**SOP for General Waste Management for COVID-19**

**1. GENERAL INSTRUCTIONS**

1. All waste produced during the covid-19 in and around the Quarantine and isolation Facility must be considered as general waste and should not be mixed with infectious waste.
2. Brief and train the staffs who are assigned in handling and disposal of waste management.
3. Ensure staffs wear gloves and mask when handling and disposing waste.

**2. INSTRUCTIONS ON WASTE DISPOSAL FOR FACILITIES WITH LANDFILL SITES**

1. Clean all the surroundings and collect the waste in dustbins provided.
2. When the dustbins is 2/3 rd full, empty it to the dump truck.
3. Transport the waste in dump truck/tractor available to the nearest disposal site.

**3. PROCEDURE FOR BURNING OF GENERAL WASTE**

1. Remove/cut lid of an empty oil barrel (standard size)
2. Cover 30 to 40 cm of barrel with sand
3. Put waste on top of sand and burn
4. Burn waste away from households, health care facilities

**4. PERSONAL PROTECTIVE EQUIPMENTS**

A person responsible for disinfecting and decontaminating a contaminated area should be geared in PPE which include:

1. Coverall
2. N-95 respirator
3. Surgical masks
4. Goggles/face shield
5. Inner gloves (non-sterile medical gloves)
6. Outer gloves (utility gloves)
7. Plastic apron
8. Gumboots

**5. Criteria for use of PPE to disinfect and decontaminate different facilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **PPE requirement** | **Quarantine Facilities** | **Isolation room (ICU)** | **Vehicles & other carriers** |
| Inner gloves | x | √ | x |
| Outer gloves | √ | √ | √ |
| Plastic apron | x | √ | x |
| Coverall | x | √ | x |
| N95 Mask | x | √ | x |
| Surgical mask | √ | x | √ |
| Googles/face shield | x | √ | x |
| Gumboot | x | √ | x |

1. **Disinfectants**
2. The preparation of disinfectants will be done by the Health Officials.
3. The disinfectants used in Quarantine and Isolation facilities are 0.5 percent bleaching (sodium hypochlorite) solution
4. 2 percent glutaraldehyde solution (if bleaching solution not appropriate to prevent corrosion of surfaces)
5. 70 percent alcohol
6. **Waste disposal from isolation room**
7. Waste generated from the isolation room should be treated as infectious.
8. Biohazard bag should not be filled beyond ¾ of its capacity.
9. Use double bag for biohazard wastes and secure it tightly.
10. Spray disinfectant on waste plastic bag using 0.5 percent bleaching powder and leave it for 20 minutes.
11. The ward boy will collect all plastic bags in larger ones ࿇ Spray disinfectant over the large plastic bag and leave it for 20 minutes.
12. Waste from the isolation room should be sent for incineration or autoclaving and disposal.

**8**. **Waste Disposal from quarantine facilities at Dzongkhag Level**

1. All the waste is to be handled and managed as per the Waste Prevention and Management Regulation 2012.
2. All general waste to be collected as usual by the compactor and shall be disposed to landfill site.
3. All waste generated from quarantine centers shall be treated as infectious waste.
4. All infectious waste shall be handled as per Health SOP.
5. Waste bin with biohazard bag will be provided to the quarantined individuals.
6. All waste should be kept in front of the door by the quarantined individuals.
7. The waste handlers will spray disinfectant on waste plastic bag and keep for 20 minutes.
8. The waste handlers will collect all the waste and spray disinfectant and keep for 20 minutes.
9. The waste handlers will collect the waste into the designated vehicle and transport to designated facilities
10. All the infectious waste shall be sent for incineration or autoclaving and disposal.
11. The workers for infectious waste shall be trained by Health Officials.

**9. Waste disposal from quarantine facilities at Gewog Level**

1. All General Waste to be collected as usual from the Gewog area and dispose to garbage pit.
2. All general waste to be handled and managed as per Waste Prevention and Management Regulation 2012.
3. All waste generated from quarantine centers shall be treated as infectious waste.
4. The infectious waste shall be handled and cared as per the Health SOP.
5. Waste bin with biohazard bag will be provided to the quarantined individuals.
6. All waste should be kept in front of the door by the quarantined individuals.
7. The waste handlers will spray disinfectant on waste plastic bag and keep for 20 minutes.
8. The waste handlers will collect all the waste and spray disinfectant and keep for 20 minutes.
9. The waste handlers will collect the waste into the designated vehicle and transport to designated facilities.
10. The infectious waste shall be transported to the autoclave facility in designated vehicle.
11. The infectious waste shall be sent to autoclaving and disposal.

**10. TERMS OF REFERENCE**

**a. Roles and Responsibilities of Coordinator:**

1. To coordinate the staff for safe management of solid waste
2. To mobilize the workers into all the quarantine areas.
3. To monitor and update the progress of waste management to Secretariat office
4. To give briefings and trainings to the staffs.
5. To provide Personal Protective Equipment’s to all the staffs
6. To maintain effective and efficient waste management in all quarantine areas

**b. Roles and responsibilities of staff:**

1. To work within the respective designated quarantine facilities.
2. To work in consultation with health workers.
3. To clean all the surroundings and nearby areas of the designated facilities.
4. To segregate waste into infectious and non-infectious waste in consultation with health officials.
5. To collect, store waste from the designated area and transport it to the disposal or landfill sites.
6. To handle all kinds of solid waste in and around the Facilities.
7. To keep quarantine facilities clean and safe.

**c. Roles of Driver:**

1. Deliver timely collection and disposal of waste.
2. Collect the waste from designated quarantine center.
3. Clean and disinfect vehicles in consultation with health officials.

**d. Timing of collection:**

1. Dumper Truck (BG-1A-0808): Every Day Collection from 9AM
2. Dumper Truck (BG-4A-0203): Every Day Collection at Dewathang Area from 2PM
3. Tractor (BG-4-A-0013): Every Day collection towards SJMSS & SJPS area from 9AM

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl.No** | **Name of Driver** | **Vehicle No.** | **Contact No.** |
| 1 | Dorji Tshering | (Compactor) BG-1A-0808 | 17811625 |
| 2 | Pema Gyelpo | (Compactor)BG-4A-0203 | 17392929 |
| 3 | Prem Bahadur | (Tractor) BG-4A-0013 | 17948539 |

**11. HUMAN RESOURCE FOR WASTE MANAGEMENT**

All Dzongkhag & Thromde ESP& GSP, Red Cross Members and CBSS/RENEW/MSTF Members are the volunteers for Waste Management.

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| **Sl/No** | **Name of the Person** | **Role** | **Contact No.** | **Area** |
| 1 | Mr.Sonam | Mobilize compactor/tractor | 17938744 | Core Town |
| 2 | Mr.Dorji Gyelpo | Coordinate and mobilize Thromde staff | 17349044 | Core and Dewathang Area |
| 3 | Tashi Wangchuk | Cleaning | 77878553 | TD Guest House |
| 4 | Phuntsho Wangmo A | cleaning | 17569726 |  |
| 5 | Nima A | Cleaning | 77280339 |  |
| 6 | Phuntsho Wangmo B | Cleaning | 17812675 |  |
| 7 | Wangmo |  | 179308556 |  |
| 8 | Kencho Pem |  | 77434329 |  |
| 9 | Nima B |  | 17833217 |  |
| 10 | Kinden Dema | do | 17575791 | TD Guest House |
| 11 | Zam |  | 77445149 |  |
| 12 | Choni Zangmo |  |  | -Do- |
| 13 | Nidup Dorji |  | 17256996 | -do- |
| 14 | Tashi Dorji | Cleaning | 77879244 | -do- |
| 15 | Yangchen Lhamo |  | 77445710 | Tashigatshel Hotel |
| 16 | Monjita Subba |  | 77442593 | -do- |
| 17 | Tshering Dem |  | 17898617 | -do- |
| 18 | Kelzang Wangchuk |  | 77745440 | TD Guest House |
| 19 | Karma Rinzin Lhamo |  | 17291908 | -Do- |
| 20 | Sangay Wangmo | -do- | 17581853 | -do- |
| 21 | Dema |  | 17569726 | Druk Mountain Hotel |
| 22 | Tashi Wangmo | -do- |  |  |
| 23 | Kelzang Wangmo |  | 17700661 |  |
| 24 | Ugyen Wangmo |  | 77274252 |  |
| 25 | Sonam Zangmo |  | 17939074 | Druk Mountain Hotel |
| 26 | Karma | Cleaning | 77878590 | -do- |
| 27 | Jigme Seldon |  |  | -do- |
| 28 | Dechen Pemo |  | 17302173 | -do- |
| 29 | Dechen Wangmo | Cleaning/storing waste | 77478035 | Tashigatsel Hotel |
| 30 | Dorji Duba | Cleaning /storing of waste | 17656513 | Tashigatsel Hotel |
| 31 | Golay | Cleaning/storing of waste in Bins | 17532169 | Phuntsho Yangkor |
| 32 | Jigme Lhaden | -Do- | 17863058 | Phuntsho Yangkor |
| 33 | Lobzang Dorji | - Do- | 17678796 | TD Guest House |
| 34 | Pema Gyelmo | -Do- | 17660356 | TD Guest House |
| 35 | Singye Norbu | -Do- | 17688535 | Ama Hotel |
| 36 | Tempa Dargay | -Do- | 17660464 | Ama Hotel |
| 37 | Tshering | -Do- | 17713922 | Zambala Hotel |
| 38 | Yangku | -Do- | 17503926 | Zambala Hotel |
| 39 | Changchung | Coordinate and Mobilize CBSS Members | 17615950 | LAP 4 Area |
| 40 | Ms Kinga Choden | -Do- | 17302808 | SJMSS |
| 41 | Sonam Dema | -Do- | 17802533 | SJPS |
| 42 | Mon Maya Jimba | -Do- | 17915189 | SJPS |
| 43 | Namgay Lhamo | -Do- | 17507966 | Dewathang PS |
| 44 | Dorji Dema | -Do- | 17532457 | Dewathang PS |
| 45 | Tshewang Lhamo (Red Cross) | -do- | 17485959 | SJMSS |
| 46 | Tshering Dema | -Do- | 17434114 | SJMSS |
| 47 | Pema Wangmo |  | 17734885 | SJPS |
| 48 | Tashi Zangmo | -Do- | 17456214 | SJPS |
| 49 | Tshedup Wangmo |  | 17841448 | Phuntsho Yangkhor Hotel |
| 50 | Jigme Selden |  | 17444665 | Phuntsho Yangkhor Hotel |
| 51 | Nima Zangmo | -do- | 17438057 | Phuntsho Yangkhor Hotel |
| 52 | Ugyen Wangmo |  | 17767755 | Job Seeker Hostel |
| 53 | Padey |  | 77219735 | Job Seeker Hostel |
| 54 | Pema Cheki |  | 17713979 | Maratika Hotel |
| 55 | Cheki Wangmo | -Do- | 17789853 | Maratika Hotel |
| 56 | Seday |  | 17615949 | Shambala Hotel |
| 57 | Karma Zangmo |  | 17557775 | Shambala Hotel |
| 58 | Tandin Wangchuk | -Do- | 17783697 | Druk Mountain Hotel |
| 59 | Rinzin Namgay |  | 17880240 | Druk Mountain Hotel |
| 60 | Kezang Jigme (Taxi) |  | 17886735 | Friends Hotel |
| 61 | Norbu Zangpo | do | 17532103 | Friends Hotel |
| 62 | Tshewang Dorji |  | 17941024 | CDCL Guest House |
| 63 | Langa Dorji (Taxi) |  | 17699044 | CDCL Guest House |
| 64 | Sonam Wangmo |  | 17598838 | CDCL Guest House |