



Basel Convention Regional Centre for Training and Technology Transfer for Arab States in Egypt

Business Plan

2009-2011

Table of contents

Executive Summary of the Business Plan 2009-2011 (1 page)

I - Information on the Centre

A – Vision

B - Background on the Centre

C – Legal Structure

D - Contact information

II – The Centre and the Basel Convention

A – Performance of the core functions

B – Cooperation with the Rotterdam Convention, Stockholm Convention and the SAICM

C – Partnership Activities

D – Opportunities for improvement

III – Regional Needs Assessment (2- 3 pages)

IV – Proposed activities

A - Maintenance of the Centre and staff training activities;

B - Activities for the implementation of the Strategic Plan

C – Other capacity building activities

V – Financial information

A – Financial information about the Centre

B – Main partner institutions

C – Proposed budget for activities (2009-2011)

Annex

I – List of focal points and endorsement

Abbreviations

| | |
|-----------|---|
| BAT | Best Available Technologies |
| BC | Basel Convention |
| BCRC | Basel Convention Regional Centre |
| BEP | Best Environmental Practice |
| CEHM | Cairo University Centre for Environmental Hazard Mitigation |
| COP | Conference of the Parties |
| EMSEA | Egyptian Ministry of state for Environmental Affairs |
| ESM | Environmentally Sound Management |
| GDP | Gross Domestic Product |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| GOE | Government of Egypt |
| HZW | Hazardous Waste |
| HZWM | Hazardous Waste Management |
| MEAs | Multilateral Environmental Agreements |
| MPPI | Mobile Phone Partnership Initiative |
| NA | Needs Assessment |
| NEPAD | New Partnership for Africa's Development |
| NGO | Non Governmental Organisation |
| NIP | National Implementation Plan |
| PCB | Polychlorinated Biphenyls |
| POPs | Persistent Organic Pollutants |
| PSC | Project Steering Committee |
| RAC/CP | Regional Activity Centre for Cleaner Production |
| SBC | Secretariat of Basel Convention |
| SMEs | Small and Medium Enterprises |
| SSC | Secretariat of Stockholm Convention |
| TOR | Terms of Reference |
| UNEP | United Nations Environment Programme |
| UNEP/MAP | United Nations Environment Programme/Mediterranean Action Plan |
| UNEP/ROWA | United Nations Environment Programme/Regional Office of West Asia |

2. EXECUTIVE SUMMARY

The current business plan covers the period from 1/1/2009 to 30/12/2011. It entirely reflects ongoing and planned activities linked with the Finland funded project (Phase I extension activities), and activities proposed for Phase II of the Finland funded project. In addition, small fund activities cosponsored by the UNEP/MAP and other donors are also covered under this business Plan. The main focus of the business plan for 2009-2011 is to consolidate achievements of the previous business plans (2005/2006 and 2007/2008) and complement the capacity building efforts initiated by the BCRC-Egypt and are ongoing since the year 2000.

The Phase I extensions activities include completing pilot projects aimed at, instituting hazardous wastes inventory units in Environment authorities in Egypt, Sudan and Syria, , completing e-waste assessment in Egypt, assessing Hazardous wastes from the oil and gas sectors in one of the biggest cities in Yemen, assist Morocco to develop a HW management plan for Marrakech SMEs, assist Jordan in developing and implementing monitoring and auditing system for hazardous wastes generation from the industrial sector, and assist Egypt in testing and documenting the use of modern cement kilns for incinerating obsolete pesticides. Phase I ongoing activities include also assist Cairo University; the BCRC-Egypt host institute, develop a management Plan for hazardous wastes and chemicals from research labs inside its campus. Phase I extension activities will also witness a consultation workshop where the current business plan will be refined and endorsed by the member countries. The consultation workshop will also discuss the regional strategy and action plan for combating illegal trade and dump of hazardous wastes and hazardous substances controlled by international conventions in the Arab territories. The funds available for completing Phase I activities in 2009 are **US\$ 324765.5** (already available).

Phase II main focus will cover five broad category areas including project governance, capacity building of the centre, institutional and technical capacity building of the countries of the region, regional cooperation and awareness raising and dissemination.

These five category areas are based on the needs of the region and aim to consolidate the results of Phase I, further enhancing the subsequent national initiatives and efforts monitored towards noticeable results. Complementary activities proposed for Phase II include; Persistent Organic Pollutants (POPs) wastes, electrical and electronic wastes (e-wastes) and combating illegal trade in wastes and hazardous chemicals controlled by international conventions. Also, more support tools (e.g. data bases, training manuals, e-learning) and awareness raising and dissemination will be developed and promoted. The project will also support the centre to approach the private sector, and to establish concrete partnership with the industry sector, and will seek cooperation with the MEAs secretariats to co-implement relevant activities. The total estimated cost of the Phase II is **US\$ 1,514,380.8** (still to be approved by the Finland Government).

A Small scale project (cost approximately **US\$ 12,500**) financed through the Mediterranean Action Plan/ United Nations Environment Program will be implemented by BCRC-Egypt which aims at assessing the e-waste problem in the 8 Mediterranean Arab countries Algeria, Egypt, Lebanon, Libya, Morocco, Syria, Tunisia, and in the Palestinian authority territories.

The total cost of the 2009-2011 business plans will be **US\$ 1,851,646**, in addition to contribution of the host government, the Basel Convention and the member Arab countries

I - Information on the Centre

A – Vision: BCRC-Egypt is credible Regional Center capable of providing Quality Sound Management of Hazardous Wastes ' services and consultations acknowledged by the 22 member Arab countries, by the SBC, and by the COP.

B - Background on the centre

In 1995, by Decision III/19 of the third meeting of the Conference of the Parties, Egypt was selected as the site of a Sub-Regional Centre "for Arabic-speaking countries in Africa, which will serve the other Arabic-speaking countries", and in 2002, by Decision VI/9 for Arab speaking countries instead.

The Egyptian government instituted BCRC Egypt within one of the most outstanding academic and research institutes in the region; that is, the Cairo University. Currently, the center is hosted inside the Cairo University Center for Environmental Hazard Mitigation which runs the National Air pollution monitoring network. The University is providing BCRC-Egypt the office space, and staff for its operation. The Egyptian Ministry of State for Environmental Affairs (EMSEA) collaborated with the Cairo University in the physical establishment and operation of the centre. The BC focal point hosted in the EMSEA is closely linked with the BCRC-Egypt and mediated the financial support from the Ministry. The BCRC Egypt is also fully supported by the Egyptian Foreign Ministry.

The project document signed by the UNEP, the SBC and the BCRC-Egypt director in October 2004, constitutes the legal instrument for the funding and implementation of the major project for building the capacity of the region towards adopting sound management of hazardous wastes and efficient implementation of the Basel Convention Provisions. Government of Finland was the funding agent for that major project. The date for project launching marked an important benchmark in the support and consolidation of the current centre.

Currently, BCRC-Egypt is serving 22 Arab States in Africa and West Asia (Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen)

Since the year 2000, BCRC-Egypt has been implementing regional activities supported from the SBC, the UNIDO, the Stockholm Convention and from the Government of Finland. The

activities covered several technical and institutional capacity building issues in the region including, sound management of hazardous wastes, the Basel convention and its protocol on liability and compensation, landfills, Inventory of hazardous wastes, illegal traffic, liquid hazardous waste management, e-waste assessment, and many other areas. The activities included more than 17 training workshops and about 15 pilot projects. All the countries of the region except Somalia benefited from the activities implemented by the centre.

In addition to the workshops and pilot projects, BCRC-Egypt developed and published guidelines adopted for the region on; landfills, used oils, liquid hazardous wastes, and on conducting national inventories for hazardous wastes. The centre is regularly publishing a bi-annual newsletter. BCRC-Egypt has also, translated the Guidelines on used and end of life mobile phones prepared by the MPPI.

BCRC-Egypt has been cooperating with regional organizations like UNEP/MAP, UNEP/ROWA, CEDARE and RAC/CP in implementing its activities throughout the period 2006-2008. BCRC-Egypt is also participating in the activities of the Basel Convention Partnership for Action on Computing Equipment (PACE).

Networking of the BCRC-Egypt with other BCRCs, UN bodies and Regional Organizations with common interest is ongoing and will be an emerging and important issue that will be further strengthened and explored in view of resource mobilization and the transfer of know how to the countries of the region.

C – Legal Structure

The BCRC-Egypt came into official existence following the approval of the Egyptian Peoples' Assembly on the 22/5/2005 to the Presidential decree number 81/2005 which approves the framework agreement signed between the Egyptian Government (represented by Egyptian Environmental Affairs Agency, EEAA) and the Secretariat of the Basel Convention (SBC) in 24th.October 2004. This agreement came into force on the 22nd.June 2005.

The framework set forth the terms and conditions under which an institution in the Arab Republic of Egypt shall act as a Basel Convention Regional Centre for Training and Technology Transfer pursuant to the relevant provisions of the Basel Convention and related decisions of the Conference of the Parties to the Basel Convention.

The Centre, acting through the Cairo University Centre for Environmental Hazard Mitigation, is having the capacity, in accordance with the national laws and regulations of the Arab Republic of Egypt:

- To contract;
- To acquire and dispose of movable and immovable property;
- To institute legal proceedings.

Also, according to the framework agreement; the activities of the Centre relevant to its regional role shall be carried out under the general guidance and in close coordination with the Secretariat, and a Steering Committee is established to advise the Centre on the development and implementation of the activities of the Centre relevant to its regional role and to enhance national support to its activities from the Parties served by the Centre.

The Steering Committee is composed of five members nominated by the Parties served by the Centre through a process of consultations, for a period of four (4) years. The representative of the Arab Republic of Egypt is one of the five (5) members.

D - Contact information

(a) Contact Person

Prof. Dr. Mohamed Hani Moubasher

(b) **BCRC- Egypt**

Cairo University Center For Environmental Hazard Mitigation (CEHM).
Cairo University, Giza 12612
Egypt

(c) Postal Address

P.O. Box 453 El Orman- Giza 12612
Egypt.

(d) Telephone/Fax/E-Mail

Tel: (+202) 35719688-35674836/8
Fax: (+202) 35717565
Email: [basel_cairo @baseegypt.org](mailto:basel_cairo@baseegypt.org)

(e) Website: www.bcrc-egypt.org

II- The Centre and the Basel Convention

A – Performance of the Core functions

BCRC-Egypt with support from the SBC and the Finland government has been working actively since 2006 implementing more than 25 workshops and 15 pilot projects in Egypt and in selected member countries of the region based upon the needs and collaboration with the centre, and putting into consideration priorities of the Basel Convention Strategic Plan 2002-2010. However, activities with

focus on institutional capacity building for the Basel Convention competent authorities/focal points in the region have been also implemented.

BCRC-Egypt has been working in cooperation with the countries in the region in light of the core functions of the Basel Convention Regional Centres established according to decision VI/3 of the Conference of the Parties.

The contribution of the Basel Convention Regional Centres towards the implementation of the Basel Convention and its Strategic Plan has been recognized by the Parties of the Basel Convention in decision OEWGVI/2.

Among the basic activities implemented were Reviewing Hazardous Waste National legislations in member countries, training on strategic planning for hazardous wastes management, training on recycling of used oils, on e-waste management, on conducting national hazardous wastes inventories and on other core issues connected with the implementation of the Basel convention and its strategic plan. On the other hand BCRC-Egypt developed/adapted guidelines addressing the priority needs in the region, such Guidelines on Hazardous wastes Land filling in hyper dry areas, re-refine and reuse of waste mineral oil, on conducting national inventories of hazardous wastes, and guidelines on liquid hazardous wastes management. Many workshop and training activities were followed with pilot activities to consolidate the experience and to demonstrate lessons learned. All these contributed to the improvement of qualifications and awareness hazardous wastes competent authorities in the region and among specialists and people, fostering of partnership with industry and business on the environmentally sound management of hazardous wastes.

B – Opportunities for Improvement

Improving the performance of the BCRC-Egypt is directly linked with building the capacities of the member countries to understand hazardous wastes and their impacts and in exposing these member countries to opportunities to improve their hazardous waste management systems through cooperation with the centre. This cannot be achieved without;

- 1- Develop a permanent structure for all BCRC-Egypt, clarify the main umbrella the centre is working under and reflect this explicitly in the framework agreements, and assume basic operation cost and propose mechanism to secure it.
- 2- Carefully develop terms of reference of permanent staff of the centre and insist to match nominations from host countries with these nominations.
- 3- Develop and oblige personnel of the BCRC to take capacity building training both technical and administration guided by the SBC. It is also recommended that SBC should arrange with the donors study tours aim at exposing BCRC to relevant technologies before these BCRC can be fully utilized in effective training and technology transfer in their regions.
- 4- Equip and empower BCRC to act as accreditation office and to collect fees on behalf of the SBC from companies, NGOs, and institutes seeking accreditation to practice Sound Management of Hazardous Waste.
- 5- Assist the BCRC-Egypt develop its financial strategy and in its implementation.
- 6- Basel Convention Focal points in the region facilitate interaction of BCRC with the industry sector.

C- Cooperation with the Rotterdam Convention, the Stockholm Convention and the SAICM

Complying with the decision VIII/8 of the Conference to the Parties of the Basel Convention in regard

to the cooperation and coordination among the Basel, Rotterdam and Stockholm conventions, it is important to highlight that BCRC –Egypt has been involved in the implementation of activities with other MEAs Secretariats. These activities include the participation in regional workshops coordinated by other conventions and the organization of a regional workshop in cooperation with other Secretariats. At the regional level BCRC-Egypt is an active participant in all meetings convened by the league of Arab States/Arab team following up with the implementation of MEAs and in the Arab SAICM coordination meetings.

BCRC-Egypt is looking forward to increasing the cooperation with all MEAs secretariats and with other coordination centers.

D- Partnership activities (optional)

Throughout its work since 2005, BCRC-Egypt established partnership with several regional and international organizations, and kept all interested and affected parties informed with the BCRC-Egypt activities and interest through its web site and through the newsletter published biannually. Among most important partnerships is the partnership with UNEP/ROWA and UNEP/MAP for developing the regional strategy and action plan for combating illegal trade in waste and chemicals controlled by international conventions.

III. Regional Needs Assessment

BCRC-Egypt has been continuously gathering information regarding hazardous wastes problems in the region and current and emerging needs. Tools for gathering this type of information have never been formal, rather were restricted to verbal reporting by focal points representatives in regional meetings and workshops or via personal e-mails. However, the main hazardous waste management problems identified by feasibility study done by the SBC in 1996 are still valid to a great extent:

- ◆ Inadequate legislation governing hazardous waste management and shipments;
- ◆ Lack of hazardous waste criteria/definition to underpin legislation and control techniques;
- ◆ Lack of administrative procedures and resources (including facilities and trained personnel) for implementing the Basel Convention and legislation;
- ◆ Incomplete (or no) hazardous waste generation inventories;
- ◆ Absence of monitoring facilities;
- ◆ Lack of secure landfills;
- ◆ Absence of recycling facilities; and
- ◆ Fragmented approach to cleaner technology production and waste minimisation techniques.

Since 1996, many countries in the region started to construct secure landfills and to adopt systems for health care waste management in their major cities; e.g. Egypt, Saudi Arabia, Qatar, Jordan, Bahrain, Kuwait, Morocco, Algeria and Tunisia.

Although the efforts being done by governments of the member countries the following needs still need to be further fulfilled;

- ◆ Guidance in setting up hazardous waste criteria and in listing hazardous wastes from different sectors;

- ◆ Pointers on efficient means for drawing up hazardous waste generation inventories and inventories of existing hazardous wastes disposal options and entering these into database systems;
- ◆ Guidance in drafting legislation that transposes Basel Convention provisions into national law, in terms of both waste management and shipment requirements;
- ◆ Assistance in developing documentation systems for hazardous wastes generation, transport and disposal;
- ◆ Information exchange concerning best practices in managing various types of hazardous wastes; and
- ◆ Information exchange regarding waste minimisation and cleaner production techniques.
- ◆ Know how for liquid hazardous waste management
- ◆ Regulations for land disposal of hazardous waste
- ◆ Capacity building for Sound management of e-wastes
- ◆ Guidance in surveying for information and national reporting to the Basel Convention.
- ◆ Guidance in elimination of POPs wastes.

IV – Proposed activities

Activities planned for implementation within the context of the current business plan can be divided into two major categories:

1-Ongoing activities within the framework of the Finland funded project (Phase I) and within the framework of other projects funded from other donors.

2- Planned activities within Finland funded project (Phase II) and planned within the framework of other projects foreseen.

1- Ongoing activities

Ongoing activities include activities of pilot projects implemented in member countries with support from the Finland funded project (Phase I) under execution by BCRC-Egypt. Also, the activities include regional training workshops. All these activities are planned to be completed before the end of June 2009.

The pilot projects include:

- 1- Pilot project for instituting Hazardous waste inventories in Egypt and Syria.
- 2- Pilot project for developing a waste management Plan for Marrakesh traditional industries
- 3- Pilot project for monitoring and auditing Hazardous wastes generation from Industry sector, with the objective to set up a system coordinating all monitoring and auditing tools for specific industrial sectors.

The workshops include:

- 1- Consultation workshop to present and endorse the business plan of 2009-2011, and to present and agree on future steps regarding the Regional Strategy for combating illegal trade in hazardous wastes and chemicals controlled by international conventions.
- 2- Regional training workshop on Monitoring and auditing Hazardous wastes generation from Industrial sectors.

The allocated budget for the ongoing activities which will be implemented in the first half of 2009 is **US\$ 324,766**, including governance activities and project operation.

Ongoing activities funded from other sources and planned for completion during 2009 is the e-waste assessment project with the contribution of euro 10,000 from UNEP/MAP. The project aims at assessing the e-waste problem and its management in the Mediterranean Arab countries; Algeria, Egypt, Lebanon, Libya, Morocco, Syria and Tunisia. BCRC-Egypt will also include the territories governed by the Palestinian authorities in the assessment.

Detailed explanation of the pilot projects and the workshops proposed for 2009 can be found on the BCRC-Egypt web site (embedded in the workplan for 2008) at: www.bcrc-egypt.org.

2- Planned Activities

Most of the planned (proposed) activities are those listed in the concept paper developed for Phase II of the Finland Funded project. The following table summarizes these activities and the following paragraphs give some details regarding the objectives, and expected results and outputs.

Table 1: Summary of Proposed activities and expected outputs under the four category areas

| Category Area | Project Activities | Project outputs |
|--|---|---|
| 1- Project Governance | Preparation and hold of steering committee meetings of the centre and the project | Meetings minutes and decisions on the development and implementation of the project |
| | Preparation and facilitation of the Project review and evaluation missions. | Actions to be taken to improve project implementation and reporting. |
| | Periodic reporting | To the government of Finland, UNEP and The SBC, League of Arab States and Cairo University. |
| | Facilitate Project auditing | In coordination with UNEP, Government of Finland and the SBC. |
| 2. Capacity building of the Regional Centre | 1 Capacity building for technical and admin staff via training | Trained Centre staff and efficient operating centre. |
| | 2 Dev of Resource Centre via equipment and linkage with stakeholders | Developed Resource Centre serving better the host and member countries of the centre. |
| | 3 Acquiring and implementing professional Accounting system | Efficient accounting and financial reporting |
| 3. Institutional and Technical Capacity building for BC focal points and Competent authorities in the member countries | 1- Environmentally sound management of electrical and electronic wastes (e-waste) | Better planning and management of the e-waste problem in the region. Report on best approaches in e-waste management; e-waste Assessment reports for selected countries. |
| | 2- Training on safe management of POPs. | Trained experts on the management of POPs waste Improved implementation of the Basel and Stockholm Conventions. promoted ESM of PCBs through the coordinated implementation of the Basel Convention and the Stockholm Convention with particular focus on protecting the health of vulnerable groups, including women |
| | 3- Mercury and Asbestos activities | Trained experts, Trained trainers, New short course developed and tested. |
| | 4- Developing hazardous waste management plan for SMEs | Plans for management of HZW from SMEs in two selected Arab Countries and experience propagation through the rest of the countries. |

| | | |
|---|---|---|
| | 5- Developing data base for hazardous wastes, hazardous wastes management options, information for Arab Countries, international hazardous waste facilities and best management practices | Tools to be used by executives, enforcement officers, institutions, industrial sectors and decision makers. Accessible HZW management data base to all member Arab Countries. |
| | 6- Pilot study on Bioremediation of hydrocarbon contaminated soils | Report on effective bioremediation technologies and uses. Enhance the research capacity of the BCRC-Egypt Gulf countries suffering from oil exploitation contamination further involved in BCRC-Egypt activities. |
| | 7- Training on GHS (Globally Harmonized System of Classification and Labelling of Chemicals) | Trained experts, Trained trainers, New short courses developed and tested. Increased awareness by governments on GHS. |
| 4. Regional Cooperation | 1- Complete and Update the Regional Strategy and action plan for combating illegal trade in hazardous wastes and hazardous materials governed by international conventions. | Regional strategy updated Regional strategy adopted by the countries of the region Regional strategy and action plan implemented in at least 6 countries. |
| | 2- Developing Region's HZW management legislation. | HZW management Arab legislation developed and adopted. Capacity of the Parties to enforce the provisions of the Basel Convention on the monitoring and control of trans-boundary movements of hazardous waste enhanced |
| 5- Awareness raising and dissemination. | 1- Maintain the BCRC-Egypt website | Website maintained, and awareness material for specific HZW problems for all executive and public levels; Documents in Arabic language that can be used by executives and technicians for implementing Environmentally Sound Management of hazardous wastes; Web based interactive material on specific and priority HZW streams management |
| | 2- Translation and Publications | |
| | 3- Publishing regularly the newsletters | |
| | 4- Developing e-learning material | |
| | 5- Produce educational material for a variety of audience | |

As indicated above, the activities proposed for phase II of the Finland Funded project constitute the major part of the BCRC-Egypt business plan for 2009-2011. Five category areas are proposed for intervention to consolidate the achievements of Phase I, and to further strengthen the existence of BCRC-Egypt; these include

- Governance activities
- Activities devoted for Capacity building of the centre
- Activities for Institutional and technical capacity building of the HZW departments in the member countries
- Regional and international cooperation
- Awareness raising and dissemination

a) Governance Activities

The activities of the Centre relevant to its regional role shall be carried out under the general guidance, monitoring and coordination by the Project Steering Committee (PSC) and in close coordination with the Secretariat of the Basel Convention. The ultimate authority in managing the project will rest with the BCRC, in line with the guidance by the PSC, donor grant guidelines, and decisions of the Conference of the Parties to the Basel Convention.

The Centre shall keep the Focal Points of the Basel Convention of the Parties served by the Centre, the Secretariat, the donor country, non-governmental organisations, entities, private sector organisations, academic institutions or other organisations which participate in the activities of the Centre, regularly informed of its activities.

The Secretariat shall coordinate the activities of the Centre with the work of other Basel Convention Regional Centres as well as with the relevant activities of the Parties to the Basel Convention, International Organisations, programmes, funds and other institutions established by relevant global and regional conventions as mandated by the decisions of the Conference of the Parties to the Basel Convention.

The Project Steering Committee (PSC) established for Phase I, with the membership of Algeria, Bahrain, Egypt, Jordan, Tunisia, United Arab Emirates, the Director of the BCRC-Egypt, the representative of the Government of Finland, and the representative of the Secretariat of the Basel Convention will be reconstituted in Phase II to allow other member countries to be represented and to enhance member countries ownership.

b) Capacity building for BCRC-Egypt

The Centre's capacity has to continue to be enhanced so as to be able to undertake the challenges of meeting the expectations of the countries in the Region. The current structure of the BCRC-Egypt needs to be supported by a national program officer and a technical officer to support detailing and implementing the activities proposed. The proposed national staff will work closely with the all experts (national and international) hired and the BCRC-Egypt director so they will get on the Job training and should be joining the BCRC-Egypt as permanent staff at the end of Phase II. The proposed officers will assist the centre in planning, marketing and executing training programs and will be key players in following up with marketing the BCRC-Egypt services to secure operation resources for the centre sustainability. Also, the centre needs to keep an executive secretary (even for part time) and an accountant to hold regular accounting books. The capacity building requirements lay in the following; which have to be coupled probably with relevant study tours whenever applicable:

- 1 General Project management
- 2 Project financial management
- 3 Marketing and Private/public partnerships
- 4 Policy studies (political, technology, social, economic)
5. Information technology management

Under the emerging needs and the recommendations of the mid-term review mission of the Phase I of the Finland funded project, that the centre has to work closely with the industry and other private sectors, and in order to increase the efficiency of the BCRC-Egypt staff and experts, and has to establish proper links and work interest, BCRC-Egypt needs to have an efficient vehicle for such field activities.

During Phase I, BCRC-Egypt relied for its limited field activities on the rarely available CEHM cars which were extensively in use by other national projects implemented by CEHM, the host institute. A provision for an ordinary vehicle is thus foreseen for Phase II field activities to increase the mobility and efficiency of the staff for field activities.

It is also foreseen to support BCRC-Egypt with some sampling equipment and some protective cloths to use during sampling and during field visits to HZW sites.

The total allocation for such capacity building activities is US\$ 51,000.

c) Institutional and Technical Capacity Building of the HZW Departments in the Member Countries

As indicated in several instances, most of the Basel Convention Focal points in the countries of the region are poorly staffed, while enormous responsibilities constitute an overburden. The proposed activities herein will focus on increasing the efficiency of these focal points to meet the challenges of their jobs. It is expected that by increasing the capacities of the focal points will improve management of hazardous wastes and the implementation of the Basel convention.

Technical capacity building will comprise activities related to priority waste streams of the Strategic Plan for the implementation of the Basel Convention like

- e-wastes
- Persistent Organic Pollutants (POPs) wastes
- Mercury wastes, and
- Asbestos wastes.

In addition to training on the **GHS** system.

While Institutional capacity building will comprise the activities related to developing tools that can be used to improve the efficiency of the competent authorities for Basel convention and other MEAS; these are:

- Access to information through establishing the BCRC-Egypt HZW management Data base
- Developing SMEs' HZW management plans
- Research on bioremediation Technology

Experience with the counties of the region reveal that in general most countries have training capacity associated with environmental management in general. However, the quality and relevance of curricula to hazardous waste management issues varies considerably. Potential expertise exists in most countries which through targeted support can serve as in-country resources for the delivery of training programmes. The potential, however, require nurturing and support from BCRC-Egypt through a combination of development of an appropriate curricular, training of trainers approach, support for country and sub-regional networking as well as knowledge sharing/management aimed at enhancing training delivery competences. Through this approach the learning process can be fast tracked. Training has been seen as a component which should go in parallel to the implementation of defined waste management strategies and programmes. Most of the activities linked to the institutional technical capacity building will comprise both training and follow up pilot project activities.

- 1- **For e-wastes:** The production of electrical and electronic devices (e-products) is the fastest-growing manufacturing sector across industrialized countries. At the same time, e-products are also well known as one of the most persistent sources of toxic materials such as heavy metals and flame retardants in the common household. These basic facts, combined with an increasingly rapid obsolescence for e-products, have made their appropriate disposal a major, and rapidly growing, global environmental challenge. For that reason, came the Nairobi Ministerial declaration of the eight's Conference of Parties to the Basel Convention focused on this type of waste stream.

It is proposed to convene two sub-regional workshops; one for the Asian Arab Countries and one for African Arab Countries. The workshops will build on the pilot projects completed in

Algeria, Egypt, Jordan and Saudi Arabia and on the experience gained by BCRC-Egypt while adopting the MPPI Guidelines on used and end of life mobile phones to the Arabic regions.

The experience of the projects being carried out by BCRCs located in Argentina, China, and Indonesia will be also used as a reference for the proposed activities. These workshops will introduce to the current international concerns regarding e-wastes and their environmental and human health impact, and will also refer to the opportunities offered under environmental sound management. The training will also address efficient collection and recycling schemes. They will also introduce to trans-boundary movement under the Basel Convention. The workshop will also cover the international efforts for green design and for promoting innovative ESM of e-wastes. The workshops will be supported by follow up activities in selected Arab Countries where reconnaissance assessment will be conducted followed by collection, packing and shipping schemes arrangements to be well promoted and probably tested by the project in collaboration with competent authorities in the selected countries.

The proposed budget for such workshop and pilot project activities is US\$ 114000 with additional in-kind contributions amount to US\$ 50,000 from the beneficiary countries expected for the pilot activities.

- 2- **For the Persistent Organic Pollutants (POPs):** POPs fall within the interest of the Basel and Stockholm Conventions. Import and export of the ten intentionally produced POPs is severely restricted by the Stockholm Convention. After all substance specific exemptions have ceased, import and export is allowed only for the purpose of environmentally sound disposal under restricted conditions.

The Stockholm Convention lays down an obligation to all Parties to develop and endeavour to implement a plan for the implementation of its obligations under the Stockholm Convention (National Implementation Plan, NIP). Most (19 countries out of 22) of the Arab Countries signed the Stockholm Convention. Among the member Arab Countries, only seven countries (Algeria, Djibouti, Egypt, Lebanon, Jordan, Tunisia and Morocco) were able to develop and present their NIPs to the Secretariat of the Stockholm Convention and started to take measures towards implementation. Some of the countries who submitted their NIP are currently revising them (e.g. Egypt). The remaining countries are either developing their plans or plan to develop them.

It is proposed that BCRC-Egypt assist the Arab Countries to revise/update their NIPs, and build the capacity of the rest of the countries to properly develop their plans. In order to achieve good results, it is proposed that BCRC-Egypt gather and review NIPs prepared for the seven Arab Countries and plan subregional capacity building workshop activities. These activities will be followed by pilot activities in two selected Arab Countries. The pilot activities will be planned in consultation with the selected member countries and regional and international stakeholders. Possible pilot activities can include;

- ✓ Identify the existing National measures related to POPs;
- ✓ Assess their efficiency and sufficiency in meeting the obligations of the Stockholm Convention;
- ✓ Identify needs for further measures;
- ✓ Establish a plan for implementing the further measures;
- ✓ Identify and strengthen links and potential synergies between POP management and other environmental policies and other policy fields; and

- ✓ Increase awareness on POPs and their control measures.

These pilot project activities will be followed by a workshop to test the Basel Convention Technical guidelines on the environmentally sound management of POPs wastes in collaboration with the Secretariat of the Basel and Stockholm Conventions.

The Budget allocation for such capacity building activities is US\$ 136000.

3- For the Mercury and asbestos waste Streams: Mercury and asbestos waste streams are gaining a lot of interest and concern among the international community and inside the Arab region. They were added to the strategic plan focus areas in 2006. It was planned that guidelines for asbestos wastes and training materials for its sound management be developed with emphasis on measures to be taken in disaster-prone areas. It was also noted that BCRCs should plan and implement activities to promote awareness among local residents and of municipalities on the issue and to develop related pilot activities to assist in controlling the impact of these types of wastes.

For Mercury wastes: The SBC, as requested by the ninth meeting of the conference of the parties in Bali in 2008, is developing in cooperation with UNEP chemicals, i) partnerships around the theme of environmentally friendly technologies and awareness raising regarding avoidance, use and disposal of mercury wastes; ii) capacity-building and technical assistance programmes to reduce and prevent pollution from mercury; iii) guidelines on environmentally sound management of mercury wastes with emphasis on the development of sound disposal and remediation practices.

BCRC-Egypt will therefore take a leading role in the region to promote awareness regarding the asbestos and mercury waste streams through pilot activities in two selected countries and then promote the experience gained from these pilot activities in a regional workshop.

Pilot activities that can be implemented at the national level may include;

- identify the existing National measures related to the two waste streams;
- identify needs for further measures and promote them;
- establish a plan for implementing the further measures proposed;
- identify and strengthen links and potential synergies with the Rotterdam convention and other mechanisms agreed by the governments.
- increase awareness on the two waste streams and their control measures.

The budget allocation for such capacity building activities is US\$ 114,000.

4- Training on the GHS system:

The sound management of chemicals is an important capital for protecting human health and the environment. One important tool for supporting chemical safety is the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The GHS as a tool for facilitating the implementation of chemicals conventions has also been highlighted in recent international discussions (such as SAICM).

In Africa, the importance of the GHS has been highlighted in the Action Plan of the Environment Initiative of the New Partnership for Africa's Development (NEPAD). The

importance of the GHS was demonstrated by the conclusion of the Regional SAICM Workshop for Africa in 2005 in Cairo. From the workshop recommendations, several important points were raised on the need for further GHS training and awareness raising for countries in the region. However, it has been noted that lack of resources and capacity, as well as lack of awareness on the GHS, are obstacles to GHS implementation.

The elements in the GHS supply a mechanism to meet the basic requirement of any hazard communication system, which is to decide if the chemical product produced and/or supplied is hazardous and to prepare a label and/or Safety Data Sheet as appropriate. Regulatory authorities in countries adopting the GHS will thus take the agreed criteria and provisions, and implement them through their own regulatory process and procedures rather than simply incorporating the text of the GHS into their national requirements. Understanding the GHS system thus provides countries with the regulatory building blocks to develop or modify existing national programs that address classification of hazards and transmittal of information about those hazards and associated protective measures. This helps to ensure the safe use of chemicals and of hazardous wastes as they move through the product life cycle from "cradle to grave."

Training on GHS has been identified by many Arab Countries as a priority need for enforcement officers, environmental executives and for industry. BCRC-Egypt is planning to compile GHS related training materials and to do two regional training workshops for trainers and for enforcement and executives from the customs, the industry and environment sectors. The planned activities will greatly help in reducing the risk associated with handling hazardous chemicals and wastes and will contribute indirectly to the waste control and minimization objectives.

The budget allocation for such capacity building activities is US\$ 112,000.

5- Access to information through establishing the BCRC-Egypt Data base

Information constitute the backbone of any decision making process. The availability of an enhanced web site for the BCRC-Egypt will help greatly information publication and dissemination. BCRC-Egypt has produced in Arabic language guidelines, reports and information that were very useful to the member Arab Countries. During Phase II of the project more information and technical material will be produced. There is then a need to have a more efficient web site and to have a data base that holds in an easy access interface all results, outputs of the BCRC-Egypt, and other related links, linked to such web site. The BCRC-Egypt intends to prepare a data base that will contain fact sheets regarding hazardous waste management in the member countries, guidelines produced by the BCRC-Egypt, web links to valuable information/other data bases, awareness material and other related information.

Preparation of countries fact sheets and data entry will comprise an important part of the development of the BCRC-Egypt data base. BCRC-Egypt will need to allocate for data entry or operators.

Many Arab Countries which lack the facilities to deal with specific types of wastes (especially PCBs) requested information regarding international companies that accept hazardous waste shipments from developing countries. It is therefore intended to compile a data base for regional and international facilities (within the EU) accepting hazardous wastes and make this compilation available through BCRC-Egypt website.

In order to have an effective and efficient website BCRC-Egypt will need to upgrade its information technology hardware. It is therefore planned to acquire new hardware server and three new desktop or laptop computers.

The development and expansion of the existing information management capability of BCRC-Egypt is also central to the elevation of the quality of decisions made on the basis of properly collected and analysed information. The activity will strengthen the institutional capacity of the region in addition to building the capacity of the BCRC-Egypt.

The budget allocation for such capacity building activities is estimated at US\$ 112,000.

6- Promoting SMEs' HZW management plans:

Although it is becoming increasingly common for large scale organizations to set ambitious environmental targets and to take accordingly necessary measures, the same cannot be extended to Small and medium-sized enterprises (SMEs). SMEs are widely considered as an important engine for economic growth and employment throughout different regions of the world. SMEs are also an important contributor to environmental pollution. Scarcity of resources and unfamiliarity with the available environmental sound management tools are common features among SMEs. Data regarding the contribution of the SMEs to the hazardous waste problem in the Arab region are hardly available. A common belief that SMEs contribute much to the hazardous waste problems in the Arab region is shared among many executive and experts from the region.

During Phase I of Finland funded project, BCRC-Egypt assisted Morocco to assess the waste problem from SMEs in Marrakech, and in developing a relevant waste management plan. Also, under the umbrella of the Basel Convention Ministerial Declaration as well as the COP 6 adopted Strategic Action Plan, funding was provided (with additional financial support from the Swiss Agency for Development and Cooperation) to Jordan for the development of a guide for management of wastes from SMEs. From November 2003 to April 2005, the Royal Scientific Society (RSS, Jordan) and Sustainable Business Associates (SBA, Switzerland) developed the first Guide for Hazardous Waste Management in order to help SMEs tackle the problem of the sound management of hazardous wastes in an environmentally and economically viable manner (preventive actions).

The Guide was initially developed for Jordan, building on existing know-how through the application of an integrated life cycle approach to hazardous chemicals and hazardous wastes by encouraging the adoption of environmental friendly practices and by tackling the problem of hazardous waste generation at its source.

BCRC-Egypt will work closely with both the Jordanian and Moroccan authorities to transfer the knowledge gained during these important activities to other Arab Countries who need them. A consultant will be used to identify and prioritize SME sectors to address and to develop screening questionnaire to share with the BC focal points in the 22 member Arab Countries. Based on the response to the initiative of the BCRC-Egypt, two or three selected countries will be subject to pilot activities to collect field data in collaboration with local environmental authorities and industrial federations. BCRC-Egypt then will encourage and assist the countries subjected to the field activities to put their SMEs waste management plans and will further develop relevant guidelines to be used by other beneficiary countries.

The budget allocation proposed for such capacity building activity is US\$ 45,000.

7 - Pilot study on bioremediation of Hydrocarbon Contaminated soils

The problem of soils and beaches contaminated with hydrocarbons is common in many oil producing countries in the region. The current practice for decontamination is to incinerate the soils either locally or in Europe. Currently the EU has been stringent and may not continue to accept such soils from

outside the EU. The current activity proposes bioremediation as alternative and proposes to examine its viability. Successful bioremediation or decontamination will also protect nearby natural resources and inhabited areas from contaminated run off and leachate of contaminated areas. The expansion to new areas became an emerging must to meet the population growth needs in many countries of the region, and thus rehabilitation of contaminated areas became an important issue.

To the BCRC-Egypt Knowledge, bioremediation have not been implemented for cleaning hydrocarbon contaminated soils except for very few cases. It is also known that bioremediation use in our region is mainly for waste water treatment.

BCRC-Egypt proposes for Phase II of the Finland funded project, an activity that will focus on identifying international sources for supplying bioremediation technologies for hydrocarbon contaminated soils and will try to acquire samples of different microbes for testing on contaminated soils and screen the best effective microbes for each specific soil. This proposed activity will enhance the research capacity of the BCRC-Egypt and will feed the BCRC-Egypt with information to be added to the its data base which contribute to the regions capacity building.

The budget allocation proposed for such capacity building activity is US\$ 25,500.

d) Regional Cooperation Activities

The area Regional Cooperation witnessed several important activities during last couple of years. One of the most important was the development of a framework for a regional strategy and action plan for combating illegal trade and dump of hazardous wastes and hazardous materials controlled by international conventions in the Arab territories. Among the regions organizations which collaborated with the BCRC-Egypt in implementing pilot activities for developing that strategy was the League of Arab States. Phase I of the Finland funded project also contributed to other international endeavours carried out by the WCO, UNEP/MAP, and UNEP/ROWA.

The proposed activity will update and detail the regional strategy and action plan and will support its adoption , and channel its endorsement and implementation through the regional official channels; e.g. the League of Arab States, in at least 6 Arab countries..

Another regional cooperation activity will focus on developing and endorsing regional hazardous waste legislation as this has been identified as an emerging need to protect the countries of the region from the impact of illegal trade in waste and in hazardous chemicals. The development of the legislation will also protect those countries which do not have national legislations for hazardous wastes and rely largely on Environmental legislations frameworks which usually do not provide enough legal protection.

The budget allocation proposed for this activity is US\$ 24,000.

e) Awareness Activities and Dissemination

Awareness and dissemination are the essential mechanisms for implementing effective waste management programs. The needs of the region reflect the lack of Hazardous Waste Management (HZWM) awareness within the political and governmental leadership of the stakeholder countries including the private sector. Few of the senior officials are even aware of the BCRC or its objectives.

There is therefore a need to continue to stimulate awareness and commitment within this sector which is crucial in the successful undertaking initiation and undertaking of future HZWM programmes.

The project in Phase I utilized many tools for raising the awareness at different levels of audience, executives, politicians and decision makers. Awareness activities proposed to cover the maintenance of the current website and for preparation of additional newsletters of the BCRC-Egypt. A media consultant will be utilized to facilitate target oriented interviews with regional media and TV channels, the development of awareness materials, and for localized awareness events.

The budget allocation proposed for awareness is US\$ 23,300.

Other important awareness activities will include;

a- Translations and publications

Translation, publication and dissemination of outreach materials are important tools for the transfer of knowledge and technology. BCRC-Egypt translated and produced many valuable guidelines and reports during phase I of the Finland funded project. Plans to continue its translation, publication and dissemination of important outreach material during Phase II of the project are considered.

Among most important documents foreseen for translation into Arabic language are from the publication lists of Basel Convention, the Stockholm Convention, the World Bank, and from the Publications of Regional Activity Center for Cleaner Production. BCRC-Egypt puts a target of 900 pages of translation throughout the three year project period. BCRC-Egypt will not restrict itself to the mere translation of the publication to be selected, but will adopt the translated documents to the region's conditions to the best. BCRC-Egypt will make sure before take the decision for translation that the publication selected for translation has not translated into Arabic language at all.

The translation and publication activities will promote the use of BCRC-Egypt services and outputs in addition.

The budget allocation proposed for such activity is US\$ 48,000.

b- E-learning

E-Learning, or online learning, stands for all forms of Internet-enabled and/or computer supported learning. It refers to the use of computer and computer network technologies to create, deliver, manage and support learning, usually independent of specific locations or times. E-Learning can involve complete online courses, where all aspects of learning, from learner enrolment to tuition and support take place online. At the other end of the e-Learning spectrum, these elements may well take place in a face to face situation, with only the learning resources available on the internet.

E-learning through the semantic web is becoming increasingly popular among various age groups and among different specialization categories. BCRC-Egypt through the various proposed activities and utilizing the Phase I achievements and materials maintained has a good potential to develop e-learning courses to promote through its web site. The e-learning courses that will be developed by the BCRC-Egypt will be used to generate resources to the centre on the long term. It is planned to develop at most our courses during the proposed three years of the project. The areas for developing e-learning courses include; e-waste management, Persistent Organic pollutants, liquid hazardous wastes and on BAT and BEP for hazardous wastes management.

With these activities, the centre is striving to become knowledge and excellent center to assist in the implementation of the Basel and Stockholm conventions, and the Strategic Approach to International Chemical Management (SAICM).

The budget allocation proposed for such activity is US\$ 30,000.

V – Financial information

A – Financial information about the Centre (optional)

| Table 2: BCRC-Egypt operation cost for the period 2009-2011 | | | | |
|--|----------------------------|------------|---------------|---------------|
| | GOE/BCRC- Egypt | MAC | SBC | Total |
| Director | 36,000 | | | 36,000 |
| Secretary | 9,000 | | | 9,000 |
| Offices | 36000 | | | 36,000 |
| Communication | 3000 | | 6,000 | 9,000 |
| Maintenance | 1,000 | | 2500 | 3,500 |
| Others | 1,000 | | 2000 | 3,000 |
| Publications | | | 5500 | 5,500 |
| Traveling | 5000 | | 25,000 | 30,000 |
| Sub total | 91000 | | 41,000 | |
| TOTAL in U\$S | | | | 132000 |

B – Main partner institutions

Financial Resources

Current main sources of funding:

- Cairo University
- The Egyptian Ministry of States for Environmental Affairs (EMSEA)
- Government of Finland, Development Cooperation.
- UNEP/MAP
- SBC, Trust Fund
- UNEP/ROWA

Potential future sources of funding:

- GEF
- UNEP/SSC
- UNIDO
- World Bank
- Parties in the region
- Others

External Resources

Current key partners and stakeholders:

- SBC/UNEP

- SSC/UNEP
- MSEA
- Parties in the region

Key Partners and stakeholder in the future

- Donors
- Governmental departments
- Industries
- Academic institutions
- Non-governmental organizations

C – Proposed budget for activities (2009-2011)

Table (3) Budget for 2009 activities of Phase I of the Finland Funded Project

| | COMPONENT | Budget (US\$) for 2009 |
|------|--|------------------------|
| 10 | | |
| 1100 | Project Staff | |
| 1105 | Official travel | 6,500.00 |
| 1199 | Total | 6,500.00 |
| 1201 | Consultancies for technical assistance / advisory services for the countries in the region | 115,254.38 |
| 1299 | Total | |
| 1999 | Component Total | 121,754.38 |
| 3201 | Workshops and Seminars | 125,000.00 |
| 3301 | Organization of Steering Committee Meetings (4 meetings) | 6,500.00 |
| 3999 | Component Total | 131,500.00 |
| 5201 | Publication of outreach materials, designing and maintenance of the Website | |
| 5999 | Component Total | 18,902.69 |

| | | |
|------|---------------------------|------------------------|
| 6999 | UNEP Participation Cost** | 52,608.4 1 |
| 99 | Grand Total | 324,765. 48 |

Table (4) Proposed budget for Phase II of Finland Funded Project

| Activities | Total (US\$) | 2009 | 2010 | 2011 | |
|---|---------------------|---------------|---------------|---------------|---------------|
| 1- E-waste | 114000 | 44000 | 35000 | 35000 | |
| 2 training on GHS System | 112000 | 56000 | 56000 | | |
| 3- POPs sound management and enabling activities | 136000 | 6000 | 70000 | 60000 | |
| 4- developing hazardous waste management plan for SMEs | 45000 | | 25000 | 20000 | |
| 5- Constructing and maintain BCRC-Egypt Data Base | 41500 | 20000 | 12000 | 9500 | |
| 6-BCRC-Egypt Capacity Building | 51000 | 35000 | 13000 | 3000 | |
| 7- Research on bioremediation of hydrocarbon contaminated soils | 29500 | | 12000 | 17500 | |
| 8- Translation and publications | 51000 | 16500 | 14700 | 19800 | |
| 9- Developing e-learning training material | 30000 | | 15000 | 15000 | |
| 10-Mercury and Asbestos activities | 114700 | 35000 | 17000 | 62700 | |
| 11- Governance activities | 76000 | 10000 | 46000 | 20000 | |
| 12- Awareness | 23300 | 8500 | 6800 | 8000 | |
| 13- Regional and international cooperation | 24000 | 12000 | | 12000 | |
| total | 848000 | 243000 | 322500 | 282500 | 848000 |
| | | 0 | 0 | 0 | 0 |

Project Personnel

| item | Cost (US\$) |
|-------------|--------------------|
|-------------|--------------------|

| | |
|---|----------------|
| Project local recruited Personnel (15%) | 127200 |
| International expert | 288000 |
| travel for project staff | 60000 |
| project operation (2%) | 16960 |
| total | 1340160 |
| UNEP cost (13%) | 174220.8 |
| gross total | 1514381 |

Table (5) Budget for E-waste Assessment in Mediterranean Arab countries from UNEP/MAP

| BL | Activity/Expense Category | Budget, Euro |
|-----------|---|---------------------|
| | Assessment of WEEE in Egypt, Syria, Lebanon, Libya, Tunisia, Morocco and Algeria | |
| 1200 | Expert/Consultant Fee | 8000 |
| 3300 | Coordination | 2000 |
| | <i>Total</i> | <i>10,000</i> |

Table (6) Budget totals summary

| Source | Amount (US\$) |
|------------------------|-------------------|
| GOE | 91000 |
| Phase I Finland Funds | 324,765.48 |
| Phase II Finland Funds | 1514381 |
| SBC Trust fund | 41000 |
| UNEP/MAP | 12500 |

| | |
|-------|-------------------|
| Total | 1983646.48 |
|-------|-------------------|

ANNEXE 1

Contact info for BC focal Points in the Arab countries

| | | |
|---|-----------------|--|
| 1 | <i>Algeria</i> | <p>Ministere de l'Aménagement du Territoire, de l'Environnement et du tourisme Direction Générale de l'Environnement, Rue des 04 canons - Alger, Algérie Téléphone:(213) 2143 2804 or 716 28992 (Baba Karem) or 00213662053555 (Hinda) Telefax:(213) 21432897 E-Mail: baba.mate@hotmail.com, b-hinda@hotmail.com</p> |
| 2 | Bahrain | <p>Mr. Abdel Mohsin Al Mohmoud Head of Waste Management Section Environment and Wildlife Affairs Public Commission for the Protection of Marine Resources, Environment and Wildlife P.O. Box 32657, Isa Town Kingdom of Bahrain Telephone: (973) 17 87 51 63 or 39640955 Telefax: (973) 17 78 61 02 E-Mail: a.mohsin_060@yahoo.com or ama13579@batelco.com.bh , MohsinM@env.gov.bh</p> |
| 3 | Comoros | <p>Le Directeur Général Institut National de Recherche pour l'Agriculture, la Pêche et l'Environnement Ministère de la Production et de l'Environnement B.P. 41, Moroni Comores Telephone: (269) 73 66 88 – 750002 – 750003 – 736 200 Telefax: (269) 74 46 32 E-Mail: inrape@snpt.km</p> |
| 4 | Djibouti | <p>Ministre Ministère de l'Habitat, de l'Urbanisme, de l'Environnement et de l'Aménagement du Territoire B.P. 11 Djibouti République de Djibouti Telephone: (253) 35 85 22 or 35 83 57 Telefax: (253) 35 16 18 E-Mail: adoule@yahoo.fr, admadin2003@yahoo.fr</p> |
| 5 | Egypt | <p>Eng. Adel Shafie Head of Hazardous Waste Department Egyptian Environmental Affairs Agency Ministry of State for Environmental Affairs 30 Misr Helwan Rd 11728 Maadi, Cairo Egypt Telephone: (202) 525 64 52 Telefax: (202) 525 64 75 or 525 64 90 E-Mail: adel221261@yahoo.com OR adelshafei@eeaa.gov.eg</p> |
| 6 | Jordan | <p>The Secretary General Ministry of Environment P.O. Box 1408, Amman 11941 Jordan Telephone: (962) 5560113 or 776 296 294 Telefax: (962 6) 552 53 15 E-Mail: moenv@moenv.gov.jo , mkhashashneh@yahoo.com</p> |
| 7 | Kuwait | <p>Mrs. Manal Ahmed Saleh Environment Public Authority</p> |

| | | |
|----|-----------------------|---|
| | | <p>P.O. Box 24395, Safat 13104 Kuwait Telephone: (965) 48 20 595, 94821285 Telefax: (965) 48 21 724, 4820579 E-Mail: wish_ubset@yahoo.com, wish_ubset@hotmail.com, hollanda_123@hotmail.com</p> |
| 8 | Lebanon | <p>Directeur Général Ministère de l'Environnement P.O. Box 70-1091, Antelias Beirut Lebanon Telephone: (961) 302 95 47 or 197 655 55 Telefax: (961 1) 976530 or 976531 E-mail: dgmoe@moe.gov.lb, j.berbari@moe.gov.lb</p> |
| 9 | Libya | <p>Environment General Authority (EGA) P.O. Box 83618 El-Gheran, Tripoli Libyan Arab Jamahiriya Telephone: (218) 91 370 85 01- 21 48 73 761 (164) Telefax: (218) 21 48 70 266 or 21 48 71 590 E-Mail: mufidaseleh@yahoo.com</p> |
| 10 | Mauritania | <p>Mr. Moulay Abdel Moemen Telephone: (222) 63 48 572 or 65 08 106 Telefax: (222) 524 31 38 E-Mail: noumine1@maktoob.com or deuxvess@yahoo.fr Mr. Hamoud Ould SidAhmed Directeur de la Reglementation et des conventions Internationales Secrétariat d Etat charge de l Environnement Ministère du Développement Rural et de l'Environnement B.P. 170, Nouakchott Mauritanie Telephone: (222) 641 08 36 Telefax: (222) 252 583 86 or 252 90 115 E-Mail: hosa65@hotmail.com</p> |
| 11 | Morocco | <p>Mr. Abdel Hai Zerouali Directeur de la Surveillance et de la Prévention des Risques Secrétariat d'Etat chargé de l'Environnement Département de l'Environnement 2, street Oum El Rabie, Agdal, Rabat Morocco Telephone: (212) 37 576 647 or 37 5766 48 Telefax: (212) 37 576 645 E-Mail: a.Zerouali@pop-maroc.org, sq@environmen.gov.ma</p> |
| 12 | Oman | <p>Mr. Ahmed Ben Said Director of Coordination and Follow-up Ministry of Regional Municipalities, Environment and Water Resources P.O. Box 323, Muscat 113 Sultanate of Oman Telephone: (968) 24 692 471or (968) 994 71115 Telefax:(968) 24 692 928 E-Mail: dgea@mrmewr.gov.om or kharusi-al@yahoo.com or meca.dgea@gmail.com or Meca.dgea@gmail.com</p> |
| 13 | Palestinian Authority | <p>Dr. Yousef Abu Safieh Minister, Chairman of Environment Quality Authority Mr. Mahmoud Abu Shanab The Deputy Director General of Environment Protection directorate Environment Quality Authority (EQA) P.O. Box 3841 Ramallah, West Bank Tel: (970) 599 674801or (970) 2 2403495 Fax: (970) 2 2403494</p> |

| | | |
|----|---------------------|---|
| | | E-mail: environment@gov.ps , athaher@yahoo.com , mabushanab@mena.gov.ps , ma_shanab@yahoo.com |
| 14 | Qatar | Mr. Hasan Mohsen El khowar Head of Pollution Control Section Supreme Council for the Environment and Natural Reserves P.O. Box 7634, Doha Qatar Telephone:(974) 44 371 71 or 504 50 60 or 420 7777 Telefax:(974) 441 52 46 or 420 7000 E-Mail: hmkhuwar@gatarenv.gov.qa |
| 15 | Saudi Arabia | Mr. Sulaiman AlZaben D.G of Chemical Safety and Hazardous Waste Presidency of Meteorology and Environment (MEPA) P.O. Box 9257 Jeddah 21413 Saudi Arabia Telephone: (966) 5570 60 666 Telefax: (966) 265 15 303 E-mail: smz2002@gawab.com , smz2002@hotmail.com |
| 16 | Sudan | Higher Council for Environment and Natural Resources Gamaa Avenue P.O. Box 10488, Khartoum, Sudan Tel: (249) 183 78 42 79 Fax: (249) 183 78 76 17 Email: hcenr@sudanmail.net , saadeldinibrahim@yahoo.com , alispacti@hotmail.com (Dr. Saad EIDin Secretary General +249 912393249) |
| 17 | Syria | Eng. Fouad El-ok Ministry of Local Administration and Environment Mazraa, P.O. Box 3773, Damascus Syrian Arab Republic Telephone: (963 11) 33 360 43 or 4443729 or 57 410 23 or 0944646595 (96311) 231 8683 or 231 7873 or 231 8682 or 231 7911 Telefax: (963 11) 44 610 79 or 2320885 or 2316921 E-Mail: fa-ok@scs-net.org , almasri1972@yahoo.com , info@lmlae-sy.org |
| 18 | Tunisia | Ministère de l'Environnement et du développement Durable Centre Urbain Nord Building I.C.F. 1080 Ariana Tunisia Telephone: (216) 973 49 897 Telefax: (216) 70 728 655 E-mail: hassinisalah@yahoo.com , khemaies.oueslati@laposte.net , dechets.ind@anged.nat.tn |
| 19 | UAE | Mr. Mahbob Hasan Saleh The Environmental Researcher Federal Environmental Agency (FEA) P.O. Box 5951, Abu Dhabi United Arab Emirates Telephone: (971) 439 65 888 OR 504 553 055 Telefax: (971) 439 62 113 E-Mail: mahboub-saleh@yahoo.com Dr. Salem Masri Al-Dhaheri General Manger Federal Environmental Agency (FEA) P.O. Box 5951, Abu Dhabi |

| | | |
|-----------|----------------|---|
| | | <p>United Arab Emirates Telephone: (971) 26777363 or 506 411 911 Telefax: (971) 2677 05 01 E-Mail: uaefea@fea.gov.ae</p> |
| 20 | Yemen | <p>Mr. Ali Abdallah El dobhani Environment Protection Authority (EPA) P.O. Box 19719, Sana'a Republic of Yemen Telephone: (967) 7111 24 127 or 7112 92 114 Telefax: (967) 156 17 97 or 120 73 27 E-Mail: aliadobhani@yahoo.com</p> |
| 21 | Somalia | <p>Mr. Mohamed Osman Ministry of Environment Telephone: (252 1) 53 86 58 or 56 15 24 Telefax: (25) 420 273 66 19</p> |
| 22 | Iraq | <p>Minister of Environment, Iraq Telephone: (964) 79 01 933 504 (Teama El Helw) E-Mail moen_iraq@yahoo.com</p> |

