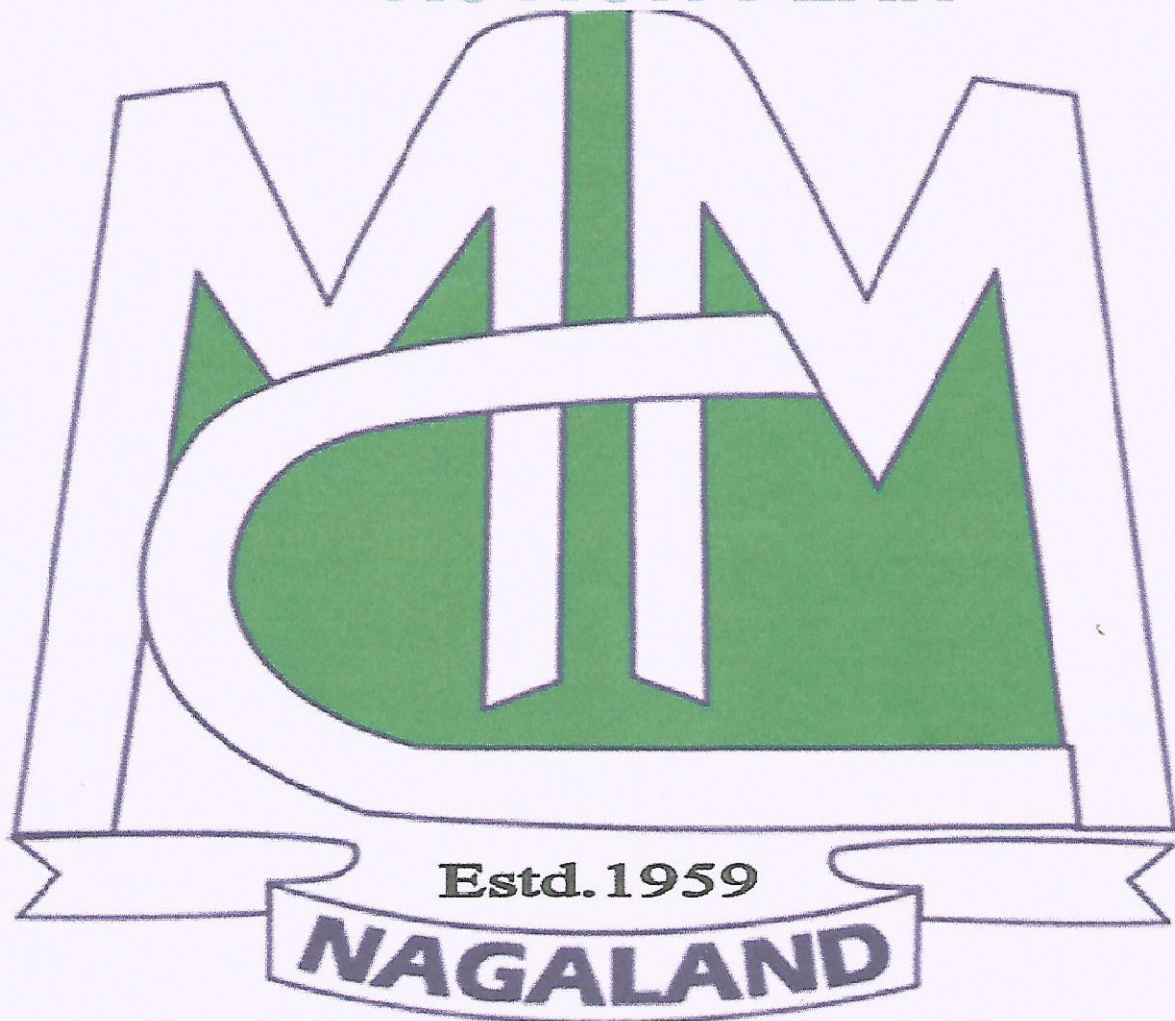


SOLID WASTE MANAGEMENT

ACTION PLAN



MOKOKCHUNG MUNICIPAL COUNCIL

INDEX

		Page No
1.	Introduction	2
2.	Objective	2
3.	Existing Solid Waste Management under MMC	3-15
4.	Solid Waste Management Action Plan	16-19

1. INTRODUCTION

Urban towns in Nagaland have rapidly increased in terms of activities and population, supporting municipal services at these urban centers is far behind from reaching adequate level. Solid waste in urban areas is generated from domestic, commercial and industrial activities. If waste not stored, collected, transported and disposed off in an engineered way safely and timely, this causes aesthetic problems and detrimental impact on public health, and results in contamination of air, soil, and natural water sources. Solid Waste Management (SWM) thus becomes one of the most critical municipal services.

Therefore, in order to effectively address this issue, the MMC has devised an Action Plan on Solid Waste Management for Mokokchung town in accordance with and in pursuance to the Solid Waste Management Rules 2016 (SWM Rules), Plastic Waste Management Rules 2016 and Bio-medical Waste Management Rules 2016.

2. OBJECTIVE

The MMC Action Plan aims to address the local waste management problem/issues of Mokokchung town by providing an insight of the existing Solid Waste Management system in place and further by devising ways and means to strengthen and bring about improvement in the current waste management system in line with the laid down rules and guidelines and also by way of adapting to the local conditions and requirements.

3. EXISTING SOLID WASTE MANAGEMENT – UNDER MMC

The Solid Waste Management System/ civic services in Mokokchung town, like most of the cities and towns in India, is far from achieving the desired level as the present system is just the continuation of the old system which is outdated and inefficient to meet the standards set by the Solid Waste Management Rules and Guidelines .

Hence attempts has been made to device this Action Plan by creating deeper understanding and insight of the existing Solid Waste Management System to effectively address the problems and chart out ways and means for better Solid Waste Management in its jurisdiction.

3.1 Town Profile

Mokokchung, one of the districts in Nagaland, the Home of the Ao Naga tribe. It covers an area of 1,615 sq. km. It is bounded by Assam to its north, Wokha to its west, Tuensang to its east, and Zunheboto to its south.

Mokokchung is a town and a municipality in Mokokchung district in the Indian state of Nagaland. It is the district headquarters as well as the main urban hub of Mokokchung district. Mokokchung is the cultural nerve centre of the Ao people and is economically and politically the most important urban centre in northern Nagaland, in fact it is third most important urban hub in all of Nagaland after Dimapur and Kohima. The town limit/municipal area covers an area of about 7 kilometres square and is divided into 18 wards of which Kumlong, Sangtemla, Alempang and Yimyu are the largest.

Mokokchung is one of the town in Nagaland with significant sub urban population. Mokokchung is the hub of Mokokchung Metropolitan Area, a term which refers to the continuous settlements from Alichen in the south, through Mokokchung town up to Amenyong and Khensa in the North West; and from Mokokchung town through Fazl Ali College up to DEF colony in the North East.

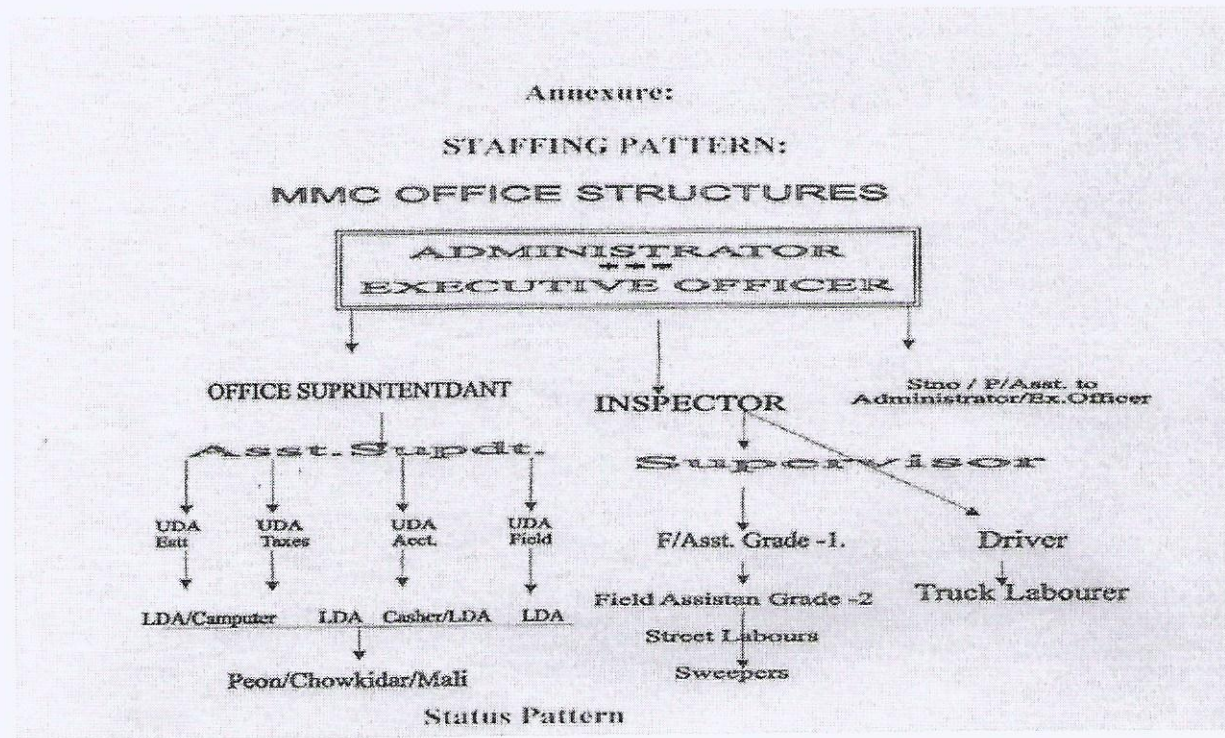
The trend of sub urbanization in Mokokchung(which had started in Western countries in the sixties) started in the eighties with the mushrooming of satellite towns like Yimyu and Marepkong. Today, the urban settlement has spilled outside the historical boundary of Mokokchung town. This trend has speeded up(since late nineties) so much so that the erstwhile satellite town of Yimyu boomed and spread towards Mokokchung and became conjoined with it. Today it has become a ward of Mokokchung. As a result of this flight to suburbs, population growth in Mokokchung town (the area under the municipality comprising the fifteen wards) has slowed down while the satellite towns are booming.

Besides, the following villages have been engulfed by the spiraling urban spread of Mokokchung and have acquired urban characteristics. In fact through not part of the municipality, they have become very much a part of Mokokchung and are confused by many tourist as being localities of the town.

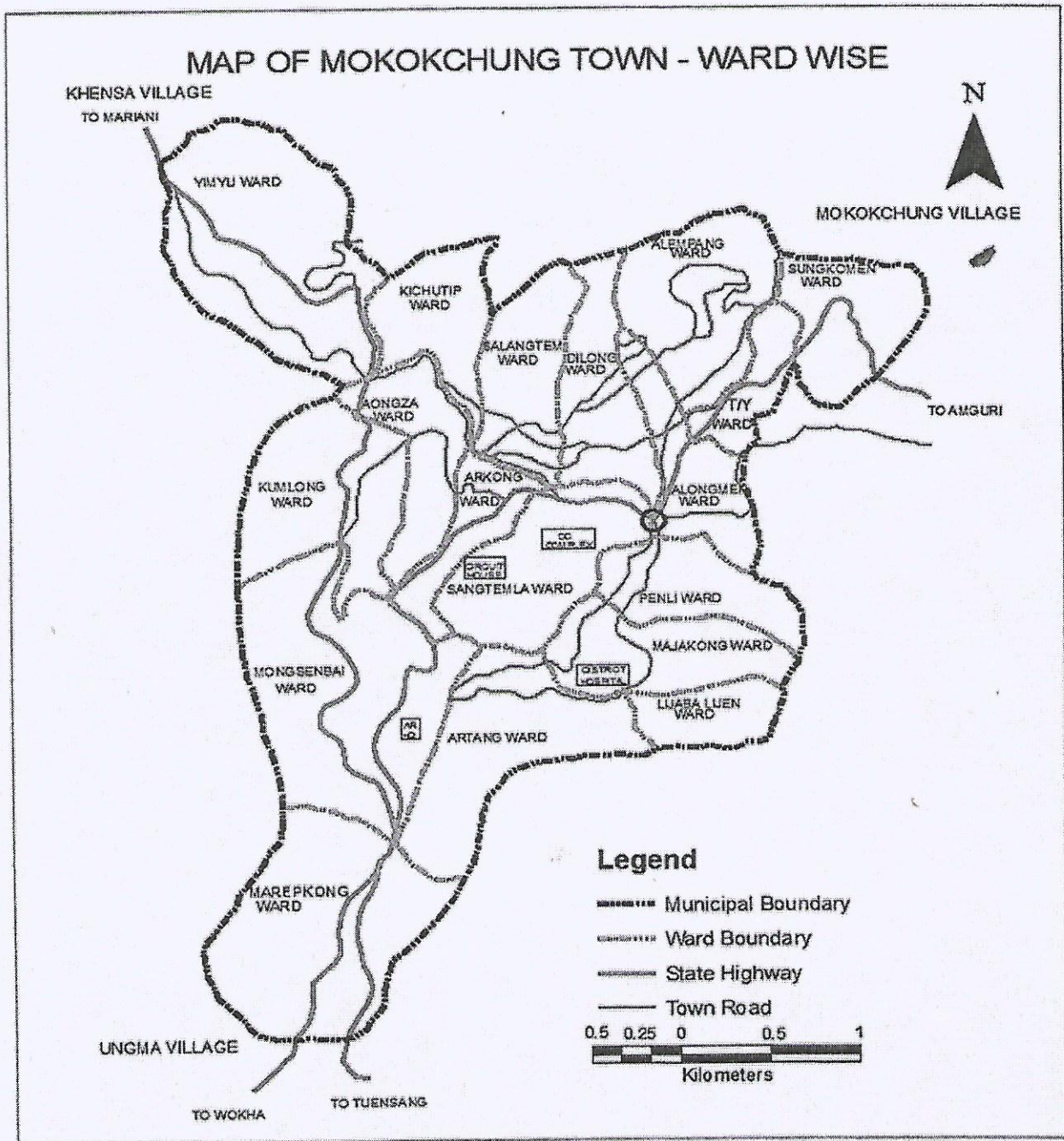
- Chuchuyimpang
- Mokokchung Village
- Khensa
- Ungma

3.2 Mokokchung Municipal Council

The MMC is the designated local authority for providing Municipal services in Mokokchung town. The organizational structure of MMC is as under



3.2.1 Map of Mokokchung Town



3.2.2 Municipal jurisdiction :

The MMC jurisdiction falls within the municipal area measuring 7 Km² which is divided into 18 wards.

Ward Details:

Ward 1 Alempang

TOTAL POPULATION	2365
TOTAL HOUSEHOLDS	725
TOTAL NUMBER OF SHOPS	25
TOTAL NUMBER OF OFFICE	2
TOTAL NUMBER OF HOSTELS	NA
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 2 Alongmen

TOTAL POPULATION	2500
TOTAL HOUSEHOLDS	463
TOTAL NUMBER OF SHOPS	204
TOTAL NUMBER OF OFFICE	2
TOTAL NUMBER OF HOSTELS	1
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 3 Arkong

TOTAL POPULATION	2244
TOTAL HOUSEHOLDS	535
TOTAL NUMBER OF SHOPS	209
TOTAL NUMBER OF OFFICE	4
TOTAL NUMBER OF HOSTELS	1
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 4 Artang

TOTAL POPULATION	3145
TOTAL HOUSEHOLDS	609
TOTAL NUMBER OF SHOPS	31
TOTAL NUMBER OF OFFICE	N/A
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 5 Aongza

TOTAL POPULATION	2200
TOTAL HOUSEHOLDS	305
TOTAL NUMBER OF SHOPS	36
TOTAL NUMBER OF OFFICE	4
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 6 Dilong

TOTAL POPULATION	2915
TOTAL HOUSEHOLDS	686
TOTAL NUMBER OF SHOPS	178
TOTAL NUMBER OF OFFICE	3
TOTAL NUMBER OF HOSTELS	1
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 7 Kumlong

TOTAL POPULATION	2412
TOTAL HOUSEHOLDS	591
TOTAL NUMBER OF SHOPS	34
TOTAL NUMBER OF OFFICE	7
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 8 Kichutip

TOTAL POPULATION	1261
TOTAL HOUSEHOLDS	319
TOTAL NUMBER OF SHOPS	27
TOTAL NUMBER OF OFFICE	N/A
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 9 Majakong

TOTAL POPULATION	1828
TOTAL HOUSEHOLDS	410
TOTAL NUMBER OF SHOPS	35
TOTAL NUMBER OF OFFICE	3
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 10 Sungkomen

TOTAL POPULATION	1755
TOTAL HOUSEHOLDS	398
TOTAL NUMBER OF SHOPS	48
TOTAL NUMBER OF OFFICE	3
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 11 Sangtemla

TOTAL POPULATION	2370
TOTAL HOUSEHOLDS	686
TOTAL NUMBER OF SHOPS	350
TOTAL NUMBER OF OFFICE	30
TOTAL NUMBER OF HOSTELS	2
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 12 Salangtem

TOTAL POPULATION	2225
TOTAL HOUSEHOLDS	595
TOTAL NUMBER OF SHOPS	92
TOTAL NUMBER OF OFFICE	6
TOTAL NUMBER OF HOSTELS	2
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 13 Penli

TOTAL POPULATION	1783
TOTAL HOUSEHOLDS	525
TOTAL NUMBER OF SHOPS	75
TOTAL NUMBER OF OFFICE	3
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 14 Tongdentsuyong

TOTAL POPULATION	1590
TOTAL HOUSEHOLDS	395
TOTAL NUMBER OF SHOPS	60
TOTAL NUMBER OF OFFICE	2
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 15 Yimyu

TOTAL POPULATION	2930
TOTAL HOUSEHOLDS	545
TOTAL NUMBER OF SHOPS	44
TOTAL NUMBER OF OFFICE	4
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 16 Marepkong

TOTAL POPULATION	1024
TOTAL HOUSEHOLDS	256
TOTAL NUMBER OF SHOPS	12
TOTAL NUMBER OF OFFICE	3
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 17 Mongsenbai

TOTAL POPULATION	1722
TOTAL HOUSEHOLDS	612
TOTAL NUMBER OF SHOPS	91
TOTAL NUMBER OF OFFICE	1
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

Ward 18 Lijaba lijen

TOTAL POPULATION	949
TOTAL HOUSEHOLDS	251
TOTAL NUMBER OF SHOPS	11
TOTAL NUMBER OF OFFICE	N/A
TOTAL NUMBER OF HOSTELS	N/A
TOTAL NUMBER OF COMMUNITY HALLS	1

3.3 Current Waste Management System

3.3.1 The Solid Waste Management System under MMC is managed under the direct supervision and control of the Field/Sanitation Branch. The staff details are as under –

1. Inspector - 1
2. Supervisor - 2
3. Field Assistant – I - 3
4. Field Assistant – II - 3
5. Sanitation workers - 42

3.3.2 Collection, Storage and Transportation of Waste

- **Primary collection** – Household store the waste they generate, which is collected via door to door collection. At present, out of the 18(eighteen) ward under MMC, door to door collection of waste has been introduced in 6(six) wards namely – Alempang, Artang, Majakong, Kumlong, Kichutip and Mongsenbai wards. The operation of SWM system in these 6(six) wards have been decentralized and the ward sanitation Committee manages the affairs in the respective wards.

- **Secondary collection** – Concrete/open dustbins have been provided covering 18 wards for areas like residential area, market, main road, institutions, offices etc daily collection is made from such bins. At present, collection of waste in the 12(twelve) wards follows secondary type collection – i.e. from the open dustbins placed at various location in these ward locality. The MMC is not able to extend door to door collection of waste in these wards as dedicated vehicle(truck) is required for transportation of waste at each ward level and MMC is not in a position to provide the same.
- **Transportation of waste**

The available vehicles(trucks) under MMC are as follows –

(a) 3(three) Tipper truck

(b) 6(six) mobile pickup truck(provided under SBM in the year 2017).

The 6(six) wards where door to door collection of waste has been introduced is allotted with a dedicated Mobile pickup truck for transportation of waste. The remaining 12(twelve) wards along with market areas, institutions and offices are covered by the 3(three) tipper truck as per the under mentioned routes and collection points on daily basis.

Dustbins Collection Chart By MMC Trucks

1. Truck NO:1 (NL02 G 2928)

Sl. No	Location	Ward	No of Box
1	Old Town Hall Road	Sangtemla	3
2	Main Police Point	Alongmen	1
3	Reserved Forest	Penli	1
4	In front of Town Hall	Sangtemla	1
5	Above ADC Residence	Sangtemla	1
6	Above NPF Office	Sangtemla	1
7	Opp. A/R Commandant's Residence	Sangtemla	1
8	Below Circuit House	Sangtemla	1
9	Near Mizo Church	Sangtemla	1
10	Front of DGP Residence	Sangtemla	1
11	Junction (Tongpang site)	Sangtemla	1
12	Taxes Office	Sangtemla	1
13	Near Tenlakaba	Arkong	1
14	Police Station I	Sangtemla	1
15	Cosmos Hall	Alongmen	1
16	Tongtentsuyong		2
17	Sungkomen		2
Total			21 Nos

2. Truck NO: 2 (NL02 G 3898)

Sl. No.	Location	Ward	No of Box
1	MMC Complex	Dilong	1
2	Post Office Junction	Sangtemla	1
3	National Tyre	Sangtemla	1
4	Ongpangkong Salang	Arkong	1
5	Salangtem Market	Salangtem	1
6	Pump House	Salangtem	1
7	Lower Dilong	Dilong	1
8	MGHSS (inside)	Kumlong	1
9	MGHSS (front)	Kumlong	1
10	Marepkong	Marepkong	3
11	Above HDFC Bank	Sangtemla	1

Total 13 Nos

3. Truck NO: 3(NL02 G 9350)

Sl. No.	Location	Ward	No of Box
1	Genesis	Arkong	1
2	Below S.C Jamir's Residence	Arkong	1
3	Below Lopenshilu	Arkong	1
4	Yongpang Market	Arkong	1
5	Sports Complex	Aongza	1
6	High School junction	Aongza	1
7	Boundary Aongza/ kumlong		1
8	Sewak Gate	Mongsenbai	1
9	Mariani Road below Saw Mill	Arkong	1
10	Nokzenketba front	Salangtem	1
11	IOC	Aongza	1
12	Yimyu	Yimyu	4
13	Musaver Well	Penli	1
14	Yangsumong Hospital Rd.	Penli	1
15	Hospital	Majakong	1
16	AOC Area	Sungkomen	3
17	People's College junction	Kumlong	1
18	Near S/Judge Residence	Aongza	1

Total 23 Nos

3.3.3 Segregation of waste

Segregation of waste has not been implemented in Mokokchung Town. However, MMC is taking up steps to sensitize the waste generators on segregation of waste specifically on bio-degradable, plastic and e-waste. Segregation of domestic/household waste is being implemented and enforced on a trial basis by the Ward Sanitation Committee of 6(six) wards where door to door collection of waste has been introduced.

3.3.4 Disposal of waste

At present, disposal of Solid Waste is done by collecting the waste and dumping at the dumping site which is situated at Salangkaba Menjen located around 10 km from Mokokchung Town.

3.3.5 Plastic Waste, E-Waste and Bio degradable Waste

- **Plastic waste**

As per the provision of the plastic Waste Management Rules 2016, and in pursuance to Government of Nagaland notification, MMC has been making efforts to collect and dispose the plastic waste. Rules and guidelines have been framed to impose ban on single user plastic of less than 50 microns and complete ban on plastic cutleries including Styrofoam and thermocol disposable plate within Mokokchung municipality. Besides MMC in collaboration with NGOs have been making efforts to make Mokokchung town plastic free.

- **E-Waste**

As regards with E-waste Management Rules 2016, MMC is yet to implement. MMC will work out for its implementation.

- **Bio-degradable waste**

The segregation of bio-degradable waste and wet waste is mostly done at the household level. To effectively reduce the bio-degradable waste from the household, the MMC in collaboration with NGOs, and ward authorities has been sensitizing the waste segregation on composting of the bio-degradable waste.

3.4 Steps undertaken for implementation under Rule 22 of SWM Rules.

Rule 22 of SWM Rules has been provided a time line for implementation of certain activities. In this regard, MMC have taken up the following steps –

Sl.No	Activity	Time limit from the date of Notification of rules	Action Taken
(1)	(2)	(3)	(4)
1	Identification of suitable sites for setting up solid waste processing facilities	1 year	<ul style="list-style-type: none"> • Site identification for Solid Waste Processing facilities under process. • Yet to be finalized.
2	Identification of suitable sites for setting up common regional sanitary landfill facilities for suitable cluster of local authorities under 0.5 million population and for setting up common regional sanitary landfill facilities by all local authorities having a population of 0.5 million or more	1 year	<ul style="list-style-type: none"> • Not applicable for Mokokchung municipality. • Population of Mokokchung Town as per 2011 census is 35,913.
3	Procurement of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	2 years	<ul style="list-style-type: none"> • Procurement of Site for setting up Solid Waste Processing facilities yet to be done. • Only site identification under process.
4	Enforcing waste generation to practice segregation of bio degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid waste at source	2 years	<ul style="list-style-type: none"> • Enforcement of waste segregation not yet implemented. • MMC is taking up steps to sensitize the waste generators on segregation of waste specifically on bio-degradable, plastic and e-waste. Segregation of domestic/household Waste has been initiated in 6(Six) wards on trial basis.

5	Ensure door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities	2 years	<ul style="list-style-type: none"> At present, out of the 18(eighteen) ward under MMC, door to door collection of waste has been introduced in 6(six) wards namely – Alempang, Artang, Majakong, Kumlong, Kichutip and Mongsenbai wards on trial basis. The operation of SWM system in these 6(six) wards have been decentralized and the ward sanitation Committee manages the affairs in the respective wards. The MMC is not able to extend door to door collection in the rest of 12 wards due to non-availability of vehicles as dedicated vehicle (truck) is required for each ward to implement it at the ward level and MMC is not in a position to provide the same.
6	Ensure separate storage, collection and transportation of construction and demolition waste	2 years	<ul style="list-style-type: none"> MMC will frame necessary guidelines for effective regulation of construction and demolition waste. As of now construction and demolition waste in Mokokchung town is negligible.
7	Setting up solid waste processing facilities by Local Bodies having 100000 or more population	2 years	<ul style="list-style-type: none"> Not applicable for Mokokchung town. Population as per 2011 census is only 35,913.
8	Setting up Solid Waste Processing facilities by Local Bodies and census towns below 100000 population	3 Years	<ul style="list-style-type: none"> Site identification for Solid Waste processing facility is under process. The process of preparing DPR for setting up of the same through private firm is under process and at initial stage.

9	Setting up Common or stand alone sanitary landfills by or for all Local Bodies having 0.5 million or more population for the disposal of only such residual Waste from the processing facilities as well as untreatable inert Waste as permitted under the Rules	3 years	<ul style="list-style-type: none"> • Not applicable for Mokokchung town. • Population as per 2011 census is only 35,913.
10	Setting up common or regional sanitary landfills by all Local Bodies and Census towns under 0.5 million population for the disposal of permitted waste under the rules	3 years	<ul style="list-style-type: none"> • Not implemented. • Procurement of site for sanitary landfill facilities yet to be done.
11	Bio-remediation or crapping of old and abandoned dump sites	5 years	<ul style="list-style-type: none"> • Treatment of old and abandoned dump sites have been undertaken

4. SOLID WASTE MANAGEMENT ACTION PLAN

The existing Solid Waste Management System is not adequate to manage the over abundant waste generations due fast urbanization and have rendered the system inefficient. By adopting a planning process the inefficient waste management system can be restructured to ensure that the Solid Waste Management services are managed effectively to provide the best solution to the prevailing sanitation problem of the town.

4.1 Waste Assessment

The MMC shall undertake an assessment to study its current waste management system of Mokokchung town including the sub-Urban areas of Mokokchung village, Chuchuyimpang, Ungma and Khensa. The detailed assessment of quantum, composition and characteristics of solid waste generated from households, market areas, institutions, and offices within its jurisdiction shall be undertaken.

4.2 Segregation-at-source and IEC Campaign

A multi dimensional awareness campaign targeting the various stakeholders shall be initiated through IEC. At present segregation of waste at the household level is initiated in only 6 (six) wards on trail basis where door to door collection of waste has been introduced. The MMC in co-ordination with the ward authorities is working out ways and means to initiate waste segregation at the household level in the rest of 12(twelve) wards under MMC. Door to door sensitization of households shall be carried on to achieve 100% door to door collection of waste. The IEC campaign shall also emphasized on composting of bio-degradable waste, burning/burying of waste, implication of waste on health and environment and potential value of waste.

4.3 Collection, storage and transportation

Attempt shall be made to collect wet/biodegradable and dry/biodegradable waste separately. The wet/biodegradable waste can be composted and the dry/non-biodegradable channelized to scrap dealers or Material Recovery Facility (MRF), if set up. Further, a systematic routine for collection and transportation of waste, taking into consideration the terrain, shall be planned by the MMC. The available vehicles(trucks) under MMC i.e. the 3(three) Tipper truck and the 6(six) mobile pickup truck(provided under SBM in the year 2017) is not sufficient to provide effective transportation facility for solid waste management. For this, the MMC shall submit necessary proposal to the Government for procurement of requisite vehicles and machinery as MMC is not in a position to mobilize fund for the same.

4.4 Integrating the informal sector

The work force of MMC is not sufficient for segregating and managing the waste generated. Integrating the informal sector into the waste management system will ensure that most of the waste are salvaged, thereby reducing the amount of waste disposed of. The MMC in co-ordination with the ward authorities is working out ways and means to initiate waste segregation at the household level.

4.5 Community participation and Decentralized system

The community participation and response in respect of providing better civic services and waste management has been very forthcoming and active in Mokokchung town. The MMC in coordination with the 6(six) ward council have successfully put in place a system of decentralized solid waste management system on trial basis. The MMC shall work out ways and means to initiate and set up decentralized Solid Waste Management System in all the remaining 12(twelve) wards under its jurisdictions. Further, MMC also aim for community participation by strengthening Civil Society Organization (CSO) for effective democratic and participatory functioning, devising methodologies to ensure community participation and ownership of Solid Waste Management on sustainable mode.

4.6 Surveillance, Monitoring and Management of Information System (SM-MIS)

A SM-MIS for planning, monitoring, mapping and analyzing requirement, generating programme sheet, obtaining and upgrading the collection and transport system on continuous basis shall be implemented in the long run. It will aid in managing large amount of spatial and attribute data related to the 18 wards and generate reports (daily, weekly etc.) at various levels (city, zone, range etc.) with details of the waste, types of vehicles, etc. In this regard, global positioning system (GPS) would be helpful and cost effective. It also helps in optimizing truck routes, thereby increasing the efficiency of the transport mechanism. Also, Geographic Information Systems (GIS) shall be utilized simultaneously. Analysis of spatial data, i.e., land use and land cover pattern, transport network, collection network etc., through GIS along with information related to quantity and quality of wastes will enable the authorities involved in waste management to come out with feasible options.

4.7 Waste processing or treatment plant

Resource recovery and proper treatment of waste to reduce its impact on human health and environment are the key features of an effective waste management system. To this effect, the MMC will aim at turning waste to energy, thereby eliminating waste pollution, improve the environment, create profits and benefit the next generation.

The MMC shall monitor and record generation of construction and demolition waste within its jurisdiction and shall charge fees for collection and transportation of such waste. It shall endeavour to find alternative to its disposal as under:

- (a) To reuse on site or salvaged for subsequent reuse to the greatest extent possible and disposal should only be considered as a last resort.
- (b) To utilize any excavated spoil/topsoil as landscaping material in the completed development.
- (c) To use waste timber as shuttering or hoarding, or sent for reprocessing as medium density fiber board.
- (d) To utilize waste concrete as fill material for roads or in the manufacture of new concrete when arising at source.

4.8 Periodical employees training

To have an effective waste management system, the sanitation officers should be well acquainted with all the existing waste management rules. It shall be mandatory for the sanitation officers to undergo training on waste management rules on a periodical basis. Further, the other MMC employees shall also be provided basic training on the existing waste management rules from time to time.

4.9 Sanitation workers' welfare

Sanitary workers welfare scheme (SWWS) has been started for sanitation workers under MMC. Medical camp is being organized from time to time and Personal Protection Equipment (PPE) is also provided to sanitation workers. They shall given be training to deal with waste.

4.10 Public Awareness and Door-to-door sensitization

Mass Public Awareness for segregation-at-source, implications of waste on health and environment, and potential of waste is the key factor in establishing an effective waste management system. In addition to it, door-to-door sensitization to households becomes pertinent. In this regard, MMC is collaborating with the ward authorities for better coordination & management of solid waste within the municipal area.

4.11 Collection and transportation of waste

The success of any solid waste management system largely depends upon the three factors, i.e. Collection, Transportation and Processing & Disposal. Clear assessment on the quantity of solid waste to be handled is very essential. The varieties of solid waste generally generated in a municipal town are domestic, commercial, institutional, etc. Waste from street sweeping, drain cleaning and construction debris also get into stream of solid waste.

4.12 Up gradation of Sanitation Fleet

The available vehicles (truck) for transportation of solid waste are as under

(a) Tipper truck -3(three) Nos –

-NL02 G 9350 (2010 model)

-NL02G 3898 (2008 model)

-NL02G 2928 (2007 model)

(b) Mobile pickup truck -6(six) Nos (provided under SBM in the year 2017).

It may be mentioned that available 3(three) tipper truck has become very old and uneconomical for maintenance. Hence for an efficient solid waste management in Mokokchung town, the existing fleet of sanitation vehicles will have to be upgraded by adding new vehicles and machineries.

4.13 Vehicles & Machinery Required For Effective Waste Management System For MMC

For effective waste management system in Mokokchung town, the MMC needs to upgrade its existing system.

Sl.No	Particulars	Quantity
1	Dumper truck	2
2	407 tipper truck	15
3	Cesspool	1
4	JCB	1
5	Nallah/Drainage Cleaner	1

4.14 Estimated workforce

For implementing an effective waste management system for Mokokchung town, the workforce needs to be augmented from the present workforce. As such, the estimated workforce required is as stipulated in the table:

DESIGNATION	SANITATION WORKERS		DRIVERS	
	Existing	Requirement	Existing	Requirement
Street sweepers for street sweeping and primary collection of waste from household, shops and establishments	27	15	-	
Sanitation workers/ drivers on Tipper trucks @ 3 person per vehicle	9	6	2	2
Sanitation workers/ drivers on 407 Tipper trucks @1 Labour 1 driver per vehicle	3	45	1	15
Sanitation workers/drivers on JCB		1		1
Total	39	67	3	18

ADMINISTRATOR
Mokokchung Municipal
Council, Nagaland