Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: **BURMA**

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMR Mitigation Plan (EMMR Part 2 of 3)	Status of Mitigative Measures	List any outstanding issues relating to required conditions	Remarks
	To date, skills labs (i.e, Learning and Performance Improvement Centers – L&PICs) have been established in eight locations under MCSP. These include: 1. a Clinical Skills Standardization and Assessment Center at the Myanmar Nurse and Midwife Council (MNMC) in Rangoon 2. L&PIC in Sittwe, Rakhine State 3. L&PIC in Magway, Magway Region 4. L&PIC inTaunggyi, Shan (South) State 5. L&PIC in Lashio, Shan (North) State 6. L&PIC in Pathein, AyeyarwaddyRegion 7. L&PIC at the Myanmar Nurse and Midwife Association (MNMA) office in Rangoon 8. L&PIC at Taw Nor Teaching Hospital at Kayin State Skills lab coordinator (SLC) workshops have been conducted so far in seven of the eight	None	MCSP Burma PY3-4 workplan approved June 2017

	locations (Taw Nor Teaching Hospital is upcoming in FY18). During skills lab coordinator trainings, proper waste disposal is discussed among the skills lab management team and demonstrated by the trainer.		
	A stand-alone module on infection prevention has been developed and also infection prevention is included in all maternal and newborn health skill modules (postpartum hemorrhage prevention, essential newborn care, etc). Moreover, quality improvement technical update sessions on infection prevention have been conducted at the five clinical practicum sites affiliated with the state/regional-based L&PICs.		
Proper waste segregation and disposal through provision of color coded bins & liners.	Proper waste segregation and disposal are covered in the skills lab coordinator workshop. MCSP has provided proper colored coded bins in each of the L&PICs and the clinical practicum sites.	None	See remark above
Capacity building of health care providers on proper commodity management systems to minimize expiries or wastage.	Proper commodity management to minimize expiries/wastage is covered in the safety and maintenance portion of the skills lab coordinator workshop.	None	See remark above
Put in place a system to identify expired reagents and other medical utilities, remove them from shelves, place them in well labelled boxes, and forward them to incineration / disposal points.	This is covered in the safety and maintenance portion of the skills lab coordinator workshop. Inventory management systems will be developed by the skills lab management teams with MCSP technical support.	None	See remark above
Safe disposal of consumables by providing disposal bins.	This is covered in safety and maintenance portion of the skills lab coordinator workshop and bins have been provided to existing	None	See remark above

	learning and performance improvement centers.		
No toxic materials will be purchased or used.	No toxic materials were purchased or used.	None	See remark above
Sources of materials will be vetted to the best of the projects abilities.	The Specially Designated Nationals list is always checked before engaging with suppliers and a bid process is used to get quality products (not harmful to environment) at a reasonable cost.	None	See remark above
Ensure that all hazardous materials are avoided and that when they must be used (paint, etc.) they are properly disposed of.	MCSP ensured that all the suppliers avoid hazardous materials and makes them aware of proper disposal methods.	None	See remark above

Prepared by:

Khaing Thandar, MCSP Burma Program Manager

Date: October 13, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: DEMOCRATIC REPUBLIC OF CONGO

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
 Education, Technical Assistance, Training Ensure training curricula follow proper use and waste management guidelines in accordance with international best practices (e.g., WHO, USAID) and host country requirements (e.g., Ministry of Health's IPC protocols and post-exposure prophylaxis (PEP) guidelines). Include sessions on segregation, collection, storage, and disposal of medical waste in training curricula. Use water dispensers during trainings and meetings Initiate and standardize a reporting tool (check list) for key environmental mitigation and monitoring (EMM) measures for meetings and trainings Combine field visits where possible, to minimize fuel consumption, and use fuel only from licensed stations Procedures for handling and disposing of commodities and health care waste generated during training activities are 	 MCSP supported 9 training sessions on family planning in Tshopo and Bas-Uélé Provinces. During each training session MCSP and MOH reviewed all the materials for the safe management of medical waste. There was the presence of waste bins for the separation of waste (infectious, sharp and general waste) during the training session 128 people (doctors, nurses, midwives) were trained on the safe use and management of waste and commodities 128 people were also trained on best practices in compliance with IPC and PEP policies During integrated community case management (iCCM) training, 212 health providers and 228 community health workers (CHWs) were trained and technically oriented in safe management of waste from health care activities, especially disposal of syringes and needles During WASH Clean Clinic Approach (CCA) training, 32 providers and 40 hygienists have received full training on health care waste management Standardized reporting tools (check list) for key environmental mitigation and monitoring (EMM) measures for meetings and trainings have been put in place 	Combine field visits where possible, to minimize fuel consumption, and use fuel only from licensed stations During joint supervision visits, MOH staff prefer to buy low cost fuel from unlicensed fuel stations that potentially contribute more pollution than licensed fuel operators	Using fuel from licensed stations remains the major challenge for the MCSP teams during joint supervision visits. MCSP is sensitizing MOH counterparts on the importance of using fuel from licensed operators.
addressed below in the Public Health	Training logs have been reviewed at the end		

Commodities activity category (#3) 2. Research and Development	of each training • All rooms used for meetings and trainings are equipped with drinking water supply (tap) instead of water dispensers • No adverse events were reported during this reporting period (Y2) N/A		
 3. Public Health Commodities Develop and implement Standard Operating Procedures (SOPs) on the safe storage and use of health commodities, including a system for identifying and removing expired drugs. Procedures will be in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Develop and implement a Waste Management Plan (WMP) that includes procedures for properly handling and disposing of health care waste in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Disposal considerations include, but are not limited to: minimizing medical waste, sterilization, proper segregation, handling, and storage of wastes, containers and labeling, safe disposal practices and procedures, prevention of nosocomial infections, inspection protocols and frequency, IPC protocols, and documentation requirements (e.g., waste records). Train workers on the SOPs and WMP developed for the proper handling of health commodities and disposal of waste Ensure SOPs and WMP are available at health facilities Initiate and standardize a reporting tool (check list) for key EMM measures Wastes will only be disposed in incinerators or controlled landfills that comply with USAID and international standards (i.e. WHO). Incinerators will not exceed the maximum capacity to burn 100 kilograms of 	 212 health providers from 106 health care facilities (HCFs) supported by MCSP have been trained and oriented in developing Standard Operating Procedures (SOPs) on the safe storage and use of health commodities, including a system for identifying and removing expired drugs in compliance with international (WHO) best practices and DRC requirements. 228 CHWs were trained on waste management 48 bins have been distributed in 48 HCFs implementing family planning for proper waste segregation at all waste generation points Sharps containers are available in all HCFs and community care sites that they get from other partners (GAVI, etc.) 64 out of 106 HCFs supported by MCSP were supervised on health care waste management during this reporting period (60.3%) 10 clinics with full package of WASH (CCA) activities have SOPs and functional healthcare waste management plans (HCWMP or WMP) The capacities of incinerator operators have been strengthened for effective incineration of infectious and hazardous wastes during the various training sessions and field visits (only 9 HCFs have incinerators) MCSP provided equipment and clothing to waste workers for personal protection in 10 clinics with MCSP's full WASH package 	 Effective implementation of SOPs at health facility level More than half of the HCFs have not yet developed the SOPs and WMP for the proper handling of health commodities and disposal of waste A system for reporting and archiving waste management activities is not yet in place in the HCFs supported by MCSP HCFs that do not have incinerators that are close to large hospitals with incinerators still do not have a waste transfer plan in place 	MCSP teams will reinforce field visits to ensure SOPs are effectively implemented MCSP will keep working with HCFs team to formalize the waste reporting system in all supported HCFs in collaboration with provincial and health zonal authorities Discussions are under way between hospitals and health centers to establish a plan for the transfer of hazardous waste

- waste per hour, as indicated in the <u>USAID PATH Incinerator Guidebook</u>. This EMMP does not cover the procurement and/or installation of incinerators.
- If the incinerator is available in the health care facilities (HCF), MCSP will ensure that incineration of infectious and hazardous waste is carried out safely in accordance with the standard operating rules for a WHO Montfort 8a incinerator. The parameters that will be monitored are: incinerator status, operator skills, waste loading, temperature control (infectious waste will be loaded from 700 °C), secure final disposal of ash (burial)
- Collect and maintain treatment and disposal records on file
- Prior to waste generation, MCSP will ensure the location of functional incinerators and assist health facilities in implementing the safe waste transfer plan. This measure considers only health facilities that are close to where there is a functional incinerator. Where incinerators are unavailable MCSP will use two options:
 - Identify HCFs with functional incinerators and encourage the transport of waste to these incinerators by ensuring compliance with the rules related to the transport of hazardous waste on public spaces
 - 2) If burial of waste is required, the waste will be safely buried in the premises of the HCFs in accordance with WHO's guidelines (i.e. <u>Safe management of wastes from health-care activities</u>). Examples include access restricted to authorized personnel, preventing new water wells from being dug nearby, burying only infectious health care wastes, and limiting the burial of chemical wastes to smaller quantities in order to avoid contamination.

The health facilities at Tshopo and Bas-Uélé have a drastic lack of waste disposal treatment infrastructure. MCSP will put in place simple and effective measures for the safe and hygienic (CCA)

- For HCFs that do not have incinerators two technological options are used:
 1) non-hazardous waste is burnt in the pits after working hours (around 5pm)
- 2) Infectious/hazardous and pharmaceutical wastes are buried under hygienic conditions and covered with clay soil. The depth of the pits does not exceed 3 meters and the bottom located 2 meters from the water table. The burial of medical waste is carried out in accordance with WHO guidelines
- MSCP provided equipment for proper transportation of health care waste (wheelbarrow) to 10 clinics with the full WASH/CCA package

In some HCF supported by MCSP, the burial of infectious wastes does not yet meet WHO or USAID standards.

- Only 9 HCFs supported by MCSP have incinerators and these incinerators do not meet USAID or WHO standards. MCSP is working with HCF teams and incinerator operators on appropriate infectious waste incineration techniques. MCSP is providing technical assistance to HCF hygiene committees to plan for repair and maintenance of functional incinerators.
- MCSP will continue to assist HCFs in the design of environmentally and health-compliant garbage pits that meet USAID/WHO standards

burial of medical waste to minimize potential health and environmental impacts. MCSP will technically accompany health facilities in the construction of these waste pits, but no construction activities will be conducted by MCSP.		
4. Small-Scale Construction	N/A	
5. Small-Scale Water and Sanitation	N/A	
6. Nutrition	N/A	
7. Vector Control	N/A	
8. Emergency Response	N/A	

Prepared by:			
	Dr. Boniface Mutombo, MCSP COP	Date:	October 13, 2017

PHOTOS



Superstructure construction of a burial pit in progress CS Triangle Bas-Uélé



Proper waste transportation/CS Yeme



Waste workers with equipment for personal protection Koteli Health Center (CS)



sharps containers/CS Yahisuli



waste segregation/Isangi hospital

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: EGYPT

LEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Education, Technical Assistance, Training Ensure training curricula follow proper use and waste management guidelines in accordance with international best practices (e.g., WHO, USAID) and host country requirements.	MCSP's has begun to cascade the training of the community health workers (RRs), which will be conducted using an approach of short duration and frequent training sessions. Rather than didactic training in a classroom environment, RRs will receive workplace-based (peripheral health center unit) training followed by weekly practice sessions and mentorship. Training materials will include paper-based and digital modules and tools, and each RR will receive a bag to hold all materials. These materials have no yet been printed. No additional commodities will be generated.	None.	
2. Research and Development			
3. Public Health Commodities			
4. Small-Scale Construction			
5. Small-Scale Water and Sanitation			

6. Nutrition			
7. Vector Control			
8. Emergency Response			
Prepared by:			
,			
	Elaine Scudder, MCSP Program Officer	Date: <u>October 7, 2017</u>	

Project Name: MATERNAL AND CHILD SURVIVAL PROGRACOUNTRY/Activity:Ethiopia CBNC/NEGA	M IEE File #/DCN: GH-13-16	EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Education, Technical Assistance, Training Train health workers on medical waste management.	Medical waste management and infection prevention (IP) concepts are included in the Health Extension Workers (HEWs) Integrated Refresher Training (IRT)		
Ensure health workers follow required standards of waste management and infection prevention procedures during service provision.	modules and materials. Infection prevention is integrated in the Community Based Newborn Care (CBNC) training material for HEWs and Health Workers (HW), including IMNCI trainings.		
Ensure health care providers have access to infection prevention standards /guidelines.	Therefore, MCSP CBNC/NEGA provided training sessions on infection prevention practices and how to manage medical wastes to HEWs and HWs from health posts, health centers, and district and zonal health offices responsible for		

supervision and support to HEWs at health posts.	
The information provided during the trainings was reinforced during post training follow up visits, biannual performance reviews, clinical mentorship meetings, and routine supportive supervision visits to health posts and health centers. When gaps in IP and waste management practices (e.g., disposal of expired medicines) were observed, immediate feedback was provided to HEWs and HWs, including demonstration of correct procedures.	
As part of the HC strengthening and MNH quality improvement (QI) initiative, MCSP CBNC/NEGA provided 13 HCs with equipment for waste segregation and disposal. This included waste bins of various colors and sizes to contain different types of health care wastes. Additionally, key staff members responsible for management of health care wastes (e.g., janitors,	

	cleaning staff) were included in the QI process and teams receiving proper orientation and IP supplies on identified gaps.		
2. Research and Development	NA	NA	NA
3. Public Health Commodities Capacity building of health workers on proper commodity management systems to minimize expiration or wastage.	As reported previously, a half-day Integrated Pharmaceutical and Logistics Management (IPLS) training was added to the national CBNC training to refresh HEW and HW knowledge on drugs and medical supplies management. MCSP CBNC/NEGA also		
Put in place a system to identify expired reagents, remove them from shelves, place them in well labeled boxes, and forward them to incineration/disposal points.	integrated management of supplies and commodities into routine visits (e.g., post-training follow-up, performance review committees, routine supervision supervision), using the nationally accepted standard checklists and guidelines.		
Identification of expired drugs and their removal from drug stores for disposal.	Similar to the previous year, MCSP CBNC/NEGA supported target health posts to identify near-expiry drugs at least three to four months before expiration dates and realistically estimate the amount that is likely to be used at the facility before the end date, based on their average caseload. MCSP		

	CBNC/NEGA's continued		
	technical assistance in this area was		
	particularly important in PY3, as a		
	large quantity of Gentamycin was		
	expected to expire in January and		
	February 2017.		
	Following this exercise, the balance		
	that is not likely to be used at the		
	health posts was re-distributed to		
	health centers and district hospitals		
	who needed these supplies and		
	used them in a short time period.		
	MCSP CBNC/NEGA helped		
	woreda health offices to institute		
	this mechanism of closely		
	monitoring utilization of these		
	supplies, and develop a		
	redistribution plan for those health		
	posts with lower caseloads than the		
	expected and who may not use		
	them fully.		
	In areas where expired drugs		
	(primarily ORS, Zinc,		
	Cotrimoxazole and Gentamycin)		
	were found at HPs and HCs,		
	information of expired drugs was		
	shared with woredas, zones, and		
	regional health bureaus to facilitate		
	their proper disposal.		
4. Small-Scale Construction	NA	NA	NA

5. Small-Scale Water and Sanitation	NA	NA	NA
6. Nutrition	NA	NA	NA
7. Vector Control	NA	NA	NA
8. Emergency Response	NA	NA	NA

Prepared by:		
	Amy Mangieri, MCSP Program Officer	Date: October 13, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: GHANA

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
 1. Education, Technical Assistance, Training CMEs on IP Proper waste segregation and disposal through provision of color coded bins & liners Rearrangement of clinical settings Monitoring availability of PEP and guidelines Use of water dispensers during trainings and meetings Will encourage proper handwashing in the IPC trainings 	 Discussion of environmental impact included in the education, technical assistance, training and other materials. In the past year, Jhpiego conducted 51 regional and district health facility trainings on IPC and Ebola prevention for 10,941 clinical staff from Ashanti, Brong Ahafo, Eastern, Upper East and Upper West. Among the standard precautions discussed in detail in the IPC trainings is the topic of disposal of waste. Multicolor bins are provided and used for the trainings and the skills lab for the sorting of the waste based on national waste management guidelines. Veronica buckets are being supplied to the clinical skills labs and IPC trainings for practicing. Sharp boxes were also provided for proper disposal of sharps. Veronica buckets and safety boxes for sharps were distributed to the regions during trainings and when trainings are complete they will be assigned to facilities per the Regional Health Directorate. In addition, waste is sorted into categories and disposed of in separate fenced pits. Surroundings are kept clean through daily cleaning and community cleaning. Each staff is taken through infection prevention and waste 	None	The midwifery and community health nursing schools as well as the model CHPS compounds do not have PEP available to them. However, throughout IPC trainings in the regions, the regional and district hospital staff are oriented on PEP.

-			
	 management through training. No hazardous materials have been procured for the updates to school skills labs or the model CHPS compounds. 		
2. Research and Development	N/A	N/A	N/A
No environmental impact anticipated as MCSP activities in this category are simple monitoring and evaluation, conducting OSCEs as well as interviews and focus groups.			
3. Public Health Commodities	N/A	N/A	N/A
4. Small-Scale Construction Ensure that all hazardous materials are avoided when possible and that when they must be used (paint, etc.), ensure proper ventilation and protective materials are available as needed, limit noise pollution and disposal of materials outside of the refurbished environment to their proper location based on national guidelines. No toxic materials will be purchased or used, especially lead paint. Sources of materials will be vetted to the best of the projects' abilities in order to verify.	No materials have been procured to date for the surface refurbishments of the schools skills labs or the model CHPS compounds.		
5. Small-Scale Water and Sanitation The water obtained for the skills lab will be from the main water line from the sewer treatment plant into the school. Veronica buckets will be used in the skills lab is not piped directly into the room.	Veronica buckets have been provided and national guidelines have been followed in the placement of the buckets. As planned, water for skills labs is sourced from the main water line. During the IPC trainings at the regional and district hospitals proper waste management is explained. Additionally, all the schools and the model CHPS compounds for the CHN schools are reminded on mentoring visits of appropriate waste management practices.	None	During the IPC regional trainings, the Regional Health Directorates were given 4-5 veronica buckets each in the training kits, among other items. When trainings are complete they will distribute these buckets to the facilities.

6. Nutrition No environmental impact anticipated as	N/A	
MCSP nutrition activities are focused on developing an eLearning maternal nutrition module, learning manuals, conducting trainings and supporting mothers group.		
7. Vector Control	N/A	
8. Emergency Response	N/A	

Prepared by:		
	Karen Caldwell, Ghana Country Director	Date: <u>October 13, 2017</u>

Part 3 of 3: Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training			
The purpose of the trainings is to strengthen clinical and IPC skills and practices to improve quality of care	All training courses include IPC skills and waste management procedures	None	
Management and single use/disposable materials is thoroughly discussed and practiced as part of training and supervision activities	Material management and the process of equipment disposal have been a component of IPC training and follow-up classroom discussions. It is also reviewed during supervisory visits, and as a part of performance evaluations.	None	These are standard procedures.
Decontamination of reusable materials are thoroughly discussed and practiced as part of the training activities.	Decontamination of reusable equipment has been a component of training and follow-up classroom discussions. It is also reviewed during supervisory visits, and as a part of performance evaluations.	None	
Management and disposal of hazardous materials through the use of incinerators will be thoroughly discussed and practiced during training and supervision.	Management and disposal of waste is a component of trainings, observation and feedback during on-site coaching of health providers. IPC coaching in particular includes reviewing procedures with auxiliary staff responsible for waste management	None	

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Performance standards for Infection Prevention are a key component of the quality improvement methodology; target facilities were previously trained on this methodology.	Supervisors of hospital services and heads of health centers have been oriented on the use of IPC performance standards to promote IPC self-assessment and self-learning measures by staff. The strengthening of health and safety committees via the RHS project has contributed to the improvement of the quality of infection prevention and control at the facilities.	Sustaining the involvement and motivation of supervisors is a challenge	
The purpose of the supervision activity is to reinforce the implementation of proper IPC and waste management practices in the facilities, thus focusing on proper disposal of contaminated materials, decontamination and sterilization of reusable materials, instruments, etc.	A coaching schedule has been established for monitoring starting the 2nd week after training, and encompasses the implementation of the various IPC measures including waste management at the targeted health facilities. Now the coaching and supervision are conducted monthly or every two months.		ongoing
Supervision will assess the implementation of infection prevention and waste management as part of the service delivery	Supervisions in maternal health and family planning include IPC evaluation components.		MNH, FP and VBG monitoring visits at the facility level always include supervision of IPC performance.
3. Public Health Commodities			
Waste containers will be provided for management of waste in training and clinical rooms	The project provides an initial stock of safety boxes following the training of providers on clinical skills and IPC. Their use has been explained, demonstrated and utilized by health providers during trainings. For service provision, the facility	During supervision visits, it has been noted that the management of the safety boxes is an ongoing challenge. Sometimes they are not replaced when they reach 3/4 full and full boxes have been observed next to the incinerator, not yet burned. Feedback is provided during the visits to encourage facility staff to take immediate action and respect protocols for service provision areas and disposal	

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Burning or burial of waste will be conducted based on available waste management resources, such as incinerators.	is responsible for reordering. Generally, the availability of the security boxes is good. As part of IPC support, the project has provided covered trash cans to the facilities for use in service provision, as well as large capacity trash cans for removing trash safely. Follow-up of waste management is included in all supervision and coaching by the project and is included in the quality standards monitored by the project. Project staff and trainers engage with providers and auxiliary staff to ensure proper waste disposal, including advocacy	None	
memerators.	with facility managers when needed to address fuel and supplies need to operate incinerators. The project has also been requested to support improvements in waste management including installation and repair of incinerators at select sites which is ongoing.		
4. Small-Scale Construction Contractors will be responsible for securing and disposing of construction materials and waste, with all unused items removed from facility premises upon completion.	Contractors performing as requested and regularly monitored by project staff as well as facility directors	None	
5. Small-Scale Water and Sanitation	N/A	N/A	N/A

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:				
	Rachel Waxman, MCSP Senior Program Officer	Date:	October 30, 2017	

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: HAITI

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training •Ensure training curricula related to WASH, commodities, and supply chain follow proper use and waste management guidelines in accordance with World Health Organization (WHO) best practices (e.g., infection prevention control (IPC) protocols and minimum standards). Include sessions on segregation, collection, storage, and disposal of medical waste and personal protective equipment (PPE) in relevant training curricula. •Rearrangement of clinical settings during technical assistance visits to ensure optimal flow and organization. •Monitoring availability of post-exposure prophylaxis (PEP) and guidelines during technical assistance visits to help reduce the risk of HIV transmission at sites. •Use of water dispensers during trainings and meetings to reduce plastic water bottle waste. •Procedures for handling and disposing of commodities and health care waste generated during training activities are addressed in the Public Health Commodities activity category (#3).	Project staff have ensured that training curricula related to WASH, commodities, and supply chain follow proper use and waste management guidelines are in accordance with World Health Organization (WHO) best practices (e.g., infection prevention control (IPC) protocols and minimum standards). The trainings included sessions on segregation, collection, storage, and disposal of medical waste and personal protective equipment (PPE) in relevant training curricula. The project has also worked on the rearrangement of clinical settings during technical assistance visits to ensure optimal flow and organization. Staff continue to monitor availability of post-exposure prophylaxis (PEP) and guidelines during technical assistance visits to help reduce the risk of HIV transmission at sites. The team has also implemented the use of water dispensers during trainings and meetings to reduce plastic water bottle waste.	No issues to report	Note that PEP is available at HIV health facilities only (46 out of 164)

•Ensure that all providers, Community Health Workers (CHWs) and traditional birth attendants (TBAs) participating in the community distribution of Misoprostol are trained in the proper collection and returning of unused Misoprostol to SSQH for proper disposal. •Procedures for handling and disposing of commodities and health care waste generated during training activities are addressed in the Public Health Commodities activity category (#3).	All trainings have ensured that providers, Community Health Workers (CHWs) and traditional birth attendants (TBAs) participating in the community distribution of Misoprostol are trained in the proper collection and returning of unused Misoprostol to SSQH for proper disposal.	No issues to report	All unused Misoprostol was collected by data clerks and site supervisors who then gave it to the pharmacist to be destroyed at the end of the study (Dec 2017).
 Maintain copies of procurement records on file (delivery receipt available at sites and electronic copies of global distributions by Procurement partner available with project staff). As part of the Clean Clinic Approach (which encourages health facility staff to improve WASH practices at the facility level), monitor the Waste Management Plan (WMP) for each site. This includes procedures for properly storing, handling, and disposing of health care waste in conformance with WHO standards and best practices. Disposal considerations include, but are not limited to: minimizing medical waste, sterilization, proper segregation, handling, and storage of wastes, containers and labeling, safe disposal practices and procedures, prevention of nosocomial infections, inspection protocols and frequency, IPC protocols, and documentation requirements (e.g., waste records). Ensure site supervision checklists contain WMP monitoring components. Train workers on the Standard Operating Procedures (SOPs) and WMP developed for proper handling of health commodities and disposal of waste, including the use of PPE. 	The team is maintaining copies of procurement records on file. As part of the Clean Clinic Approach, health facility staff have been monitoring the Waste Management Plan (WMP) for each site. This includes procedures for properly storing, handling, and disposing of health care waste in conformance with WHO standards and best practices. Disposal considerations include, but are not limited to: minimizing medical waste, sterilization, proper segregation, handling, and storage of wastes, containers and labeling, safe disposal practices and procedures, prevention of nosocomial infections, inspection protocols and frequency, IPC protocols, and documentation requirements (e.g., waste records). In addition, project staff are ensuring site supervision checklists contain WMP monitoring components. Lastly, we are training all facility staff workers on the Standard Operating Procedures (SOPs) and WMP developed for proper handling of health commodities and disposal of waste, including the use of PPE.	No issues to report	The Clean Clinic Approach engaged 69 out of 164 sites. However, all sites received supportive supervision visits, which contained elements of medical waste management that were examined and followed up with based on recommendations made by SSQH for quality standards.

4. Small-Scale Construction	N/A		
5. Small-Scale Water and Sanitation •Promote the sound management of wastewater through trainings and coaching of medical staff in facilities and CHWs in the community, and conduct inspections to evaluate progress. This includes proper maintenance of hand-washing stations. •Ensure trainings follow proper use and waste management guidelines in accordance with WHO best practices.	Through trainings and coaching of medical staff in facilities and CHWs in the community, the project is promoting the sound management of wastewater as well as conducting inspections to evaluate progress. This includes proper maintenance of handwashing stations. Trainings for the proper use and waste management guidelines in accordance with WHO best practices have also been held.	No issues to report	The Clean Clinic Approach engaged 69 out of 164 sites. However, all sites received supportive supervision visits, which contained elements of medical waste management that were examined and followed up with based on recommendations made by SSQH for quality standards.
SSQH will refer to the following documents when developing training materials: •WHO Fact Sheets on Environmental Sanitation: Introduction to Fact Sheets on Sanitation (accessed September 26, 2016) •WHO A Guide to the Development of On-Site Sanitation (1992) •USAID Sector Environmental Guidelines: Water Supply and Sanitation (Partial Update: 2014, Last Full Update: 2009)			
6. Nutrition Implement procedures for identifying and removing expired Plumpy Sup packets. Promote proper disposal of packets (expired or not) in waste bins to staff in charge of the distribution of Plumpy Sup packets.	The project has implemented procedures for identifying and removing expired Plumpy Sup packets from distribution centers. Staff in charge of distribution have also been encouraged to properly dispose of packets (expired or not) in waste bins.	No issues to report	Plumpy Sup packets will not expire until 2018 so sites have not disposed of unused packets.
7. Vector Control •Develop and implement standard operating procedures (SOPs) for the safe distribution of ITNs being transported in bulk in motorized vehicles. Distribution considerations include, but are not limited to: proper loading and containment, route planning, theft prevention, accident response and incident reporting, availability of gloves for workers, and vehicle maintenance and decontamination. •Refer to the following documents for guidance when developing SOPs:	The project has developed and implemented standard operating procedures (SOPs) for the safe distribution of ITNs being transported in bulk in motorized vehicles. Distribution considerations include, but are not limited to: proper loading and containment, route planning, theft prevention, accident response and incident reporting, availability of gloves for workers, and vehicle maintenance and decontamination. Staff have also conducted site visits or surveys to document that workers and drivers are trained and following the SOPs	No issues to report	ITNs were not procured or distributed in this reporting period.

•Food and Agriculture Organization (FAO). Pesticide Storage and Stock Control Manual (1996) •Chandonait, Peter. President's Malaria Initiative BMP Manual Best Management Practices (BMP) For Indoor Residual Spraying (IRS) In Vector Control Interventions. •Review training procedures and logs to verify training was conducted •Conduct site visits or surveys to document that workers and drivers are trained and following the SOPsInclude date of site visits or surveys, findings and any non-compliance issues in the annual EMMR			
•Include photographs from site visits 8. Emergency Response •Ensure that stock management and distribution protocols are in place to properly sort and dispose of expired medicines and Aquatabs. •Train staff on the proper stock management practices. •Procedures for handling and disposing of commodities and health care waste generated during training activities are addressed in the Public Health Commodities activity category (#3).	Clinic staff have been trained that stock management and distribution protocols are in place to properly sort and dispose of expired medicines and Aquatabs.	No issues to report	All medicines and Aquatabs received by SSQH for distribution through mobile clinics were distributed, no stock remaining.

Date: October 13, 2017

Prepared by:

Neda Dowlatshahi, MCSP Program Officer

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: KENYA

LEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
 Education, Technical Assistance, Training Ensure MCSP program managers and training facilitators are informed on the proper disposal of general or municipal waste generated during trainings. All waste will be appropriately disposed of following trainings. Because equipment does not come in contact with real bodily fluids during the training, and the trainings do not use dangerous equipment such as needles, regular trash disposal methods are appropriate. Ensure training curricula related to WASH, commodities, and supply chain follow proper use and waste management guidelines in accordance with World Health Organization (WHO) best practices (e.g., infection prevention control (IPC) protocols and minimum standards). Include sessions on segregation, collection, storage, and disposal of medical waste and personal protective equipment (PPE) in relevant training curricula. Rearrangement of clinical settings during technical assistance visits to ensure optimal flow and organization. Monitoring availability of post-exposure prophylaxis (PEP) and guidelines during 	 MCSP supported: Safe disposal of waste paper generated from used charts and packaging of snacks during the partner's trainings/meetings/workshops in sites designated for general waste. Integrated waste management and infection prevention control standards during training and supportive supervision for facilities in Kisumu and Migori Counties. Standards include WHO best practices on waste management, optimal flow and organization of clinical settings, availability of PEP for accidental exposure to HIV, and management of expired health commodities. 		The facilities' own removal of expired drugs, supplements and vaccines from shelves and fridges could not be undertaken due to closure of health facilities following the nurses' strike from June 2017. MCSP held stakeholders meetings with communities and discussions on how they can use their own resources to construct latrines and hand washing devices. In addition, trained/triggered communities were informed on the importance of using latrine/toilet.

technical assistance visits to help reduce the risk of HIV transmission at sites.		
 Use of water dispensers during trainings and meetings to reduce plastic water bottle waste. 		
2. Research and Development	N/A	
3. Public Health Commodities	N/A	
4. Small-Scale Construction	N/A	
5. Small-Scale Water and Sanitation	N/A	
6. Nutrition	N/A	
7. Vector Control	N/A	
8. Emergency Response	N/A	

Prepared by:		
	Natalie Hendler, MCSP Program Officer	Date: <u>October 27, 2017</u>

Environmental Monitoring and Mitigation Report

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: Lao PDR

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training • All waste will be appropriately disposed of following trainings. Because equipment does not come in contact with real bodily fluids during the training, and the trainings do not use dangerous equipment such as needles, regular trash disposal methods are appropriate.	1. Program managers and training facilitators dispose of generated waste (which may include suction tubing, nasogastric tubing, disposable gloves, etc) appropriately during trainings. As noted in the EMMP, waste generated from these trainings does not come in contact with real bodily fluids, so regular trash disposal methods are used. 2. In some cases, program staff may be present in the clinic or facility when a real delivery takes place. In these cases, facility staff observe facility standards of separating bio-waste from regular waste and dispose both per facility requirements; sharps are also disposed of separately.	No outstanding issues related to required conditions.	1. No additional remarks.
2. Research and Development	N/A	N/A	N/A
3. Public Health Commodities	N/A	N/A	N/A

Environmental Monitoring and Mitigation Report

4. Small-Scale Construction	N/A	N/A	N/A
5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

repared by:		
	Saraswati Khalsa, MCSP Senior Program Officer	Date:_10/11/17

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: LIBERIA/RESTORATION OF HEALTH

SERVICES

IEE File #/DCN: GH-13-16 EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
 Education, Technical Assistance, Training Ensure training curricula follow proper use and waste management guidelines in accordance with international best practices (e.g., WHO, USAID) and host country requirements (e.g., Ministry of Health's IPC protocols and minimum standards) Procedures for handling and disposing of health care waste generated during training activities are addressed. (More explained below in the Public Health Commodities Category of Activity (#3) Monitoring, managing, and reporting adverse events 	 97% of staff at health facilities have been trained in the proper use of health commodities, medical waste management and use of personal protective equipment in accordance of Liberian MOH requirement and international best practices. Facilitators (MCSP staff and MOH) of the training are very vigilant and comply with the disposal of waste products during the training. All the trainings held during the reporting period have followed and disposed wastes generated during/after training. In this reporting period, no incident/adverse event was reported during trainings and technical staff. All MCSP technical and program staff are versed with the Jhpiego adverse reporting SOP and follow it in case of adverse events. 	Staff not trained include new staff deployed at facilities after training is completed. Staff not trained are provided with onsite mentoring and coaching during supportive supervision visits by MCSP central and country based staff using the national guidelines	

2. Research and Development	N/A	N/A	N/A
 3. Public Health Commodities Follow MOH Waste Management Plan (WMP) that includes procedures for properly handling and disposing of health care waste in conformance with international best practices. Disposal considerations include, but are not limited to: proper segregation, handling, and storage of wastes, containers and labeling, safe disposal practices and procedures, inspection protocols and frequency, IPC protocols, and documentation requirements (e.g., waste records). Train workers on the WMP developed for proper handling and disposal of waste via IPC training known as SQS training in Liberia. Construct medical waste incinerators, placenta and ash pits, as required. Incinerators will not exceed the maximum capacity to burn 100 kilograms of waste per hour 	 97% of staff have been trained in the proper use of health commodities, medical waste management and use of personal protective equipment in accordance of Liberian MOH requirement and international best practices. 95% of health facilities are compliant with MOH infection prevention and control policies, guideline and minimum standards 92% of facility staff have been trained in IPC including waste, management. 97% of facilities adhere to IPC guidelines including waste management 63 % (28/44) of facilities have functional waste incinerators, placenta and ash pits, constructed according to MOH standards and international best practices. All facilities have system in place for identification expired reagent and drugs; expired reagents and drugs are removed from shelves, boxed and forwarded to requisite department/agency for disposal 89% of facilities did not have expired drugs in store at time of verification. 	 Staff not trained include new staff deployed at facilities after training is completed. Staff not trained are provided with onsite mentoring and coaching during supportive supervision visits by MCSP central and country based staff using the national guidelines Noncompliance at facilities is the result of lack of IPC structures, new staff with limited IPC skills, and some resistance to change by health care workers despite training. MCSP supports the procumbent and distribution of basic IPC supplies as well as renovation works at facilities. Additionally, ongoing onsite coaching and mentoring of health workers to ensure 100% adherence to IPC guidelines will be provided by MCSP technical & program people. Staff not trained include new staff deployed at facilities when training was held. Additionally some health care workers left facilities and transferred to other facilities. The project will provide on -site training to untrained staff during the supportive supervision to ensure 100 % of health facility were trained on IPC. Non-compliance at facilities a 	Staff recruited after SQS/IPC training in 2015 have not received training No selected site for waste disposal, placenta pits are poorly fenced.

result of lack of IPC structures, new staff with limited IPC skills and limited behavior change by health workers. This will addressed through regular supply of basic IPC supplies, onsite mentoring, coaching, and completing the IPC construction works • Work is ongoing at the rest of the facilities, to be completed by December 2017. Ongoing construction at 44 facilities will ensure 100% coverage of functional waste systems at 77 facilities • None. MCSP team through monthly supportive supervision ensures that facilities identify and remove expired commodities from shelves • 9 out 77 facilities had expiry drugs due to the lengthy procedures needed to dispose of expired drugs as well as received nearly expiring commodities from the supply chain of MOH without taking in to consideration of previous consumption data of health facilities. MCSP will work with the CHT to facilitate the disposal of expired drugs from the 9 facilities. Additionally, MCSP will work with the supply chain unit of MOH and county pharmacist to distribute nearly	

- 4. Small-Scale Construction
- Develop a design plan that includes the use of appropriate building materials and complies with international best management practices and host country laws and regulations (e.g., MOH Infrastructure Standards).
- Stakeholder meetings to discuss and develop plans that promote environmentally sound design and construction of water and sanitation infrastructure
- Contractors trained in the EMMP SOPs
- Implement standard operating procedures (SOPs) for construction activities that are in conformance with international best practices (e.g., USAID GEMS construction sector guidelines) and host country laws and regulations. Considerations include, but are not limited to: control measures to minimize soil erosion and storm water runoff, water source protection, vegetation and tree preservation and transplanting, wildlife habitat protection, site security, relevant occupational health and safety concerns, etc.
- Design storage areas so that hazardous materials are aboveground and in leak-proof containments to avoid spills from occurring during normal operation or natural disaster events and to ensure compliance with MOH Construction Safety Policy and Guidelines.
- Ensure that all hazardous materials are properly encapsulated in leak proof containers and disposed off-site in a safe landfill.
- Ensure proper management of landfills by using designated and approved site by local authorities

- All 44 health facilities with construction works have a design plan developed and approved by MOH and in accordance with MOH standards
- All 44 facilities with rehabilitation activities were reviewed and approved by MOH, CHT and USAID
- An SOP developed for contractors and implemented at all 44 facilities by infrastructure team.
- Infrastructure team ensures that all 44 facilities for construction have secure landfills practices in place.
- The contractors store hazardous construction materials (paint, solvent, termite protection) in their original containers with lids secured. Excess materials are removed from the site in those same containers.

- None. Among the planned 46 constructions, two facilities have construction work done by other partners before MCSP
- None. Explanation about the two health facilities is explained above.
- None. Explanation about the two health facilities is explained above.
- None. Explanation about the two health facilities is explained above
- County
 construction
 supervisors,
 through routine
 monthly
 supervision visits,
 ensure that
 contractors adhere
 to MOH standards
 and provide them
 refresher training
 on EMMP and
 monitor their
 compliance
- County Health
 Team maintenance
 supervisor and
 county health team
 and officer in
 charge of the
 facility approved
 reviewed and
 approved
 rehabilitation plans
- County
 construction
 supervisors with
 the county
 maintenance
 person ensure
 contractor
 adherence to SOPs
 through, through
 routine monthly
 supervision visits
- County construction supervisors, through routine monthly

 5. Small-Scale Water and Sanitation Prepare a design plan for the sanitation and treatment system based on site-specific conditions, community need, population size and growth, cost to build, and system maintenance requirements. Consult with host country regarding regulatory, permit, and monitoring requirements. Refer to the following documents when developing a design plan: MOH infrastructure standards, adapted from WHO Design considerations will include but not limited to: control measures to prevent soil contamination, following the ministry of health 	 All 44 health facilities with construction works have a design plan developed and approved by MOH and in accordance with MOH standards All 44 facilities with rehabilitation activities were reviewed and approved by MOH, CHT and USAID Construction plan used at all 44 facilities are approved plans from ministry of health and adheres to their guidelines. 	 None. Among the planned 46 constructions, two facilities have construction work done by other partners before MCSP None. Explanation about the two health facilities is explained above None. Explanation about the two health facilities is explained above 	supervision visits, ensure that contractors have secure landfills County construction supervisors, through routine monthly supervision visits, ensure that contractors adhere to MOH standards and provide them refresher training on EMMP and monitor their compliance County Health Team maintenance supervisor and county health team
developing a design plan: MOH infrastructure standards, adapted from WHO Design considerations will include but not limited to: control measures to prevent soil contamination, following the ministry of health WASH guideline. (http://adc.massdesigngroup.org/portfolio/liberia-standards-and-guidelines), and measures to ensure that location of water sources are	guidelines.		on EMMP and monitor their compliance • County Health Team maintenance supervisor and county health team and officer in charge of the facility approved reviewed and approved
guided by the Ministry of Public Works (MPW) WASH guidelines • Site selection done with environmental technicians • Local contractors educated on WASH guidelines and construction methods			rehabilitation plans • County Health Team maintenance supervisor with county construction supervisors of the project monitor through monthly supervision to ensure adherence to guidelines

6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:		
	Mira Thompson, MCSP Program Officer	Date: <u>October 13, 2017</u>

Project Name: MATERNAL AND CHILD SURVIVAL

PROGRAM

Country/Activity: : LIBERIA/HUMAN RESOURCES
FOR HEALTH IN LIBERIA

IEE File #/DCN: GH-13-16 EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Monitoring Indicators	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training • Proper waste segregation and disposal through provision of color coded bins • Rearrangement of clinical training settings and client flow to meet MOH IPC standard • Monitoring the availability of Post Exposure Prophylaxis and Guidelines • Monitoring, managing and reporting adverse events • Use of water dispensers during trainings and	100% of the Facility/Institutions (8 programs-Midwifery (5) and Laboratory (3)) have the MOH IPC Policies, Guidelines and minimum Standards, and standards are being operationalized by focal persons within the sites Zero (0) severe adverse events reportable to Jhpiego occurred during the reporting period	Conducted training on IPC, waste management including use of PPE. MCSP supplied IPC materials to enable adherence to MOH standards. MCSP mentors facility teams to adhere to the MOH IPC policies, guideline and minimum standards on a continuous basis in order to sustain best practices. All MCSP	Some health facilities lack infrastructure required to fully comply with MOH standards. Where this and other gaps are noted, this information is shared with MOH for their action.	

meetings Ensure that Ministry of Health's Infection Prevention and Control Protocols and Minimum Standards are in place and being operationalized Staff training on MOH Minimum Standards on Medical Waste Management and the Use of Personal Protective Equipment (PPE) scheduled and completed		trainings follow MOH guidelines for IPC.		
2. Research and Development	No environmental impact anticipated as research only includes social and behavior qualitative studies and assessment and no clinical trials demonstrations or practical or introduction and evaluation of any substance	• N/A	• N/A	• N/A
 3. Public Health Commodities Capacity building of health care providers, in particular Preceptors and Pre Service Education 	100% Facility has staff trained in logistics and pharmaceutical products, LMIS and Supply Chain Management System (SCMS)	MOH conducted training for staff on how to manage waste and expired drugs or reagents.		Refresher trainings for staff have been completed and staff are monitored monthly across the facility.

Institution Faculty on Proper Commodity Management Systems to minimize expiration or waste of Public Health Commodities • Ensure MOH system to identify expired commodities, reagents and other medical utilities, remove them from shelves, place them in well labeled boxes and/or color coded disposal bins, and forward them to	100% of the Facility/Institution has system in place to identify expired reagents and drugs, remove them from shelves, place label on boxes and forward to disposal/incineration points	Capacity building for preceptors and PSE Institution faculty on commodity Management system to minimize of waste, ensure MOH system to identify expired commodities, reagents and other medical utilities.		
incineration/disposal points is adhered to	13% of the facilities has expired drugs in store at time of verification visit	At the time of verification, MCSP staff worked with the facility team to label the drugs taken from the shelves as expired	This was due to the push system used by National Drugs Service that is now being changed by the incoming management to a pull system.	
4. Small-Scale Construction	N/A	N/A	N/A	N/A
5. Small-Scale Water and Sanitation	N/A	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A	N/A

Prepared by:	Mira Thompson, MCSP Program Officer	Date: October 13, 2017

Project Name:	MATERNAL AND CHILD SURVIVAL PROGRAM	IEE File #/DCN:	GH-13-16	EMMP File #/DCN:	N/A
Country/Activity:	MADAGASCAR				

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Education, Technical Assistance, Training Conduct Infection prevention session during each training to sensitize health providers on the use of standard precautions, disinfection process, injection safety and safe biological waste management	 Each training provided by MCSP included a session on infection prevention Activities were in compliance with IPC and PEP policies and guidelines 	None	N/A
- Carry out proper waste segregation and disposal during training through provision of color coded bins & liners to clinical sites	- Safe disposal of medical waste is outlined during clinical practical session and supportive supervision visits	A change in training strategy – from grouped off-site trainings to low-dose, high-frequency onsite trainings – made the use of use of colored bins obsolete, the team continued to demonstrate safe medical waste disposal during onsite training and supervision.	N/A
- Monitoring, Managing and Reporting Adverse Event	- Adverse events are managed and reported	None	N/A
- Use of water dispensers during trainings and meetings	- Meetings and trainings use water dispensers	None	N/A
 Deliver supplies and equipment with a SOP for environmentally safe management and disposal of expired products and non-functional equipment 	 Each donation of MNH basic equipment to the health facilities is accompanied of a SOP that describes environmentally safe management and disposal of expired products and non-functional equipment 	None	N/A

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
2. Research and Development - see all activities under #1 - Education, Technical Assistance, Training	- See all measures taken under #1 – Education, Technical Assistance, Training	None	N/A
3. Public Health Commodities - Deliver supplies and equipment with a SOP for environmentally safe management and disposal of expired products and non-functional equipment	- Each donation of MNH basic equipment to the health facilities is accompanied of a SOP that describes environmentally safe management and disposal of expired products and non-functional equipment	None	N/A
4. Small-Scale Construction	N/A	N/A	N/A
5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:		
Karine Nankam, MCSP Program Officer	Date: 13-October-2017	

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM

Country/Activity: Malawi

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training Infection prevention embedded in each training to sensitize health providers on the use of standard precautions, disinfection process, injection safety, and safe biological waste management.	MCSP supported training of vaccinators and mid level managers on injection safety and waste management during the IIP and MLM trainings. During MCSP supported follow up visits and supervisory visits to districts and facilities, injection safety and waste management is emphasized. MCSP supported training of vaccinators which	Supervision is ongoing in priority districts and of new staff; MCSP will continuously refresh staff during trainings.	Overall, MCSP aims to discuss environmental impact as part of technical assistance, training and other materials. MCSP only provides technical assistance to
CMEs on IP	included client flow to ensure that every client receives the service due and is recorded. During MCSP		management of auto- disable AD syringes,
Rearrangement of clinical settings and client flow.	supported follow up visits and supervisory visits to immunization sessions, client flow is emphasized.		does not procure nor distribute them to
Proper waste segregation and disposal through provision of color coded bins and liners.	MCSP supported training of vaccinators and mid level managers on Adverse Events Following Immunization		districts and health facilities (this is responsibility of the
Monitoring, managing, and reporting of adverse events.	during the IIP and MLM trainings. During MCSP supported follow up visits and supervisory visits to districts and facilities, AEFI monitoring and reporting		Government of Malawi and the MOH/EPI).
Written project guidelines for healthcare management following WHO healthcare waste	is emphasized.		
guidelines and applicable country regulations.	MCSP ensures the proper quantification and use of auto-disable syringes and needles during all MCSP-		
Use of water dispensers during trainings and meetings for hand-washing.	supported supervisory visits. Vaccinators are supervised in vaccine and immunization logistics management, including ordering and use of auto-		
Utilization of auto disposable (AD) syringes and	disable (D) syringes.		

needles for all. Training of vaccinators to avoid recap of needles after vaccination, use of safety boxes following guidelines- "no safety box no vaccination", and use of training records to monitor trainings conducted and participants. Segregation of wastes during vaccination. Sharps to be separated from other wastes. Sharps containers which are puncture-proof, impermeable and tamperproof should be used. Before final disposal of filled safety boxes, they should be stored in a secure place that is inaccessible to people and animals, in cases where it's not possible to dispose the same day.	MCSP ensures the avoidance of recapping syringes by encouraging use of AD syringes and incorporates messages on this topic in review meetings, and supportive supervision visits. MCSP ensures the segregation of waste through the use of safety boxes and other boxes for dry wastes and immediate disposal of safety boxes when possible through review meetings, and supportive supervision visits. Filled safety boxes are disposed of immediately after immunization sessions.		
2. Research and Development	N/A	N/A	N/A
3. Public Health Commodities Construction of incinerators to be used for burning of safety boxes and other wastes. Fencing of the disposal sites. Where incinerators are unavailable, use burn and bury methods in an area with limited access that is adequately protected from ground contamination.	Where incinerators and fencing are available, MCSP observes proper use during supportive supervision visits. Where incinerators are available, MCSP observes burn and bury methods especially in outreach clinics where transferring filled safety boxes to a health facility is less feasible. According to the Cold Chain Inventory 2014 report, 430 facilities or 53% of facilities in Malawi have an incinerator. MCSP is unable to support construction of incinerators, but will continue to advocate for them where needed.	MCSP will continue to advocate for incinerators and fencing where needed.	
Mercury thermometers need to be disposed of in a safe place where the mercury will not contaminate the ground water. They should not be burned in open spaces, where the fumes will destroy the environment. Once expired, fridge-tags should be disposed of in a safe place such as a landfill or designated trash area.	In Malawi, there are no designated trash area for disposal of expired thermometers and fridge tags and disposal is indiscriminate.	MCSP will continue to work with partners including UNICEF, the vaccine supplies, and WHO, the global technical lead, to support the Government of Malawi obtain proper disposal methods.	

4. Small-Scale Construction	N/A	N/A	N/A
5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:

Elizabeth Hourani, MCSP Program Coordinator

Date: 10/4/2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: MOZAMBIQUE

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Ensure training curricula includes guidance to sensitize health providers on the use of standard precautions, disinfection process, injection safely, and safe biological waste management Provide Continuing Medical Education (CME) courses on infection prevention and control (IPC) Rearrangement of clinical settings and client flow Monitoring availability of post-exposure prophylaxis (PEP) and guidelines Monitoring, managing and reporting of adverse events Utilization of auto- disable syringes and needles safety boxes for all immunization activities Training of vaccinators to avoid recap of needles after vaccination and use of safety boxes following guidelines, with the motto "no safety box, no vaccination"	Infection prevention, including universal precautions and demonstration and practice of proper handwashing techniques, and safe biological waste management are included in all project trainings, including those conducted during FY17 in BEMONC, CEMONC, FP (PPIUD, implants, interval IUD), CECAP, IMCI, ETAT, malaria, immunization, and nutrition. The training on waste management is focused on segregation of waste in different color-coded bins and in properly labeled disposal bins and proper disposal procedures. MCSP promotes the use of auto-disable syringes and needle safety boxes in all immunization activities, and provides onsite supervision to ensure their use at 56 facilities in Nampula province and 30 facilities in Sofala province. MCSP also provides technical assistance and monitoring to ensure the proper destruction / disposal of needle boxes. No adverse events occurred during the reporting period.	None	No adverse events reported.
2. Research and Development	N/A	N/A	N/A

3. Public Health Commodities

- Capacity building of healthcare providers on proper commodity management systems to minimize expiries or wastage.
- Conduct quantification and supply planning activities to meet current needs and minimize the oversupply of health commodities
- Put in place a tracking system to identify expired reagents and other medical utilities, remove them from shelves, place them in well labeled boxes, and forward them to incineration / disposal points.
- In collaboration with the USAID supply chain partner, PSM, implement standard operating procedures (SOPs) for the safe storage and distribution of health commodities in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Storage and transport considerations include, but are not limited to: storage conditions, stock inventory and records, monitoring product quality and expiration dates, theft prevention procedures, accident and spill response, incident reporting, and waste management.
- Provide capacity-building to healthcare workers on SOPs

At the central level, MCSP provided technical support to the National Task Force for RMNCH, Nutrition and Malaria Commodities to monitor the distribution of MCH and nutrition products, develop distribution plans for MCH and nutrition commodities, and to quantify MCH commodity needs for the period of 2019 to 2021. MCSP also reinforced the capacity of provincial-level commodity task forces and supported the creation of district and facility-level task forces in Nampula and Sofala.

In collaboration with the USAID-funded Procurement and Supply Management (PSM) project, MCSP conducted training on stock management procedures for MCH, immunization, nutrition and APE kits. MCSP also provided on-site technical support, including on-the-job training and mentoring, to health workers at 86 project-supported facilities in Nampula and Sofala in commodity management procedures, including minimum and maximum stock levels, average monthly consumption, intervals between requisitions, and average delivery times. During these visits, MCSP supported health workers to monitor and document stock-outs of essential commodities, and identified bottlenecks and communicated these findings to PSM. Also during the on-site visits, MCSP identified vaccine coverage issues due to problems with the cold chain and provided remedial support, including transportation of gas for vaccine refrigerators from the district level to health facilities and preventive maintenance of vaccine refrigerators.

Finally, on specific occasions and in response to requests from the MOH, MCSP supported in the transportation of vaccines. For example, in Quarter 3, MCSP In Sofala, MCSP provided logistical support to transport 20,070 doses of vaccines, 21 incinerator boxes, 168 vials of diluents, and 5,500 syringes to health facilities in two districts of Sofala province during programmed supportive supervision visits. During the supervision visits, MCSP also collected 800 doses of expired vaccines, which were delivered to the district warehouse for disposal.

During FY17, MCSP designed a tool to collect required information on stock-outs at the facility level and is still facing challenges to receive complete information from 100% of facilities (completeness has been around 65%). MCSP is working with health facilities to improve the reporting on this indicator.

MCSP's role in supply chain management is to provide support at the health facility level to build the capacity of health workers to forecast and request RMNCH, nutrition and malaria products, as well as to follow stock management procedures to conserve

commodities. these Because the USAIDfunded PSM project has the mandate to address the more systemic related issues to availability of essential commodities, MCSP coordinates very closely on bottlenecks that are identified at the facility level.

4. Small-Scale Construction

N/A

N/A

N/A

 Project will promote the use of handwashing stations and latrines in communities and households. Outreach sessions will be conducted with communities on the proper use and management of handwashing stations and effluent (installing and using latrines e.g. located minimum of 30m from any water source, use of impermeable slab to reduce environmental contamination, constructing a round pit no more than 1m in diameter to reduce risk of pit collapse), in conformity with WHO and SPHERE guidelines. The project will not construct or rehabilitate handwashing stations or latrines but will link households and communities to partner projects or local suppliers to facilitate access to WASH hardware as needed. MCSP will conduct training with local suppliers to reinforce international guidelines for installation of handwashing stations and latrines. Ensure hand washing stations are connected to soak away pits Ensure wastewater management practices conform with host-country requirements (Regulation on Waste Management, Decree 13/2006 of 15 June, published in the Boletim da República No. 24, 1st Series, of the 15 June 2006) 	MCSP-hired Community Development Agents (CDAs) worked in 490 communities in Nampula province and 131 communities in Sofala province to promote key water, sanitation and hygiene (WASH) behaviors, including the use of handwashing stations (tippy-taps) and latrines. MCSP has supported Community Health Committees in these provinces to create 1,078 WASH demonstration centers in Nampula and 153 demonstration centers in Sofala that showcase healthy WASH practices, including training and guidance on the proper use and management of handwashing stations and effluent. The WASH demonstration centers complement messages conveyed to community members by CDAs during educational sessions and mobile brigades, including reinforcement of proper latrine use for disposal of adult, child, and infant feces and the importance of following procedures for proper drainage of handwashing stations and management of wastewater.	None	
 6. Nutrition Capacity building of healthcare providers on proper nutrition commodity management systems to minimize expiries or wastage. Conduct quantification and stock management activities to meet current needs and minimize the oversupply of health commodities Strengthen the delivery of the Nutrition Rehabilitation Program (PRN), including improved implementation of protocols for the management of acute malnutrition, improved program monitoring, and 	At the central level, MCSP provided technical support to the Nutrition Logistics Working Group, which is led by the MOH's Nutrition Department and the Center for Management of Medical Supplies (CMAM), and supported by MCSP, PSM, UNICEF, Clinton Health Access Initiative (CHAI) and the World Food Program (WFP). The working group developed a forecasting plan for nutrition commodities for 2017-2021, and included state funds for the procurement of vitamin A, iron and folic acid supplements, and therapeutic milks (F75 and F100). At the provincial level, MCSP participated in all meetings of the Commodities Task Force in Nampula and Sofala.	None	MCSP's role in supply chain management is to provide support at the health facility level to build the capacity of health workers to forecast and request nutrition products, as well as to follow stock management procedures to conserve these commodities.

 Where nutrition work is implemented, promote WASH practices that can contribute to diarrhea and stunting reductions in under-two children. In collaboration with the USAID supply chain partner, PSM, implement standard operating procedures (SOPs) for the safe storage and distribution of health commodities in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Storage and transport considerations include, but are not limited to: storage conditions, stock inventory and records, monitoring product quality and expiration dates, theft prevention procedures, incident reporting, and waste management. 	To ensure monitoring of nutrition therapeutic and supplementary products at the health facility level, MCSP adapted a checklist from the FANTA project and applied it at project-supported facilities in Nampula province. During supportive supervision visits, MCSP nutrition supervisors identified several gaps in stock management of nutrition commodities, with most stock-outs identified for ready-to-use therapeutic food (RUTF), Super Cereal and MNPs. Out of the 73 facilities visited, stock-outs of Iron and Folic Acid (IFA) supplements were reported in the following health facilities in Nampula: Muralelo HC, Malema HC, Muhala Expansão HC, Nampula City health facilities, Murrupula Sede HC, Murrupula HC, Namige HC, and Mongincual HC. In Sofala, Nhamatanda had a district-level stock-out of IFA supplements. Metuchira HC had a long-term stock-out of IFA due to lack of viable access roads for delivery (caused by flooding in the area). To support the resolution of stock-outs, MCSP nutrition supervisors and DNOs provided mentoring to nutrition and pharmacy health facility focal points on completing request forms and stock control forms, and most importantly, on working together to improve communication; aided in the transport of supplements from district warehouses to health facilities during scheduled supervision visits; and coordinated with the DPS and partners including WFP and PSM to help resolve distribution constraints. During health facility visits, MCSP also observed that nutrition commodities are often not appropriately stored, and that key logistics principles are not followed to prevent stock-outs and expiration. While support was provided to identify immediate solutions, including placing raised platforms to prevent the products from being in direct contact with the floor and walls, longer-term solution were sought through meetings with PSM, including the planning of more on-the-job logistics trainings targeting pharmacy and nutrition focal points.		Because the USAID-funded PSM project has the mandate to address the more systemic issues related to availability of nutrition products, MCSP coordinates very closely on bottlenecks that are identified at the facility level.
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by: Kathryn Smock, MCSP Sr. Program Officer Date: October 12, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: NAMIBIA

LEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training Education, technical assistance, and training activities that affect the environment will include discussion of prevention and mitigation of potential negative environmental effects as well as planning for pharmaceutical storage and disposal.	MCSP Namibia ensures that prevention, mitigation, and pharmaceutical storage and disposal strategies are discussed during technical assistance, training activities, and supportive supervision. Part of MCSP Namibia's technical assistance to the Namibia Planned Parenthood Association (NAPPA) and Health Extension Program (HEP) includes training staff on proper medical waste management and suggesting improvements to clinical settings and client flow.		Training is ongoing in new districts and at new health facilities in priority regions. MCSP will continuously train new staff and refresh old staff on environmental mitigation measures. In PY4, MCSP will support the MOHSS to revise training materials for the HEP, and will advocate for the inclusion of further environmental mitigation measures into the finalized materials.
Used training instruments will be properly disposed through decontamination and packaging in appropriate storage or waste containers. 2. Research and Development	As stated above, MCSP ensures that training instruments are properly stored and disposed after use in training. Biohazard waste is separated, appropriately labelled and disposed. Used sharp instruments are placed in puncture proof sharps disposal containers while awaiting incineration.	N/A	All biohazard waste produced during training is placed in appropriately labelled bags and deposited at MOHSS facilities for incineration.
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3. Public Health Commodities Ensure project and project partners follow Ministry of Health and Social Services (MOHSS) guidelines on health commodity waste management and environmental health.	MCSP ensures that MOHSS guidelines on health commodity waste management and environmental health are discussed with project partners, including NAPPA, and mitigation approaches are integrated into plans for future activities that could impact the environment.		MCSP aims to ensure that a discussion of environmental impact is part of all technical assistance, during all training, and is considered when supporting the MOHSS to develop training materials and standard operating practices.
Capacity building of health care providers on proper commodity management to minimize expiration, including identification of expired drugs and removal/disposal.	During provider-initiated testing and counseling (PITC) training, MCSP ensures that health care providers are trained on the proper removal/disposal of used equipment at NAPPA facilities and at community level in the HEP. Providers are also trained on stock management to reduce stock outs and minimize expiration.		In PY3, MCSP engaged in capacity building of health care workers who will conduct community-based HIV testing and counseling and included proper commodity management. Routine measures were put in place to detect expired commodities and direct appropriate disposal.
Training on best management practices concerning the proper handling, labeling, treatment, storage, transport, use, and disposal of medical waste, including blood, sputum, and sharps.	In PY3, MCSP supported the MOHSS to strengthen the supply chain and waste management of the national HEP per the SOP for supply and waste management for community-based health care.		MCSP ensures that technical assistance and supportive supervision is provided to health care workers and health facility staff in proper handling, labeling, treatment, storage, transport, use and disposal of medical waste. Waste is handled in accordance with the Namibia Integrated Waste Management policy and guidelines.
Annual completion of the Healthcare Waste Management Minimum Program Checklist and Action Plan (Annex 1 in MCSP IEE)	In PY3, MCSP used the Healthcare Waste Management Minimum Program Checklist and Action Plan as a guiding checklist for institutionalizing proper waste management practices at facilities and with health care workers that MCSP supports.		
4. Small-Scale Construction	N/A	N/A	N/A

5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:

Dr. Tafadzwa Chakare, MCSP/Namibia Technical Director

Date: October 11, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: NIGERIA MNCH, HelloMama, HTS	IEE File #/DCN: <u>GH-13-16</u>	EMMP File #/DCN: <u>N/A</u>

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training *Proper collection of paper products after training/capacity building events and disposal or reuse as necessary *Proper use of IPC protocols for disposal of medical waste and PPE in accordance with WHO Guidelines	As part of MCSP trainings on EmONC, PPIUD, ENCC and other Clinical Training Skills, discussion of proper waste management, disposal of used consumables is covered	None	Waste generated from trainings are properly disposed according to standards
2. Research and Development *Procedures for handling and disposing commodities. *Proper use of IPC protocols for disposal of medical waste and PPE in accordance with WHO Guidelines	Procedures for handling and disposing commodities with proper use of IPC protocols for disposal of medical waste in place during MCSP research supported processes	None	None
3. Public Health Commodities Capacity building of health care providers on proper commodity management systems to minimize expiries or waste.	Safe disposal of consumables and public health commodities by providing disposal bins monitored through the Quality Improvement Committees will be established.	None	This process will need to be monitored closely by Quality Improvement Coordinators and Service Improvement Coordinators.

*Put in place a system to identify expired reagents and other medical utilities, remove them from shelves, place them in well labeled boxes, and forward them to incineration / disposal points *Identification of expired drugs and removal of drugs from drug stores for disposal *Safe disposal of consumables by providing disposal bins.	Capacity building of health care providers on proper commodity management systems to minimize expiries or wastage carried out		
4. Small-Scale Construction	N/A	N/A	N/A
5. Small-Scale Water and Sanitation *Ensure proper IPC training for all HCWs at 305 MCSP supported facilities *Use IPC protocols according to WHO and national guidelines *Selected facilities will receive portable hand washing stations known as Veronica Buckets that have taps and can be placed on tables	 In compliance with National Guidelines, hand washing facilities supported and encouraged to have drainage systems in place. IPC and hand washing training carried out in supported facilities with guidelines in place 	None	None
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by: Oniyire Adetiloye, MCSP/Nigeria Chief of Party

Date: October 13, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: NIGERIA ROUTINE IMMUNIZATION

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

Timerraine. October 2010 – September 2017			
List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)		g issues relating to required Remarks/Update onditions	
 1. Education, Technical Assistance, Training Ensure training curricula follow proper use and waste management guidelines in accordance with international best practices (e.g., WHO, USAID) and host country requirements. Include sessions on segregation, collection, storage, and disposal of medical waste in training curricula. Use of auto-disable syringes and needles, and safety boxes for all immunization activities. Procedures for handling and disposing of commodities and health care waste generated during training activities are addressed below in the Public Health Commodities activity category (#3) 	 RI service providers have been trained to segregate sharps and dispose the papers, syringe foils and needle caps separately during fixed and outreach RI sessions. This helps reduce the space occupied by the sharps in safety boxes, such that safety boxes can be used longer before filling up and being disposed. Waste segregation is verified at the health facilities during state-and local government area (LGA)-led routine monitoring and SS visits, with support from the MCSP's state immunization technical officers (SITO) and LGA immunization officers (LITOs). These SS-visits serve to reinforce the principles of waste-management that are part-and-parcel of all Service Provider trainings conducted. In Bauchi and Sokoto states, all antigens being used for RI services are being administered using auto-disable syringes. The program's technical staff follow up regularly with service 	 Training and mentoring has continued to be a continuous activity with MCSP Technical officers and Consultants emphasizing the need to do no harm to the client, health worker and the community. Use of auto-disable syringes, needles and safely boxes was strictly followed during the immunization campaign against meningitis early in the year especially in Sokoto State. Identified standard incineration sites were used for disposal. Procedures for handling and disposing of commodities and health care waste generated during training activities will also be followed 	

	providers, including through routine monitoring and supportive supervision (SS) visits, to ensure compliance.		during the nation-wide measles campaign planned for last quarter of 2017 and first quarter of 2018
2. Research and Development	N/A		
 Public Health Commodities Develop and implement Standard Operating Procedures (SOPs) on the safe storage and use of health commodities, including a system for identifying and removing expired drugs. Procedures will be in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Develop and implement a Waste Management Plan (WMP) that 	 SOPs are currently being finalized at the national level after which series of training will take place. The National Training on the Basic Guide for RI Service Providers is 	N/A	
includes procedures for properly handling and disposing of health care waste in conformance with international best practices (e.g., WHO, USAID) and host country requirements. Disposal considerations include, but are not limited to: proper segregation, handling, and storage of wastes, containers and labeling, safe disposal practices and procedures, prevention of nosocomial infections, inspection protocols,	currently on-going. This training contains waste management component/module The Midlevel Manager's training also contains module on waste management. The guidelines from the national level on WMP are very clear-the first option is incineration.		
and documentation requirements (e.g., waste records). Train workers on the SOPs and WMP developed for proper handling of health commodities and disposal of waste, including capacity building of health care providers on proper commodity management systems to minimize	• For health facilities not far from the centers with incinerators, logistics are put in place to transport used safety boxes for incineration. Where this is not feasible, burn and bury is practiced in accordance with Host country guidance and policy.		

expiries and wastage		
Ensure safe disposal of old and		
broken thermometers containing		
mercury. Safe disposal of old and		
broken fridge tags (which have		
gradually replaced thermometers,		
but do not contain mercury). IP may		
manage disposal of such equipment		
or commodities but may not		
distribute mercury-containing		
equipment.		
Wastes will only be disposed in		
incinerators that comply with USAID		
and international standards (i.e.		
WHO). Incinerators will not exceed		
the maximum capacity to burn 100		
kilograms of waste per hour. This		
EMMP does not cover the		
procurement and/or installation of		
incinerators.		
Burn and bury pits may be used in		
the absence of a standard		
incinerator, but national policy calls		
for the phase-out of burn and bury		
pits and transition to use of		
incinerators only. Support for		
fencing of disposal sites. During		
campaigns when a lot of waste is		
generated, the safety boxes are		
usually transported to a central		
place with incinerators		
Where incinerators are unavailable,		
use burn and bury methods in areas		
with limited access and that are		
adequately protected from ground		
contamination. Avoid burning in		
open spaces, where fumes can lead		
to adverse health impacts and air		
pollution.		
Collect and maintain treatment and		
disposal records on file		

4. Small-Scale Construction	N/A	
5. Small-Scale Water and Sanitation	N/A	
6. Nutrition	N/A	
7. Vector Control	N/A	
8. Emergency Response	N/A	

Prepared by: Devina Shah, MCSP Program Officer

Date: October 13, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: RWANDA

LEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Include sessions on segregation, collection, storage and disposal of medical waste in training curricula	In PY3, all health facilities in 10 MCSP supported districts were visited through integrated supportive supervision, monitoring of FP compliance, quality improvement assessment; clinical mentorship, on job training, data quality audits, technical coordination meetings and DHMT supervisions. Through these field visits, MCSP discussed with environmental, hygiene and sanitation officers and heads of facilities on waste management, hygiene conditions, safe handling of sharps, proper use of protective clothing, etc. In addition, all clinical and non-clinical staff were oriented on medical waste management, hygiene, safe handling of sharps, proper use of protective clothing etc., and messages on waste management were shared via morning staff meetings.	None	MCSP will continue routine monitoring to ensure waste management and infection control is fully implemented at all supported health facilities.
2. Initiate and standardize a reporting tool (check list) on key EMM measures for meetings and trainings	All health facilities were oriented on use of health care waste management and health care waste management action plans during the year.	Due to budget constraints at facility level, some aspects to annual health care waste management action plans were not implemented as planned.	MCSP will continue advocacy at facility level to ensure integration of waste management and compliance with guidelines
3. Proper waste segregation and disposal through provision of color coded bins and liners and use	In PY3, all health facilities were oriented on use of color-coded bins and during mentorship, the mentors checked for waste disposal using appropriate bins.	A few facilities had bins that were not covered and a few others were not emptied when they are full.	MCSP will continue to monitor and encourage environmental health officers and heads of facilities to comply with all

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
of standard operating procedures for waste disposal.			requirements regarding waste management at all times.
4. Re-arranging the clinical settings to ensure smooth client flow as a simple effective step of enhancing a safe environment.	MCSP advocated for rearrangement of clinical settings and patient flow. During the year, a number of services were re-arranged to improve service delivery. These services include family planning, maternity, outpatient and kangaroo mother care rooms.	None	MCSP will continue to monitor service delivery and client flow systems in all supported facilities
5. Monitoring availability of PEP and guidelines	PEP guidelines were available in all health facilities and were monitored by Environmental Health Officers at district hospital. MCSP monitored this through field visits.	There is need to integrate monitoring of PEP in routine supportive supervision activities to ensure sustainability.	MCSP will discuss with hospitals and RBC to ensure integration of PEP in routine supportive supervision activities to ensure sustainability.
6. Use of water Dispensers during trainings and meetings	All MCSP staff were educated on the use of safe water within working premises and MCSP office has water dispensers for use. All service providers for training/meeting venues were requested to avail water dispensers for use during meetings and trainings. Most venues now use water dispensers.	Only a few service providers for training or meeting venues still use bottles.	MCSP will continue advocacy and monitoring to ensure all service providers comply with this requirement
7. Monitor expiration dates of commodities used in trainings	All health facilities have the updated bin cards with expiry dates and this is monitored regularly by facility Environmental Health Officers.	A few heath facilities need to update their bin cards	MCSP will work with Environmental Health Officers to ensure all HFs update their bin cards on time
8. Put in place a system to identify expired health commodities	Monthly report of expired medicines disposal at district hospital pharmacy is regularly done using drugs management tools. All expired medicines are reported and kept out of pharmacy stores for final disposal. Monthly reports on drug expiration are submitted to district pharmacies by each health facility and from community health workers. Expired drugs are regularly taken to incinerators for final disposal.	None	MCSP will continue to monitor management and disposal of expired medicines

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
9. Monitor expiration dates of commodities used in trainings	The expired medicines disposal is monitored by District Hospital on a quarterly basis. Each Health center conducts regular inventory of chemicals and pharmaceutical products. The expired pharmaceuticals are set aside for safe disposal. During mentorship and quarterly integrated supportive supervision from hospitals to health centers, supervisors and mentors verify how health center pharmacies manage the medicines including disposal of expired medicines.	None	MCSP will continue to monitor management and disposal of expired medicines
10. Safe disposal of consumables by providing disposal bins	All consumables are appropriately disposed of and health facilities have boxes for disposal of used syringes, gloves, etc. The Environmental Health Officers are in charge of ensuring that all full bins are emptied regularly.	A few bins were full and had not been emptied during monitoring visits.	MCSP will continue to monitor and encourage Environmental Health Officers and heads of facilities to comply with all requirements regarding waste management at all times.
11. Monitoring of use of log book for tracking application of EMMP at Health facilities	During PY3, the use of logbooks to track EMMP activities was implemented at supported hospitals.	These logbooks are not yet available at health centers.	MCSP will discuss with health facility managers and agree on way forward to introduce the logbooks at health centers.
12. Ensure that the health facility or site has a medical waste management protocol or Standard Operating Procedure	All health facilities have SOPs on waste disposal. This is monitored during field visits such as during mentorship visit, integrated supportive supervisions and other technical visits. Head of health facilities are responsible for implementation of the SOPs.	None	MCSP will continue regular monitoring to ensure compliance with the SOPs.

Prepared by:			
	Rachel Janik, MCSP Program Coordinator	Date: October 17, 2017	

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: SOUTH AFRICA

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Education, Technical Assistance, Training Continuing medical education on infection prevention and proper biomedical waste disposal Proper waste segregation and disposal through provision of color coded bins and liners Rearrangement of clinical settings Monitoring availability of postexposure prophylaxis and guidelines	MCSP has provided one, primarily didactic training which generated no waste, and mitigation measures have not yet been enacted		
 Include in the training curriculum and mentorship checklists best practices concerning the proper handling, use and disposal of medical waste, including blood, sputum and sharps. Capacity-building of pediatric nurses and nurse managers on proper waste management and disposal. Support nurse managers at 	MCSP works with one Hospital which has only opened for patients on a limited basis. Future capacity building support provided by MCSP will include training on best practices in waste management and disposal.		

Nelson Mandela Children's Hospital to follow procedures to properly handle, transport and properly dispose of blood, sharps and other medical waste • Support development and/ or operationalization of annual work plan which includes waste management check list with a clear action plan.			
2. Research and Development	N/A	N/A	N/A
3. Public Health Commodities	N/A	N/A	N/A
4. Small-Scale Construction	N/A	N/A	N/A
5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:			
	Alisha Smith-Arthur, MCSP Senior Program Officer	Date:	October 6, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: TANZANIA

IEE File #/DCN: GH-13-16

EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
1. Education, Technical Assistance, Training	N/A	N/A	N/A
2. Research and Development	N/A	N/A	N/A
3. Public Health Commodities	 Ensured that the below conditions are applied before and during procurement, storage and disposal of health commodities: Supported supply planning activities to minimize the oversupply of health commodities; Reinforce best waste management practices with health care providers during trainings, supportive supervision and mentorship visits. Reminded providers to implement the tracking system to identify expired commodities and reagents, remove them from shelves, place them in well labeled boxes, and forward them to authorized incineration/disposal points; Procured health commodities that comply with international and host country regulatory, shipping, and packaging requirements, when needed; 	After discussions with USAID, MCSP TZ will begin reporting on environmental mitigation measures in PY4 and will provide quarterly updates on measures undertaken to reduce the project's environmental impact in Tanzania.	

 4. Small-Scale Construction Develop a design plan(s) that includes information on construction or rehabilitation activities (e.g. location, building materials to be used, etc.) Ensure accredited contractors for construction activities implement SOPs that are in conformance with international best management practices and host country laws and regulations. Considerations include, but are not limited to: site security, relevant occupational health and safety concerns include the use of PPEs, control measures to minimize environmental impacts etc. We do not expect there to be any environmental threats. Ensure accredited contractors implement "site clean up" that includes procedures for properly disposing of renovation materials in accordance with international best management practices and host country laws 	 Maintained copies of procurement records on file (e.g., manufacturing records, Certificate of Analysis, test data, regulatory certificates) Supported the implementation of standard operating procedures (SOPs) for the safe storage and distribution of health commodities based on the international best practices (e.g., WHO, USAID) and host country requirements (Tanzania Health Care Waste National policies). Storage and transport considerations include, but are not limited to: storage conditions, stock inventory and records, monitoring product quality and expiration dates, theft prevention procedures, accident and spill response, incident reporting, and waste management; Provided capacity building to health care workers on SOPs and waste management practices. No small-scale construction activities were conducted during MCSP TZ PY3. 	N/A	Potential construction activities proposed for PY3 were transitioned to the USAID Boresha Afya project in PY3 Q1.

 and regulations. Considerations include, but are not limited to: proper handling and storage of waste, safe disposal practices and acceptable disposal locations Ensure accredited contractors implement Tanzania waste management policies that include procedures for properly disposing of non-hazardous and hazardous materials in accordance with international best management practices and host country laws and regulations. Considerations include, but are not limited to: proper handling and storage of waste, safe disposal practices and acceptable disposal locations, and use of appropriate PPE. 			
5. Small-Scale Water and Sanitation	N/A	N/A	N/A
6. Nutrition	N/A	N/A	N/A
7. Vector Control	N/A	N/A	N/A
8. Emergency Response	N/A	N/A	N/A

Prepared by:			
	John George, MCSP Project Director	Date:_	October 30, 2017

Project Name: MATERNAL AND CHILD SURVIVAL PROGRAM Country/Activity: _UGANDA	IEE File #/DCN: <u>GH-13-16</u>	EMMP File #/DCN: N/A

MCSP Environmental Mitigation and Monitoring Report (EMMR)

List each Mitigation Measure from column 3 in the EMMP (EMMT Part 2 of 3)	Status of Mitigation Measures	List any outstanding issues relating to required conditions	Remarks
Education, Technical Assistance, Training Utilization of auto-disable syringes and needles for all immunization activities.	Vaccinators were trained in vaccine and immunization logistics management, including ordering from the health sub-district vaccine store/district vaccine store that includes bundling of auto-disable syringes (ADs) with vaccines to ensure available stock of vaccines doses at the health facility at any time have equal number of ADs, stock management and the use of only ADs for immunization.		MCSP only gives technical assistance to management of auto- disable syringes (ADs), does not procure nor distribute them to districts and health facilities (this is responsibility of the National Medical Store (NMS)).
Training of vaccinators to avoid recapping of needles after vaccination and use of safety boxes following guidelines, with the motto "no safety box, no vaccination."	MCSP Uganda contributed to efforts aimed at avoidance of recapping syringes by promoting proper use of the AD syringes (provided through MOH/UNEPI) through project trainings, quality improvement activities, and supportive supervision visits.		

Reduction in waste generation and segregation of wastes during vaccination. Sharps to be separated from other wastes. Sharps containers which puncture-proof, impermeable and tamperproof with fitted covers should be used. 2. Research and Development	Through the trainings, quality improvement activities, and supportive supervision visits that it supports, MCSP Uganda promotes segregation of waste by proper use of safety boxes for sharps disposal during vaccination sessions.	
 Public Health Commodities Put in place a system to identify expired vaccines and consumables, remove them from shelves, place them in well labeled boxes, and forward them to incineration / disposal points. Identification of expired drugs and their removal from drug stores for disposal. Before final disposal of filled safety boxes, they should be stored in a secure place that is inaccessible to people and animals. 	MCSP Uganda builds local capacity to ensure systems are in place to identify expired vaccines and remove them from the cold storage (EPI fridges) at health facilities and drugs for district retrieval and disposal, locked storage place for filled safety boxes exist are communicated and monitored in project trainings, quality improvement activities, and supportive supervision visits conducted.	Overall, MCSP Uganda aims to discuss environmental impact as part of technical assistance, training and other materials.
 Construction of incinerators to be used for burning of safety boxes and other wastes. Fencing of the disposal sites. Where incinerators are unavailable, use burn and bury 	Training, quality improvement activities, and supportive supervision are geared towards building local capacity to properly use incinerators, where they exist and the 'burn and bury' method recommended by MOH/UNEPI is known and practiced	

methods in areas with limited access that is adequately protected from ground contamination. • Mercury thermometers will be disposed of in a safe place where the mercury will not contaminate the ground water. They should not be burned in open spaces where the fumes will destroy the environment. • Once expired, fridge-tags should be disposed of in a safe place such as a landfill or designated trash area. • Capacity building of health care providers on proper commodity management systems to minimize expiries or wastage.	at health facilities where incinerators do not exist. MCSP Uganda works to ensure that mercury thermometers are destroyed and fridge tags are disposed of according to WHO protocols.	Ministry of health /UNEPI now uses alcohol thermometers for its EPI fridges and other cold storage equipment as clarified by UNEPI.
4. Small-Scale Construction	n/a	
5. Small-Scale Water and Sanitation	n/a	
6. Nutrition	n/a	
7. Vector Control	n/a	
8. Emergency Response	n/a	

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