ÖZKARTALLAR CAMPAK JOINT VENTURE

Sikandriya workshop 2



# Solid Waste Management Plan For Awan Town (Uc-110)

By

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## 1. Facts

SR.N	Description				
1	Phase	C			
2	UC	110 –Awan Town			
3	Area Manager / Shef OZPak	Javeed Iqbal/usman			
4	Zonal Officer LWMC	Usman			
5	Population	59090			
6	UC Area	1889166 m <sup>2</sup> (middle income)			
7	Waste Generation (estimated)	38.40Tons/day			

# 2. Operational Arrangements / Resources Deployed

# 2.1 1<sup>st</sup> Shift Arrangement – 6 AM to 2 PM

Manual Sweeping					
Sanitary Supervisors	3				
Sanitary Workers	67	7			
Wheelie Bins	11				
Hand Carts	28	3			
Special Gang					
Sanitary Workers	10	)			
Sanitary Supervisor	2				
Toyota Hilux	1				
Note: Special Gang solely o	n Shef / ZO'	's disposa	I to attend important complaints and to		
work for absent workers bea	ts of the day	y .			
Centralize Gang					
Sanitary worker	20				
Sanitary Supervisor	2				
Mini Bus	1				
also solely on shef / ZO'S disposal to attend important complaints and to work for absent workers beats of the day.					
Containers Collection					
Containers Collection	59				
	59 38				
Containers Placed Containers Points		1 trip, ap	oprox. 8 to 10 tons		
Containers Placed	38		oprox. 8 to 10 tons approx. 4 to 5 tons in each trip)		
Containers Placed Containers Points	38 C-1063				
Containers Placed Containers Points Compactors	38 C-1063 1131				
Containers Placed Containers Points Compactors Drivers Helpers	38 C-1063 1131 2				
Containers Placed Containers Points Compactors Drivers Helpers D-T-D Collection	38 C-1063 1131 2				
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Containers Placed Containers Points Compactors Drivers Helpers <b>D-T-D Collection</b> Mini Dumpers – Suzuki Pickup Driver	38 C-1063 1131 2 4 4				
Containers Placed Containers Points Compactors Drivers Helpers <b>D-T-D Collection</b> Mini Dumpers – Suzuki Pickup Driver Helper	38 C-1063 1131 2 4 4 1 1 1	2 trips, (	approx. 4 to 5 tons in each trip) MD-46		
Containers Placed Containers Points Compactors Drivers Helpers <b>D-T-D Collection</b> Mini Dumpers – Suzuki Pickup Driver Helper	38 C-1063 1131 2 4 4 1 1 1	2 trips, (	approx. 4 to 5 tons in each trip)		

# 2.2 2<sup>nd</sup> Shift Arrangement - 2 PM to 10 PM

Manual Sweeping - Special Gang				
Shift In-charge	1			
Sanitary Workers	10			
Driver	1			
Toyota Hilux - 2013	1			
<b>Note:</b> for taking care of whole Zone-21, attending major roads, markets, 1139 complaints and to coordinate compactors and ensure containers collection.				
Containers Collection				
Compactors	1	C-1134, 1 trip (approx. 8 to 10 tons)		
Note: attending 2 UC's 110 & 112				

#### 2.3 3rd Shift Arrangement – 10 PM to 6 AM

Containers Collection				
Compactors	1	C-1019, 1 trip (approx. 8 to 10 tons)		
Driver	1			
Helper	2			
Note: Attend all UC's				

## 3 Introduction

Union Council – 110 (Awan Town) is located in Allama Iqbal Town. Total area of the UC is 1889166  $m^2$  with population of 59090<sup>1</sup>. This area is predominantly middle income area with planned settlement.

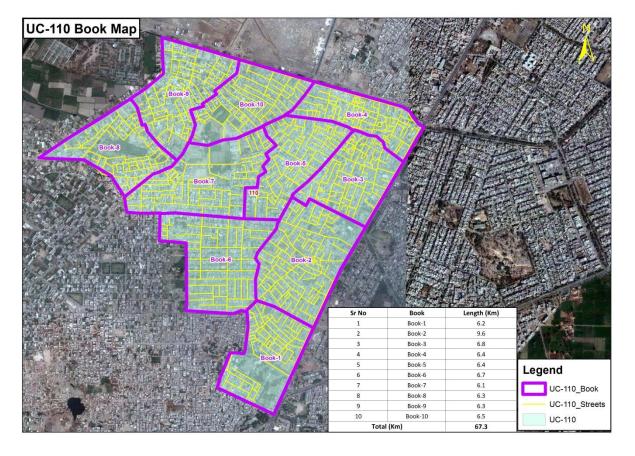


Figure 1: Map of UC 110 Awan Town

## 4 Solid Waste Generation

Estimated solid waste generation is 38.40 tons per day @ waste generation rate of 0.65 kg/person/day.

## 5 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:

<sup>&</sup>lt;sup>1</sup> Punjab Development Statistics – 2011, Bureau of Statistics, Govt. of the Punjab

## 6 Street Sweeping and Waste Collection by Sanitary Workers

#### 6.1 Team Division

- 10 sanitary workers deployed in each Team and each sanitary worker has his own defined beat.
- Solid waste is collected by sanitary workers from streets & households and hauled to container by wheelie bins / hand carts.
- Waste bags also used for roads sweeping

## 7 Solid Waste Storage

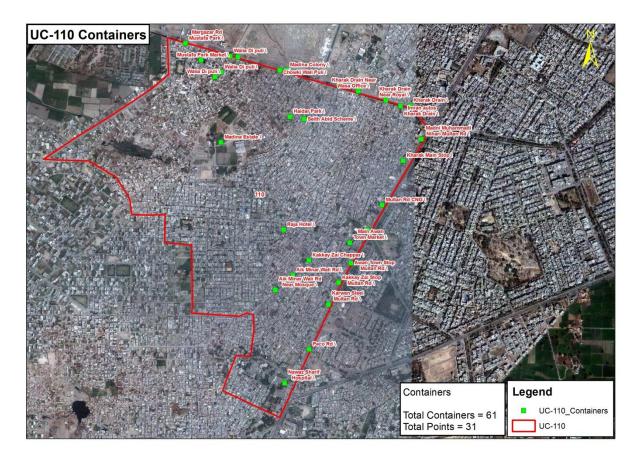
#### 7.1 Waste Storage Facility

- Currently 61 waste storage containers are placed at 38 different points.
- Storage capacity is 16 tons in one time lifting
- Lifting is operational in 3 times

## 7.2 Existing Points of Containers

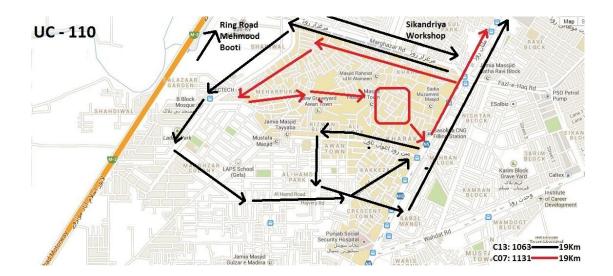
SR.	Location
1	80 feet road near sadaat dawa khana
2	80 feet road near sadaat dawa khana
3	80 feet road near mansha stop
4	Ganda naala Kharak Chiniot estate
5	Mustafa Park dean poora ganda naala
6	Malik associates CMP school
7	Karachi wali pulli ganda naala kharak
8	Chowki wali pulli
9	Ganda naala infront of gulshan store
10	Toka chaudry karamat ganda naala
11	Islam bakers haider park deen pura
12	Ejaz pakwaan center Dabann pura
13	Abubakar store daban pura
14	Seth abid scheme
15	Kharak ganda naala masjid Elahe Hadis
16	Ganda naala kharak near wasa office
17	Ganda naala kharak near Royal bakery
18	Ganda naala kharak near Bismillah chiken
19	Ganda naala kharak near sethi pulli
20	Masjid 1 minaar wala road kakay zai
21	Kharak main bazar
22	Anwar town near masjid hussain
23	Kakay zai chappar
24	Haji sarfraz hawaili peco raod
25	Peco road mandi stop
26	Peco road plot
27	Social security hospital
28	Jinnah block link road awaan town
29	Main multan road chuungi
30	Nadeem town Crescent town
31	Main multan raod Karwan
32	Main multan roAd Kakay zai
33	Main multan road Awan town
34	Heco pump Multan road
35	Main multan road near Benz bakery
36	Main multan road near Baber shadi hall
37	Muhammadi Nehari House Main multan road
38	Meer pura Ahmed Block Awan town

# **Existing Points of Containers**



# 8 Solid Waste Collection & Transportation

#### 8.1 Route for Compactor



# 8.2 Staff Deployment for Compactor Vehicle

	Compactors Zone-21									
			Overa	all Incharge	e = Junaid (0300	-8482219)				
Shift		or = MEHMOO 13-4805842	D ASHRAF	Shift Supervisor = MEHMOOD ASHRAF (0313-4805842)			Shift Supervisor			
		1st shift			2nd shift			3rd shift		
UC	Vehicle No.	Driver Name & Mobile	Name of Helpers	Vehicle No.	Driver Name & Mobile	Name of Helpers	Vehicle No.	Driver Name & Mobile	Name of Helpers	
	1063	M. lqbal (0324- 4892866)	Mukhtar Shaukat	1134 (Cover all UC's)	Jaan Muhammad (0323-	Zafar Ghulam Arif				
110		1052000			4896081)	Aslam			Salamat	
	1131	Amjad Ali (0333-	Tariq Anayat	1065	Safdar Ali (0336-	Rafaqat		M. Yousif (0301- 4647922)		
		4059741)	Hashim s/o Laal		7860712)	Shareef Gulam				
111	1132	Abdul Rasheed (0344-	Sunny	1134	Waseem Imran (0323-	Anwar	1019 (Cover all UC's)			
		4588809)	Younis		8841521)	Allah Ditta			Shameer	
		Asif Anwar	Rafiq		1065 Same Driver					
	1060	(0322- 4848992)	Aslam			Same				
112		Asif	Nasir	_		Helpers				
	1135	Mehmood (0323- 8629348)	Ghulam							
		Malik	Rasheed							
113	1133	Shahid (0321- 8874549)	Jabran	an					Amir	
115	1134	Iftikhar	Shan	1134	1134 Same Driver	Same	1060 (Cover all UC's)	Imran Sadique (0311-	AIIII	
		Ahmad (0321- 4765477)	Shareef			Helpers				
		Aftab Alam	Marakas	-				Monday Tuesday	4330054)	
114	1066	(0324- 4458940)	Shehzad						Tariq	
	1065	Nasir Ali	Bashir			Same	1		Ditta	
117		(0323- 8040230)	Shakeel	1065	Same Driver	Same Driver	Helpers	;		
	1004	Shahid Ali	Shehbaz							
All	1084	(0333- 4949699)	Amanat							

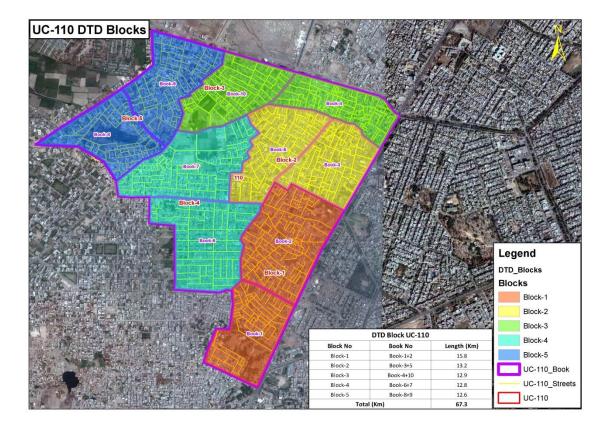
## 9 Door To Door Waste Collection

#### 9.1 System for D-T-D Waste Collection

- 1 Pickup for door to door waste collection
- Waste collected by pickup will be unloaded into nearby Compactor or transfer station.
- Compactors are also collecting waste if found in waste bags on road or in front of home or shop

Block	Major Areas/ Mohalla's	Timings
Block 1	6:00 am to 8:00 am	
Block 2	8:00 am to 11:00 am	
Block 3 Waseem Block Kharak Hassan Town Awan Town Multan Road, Jinnah Block Link Road Awan Town		11:00 am to 12:00 pm
Block 4 Kakkey Zai Chapar Awan Town Kakkey Zai Pind Awan Town Masjid Noor Aik Minar Wala Road		12:00 pm to 1:00 pm
Block 5 Bilal Town Nadeem Town, Main Bazar Peco Road Multan Road		1:00 pm to 2:00 pm

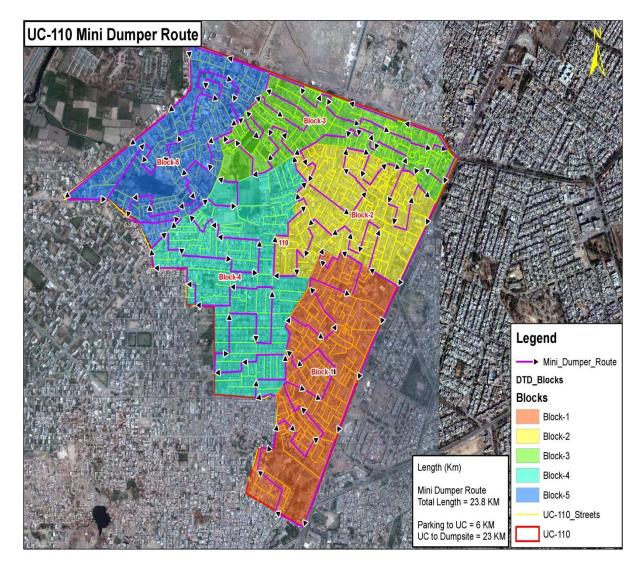
### **DTD Blocks Map**



**DTD ROUTE MAP** 







# **10 2nd Shift Operational Arrangement**

Manual Sweeping - Special Gang				
Shift In-charge	1			
Sanitary Workers	15			
Driver	1			
Toyota Hilux – 2013	1			
<b>Note:</b> for taking care of whole Zone-21, attending major roads, markets, 1139 complaints and to coordinate compactors and ensure containers collection.				
Containers Collection				
Compactors	2	C-1134, 1 trip (approx. 8 to 10 tons)		
Note: attending 2 UC's 110 & 112				

## **11 3rd Shift Operational Arrangement**

Containers Collection				
Compactors	1	C-1019, 1 trip (approx. 8 to 10 tons)		
Driver	1			
Helper	2			
Note: Attend all UC's				

#### **12 Major Areas**

- Main multan road chuungi
- 80 feet road kharak ganda nala
- Peco road mandi stop
- Kharak main bazar
- Awan town

## **13 Problematic Areas**

#### Kharak Naala:

Kharak nala is one of main problematic area of UC 110.

## **Observations:**

- Containers were over flowed in this area.
- Solid waste around the area was observed.





#### **Recommendations:**

- More containers should be placed to cover overflowing of waste from the container.
- Gang activity should be accelerated to clean surrounding area of kharak nala.

## Main Peco Road.

### **Observation:**

• Mainly small heaps were observed after 9 AM.



## **Recommendation:**

• Worker should be instructed to lift these heaps by hand carts or pack the waste in the bags.

## **14 Open Plots:**

Almost in all UC's of zone open plots are exist. These open plots are major hurdle in cleaning operation. To maintain the cleaning of open plots is quiet hard because of the immature attitude of residence and walking people (non-residence).

Solid waste types:

Different solid waste types are observed in these open plots.

- Inorganic
- Organic
- C & D waste
- Green Waste
- Animal waste

## **Measurements:**

To maintain the cleaning of open plots an operational strategy has been developed and also **door to door waste** collection has been focused more to make open plots cleaning operation more effective.

## Group activity:

15-20 people group activity has arranged on regular basis to cover-up the cleaning of open plots.... Machinery is also used to clean up where an open plot cannot be handled with manual sweeping.



## **15 Public Awareness**

- Distribution of leaflets along-with bags distribution has been done as per contract.
- Announcement of waste collection when pickup will move in the area
- Involvement of public representatives in mass awareness campaign