

EMPR Quarter 5

Haiti SDSH II

August 1, 2013 – October 31, 2013

This report was made possible through support provided by the US Agency for International Development, under the terms of Contract Number 521-C-12-00008. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

Santé pour le Développement et la Stabilité d'Haïti (SDSH II)

Management Sciences for Health

200 River's Edge

Medford, Massachusetts 02155

Telephone: (617) 250-9500

www.msh.org



Santé pour le
Développement et
la Stabilité d'Haïti

Environmental Mitigation Report (EMPR)

USAID Haiti Mission Strategic Objective (SO) and Title: The Development Objective (DO) of the current health strategy is “Health and Nutrition Status of the Haitian Population Improved

Title of IP Activity: SDSH II (Extension)

IP Name: Management Sciences for Health (MSH)

Funding Period: August 1, 2013 – January 31, 2014

Resource Levels (US\$): US \$4,984,710

Associated IEE: LAC-IEE-11-03

Report Prepared by: Jean Romuald Ernest and Alex J. Durena

Submission Date: December 12, 2013

Report period: August 1, 2013 – October 31, 2013

Background

At the end of the SDSH project in July 2012, in order to ensure continuous provision of care to 43 percent of the Haitian population covered, USAID provided a one year contract to Management Sciences for Health (MSH), with the mandate to offer a basic package of primary healthcare services through performance-based financing contracts and agreements with NGOs and the Ministry of Health (MOH). The Santé pour le Développement et la Stabilité d'Haïti II (SDSH II) project aims to strengthen the capacity of Haiti's *Ministère de la Santé Publique et de la Population* (MSPP) [Ministry of Public Health and Population (MOH)] to carry out its executive management and oversight functions at the departmental level and also to deliver health services to people living in the catchment area of a total of 164 health facilities (99 public sites and 65 private). On August 1, 2013, USAID gave a two month extension to guarantee availability of services throughout the SDSH II network until September 30, 2013. An extra six weeks of implementation were then added to the mandate of the SDSH II project that will end on November 15, 2013.

During the two extension periods, the project continued to offer technical and financial support to 40 MOH's Targeted Zones (called Zones Ciblées) and 26 NGO's while focusing attention on the following program areas:

- 1) HIV/AIDS and Tuberculosis (TB)
- 2) Maternal and Child Health (MCH) including Water, Sanitation, and Hygiene (WASH) and Nutrition
- 3) Family Planning (FP)
- 4) Gender based violence (GBV) and child protection (CP)

In compliance with the United States environmental regulations, the SDSH II project elaborated on an environmental mitigation plan to ensure application of defined norms and procedures for waste management and infection control. The effective implementation of this plan is an important step in ensuring the mitigation of impact that the medical waste generated by the project's activities in the whole network might have on the immediate and surrounding environment.

It should be noted that no environmental activities were conducted after October 31, 2013, and therefore this is the final EMPR for the SDSH II project. The end of the contract of most of the SDSH technical staff (departmental and central levels) initially scheduled on October 31st were prolonged until November 15th. But, during these 15 days, the focus have been put on the follow of up with all 164 health facilities for the submission of the monthly reports on time and on the justification of the expenses incurred during the project.

Main Activities Conducted

From August 1, 2013 to October 31, 2013, the SDSH II project put an emphasis on the supervision visits at the institutional level to monitor compliance to the guidelines of waste management and infection prevention. The project ensured as well that all awareness and information, education and communication (IEC) materials reproduced during the previous quarter were distributed and displayed

in the 164 supported facilities. A post assessment on environmental compliance was also conducted to compare with the results of the first study conducted one year ago before the implementation of the numerous waste management related activities that occurred during SDSH II.

Waste management supervision at the institutional level

During this reporting period 86 health facilities have been supervised; the checklist developed during the previous semester has not been used for all of those visits conducted. It has been noticed that the infection prevention and waste management plan developed by the staff at the facility level was not implemented in most sites. This situation is hampering the expected improvements regarding the application of the defined guidelines for waste management and infection prevention. The lack of space or specific mechanisms for final disposal of waste and the absence of incinerators observed at the national level in most sites remain crucial issues within the SDSH network. SDSH project did not have the mandate to provide or build incinerators but these visits still showed progress in the collection, handling, and sorting of waste at the facility level.

Post-assessment of environmental compliance

During the month of October 2012, a first assessment on environmental compliance was conducted in 41 health facilities supported by the SDSH II project, in order to assess the level of compliance by these facilities to the established requirements regarding waste management and infection prevention, to identify areas for improvement and to formulate specific recommendations regarding the issues and key findings discovered.

Several topics have been considered for this evaluation:

- Knowledge of the different types of personnel regarding waste management norms and procedures
- Cleanliness of the different kinds of rooms for service deliveries and of the courtyard
- Nature and condition of the water sources and the toilets as well as condition of the showers
- Sterilization of medical material
- Elimination of waste
- Uniform of the health personnel

In October 2013, after the application of the agreed recommendations, a second study was piloted to monitor and gauge improvements compared to the previous one. While the data analysis highlighted many improvements, it also demonstrated the need of continuous efforts aimed to strengthen hygiene and waste management.

This study showed an increased percentage of sites with at least one person trained in health waste management (HWM); increase of the percentage of sites with posters on HWM posted on the walls (from 16.22% to 80.56%); increase of the percentage of sites with cleaning personnel trained on HWM

(from 41.46% to 85%); increase of the percentage of sites using biosafety boxes regardless of the type of room (main consultation, delivery, immunization, or emergency room) (from 53.85% to 82.5%); and increase of the percentage of sites with biosafety boxes always available in a sufficient quantity regardless of the type of room (main consultation, delivery, immunization, or emergency room) (from 68.97 to 93.75% for the delivery rooms).

Even though the results showed (a) an increase in the percentage of sites with materials available for waste collection [spade (from 23.81% to 63.41%), wheel barrow (from 28.57% to 65.85%), and plastic bags (from 33.33% to 51.22%)]; (b) an increase in the percentage of sites with controlled access to incinerator (from 41.67% to 53.85%); (c) an increase in percentage of sites with available materials for dry (from 58.34% to 74.2%) or humid (from 57.14% to 80%) sterilization; and (d) an increase in the percentage of sites with protocols for dry or humid sterilization posted on the wall (from 11.11% to 37.5%). However, continuous efforts should be made to improve waste management as specific elements still show weaknesses and an insufficient level of quality. For example very low or worsen results have been seen for the following: (a) percentage of sites with visible waste in the courtyard (especially organic (from 4.76% to 9.76%) and vial (from 4.76% to 4.88%)); (b) percentage of sites that clean their toilets for patients at least twice a day (from 33.33% to 48.78%); percentage of sites with very clean toilets (from 23.08% to 22.5%); (c) percentage of sites with specific colour bags for contaminated waste (from 14.63% to 28.95%); (d) percentage of sites with usable showers available for patients (from 46.15% to 62.16%); (e) percentage of sites with functional incinerator (from 40.49% to 56.1%).

Other activities

An onsite refresher on waste sorting and disposal has also been conducted for the staff directly involved in waste management while delivering these educational materials. Posters on hand washing techniques were not reproduced because of unavailability of funds.

I) Environmental Monitoring and Evaluation Tracking Table

#	Description of mitigation measure	Responsible party	Monitoring methods		Progress during extension period (August 13 – October 13)
			Indicators	Methods	
1	Handling of hazardous medical waste	MSH/Waste Management Advisor (WMA) Heads of Institutions	At least one person trained in handling hazardous medical waste per partner institution	Training registers of representatives from clinical sites by MSH	Training completed for all staff at both the institutional and community levels since the last quarter
	Collection and disposal of hazardous waste				
	Wear thick household gloves before handling hazardous waste	In charge of health facilities	Safety equipment available at all sites (gloves, safety boxes)	Regular spot visits by MSH representative	Equipment available at most sites supported by the project. A checklist for integrated supervision including waste management monitoring has been used this quarter during visits conducted at 86 sites
	Safety boxes are available and well used	In charge of health facilities	Puncture resistant containers are available and used appropriately in all sites At least 85% of sites visited are compliant	MSH/WMA use the written waste management protocol to report on the status of waste management at each site with an improvement plan where needed	Every site visited complies and are using appropriately the safety boxes.
2	Partners' institutions will define the circuits of hazardous waste disposal at their specific sites	Institution MSH / WMA	Each site has guidelines for waste management hang in a visible location in the health facility	Observation during sites visits	All partners have developed a plan for waste management and have defined the waste stream. However, the implementation of the plan developed is still an issue in most sites
	1st choice: All syringes, needles and other disposable implements should be well secured and covered before being transported to a nearby hospital to assure that they reach their destination for incineration	Institution	Puncture resistant containers are available and used in all sites Full safety boxes are stored in a secure area prior to incineration/transport	Spot visit to verify if waste is well disposed off	Safety boxes available at the 86 sites supervised with the use of the checklist
	2nd choice: Burn waste materials in a container to decrease likelihood of scavenging and to reduce the risk of	Institution	Hazardous waste is not found on facility grounds, except in appropriately marked and secured	Spot visit to verify if waste is well disposed off	Waste materials are generally burnt in most sites, but hazardous waste is still found on few facility grounds ;this issue has been discussed with local leaders

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress during extension period (August 13 – October 13)
			Indicators	Methods	
	infection		areas/receptacles at least 85% of sites visited are compliant		
3	Wear thick household (utility) gloves, coveralls, face mask, and boots when handling and transporting wastes	Institutions (clinics)	Safety gloves, masks, boots available and utilized at all health facilities supported by SDSH II	Spot sites visits by MSH to observe safety disposal of materials when handling waste	Equipment available at most sites supported by the project; however, it should be noted that some equipment delivered to institutions such as household gloves are not purchased by the institutions once the stock delivered is exhausted
	Dispose of solid wastes in non-corrosive washable containers (plastic or galvanized metal) with tight fitting covers	Institutions (clinics)	Non-corrosive washable containers (plastic or galvanized metal) with tight fitting covers available at 95% sites	Spot sites visits by MSH to observe safety disposal of materials when handling waste	Containers available at most sites supported by the project. Most of the 86 sites for which the checklist has been used have containers available
	Collect the waste containers on a regular basis and transport the combustible ones to the incinerator If incineration is not available, burn or bury in a controlled area, where scavenging would not occur	Institutions (clinics)	Maintenance records indicate at least 2 transport of waste per week	Waste management registers verification	Waste final disposal is a challenge in most health facilities; there is a strong need of incinerator; managers often burn the waste in a hole located in the facility yard.
	Wash hands after handling wastes Decontaminate and wash gloves in a chlorine solution prior to reuse or disposal	Institutions (clinics)	Available clean water and chlorine solution near the circuit of waste handling	Spot visits observations	In most places, due to the strong cholera epidemic response there is always a bucket with chlorine water for hand washing

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress during extension period (August 13 – October 13)
			Indicators	Methods	
4	Handling and disposal of sanitary wastes				
	Wear thick household (utility) gloves when handling and transporting waste	Institutions (clinics)	Safety gloves, masks, and boots available at the health facility and utilized	Spot visits to see if safety measure are respected	Equipment available at most sites supported by the project. A lot of materials delivered to the institutions were kept in their warehouse; they have been put in use after the supervision visits held
	Carefully pour waste down a utility sink drain or into a flushable toilet Liquid waste can also be poured into latrines that do not drain uphill from a water source Avoid splashing	Institutions (clinics)	Specific drainage facility for sanitary waste available and utilized	Review of the drainage system during field visits and propose remedial measures if necessary to the institutions	The regular supervision visits revealed the majority of health facilities had toilets where liquid waste are disposed of
	Rinse the toilet or sink carefully and thoroughly with water to remove residual wastes Avoid splashing	Institutions (clinics)	Sink drain/toilets are available and clean	Spot visits to observe how waste handling areas are managed; if they are clean with no splash around	Trainings that occur during the previous quarter reinforce these habits; compliance has been regularly checked with the use of the supervision grid.
	Decontaminate specimen container with 0.5% chlorine solution or other locally available and approved disinfectant, by soaking for 10 minutes before washing	Institutions (clinics)	Available clean water and chlorine solution near the circuit of waste handling		Trainings that occur during the previous quarter reinforce these habits; compliance has been regularly checked with the use of the supervision grid
5	Handling and disposal of waste containers				
	Use non-corrosive washable containers (plastic or galvanized metal) with covers for contaminated waste	Institutions (clinics)	Non-corrosive washable containers (plastic or galvanized metal) with covers for contaminated wastes are used in all sites	Spot visit to observe the use of non-corrosive washable containers with covers	Equipment available at most sites supported by the project.
	Wash all waste containers with a disinfectant cleaning solution (0.5% chlorine solution) and rinse with water	Institutions (clinics)	Waste containers are regularly disinfected at all sites	Spot visit/ visual observation of treatment of containers	This measure was presented for implementation during trainings for health providers and waste managers that occur during the last quarter; compliance has been regularly checked with the use of the supervision grid

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress during extension period (August 13 – October 13)
			Indicators	Methods	
5	When possible, use separate containers for combustible and non-combustible waste to avoid workers from having to handle and separate waste by hand later	Institutions (clinics)	Use of separate containers for combustible and non-combustible wastes at 50% of sites	Spot visit/visual observation of separation of waste	This measure was presented for implementation during trainings for health providers and waste managers that occur last quarter; most of the 86 sites visited are using separate containers
	Use heavy work gloves when handling waste	Institutions (clinics)	Heavy gloves and masks available at all clinics	Spot visit/ visual observation of treatment of containers	Equipment available at all sites supported by the project; however, when the stock glove provided by the project runs out, the institutions do not redeem.
	Rinse glass containers thoroughly with water. Glass containers may be washed with detergent, rinsed, and reused	Institutions (clinics)	Glass containers are separated from non-glass containers, rinsed thoroughly and reused	Spot visit/ visual observation of treatment of containers	This measure was presented for implementation during trainings for health providers and waste managers held during last quarter
	Non glass containers which contained toxic substances: rinse three times with water, puncture and dispose by burial	Institutions (clinics)	Non glass containers are punctured and disposed of for incineration	Spot visit/ visual observation of separation of waste and treatment of containers	This measure was presented for implementation during trainings for health providers and waste managers held during last quarter Compliance has been regularly checked with the use of the supervision grid
6	Small scale construction / rehabilitation of buildings				
	Assessment of sites selected for renovation	MSH/Engineer MSH/WMA	Renovation plan takes into account environmental assessment recommendations prior to construction	Environmental assessment report	The project has not received approval to proceed with the renovation
	All building designs and implementation will be approved by a certified engineer	MSH/Engineer	Certification from a certified engineer	Environmental assessment report	N/A
	Avoid construction in sites prone to flooding where possible	MSH/Engineer	Certification from a certified engineer	Environmental assessment report	N/A
	Cover construction site to keep dust and noisiest work to a minimum, if the dwellings are located nearby	MSH/Engineer	Construction site covered with sheets that protect visitors of the health center from injury, noise, and dust	Site visit	N/A

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress during extension period (August 13 – October 13)
			Indicators	Methods	
6	Make recommendations to the institutions to ensure latrines or toilets are not built up hill from a water source	MSH / Engineer	A report is available that certifies the compliance to MOH norms and standards	Review report	N/A
	Check that small rehabilitation buildings meet MOH standards	MSH / Engineer	A report is available that certifies the compliance to MOH norms and standards	Review report	N/A
	Non-lead based paints will be purchased under SDSH II	MSH / Engineer	A report is available that certifies the compliance to MOH norms and standards	Review report	N/A
	Avoid painting during working hours	Head of institution	Schedule of work	Review planning of painting work	N/A
	Schedule work to be completed during hours of least distraction to patients and neighbors when possible	Head of institution	Schedule of work	Review planning of work	N/A
7	Small scale construction / rehabilitation of incinerators				
	Locate new incinerators away from populated areas and from clinics		Incinerators located away from public areas and are burning waste cleanly and completely	Reports on construction of incinerators Site visit to construction	N/A, the project has not received approval to proceed with the construction of incinerator
	Burn in the incinerator only during non-rainy times. Burn during windy days to dissipate smoke particles			Visual observation	N/A
	Ensure that incinerators are equipped with filters and that filters are inspected/cleaned and/or replaced			Visual observation	N/A
	Ensure that the incinerators are functional and used properly			Visual observation	N/A