DOH-UNDP-GEF HEALTHCARE WASTE MANAGEMENT PROJECT

Diosdado P. Macapagal Memorial Hospital Guagua, Pampanga

ANNUAL REPORT

"DEMONSTRATING AND PROMOTING THE BEST TECHNIQUES AND PRACTICES FOR REDUCING HEALTHCARE WASTE TO AVOID ENVIRONMENTAL RELEASES OF DIOXINS AND MERCURY"

Romulo M. Kintanar Technical Project Officer

December 12, 2011

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I. INTRODUCTION

This annual report discusses the accomplishments/outputs as the results of the project implementation by major project components, namely: 2.1) Component 1: Best Practice, 2.2) Component 2: Non-Burn Waste Treatment Technology, 2.3) Component 3: Non-Mercury Devices, and 2.4) Component 4: Training. Each project component discusses the accomplishments, except for the training component which discusses additional subtopics, namely: 2.4.1 Training Participants, 2.4.2 Training Levels/Categories, 2.4.3 Training Results, and 2.4.4 Post Training Evaluation.

The remaining sections of this report discusses some of the prevailing issues and concerns with regards to the project implementation aspects and then followed by the recommendations. The last part of this report is the list of the "pending jobs" or the deliverables that have not been met. In addition, an Annual Work Plan: 2012 is also attached as an appendix this report, as a supplementary information in addition to the pending jobs.

II. PROJECT COMPONENTS

2.1 COMPONENT 1: BEST PRACTICES

This component has 10 major deliverables/activities as stipulated in my Term of Reference (TOR), namely: 1) Inception report, 2) Monthly progress report, 3) Baseline assessment report, 4) Healthcare waste management plan, 5) Guidelines for measurement and documentation of the results of the healthcare waste management practices in the model facilities, 6) Implementation records and reports on the results of the implementation of the healthcare waste management plan, 7) Documentation of the best practices in the model facilities, which includes among others the replication toolkits, photographs before and after project intervention, 8) List volume and specification of materials/devices to be procured. and other procurement documents, 9) Recommendation for approval of the materials/devices to be procured, and 10) Recommendation for acceptance of the materials/devices and payment of the supplier.

2.1.1 Accomplishment

The first three deliverables (Nos. 1-3) were the first group of deliverables that were completed in the first quarter. These deliverables are due for completion on the first 6 months of the project life, *i.e.*, from January to June 2011. The Inception Report was completed and submitted at the end of the month of January. This report includes the first technical report which is the Individualized Rapid Appraisal Tool (I-RAT). Major contents of the report are the basic data and profile of the hospital in question. The I-RAT toolkit was provided by the Global Project Team headed by Dr. Jorge Emmnanuel.

The second deliverables which is the monthly progress report have been done religiously every end of the month. This is submitted regularly to the National Project Coordinator stationed at the DOH-BIHC together with my Daily Time Record every end of the month as a requirement for the release of our salary. This deliverable is an administrative related report and a more routinary in nature.

The third deliverable that was completed also in the first quarter was the "Baseline Assessment" report. It was completed and submitted on March 18, 2001 to the National Project Coordinator. The report comprises two-day documentation on the existing healthcare waste management practices of the hospital and the 7-day was generation study. A final draft copy was given to the Global Project Team and to the international consultants Mr. Pawel Guzinsky in May 2011 and to Dr. Carlo Lupi-the international lead consultant for the mid-term evaluation of the project. A copy was also provided to the local consultant Engr. Ricardo Miranda-the counterpart consultant of Dr. Lupi. So far, from Mr. Guzinsky to other consultant and parties who got hold of the report had commented that the report is sufficient in form and content based on the international guidelines.

The fourth deliverable was the most tedious deliverable of all. It took me several months to complete the report. This report is due on the second-half of the year, *i.e.*, from July to December. However, the complete draft final copy was completed and circulated only in October this year. Copies of the final draft are still with the members of the Waste Management Committee who contributes to the formulation/preparation of the plan. Initially, some provision of the plan has also been implemented, such as the total enforcement of the ban of the styrofoar inside the hospital. The first one who fully complied with this policy was the dietary and all medical staff of all departments of the hospital.

The fifth, deliverable "guidelines for measurement and documentation for the results of the healthcare waste management practices has not yet been done. The reason behind was that , we still awaits guidelines from the Global Project Team (GPT), while the sixth, deliverable is done, however, it is not complete since, there was only minimal results/outputs produced since the implementation process was hindered by the long delay (not delivered until this time of writing) of the medical supplies and equipment, especially in the implementation of the waste segregation at source because, currently the hospital has no bins for all the medical room in the two major buildings, therefore, segregation at source could not be implemented which resulted to no accomplishment status.

The seventh deliverable which is the documentation of the best practices in the model facilities, which includes among others the replication toolkits, photographs before and after project intervention, was partially done. Similar to deliverable no. 5, this activity also awaits the guidelines to be provided by the Global Project Team.

The eight deliverables is the list, volume and specification of materials/devices to be procured and other procurement documents. This deliverable was completed in June 2011. The list of medical supplies and materials was submitted in early July 2011 to the National Program Coordinator stationed at DOH Central Office, who likewise forwarded the request to UNDP Procurement Section. However, I only got the quotation of the supplier on November 18, 2011. As mentioned on the e-mail of Ms Karyll Angeles, only one supplier had submitted their quotation to DPMMH out of the 17 suppliers that were invited. I would like to make an estimated guess, although, I am not privy to UNDP procurement processes, but it seems that the long delay in the procurement process was not on our part but rest with the procurement section of UNDP, assuming that the National Project Coordinator (Ms. Carmina Sarmiento) had likewise submitted the request to UNDP on the date I mentioned above, which is on early July 2011.

Nevertheless, the initial revised final list of quantities of medical supplies signed by the Hospital Administrator was submitted on December 7 to the Project Director-Arch. Penafiel for her approval. I would likewise anticipate that if request was immediately signed by Arch. Penafiel, then that request could be immediately submitted on that same day-December 7, 2011 to UNDP or else it should be on the next succeeding days. Indeed, I doubt if there is still sufficient time left for the month of December 2011 for the procurement and delivery of these materials here at DPMMH.

The ninth deliverable is the "recommendation for approval of the materials/devices to be procured. This deliverable/activity has not yet done, since the medical supplies and materials requested was not yet procured. On the same token, deliverable no. 10, that is the "recommendation for acceptance of the materials/devices and payment of the supplier the "could not also be done, since the materials are not yet delivered.

2.2 COMPONENT 2: NON-BURN WASTE TREATMENT TECHNOLOGY

(Medical waste autoclave, autoclave housing and medical waste transport vehicle)

Based on my TOR, this component has eight (8) major activities, namely: 1) comments on the technical proposals for the design and build of the non-burn waste treatment technology, 2) review and recommendation of the approval of the final plan of the contractor... 3) progress report on the supervision and monitoring of the supply, installation and build of the non-burn waste technology, 4) recommendation for acceptance and payment of the contractor, 5) guidelines for measurement and documentation of the performance, use and costs, 6) review of the Manual of Operations, 7) report on the performance, use and costs, and 8) documentation of the waste treatment technology which includes the toolkits, photographs before and after the project intervention.

2.2.1 Accomplishment

There is no accomplishment yet on this component, except for activity no. 1 which is the "comments of the technical proposals for the design and build of the non-mercury devices in coordination with NCHFD". Of the eight activities, only the first activity was completed and all the rest are not yet done.

I have participated in the initial opening of bids/project proposals and assisted in the screening process of the technical proposals of the bidders conducted in March 18, 2011 at the UNDP Head Office in Makati City. The screening committee was composed of UNDP representative from the Procurement Section, the Technical Project Officers of Sta. Ana and Pampanga and one representative from UNDP. On the other hand, the Evaluation Committee was composed of Mr. Hitoshi Katayama of UNDP, Engr. Carlos Bariring of DOH-NCHFD and Dr. Jorge Emmanuel of UNDP-GEF. In addition, the TPO of Sta. Ana and I have also participated/assisted the evaluation team in the technical evaluation process, however, we are not signatory to it.

There were five (5) proposals that were evaluated. Of the five proposals, only three passed the selection criteria. The selected bidders that had passed the technical evaluation were again advised to submit their financial proposals. Financial negotiations were done on the succeeding weeks or so. The TPOs were no longer involved in the financial evaluation.

The information that I had was that the financial offer was higher than the allocated budget and subsequent financial negotiations had not been materialized. This is of course, one of the reasons why the non-mercury devices have not been procured. In

summary, the delay in the procurement process of the non-mercury devices was one of the reasons why these activities have not yet been implemented.

2.3 COMPONENT 3: NON-MERCURY DEVICES

Component 3 has four (4) major activities, namely: 1) "list, volume and specification of mercury-free devices to be procured and other procurement documents, 2) recommendation for approval of the devices to be procured, 3) recommendation for acceptance of the devices and payment of the supplier, 4) mercury practices implementation report, and 5) evaluation reports on the use, efficacy and acceptability on non-mercury devices in the model facilities.

2.3.1 Accomplishment

Of the five (5) activities, four had been completed and only one activity remains to be done, *i.e.*, the evaluation reports on the use and efficiency and acceptability on the nonmercury devices in the model facilities. The list, volume and specifications of the nonmercury devices was prepared and provided by the TPO, while the recommendations for the approval of the devices and acceptance of the payment of the devices of the suppliers were all processed and done at the Center for Health Facility Development III, Central Luzon. The devices was supposed to be delivered at DPMMH, however, on the day that the Supply Officer wanted to deliver the devices to DPMMH, CHD 3 has no available vehicle on that day, so DPMMH through the Hospital Administrator volunteered to pick-up the devices at CHD 3 on November 18, 2011.

The non-mercury devices just recently acquired by DPMMH through CHD 3 consist of the following: a) 20 units Mechanical Dial Aneroid Sphygmomanometer, b) 20 units Digital ThermoScope Digital Thermometer and 24 units' plastic containers/boxes (to be used as storage for devices containing mercury, especially the broken fluorescent lamps and bulbs, used batteries, etc. (Note: All the procurement process were done at CHD 3, however, it was the TPO who provide the specifications based from the guidelines provided by the Global Project Team), (See also pictures below).

On the other hand, preparation and processing of the "Acknowledgement Receipt for Equipment (ARE) and the Asset/Equipment Loan Agreement Form (A/ELAF) and the preparation of the UNDP stickers were processed on the following week, *i.e.*, after the November 18, 2011 delivery of the devices, while, the distribution to the end-users commenced from November 25 to December 6, 2011. At present, 11 Digital Thermometer and 13 Sphygmomanometer had been distributed and in-use and another 4 units Sphygmomanometer are due for distribution by the second or third week of December 2011.

The remaining 3 units of mechanical dial aneroid sphygmomanometer and 3 units digital thermometer are allocated as reserved units. These are stored and kept at the supply section stockroom intended to be distributed later as replacement in case there are devices that will become non-functional.

Lastly, the evaluation reports on the use efficacy and acceptability on the non-mercury devices can't be performed at this time since the devices has just been recently delivered. Timing of the report preparation should be done at least three 3 months after it was deployed, *i.e.*, on the 1st quarter of 2012. The person in-charge for the supervision and monitoring of the reports from the end-users will be the Pollution Control Officer and the data (results) obtained should be consolidated and analysed by the Waste Management Officer.

2.3.2 Feedbacks

Initial feedbacks I got from the end-users after a few days of usage revealed that the equipment-according to them was easy to operate and accurate. Indeed, the devices are of great help to them and to the hospital in general, since they lack this type of equipment.

2.3.3 Pictures



Source: Kintanar, R.M. 2011 HCWM Project, Diosdado P. Macapagal Memorial Hospital, Guagua, Pampanga



Mechanical Dial Aneroid Sphygmomanometer

Source: Kintanar, R.M. 2011 HCWM Project, Diosdado P. Macapagal Memorial Hospital, Guagua, Pampanga

2.4 COMPONENT 4: TRAINING

2.4.1 Training Participants

A total of 199 hospital staff out of the 215 total hospital employees were trained on healthcare waste management or a total accomplishment of **93** per cent (**Table 1.0**). The trainings were conducted into two different levels. First, was the trainor's training intended for the top management of the hospital and the second level was the "in-house" training intended to all hospital employees. The in-house training was also divided into two groups, *i.e.*, the waste handlers and all employees.

The trainor's training was conducted by the University of the Philippines-College of Public Health, while the "in-house" trainings were conducted by the Technical Project Officer and the select trainors-participants from the trainors training of batch 1 and 2 (See **Table 1.0**) below for the distribution of training participants on HCWM to all trainings conducted, number of participants that attended the trainings and the per cent distribution of accomplishments.

Table 1.0 Distribution of training participants on HCWM conducted from May to October, 2011.									
No.	Training Date	Target Participants	Participants Attended	Percent					
1	May 16-20, 2011 (HCWM Trainor's Training)	16	16	100					
2	July 10-15, 2011 (HCWM Trainor's Training)	16	15	94					
3	Aug. 4 & 5, 2011 (Waste Handlers)	15	15	100					
4	Aug. 11 & 12, 2012 (Waste Handlers)	15	15	100					
5	Aug. 18, 2011 (All employees)	20	13	65					
6	Aug. 19, 2011 (All employees)	19	16	84					
7	Aug. 25, 2011 (All employees)	16	12	75					
8	Aug. 26, 2011 (All employees)	17	15	88					
9	Sept. 1, 2011 (All employees)	17	13	76					
10	Sept. 2, 2011 (All employees)	17	15	88					
11	October 25, 2011 (All employees)	35	25	71					
12	October 26, 2011 (All employees)	35	29	83					
	Total		199	93					
Total h DPMM	ospital population as of October 2011 (Source: H, Personnel Section)	215							

Source: Kintanar, R.M. 2011 HCWM Project, Diosdado P. Macapagal Memorial Hospital, Guagua, Pampanga

2.4.2 Training Levels / Categories

The first level was the trainor's training entitled "Pilot Training Course on Healthcare Waste Management" which was conducted by the UP-CPM faculties. There were two batches of trainor's training that were conducted with a total of 30 participants trained coming from the top level management of the hospital.

The second level was the in-house trainings. The first batched of the in-house training was for all waste handlers (two training batches with two-day duration per batch). The waste handlers were the first priority of the HCWM training because they are the most vulnerable sector/employees of the hospital since they are the one handling the hospital

waste every day and therefore the risk factor of contacting medical waste related infections is high. The next batches of in-house training succeeding the waste handers were all hospital employees. It comprises eight (8) training batches starting from the month of August to October 2011 (see **Table 1.0**) above.

The first batched trainor's training was conducted from May 16-20, 2011 at the City State Tower Hotel, Malate, Manila. This was facilitated and conducted by the University of the Philippines-College of Public Health (UP-CPH). There were 16 participants attended the training which is composed of six (6) doctors, seven (7) nurses, one pharmacist, one (1) radiologic Technician and one (1) midwife (**Table 2.0**).

First Batch	Educational Background	Position							
1. Dr. Eddie G. Ponio	Doctor of Medicine	Provincial Health Officer I- Hospital Administrator							
2. Dr. Larry M. Fernando	Doctor of Medicine	Medical Officer III							
3. Edita Layug	B. S. Pharmacy	Pharmacist II							
4. Arlene Jiao	BSN	Nurse I							
5. Fe Espiritu	BSN	Admin Aide I							
6. Mary Rose Lozano	BSN	Nurse I							
7. Alvin Capati	BSRT	RT II							
8. Dr. Joseline Ponio	Doctor of Dental Medicine	Dentist II							
9. Marlene Carlos	Midwife	Nursing Attendant I							
10. Rebecca S. Tayag	BSN	Admin Aide I							
11. Dr. Darwin Cruz	Doctor of Medicine	Medical Officer III							
12. Dr. Engelbert Baquiran	Doctor of Medicine	Medical Officer III							
13. Dr. Antonio Morales	Doctor of Medicine	RHP							
14. Wilhelmina Bernardo	BSN	Chief Nurse							
15. Jorenn Dalay	BSN	Admin Aide I							
16. Bernadeth Besonia	BSN	Nurse I							

Table 2.0 List of DPMMH participants for the first batch Pilot Training on Healthcare

 Waste Management conducted from May 16-20, 2011 at City State Tower Hotel, Manila

Source: Kintanar, R.M. 2011 HCWM Project, Diosdado P. Macapagal Memorial Hospital, Guagua, Pampanga

On the other hand, the second batched was conducted from July 11-15, 2011. This was also conducted by the UP-CPH faculties. The venue was in Island Cove, Cavite City. There were 15 participants that attended the training, which is composed of four (4) Doctors, three (3) Nurses, (3) three Midwives, one (1) Rad Technician and five (5) Administrative Staff (see **Table 3.0**).

Table 3.0 List of DPMMH participants for the second batched Pilot Training on Healthcare

 Waste Management conducted from July 11-15, 2011 at the Island Cove, Cavite City

First Batch	Educational Background	Position			
Dr. Soriano Suing	Doctor of Medicine	Rural Health Physician			
Dra. Susana Sicat	Doctor of Medicine	Medical Offier III			
Dra. Remedios dela Cruz	Doctor of Medicine	Medical Offier III			
Dra. Maydeline Bajelot	Doctor of Medicine	Medical Offier III			
Margarita Arcilla	BS Nursing	Nurse II			
Dolores Capati	BS Nursing	Nurse I			
Rowena Yap	BS Nursing	Nurse I			
Vioeta Mendoza	B.S. Rad Tech.	Rad. Tech. I			
Mary Ann Sapnu	Midwifery	Sanitary Inspector I			
Rhodora Bagang	Midwifery	Midwife II			
Zenaida Suing	Midwifery	Nursing Attendant I			
Remedios Faustina Liwanag	Bachelor of Arts	Admin Officer III			
Sahria Dimaronsing	BS Med. Tech.	Me. Lab. Tech. II			
Melinda Apron	BS Commerce-Accounting	Admin Aide VI			
Eleonor Suba	BS Commerce-Accounting	Admin Aide IV			
Emy Alvarez	BS Commerce-Accounting	Admin Aide IV			

2.4.3 Training Results

Some initial results identified after the HCWM training has been conducted based on the actual and observed indicators were the following:

- the immediate re-constitution/creation of the Waste Management Committee (WMC);
- conducted HCWM eight (8) batches in-house" trainings and trained 93% of the hospital employees;
- have produced at least 5 HCWM trainors (Four Doctor of Medicine/Medical Specialist III and the Chief Nurse) which are highly qualified and capable in handling HCWM trainings independently;
- a high level of awareness on the HCWM issues and concerns among hospital employees which never happened before the training. In fact, if is now the hospital management that are clamouring for more HCWM training (Trainor's Training) and even want to include the key personnel from the other nine (9) District Hospitals of Pampanga
- identification and assigning of storage room for medical waste containing mercury
- creation and construction of compost pits
- production of waste management signage's
- the full enforcement/ implementation of the "no styrofoar" policy within the hospital premises;
- assigning two (2) full-time waste handlers to further segregate the unsorted general waste since the hospital currently has no waste bins in all the patient wards, etc.
- recording of the daily waste generation data

2.4.4 Post Training Evaluation Results

Post training evaluation was conducted at the end of the training. A total of eight (8) batches of trainings were conducted between the months of August towards the end of October 2011. The post training evaluation form uses a 4 scale rating, where 1 means *Poor*, 2 means *Fair*, 3 means *Good* and 4 means *Excellent*.

There were 5 major topics and a group activity that were rated, namely: 1) Health and environmental impacts on healthcare waste, 2) Healthcare waste management stream/Categories of healthcare waste, 3) Healthcare Waste minimization strategies/Green procurement policy, 4) Healthcare waste segregation, collection and transport, 5) Waste water management, 6) Occupational health and safety, and a Group activity. The six topics were evaluated in terms of: 1) course content, 2) teaching-learning strategies, and 3) resource Materials.

Results of the post-training evaluation showed that all the eight batches in-house training scored a rating of "4" meaning all the in-house training conducted were rated by the

participants as excellent. Table below shows the post evaluation results on the first batched in-housing training conducted for the waste handlers.

Sumn	Summary of HCWM post-training evaluation results for waste handlers: August 4, 5, 11 & 12, 2011													
No.	Course Topic		Corse Content			Teaching- Learning Strategies			Resource Materials) 5	Overall Rating	
	Rating Scale	1	2	3	4	1	2	3	4	1	2	3	4	
1	Health and environmental impacts of healthcare waste	0	0	5	10	0	0	6	9	0	0	9	6	4
	Percent			33	67			40	60			60	40	
2	Healthcare waste composition, sources, categories	0	0	3	12	0	0	5	10	0	0	7	8	4
	Percent			20	80			33	67			47	53	
3	Healthcare waste minimization	0	0	10	5	0	0	6	9	0	0	6	9	4
	Percent			67	33			40	60			40	60	
4	Healthcare waste segregation, collection and transport	0	0	3	12	0	0	3	12	0	0	4	11	4
	Percent			20	80			20	80	0	0	27	73	
5	Treatment, storage and disposal	0	0	6	9	0	0	7	8	0	0	9	6	4
	Percent			40	60			47	53			60	40	
6	Occupational health and safety	0	0	6	9	0	0	5	10	0	0	8	7	4
	Percent			40	60			33	67			53	47	
Notes:	Total number of respondents = 15													
	Rating Scale:													
	1 = poor													
	2 = fair													
	3 = satisfactory													
	4 = Excellent													

Source: Kintanar, R.M. 2011 HCWM Project, Diosdado P. Macapagal Memorial Hospital, Guagua, Pampanga

III. ISSUES AND CONCERNS

• **Request for HCWM training**: The Hospital Administrator has still a pending request for HCWM training of the key personnel/staff of the nine (9) other district hospitals of Pampanga of at least 2 to 3 key personnel for each District Hospital, *i.e.*, the Hospital Administrator, Pollution Control Officer, Administrative/Finance Officer and a Waste Management Officer (if it exist). See Table below.

Although, during the joint meeting of the National Project Steering Committee and the National Working Group last December 2, 2011 held at Duque Hall, DOH Central Office, Manila, Arch. Ma. Rebecca Penafiel-Director III of the National Center for Health Facility Development (NCHFD) had committed to include the key management personnel/staff from the nine (9) district hospitals of Pampanga to the second batch of HCWM training for all Regional Sanitary Engineers of the Philippines last September 2011.

- **Supervision and monitoring**: Another issue is who will supervise and monitor during the installation of the medical autoclave where there are no more full-time technical officer assigned to the job?
- **Testing for the effectivity of the Autoclave**: The hospital administrator's concerns is who will check if the results of the autoclaving operation is really effective?

No.	Name of Hospital	Location /	Number of	
		Municipality	Beds	
1	Emigdio C. Cruz Memorial Hospital	Arayat	25	
2	Escolastica Romero District Hospital	Lubao	50	
3	Mabalacat District Hospital	Mabalacat	25	
4	Diosdado Macapagal Memorial Hospital	Guagua	75	
5	Balitucan District Hospital	Magalang	25	
6	Ricardo P. Rodriguez Memorial Hospital	Bacolor	25	
7	San Luis District Hospital	San Luis	25	
8	Porac District Hospital	Porac	25	
9	Macabebe District Hospital	Macabebe	25	
10	Romana Pangan District hospital	Florida Blanca	50	
		Total	375	

List of LGU O	Operated District	Hospitals,	Province of	Pampanga
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Source: Provincial Health Office

Pampanga Provincial Capitol Compound City of San Fernando, Pampanga

IV. RECOMMENDATIONS

- In lieu of the Technical Project Officers whose service contract will end by 31 December 2011, the NCHFD in close collaboration with the Regional Safety Engineer of the Center for Health Development (CHD) III, Central Luzon will take-over the functions vacated by the TPOs.
- On HCWM training, the Dir. of NCHFD has committed to include the key management staff of the 9 district hospitals of Pampanga to be included on the next batch of HCWM training next year for the Regional Sanitary Engineers of all the regions of the Philippines.
- For testing the affectivity of the Autoclave, the DOH-NCHHF and CHD 3 will closely coordinate with the Technical Expert from the National Resource Laboratory (NRL) for the testing.

V. PENDING JOBS

Component 1: Best Practice

- 1.1. Guidelines for measurement and documentation of the results of the healthcare waste management practices in the model facilities.
- 1.2. Documentation of the best practices in the model facilities, which includes among others the replication toolkits, photographs before and after project intervention.
- 1.3. Recommendation for acceptance of the materials/devices and payment of the supplier.

Component 2: Non-Burn Waste Treatment Technology

(Note: Almost all the activities under this component have not yet been started due to the very long delay of the construction/installation of the Medical Autoclave)

- 2.1 Progress reports of supervision and monitoring of the supply, installation and build of the non-burn waste treatment, if required.
- 2.2 Recommendation for acceptance of the non-burn waste treatment facility and payment of the contractor in coordination with NCHFD.
- 2.3 Guidelines for measurement and documentation of the performance, use and costs of the non-burn waste treatment technology.
- 2.4 Review and finalize Manual of Operations of the waste treatment facility submitted by contractors.
- 2.5 Report on the performance, use and costs of the waste treatment technology.
- 2.6 Documentation of the waste treatment technology which includes, among others, the toolkits, photographs before and after project intervention.

Component 3:

3.1 Evaluation reports on the use, efficacy and acceptability on non-mercury devices in the model facilities

VI. Annex A - ANNUAL WORK PLAN: 2012

(See separate page below on p.14)

Annex A: Annual HCWM Work Plan: 2012

DOH-U	INDP-GEF "HEALTHCARE WASTE MANAGEMENT PROJECT								
DPMM	H HEALTH CARE WASTE MANAGEMENT ANNUAL WORKPLAN: 2012								
NO			TIME FRAME						DEMARKS
110.		Jan Feb	Mar Apr	May Jur	n Jul Au	g Sep Oct	Nov Dec		NEMANNO
	Component I: Best Practices								
1	Procurement of supplies and equipment (waste bins, plastic liners, PPE's,							WMO/PCO	Submitted the revised final list of medical
	disinfectants, spill kits, etc.)								supplies & materials approved by the Hospital
									Administrator on December 7, 2011 to the
									Director of the DOH-NCHFD for her signature.
2	Guidelines for measurement and documentation of the results of the healthcare							WMO/PCO	Await guidance from the Global Project Team
	waste management practices in the model facility				-				(GPT)
3	Implementation records and reports on the results of the implementation of the							WMO/PCO	
	healthcare waste management plan								
4	Preparation and evaluation of replication tool kits							WMU/PCU	Await guidance from the Global Project Team
	Component 2: Non-Burn Waste Treatment Technology (Medical								
	autoclave, autoclave housing and waste transport vehicle).								
5	Progress reports of supervision and monitoring of the supply installation and							WMO/PCO	
	build of the non-burn waste treatment								
6	Recommendation for acceptance of the non-burn waste treatment facility and						•	WMO/PCO, HA, PHO,	
	payment of the contractor in coordination with NCHFD							ENRO, CHD 3-RD/RSE	
7	Guidelines for measurement and documentation of the performance, use and							HA, WMO, PHO, ENRO	
	costs of the non-burn waste treatment technology								the procurement of the Autoclave and its
8	Review and finalize Manual of Operations of the waste treatment facility							WMO/PCO, HA, PHO,	components accessories
	submitted by contractors							ENRO, CHD 3-RD/RSE	
9	Report on the performance, use and costs of the waste treatment technology							WMO/PCO, HA, PHO, ENRO	
10	Documentation of the waste treatment technology which includes, among							WMO/PCO	
	others, the toolkits, photographs before and after project intervention								
	Component 3: Non-Mercury Devices								
11	Evaluation reports on the use, efficacy and acceptability on non-mercury							WMO/PCO, End Users	
	devices in the model facilities								
10	Dranaration of ranarta								
Notes	Preparation of reports					0			
notes:	CDH-Center for Health Development: RSE-Regional Sanitary Engineer	ivironme	ent and	inatural I	Resource	e Officer;	PHU - F	rovincial Health Officer; HA-F	nospital Auministrator
	Debriefing Notes / Terminal Report 11								

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