

Standard Operating Procedures for Solid Waste Collection Unit, 2020

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TT/SW/001	SOP for Solid Waste Collection	1.0	6

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6 th August 2020	11 th August 2020	2 years

Function	Name	Designation	Signature
Prepared by	Ugyen Tshewang	Head, Solid Waste Unit	
Verified by	Sonam Desel	Chief Environment Officer	
Approved by	Kinlay Dorjee	Thrompon	

Distribution:	Whole Thimphu Thromde
Location	Thrompon's Office

1. Scope

This SOP describes the procedure for solid waste collection within Thromde during lockdown.

2. Objective

The objective of this SOP is to ensure proper disposal of solid waste and clean environment within Thromdey

3. Responsibility

It is the responsibility of the Solid Waste collection unit of Environment Division to carry out the task.

4. Principle

Clean and safe environment for happy and healthy lifestyle

5. Requirements

- 5.1. Garbage Trucks (*Details attached as annexure I*)
- 5.2. Safety Gears (Mask, Face shields, Gloves, Boots, etc.)
- 5.3. Megaphones
- 5.4. Hand sanitizers

6. Procedure.

General Waste Collection Service

1. All waste generated by the households shall be considered as municipal wastes. These municipal wastes should not be mixed with hazardous waste generated from the isolation/quarantine and health care centers.
2. The municipal wastes generated by households should be segregated into wet and dry wastes.
3. The Head of Operation Desk and Unit Head must brief the identified team of their roles during lockdown

During lockdown

1. Permit card issuance for vehicles and persons must be worked on first with the card issuance unit of RBP by the waste focal Official of Thromde
2. Before going in the field, wear hand gloves, face mask and shield, boots, etc.

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3. Brief the drivers, waste handlers and *dessung* on duty for day's work and safety protocols by the Operation Desk/Unit Head or Focal Officials
4. Disperse for waste collection at designated place as per schedule (*Schedule attached as an annexure II*)
5. Using megaphone, inform public of waste collection services and health safety protocol compliances
6. Garbage truck to wait in front of buildings and let people come to dispose wastes. Ensure physical distance, wearing mask and go straight home after disposal
7. If public wants to store the wastes, the wastes must be securely stored in secured areas for collection from where the waste handlers will pick up. This must be communicated through media
8. Dispose collected waste to the land fill
9. Follow self-containment protocol developed by MoH

Hazardous waste Collection

1. The wastes from health facilities, epidemiologically marked red zones and quarantine centers are treated as hazardous wastes
2. The waste collector must wear proper PPEs and observe other health safety protocols
3. The hazardous waste must be sealed well in the plastics and will be picked up by the designated vehicle with trained waste handlers
4. The hazardous wastes are then transported to incineration plant at Memelhakha landfill which is being operated by the Ministry of Health.
5. In case, the incineration plant in Memelhakha which is being installed by Ministry of Health (MoH) is not operational, the incinerator in the Thimphu crematorium shall be used
6. Currently the hazardous wastes are collected by Greener Way
7. Each waste collection contractor is required to keep one vehicle as backup for hazardous wastes collection

7. Safety

1. In consultation and with support of Ministry of Health, brief and train all waste handlers (staff of Thimphu Thromde, municipal waste collection service providers, Memelakha landfill care

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takers) on emergency response for safe management of municipal wastes starting from waste generation, storage, collection and disposal.

2. Ensure that staff and identified waste handlers have Personal Protective Equipment (PPE) to protect transmission of COVID 19. PPE shall include: Coverall, N-95 respirator, surgical masks, Goggles/face shield, Inner gloves (non-sterile medical gloves), Outer gloves (utility gloves), Plastic apron, Gumboots.
3. Frequently wash hands before, during and after collection of wastes
4. If there are no hand-washing facilities, use hand sanitizers frequently

8. Documentation

1. Make sure to scan druktrace or complete the Daily attendance register where ever you visit if available or maintain a log book
2. Report any issues/complaints to the head of the unit

9. References:

1. MoH Health safety protocol
2. *“Management of Biomedical and Hazardous Waste, June 2020”*.

10. People to be contacted

1. Yeshi Wangdi – Head, Operation Desk – 77305005
2. Sonam Desel, Head, Essential Environmental Service Unit – 17758958
3. Ugyen Tshewang- Team Leader, Solid Waste Collection Service – 17611084
4. Karma Yonten – CEO, Greener Way (South) – 17111213
5. Jyoti Gurung- CEO, Clean City (North) – 17807636
6. Ugyen Lama – CEO, Green Bhutan Service (Central) – 77262453

Annexure I- Vehicle and Human Resource Deployment for Solid Waste Collection

1. **Thimphu Thromde for both Hazardous and Municipal Wastes**

Sl/No	Name	Role	Contact number
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1	Ugyen Tshewang	Focal Personnel	17611084
2	Singye Dorji	Focal Personnel	17547179
3	Pema	MTO	77235539

2. Clean City (North)

SI/No	Vehicle type	Vehicle number	Driver and contact	Handyboy and contact
1	Compactor	BG-1A-0650	Mr. Purna Bdr Tamang, 17256369	Mr. Suraj Gurung, 77255335 Mr. Prithilal Gurung, 17920795
2	Compactor	BG-1A-0759	Mr. Krishna Bdr Chhetri, 17821335	Mr. Kumar Sherpa, 17702658 Mr. Pema Gyeltshen 17301912
3	Compactor	BG- 1- 0341	Mr. Prem Kumar Gurung, 77260686	Mr. Padam Bdr Tamang, 17294663 Mr. Upendra Adikari 17700185

3. Greener Way: Central

SI/No	Name	Role	Contact No.	Vehicle Number
1	Karma Yonten	Driver	17111213	BP-1-A 0091 (DCM)
2	Rinchen Wangdi	Driver	77202383	BP-1-A 0118 (DCM)
3	Namgay Thinley	Handy boy	17999671	
4	Dawa Dema Sherpa	Handy boy	17486791	
5	Leki Wangmo	Handy boy	17456814	
6	Rinzin	Handy boy	17339736	

4. Green Bhutan Services: South

Vehicle No.	Vehicle Type	Driver Name	Contact No.	Handy Boy Name	Contact No.
BG-4A-0195	Tata Compactor	Mani Kumar Rai	77219151	Bal Bdr. Gurung	17440271
BP-1-A0100	DCM	Prakash Chhetri	17438524	Chabilal Chhetri	17826916

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BP-1-B8929	Bolero	Ugyen Lama	77262453	Sonam Tshering Tamang	17422446
BP-2-A3316	Eicher Jumbo	Mahindra Gurung	17605959	Suman Rai	17450075

Note:

- i. All the waste collections are scheduled in the morning except on Friday for Kawajangsa - Zilukha area, Evening.
- ii. Dumpsters are placed in different areas: Dechencholing School 1, Cremation area - 2, Dechenphodrang Lhangkhag 1, Tashichhodzong - 1. Collected as and when full – Focal Driver: Mr. Purna Bdr Raika, Contact # 17931947

Annexure II- Waste Collection Schedule

Waste collection Schedule during LOCKDOWN For Central (Greener Way)				
Days	Areas	Waste Type	Vehicle Details	Staff Details
Tuesday	Changbangdu	Wet Waste	BG-1-A0665	Nandu Ram(#77617911)
	Hospital Waste(Drump)	Mixed Waste		
	L/Motithang	Wet Waste	BG-1-A0798	Suk Bdr(#17359964)
	Norzin Lam	Dry Waste	BG-1-A0797	Kharha Bdr(#77456200)
	Chang Lam	Dry Waste	BG-1-A0794	Dhoj Bir(#17689084)
Wednesday	Changgangkha	Wet Waste	BG-1-A0665	Nandu Ram(#77617911)
	Changzamtog	Wet Waste	BG-1-A0794	Dhoj Bir(#17689084)
	U/Motithang	Dry Waste	BG-1-A0798	Suk Bdr(#17359964)
	Changgedaphu	Dry Waste	BG-1-A0797	Kharha Bdr(#77456200)
	Thrusday	L/Motithang	Dry Waste	BG-1-A0798
Friday	Hospital Police Camp Area	Dry Waste	BG-1-A0794	Dhoj Bir(#17689084)
	NPPF Colony	Wet Waste	BG-1-A0797	Kharha Bdr(#77456200)
	YHSS Area	Wet Waste	BG-1-A0797	
	Hospital Waste(Drump)	Mixed Waste	BG-1-A0665	Nandu Ram(#77617911)
	Friday	U/Motithang	Wet Waste	BG-1-A0665
Saturday	Changgangkha	Dry Waste	BG-1-A0798	Suk Bdr(#17359964)
	Changbangdu	Dry Waste	BG-1-A0797	Kharha Bdr(#77456200)
	Norzin Lam	Wet Waste	BG-1-A0797	Kharha Bdr(#77456200)
	Chang Lam	Wet Waste	BG-1-A0794	Dhoj Bir(#17689084)
	NPPF Colony	Dry Waste	BG-1-A0798	Suk Bdr(#17359964)
Saturday	YHSS Area	Dry Waste	BG-1-A0665	Nandu Ram(#77617911)
	Hospital Waste(Drump)	Mixed Waste		

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Sunday	Hospital Police Camp Area	Wet Waste	BG-1-A0665	
	Changgedaphu	Wet Waste	BG-1-A0797	Kharha Bdr(#77456200)
	Changzamtog	Dry Waste	BG-1-A0798/BG-1-A0794	Suk Bdr(#17359964)
MONDAY- DAY OFF				

Waste collection Schedule during LOCKDOWN for North Zone (Clean City)		
BG-1A-0795 (Krishna Bdr Chetrri- 17821335- Driver)		
Days	Area	Waste
Monday	Taba	Dry waste
Tuesday	Dechencholing	Dry waste
Wednesday	DAY OFF	
Thursday	Jungshina - pamtsho	Dry waste
Friday	Bebana-Hejo	Kitchen waste
Saturday	Bebana-Hejo	Dry waste
Sunday	Taba	Kitchen waste
BG-1-0341 (Prem Kumar Gurung- 77260686- Driver)		
Days	Area	Waste
Monday	Jungshina - pamtsho	Kitchen waste
Tuesday	Kawajangsa- zilukha	Dry waste
Wednesday	DAY OFF	
Thursday	Dechencholing	Kitchen waste
Friday	Kawajangsa- zilukha	Kitchen waste
Saturday	Langjophakha	Dry waste
Sunday	Langjophakha	Kitchen waste

Waste collection schedule during LOCKDOWN for South Zone (GBS)

Days	Areas	Waste type	Vehicle details	Staffs Details
Monday	DAY-OFF			Mr. Mani Kumar Rai(Driver)
Tuesday	Changjiji below express high way	Dry waste	BG-4A-0195 Compactor truck	Contact no. 77219151
Wednesday	Changjalu & olakha Area	Dry waste		
Thursday	Olakha Workshop	Dry waste		

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Friday	Lungtenphu & Lubding area	Wet waste		Mr. Prakash Chhetri (Driver)
Saturday	Babesa E4 Zone	Wet waste		Contact no. 17438524
Sunday	Simtokha			Chabilal Chhetri(HandyBoy)
Days	Areas	Waste type	Vehicle details	Staff details
Sunday	Semthokha Area	Wet waste		Mr. Prakash Chhetri (Driver)
Monday	DAY-OFF			Contact no. 17438524
Tuesday	Babesa Lap	Dry waste		Chabilal Chhetri(HandyBoy)
Wednesday	Okakha Area	Dry waste		Mr.Mani Kumar Rai(Driver)
Thursday	Serbithang IT park	Dry waste		Bal Bdr Gurung(Handy Boy)
Friday	Changjiji below express high way	Wet waste	BP-1-A-0100	Mr.Mani Kumar Rai(Driver)
Saturday	Changjalu Area	Dry waste		Mr. Bal Bdr Gurung (handy)
				Contact no. 17440271