

Özkartallar Campak Joint Venture

Solid Waste Management Plan for Dhair (UC-06)



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Map of UC 06 Dhair



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1. INTRODUCTION

Union Council – (Qaisar Park) is located in Ravi Town. Total population of UC-06 is 60932 with area 2959440 m² and predominantly low income area with unplanned settlement/infrastructure.



Fig: 1. Pictorial View of Important Areas of UC-06

1.1. IMPORTANT PLACES OF UNION COUNCIL-06

From Sanitation point of view Union Council-06 has important Places like Commercial Markets, Parks, Graveyard Important Roads, and Mosques etc.

Graveyards

- Lasoori Graveyard
- Takiaahmad shah
- Rasheed park
- Dhair graveyard

Important Roads

- Chalaran Road

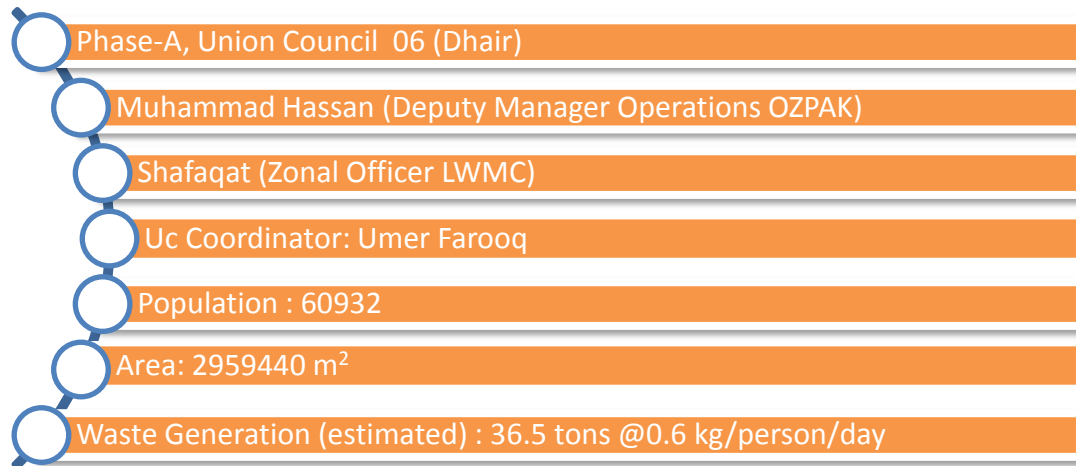
Mosques

- Jamiya masjid Bilal dhairr road
- jamiyamasjdHazrat Ali (RA) Jadda road near Yaseen chanywala
- Jamiya masjid Majeed park Majeed park road
- Madrissa Haji BasheermalikMajeed park chowk
- masjid Tajdar-e-MadinaMadholy shah colony
- jamiya masjid Noor Pracha colony
- Jamiya masjid EidgahEidgah road
- Jamiya Ali Murtazapracha colony chowk
- jamiya masjid band waliGujjarghaati
- Jamiya masjid begum wali Islam park road

1.2. SOLID WASTE GENERATION

Estimated solid waste generation is 36.5 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.



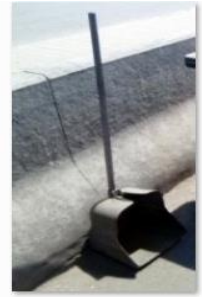
Broom



Hand Cart



Whellie Bin



Shovel



Proper Uniform with PPE's



Waste Bag



Scrapper



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 1st 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 6 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.



begum ka bagh (1).jpg



begum ka bagh (2).jpg



begum ka bagh (5).jpg



begum ka bagh (6).jpg



begum ka bagh (3).jpg



begum ka bagh (4).jpg



bendook saeen (1).jpg



bendook saeen (2).jpg



chrischan abadi bendook saeen (1).jpg



chrischan abadi bendook saeen (2).jpg



chrischan abadi bendook saeen (5).jpg



chrischan abadi bendook saeen (6).jpg



chrischan abadi bendook saeen (3).jpg



chrischan abadi bendook saeen (4).jpg



chrischan abadi bendook saeen (7).jpg



chrischan abadi bendook saeen (8).jpg



chrischan abadi bendook saeen (9).jpg



chrischan abadi bendook saeen (10).jpg



dhair road (3).jpg



dhair road (4).jpg



dhair road (1).jpg



dhair road (2).jpg



dhair road (5).jpg



dhair road (6).jpg



dhair road (7).jpg



dhair roads (1).jpg



dhair roads (4).jpg



islaam park.jpg



dhair roads (2).jpg



dhair roads (3).jpg



ithaad park.jpg



jadah road abadi (1).jpg



dhair roads (2).jpg



dhair roads (3).jpg



ithaad park.jpg



jadah road abadi (1).jpg



jadah road abadi (2).jpg



jadah road abadi (3).jpg



lateef park (3).jpg



lateef park (4).jpg



lateef park (1).jpg



lateef park (2).jpg



majeed park (1).jpg



majeed park (2).jpg



majeed park (3).jpg



majeed park (4).jpg



majeed park (7).jpg



majeed park main dhair road.jpg



majeed park (5).jpg



majeed park (6).jpg



majeed park.jpg



paraacha colony (1).jpg



paraacha colony (2).jpg



paraacha colony (3).jpg



pracha colony (1).jpg



pracha colony (2).jpg



paraacha colony (4).jpg



paraacha colony (5).jpg



pracha colony (3).jpg



pracha colony (4).jpg



pracha colony (5).jpg



pracha colony (6).jpg



pracha colony (9).jpg



pracha colony (10).jpg



pracha colony (7).jpg



pracha colony (8).jpg



pracha colony (11).jpg



pracha colony (12).jpg



pracha colony (13).jpg



shan colony (1).jpg



shan colony (4).jpg



shan colony (5).jpg



shan colony (2).jpg



shan colony (3).jpg



shan colony (6).jpg



shan colony (7).jpg



shan colony (8).jpg



shan colony (9).jpg



shan colony (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 6.

UNION COUNCIL 6	
Day	Open Plots Plan
Monday	Modhalay Shah(2 plots)
Tuesday	Majeed Park(2 plots)
Wednesday	Islam Park(2 plots)
Thursday	Lateef Park(2 plots)
Friday	baigam ka Bagh(2 plots)
Saturday	Dera MNA(2 plots)
Monday	Narowal Road(2 plots)
Tuesday	Jada Road(2 plots)
Wednesday	Behind Ghoray Shah(2 plots)
Thursday	Arshad mohalla(2 plots)
Friday	Piracha Colony Cristian Abadi(2 plots)
Saturday	Piracha Colony Muslim Abadi(2 plots)
Monday	Piracah Kothi(2 plots)
Tuesday	Itehad Park(2 plots)
Wednesday	Dhair Muslim Abadi(2 plots)
Thursday	Dhair Cristian abadi(2 plots)
Friday	Shareef Park(2 plots)
Saturday	Aray wala bazar(2 plots)
Monday	Lasoori peer(2 plots)
Tuesday	Jhalaraan(2 plots)
Wednesday	Shaan Colony(2 plots)



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-6

UNION COUNCIL 6
Shan Colony
<u>Piracha Colony Christian Abadi</u>
<u>Dhair Christian Abadi</u>
<u>Shamasbad</u>
<u>Banu kot</u>
<u>Purana Narowal Road</u>
<u>Bandoog Sain Christian Abadi</u>
<u>Ethad Park no 2</u>
<u>Lateef Park</u>
<u>Dhair Abadi</u>
<u>Miraj Park</u>
<u>Madholay Shah Colony</u>

GROUP WORKING PLAN UC-6

Union Council-6	
Day	Areas to Cover
Monday	Dhair Cristian Abadi
Tuesday	Piracha Colony Cristian Abadi
Wednesday	Piracha Colony No 2 + New Kot Jaspat
Thursday	Jadaa Road Shamsa Bad
Friday	Shareef Park Aray wala Bazar + Band Road
Saturday	Bandook Saain Cristian Abadi + Latif 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 55 waste containers are in place in Union Council at 40 different Points.
- ✓ Total waste storage capacity in 55 containers is 13.75 tons in one time lifting.
- ✓ These Waste Containers are lifted by Hydraulic Compactor Vehicles having a Compaction Ratio of 1:3.
- ✓ One large Compactor is deployed for waste collection in Union Council 6. 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

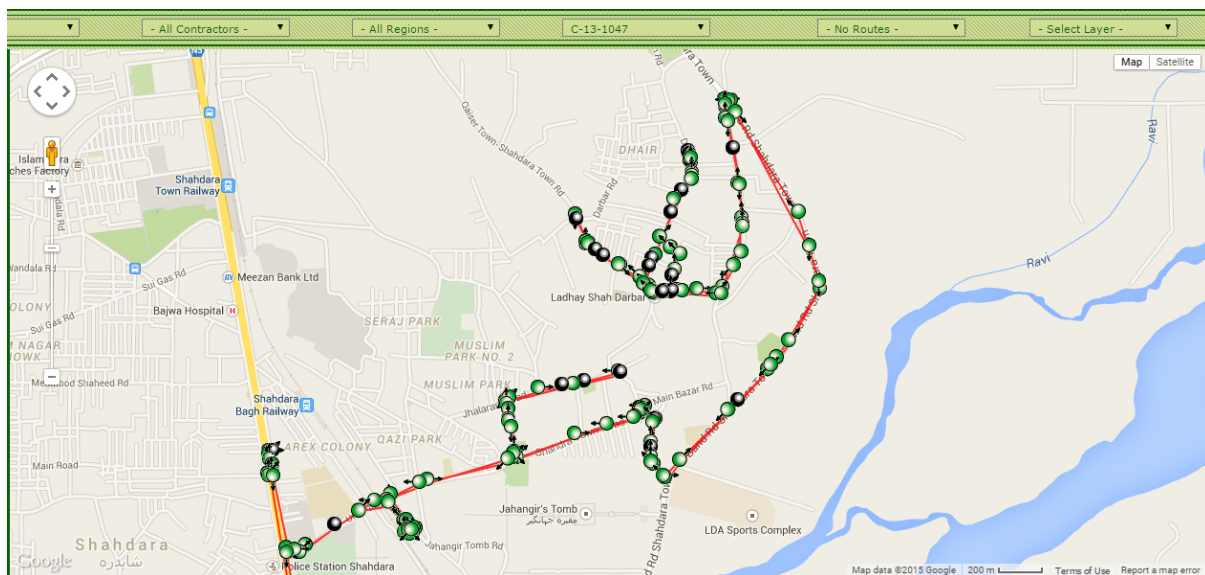
Fig: 4. Pictorial View of Vehicles & Operational Equipment's for Helpers

SOLID WASTE COLLECTION OPERATION (CONTAINER COLLECTION) DETAILS

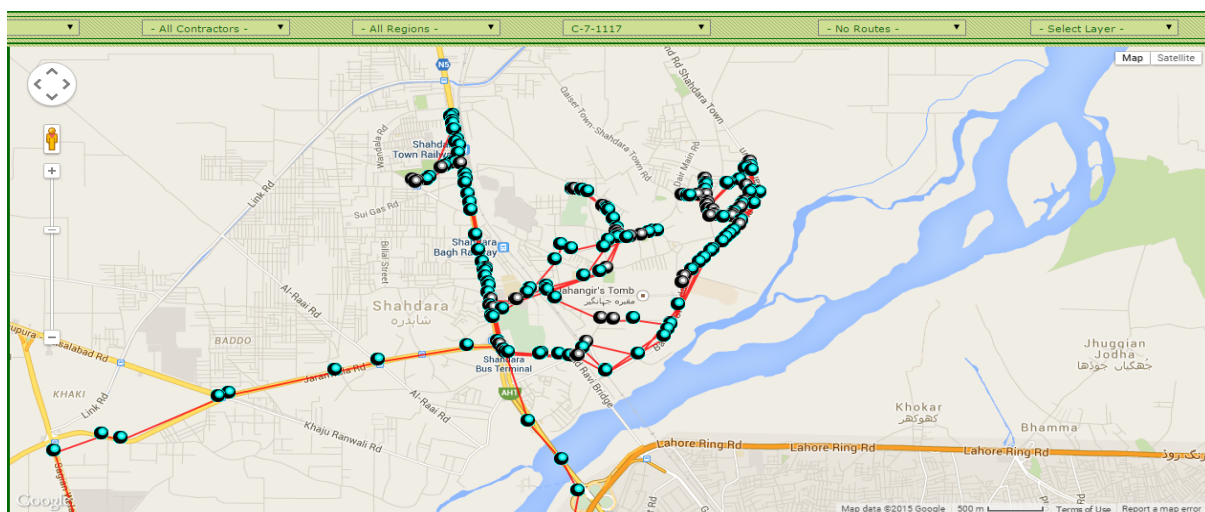
- Containers Placed: 55
- Container Points: 40
- Compactor Vehicles: C13-1080 (13m³ Compactors) & C07-1117(07m³ Compactor)
- Compactors Waste Collection: 13m³ Compactor can carry 9-12 tons of waste with one trip in 1st shift so the Collection Capacity in 1st Shift is 12 tons & 7m³ Compactor can carry 8-9 tons of waste in 2 trips.

COMPACTOR WORKING 1ST SHIFT

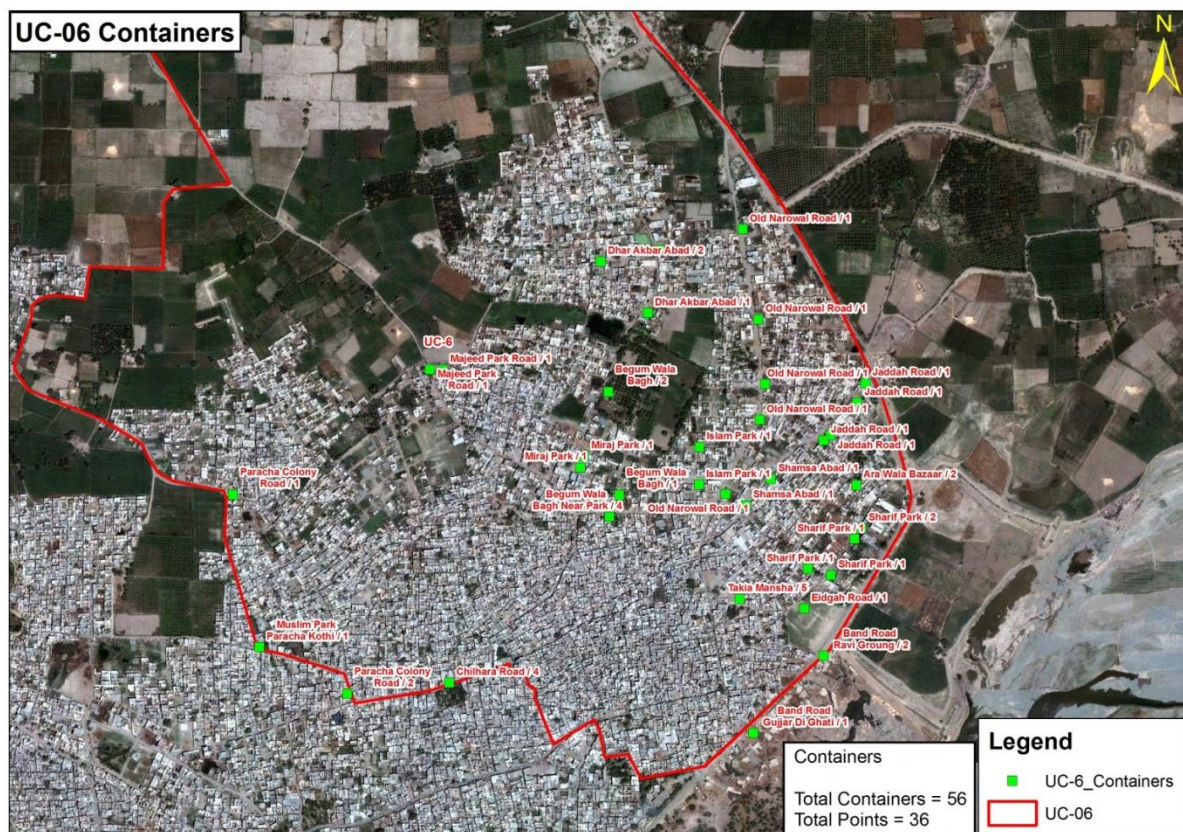
C13-1080



C07-1117



CONTAINER LOCATIONS ON MAP UC 06



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 infrastructure. But still we have successfully implemented Door to Door Service in Union Council 6 (Areas having access and infrastructure for Door to Door Collection)
- ✓ MD-56 is the code of mini dumper which is deployed for UC-06 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



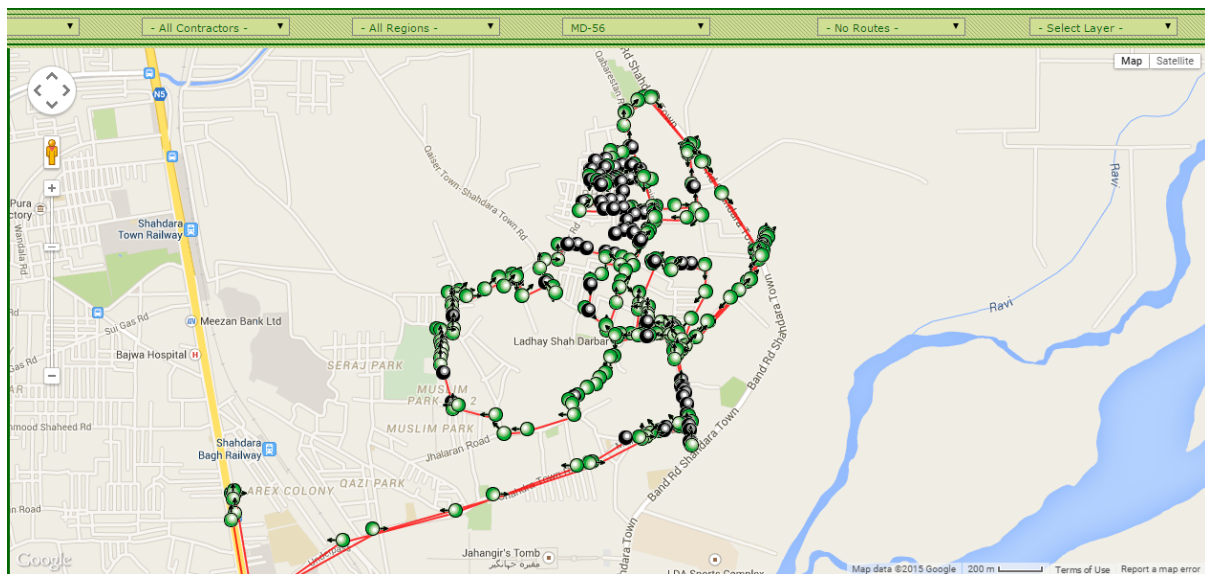
DOOR TO DOOR COLLECTION DETAILS



Mini Dumper: MD-56

Mini Dumper Driver: Pervaiz(3434229031) with 1 Helper (Properly Equipped)

DOOR TO DOOR WORKING OF MINI DUMPER IN UNION COUNCIL 6



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 1st shift. For this purpose we are using one extra mini dumper to lift waste bags daily from plots all over the shadra zone in 2nd 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.

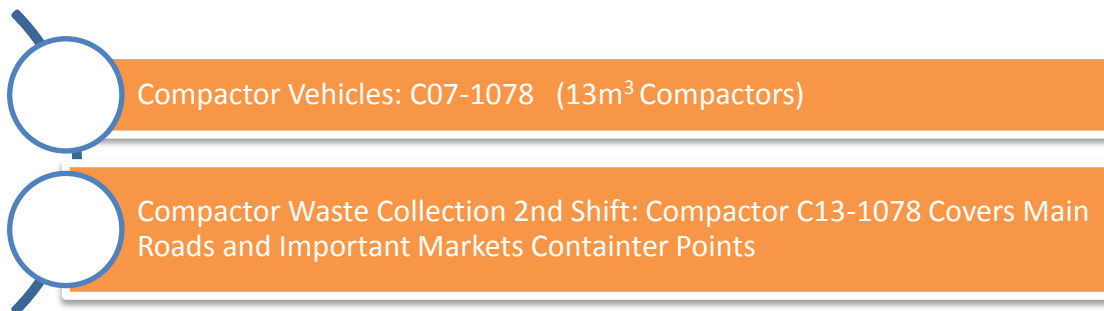
MANUAL SWEEPING OPERATION DETAILS



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 2nd 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)

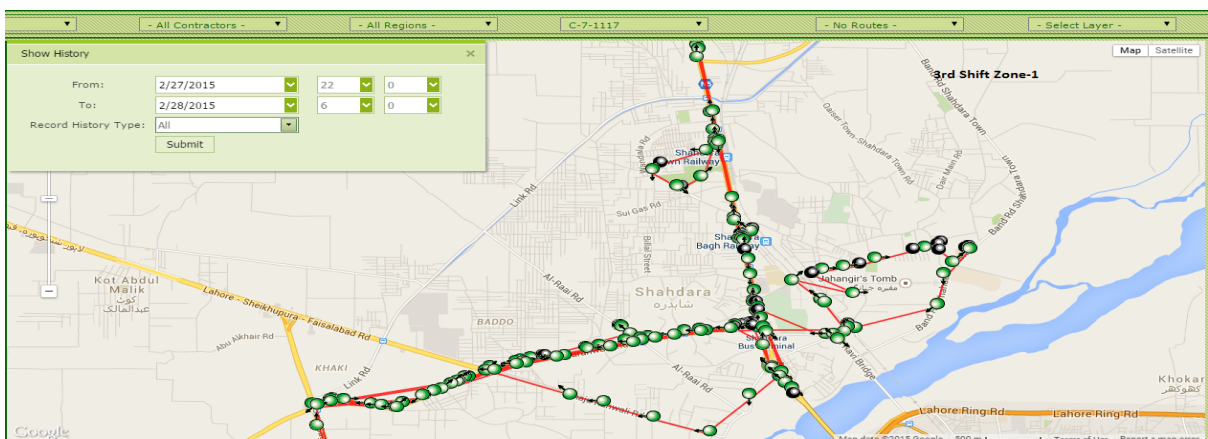
Solid waste generated is stored in waste containers which are placed all over the Union Council. These waste containers are lifted by Hydraulic Compactor Vehicles moving in the union council on a specific route for the purpose of waste collection and dump the waste at Dumping Site (Mehmood Booti).



Compactor Vehicles: C07-1117 (7m³ 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 3rd Shift



3. COMPACTOR VEHICLE STAFF DEPLOYMENT FOR UNION COUNCIL 06

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

Conservancy Staff Union Council 6, 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
06	1080	Asgher Ali(3474229158)	1078	Sabir(3214115393)	1117	Ashraf Laal(3224891824)

Table: 02. Conservancy Staff UC-06

4. UC COORDINATOR JOB DESCRIPTION/LIST OF WORK

06:00AM-06:45AM

Attendance Points:

- ✚ Manual and Android Cards Attendance Marking on these fixed attendance points
 - Ladhay Shah Point
 - Dhair Point
 - Jhalaraan point
 - Narowal Point

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 over flowed containers to Compactor and Mini Dumper drivers to attend on priority.

07:00AM-10:00AM

- ✚ Check Manual Sweeping on Main Roads and Door to Door Collection in Residential Areas with Sanitary Workers Attendance and Containers Collection.
 - Dhair Road and linked Area + 8 containers
 - Ladhay Shah Road and linked area + 5 containers
 - Narowal Road and linked area + 7 containers
 - MNA Road + 2 Containers
 - Jaada Road + 7 Containers
 - Takia Khusra Area + 5 Containers

- Ravi Ground Road + 5 Containers
- Jhalaaran Road + 6 Containers
- Piracha Colony Road + 6 Containers
- Begum Park Road + 2 Containers
- Majeed Park Abadi
- Dhair Abadi

✚ 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 one Attendance Points

11:00AM-01:30PM

✚ Divide work force in groups to cover empty areas, absent worker area, problematic areas and open plots.

✚ Send workers in group in empty areas and on open plots daily according to a fix schedule

✚ Deploy Workers at Shadra Bazar

✚ Check working in empty areas, open plots.

✚ Resolve PMS & 1139 Complaints on priority basis if any

✚ Check again main roads manual sweeping, container collection & Open Heaps Points including some problematic container points

- Dhair Road and linked Area + 8 containers
- Ladhay Shah Road and linked area + 5 containers
- Narowal Road and linked area + 7 containers
- MNA Road + 2 Containers
- Jaada Road + 7 Containers
- Takia Khusra Area + 5 Containers
- Ravi Ground Road + 5 Containers
- Jhalaaran Road + 6 Containers
- Piracha Colony Road + 6 Containers
- Begum Park Road + 2 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

- Ladhay Shah Point
- Dhair Point
- Jhalaraan point
- Narowal Point

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.

Takia Khusra Containers Point:

Very important point in terms of quantity of waste and location



Chalaraan Containers Point:

Very important point in terms of quantity of waste and location



Ladhay Shah Containers Point:

Very important point in terms of quantity of waste and location



Weekly Markets are also very important in this union council and cleanliness is maintained here.

Note: In UC-6, we have 5 such points where more than 1 container is deployed and all are our focus points.

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-06 one mini dumper is not enough. One more mini dumper is necessary for 80-90 % Door to Door Collection efficiency.