

# **Department of Nutrition, HIV and AIDS**

## HEALTH CARE WASTE MANAGEMENT PLAN FOR INVESTING IN EARLY YEARS FOR GROWTH AND PRODUCTIVITY IN MALAWI PROJECT

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#### BACKGROUND

Government of Malawi (GoM) through the Department of Nutrition, HIV and AIDS in Ministry of Health and in collaboration with Ministry of Gender, Children, Disability and Social Welfare with support from the International Development Association (IDA) would like to implement the Investing in Early Years Project. The initiative is expected to deal with stunting, under-nutrition, early stimulation and early learning in Early Years of the child to improve Growth and Productivity.

The health care service delivery in Malawi is provided by the Government through Ministry of Health and the private sector. The Ministry of Health contributes about sixty percent while the Christian Health Association of Malawi contributes thirty-seven percent. The Ministry of Local Government contributes about one per cent while the private sector, the Army and the Police contributes two per cent of the overall health care service provision.

## HEALTHCARE WASTE MANAGEMENT IN MALAWI

Maintaining public health and safety of waste handlers and the environment, all wastes generated under this project, just like any other form of waste will be managed and disposed of properly in accordance with the National Health Care Waste Management (HCWM) Policy, and with WHO good practice guidelines and World Bank Group Environment, Health and Safety guidelines. Some of the instruments to be adopted in HCWM in Malawi include: Legislative and Regulatory Regimes in Healthcare Waste Management; The Republic of Malawi Constitution, 1995; The National Health Policy; the National Waste Management and Sanitation Regulations; Environment Management Act, 1996 and Guidelines for Environmental Impact Assessment, 1997; Public Health Act, Cap 34:01; Occupational Safety, Health and Welfare Act, 1997; Water Resources Act of 1969; and the National Water Policy, 2004

## Institutional Responsibilities

#### At the central level:

The MOH is responsible for national health policy and ensures the guardianship of the health facilities. The Department of Environmental Health (DEH) Services has the lead technical role for developing and overseeing HCWM systems, with coordination and quality control being providing by the HCWM Steering Committee. DEH is responsible for National Guidelines and training materials, under the oversight of the Steering Committee. It coordinates implementation of activities on the ground, providing supervision and support to districts.

### At the district level:

District health staff (including District Environmental Health Officers), are responsible for providing training, technical support, monitoring and oversight of HCWM at district and facility levels.

## At the health facility level:

The manager of each health facility is ultimately responsible for HCWM in his/her establishment. S/he ensures that a HCWM plan is prepared and implemented. S/he designates the staff charged with healthcare waste segregation, collection, transportation and treatment.

### At the household level:

Under this project waste will be generated at household level and each household/community will be trained in management of waste generated at that level through micronutrient powders (MNPs) sachets. The households will be linked with health facility who are ultimately responsible for HCWM for disposal of sachets.

# HEALTHCARE WASTE MANAGEMENT PLAN AT HEALTH FACILITY Introduction

Government of Malawi, through Department of Nutrition, HIV and AIDS in the Ministry of Health in collaboration with Ministry of Gender, Children, Disability and Social Welfare has initiated Investing in Early Years for Growth and Productivity in Malawi Project (IEY) which will comprise a range of investments including some activities that may generate general healthcare waste. There project will not have any clinical activities, however, in the course of implementation the project will promote linkage between community interventions and facility level where provision of health service will be provided to the target group using government owned system. During implementation, some activities that may generate general waste will include provision of micronutrient powders and the waste will be in form of sachets while ironfolate supplementation, and deworming will be provided within the existing health care system since these will be provided by health centers as part of routine Ministry of Health activities. The implementation of MNPs will be at household level where the anticipated general waste will occur, however the provision of the MNPs will be done at health centre. The potential wastes that shall be generated through this project shall include:

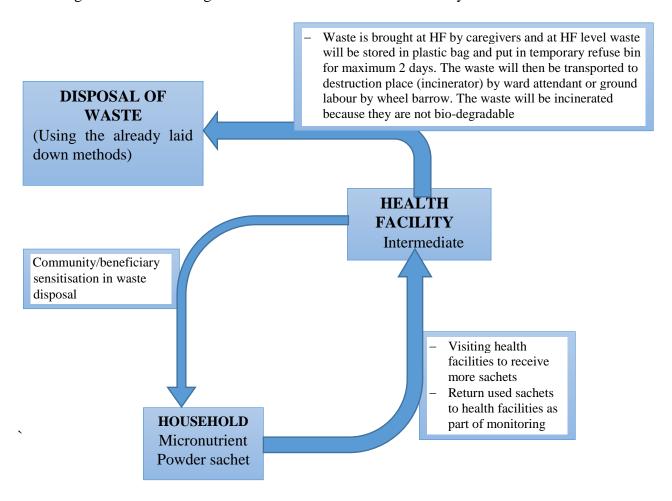
- a) Storage bottles for iron-folate and Vitamin A at facility level and;
- b) Sachets for Micronutrient Powders at household level.

## **Objectives**

The overall objective of the HCWM plan is to ensure proper management of all aspects of waste management including the generation, handling, storage and disposal of all forms of waste generated by the project consistent with international good practice and World Bank environment, health and safety guidelines. The aim of the HCWM plan is to minimise the environmental impact of waste generation treatment and disposal, protect public health and safety and provide a safe home and work environment.

## HANDLING OF WASTE

Flow diagram of waste management from household to health facility



Waste management will follow diagrammatic approach as above.

#### HOUSEHOLD LEVEL

Almost all waste will be generated at household level through used MNPs sachet. Household will be sensitised on management of the sachet and disposal. All used sachet will be put back in storage



boxes together with unused sachet. Caregivers will have to get or replenish supplies every two months and will take back both used sachet and unused sachet in their original container to health workers at health centre where they will be disposed as a general waste. Caregivers will be responsible to transport the waste using own transport as they are replenishing supplies. This will promote community ownership and sustainability of the program.



Pocket containing sachet 21cm by 12.5cm

### **HEALTH FACILITY**

All used and unused sachets will be brought to the health facility by caregivers, kept at health centre in plastic storage bags and then put in temporary refuse bin for maximum of 2 days. The waste will then be transported to destruction place (incinerator) by ward attendant or ground labour by wheel barrow. The waste will be incinerated because they are not bio-degradable. The whole disposal process will follow Ministry of Health guideline on waste management. Transportation of waste from health facility to disposal site shall made by the ward attendants or ground labourers and not extra cost will be incurred from the project since the whole process will be integrated in the routine waste management of the health facility for sustainability.

## Waste Handling, Containment and Transport

## At Household Level

All waste generated at household level including the unused product will be kept in a safe manner by caregivers (out of reach of children). The unused and used sachet are kept back in its packaging box and return to facility every 2 months by the care giver for replenishment and as part of monitoring on utilisation. The transportation of the waste from household to health facility will not have any additional cost since the caregiver will still be going with the child for growth monitoring and promotion activities as well as replenishing on the supplies.

## At Health Facility

At health centre level, waste will fall under category of general waste and since the sachet are not bio-degradable, the product will be incinerated and not extra cost will be incurred since transportation will be done using the normal facility management processes.

## **DISPOSAL AREA**

Since the waste in not bio-degradable, the waste will be incinerated just like any other general waste that is not bio-degradable. The incinerators are located with HF just a few meters away from the main building for safety. The whole incineration process will be in line with Ministry of health guideline and policy on waste management.

## **Sensitization and Training**

As part of capacity community sensitisation and trainings will be conducted on management of waste in general and specific waste generated by the project through utilisation of MNPs.

**Health care waste management matrix** 

Type of waste: Plastic packages for MNPS					
Process	Quantity of	Activities	Responsibility	Time	Cost
level	waste generated				
	per month for 14				
	districts				
Household	30 small sachets	Returning used sachets	Caregivers	Every 2	N/A
level	and carrier packs	into carrier sachet.		months	
		Transporting the carrier			
		sachet with used sachets			
		to health facility			
Health	1,071,000 small	Loading all received	Health worker	after	N/A
Facility	sachets	sachets in a refuse bin.			
	35,700 carrier	Transportation to			
	sachets	sachets to Disposal site.			
Dump site	1,071,000 small	Disposal and	Ground worker	Every	N/A
	sachets	Incineration of sachets	or ward	month	
	35,700 carrier		attendant		
	sachets				

## M&E systems to monitor healthcare waste management performance

To ensure consistency in up-keeping the safety standards for health care waste management at each Health Facility involved in this project, the minimum procedures, guidelines and standards shall be followed by all health facilities. The performance indicator that will be used is the number of sachet received against disposed sachet. At the point of collection of waste, it will be recorded as part of monitoring compliance after caregivers bring back sachet and the information will be transferred into a disposal book and signed by the officer in charge after disposal. Random checks will be done to check if caregivers are returning carrier sachets with 30 small sachets as required. The results will call for individual feedback and continuous sensitisation of caregivers. The health facility shall compile monthly reports based on the indicator. A targeted evaluation exercise shall be carried out shortly before the Project Mid-Term Review.