

EMPR Quarter 4

Haiti SDSH II

April 1, 2013 – July 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)

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Santé pour le
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Environmental Mitigation Report (EMPR)

USAID HAITI MISSION 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: Santé pour le Développement et la Stabilité d'Haïti (SDSH) Project

IP Name: Management Sciences for Health (MSH)

Funding Period: August 1, 2012 – July 31, 2013

Resource Levels (US\$): \$19,997,826

Associated IEE: LAC-IEE-11-03

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Submission Date: August 29, 2013

Report period: April 1 - July 31, 2013

Background

The United States Agency for International Development (USAID) awarded Management Sciences for Health (MSH) the SDSH II project in August 2012 as a one-year extension to SDSH – Pwojè Djanm (2007-2012). Recognizing that a healthy population directly contributes to Haiti's stability, economic growth, and democracy, SDSH aims to achieve the following objectives while providing access to quality health services for 43 percent of the population:

1. Improve the access and quality of high impact interventions based on a package of primary services defined by the Government of Haiti (GOH);
2. Strengthen the Ministry of Health's (MSPP) capacity to manage and monitor decentralized health services at the Departmental level.

In order to achieve these objectives and expected results, SDSH provides technical and financial support to 164 total service delivery points (99 MSPP-supported sites located in 40 Zones Ciblées and 65 private sites supported by 26 NGOs). SDSH II focuses on the following priority areas:

- Maternal, newborn, and child health (MNCH) including WASH and nutrition;
- Family planning and reproductive health (FP/RH);
- Detection, care, prevention, and treatment of infectious diseases (HIV&AIDS and TB);
- Support expanded services (gender-based violence and child protection case recognition, treatment, or referrals) in 31 selected sites;
- Waste management;
- Departmental level governance and leadership;
- Departmental level financial systems; and
- Strategic information systems.

In compliance with U.S. regulations, the SDSH project created an Environmental Mitigation Plan and Report (EMPR) to guide the implementation of quality standards for waste management and infection prevention at SDSH-supported health facilities. Implementation of these standards will help effectively mitigate the impact of medical waste on the surrounding environment.

Main Activities Conducted

During the period of April 1 to July 31, 2013, the project focused primarily on completing the training of all staff on waste management and infection control throughout the SDSH network. Project staffs were then tasked with conducting supervision visits at health centers to evaluate progress and provide technical support to the institutional staff. Awareness and IEC materials were also reproduced for distribution at institutions to be displayed prominently on the walls inside to serve their purpose. Three (3) different kinds of posters displaying key information on sorting and collection of multiple types of waste have been reproduced (250 for each type).

a) Training of Institutional staff and Community Health Workers

The project completed trainings initiated in the previous quarter to ensure staffs are better able to manage waste generated at the institutional level. During training each institution has developed its own waste management plan which should enable it to improve this aspect.

Trainings for institutional and community staff lasted for two days and one day, respectively. Topics covered included:

- Measures of infection prevention;
- Disinfection steps for medical equipment;
- Advantage of an appropriate waste management;
- Waste categories/types;
- Methods of waste disposal;
- Process of medical waste management; and
- Principles of hand washing.

At the end of each facility providers' training, participants developed a detailed waste management plan for their respective health facility which included specific waste management and infection control activities and designated staff responsible for implementation and monitoring. These plans were to help the improvement of waste management in each health facility.

The table below shows the number and the category of staff trained.

	N-E	North	South	G-A	West	Ce	Ni	Art	Total
Health Provider	241	36	113	157	316	11	30	300	1204
Administrative staff	72	10	10	26	222	71	18	95	524
CHW	123	119	81	153	525	123	52	357	1533

Since April 2013, SDSH has trained 1728 institutional staff from 118 health facilities in eight departments on waste management and infection prevention interventions. Trained staff include: 1204 institutional health providers, 524 administrative staff, and 1533 community health workers. All training sessions have been completed for the entire SDSH network.

b) Waste Management Supervision at the Institutional Level

To ensure proper implementation of waste management activities and the application of defined environmental standards, the SDSH project used the supervision checklist developed last quarter during the visits at the health facilities. During supervision visits, it was discovered that the infection prevention and waste management plan had been poorly implemented in health centers, despite the fact that administrative staff had participated in developing the plan to check how waste management should be conducted and monitored at the network level and also how to support the institutions to improve their waste management and environmental compliance.

Several facts caught our attention:

- Misuse or non-use of the material provided which is often kept in a “warehouse” space...
- Lack of several items like trash bags, household gloves, wheelbarrows...
- Non application of the concepts learned in the training sessions
- Lack of space or specific mechanisms for final disposal of waste
- Absence of incinerators in most sites or existence of badly damaged ones to burn waste ...

During each visit, SDSH technical staff assessed the progress of each facility's implementation plan developed during the March 2013 training. In addition, SDSH visiting staff presented their findings from the site at the end of the visit and provided appropriate recommendations for improving waste management and infection control. During this quarter, SDSH technical staff visited 158 sites, using the waste management component in 50 sites. Among the 50 sites, findings indicated that 25 percent have a poor waste management classification, 54 percent have a medium classification, and 12 percent have an excellent classification. When using the 9 questions regarding waste management that are included in the supervision grid newly developed, each facility obtained a score. A poor classification refers to a score below 40%, a medium to a score between 40% and 74.99% and an excellent classification to a score of 75% and above.

c) Other Activities

SDSH would have provided incinerators to some institutions for waste management; however, the project did not receive permission to do so. SDSH was informed that USAID Haiti would not support procurement of incinerators without ensuring that they align with the currently deployed incinerators. Further, SDSH was told by USAID that the GOH recommends a more systematic approach to the types and placement of incinerators, and to do so, in consultation with CDC and others, USAID is coordinating an inventory of current equipment and its status (i.e. functioning or not). In the meantime, it was recommended that "networking initiatives" be developed between sites to mitigate the lack of incinerators.

It should be noted that the appropriate materials to be used in the manufacture of incinerators (refractory bricks, refractory cement) are not available in-country. In addition, the project has had several meetings with the Head of Waste Management Unit at the Ministry of Health, with whom SDSH shared training materials and a list of trainees. The Head of the Waste Management Unit promised to share the documentation that the Ministry of Health intends to use for the manufacture of incinerators, but this has not yet been done.

Since the project could not build incinerators and given the reality that waste management poses real problems to health centers, the project leadership recently visited the departmental offices to discuss the matter with the departmental directors. It was decided that the departmental directorates would develop agreements with the local mayors to find a space to serve as a landfill for the storage of waste. It was laid out that these areas must be well defined, sufficiently distanced from houses and rivers, and could not be above water table. Furthermore, mayors would be responsible for arranging the transport of waste on a regular basis to the clearly identified landfill areas. And finally, along with the departmental directors, the mayors were encouraged to develop and support community committees tasked to routinely supervise waste management and removal from health institutions on a regular schedule.

The project also conducted the reproduction of educational materials related to environmental health and waste management. Other materials on infection prevention, such as posters on hand washing, and decontamination of medical and surgical instruments, have also been produced. These materials are being distributed at institutional level. Soon, all the institutions of the network will have the educational materials in compliance with the donor's requirements.

Annex: Environmental Monitoring and Evaluation Tracking Table

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During Third Quarter
			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	During this period the project completed the training for 3261 staff at both the institutional and community levels. However, 87% of the 1755 CHW have been trained on waste management.
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. Assessment has been conducted by project staff in order to cover unmet needs A checklist for integrated supervision includes Waste management monitoring has been used this quarter during visits conducted at 50 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	Partner 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	During training all institutions defined the waste stream.

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During Third Quarter
			Indicators	Methods	
	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 50 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 infection	Institution	Hazardous waste is not found on facility grounds, except in appropriately marked and secured areas /receptacles at least 85% of sites visited are compliant	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 some facility grounds. the project has met local authorities to address this issue
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 50 sites for which the checklist has been used have containers available.

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During Third Quarter
			Indicators	Methods	
	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	Circuit for waste disposal has been defined at all sites and trainings have been completed for the institutional level staff. Follow up is now important during supervision visits to ensure compliance.
	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. Moreover, the project has carried out the reproduction of posters for washing hands that are distributed to health facilities

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During Fourth Quarter
			Indicators	Methods	
4	Handling and disposal of sanitary wastes				
	Wear thick household (utility) gloves when, handling and transporting wastes	Institutions (clinics)	Safety gloves, masks, 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. Assessment has been conducted by project staff in order to cover unmet needs.
	Carefully pour wastes down a utility sink drain or into a flushable toilet. Liquid wastes 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 Waste Management assessment 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 built	Spot visits to observe how waste handling areas are managed, if they are clean with no splash around	Trainings that occur this period 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		Training made this period has reinforced 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 wastes.	Institutions (clinics)	Non-corrosive washable containers (plastic or galvanized metal) with covers for contaminated wastes are used	Spot visit to observe the use of non-corrosive washable containers with covers	Equipment available at most sites supported by the Project. Assessment is been conducted by project staff in order to cover unmet needs.

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During First Quarter
			Indicators	Methods	
	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 presented for implementation during trainings of health providers and waste managers; compliance will be regularly checked with the use of the supervision grid
	When possible, use separate containers for combustible and non-combustible wastes to avoid workers from having to handle and separate wastes 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 this period; However, not all institutions have not received the required amount of garbage
	Use heavy work gloves when handling wastes	Institutions (clinics)	Heavy gloves and masks available at all clinics	Spot visit/ visual observation of treatment of containers	Equipment available at most 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 that occur this period.
	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 off 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 that occur this quarter; compliance has been regularly checked with the use of the supervision grid.

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During First Quarter
			Indicators	Methods	
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 concentrated 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
	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

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods		Progress During First Quarter
			Indicators	Methods	
	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