



# The Regional workshop for Safe Management of Healthcare Wastes

## *The Final Report*

19-20<sup>th</sup> December 2013, Hurghada – Egypt



## TABLE OF CONTENTS

<i>The Report Sections</i>	<i>Page No.</i>
• <b>Acknowledgments</b>	<b>3</b>
• <b>Preface</b>	<b>4</b>
• <b>The Workshop Summary</b>	<b>5</b>
• <b>Recommendations</b>	<b>8</b>
• <b>Workshop Multimedia</b>	<b>9</b>
• <b>Appendix</b>	<b>10</b>
➤ <b>1. Agenda</b>	<b>10</b>
➤ <b>2. Budget Summary</b>	<b>14</b>
➤ <b>3. Evaluation Sheets and its results</b>	<b>15</b>
➤ <b>4. List of Participants</b>	<b>17</b>

## ACKNOWLEDGEMENTS

### **BCRC-Egypt and its Arab members are grateful for:**

- *The Government of Finland*, for their persistent incorporeal and financial support for BCRC-Egypt and its activities through the project the Finnish Government funds, under which this workshop was organized, as the first official regional activity.
- *Cairo University*, for its continuous support for BCRC-Egypt through hosting its headquarters.
- *United Nations Development Program*, for its fruitful collaboration with BCRC-Egypt in running the project funded by the Government of Finland.
- *The Arab League*, for its permanent coordination with BCRC-Egypt in fulfilling the Arab Countries candidates' logistic and administrative requirements.
- *The Governorate of Red Sea*, represented by Colonel/ Ahmed Abdallah, The Red Sea Governor, for its extremely hospitable and generous hosting for this workshop.
- *BCRC-Egypt Staff*, for their professional and efficient efforts in organizing and running all BCRC-Egypt local and regional activities, especially this workshop.

## **PREFACE**

BCRC-Egypt with the assistance of SBC organised a two (2) days Regional workshop for the Arab states national technical officials, who are responsible for or involved in the Safe Health Care Waste Management in their countries (*see Appendix 1 for the Agenda*). The main target of the workshop was to shed the light on the problem of the health care wastes and the importance of the environmentally sound management of these wastes.

The aims of the workshops were as follow:

- 1-To present an overview about the international sustainable wastes management policies, principles and best practice guidance for sustainable medical waste management
2. To define the difficulties the Arab states may face through the process of medical wastes management.
- 3-To elaborate discussions about the best Waste management planning

The workshop targeted the National technical officials responsible for or involved in the Safe Health Care Waste Management. **25** participants from **13** Arab countries attended this workshop; Kingdom of Bahrain, Republic of Djibouti, Arab Republic of Egypt, Hashemite Kingdom of Jordan, State of Kuwait, Lebanese Republic, Islamic Republic of Mauritania, Kingdom of Morocco, Palestinian Authority, Kingdom of Saudi Arabia, Republic of the Sudan, Tunisian Republic, and Yemeni Republic (*Appendix 4*).

# **THE WORKSHOP SUMMARY**

## **Daily Reporting**

### **The First Day Thursday 19<sup>th</sup> of December 2013**

#### **Opening Ceremony**

The opening ceremony commenced at 10:00 am. Prof. Mostafa Kamel, BCRC-Egypt Director, in his opening statement, welcomed all participants and emphasized the importance of this workshop for the following reasons:

- The workshop is considered one of the first regional activities to be organized and hosted by BCRC-Egypt since the start of the second phase of the project entitled “Basel Convention Regional Centre for Training and Technology Transfer for Arab States in Cairo - Capacity Building for the Implementation of the Basel Convention”, Funded by the Government of Finland, for 2013-2014.
- The importance of the topic discussed during the workshop due to the urgent need of most of the Arab states for guidance towards the most efficient trend for the ESM of the healthcare wastes.

Mr. Mohamed Kona, the Arab League Representative delivered a short word on behalf of HE Dr. Nabil Elarbi, the General Secretary of the Arab League, expressing the Arab League support for the project and for BCRC-Egypt as a regional center that aids the Arab states in implementing Basel Convention.

Dr. Mohamed Baiomy, Representative of the UNDP, expressed in his words, the happiness of the UNDP for its participation in the implementation of the Project funded by the Finnish Government.

President of Cairo University Speech was delivered by Dr. Gamal Abd Elnasser, the Vice-President of Cairo University, who emphasized the full continuous support of Cairo University as the hosting institute to BCRC-Egypt. Not only this support was represented by hosting BCRC-Egypt inside its premises, but also by donating BCRC-Egypt a full building to be renovated as BCRC-Egypt brand new laboratory and guest house.

The Red Sea Governorate Welcoming word was delivered by HE Colonel/Ahmed Abdallah, the Red Sea Governor. Colonel Abdallah welcomed the Arab states delegates and expressed his happiness that the Red Sea Governorate hosted this regional activity as one of the activities of the Project funded by the Finnish Government, especially with the importance of ESM of healthcare wastes as a critical element for the efficient implementation of Basel Convention.

**The First Session: International aspects health waste managements (Chaired by Dr. Gamal Abd Elnasser & Dr. Mohamed Alzarka)**

- Prof Moustafa Hussien Kamel, the Director of BCRC-Egypt, delivered a presentation in which he presented an introduction to the objectives and methodology of the workshop and an overview on the ESM of healthcare wastes under Basel Convention, followed by a presentation delivered by Mr. Imad Subhi - International law expert – Egypt, who gave a brief overview for the legal regulations for the disposal of hazardous waste in a legitimate way.
- Then that was followed with a presentation by Dr. Sabine Barakat, Ministry of Environment, Lebanon, who gave an overview on the development of hazardous medical waste in Lebanon, and deeply explaining the systematic measures that are followed by her country to manage the healthcare wastes and the most efficient practices that are followed according to the program of wastes management at the Lebanese Department of wastes, to limit their impact. She also discussed the legislations that are enforced by the Lebanese national authorities to control the healthcare wastes management. Finally, she ended up her presentation with discussing the

challenges and opportunities that may face the national competent authority in the topic of health care wastes management.

**The Second Session: Environmentally sound management of clinical waste (Chaired by Dr. Sabine Barakat & Moulay Abdalmamn)**

- This session started by a presentation delivered by Dr. Mohamed Alzarka, International Environmental expert – Egypt who gave an overview for the environmentally sound management of clinical waste. Dr. Alzarka started his presentation with giving a general definition and classification of Healthcare Waste. Then he started discussing risks Associated with Healthcare Waste. He then presented gave a brief explanation for Healthcare Waste Management and the most recent treatment technologies used in that topic.
- Then D. Afdal Hussain, First Undersecretary of the Ministry – Head of Central Department for Environmental Affairs - Ministry of Health- Egypt, presented a talk about the responsibility of the Ministry of Health for safe disposal of hazardous medical waste as the competent administrative authority according to the Law 4/94. She thoroughly explained the hierarchy of the healthcare administration in Egypt. Then she gave estimation for the amount of healthcare wastes produced annually in Egypt. She then discussed the national legislations that control the disposal pf these wastes and overviewed the obstacles that may limit the proper management of these wastes, such as financial, technical and administrative. Also she presented the international expertise that exist inside the department of healthcare wastes and how such expertise is used to collaborate with other entities regarding the healthcare wastes management. Finally she presented a future plan for her department concerning a more efficient management of healthcare wastes.
- Finally the session and the 1<sup>st</sup> day as closed by a presentation by Colonel Yasser Khalil, Adviser to the Minister of Environment – Egypt, who gave a presentation that emphasis the primary role of the Egyptian Ministry of Environment affairs in safe disposal of healthcare wastes. He also discussed the efficient role of the Ministry in monitoring all kind of wastes in general and the healthcare wastes in particular, through both Administrative and Judicial control. He overviewed the stages of Environmental inspection process. Finally, he showed a documentary film that, shows arresting a case of disposal of medical waste in an illegal way.

**The Second Day Tuesday 20<sup>th</sup> of December 2013**

**The 3<sup>rd</sup> session: National policies for the management of health care waste in the Arab countries (Chaired by Ali Mohamed Ali & Suad Taki)**

In this session, delegates of Egypt, Jordan, Morocco and Palestine presented their national experience for the management of health care waste.

- Eng. Adel El-Shafie, General Director of Wastes and Hazardous chemicals EEAA Focal Point of Basel Convention- Egypt, presented an overview of the healthcare wastes problem in Egypt and the measures the national authorities are following to minimize its impact.
- Mr. Amin Tahib, The representative of Jordan, first gave a brief introduction about the national healthcare institutions, then he presented the Legislative and legal frameworks that control the disposal of healthcare wastes in his country. Finally he presented an overview about the positives, negatives and obstacles that exist in the healthcare issue in Jordan.
- Mr. Samir Yousry, representative of the Ministry of Environment, Morocco, gave a very brief presentation about the healthcare wastes status in his country and e overviewed the activities that the Moroccan Ministry of Environment conducts to reduce these wastes.
- Mr. Yasser Abo Shanab, representative of the Ministry of Environment, Palestine, briefly presented the healthcare wastes status in his country.

**The 4<sup>th</sup> session: National policies for the management of health care waste in the Arab countries (Cont.) (Chaired by Adel El-Shafie & Mohamed Mekky Aman)**

In this session, delegates of Tunisia, Sudan, Bahrain and Kuwait presented their national experience for the management of health care waste.

- Mrs. Karima Badry, from the Technical Department - Ministry of Health, Tunisia, in her presentations, gone through the stages of development that occurred to her ministry concerning the healthcare wastes management. She overviewed the healthcare wastes status in her country and the legislative framework that controls these wastes in Tunisia. Finally she presented the national strategy adopted in reducing and disposal of these wastes.
- Mr. Mohamed Mekky Aman, the Official Representative Kingdom of Bahrain, presented the healthcare wastes status in his country. He briefly addressed the challenges that may face the national competent authorities in these wastes management, and the legislations that nationally control the whole process. Then, he explained the common role of the Ministry of Health with the Supreme council of Environment in his country concerning these wastes management and



reduction. He then drew a comparison between the healthcare wastes status before and after the setup of national legislation related to that issue. Finally he ended up his talks with few recommendations that BCRC-Egypt should adopt to enhance his role in cooperation with the Arab countries to improve the measures taken to manage the healthcare wastes (*See the recommendation section*).

- Mrs Soad Takky, representative of the Ministry of Environment, Kuwait, briefly presented the healthcare wastes status in his country.
- Dr. Bushra Hamid Ahmed, Ministry of Health, Sudan, gave a presentation about the Environmental Aspects of Medical Waste in Sudan. He highlighted the current measures adopted by the Sudanese authorities to manage these wastes and the challenges they face during their work, especially in the rural areas of Sudan. He ended up his talk with few recommendations that should be taken in consideration to enhance the reduction of these wastes (*See the recommendation section*).

Evaluation sheets for the workshop were distributed among the participants and the completed sheets were collected by hand (*Appendix 3*)

### **The Closing Session**

This session started with a brief speech delivered by Prof. Kamel, in which he expressed his happiness for the clear success of the workshop and thanked the participants for their effective participation and fruitful discussions. Then, he thanked BCRC-Staff for their great efforts in organizing the workshop. Finally Prof. Kamel distributed the workshop participation certificates on the Arab states delegates with taking a memorial photo with each delegate and a final collective memorial photo for the workshop participants and organizers.

## **RECOMMENDATIONS**

1. BCRC-Egypt should adopt an initiative to review the environmental decisions concerned with the management of medical waste in the Arab countries, for assessment and evaluation to make it more integrated.
2. BCRC-Egypt should issue brochures and educational fliers to help staff involved in the separation of medical waste generated from their sources.
3. BCRC-Egypt should prepare a consolidated reference guide to be applied in all the Arab countries and submit an annual report to the center steering committee to determine the level of achievements and difficulties to be shared with the rest of the Arab states.
4. Unifying definitions of medical waste, hazardous waste and waste management.
5. BCRC-Egypt should enhance the establishment of environmental courts and study the feasibility of organizing trainings for these courts officials to update them with the environmental concepts
6. Approval of the principle that polluters should pay for their action while leaving each state to develop an implementation mechanism according to its national law.
7. Agreement to develop an integrated strategy for the Arab nations to manage medical waste.
8. Adoption and initiation of strategic national plan for medical waste management to implement Best Environmental Practice (BEP).
9. Supply of treatment facilities for medical waste (incinerators and autoclaves, sterilizers,...etc ).
10. Serious commitment of policy makers and high executive staff to the importance and necessity of medical waste issue.
11. Secure of sufficient budget for medical waste management.
12. Capacity building for health – care staff.
13. Awareness raising.
14. Improvement of legislations and enforcement of the law.
15. Employment of competent technical staff in the field of operation and maintenance of medical waste treatment devices.
16. Initiation of information system and data collection personnel.
17. Rally of the international organizations support.

## WORKSHOP MULTIMEDIA



All Arab Countries focal points and officials are strongly encouraged to visit BCRC-Egypt official website ([www.bcrc-egypt.com](http://www.bcrc-egypt.com)) and **BCRCEgypt** Facebook official webpage, to see all BCRC-Egypt activities multimedia.

## APPENDIX

### 1. Agenda

اليوم الاول 19 ديسمبر 2013 The First day, 19th of December, 2013		
المحاضر The Speaker	الموضوع The Topic	الوقت The timing
	التسجيل Registration	10:00-9:00
	الإفتتاح والتعارف والتقديم Opening ceremony and Introduction	11:00 – 10:00
أ.د/مصطفى حسين كامل مدير مركز بازل Dr. Mostafa Kamel Director of BCRC	كلمة الإفتتاح Opening Speech	
أ. محمد كنا ممثل الجامعة العربية Mr. Mohamed Konah Arab League Representative	كلمة الجامعة العربية Arab League Speech	
د.محمد بيومي ممثل برنامج الأمم المتحدة للتنمية Dr. Mohamed Baiomy Reprehensive of UNDP	كلمة مدير برنامج الأمم المتحدة للتنمية UNDP Country Director speech	
أ.د. جمال عبد الناصر نائب رئيس جامعة القاهرة Dr. Gamal Abd Elnasser Vice-President of Cairo University	كلمة رئيس جامعة القاهرة President of Cairo University Speech	
اللواء أحمد عبد الله محافظ البحر الاحمر General/Ahmed Abdullah Governor of the Red Sea Governorate	كلمة معالي السيد محافظ الإقليم The Governor Speech	
صورة تذكارية Group Photo		
	إستراحة شاي Tea Break	11:30 -11:00
نائب رئيس الجلسة Vice-Chairperson	رئيس الجلسة Chairperson	2:00-11:30

د. محمد الزرقا	أ.د. جمال عبد الناصر	
<b>الجوانب الدولية لإدارات النفايات الصحية</b> <i>International aspects health waste managements</i>		
أ.د/مصطفى حسين كامل مدير مركز بازل <b>Dr. Mostafa Kamel (Director of BCRC)</b>	التعاريف والاتفاقات الدولية <b>The International definitions and agreements</b>	
المستشار عماد صبحي- خبير القانون الدولي - مصر <b>Mr. Imad Subhi - International law expert - Egypt</b>	الضوابط القانونية للتخلص من النفايات الخطرة بالطرق الشرعية <b>Legal regulations for the disposal of hazardous waste in a legitimate way</b>	
الدكتور سابين بركات قسم السلامة الكيميائية تكنولوجيا الخدمات البيئة وزارة البيئة لبنان <b>Dr. Sabine Barakat Department of Chemical Safety Service of Environmental Technology Ministry of Environment Lebanon</b>	نظرة عامة على وضع النفايات الطبية الخطرة بلبنان <b>An overview on the development of hazardous medical waste in Lebanon</b>	
	إستراحة غداء <b>Lunch Break</b>	<b>3:00-1:45</b>
نائب رئيس الجلسة <b>Vice-Chairperson</b> مولاي عبدالمؤمن	رئيس الجلسة <b>Chairperson</b> د. سابين بركات	<b>5:00 -3:00</b>
<b>الإدارة السليمة بيئياً للنفايات الطبية</b> <i>Environmentally sound management of clinical waste</i>		
د. محمد الزرقا	الإدارة السليمة بيئياً للنفايات الطبية <b>Environmentally sound management of clinical waste</b>	
د. أفضال حسين، وكيل أول وزارة- رئيس الإدارة المركزية لشئون البيئة- وزارة الصحة- جمهوريه مصر العربية <b>D. Afdal Hussain, First Undersecretary of the Ministry – Head of Central Department for Environmental Affairs - Ministry of Health- ARE</b>	مسئولية وزارة الصحة نحو التخلي الامن عن النفايات الطبية الخطرة باعتبارها الجهة الادارية المختصة طبقاً لقانون ٤/٩٤ <b>The responsibility of the Ministry of Health for safe disposal of hazardous medical waste as the competent administrative authority according to the Law 4/94</b>	
عقيد ياسر خليل	ضبط إحدى الحالات المخالفة في التخلص من النفايات	

مستشار وزير البيئة – مصر Colonel Yasser Khalil Adviser to the Minister of Environment - Egypt	الطبية بالطرق غير الشرعية (فيلم وثائقي) Arresting a case of disposal of medical waste in an illegal way (Documentary film)	
إنتهاء فاعليات اليوم الأول Closure of the First Day		

اليوم الثاني 20 <sup>th</sup> ديسمبر 2013		
المحاضر	الموضوع	الوقت
نائب رئيس الجلسة Vice-Chairperson سعاد تقي	رئيس الجلسة Chairperson أ. علي محمد علي	11:00-9:00
السياسات الوطنية لإدارة نفايات الرعاية الصحية في الدول العربية National policies for the management of health care waste in the Arab countries		
م/عادل الشافعي مدير عام إدارة المخلفات والنفايات الخطرة ونقطة إتصال إتفاقية بازل بوزارة البيئة – مصر Eng. Adel El-Shafie General Director of Wastes and Hazardous chemicals EEAA National Focal Point of Basel Convention- Egypt	دراسة حالة Case Study مصر Egypt	
هاجر مجر مديرية ادارة النفايات والمواد الخطرة وزارة البيئة فني الصحة العامة الاردن Official Representative Kingdom of Jordan	دراسة حالة Case Study الاردن Jordan	
ياسر ابو شنب وزارة البيئة فلسطين Yasser Abo Shanab Ministry of Environment Palestine	دراسة حالة Case Study فلسطين Palestine	
سمير يسري وزارة البيئة المغرب Samir Yousry Ministry of Environment Morocco	دراسة حالة Case Study المغرب Morocco	
إستراحة شاي Tea Break		12:00 - 11:30

	إستراحة صلاة الجمعة Friday Prayers Break	1:00 -12:00
نائب رئيس الجلسة Vice-Chairperson محمد مكي امان	رئيس الجلسة Chairperson عادل الشافعي	3:00-1:00
السياسات الوطنية لإدارة نفايات الرعاية الصحية في الدول العربية (تابع) National policies for the management of health care waste in the Arab countries (Cont.)		
أ. كريمة بدري وزارة الصحة تونس Mrs. Karima Badry Technical Department - Ministry of Health Tunisia	دراسة حالة Case Study تونس Tunisia	
المهندس/ محمد مكي أمان أخصائي بيئة أول مملكة البحرين Official Representative Kingdom of Bahrain	دراسة حالة Case Study مملكة البحرين Kingdom of Bahrain	
أ.علي محمد علي مسؤول نقطة اتصال بازل السودان Official focal of Basel Convention Sudan	دراسة حالة Case Study السودان Sudan	
أ.سعاد تقي مسؤول نقطة اتصال بازل الكويت Official focal of Basel Convention Kuwait	دراسة حالة Case Study الكويت Kuwait	
	إستراحة غداء Lunch Break	4:30-3:00
	الجلسة الختامية Closing Session	5:00-4:30
	عرض التوصيات Recommendations Presentations	
	الختام و تسليم الشهادات Delivery of Certificates and Closing Session	
ختام فاعليات الورشة - صورة تذكارية بعد إستلام الشهادات Workshop Closure		

## **2. Budget Summary**

The whole workshops operation expenses, including covering participants' travelling, accommodation and DSA will always be a challenge for BCRC-Egypt, in order to be capable to run the required activities with the required quality that can fulfill the Arab countries needs for proper implementation of Basel Convention regulations.

- **Estimated Budget: \$ 30,000**
- **Actual Budget: \$28,660.71**



### **3. Evaluation Sheet and Its Results Analysis**



ورشة العمل الإقليمية لإدارة الأمانة لتفاريات الرعاية الصحية  
19-21 ديسمبر 2013 الغردقة- مصر

***The Regional workshop for Safe Management of Healthcare Wastes***  
**19<sup>th</sup> - 21<sup>st</sup> December 2013 Hurghada, Egypt**

**استمارة تقييم**

(رجاء ملأ الاستمارة التالية للوقوف على مدى الاستفادة من ورشة العمل وسبل تطويرها المستقبلي)

الاسم رباعي :	الموقع الوظيفي:
قطاع / قسم / إدارة :	هيئة / وزارة / أخرى :
رقم الهاتف الشخصي :	البريد الإلكتروني:
عنوان المراسلات (تفصيلياً):	

- 1- هل أضافت ورشة العمل مفاهيم جديدة إلى خبراتكم في مجال التعامل مع المخلفات الخطرة ؟  
نعم ( ) لا ( )
- 2- هل أضافت ورشة العمل معلومات بشأن تعامل الدول العربية الأخرى مع التفاريات الخطرة ؟  
نعم ( ) لا ( )
- 3- ما مدى الاستفادة من التفاعل مع المشاركين في الدول العربية الأخرى ؟  
ممتاز ( ) جيد جداً ( ) جيد ( ) لم تحقق استفادة ( )
- 4- هل لك مقترحاتك لتطوير ورشة العمل في المرات القادمة ؟  
نعم ( ) لا ( )
- 5- هل يوجد ما كنت تتطلع إليه في ورشة العمل ولم يتحقق أم لك فيه ؟  
نعم ( ) لا ( )
- 6- هل ترغب في الاتصال بكم ودعوتكم في حالة وجود ورشة عمل مقبله تتناول نفس الموضوع ؟  
نعم ( ) لا ( )
- 7- ما هو تقييمك الكمي لورشة العمل ؟  
ممتاز ( ) جيد جداً ( ) جيد ( ) لم تحقق استفادة ( )



**Total Number of Completed Evaluation Sheets = 25**

<i>Question No.</i>	<i>Question</i>	<i>Answers</i>		
		<i>Yes</i>	<i>No</i>	<i>NA</i>
1	Did the workshop add new concepts to your experiences in the field of dealing with hazardous waste?	19	6	0
2	Did the workshop add information on how Arab states deal with hazardous waste?	25	0	0
4	Do you have suggestions for the development of the workshop in the coming times?	18	4	3
5	Is there anything you were looking forward to in the workshop and did not happen?	10	14	1
6	Do you want to be contacted and/or invited in case of a future workshop dealing with the same subject?	23	1	1

<i>Question No.</i>	<i>Question</i>	<i>Answers</i>			
		<i>Excellent</i>	<i>Very Good</i>	<i>Good</i>	<i>Did not achieve benefit</i>
3	How to evaluate the interaction with participants from other Arab countries?	12	6	7	0
7	What is your whole assessment of workshop?	8	10	7	0

### **The analysis**

The results, in general, showed that the workshop has fulfilled its main objectives in adding new concepts concerning the healthcare waste issue for the participants and exchanging the national experience of each country especially that is related to measures of wastes disposal and legislation.

One of the fruits of this workshop was to receive different suggestions and recommendations from the Arab candidates to improve the whole process of Healthcare wastes management in the Arab countries in general and any coming workshop to be organized by BCRC-Egypt in particular.

## 4. Participants List



Mohammed Makki  
Said Youssef

**Bahrain**



Karima Badri  
Enas Dakhli

**Tunisia**



Moulay Abdalmamn

**Mauritania**



Yousry Samir  
Zarak Hamed

**Morocco**



Ali Muhammad Ali  
Manal Abdul Rahim Osman  
Boshra Hamid Ahmed

**Sudan**



Suad Ahmed Taqi

**Kuwait**



Yasser Khalil  
Afdal Abdul Ghaffar Hussain  
Adel El-Shafei

**Egypt**



Mohammed Razak Alzarqa

**Egypt**



Ibrahim Attia  
Yasser Abu Shanab

**Palastine**



Mohammed Ali Hussein  
Asoa Abdullah

**Djibouti**



Abdullah Ahmad Bigily

**Saudi Arabia**



Amin Thub  
Hager Moustafa

**Jordan**



Salwa Abdullah Ahmed  
Bilqis Abdul-Aziz Hussein

**Yemen**



Sabine Barakat

**Lebanon**



Mohamed Konah

**Arab League**

