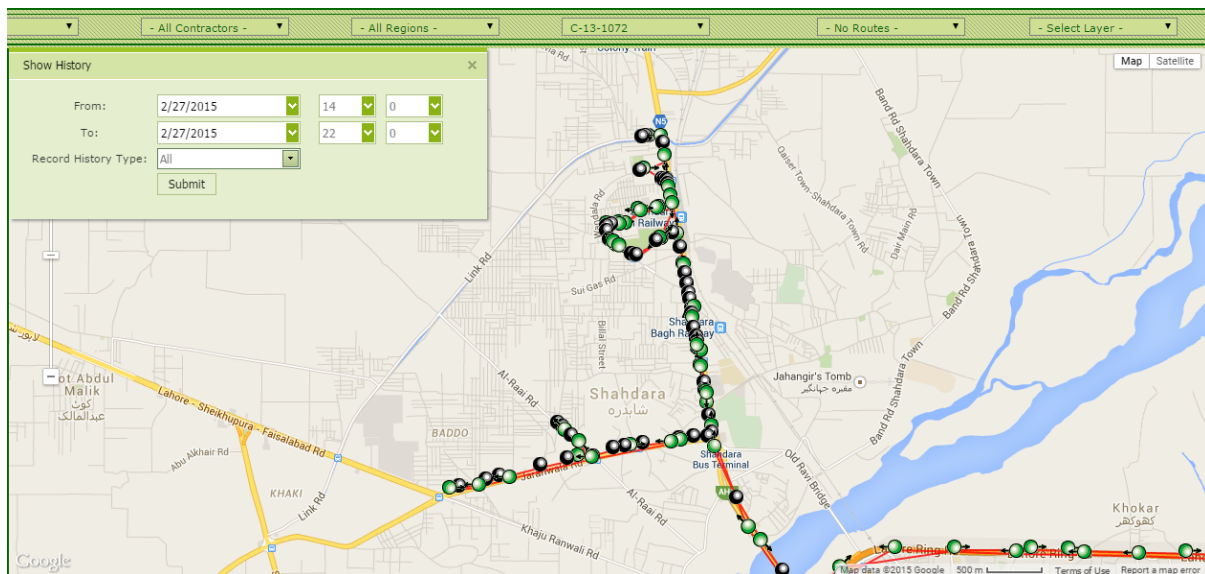
#### SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION)

Solid waste generated is stored in waste containers which are placed all over the Union Council. These waste containers are lifted by Hydraulic Compactor Vehicles moving in the union council on a specific route for the purpose of waste collection and dump the waste at Dumping Site (Mehmood Booti).

#### SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION) DETAILS



## COMPACTOR WORKING 2<sup>nd</sup> Shift



### 2.3. OPERATIONAL ACTIVITIES - THIRD SHIFT PLAN MANUAL SWEEPING OPERATION

Manual Sweeping Operation is not carried out in 3rd Shift.

### SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION)

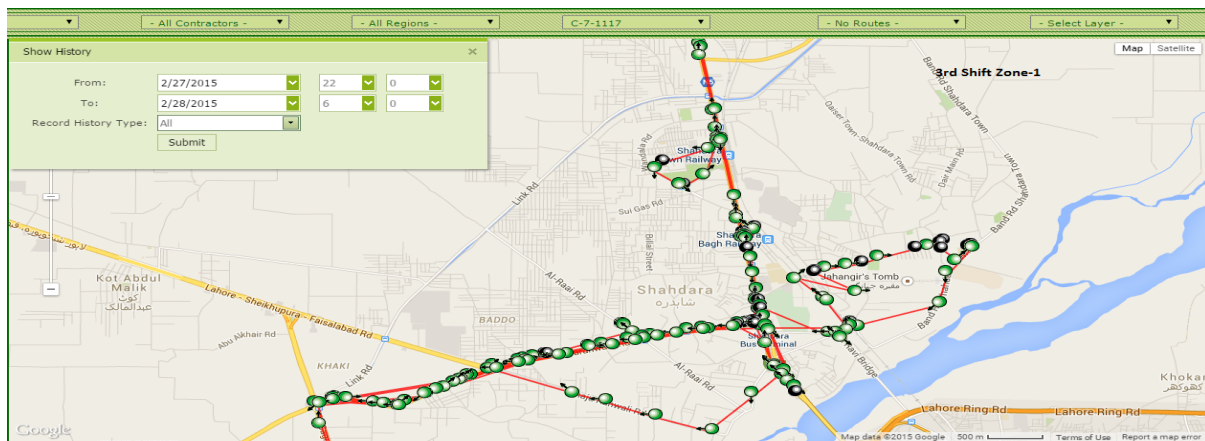
Solid waste generated is stored in waste containers which are placed all over the Union Council. These waste containers are lifted by Hydraulic Compactor Vehicles moving in the union council on a specific route for the purpose of waste collection and dump the waste at Dumping Site (Mehmood Booti).



Compactor Vehicles: C07-1117 (7m<sup>3</sup> Compactors)

Compactor Waste Collection 3rd Shift: Compactor C07-1117 Covers Main Roads and Important Markets Container Points and Problematic Points covering all Union Councils

## COMPACTOR WORKING 3<sup>rd</sup> Shift



### 3. COMPACTOR VEHICLE STAFF DEPLOYMENT FOR UNION COUNCIL 08

Detail of vehicles deployed in all three shift and contact number of responsible persons are given below:

Conservancy Staff Union Council 8, Zone-1						
Overall Incharge = Muhammad Hassan (0300-8482390)						
Supervisor = Babar (0320-8431703) & M Shahid (0346-4382320)			Supervisor = Babar (0320-8431703) & M Shahid (0346-4382320)		Supervisor = Taj ( 0300-5258304)	
1st shift			2nd shift		3rd shift	
UC	Vehicle No.	Driver Name & Mobile	Vehicle No.	Driver Name & Mobile	Vehicle No.	Driver Name & Mobile
08	1081	Yaseen(3214810118)	1072	Mirza nazim(3224577568)	1117	Ashraf Laal(3224891824)
	1088	Khalid butt(3234429092)				

Table: 02. Conservancy Staff UC-08

### 4. UC COORDINATOR JOB DESCRIPTION/LIST OF WORK

Coordinator 1:

**06:00AM-07:00AM**

**Attendance Points:**

- ✚ Manual and Android Cards Attendance Marking on these fixed attendance points
  - PSO Pump
  - Shadra Morr

**Finding Problematic Points & Deployment of Human Resource and Machinery:**

- ✚ Check arrival of Compactor and Mini Dumper in Union Council
- ✚ Deploy Human Resource on Main Roads, Commercial and Residential Areas
- ✚ Highlight important open heaps points, Filled Waste bags points and problematic overflowed containers to Compactor and Mini Dumper drivers to attend on priority.

#### **07:00AM-08:00AM**

- ✚ Check Manual Sweeping on Main Roads, Sanitary Workers Attendance and Containers Collection.
  - Main GT Road(Toll Plaza To Shadra Chowk) + 3 Koragans
  - Main and Service Sheikhpura Road(Shadara Chowk to 25 No Stop) + 5 Containers
  - Bara Dari Road + 5 Containers

#### **08:00AM-010:00AM**

- ✚ Check Manual Sweeping, Worker Attendance, Container Collection & Door to Door Waste Collection in Inner (Residential) Areas.
  - Forman Road & Backside Road with Linked Streets + 5 Containers
  - Saeed Park + 7 Containers
  - 25 No Naala Road
  - Mehboob Park + 3 Containers
  - Usman Park
  - Eid Gah Road + 1 Container
  - Sheesha Road 6 Containers
- ✚ During Visit Focusing on Manual sweeping Quality, presence of worker in allocated area, Door to Door Collection efficiency and staying in touch with compactor driver for timely lifting of containers.

#### **10:00AM-11:00AM**

- Break Time from 10:00am to 11:00am
- Workers gather at Attendance Points

#### **11:00AM-01:30PM**

- ✚ Divide work force in groups to cover empty areas, absent worker area, problematic areas are and open plots.
- ✚ Send workers in group in empty areas and on open plots daily according to a fix schedule
- ✚ Check working in empty areas, open plots.
- ✚ Resolve PMS & 1139 Complaints on priority basis if any
- ✚ Checking again main roads manual sweeping & container collection including some problematic container points
  - Main GT Road(Toll Plaza To Shadra Chowk) + 3 Koragans
  - Main and Service Sheikhpura Road(Shadara Chowk to 25 No Stop) + 5 Containers
  - Bara Dari Road + 5 Containers
  - Forman Road & Backside Road with Linked Streets + 5 Containers
  - Eid Gah Road + 1 Container



- Sheesha Road 6 Containers
- 25 No Naala Road
- Mehboob Park + 3 Containers
- Saeed Park + 7 Containers

✚ In Final Round Checking focus is to check Group Working, Main Roads Sweeping and Container Collection of important Points.

#### **01:30AM-02:00PM**

✚ Manual and Android Cards Attendance Marking on these fixed attendance points

- PSO Pump
- Shadra Morr

Coordinator 2:

#### **06:00AM-07:00AM**

##### **Attendance Points:**

✚ Manual and Android Cards Attendance Marking on these fixed attendance points

- 25 No Stop
- Sada Hussain

##### **Finding Problematic Points & Deployment of Human Resource and Machinery:**

- ✚ Check arrival of Compactor and Mini Dumper in Union Council
- ✚ Deploy Human Resource on Main Roads, Commercial and Residential Areas
- ✚ Highlight important open heaps points, Filled Waste bags points and problematic overflowed containers to Compactor and Mini Dumper drivers to attend on priority.

#### **07:00AM-08:30AM**

✚ Check Manual Sweeping on Main Roads, Sanitary Workers Attendance and Containers Collection.

- Sheikhpura Main Road(25 No to Begum Kot) + 13 Containers
- Bara Dari Road + 12 Containers

#### **08:30AM-010:00AM (Monday, Wednesday, Friday)**

✚ Check Manual Sweeping, Worker Attendance, Container Collection & Door to Door Waste Collection in Inner (Residential) Areas.

- Yousaf Park with Linked Streets
- Rozi Khan Market with Linked Streets
- Mehmood Road with Linked Streets
- Faisal Park
- Nadeem Park
- Rashid Park with Linked Streets
- Sada Hussain Containers

- Yousaf Park Containers
- Malik Park Containers 5
- Lalazar Container Point 7

**Note: On Monday Major portion of work force covers Sunday bazar waste on baradari road from 7AM to 9 AM**

- ✚ During Visit Focusing on Manual sweeping Quality, presence of worker in allocated area, Door to Door Collection efficiency and staying in touch with compactor driver for timely lifting of containers.

**08:30AM-010:00AM (Tuesday, Thursday, Saturday)**

- ✚ Check Manual Sweeping, Worker Attendance, Container Collection & Door to Door Waste Collection in Inner (Residential) Areas.

- Malik Park
- Shamsabad Road
- Rashid Park
- Sada Hussain Containers
- Yousaf Park Containers
- Malik Park Containers 5
- Lalazar Container Point 7

- ✚ During Visit Focusing on Manual sweeping Quality, presence of worker in allocated area, Door to Door Collection efficiency and staying in touch with compactor driver for timely lifting of containers.

**10:00AM-11:00AM**

- Break Time from 10:00am to 11:00am
- Workers gather at Attendance Points

**11:00AM-01:30PM**

- ✚ Divide work force in groups to cover empty areas, absent worker area, problematic areas are and open plots.
- ✚ Send workers in group in empty areas and on open plots daily according to a fix schedule
- ✚ Check working in empty areas, open plots.
- ✚ Resolve PMS & 1139 Complaints on priority basis if any
- ✚ Checking again main roads manual sweeping & container collection including some problematic container points
  - Sheikhpura Main Road(25 No to Begum Kot) + 13 Containers
  - Bara Dari Road + 12 Containers
  - Sada Hussain Containers 4
  - Yousaf Park Containers 2
  - Malik Park Containers 5
  - Lalazar Container Point 7

- ✚ In Final Round Checking focus is to check Group Working, Main Roads Sweeping and Container Collection of important Points.

#### **01:30AM-02:00PM**

- ✚ Manual and Android Cards Attendance Marking on these fixed attendance points
  - 25 No Stop
  - Sada Hussain

### **5. CRUCIAL POINTS**

From Solid Waste Management(Waste Generation, Waste Collection & Social Environment) perspective we have some focus points in every Union Council which are focused daily on priority.

#### **Javed Forman Container Point:**

Very important point in terms of quantity of waste and location



#### **Mehboob Park Madrisa Container Point:**

Very important point in terms of quantity of waste and location



**Bara Dari Container Point:**

Very important point in terms of quantity of waste and location



**Lalazar Container Point:**

Very important point in terms of quantity of waste and location



**6. RECOMMENDATIONS**

As Door to Door Collection is the back bone of waste management system and it is the best way to reduce waste load on containers and compactors by directly collecting waste from houses. To collect waste completely from UC-08 one mini dumper is not enough. One more mini dumper is necessary for 80-90 % Door to Door Collection efficiency.