Arab Republic of Egypt

Safeguards Diagnostic Review
For
Piloting the Use of Egyptian Systems to Address Environmental Issues in the Proposed GEF-Financed Egypt Sustainable Persistent Organic Pollutants (POPs) Management Project (P116230)

Equivalence and Acceptability Assessment Report

DRAFT # 4

December 2013

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ABBREVIATIONS AND ACRONYMS

BAT	Best Available Techniques
BEP	Best Environmental Practice
CAOA	Central Agency for Organization and Administration
CAP	Compliance Action Plan
CD	Central Department
CDEIEC	Central Department for Environment inspection and Environment Compliance
CEO	Chief Executive Officer
DDT	Diochlorodiphenyltrichlorethane
EEAA	Egyptian Environmental Affairs Agency
EHSIMS	Egyptian Hazardous Substances Information and Management System
EIA	Environmental Impact Assessment
EMU	Environmental Management Unit
EPAP	Egypt Pollution Abatement Project
EPF	Environmental Protection Fund
ESIAF	Environmental and Social Impact Assessment Framework
EU	European Union
FAO	Food and Agriculture Organization (of the United Nations)
FESMP	Framework Environmental and Social Management Plan
GDEC	General Directorate of Environment Compliance
GDEI	General Directorate of Environmental Inspection
GEF	Global Environment Facility
GOE	Government of Egypt
GHS	Globally Harmonized System for Classification and Labeling of Chemicals
GIS	Geographic Information System
HS	Hazardous Substances
HW	Hazardous Waste
MALR	Ministry of Agriculture and Land Reclamation
MEE	Ministry of Electricity and Energy
MHP	Ministry of Health and Population
MIT	Ministry of Industry and Trade
MOI	Ministry of Interior
MOP	Ministry of Petroleum

MSEA	Ministry of State for Environmental Affairs
MW	Municipal Waste
MWRI	Ministry of Water Resources and Irrigation
NIP	National Implementation Plan
OP	Operational Policy (of the Bank); Operational Program (of the GEF)
OPs	Obsolete Pesticides
PCBs	Polychlorinated biphenyls
PCU	Project Coordination Unit
PIF	Project Identification Form (of GEF)
PMU	Project Management Unit
POPs	Persistent Organic Pollutants
PPSI	Public Private Sector Industry
RBO	Regional Branch Office of EEAA
SDR	Safeguards Diagnostic Review
TOR	Terms of Reference
USEPA	United States Environmental Protection Agency
NGO	Non-Governmental Organization
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
REMIP	Regional Environmental Management Improvement Project
SW	Solid Waste

Vice President:	Inger Andersen
Country Manager/Director:	Hartwig Schafer
Sector Director:	Junaid Kamal Ahmad
Sector Manager:	Charles Cormier
Team Leader:	Alaa Ahmed Sarhan

Piloting the Use of Egyptian Systems to Address Environmental Issues in the Proposed GEF-Financed
Egypt Sustainable POPs Management Project (P116230)

Safeguards Diagnostic Review

EXECUTIVE SUMMARY

i. *In December 2005, the World Bank prepared a Safeguards Diagnostic Review (SDR) for the Use of Country Systems (UCS) in the Egypt Pollution Abatement Project II (EPAP II, EG-33433). Since then, the UCS was implemented in a satisfactory manner, although some actions were delayed in the implementation of some of the gap-filling measures that were identified and agreed upon between the World Bank and the Government of Egypt. The EPAP II is yet to be completed in August 31, 2013 and all of the agreed upon gap-filling measures are very likely to be met and further included in the Egypt Environmental Impact Assessment system.*

ii. As the use of the country system was applied in *EPAP II to address hazardous and non-hazardous emissions from public and private sector entities, the POPs management project will address primarily the hazardous waste which is one of the sources of pollution and both hazardous emissions and waste are affecting public health. It will be therefore appropriate to subject the POPs management project to the same national system as both projects are financed by the World Bank and GEF with the same ministry. In this regards, EPAP II and POPs will mutually reinforce the use of the National EIA system in the World Bank and GEF-financed projects and will strengthen the Government of Egypt's institutional capacity to deal with hazardous and non-hazardous pollution using the national system supplemented by the gaps filling measures identified in this SDR.*

iii. *This operation will therefore be governed by OP 4.00 on "Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank-Supported Projects". Therefore, in accordance with this Policy, the World Bank staff, in collaboration with EEAA staff, carried out equivalence and acceptability assessments of applicable Egyptian environmental systems, between September 2010 and May 2012. In doing so, they included all the findings and recommendations of the SDR prepared for the purpose of the EPAP II, including review of the implementation of the agreed upon gap-filling measures.*

iv. *The **Project Development Objective** (PDO) would be to manage and dispose of targeted POPs stockpiles and PCBs in an environmentally sound and cost-effective manner while strengthening Egypt's technical and institutional capacity through a "learning by doing" approach. The Project consists of four components:*

a. **Component 1:** Institutional and Regulatory Strengthening Measures for POPs Management ($1.78 million, including GEF $0.92 million)
1.1: *Strengthen legal and regulatory framework and enforcement capacity regarding the use, storage, transport and disposal of POPs chemicals*
1.2: Enhancement of National Capacity and Public Awareness
1.3: Develop a set of initial measures for Unintentional POPs (dioxins and furans)

b. **Component 2:** Management of Obsolete Pesticide Stocks ($10.21 million, including GEF $2.69 million)
2.1: *Secure Storage of Pesticides*
2.2: Destruction of High-Risk Stocks
2.3: Development of a Long-Term Pesticides Management Strategy.

c. **Component 3: Management of PCBs ($9.93 million, including GEF $3.12 million)**
3.1: *Secure Storage of PCBs*
3.2: Site Remediation and Decontamination of Stocks
3.3: Development of strategy for management of PCBs and PCB contaminated equipment

d. **Component 4: Project Management ($1.68 million, including GEF $1.37 million)**
4.1: Establish and maintain a Project Management Unit (PMU)
4.2: Monitoring and Evaluation (M&E)

v. *The total project cost is US$ 23.6 million of which US$ 8.1 million is a GEF Grant and US$ 15.5 million is the contribution of the Government of Egypt*.

vi. *The proposed POPs Project triggers two environmental safeguards policies: (i) Environmental Assessment, and (ii) Pest Management. The results of the equivalence assessment showed that the World Bank's EA policy and the Egyptian safeguards systems on EA and Pest Management, as amended through 2009, are nearly fully equivalent. The major gaps are to issue a regulation clarifying that all POPs sub-projects will be subjected to an EIA and prepare TORs or specific guidelines for such EIA. Also, the legal and regulatory framework should be brought into full consistency with the Stockholm Convention and other conventions applicable to POPs and to which Egypt is a party. These gaps can be implemented as part of overall Project implementation.*

vii. *The acceptability assessment shows that significant progress has been made in strengthening the institutional framework related to the EIA process and to monitoring and enforcement. Since the last SDR of EPAP II, EEAA has reorganized and established two additional central departments namely the Central Department for Environmental Inspection & Environmental Compliance "CDEIEC" consisting of a general directorate for compliance and a general directorate for inspection; and the Central Department for the Protection and Improvement Industrial Environmental and Energy. Both departments are fully functional.*

viii. *About 12 ministries and agencies will be associated with the POPs projects and all of them have expertise and staff in the fields related to hazardous waste. The new EIA guidelines of 2009 which now require public hearings and consultation for the projects classified as "C" (equivalent to category "A" of the World Bank) have provided a more prominent and participatory role for civil society. As a result, civil society has been increasingly involved in project implementation, in public debate and also in ensuring compliance with the environmental laws and increasingly vocal whenever public hearings/consultations on EIA has taken place. Similarly the media have contributed largely to this increased awareness and publish regularly the summary description of projects for which an EIA was approved by EEAA. There are also six NGOs which are working on raising awareness on health impacts and proper handling of pesticides and PCBs.*

ix. *A review of a sample of EIA reports for projects financed by the Government and/or by International Financial Institutions showed a significant improvement in quality and comprehensiveness. The quality of projects in the category "B" (equivalent to Category "B"*

of the World Bank) for which a Form B should be submitted is however variable and does not include in many cases the preparation of a comprehensive environment management plan as required by the environmental guidelines of 2009. Disclosure of the executive summary of the EIA reports and of Forms B (with the exception of the EPAP II subprojects) is still lagging because of lack of resources, staff and inherent reluctance to disclose reports which may raise controversial discussions.

x. *An additional monitoring instrument that was institutionalized by EEAA is the preparation of a compliance action plan whenever a polluting enterprise is not in compliance with the national standards but agreed to self-finance its pollution control investments instead of being prosecuted. This led to the establishment by EEAA of a general directorate for voluntary compliance which is assisted by the general directorate for industrial environment.*

xi. *Despite such progress, there are still some weaknesses in the EIA system and in EEAA's monitoring and enforcement. These are: (a) lack of knowledge related to POPs and PCBs and technologies for their management and disposal, (b) limited staff resources in the department of hazardous waste management, (c) limited inter-ministerial cooperation on hazardous waste management, (d) insufficient public communication and awareness raising on hazardous waste and in particular with POPs, and (e) lack of monitoring and enforcement for obsolete pesticides and PCBs .These weaknesses will be addressed in the components of the POPs project.*

xii. *A preliminary hazardous waste and risk assessment was also conducted during project preparation in anticipation that two potential Intermediate Collection Centers for obsolete pesticides in the Nasiriya Hazardous Waste Center in the Alexandria Governorate and the El Saff Storage Site of Obsolete Pesticides in the Guizeh Governorate could be used. The revised design of the project will provide the international operators for collection, transport and disposal of POPs, with the choice to select the appropriate methods and technology and sites, which may not involve the use of these two facilities. However, for any sites selected by the international operators, a comprehensive An ESIA, including an in-depth risk assessment, will be conducted during project implementation*

xiii. *The actions summarized in the following table will be implemented by EEAA to fill in the equivalence and acceptability gaps and sustain acceptability during the implementation of the POPs Project. The proposed timing of implementation for each of the following measures were made in accordance with the project implementation schedule*

Safeguards Gap-Filling Measures				
Gaps	**Actions to be taken**	**Implementation Steps**	**By Whom**	**By When**
Weak coordination among EEAA departments involved in POPs	**1. *Include in the Project Operational Manual a description of the roles, responsibilities, coordinating mechanism, monitoring and follow up for establishing an inter-sectoral system within***	• Description in the Operational Manual of the roles and responsibilities of the PMU, Environmental Management Department, CDEIEC and others related to the EIA process and the compliance / inspection of Obsolete Pesticides and PCBs	PMU Manager/ Consultant	April 2014

	EEAA for coordinating the EIA process with the compliance/inspection process.	• Official decree issued by EEAA on the roles, responsibilities and coordination mechanisms	PMU Manager; CEO of EEAA	June 2014
Insufficient Compliance with the requirements of the Stockholm Conventions	**2. *Complete the legal and regulatory frame work for POPs management in compliance with the Stockholm Convention***	• Prepare TORs for a comprehensive study to harmonize existing POPs-related legislation with requirements of the Stockholm Convention as described in Annex 15 to this SDR	PMU Manager	May 2014
		•Contract a legal consultant •Draft legal regulations for submissions to the Legal Council of the Government		December 2015
Lack of procedural guidelines for POP projects	**3. *Develop general EIA procedural guidelines to include: (a) specific criteria, processes and standards to be followed in the preparation and review of EIA for POPs sub-projects;(b) detailed TOR for a comprehensive EIA report for POPs including hazardous risk assessment and (c) guidelines for environmental reviewers***	• Review good international Practices including FAO and WHO	PMU	June 2014
		• Adapt sector guidelines to Egyptian conditions on pesticides, obsolete pesticides and PCB-contaminated equipment	PMU	July 2014
		• Prepare TORs for POPs and checklist for reviewing EIA reports in general	EIA Department in EEAA	October 2014
		• Approve and publish the guidelines, TORs and checklist on the website of EEAA	EEAA Board of Directors	September 2014
Insufficient knowledge on POPs and PCBs and contract management	**4. *Develop and provide training to the EEAA staff, RBOs, sector ministries and NGOs on the use and applications of (a) the specific guidelines and EIA TORs for POPs including PCBs; (b) self-monitoring and inspection of POPs sires including PCB-contaminated sites.***	• Design training program and develop training materials	PMU	October 2014
		• Organize and conduct training on TOR and monitoring and enforcement for EEAA staff and RBO and in particular the staff that will be assigned to monitor the EMSP and Forms B	PMU	Bi annually as of March 2015
	Organize awareness campaigns with local NGOs targeting the public and particularly the Youth	• Organize and conduct public awareness campaigns in collaboration with local NGOs involved in the POPs	EEAA Department of Hazardous Waste Management	Annually as of June 2015
	Develop and provide training to PMU on monitoring and supervision of contracts of PCBs operators	• Organize and conduct training on contract management and award as well as monitoring and supervision of contracts	PMU	January 2015

Weak enforcement for PCBs	**5. *Ensure that existing obsolete pesticides and PCB contaminated sites maintain an environment register to be inspected annually by CDEIEC using the format in Annex 3 of the Executive Regulations of Law 9 of 2009***	• Update the content of the environmental register by including questions on OPs and PCBs	PMU	April 2015
		• Conduct semiannual inspections based on the EIA and the environmental register for the major collection center sites for which EIAs and Form B were prepared	RBO and GDEI	July 2015 and semiannually thereafter
Lack of assessment of the quality of the ESIA reports	**6. *Carry out every two years, a review of the quality of EIA reports and Forms B and introduce corrective measures for sustaining the improved EIA process***	• TORs for the review of the EIA reports prepared and consultant selected	PMU	May 2015
		• Report on the quality of the EIA reports and Form B	PMU	July 2015 and January 2017

xiv. *EEAA will be responsible for the following actions:*

(a) Satisfactory implementation of gap filling actions set out above to achieve and sustain equivalency and acceptability;
(b) Review and approval of the EIA reports submitted by international and Form B for site specific areas for treatment and disposal of obsolete pesticides and PCBs;
(c) Disclosure of the EIA reports related to hazardous waste projects particularly those related to obsolete pesticides and PCBs in accordance with the EIA guidelines of 2009; and
(d) Performance of annual spot checks and audits of a sample of subproject sites financed the POPs project for their compliance with the relevant Egyptian Laws and Regulations, and imposition of corrective actions to achieve compliance.

xv. *The World Bank will be responsible for the following actions:*

(a) Monitor the implementation of the gap filling measures that are applicable to the types of subprojects financed under the POPs project;
(b) Review during the course of semi-annual supervisions the EIA reports and form B related to obsolete pesticides and PCBs;
(c) Review the reports on inspection or compliance for all the subprojects to be financed by the Project; and
(d) Bi-annual supervision of project implementation, including field visits to subprojects under implementation or commissioning or those completed.

xvi. *A public consultation meeting was held on June 13, 2012 and attended by* 64 representatives from ministries (Environment, Electricity and Energy, Industry, Planning and International Cooperation), research institutes and universities, 3 media representatives as well 16 NGOs. The workshop was conducted in Arabic. The meeting was chaired by the acting Chief Executive Officer of the Egyptian Environment Affairs Agency (EEAA); a list of the issues raised and comments made by the attendees and reviewers, and remarks/responses to these comments in included as in Section XI to the SDR report.

Piloting the Use of Egyptian Systems to Address Environmental Issues in the Proposed GEF-Financed:
Egypt Sustainable POPs Management Project (P116230)

Safeguards Diagnostic Review
Main Report

I. BACKGROUND

1. This SDR builds on the Safeguards Diagnostic Review prepared for the Egypt Second Pollution Abatement Project (EPAP II) (Loan # 7372-EGT), which was discussed in a consultation workshop, disclosed by the World Bank, and endorsed by the Bank's Board of Executive Directors on 23 March 2006.

2. In that case, the World Bank considered Egypt's Environmental Assessment system to be nearly equivalent by fulfilling all of the Objectives and Operational Principles spelled out in Table A.1 of Operational Policy 4.00 (OP 4.00). To be fully equivalent, the World Bank and the Egyptian Government agreed on further actions to be implemented to fill identified gaps related to consultation, disclosure and specific aspects of the EIA process and content. The World Bank also assessed the acceptability of the Borrower's implementation practices, track record, and institutional capacity. This assessment found that an appropriate level of acceptability existed and that additional strengthening of the human and technical capacity of the Egyptian Environmental Affairs Agency (EEAA) was needed to fulfill an unconditional acceptability. Strengthening actions were agreed upon and included into the Project design under a technical assistance component.

3. In order to develop the present SDR, the World Bank safeguards team has reviewed the progress made by the EEAA in fulfilling its obligations and implementing all actions to bring Egypt's EIA system to full equivalency and acceptability with the Objectives and Operational Principles detailed in Table A.1 of OP 4.00 with regard to EA. In addition, and because the Pest Management policy is triggered, an equivalency analysis and acceptability assessment was done on Egypt's legal and regulatory framework applicable to pest management.

4. The strategic objective of the environmental policy in Egypt is to introduce and integrate environmental concerns relevant to protecting human health and managing natural resources into all national policies, plans, programs and projects of the national development plan. The medium-term objective is to preserve natural resources, biological diversity, and national heritage within a context of sustainable development. The short-term objective is to reduce current pollution levels, minimize health hazards and to improve the quality of life for citizens and residents in Egypt.

5. This document describes the scope, methodology, and findings of the equivalence and acceptability assessments carried out by World Bank staff in collaboration with EEAA officials with regard to both the EA and Pest Management Policies. In doing their due diligence, World Bank team considered the background of Egypt's overall environmental policy and programs. The challenge of Egyptian environmental policy is to achieve a balance between the needs of a developing nation while protecting its natural and human environment. Environmental policy is coordinated by the Ministry of State for Environmental Affairs (MSEA) and EEAA; it is a product of a consultative process that involves all stakeholders: the public at large, NGOs, the private sector, government departments/ agencies and finally legislative bodies.

II. POPs PROJECT DESCRIPTION

6. The Project Development Objective (PDO) would be to manage and dispose of targeted POPs stockpiles and PCBs in an environmentally sound and cost-effective manner while strengthening Egypt's technical and institutional capacity through a "learning by doing" approach.

7. The Project consists of four major components as follows[1]:

Component 1: Institutional and Regulatory Strengthening Measures for POPs Management ($1.78 million, including GEF $0.92 million)
1.1: Strengthen legal and regulatory framework and enforcement capacity regarding the use, storage, transport and disposal of POPs chemicals
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RATIONALE FOR CHOOSING THE POPs PROJECT FOR USE OF COUNTRY SYSTEMS

8. Since 1995, the World Bank has been working on pollution management issues with the relevant agencies of the Egyptian Government; EPAP II is the latest of such projects. EPAP II deals with industrial pollution and has successfully assisted polluting enterprises to achieve compliance with national standards, which constituted important environmental and health risks. The experience acquired by EEAA and other stakeholders in dealing with pollution management and cleanup of polluted sites will certainly help them deal with POPs, including cleaning up POPs' storage facilities, developing guidelines for hazardous waste management, and monitoring of POPs throughout their life cycle.

9. As the Use of the Country System was applied in EPAP II to address hazardous and non-hazardous emissions from public and private sector entities, the POPs management project will address primarily the hazardous waste which is one of the sources of pollution as both hazardous emissions and waste are affecting public health. It will therefore be appropriate to subject the POPs management project to the same national system as both projects are financed by the World Bank and GEF with the same ministry. In this regard, EPAP II and POPs will mutually reinforce the use of the National EIA system in the World Bank and GEF-Financed Projects and will strengthen the Government of Egypt's institutional capacity to deal with hazardous and nonhazardous pollution

[1] Detailed description of the four Components is in Annex 1.

using the national system supplemented by the gaps filling measures identified in this SDR report. Finally, the use and management of chemicals and pest management have been included in many agriculture projects supported by the World Bank and other donors, such as FAO, providing an incentive to pilot the use of the pest management legal and regulatory framework under the POPs Project, which will be dealing, *inter alia*, with stocks of obsolete pesticides used in agriculture.

10. During project preparation, 18 sites were identified as storing obsolete pesticides. Three other sites were also noted to include transformers and capacitors contaminated by PCBs with a concentration higher than 50 ppm but the number of sites is probably higher. None of these sites were subject to an environmental assessment as many of them preceded the enactment of the Environmental Law #4 of 1994. The POPs project will not be able to finance the complete clean-up and disposal of all these sites. A final selection of the high risk stocks, based on a health risk assessment, will be carried out during project implementation on the basis of technical, financial, environmental and social criteria.

III. EQUIVALENCE ASSESSMENT

Methodology/Process Followed in Determining Equivalence

11. The equivalence assessment was carried out by a World Bank team in collaboration with relevant EEAA staff members. The methodology included a desk review of current in-force legislation and supporting mandatory guidelines, discussions with EEAA officials, and review of previous experience with EPAP II, which is being implemented by EEAA under the World Bank supervision. Annex 1 on Equivalence Assessment – Summary Matrix on Environmental Assessment and Pest Management, provides a comparison between respectively the EA and the Pest Management policy objectives and operational principles, as stated in Table A1 of OP 4.00, and requirements under Egyptian Law Number 4 of 1994 and its implementing regulations, all as amended through 2009. The World Bank team conducted a desk review of the applicable Egyptian legal and regulatory framework and held discussions with EEAA officials and other stakeholders involved in POPs during consultation sessions on the POPs project preparation. The list of key officials met during the equivalence (and later during acceptability) assessment is included in Annex 3.

World Bank's Safeguards Policies Applicable to the Proposed Pilot Project

12. As described above, the proposed POPs Project will be assisting the EEAA and other relevant agencies and private sector entities in their efforts to improve their overall environmental performance with respect of management, storage and disposal of POPs. These selected POPs stocks would be managed to prevent or reduce pollution and health risks and implement pollution control measures and actions air emission, wastewater discharge and indoor air pollution standards set under Egyptian Law #9 for 2009. Though the project investments should be environmentally beneficial and aimed to reduce the current pollution load and prevent hazards that could occur as consequence of inadequate storage, mismanagement or handling of POPs, they could also result in some adverse environmental impacts, if inappropriate design, construction and operational practices are followed. In order to address these potential adverse impacts, the World Bank Operational Policy (OP 4.01) on Environmental Assessment (EA) and the relevant guidelines are applicable to the proposed POPs project and its related activities and investments.

13. Because of the nature of chemicals and other stockpiles involved in the POPs, the Pest Management Operational Policy (OP 4.09) would also be triggered. The equivalence analysis was undertaken and completed to ensure that Egypt's legal and regulatory framework for pest management covers adequately the objectives and operational principles defined in Table A.1 of OP

4.00. However, under the World Bank's OP 4.09, a Pest Management Plan (PMP) would be required while the proposed POPs Project itself meets the requirement of a PMP, and there will be no need to require the preparation of a self-standing document.

14. Finally, the Proposed POPs Project does not trigger OP 4.12 as involuntary resettlements under the current formulation of the project (see para 80 below), the possibility of resettlement or displacement is remote.

Government of Egypt's Laws and Regulations Applicable to the Proposed Pilot Project

15. The POPs Project triggers all laws and regulations applicable to the handling, management, storage and disposal of Persistent Organic Pollutants (POPs) which include EIA-related laws and regulations and numerous legal instruments dealing with hazardous wastes, chemicals and pest management. In addition to its domestic legislation, Egypt is, as mandated by national Constitution and Law 4 of 1994 on Environmental Framework law, bound by international conventions, treaties and agreements to which it is a party[2].

The Overall Environmental Law Framework of Egypt

16. Egypt has a comprehensive Environmental Framework (Law No. 4 of 1994 dated February 03, 1994) which addresses the institutional arrangements and mandates for environmental management and protection as well as the substantives rules and principles governing among other items:

a. land pollution control;
b. materials and toxic waste;
c. air pollution control;
d. water pollution control; and
e. penalties and the associated enforcement-related provisions.

17. The Law 4 of 1994 was further implemented through Decree No. 338 dated February 18, 1995 issuing the Executive Regulations of Environment Law No. 4 of 1994. Decree 338 has further clarified the roles of the various institutions involved in environmental management and protection and the processes to develop environmental norms, standards and regulations for water pollution control; air and atmospheric pollution including air quality monitoring; and hazardous substances.

18. The 1995 Decree 338 was later amended through Decree 495 of 2001, dated April 14, 2001 and a 2005 Prime Minister's Decree 1741 which clarified provisions related to, among other provisions, EIA, oil pollution control, hazardous substances and waste and prohibited discharges. Law No. 4 was later amended by Law 9 of 2009 which included additional provisions on hazardous substances and wastes (Article 33)[3], destruction of solid waste, clarification of procedural aspects of the EIA (Article 19-21), and certification by the Egyptian Environmental Assessment Agency (EEAA) of environmental consultants and consulting firms (Article 13). After the adoption of Law

[2]However, that does not mean that Egypt is required to adopt a specific law or add direct reference in the applicable legislation to international agreements, treaties and conventions to which it is a party. In this case, there are no references to the Stockholm Convention on POPs or the Basel Convention on transboundary movement of hazardous waste in Egyptian legislation and therefore a comprehensive review of the current applicable POPs-related legislation was necessary to identify any gaps and provide for gap-filling provisions and measures to ensure the legislation is consistent with the relevant international legal instrument.

[3]Chapter 2 includes licensing, transportation, incineration, storage and requirements for land rehabilitation and decontamination

No. 9 of 2009, some provisions of the Decree 338 of 1995 as amended by Decree 1741 of 2005 are being reviewed and would be further modified and/or completed to align with Law No. 9 of 2009[4].

19. Other sectoral laws which may apply to the handling of pesticides and POPs include: (i) Law 38 of August 28, 1967, (ii) Law 59 on the Protection Against Risks of Ionizing Radiations and its implementing Regulations on Use of Ionized Radiations on Public Cleanliness, (iii) Law 53 of September 28, 1966 as amended by law 16 of 1993 on Agriculture, and (iv) Law 66 of August 14, 1974 as amended by Law 155 of 1999 on Road Safety.

20. **Hazardous Waste Regulations**. The World Bank's team also considered Egypt's Hazardous Waste Management Guidelines (2010), related manual for industries[5] and other applicable laws and regulations in connection with pest management. Law No. 9 of 2009, which amended the 1994 law, included among other provisions additional provisions related to hazardous waste (Article 29-33), notably requirements for reclamation and soil decontamination (article 33), along with other provisions related to processes and timing of EIA and burning of solid waste (articles 19-21). However, to be operational and enforceable, these provisions require specific sector guidelines on hazardous wastes in general and on PCBs, obsolete pesticides, dioxins and furans which are proposed to be developed under the project (see Acceptability Assessment).

21. **Pesticides-specific Regulations.** Concerning pesticides, 2007 was a turning point when the Egyptian Government issued Order No. 90 on regulations related to requirements and conditions for the registration, registration's renewal and use of agricultural pesticides in Egypt, dated January 22, 2007. These regulations were further amended through (i) Decree 630 of 2007 and later (ii) Decree 864 of 2008, and (iii) Decree 865, dated June 25, 2009. Decree 630, dated May 2007 amends Order No. 90 of 2007, mentioned above, and other previously enacted regulations and defines the active substances in authorized or prohibited agricultural pesticides. In addition, it includes provisions with respect to the following:

i. The applicable regime takes into account the requirements of the U.S. Environmental Protection Agency (USEPA) and/or the European Commission (EC) for the registration of pesticides in Egypt;
ii. The National Commission on Pesticides could add new safe and important pesticide active substances for agricultural production to the List annexed to the Decree No. 30 of 2007; and,
iii. The addition of copper compounds and 41 other active substances to the aforementioned List.

22. Decree 630 was amended by Decree 864 of 2008 to provide for the following: (i) add 16 active materials listed in articles 1 and 2 to Annex I of Decree 630 of 2007 on pesticides, which shall be allowed to be registered, imported, circulated and processed in Egypt; (ii) entrust the National Commission on Pesticides to issue temporary registration certificates for pesticides; (iii) delete carbofuran substance from the Annex I of Decree No.630 of 2007; (iv) delete the mark (+) before cyprodinil substance; and (v) allow the importation, registration, use, circulation and processing of buminal substance.

23. Finally, Decree 865 of 2009 has consolidated the existing provisions and laid down regulations for the registration, renewal of registration and use of agricultural pesticides in Egypt, and is further described in Annex 6.

[4] The preparation of a new Decree is still a work in progress

[5] http://www.google.com./search?q=waste+law+%2B+Egypt&hl=en&gbv=2&prmd=ivns&ei=4aPDT6GONqrU6QHFsMDgBw&start=20&sa=N

24. In addition to this legal and regulatory framework, Egypt has adopted an integrated approach to pest management and developed an implementation program which has been piloted and implemented since 2001 in the major sectors of its agriculture with assistance from FAO and other bilateral donors including Italy. Integrated Pest Management seeks to minimize the use of chemical pesticides and is now widely used in Egypt, notably because it is an integrated part of the promotion of export of agricultural products from Egypt to the USA and EU. IPM is now a policy and practice deeply rooted in the agriculture policy framework of Egypt.

25. **Archeological Resources**: Egypt is a land where archeological remains and physical cultural resources are spread all over the country. It has one of the most advance legal frameworks dealing with archeological finds and protection. Its EIA system provides for assessment of any impact on potential archeological site. Although POPs known sites are not located on or close to officials, experts and neighboring communities to establish and verify that any POPs site under the Project is not of archaeological interest. In the event, however, that remains being found any activity will cease and the advice of the Supreme Council of Antiquities would be sought. Appropriate measures would be put in place to protect and/or excavate the remains, including the following procedures: (i) where possible, remains will be protected in-situ; (ii) where identified remains cannot be protected, an excavation of the indicated area will be undertaken prior to the commencement of construction activities to record and remove vulnerable remains and features; (iii) any finds of archaeological, historic or cultural significance will be given to the Supreme Council of Antiquities; and, (v) preparation of a Chance Finds Procedure which lays out the steps to be taken if archaeological, historical or cultural remains or finds are discovered during any construction activities. The procedures will clearly set out how the construction team will be briefed so that they are aware of what to look out for and the actions which must be taken should a potential find be uncovered. The incorporation of these precautionary measures into the construction program will ensure that all potential remains of significance are recorded and are accorded the required protection where considered necessary. This is a remote hypothesis that might materialize only if the upgrading of the El Saff facility will be retained as the only option and an access road constructed or the existing access road widened.

26. **International Conventions and agreements:** Egypt participates in the United Nations Environment Program (UNEP) and has ratified and or adhered to international environmental conventions with relevance to the POPs issue including: (i) the Convention for the Protection of the Ozone Layer (Vienna Convention) and its Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), (ii) the Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (Basel Convention) and (iii) the Stockholm Convention on Persistent Organic Pollutants. As a matter of policy, Egypt supports an approach of coordinated/integrated implementation of the Basel, Rotterdam and Stockholm Conventions, although it is yet to ratify the Rotterdam Convention[6]. More specifically, after ratifying the Stockholm Convention[7], Egypt has taken initial steps to implement it. Since ratification:

(a) a coordination mechanism was established;
(b) a review of the findings on POPs pesticide assessment was carried out;

[6] Egypt signed the Basel Convention (BC) on the control of transboundary movements of hazardous waste in March, 1989 and ratified it in January, 1993. It has signed in May, 2002 and ratified in May 2003 the Stockholm Convention of the elimination or/and removal of the Persistent Organic Pollutants. Based on information gathered by the World Bank team, Egypt is preparing to adhere to the Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade which is in force since February 24, 2004.

[7] The Stockholm Convention was signed by Egypt on May 17, 2002 and ratified on May 2, 2003

(c) a general schematic approach has been agreed with NSC and other relevant NGOs and educational authorities on issues of raising public awareness;
(d) national training workshops and field visits on inventory of obsolete pesticides, PCBs, dioxins and furans were organized;
(e) international training workshops on definition of PCBs, chemical and physical properties of PCBs, handling and storage of PCBs, were organized;
(f) a review of the information on the production, use, imports and exports of the POPs listed in Annex A of the Convention (excluding PCBs) was made;
(g) the information on stockpiles and waste containing POPs pesticides was gathered in different ways and a substantial quantity was moved to and is stored at El-Saff city[8];
(h) a list of selected companies, which have transformers and capacitors containing PCBs, was obtained;
(i) safety measures and guidelines for the decontamination of electrical equipment containing PCBs were established; and equipment (condensers and transformers) that contain PCBs were isolated from food and will be subject to further inventory and mitigation and safety measures before they will be disposed of.

27. Like any other country which is party to the Convention, Egypt is reporting on implementation of the SC to the relevant International Secretariat and participating in the Conferences of the Parties. The implementation of all of the SC provisions will take time (to prepare full review of existing legal and regulatory framework, consult on potential amendments and effect appropriate changes to the legal and regulatory framework. On substance, there is no violation or non compliance with any of the major SC provisions and where full compliance is not yet achieved, the Government is working towards achieving it. A plan and ToRs will be drafted and a study conducted to prepare relevant legal and regulatory instruments to align country's domestic legislation with SC Convention during project implementation.

Environmental Impact Assessment

28. In the discussion between the World Bank team and the EEAA, it was clarified that, on the basis of existing laws and regulations, each prospective POPs-related sub-project must comply with the applicable air emission and wastewater discharge standards and Environmental Impact Assessment (EIA) requirements, prescribed in Law 4-1994 (as amended through Law 9 of July 2009 and all of its applicable implementing regulations and guidelines including applicable emission/discharge standards. The SDR prepared for EPAP II found the EIA system of Egypt acceptable subject to filling some gaps which were clearly identified and have since been filled by the Government of Egypt as planned under the EPAP II Project.

29. It is worth mentioning that, as agreed upon in the SDR for the EPAP II, including the agreed gap-filling measures, the 2009 EIA regulations modifying the then existing EIA procedural and sector guidelines of 1995 were issued in December 2009 and are effective. The new EIA regulations include:

(a) a revised Form "B";
(b) a detailed description of the EIA report for category "C"[9] projects including:
    i. an analysis of alternatives (section 6-4-2-7 of the EIA regulations);

[8] This storage site was visited by the Bank team and was not found up to the standards of storage sites for POPs. No EIA was done on the site before it was selected as storage site. Under the project, the site would be subjected to an environmental and social impact assessment which would establish whether the site is suitable for future POPs management activities and define the needed mitigation and safety measures that would need to be applied.
[9] Category "C" are projects with substantive and significant impacts

ii. use, as reference, of the Bank's Pollution Prevention and Abatement Handbook (PPAH) (page 27 of EIA regulations);
iii. requirement for public consultation during scoping and after the preparation of the draft EIA report (section 6.4.3 of the EIA regulations);
iv. disclosure of the EIA report on the EEAA website (section 7 page 36 of the EIA guidelines); and
v. detailed description of the EMP with associated budget and timing prepared by the proponents (sections 6.4.2.8 page 30 of the EIA regulations)

30. The current screening Forms for B and C category projects provide good instruments for screening POPs related subprojects. However, EEAA is advised to further review existing forms to include items specifically related to POPs and Hazardous substances to ensure they are fully covered by proponents. In addition to the existing forms, it is necessary for EEAA to develop and adopt Sector Guidelines (mainly by adapting existing ones issued in 2009) to include specific criteria, processes and standards to be followed in the preparation, review of EIA for POPs projects including hazard risk assessment and guidelines for reviewers. These Guidelines and related checklist will be disclosed on the EEAA website.

31. All these modifications were part of the gap filling measures described in the SDR of EPAP II. A supervision mission of June 2011 as well as the acceptability assessment carried out by the Bank and described below has confirmed that the above changes are in effect. On that basis, it can be concluded that the Egypt's EIA system is now fully consistent with the Objectives and Operational principles of Table A.1 of OP 4.00[10]. However, on the very specific issue of POPs, the EIA system as applied for the purpose of POPs-related sub projects, must also ensure that the Egypt' system be brought to compliance with the Stockholm Convention. Under the Project, a Policy and Legal Framework for POPs Management sub-component (Component 1.1) will assist the Government to further develop the legal and regulatory framework for POPs to bring it into compliance with the Stockholm Convention (see above). One of the gap filling measures is that the draft legal regulations for full compliance, which will be prepared under this project, will be submitted to the Legal Council of the Government by December 2014. However, the project has no direct influence on the timing of the approval of the legal actions beyond the approval of the Legal Council which should be followed up by the approval of the Cabinet. It is expected that the PMU will follow up on the extent of Egypt's compliance with Stockholm Convention.

32. **EIA Review and Approval Procedures**: The contents and procedures for review and approval of an EIA are described in Law 4-1994 as amended through 2009. The EIA, carried out by the project developer, is to be approved by the respective Competent Administrative Authority[11] (CAA) or the licensing authority. A CAA cannot issue the license to construct unless the proponent The CAAs could either be the Governorate within which the project is proposed or a relevant agency or sector ministry (e.g. MEE for power production, which is the main agency involved in PCBs, or MALR involved with obsolete pesticides). The CAA will not issue the license to construct unless the operator provides all the necessary permits from the relevant ministries and organizations, which would include a letter of approval by EEAA on either the EIA report or Form B (see section on environmental approval in the acceptability assessment). The letter of EEAA approval is signed by the Chief Executive Officer of the EEAA and the CAA cannot circumvent the EEAA approval as the revised Environment Protection Law of 2009 makes it mandatory that an EIA be prepared and approved by the Ministry of the Environment prior to the start up of the project. Although the EIA procedural guidelines include a general description of CAAs for different projects, discussions with

[10] See Annex 12 to this SDR on the "Status of the Gap-Filling Measures Agreed upon under the EPAP II Project"
[11] See Articles 19 to 22 of Law 4 for 1994 for details about CAA's roles and responsibilities.

EEAA staff confirmed that this issue is not straightforward and open to interpretation, and that the selection of the CAA seems to be *ad hoc* and done on a case by case basis. For example, in Alexandria, the CAA may be the Alexandria Governorate, the Ministry of Investment (if the project site falls within a designated free zone), or the Council of Borg El-Arab city, which is under the Ministry of Housing (if the project site is contained within the designated industrial city). In most cases, the terms CAA and "licensing authority/agency" are used interchangeably. When the Governorate is the CAA (the case for most – if not all – of the POPs sub-projects), then the Environmental Management Unit (EMU) which exists in each district, will act as CAA on behalf of the Governorate in environmental matters. The CAA is responsible for advising the project developer on EIA screening and on the permitting and licensing requirements for the project.

33. In accordance with the classification of the projects in Annex 1 of the EIA guidelines, all projects related to hazardous emission or waste are screened under Category "C" (which would be "A" under the Bank's OP 4.01 classification for EA purposes. Also as part of the Environment and Social Impact Assessment (ESIA) Report, a risk assessment and emergency plan is required for each project in which the site could pose, *inter alia*, risks to surrounding populations. As stated in the Acceptability Assessment, an international operator will be selected through a two stage bidding process to collect, transport, temporarily store, and dispose on-site or export the POPs. The ESIAs[12] will be carried out after project implementation by the international operators of PCBs and obsolete pesticides, in accordance with the guidelines for Egyptian EIA and the accompanying sectoral guidelines for establishments that need full EIA. Moreover, for each site for the management or disposal of obsolete pesticides or PCBs, a Form "B" will be prepared. For sub-projects under Category "B", a more detailed screening form (known as Form "B")[13] would be submitted by the project proponent. Form "B" has a comprehensive checklist which addresses all environmental aspects of the project and requires an environmental analysis and environmental management plans (EMP) to mitigate any adverse impacts. In selected cases, EEAA, after reviewing the Form "B", could ask the proponent to carry out a "scoped EIA," depending on the nature and magnitude of potential impacts. In many respects, projects under current categories "B" and "C" must answer the same or similar questions about the potential impacts of their projects and include many identical requirements. EEAA has developed a series of guidelines on hazardous waste licensing, permitting and other requirements related to classification and coding, on-site storage selection, handling, transportation, treatment and disposal, and recycling requirements. These guidelines were developed in accordance with the law No. 4 of 1994 as amended through 2009 and its executive regulations of 2009. These guidelines are being further reviewed to include specific requirements for POPs and PCBs.

[12] According to the current in force legislation and guidelines, an EIA is required to include information on: (a) Description and nature of Project; (b) project title and proponent; (c) location of the project with an outline of the major elements of the surrounding environment which might be affected (Form B and EIA Guidelines require the proponent to submit a map of the area); (d) outline of the Planning and Implementation Program, (e) analysis of any activities involved in the construction/operation which may result in the following: (i) gaseous emissions, (ii) dust, (iii) odor, (iv) noisy operations, (v) night time operations, (vi) liquid effluents/discharges, (vii) traffic generation, (viii) waste and/or by-products generated, (ix) storage/disposal of hazardous goods, (x) disposal of spoiled materials, (xi) visual impact, (xii) risk of accidents resulting in pollution or hazard; (xiii) possible interactions with other projects which should be considered, and (xiv) transboundary impacts (mentioned in Form B to be filled for Category B Project) and in sectoral guidelines for Category C Project; and (xv) environmental protection measures incorporated in the design and any further environmental implications, including monitoring, beneficial/adverse effects, short-term/long-term effects, secondary/induced effects, cumulative effects, magnitude and distribution of effects, ability to mitigate adverse environmental consequences via application of the best practical means and best practical environment

[13] See Footnote 12 above

34. The Competent Administrative Authority (CAA) or the licensing authority is required to send a copy of the EIA report prepared by the project proponent to EEAA[14] for its review and approval. The CAA is responsible for not only conveying EEAA's opinion and comments (approval or rejection) but also responsible for verifying the implementation of EEAA's recommendations (see Article 20 of Law Number 4 of 1994).

35. The above described legal and regulatory framework for POPs management, although fairly well-developed and adequate for addressing the many challenges of POPs management is not consistently applied and enforced. The Acceptability Analysis shows clearly that additional actions are needed to make this legal and regulatory framework effective and include (among other measures) the following: (a) the obligation of periodic registration; (b) surveillance and monitoring of POPs-related sites and staff working on handling POPs; (c) the obligation of POPs site and holders to maintain records on nature, quantities, sources, locations, treatment models and transportation models; as well as (d) the existence of a specific manual to prepare and implement EIAs.

Implementation Mandate

36. EEAA will be the main agency implementing the Project, but other agencies from the Ministry of Agriculture and Land Reclamation (MALR), Ministry of Electricity and Energy (MEE) and Ministry of Trade and Industry (MTI) and private sector companies will also be involved in selected activities. However, it must be mentioned other agencies and ministries do have part of the overall mandate to govern portions of the POPs life cycle, from source to disposal, environmental impact and health monitoring, transportation, trading and handling in Egypt. In addition to those above listed (EEAA, MALR, MEE and MTI), agencies and ministries include: the (i) Ministry of Health and Population (MHP), (ii) Ministry of Higher Education and Scientific Research (MHESR), (iii) Ministry of Manpower and Immigration (MMI), (iv) Ministry of Housing Utilities and Urban Communities (MHUUC), (v) Ministry of Water Resources and Irrigation (MWRI), (vi) Ministry of Petroleum (MP), (vii) Civil Defense Authority (CDA), (viii) Ministry of Interior, (ix) Ministry of Information, (x) Customs Authority (CA), (xi) General Organization for Control of Export and Import (GOCEI), and (xii) General Organization for Investment and Free Zones (GOIFZ). Their mandates are further described in the Acceptability Chapter below.

37. The mandate of EEAA in connection to POPs is as follows: EEAA is the national authority responsible for issuing rules, procedures and standards to conform to regional and international conventions related to the environment and to prepare the necessary draft laws and decrees required for the implementation of such conventions. This mandate is relevant to the Stockholm Convention and the Basel Convention both of which are binding on Egypt. Other EEAA mandates relate directly or indirectly to POPs including: (i) preparing studies on the state of the environment, and formulating national plans and projects for the protection of the environment; (ii) issuing environmental criteria, conditions, procedures and standards to which project proponents and establishments must adhere, before implementing their respective project and during operation, (iii) conducting compliance monitoring activities and enforcing environmental legislation; (iv) setting pollution control standards and procedures, including safety standards for the management of hazardous materials and chemicals; (v) gathering and disseminating national and international information on environmental conditions and changes on a periodic basis, in cooperation with relevant and competent agencies; (vi) preparing environmental contingency plans (Article 25 of the 1994 Law No. 4) and coordinating with the competent bodies in the preparation of programs to address environmental disasters; (vii) preparing and implementing environmental training plans and programs, including public awareness programs and activities; and (viii) providing economic and other incentives for the prevention of pollution,

[14] See Chapter 2 of Law 4-1994 for details about EEAA's roles and responsibilities

including implementing pilot projects for the preservation of natural resources, the protection of the environment from pollution, and other plans and activities to protect the country from the spread of hazardous substances and wastes.

38. More specifically, for hazardous substances, EEAA has the mandate to develop and/or contribute to the national policy for chemicals management including: (i) control of hazardous substances (HS) at the various stages of their life cycle, to be regulated by adequate legal instruments; (ii) harmonized classification and labeling of chemicals; (iii) inventory of hazardous substances in Egypt; (iv) a national plan for the prevention of illegally imported HS; and (v) environmentally safe and sound methods for reduction and control of chemical risks, including possible development of non-toxic alternatives. All the above mandates are highly relevant to POPs management and could not be effectively implemented without close and efficient coordination and collaboration efforts with all other agencies, ministries and stakeholders at large.

Gaps/Differences

39. The World Bank's EA policy and the Egyptian safeguards systems on EA and Pest Management, as amended in 2009, are nearly fully equivalent. For the purposes of the POPs Project, it will be important for EEAA to issue a regulation clarifying that all POPs sub-projects will be subjected to an EIA and to prepare TORs, Manual or specific Guidelines for such EIA[15] to be prepared and implemented. Also, it is important that the legal and regulatory framework be brought in full consistency with the Stockholm Convention and other conventions applicable to POPs and to which Egypt is a party. These gaps can be implemented as part of the overall Project implementation.

Proposed Gap Filling Measures

40. EEAA is committed to address the above mentioned gaps by further developing and adopting all needed regulations to harmonize the current legal framework related to POPs and implement the provisions of the Stockholm Convention and other international conventions and agreements related to POPs and to which Egypt is party. Also EEAA is committed to further developing EIA procedural guidelines for POPs related sub-projects, including sample Terms of References for project proponents and EIA consultants in 2012. Subsequently, the existing sectoral guidelines (initially targeting those sectors which are likely to be supported by POPs) will also be revised to reflect: (i) inclusion in the new procedural guidelines of requirements for analysis of social impacts; and, (ii) the obligation to comply with environmental and safety standards, which will be based on international good practice, as expressed in the FAO Guidelines on POPs pesticides, UNEP Standards on PCBs and/or the World Bank Group's 2007 EHS.

41. Specifically, EEAA shall:

a. Review Egypt's legal and regulatory framework applicable to POPs, with a view to harmonizing it with the Stockholm Convention provision, to which Egypt is a party[16].

b. Develop TORs for EIAs for all types of POPs projects[17] and ensure that all POPs sub-projects will be required to comply with all applicable environmental and safety standards. Such standards are to be included in the TORs for EIAs for POPs projects;

[15]In order to meet Bank requirements, it will be important that such EIAs also include social aspects. However, such social aspects are beyond the scope of this SDR.

[16]See Annex 15 on Bringing Egypt Legal and Regulatory Framework for POPs management to compliance with the Stockholm Convention.

c. Clarify the requirement to analyze social impacts as part of the EIA process for POPs projects; it is important that EIA and environmental audits for POPs sub-projects include in their terms of reference the need to analyze social impacts – especially when POPs storage, handling and or disposal facilities are located close to urban or inhabited areas as well as the health and safety of the workers and the local residents which may be exposed; and

d. Review and develop screening criteria defined in Form B in order to take into account the specific features and potential impacts and risks of POPs-related activities (i.e. handling, transportation, storage, disposal or destruction).

[17]Including, but not limited to: safeguarding of pesticides; disposal of pesticides; remediation of pesticide storage sites; safeguarding PCBs stocks and off-line equipment; destruction of high-concentration PCB stocks and PCB-contaminated equipment; decontamination of other contaminated equipment; and, remediation of PCB-contaminated sites.

IV. ACCEPTABILITY ASSESSMENT

Introduction

42. The purpose of the acceptability assessment is to confirm that the institutional capacities and implementation arrangements, practices as well as track record of competent Egyptian institutions in addressing POPs-related environmental safeguard issues in the proposed Bank-supported POPs Project are acceptable and meet the requirements stated in the Bank Policy OP/BP 4.00. This assessment will fulfill the objective of the Acceptability part of the SDR as its covers the institutional capacity; processes and procedures; outputs; and outcomes. The scope of the assessment will, however, be limited to reviewing the capacity, implementing practices, track records and outcomes achieved by the following organizations responsible for POPs management activities, with a focus on the EEAA.

- **National Level:** the EEAA organization, its Environmental Management Department, Central Department for Environmental Inspection & Environmental Compliance "CDEIEC", the Central Department for the Protection and Improvement of Industrial Environmental and Energy, and the Department of Citizens' Services;
- **Regional Level:** EEAA RBOs of West Delta (Alexandria) and Greater Cairo (Guizeh and Qalyubiya,) and Suez;
- **Local Level:** The EMUs of the participating Governorates (Alexandria and Qalyubiya); and
- **Project Level:** The proposed PMU

Methodology

43. The Acceptability Assessment applied (whenever appropriate) the four-component methodology[18] that has evolved through the SDR process during the implementation of the UCS pilot program. To assess relevant institutional capacity, the assessment drew on primary sources, including external and internal reports prepared by EEAA and its advisors and consultants as well as meetings with senior staff in sector ministries of Petroleum, Electricity and Energy, Health, Industry and Agriculture and Land Reclamation. These reports as well as the results of the meetings provided valuable insights into EEAA's institutional capacity to: (a) govern and monitor environmental assessment processes, outputs and outcomes; and (b) to enforce environmental laws, regulations and standards to avoid, minimize, mitigate and compensate for adverse environmental impacts resulting from development projects subject to EIA or to EEAA control and monitoring.

44. To assess the effectiveness of implementing processes and procedures, the SDR reviewed official procedural and guidance documents describing the appropriate conduct of the environmental assessment and management process in Egypt, with particular attention to the various stages of the environmental assessment process, including the screening and scoping phases, EIA preparation and follow up and monitoring, public consultation and disclosure, culminating in the environmental approval on the part of the EEAA. As noted above, the findings with respect to specific aspects of the Egyptian legal and regulatory framework on EIA and responsible implementing agencies, such as EEAA, have already been subject to a SDR and public consultations as part of the EPAP II Project. Those findings have been updated as necessary and reflected in the current draft SDR, especially to assess the degree of compliance with the required gap-filling measures agreed upon under the EPAP II. The primary focus of the current draft SDR is EEAA and other agencies' policies and practices dealing with POPs.

[18] These components include: institutional capacity; processes and procedures; outputs; and outcomes.

V. INSTITUTIONAL ARRANGEMENTS AND MANDATES FOR POPs MANAGEMENT IN EGYPT

45. As mentioned above, several agencies and ministries have mandates related to POPs. Several ministries have mandates to deal with POPs cycle, from source to disposal, environmental impacts and health monitoring. However, EEAA clearly appears to be the leading agency for the POPs environmental management purpose. EEAA will have (in accordance with Law 4 of 2004 and Law 9 of 2009) the ultimate responsibility to review and approve the environment assessment reports as well as to inspect and ensure full compliance with rules, regulations, and standards. EEAA has established contact and coordinates its compliance and monitoring functions with each of the ministries below as appropriate. Furthermore, under the POPs management project, a **POPs Project Steering Committee** (PPSC) will be established. Membership would include the EEAA CEO as Chair, with three members from EEAA, two from both the Ministry of Agriculture and Land Reclamation and Ministry of Electricity and Energy as well as one NGO representative. The committee can call on experts from the ministries described below or from universities and research institutes whenever the need arises. The PPSC would meet every three months. A simplified description of the mandates and responsibilities of each ministry is as follows:

- **Ministry of State for Environmental Affairs (MSEA) / The Egyptian Environmental Affairs Agency (EEAA)**:

46. The Environmental Protection Law 4 of 1994 provided new mandates for the Egyptian Environmental Affairs Agency. Given its coordinating and horizontal role among all ministries, EEAA was put under the responsibility of the Council of Ministers and a Minister of State was nominated to oversee the work of the agency and to chair EEAA's Board of Directors. The Chief Executive Officer (CEO) of the Agency is nominated by the Council of Ministers upon the recommendation of the Minister of State, and has a First Undersecretary rank. The CEO oversees the day-to-day management of the agency and ensures that the policies and guidelines provided by the Board are implemented.

47. EEAA's major functions are described in Table 1 below:

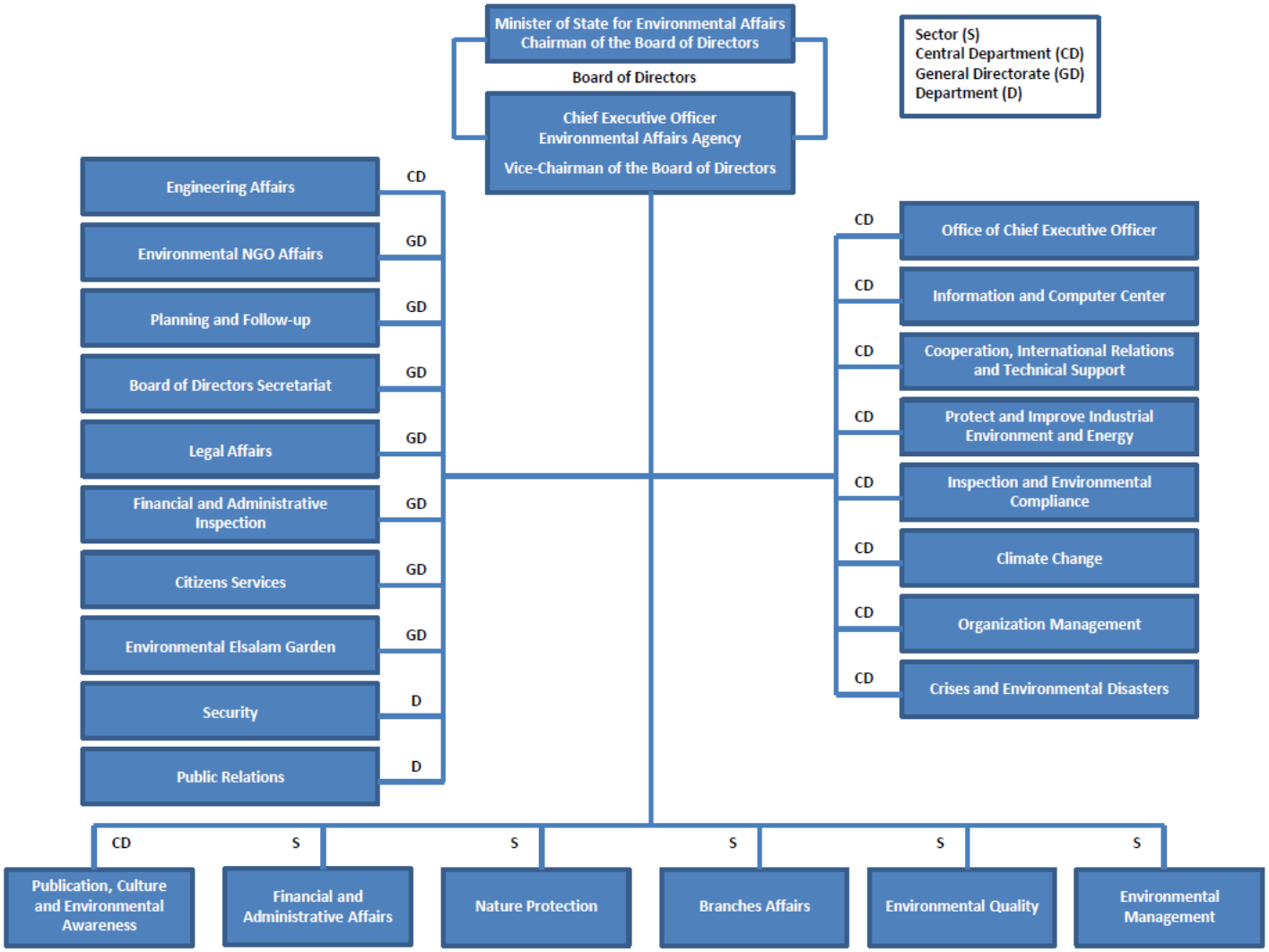
Table 1: Major Functions of MSEA[19]

Preparation of draft legislation and decrees relevant to fulfilling the objectives of the Agency and consideration of proposed legislation that is related to the protection of the environment.
Preparation of studies related to the state of the environment of the country, and formulation of the national plan for the protection of the environment. This would include environmental protection projects and their estimated budgets as well as the environmental maps of urban areas and areas planned to be developed. In addition, it shall set the necessary norms that need to be followed when planning and developing new areas as well as targeted norms for old areas.
Establishment of norms and conditions to be complied with by owners of projects and establishments before the start of construction and during the operation of these projects.
Compilation of a list of agencies and national institutes as well as qualified individuals who could contribute to the preparation and execution of environmental protection programs, and the preparation and implementation of the projects and studies undertaken by the Agency.
Carrying out of field follow-up of compliance to norms and conditions to be followed by agencies and establishments. Also, it shall undertake the procedures stated in the law against those who violate these norms and conditions.
Establishment of necessary norms and standards to assure compliance with the permissible limits of pollutants and to ensure that these norms and standards are followed.
Collection and publication of national and international information related to the environment on a periodical basis in cooperation with information centres of other agencies. It shall evaluate and utilize this updated information in environmental management and planning.
Setting of principles and measures for environmental impact assessment of projects.
Preparation of the Environmental Contingency Plan in the manner stated in Article 25 of Law 4 and coordination with the competent agencies for the preparation of programs for confronting environmental disasters.
Following up the implementation stages of International Conventions concerned with the environment.
Suggesting an economic mechanism, which encourages the observation of pollution prevention procedures

48. The official organization chart of the Ministry of State for Environmental Affairs (MSEA) is provided in Figure 1 below. It includes the following central departments of the Egyptian Environmental Affairs Agency (EEAA) that are involved with the POPs project (the Project).

[19] www.eeaa.gov.eg

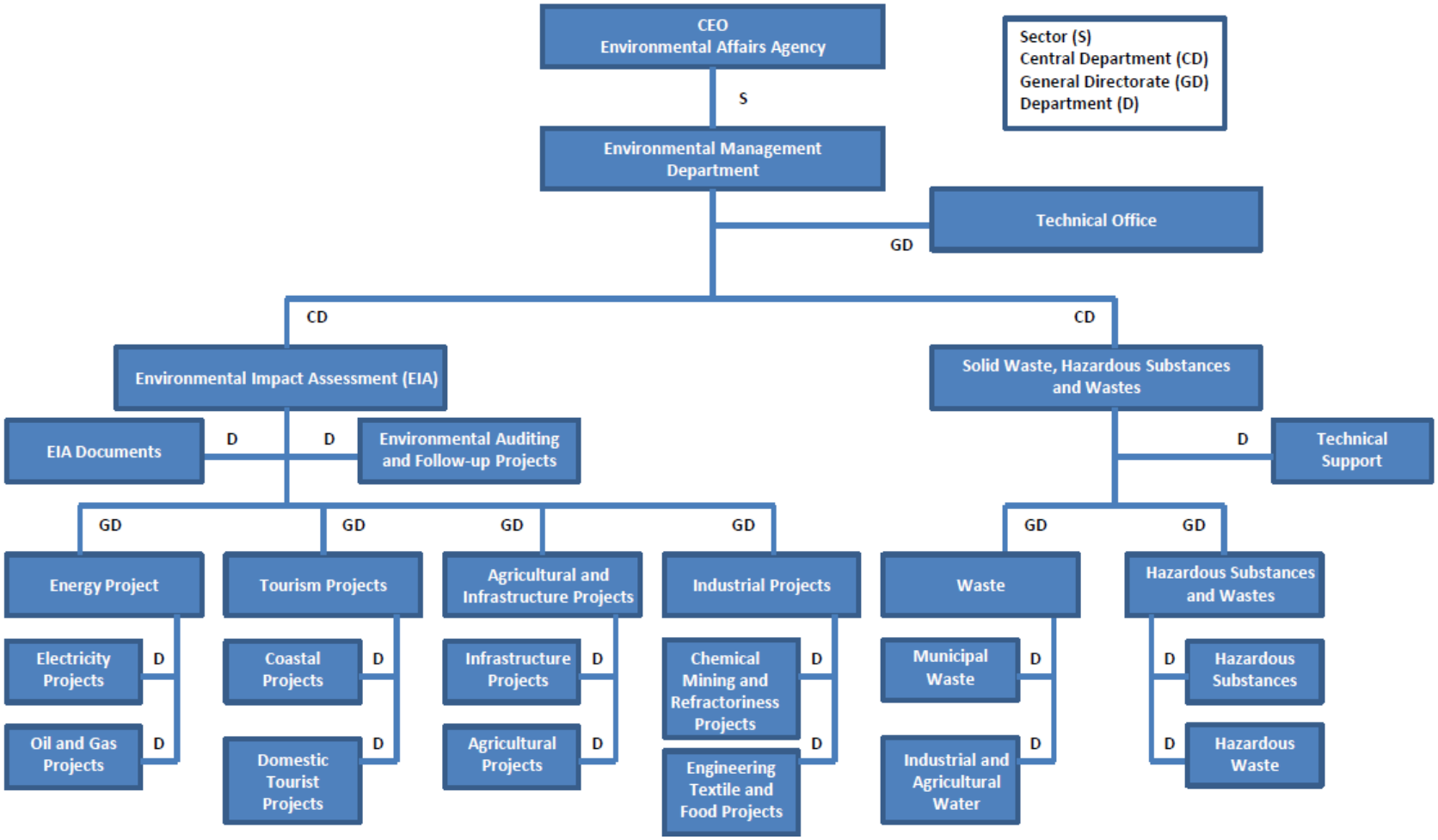
Figure 1: General Organization of the MSEA[20]



[20] The organizational structure is based off an approved reorganization by the Central Agency for Organization and Management in September 2011.

49. The **Environment Management Sector** includes both the EIA Department and the Hazardous Substance and Waste Management Department are presented in Figure 2 below.

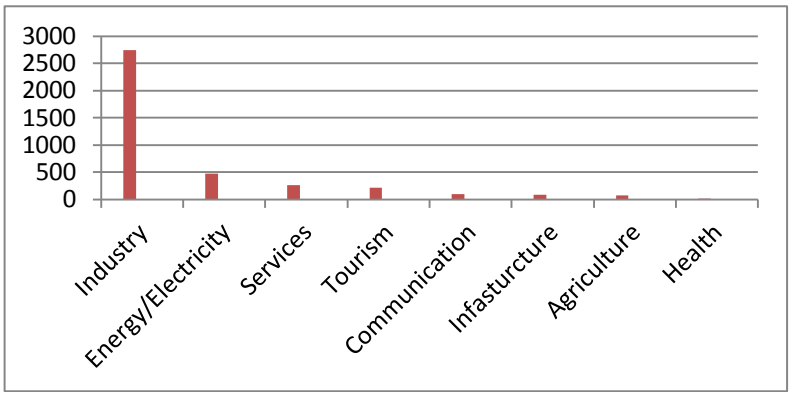
Figure 2: Organization of the Environment Management Sector[21]



[21] The organizational structure is based off an approved reorganization by the Central Agency for Organization and Management in July 2009.

50. **The EIA Department of EEAA,** which is responsible for review and approval of EIA reports and Form "B" has a total of 26 technical staff in Cairo, of which 16 are technical staff and 10 are non-technical staff. The capacity of the EIA department at EEAA is adequate considering that now all EIA (Category "C" projects corresponding to Category "A" projects of the World Bank) reports should be reviewed by national universities or research institutes before being formally approved by EEAA. The EIA department staff administratively process all projects for screening and scoping. It participates also in the review of the EIA reports, but focus mainly on those projects that should submit Form B pertaining to Category "B" and corresponding also to the Category "B" projects of the World Bank. In 2002, the EIA department delegated the review of Form "A" projects (corresponding to Category "C" projects of the World Bank) to the RBOs. The EIA department has processed in 2011, 3937 environment reports in categories B and C (corresponding to category "B" and "A" of the World Bank respectively), with projects in the industrial sectors being the most predominant, as shown in the figure below.

Figure 3: Distribution of Projects among Sectors[22]



51. The review of all these projects represents a heavy workload on the staff, which is not only affecting the quality of the review but also affecting the work-life balance of the dedicated EIA staff. There is no allocated budget for the review of the EIA reports and any request for contracting the consultants to review the EIA report and/or Form B is made on an *ad hoc* basis and financed from the Environmental Protection Fund (EPF). Although, Law 9 of 2009 (which amended Law 4 of 1994) requires that EEAA provide its decision within 30 days from the EIA submission; otherwise, the EIA is implicitly approved. The EIA department has estimated that it takes an average of 20-22 days[23] to review an EIA report. However, the EIA department usually requires additional information before the 30 day deadline in order to extend for another 30 day period until the review is completed. No EIA was approved by default because EEAA has not replied within the 30 day period. At present, there is no specific TOR for the EIA, and therefore there is no limit for requesting additional information which is based on the personal judgments of the reviewer – and could delay the EIA decision-making process.

52. Recently the Environment Management Sector has established **a Directorate for the Technical Office** consisting of one coordinator**.** Its function is to follow up on the EIA mitigating measures during the construction phase of projects with the assistance from other technical

[22] Mahmoud Ahmed Shawki, Presentation of the National EIA System, SDR consultation meeting, June 2012
[23] Mahmoud Ahmed Shawki, Presentation of the National EIA System, SDR consultation meeting, June 2012

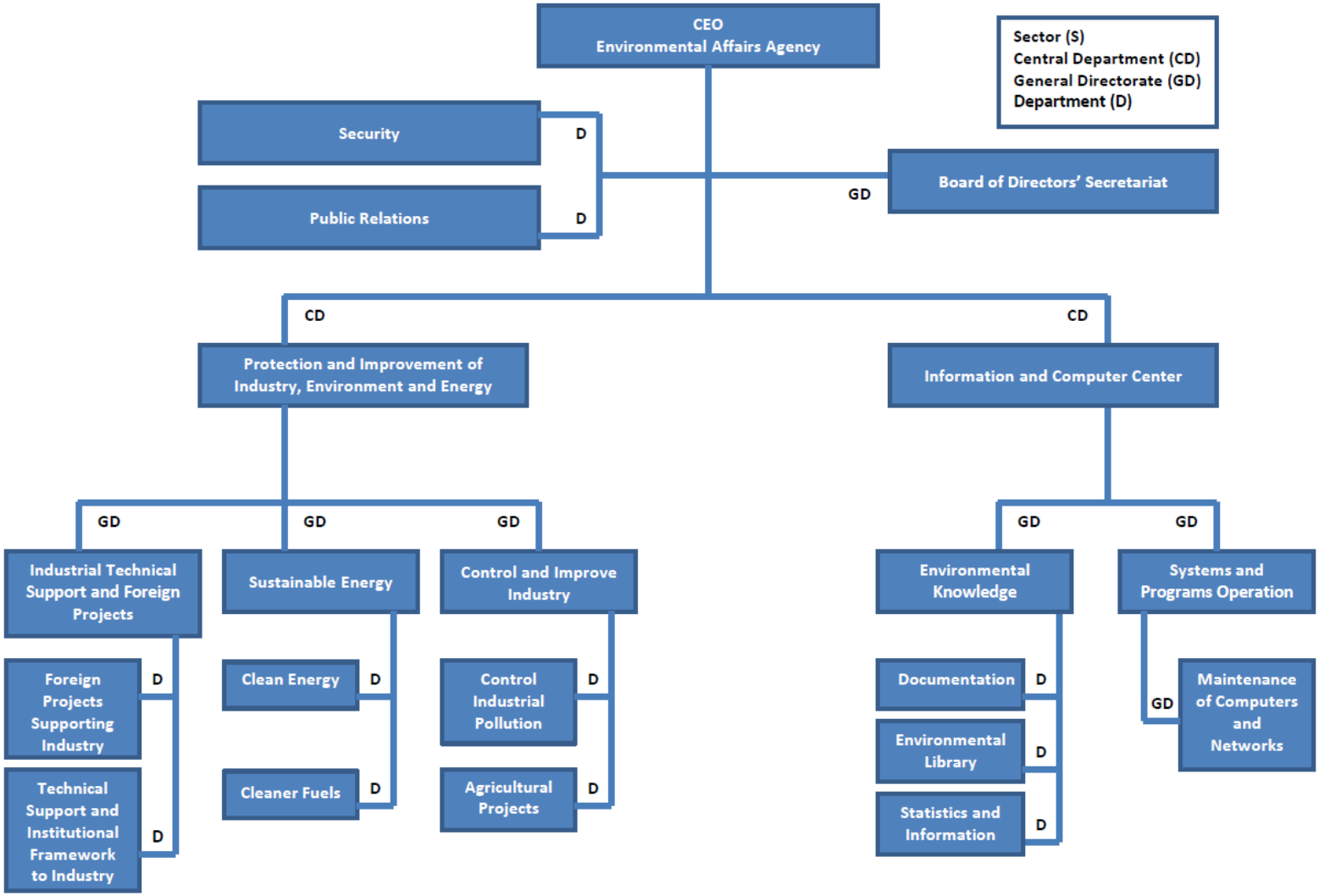
departments. Follow-up of the mitigating measures during the operation phase is supposed to be carried out by the Central Department for Environmental Inspection & Environmental Compliance (CDEIEC) (see below). In the POPs project, the international operator will provide in its semiannual reports to the PMU (see the PMU section below), the status of the implementation of the EMSP. Such a progress report will be verified by the two technical specialists of the PMU who would report the results to the Directorate of the Technical Office for further actions to be taken in case of non compliance. In addition, the environment specialist from the World Bank team will review the EIA reports as well as the implementation of the ESMP as part of the Bank responsibility under this SDR.

53. **The Hazardous Substances and Waste Management Department** consists of two general directorates divided further into 3 directorates under the General Directorate of Waste and 2 directorates under the Substances and Hazardous Waste General Directorate as shown in Figure 4 below[24]. The department functions and responsibilities are to: (i) prepare strategies and plans on waste management, (ii) provide support to sector ministries, and governorates on issues related to municipal, industrial and hazardous waste, (iii) provide scientific views related to chemical substances to national authorities and in particular the custom authorities, (iv) review the Materials Safety Data Sheet, and act as focal points for the Stockholm, Rotterdam and Basel Conventions to ensure their compliance. The staff of the General Directorates of Substances and Hazardous Waste is limited to 5 staff but are also assisted by 14 staff from the RBOs. The General Directorate on Hazardous Waste and Substances will be responsible for the implementation of the POPs project but would be strengthened with the establishment of a PMU (see below) and the provision of capacity building and training. The EU -financed "Twinning" Project has reviewed the overall organization of the Department and has recommended a reorganization of this department into one General Directorate of Waste which includes hazardous and non-hazardous waste and one General Directorate for Chemical Substances. The POPs project will first assess the proposed organizational structure and will provide necessary technical support and training in case reorganization is approved by EEAA.

54. **The Central Department for the Protection and Improvement of Industry, Environment and Energy** includes: Industrial Technical Support & Foreign Projects which manages the EPAP II[25] through its project management unit as well as the KfW- financed project: Private and Public Sectors Industry (PPSI) as shown in Figure 4. The objective of the general directorate is to: (a) enhance the environmental performance of industry; and (b) benefit from and sustain activities undertaken by the donor-funded projects. As a result of EPAP I and II, this General Directorate has 13 fully qualified technical and procurement staff trained. It has established its industrial pollution control policy, developed information system on polluting enterprises participating in the projects, assist the polluting enterprises in the development of compliance action plan, provide support to the procurement of equipment for projects, and conduct supervision on projects to be financed under the EPAP II and PPSI. The PMU of POPs project would benefit from the experience and the technical support of this General Directorate.

[24] K. Stepper, Report on Organization Aspects of HW, HS and W, EU Twinning project, 2010
[25] The EPAP II is co financed by EIB, AfD, JICA, Finland and the World Bank at a level of US$ 185 million equivalent

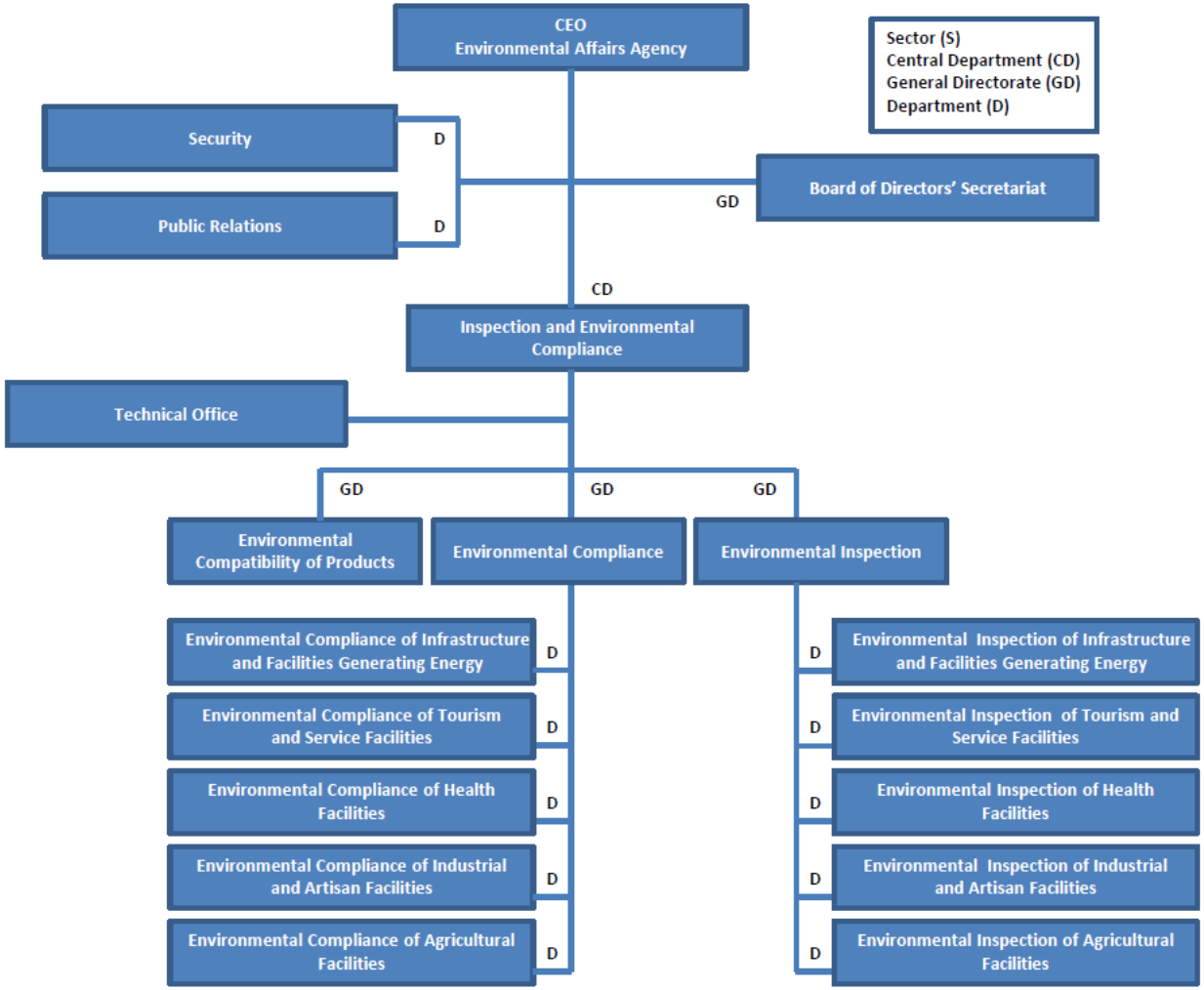
Figure 4: Organization of the Central Department for the Protection and Improvement Industry, Environment and Energy[26]



[26] The organizational structure is based off an approved reorganization by the Central Agency for Organization and Management in July 2009.

55. **The Central Department for Environmental Inspection & Environmental Compliance (CDEIEC)** was previously the Central Inspection Department and as shown in Figure 5. The CDEIEC includes now two General Directorates: (i) the General Directorate for Environmental Compliance (GDEC) which is composed of 7 staff and is responsible for reviewing and following up on Compliance Actions Plans (CAP), which is now considered by virtue of Article 22 of Law 9 of 2009, to be the instrument for improving the overall environmental performance of a polluting enterprise; and for enabling the enterprise to move towards compliance with the Egyptian environmental regulations; and (ii) the General Department for Environmental Inspection (GDEI) which is composed of 18 staff and is responsible for inspecting polluting enterprises, reviewing and verifying the environmental register, imposing fines and taking non-compliant industries to court. Also, as a result of Law 9 of 2009, the environmental police were combined with the waterways police at the Ministry of Interior. The police works in close collaboration with CDEIEC on inspection, prosecution and implementation of court orders regarding violations.

Figure 5: Organization of the Central Department for Environmental Inspection & Environmental Compliance (CDEIEC)[27]



[27] The organizational structure is based off an approved reorganization by the Central Agency for Organization and Management in July 2009.

56. **The Department of Citizens Services.** This department reports directly to the CEO of EEAA, and is the first interface between the citizen and the EEAA administration. The department consists of 9 staff and maintains a hot line (8050 and 8051). Its function is to field complaints, receive grievances and inquiries, prepare a report on the complaint/inquiry, forward them to the office of the CEO, and follow up on the results and decisions of complaints/inquiries with the different office of EEAA. In 2010, the Department received about 7270 complaints, of which 3025 were resolved and the remaining were under investigation. The Department also answers inquiries about the status of the EIA or Form B reports. They receive about 10-25 inquiries / day regarding the status of the EIA review. The Department maintains an electronic registry of complaints, the EIAs under inquiry or requiring additional information, as well as approved and rejected EIAs.

57. **The Regional Branch Offices (RBOs)** were formed by a ministerial decree in 1995 to represent EEAA at the regional level. The responsibilities of the RBOs as stated in the ministerial decree includes: (a) following up with the Governorate implementation of the national plan for protecting the environment; (b) supervising the environmental monitoring network at the Governorate level while obtaining data and information from these networks and reporting them to the EEAA Head Office; (c) following up on the enforcement of Law 4 of 1994 and Law 9 of 2009 and its Executive Regulations at the Governorate level; (d) implementing decisions made by the head of EEAA concerning environmental protection and assuming EEAA role and purposes at the Governorate level; and (e) raising environmental awareness and coordinating public and Governorate environmental unit efforts, in accordance with EEAA plan in that respects.

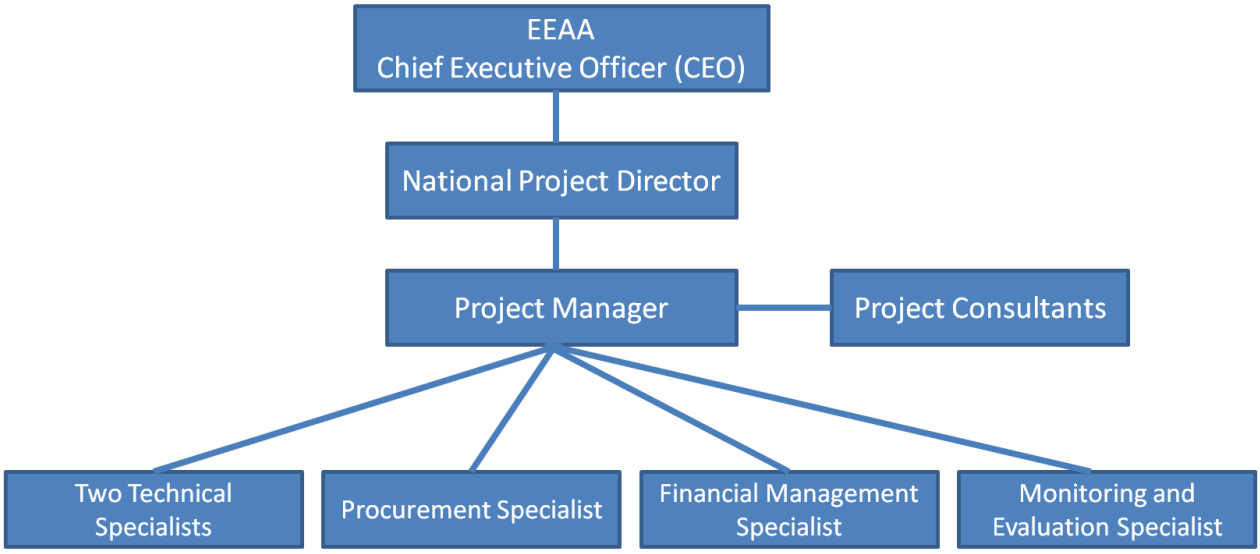
58. Currently, 11 RBOs exist. Each covers several governorates in Egypt. RBOs are located in Cairo, Alexandria, Suez, Assuit, Aswan, Tanta, El Dakahlia, Hurghada as well as three recently established RBOs at New Valley, El Sharkeya, and El Fayoum. At least three RBOs are expected to be involved in the POPs project (e.g. Cairo, Alexandria and Suez) as they will have a critical role in overseeing the activities of the POPs project and in monitoring the air, water and soil qualities related to the treatment and disposal of these POPs jointly with CDEIEC. The West Delta RBO which includes Alexandria, Beheira, and Matrouh Governorates, will carry out its environment management activities related to the El Nasreya Hazardous Waste Treatment Center (HWTC). The RBO of Greater Cairo which covers Cairo, Guizeh and Qalyoubieh will also be involved as the El Saff Storage Site which is located in the Eastern border to El Saff city in the Guizeh Governorate as well as the PCB storage facility in Shoubrah El Kheima situated in the Qaloyoubieh governorate. The RBO of Suez would be involved in case the POPs project would treat the 220 tons situated in El Adabia port in Suez.

59. The RBOs have similar structure as the EEAA with the exception of international partnering. They include: (1) environmental management, (2) environmental quality assurance, (3) environmental monitoring and testing, (4) environmental information dissemination and awareness raising, (5) handling citizen complaints as well as (6) legal affairs, amongst other activities. The total number of staff in the Cairo, Alexandria and Suez RBOs are 35, 51 and 24 respectively. The RBOs have their own laboratories and carry out monitoring and enforcement. The RBO staff received extensive training from the different programs financed by the international donors including the training and capacity building provided under EPAP I. Six of the 11 RBOs (Cairo, Alexandria, Tanta, Mansoura, Suez, Assiut and Aswan) each have two hazardous waste management specialists trained by the European Community financed "Twinning" project.

60. **The Project Management Unit (PMU)** will be managed on a part time basis by a National Project Director selected from the EEAA senior staff which will report directly to the EEAA CEO (see Figure 6). The National Project Director will have the following responsibilities: (a) appointment and performance evaluation of all PMU staff; (b) oversight of all project activities; (c) approval and

signature of quarterly and annual project reports; (d) signature of disbursement applications and (e) approval of procurement decisions. Under the Director, an experienced Project Manager will be hired on a competitive basis and will be financed from the project. The Project Manager will be working full-time and will have the following responsibilities: (a) day-to-day management of PMU staff; (b) ensuring the quality and timeliness of all project activities; (c) preparing quarterly and annual reports and disbursement applications and (d) chairing the bid award committee. The hazardous waste specialists will be in charge of (a) reviewing the technical and environmental eligibility of the POPs sub-projects; (b) providing technical support to the participating agencies of the project and reviewing technical reports; (c) ensuring due diligence on the environmental and social safeguards based on the gap filling measures in the SDR; (d) liaising with the relevant departments of EEAA (and in particular with the EIA department as well as with the RBOs of Greater Cairo, Alexandria and Suez) so as to ensure proper coordination and exchange of information. The PMU will also include two technical specialists (one for PCB and the other for obsolete pesticides), a financial specialist and a procurement specialist. The financial specialist will be in charge of the overall financial consolidation and reporting aspects in coordination with the EEAA financial department. The procurement specialist will ensure that procurement is carried out by eligible companies in a manner appropriate and consistent with World Bank's procurement guidelines. The detailed procedures for project management would be included in a **Project Manual**, covering such topics as: job descriptions; decision-making procedures; procurement; financial management; implementation of safeguards measures; monitoring and evaluation; and, reporting.

Figure 6: Proposed Organization of the PMU



61. The Ministry of Electricity and Energy (MEE) would establish a **Project Coordination Unit (PCU)**. The PCU of the MEE will be attached to the General Directorate for Technical Follow up and will report directly to the First Undersecretary for planning and management. The PMU will assume the management of the activities for the MALR until a decision is reached by MALR concerning the rehabilitation of El Saff Storage (see below). The Ministry of Trade and Industry (MTI) would establish a **Focal Point**, to liaise with the PMU on all implementation matters, especially Sub-Component 1.4, and to manage some project activities delegated to those ministries, for example, inventorying and testing of transformers for PCB contamination.

62. **The Ministry of Agriculture and Land Reclamation (MALR**) provides services to farmers in animal and crop production and also administers the fertilizers and pesticides regulations, to control the importation and use of fertilizers and pesticides through different departments, to prevent plant diseases and pests from inside and outside the country. The Agricultural Pesticide Committee (APC) (see www.apc.gov.eg) is composed of an 18 member committee, and four sub-committees is the legal arm and authorized institution of the Ministry of Agriculture and Land Reclamation for the registration, importation, manufacturing, and distribution of all pesticides in Egypt. In order to register for a specific pesticide, the importer or manufacturer will have to provide as part of the protocol document required by Decree 622/2008, laboratory testing and impact of this pesticides in health and environment. The Ministerial Decree 90/2007 specifies in Article 1 that no pesticide can be registered in Egypt unless it is registered with WHO, and FAO and their environment and health impacts have been approved by USEPA or the European Commission. Also, the Central Agricultural Pesticides Laboratory (CAPL) belonging to the Agricultural Research Center (ARC) conducts chemicals and toxicity analyses of the active ingredients and verifies the chemical materials date sheet of each pesticide before being released by the Customs Authority. Furthermore, it regulates the establishment of standards for withholding registration and the usage restrictions on agricultural chemicals from an environmental conservation viewpoint and sets up regulations and standards regarding the prevention of soil contamination. Although APC is responsible for all aspects related to pesticides, the safe disposal of the obsolete pesticides (POPs and non-POPs) is neither their responsibility nor the responsibility of the ARC as these POPs do not belong to the MALR, but originated from different factories or installation and the MALR responsibility was to provide a temporary storage site as these POPs have not been adhered in accordance with the FAO guidelines. This will be mitigated in the Project[28].

63. **Ministry of Health and Population (MHP**) is involved in chemical safety through its directorates and centers. The General Directorate of Occupational Health has a unit for chemical safety and keeps a register of hazardous chemicals. The Occupational Health Department "Chemical Safety Unit" supports the safe handling of chemicals throughout the whole process (importation, transportation, storage, use and waste management). The General Directorate of Environmental Health supervises hazardous materials and hazardous wastes generated by health establishments and licenses clinical waste disposal. The Directorate conducts the air-monitoring network, does water analyses as appropriate and approves chemicals used for water treatment. The General Directorate of Food Control (a) sets limits for food additives and food contaminants, (b) inspects and analyses imported and locally produced foods and those on the market for safety, and (c) investigates food poisoning outbreaks. The Directorate of Central Laboratories does laboratory analyses for water, food and biological fluids to help implement various legislation of the MOHP and other agencies. The Research Institute of Medical Entomology carries out laboratory and field research to examine the efficacy of pesticides and provide information important for registration of pesticides used for public health and household purposes, while the General Organization for Health Insurance carries out periodic medical examinations for workers exposed to hazardous chemicals.

64. **The Ministry of Electricity and Energy (MEE**) has established a Central Directorate for Environmental Affairs at the Egyptian Electricity Holding Company (EEHC) (see also www.egelec.com) which coordinates, monitors, follows up and provides technical support to the General Directorates of Environmental Affairs established in the 16 distribution companies. The Central Directorate is composed of six staff that is familiar with the World Bank environmental policies and guidelines. The PCU for Component 3 of the project would be formed in the Central Directorate for Environmental Affairs of EEHC. There are no specific environmental guidelines for

[28] Legal issues will be addressed in 1.1, inventory and disposal in 2.2 and 2.2 and policy to avoid future stockpiles in 2.3.

the power sector through EPAP II, as part of the gap filing measures, prepared sector guidelines for the power sector. There are no guidelines for handling or disposal of PCBs. EEHC has requested that during project implementation capacity building and technical assistance be provided on PCBs. There is also a company, Power Generation Engineering and Services Company, owned by EEHC (at 49% and by Bechtel at 51%) that could prepare an EIA in the power sector.

65. **The Ministry of Petroleum (MOP)** is the owner of the Egyptian General Petroleum Corporation (EGPC) and the Egyptian Gas Holding Company for Gas (EGas). Each has established a Department of Environment and Safety for oil and gas respectively. The Environment Department at EGPC is composed of 10 oil specialists who are responsible for coordinating and monitoring the environment and safety requirements for companies in oil exploration and production. This department is the counterpart of EEAA in all aspects regarding the EIA inspection and compliance action plan process. The department reviews and maintains a quality control for all EIA reports prepared by companies prior to their submission to EEAA and also follows up on the inspections that EEAA performs in the oil and gas exploration fields. The Petroleum Trading Services Company (PETROTRADE) is the only company responsible of collecting used oils and recycling it for re-use. PETROTRADE has stopped collecting and recycling PCB-contaminated oil. However, PETROTRADE has no kits for testing incoming used oils for PCB contamination. Moreover, in the absence of clear legislation prohibiting the use of PCB-contaminated oil, some of these oils were previously sold to cosmetic manufacturers because of the mistaken public impression that "electrical oil" has beneficial properties.

66. **The Ministry of Trade and Industry (MTI)** oversees the Industrial Development Authority (IDA)[29] (which has established a Central Department for Environmental Protection in charge of ensuring that all environment and safety requirements are met before providing the environment register, review and approval of the list of chemicals before their release from customs and ensure that decrees related to hazardous chemicals (Decrees 88/1998 and 851/2006) and hazardous waste (Decree 165/2002) are complied with. There are no specific guidelines or Egyptian standards for the release of dioxin and furans.

67. **Ministry of Water Resources and Irrigation (MWRI)** is mandated to control and manage all fresh water resources in Egypt, including surface and subsurface water. The Ministry is also responsible for providing all other sectors with their needs of good quality fresh water in due time. It also implements legislation to protect the Nile River and waterways from pollution with all kinds of wastes. Law 4/1994 refers to Law 48 of 1982 for pollution control of Egypt's water resources, in collaboration with other concerned Ministries. Law 12 of 1984 is the law governing the management and operation of the irrigation and drainage systems in Egypt. Permits may be issued for the disposal of treated liquid wastes provided certain standards are observed. The MWRI issues standards after consultation with the Minister of Health. Regular inspections of the wastes disposed of in the waterways are carried out with the assistance from the Environment and Waterways Police and the MOHP in order to control the disposal and treatment of industrial wastewater. Furthermore, it formulates standards and regulations regarding prevention of groundwater contamination.

68. **The Ministry of Interior (MOI)**. MOI sets and approves plans for emergency actions, trains personnel, inspects sites suspected to have a potential risk and co-operates with other agencies in case of emergency. It also regulates matters related to treatment of obsolete pesticides which may have explosive risks. MOI issues a list of hazardous substances that are under its control. The Environmental Police is now part of the General Directorate for Police for waterways which enforces *inter alia* the law on the Nile and principally Law 48/1982, and the Environment Police General

[29] www.ida.gov.eg

Directorate which is responsible for enforcing the environment laws 4 and 9 and their Executive Regulations.

- **The Civil Defense Authority (CDA).** The CDA is part of MOI and is responsible for reviewing the design and implementation of the buildings interiors where hazardous substances may be produced or stored. It ensures that buildings and installations conform to the engineering standards to be observed for each type of such substances, as determined by a decree issued by the Minister of Housing (upon consultation with EEAA) according to which these buildings are subject to periodic inspections. Furthermore, it sets up emergency plans to deal with any potential accidents which may occur during the production, storage, transportation or handling of such substances, provided the plan is reviewed and approved by the licensing authority after consulting the EEAA.

69. **The Ministry of Finance (MOF)** includes the Customs Authority and the General Organization for Control of Export and Import. These organizations ensure that all imported chemicals comply with specifications after receiving the necessary clearances from EEAA, the MTI and the MALR as appropriate. The custom authorities withheld in Adabya Port, 200 tons of pesticides imported by a private sector company, and they became subsequently obsolete pesticides but still stored in containers on the compound of the Port. The disposal of these pesticides of their storage could be considered as part of the Project subject to the approval of the Project Steering Committee and the PMU.

70. **Ministry of Manpower and Immigration** is responsible for the administration and enforcement of Law No.12 of 2003 and its related decrees concerning labor and industrial safety protection of industrial working environment. The **Factories Inspectorate Department** has a specialized wing on Occupational Safety and Health, acting to enforce this law. This legislation is aimed at protecting workers against occupational accidents and diseases. The department carries out systematic inspections of all premises covered by the Factories Act (i.e., factories, construction sites, and general engineering construction workers). The inspectors assess the risks of the exposure to workers from chemicals and physical hazards and also biological, physiological, mechanical and psychological hazards. Also, it regulates matters related to ensuring standards and measures to prevent health impairments to workers (working environment) due to chemical substances.

71. **The Environment Management Units (EMUs)** operate at the local level, and exist in each of the 26 Governorates according to Prime Ministerial decree in 6/5/1981. The organization and operations of the EMUs vary across these Governorates. Under the existing institutional framework, the EMUs represent the primary local authority on environmental issues and, in many cases, operate as the executing agencies for EEAA's environmental policies and programs. In Alexandria, the Governor Decree number 183 in 2004 called for establishing one EMU in each of the six districts in Alexandria plus Borg El-Arab city. It is staffed with about 15 people for the six districts in Alexandria plus Borg El-Arab. In Qalyubiya Governorate, the EMU was formed in 1988. Currently, it is staffed with 13 people including the head of the EMU office. In Suez, the EMUs received technical and financial support from international donors such as DANIDA and the Government of Finland.

72. **The Civil Society.** Before the revolution of January 2011, Egypt had more than 270 NGOs actively participating in the environmental arena, on issues ranging from public awareness and environmental education to waste collection and community self-help programs. This number has increased but no official figures are yet available. The new EIA guidelines of 2009 which now require public hearings and consultation for the projects classified as "C" given a more prominent and participatory role of the civil society. Civil society has been increasingly involved in project implementation, in public debate and also in ensuring compliance with the environmental laws and is

vocal whenever public hearings/consultations on EIAs have taken place. Similarly the media has contributed largely to this increased awareness and to change in behavior. The number of newspapers has greatly increased and most of them carry reports on environmental activities, and do not hesitate to bring to the public any major violations undertaken by the State or by the private sector. TV stations often provide clips on the status of the environment in poor areas. The Egyptian press regularly publishes summaries of EIA reports, as approved by the MSEA as well as the conditions under which the EIA reports were approved.[30]

- One NGO is known to have focused its attention on OPs and PCBs. The Day Hospital Institute for Development and Rehabilitation (www.dayhospl.org) provides workshops, awareness, communications and materials on hazardous chemicals and waste and in particular POPs and PCBs. All these activities are financed by the GEF Small Grants Program (GEF SGP), UNIDO, the European Commission, and Japan. The Day Hospital also works with six other local NGOs in Cairo, Alexandria and Beni Soueif on environmental awareness for PCB and POPs. These NGOs, under the leadership of the Day Hospital Institute, should be involved in the preparation and implementation of the project especially during the consultation process of the UCS. Another nonprofit organization, Crop Life Egypt, which is affiliated with Crop Life International[31] whose headquarters are in Brussels, consists of a federation of 18 pesticides manufacturing companies and is managed by a Board of seven members. Crop Life proposes to provide awareness campaigns, offer training for disposal of pesticides and stock storage as well provide international experts in pesticides.

VI. IMPLEMENTATION PRACTICES AND TRACK RECORDS

A. Procedures and Guidelines

73. In response to the gap filling measures in the SDR of EPAP II, EEAA revised completely its EIA guidelines which were officially published in January 2009 as Guidelines of Principles and Procedures[32] for Environment Impact Assessment. The major features of the revised guidelines[33] include:

- Clear criteria for categorization and illustrative lists for guidance for Categories "A", "B", and "C". In addition to the criteria of the nature of the project in terms of types of inputs, outputs energy and resources consumption. One additional criterion was added which is related to the screening into the three levels of severity of the project namely highest, medium and lowest severity. These are fully explained in the EIA guidelines.
- A definition of special cases of projects, projects in sensitive areas or belonging to a larger development or expansion.
- The requirements that Category "C" projects be prepared by independent consultants or firms, and that the name of consultants should also be included in projects for Category "B" projects, as well as their role.
- An Executive Summary for Category "C" project is mandatory and should be made available to stakeholders before disclosure and public consultation.

[30] Some examples are herein provided: El Ahram Evening Newspaper,March 12, 2012 related to the polyethylene project, El Goumhouria Newspaper, December 12.2010 on the fourth line of the Underground metro, El Shourouk, Newspaper, on the environmental rehabilitation of Kima
[31] www.croplife.org
[32] http://www.eeaa.gov.eg/arabic/main/guides/English_EIA_guidelines.pdf
[33] Y. Sherif , EIA Review of EPAPII Sub-projects within the Context of Piloting of the World Bank Use of Country System, Environics, December 2010

- Additional details in the project description including quantification of environmental aspects.
- A detailed analysis of the baseline with provision of physical, biological and social characteristics.
- An in-depth analysis of environmental and social impacts is required for projects in Categories "B" and "C", and an in-depth analysis is required for cumulative impacts for Category "C" projects.
- The analysis of alternatives is mandatory and is required for Category "B" and "C" projects and should be part of the consultation process.
- A detailed description of the Environment Management Plan (EMP) which consists now of a mitigation plan, a monitoring plan and institutional needs for EMP implementation for the facility, as well as the cost estimated for EMP implementation.
- Detailed procedures that should be followed for the scoping consultation and EIA consultation of Category "C" projects. The announcement of public consultation on the draft EIA should be made 15 days before the meeting and the EIA summary should be made available during the meeting.
- The Executive Summary for Category "C" project would be available to all stakeholders, and after the EIA approval the Executive Summary will be posted in the EEAA website.

B. Assessment of the Application of the EIA guidelines of 2009

74. A rapid assessment was conducted on the extent of the application of these guidelines, using also a sample of EIA reports and Form B. The results were as follows:

(a) The quality of the EIA reports for Category "C" projects has substantially improved and the contents follow the outline set forth in these guidelines. The quality also depends on the experience, skills and familiarity of national consulting / international firms with the EIA standards procedures such as the World Bank, the EC and EIB. For projects financed by international organizations (such as the World Bank Cairo Airport Project), the EIB/AfD financed study on Phase III of Cairo Metro line [34] include detailed analysis of the impacts, scoping phase, and detailed descriptions of the Environment and Social Management Plan (EMSP) . Also involuntary resettlement policy of EIB was used and applied in the case of the Metro Line. Also, for projects that are not financed by International Financing Institutions such as the EIA report prepared[35] on behalf of the Industrial Power Group for the construction and operation of an integrated Hazardous Waste Management Facility in the 10th of Ramadan City as well as the EIA report on the Marsa Allam Airport[36] are very comprehensive, and fulfill all the requirements of the EIA guidelines with the exception of providing cost for the EMP and the public disclosure of the EIA summary. All the EIA reports which were examined, included a section on the public consultation and provided a detailed record the issues raised and responses provided.

(b) In accordance with the guidelines, public hearing on Category "C" projects have systematically taken place for more than 30 projects[37] in 2010 improving therefore the participation of the stakeholders in the EIA process.

[34] Environment Quality International
[35] EcoConServ, January 2009
[36] Egyptian Consulting Group June 2011
[37] EEAA Annual Report 2010

(c) The contents of the Form B of projects in Category "B" and not financed by EPAP II are not always consistent with the EIA guidelines of January 2009 and more specifically with respect to the impact analysis, costs related to the EMPs and preparation of EMP and disclosure of these forms. For example, Form B for the Production[38] of 30000 Magnesuim Oxide Sheets by the Egyptian –Saudi Dar Company for Trading and Marketing lack an adequate project description and impact analysis. Similarly Form B for the Exploration well in West Kalabsha in the Western Desert provides a good description of the mitigating measures with no cost associated with these measures[39]. The Form B for the EPAP II financed projects were revised including the EMP to conform to the January 2009 guidelines. These forms were also disclosed in the MSEA website[40]. The major reason is that the EIA department did not disclose all the Form B or the Executive Summary due to the fact that human resources and time were limited and a system of disclosure for all these projects had yet to be established.

(d) The EIA review process has still some deficiencies:

i. There are no standard TORs to enable proponents to prepare for the scoping as well as for the EIA reports in all the sectors. The EIA Department has prepared sector guidelines, but not specific TORs for the following sectors: power, cement, fertilizers, textile, petrochemicals, land reclamation, ports and harbors, wastewater, industrial cities, medical products, urban development and land reclamation. These sector guidelines are available on the website of the Ministry (http://www.eeaa.gov.eg). No specific guidelines or TORs were prepared for hazardous waste and specifically for POPs including PCBs;

ii. EIA reviewers review the projects based on their field of specialization, personal experience and judgment. Standard TOR for the reviewers to conduct the review and checklist or methodology for the review of the EIA report is not yet available;

iii. The certification of the national consultants for conducting environmental services as required by law #9 of 2009 was initiated but not completed. Meanwhile, the EIA department continues to rely on a request made by the former Minister of State for Environmental Affairs to contract the services of selected national universities and their centers to review the EIA for the sectors of infrastructure and Industry only. The reason for the selection of the universities is that they have a large pool of expertise in the specialization required in the EIA reports. Furthermore, in case an EIA report is rejected or is challenged by the proponent of the project, EEAA could call upon these universities to defend their review. The following universities were contracted in 2011 to review 91 projects in Category "C": Cairo University, Ain-Shams University, Alexandria University, Suez Canal University and the National Research Center and the University of New Valley. The selection of these universities are based on the expertise required in the EIA and available in these institutes to review the EIA report in a particular field as well as the geographic location of the project itself (e.g., an EIA for an industrial project in Alexandria will be reviewed by Alexandria University). EEAA sends to these institutions a letter requesting them to review the EIA. The content of the reports prepared by these universities are technical and engineering in nature but does not follow any TOR. Subsequent to the review conducted by these universities and centers, the EIA department which include experienced staff in chemical engineering, energy, water and wastewater, and coastal zone management conducts also a review of the same EIA reports and would also provide additional comments which are all summarized in the

[38] Energy Research Center , Cairo University, 2012
[39] Environment and Petroleum Services Company, March 2012
[40] http://www.eeaa.gov.eg/arabic/main/eia.asp

letter of approval/ disapproval that is signed by the EEAA Chief Executive Officer (CEO). EEAA remains responsible and accountable for the decision it reaches concerning approval/disapproval of the EIA reports. As part of the gap-filling measures, the EIA Department, in full collaboration with the PMU, will develop (a) the ESIA TOR for the PCBs and Obsolete Pesticides; (b) TOR for the review of the ESIA in case of outsourcing; (c) guidelines for the ESIA reviewers for assessing the ESIA reports; and, (d) training on developing TORs and on the ESIA review guidelines.

(e) The follow-up, supervision and monitoring of the EIA reports, EMPs or Form B are still lagging. The EIA Department is required to monitor the implementation of the EMP during the construction phase and has established a one person office to coordinate the process. However, such follow-up is slow. The follow-up of the EMP during the operation phase (which should be followed by the General Directorate for Environmental Compliance) is still limited.

75. In summary: based on the above observations and on similar assessment that EPAP II carried out on application of the new EIA system in its projects[41], the EIA guidelines of 2009 are not fully operational. Their application is in a transitional phase and will be gradually implemented. The acceptability assessment will highlight in its gap-filling sections the major requirements to be met in the Project to allow proper implementation of such system.

C. EIA Procedures related to the POPs Project

76. As discussed in the equivalence assessment section, there are 18 specific sites of obsolete pesticides (OP) which are described in Annex 2 of the report and could be a candidate for the treatment and disposal. Based on the available data and the site visits conducted by the consulting firm Tauw[42], the total amount of obsolete and POPs pesticides ranges between 2,250 and 4,600 tons. From this amount, the amount for POPs pesticides ranges from 250 to 1,500 tons. A POPs site can have one or more sources of contamination. For instance, a site can have a contaminated storage building with a stockpile of POPs pesticides, buried pesticides at the back of this storage building and a hotspot of spilled pesticides in front of an off/on loading platform. This is a site with multiple sources of contaminants. Each source requires a different approach of assessment and cleanup. The different categories of POPs sites are presented in Table 2 below.

77. The approach integrates different assessment tools for different site categories such as: the FAO Pesticides Stockpile Management System (PSMS) for the inventory of POPs pesticides stockpiles and the World Bank POPs toolkit for assessing soil and groundwater contaminated with POPs pesticides.

Table 2: Site Characterization[43]

Categories of POPs sites	Characterization of site category
1. Site with POPs	POPs pesticides that can be reclaimed and repacked
2. Site with buried POPs	POPs pesticides are buried in a pit
3. Site with contaminated buildings	Storage building, varying from completely closed to tumble down, contaminated with POPs pesticides

[41] Y. Sherif, EIA Review of EPAPII Sub-projects within the Context of Piloting of the World Bank Use of Country Systems, Environics, December 2010.
[42] Tauw Final Report: Sustainable POPs Management Project: Project Preparation Studies, October 2011.
[43] Ibid

Categories of POPs sites	Characterization of site category
4. Site with hot spots in top soil	Spilled POPs pesticides heavily contaminated the topsoil, the hotspot
5. Site with POP contaminated soil and or groundwater	Spilled pesticides are dispersed in the soil and/ or groundwater

78. All these different site categories have specific characteristics and the strategy for the preliminary site assessment and site assessment must be adapted to the category. Also the used technique to clean up and remediate a site depends on the category of the site. It is mentioned that a site, where pesticides are/were handled¸ can consist of one or more of these categories. Each site category and phase needs a different approach and, if available, a set of specific tools.

79. Concerning the PCB-contaminated equipment, it was estimated that there are a minimum of 7,000 transformers containing more than 8,400 tons of PCB contaminated oil (>50ppm). In addition, a widespread dispersion of diluted PCB contaminated oil with concentration <50ppm is also available. The inventory data showed however significant discrepancies and lack of reporting on where the figures have originated or what percentage of coverage they represent[44]. There are, however, 200 tons of PCB contaminated-equipment with a concentration more than 500-5000ppm, which will be treated by MEDPOL. There are also 3 storage centers belonging to MEE namely one storage center in Shoubra El Kheima, in Qalyoubieh governorate and two storage center centers in El Nasr City (Cairo Governorate) – one of which is for the maintenance of the transformers. There is also a storage area in El Tebbin which includes about 20 tons of pure PCBs (concentration of more than 5000 ppm) belonging to the Ministry of Industry. The sampling and testing of oil were not comprehensive, representative and cross-contamination was not considered. For verification, extended sampling and testing is required. Data on the situation in the private sector are lacking. It is concluded that the available inventory data are by far insufficient to develop a PCB clean-up campaign. During project implementation, a detailed survey will be conducted in Component 2 of the project, on the sites agreed upon with the Ministry of Electricity and Energy and the Ministry of Trade and Industry.

80. Nevertheless, none of the POPs sites were subject to an environmental assessment. In accordance with Annex 6 of the national EIA guidelines of 2009, pesticides manufacturing and formulation plants as well as plants engaged in pesticides packaging and mixing processes as well as hazardous wastes treatment or disposal facilities such as PCBs are placed in Category "C" – thereby requiring an environmental impact assessment. The following EIA procedures will be followed in agreement with the EIA department.

(a) Soon after effectiveness, the PMU will issue for each of the components of Obsolete Pesticides (OPs) and PCBs, a tender under a two stage International Competitive Bidding (ICB) procedure for contracting the services of an international operator to be responsible for survey of the sites containing PCB and OPs, the collection, transport, and temporary collection center and treatment of OPs and PCBs respectively[45]. The bidder will describe (a) the sites which include the OPs or PCBs; (b) the methods of collection; (c) the type of transport; (d) the type of the intermediate collection center (ICC) (if any); and, (e) the technologies to be used for the treatment and disposal of the POs and PCBs.

[44] NIP (2005), the JICA report (2008), the CSD report (2010)
[45] See the a description of the two stage bidding procedure in http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/PROCUREMENT/0,,contentMDK:20062796~pagePK:84269~piPK:84286~theSitePK:84266,00.html

(b) The operator which is the successful bidder will be required in its contract to prepare the ESIA on the basis of the survey of a group of sites that it will choose for treatment and disposal and the identification of the intermediate collection center if any after receiving approval from the steering committee and before starting the collection of the POs or PCBs. Each ESIA for a site or group of sites of OPs and PCBs, will include the preparation of the risk assessment and emergency plan in accordance with the EIA guidelines for Category "C" projects including consultation and disclosure. The ESIA will be approved by the EIA department of EEAA and the World Bank.

D. Preliminary hazardous waste and risk assessment

81. During project preparation, a preliminary hazardous waste and risk assessment was conducted by the Consultant Tauw, on two potential sites that could be candidate by the operator for Intermediate Collection Center (ICC) for POPs. An ICC should provide safe and sound storage of the repacked POPs prior to their destruction. These two sites are:

(a) The Nasreya Hazardous Waste Center

(b) The El Saff Storage site of Obsolete Pesticides

During the World Bank mission for the discussion and consultation on the SDR, which took place from June 10-14, 2012, it was determined that El Nasreya Hazardous Waste Center could be considered as a potential ICC subject to the review by the international operator which will be tasked with the responsibility of conducting ESIAs in accordance with the national regulations and following measures acceptable to the Bank. However, the El Saff storage site will not be considered as an ICC as the facility is situated within a densely populated area and could threaten the health of the local people and their livestock. In addition, this storage is closed and does not receive any more pesticides. However, the rehabilitation of the storage site (which will be financed under Component 3 of the project) will be limited to mitigating measures just to prevent further degradation, and as outlined below but will further be defined during project implementation after a detailed risk assessment will be undertaken.

El Nasreya Hazardous Waste Center

82. NHCW is situated in Al Nasreya (between 50-60 kilometers south east of Burg El-Arab district, in the Alexandria Governorate). The Center includes a hazardous landfill with a capacity of 40,000 tons and a surface of 14,000 m^2, a physical-chemical treatment plant for inorganic liquid hazardous waste, a solidification unit, and storage units for organic and inorganic wastes. Two small incinerators were recently installed and are used for now as a pilot operation for the disposal of solid organic hazardous wastes (primarily pharmaceutical wastes). The site is totally fenced off. Illegal housing and a mosque are situated outside the fence and along the road adjacent to the site. These were built after the establishment of the Center. Egyptian law forbids the displacement of any occupants and especially the displacement of a mosque. As stated in para 80 above, the operator will have a choice to select an ICC which may not be Nasreya Center. The Consultant report has recommended widening the road in case Nasreya will be selected as an ICC. Subsequent discussions with EEAA concluded that the project would not finance any extension or widening of roads.

83. A brief summary of the preliminary hazardous waste and risk assessment is provided in Annex 5 with recommendations of the appropriate mitigating measures required. The objective was

to assess the threat posed by the site to human health and the environment, to eliminate from further consideration those sites that pose no significant threat to public health or the environment; determine if there is any potential need for removal action; set priorities for further investigation; and gather existing data to facilitate later evaluation of the release. Such preliminary assessments are included in the Tauw Consultant report and will be shared with the bidders, but could be further elaborated during the preparation of detailed ESIA by the operator (s).

84. The PMU will also share with the operator an EIA report on the site selection of Inorganic Industrial Hazardous Waste Landfill for Alexandria, which was prepared in 2001 by the Institute of Graduate Studies and Research of Alexandria University using the EIA guidelines of 1996. The landfill facility was co-financed by the Government of Finland at a level of LE 20 million and is now operational. The report examined 6 sites and carried a detailed base line survey and impact analysis as well as developed the general mitigation and monitoring measures that were not site-specific. A public hearing was organized concerning the choice of the sites and the selection was made to construct the hazardous waste center in El Nasreya. The EIA report for the site selection was considered to be the EIA report for the NHWC. However, no specific Environment Management Plan (EMP) was prepared for this Center. Another EIA report was prepared in 2011 by the same Institute for the establishment of hazardous waste of mercury fluorescent lamps which is financed by the Korean Government.

85. The EIA report determined that the project will not have a negative impact of the environment although the report is silent on the cumulative impacts resulting from the hazardous landfill site and physical and chemical treatment plant. The EIA report prepared an EMP in which the monitoring plan did not include any cost as well a very general institutional plan. The EIA report requires that a social assessment be conducted on a yearly basis without providing any justification on the reason for undertaking such an assessment.

The El Saff Storage Site of Obsolete Pesticides (OPs)

86. El Saff area lies in the eastern side of the River Nile, between El Saff town in the south and El-Tebbin in the north. It belongs to Gizah Governorate. The El Saff canal crosses the area of study, and has a length of about 52 km. The storage unit is located inside the granary (170 m x 90 m) of the Credit Development Bank, at a limited locality called Zerzarh.

87. The following corrective actions (among others to be identified during the full-scale health risk assessment) were recommended by Tauw:

(a) POPs pesticides should be stored safely, preferably in dedicated areas away from other materials and wastes.
(b) Storage sites should be re-designed to prevent the release of POPs to the environment by any route.
(c) Some basic principles of safe storage of wastes consisting of, or contaminated with, POPs are as follows:

i. Storage rooms, buildings and containers should be located and maintained in conditions that will minimize volatilization, including cool temperatures, reflective roofs and sidings, as well as the construction of a shaded location, etc.
ii. A dedicated building and containers should be in good condition and made of hard plastic or metal, and with wood, fiberboard, drywall, plaster or insulation.
iii. Storage sites should have fire alarm systems.
iv. Liquid wastes should be placed in containment trays or a curbed, leak proof area.

v. Contaminated solids should be stored in sealed containers such as barrels or pails, steel waste containers or in specially constructed trays or containers.
vi. A complete inventory of wastes in the storage site should be undertaken and kept up to date as waste is added or disposed of.
vii. The outside of the storage site should be labeled as a hazard.
viii. The site should be subjected to routine inspection for leaks, degradation of container materials, vandalism, integrity of fire alarms and fire suppression systems as well as general status of the site.
ix. Emergency response plans should be in place for all POPs in use, in storage, and in transport.

E. Existing Guidelines on Hazardous Waste

88. EEAA has developed a series of guidelines in English and Arabic with the assistance of USAID-financed Egypt Environmental Policy Program (EEPP). They include guidelines on hazardous waste systems, licensing requirements, permitting and regulations, classification and coding, on site storage and handling, transportation treatment and disposal, and recycling. These guidelines were developed to comply with the Law 4 of 1994. Now that Law 4 was amended with Law 9 of 2009 and the executive regulations of 2009 are in force, these guidelines should be updated and replaced by specific guidelines to be developed for obsolete pesticides and PCBs and based on the (a) the World Bank Pollution Prevention and Abatement Handbook[46] as required in the national EIA guidelines of 2009, (b) The World Bank Pest Management Tools and Methods[47] for Integrated Pest Management as well as the IFC health and Safety guidelines[48] on pesticides. Also, the Environment Management Tool Kit for obsolete pesticides prepared by the FAO[49] would provide the necessary guidelines for the selection, management of collection centres as well as the rapid environment assessment and the transport requirement for obsolete pesticides. On the other hand, the training manual[50] for the preparation of the National Plan for PCB contaminated-equipment, could serve as an important guide for developing the sector guidelines and TORs for PCB disposal and treatment.

F. Environmental Approvals

89. An environmental permit for construction is not explicitly regulated by Law 4 of 1994[51]. A letter of approval for Form B or Form A is considered by the licensing authority as an environmental permit for construction.

90. The approval letter has no specific time validity and such permit is always valid but, can be rescinded only if the operator does not proceed with construction within time limits fixed in the license.

[46] www.miga.org/documents/PesticidesFormulation.pdf - 2006-01-10
[47] http://go.worldbank.org/AE4NQV7FA0, and http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTARD/EXTPESTMGMT/0,,contentMDK:20634165~menuPK:1608601~pagePK:64168445~piPK:64168309~theSitePK:584320,00.html
[48] http://search.worldbank.org/all?qterm=IFC+health+and+Safety+Guidelines&intitle=&as_sitesearch=&as_filetype=&os=100
[49] FAO Pesticides Disposal Series
[50] Training Manual for the preparation of a national Environmentally Sound Management plan for PCBs and PCB-contaminated equipment in the framework of the implementation of the Basel Convention March 2003
[51] Industrial Pollution Control Policies in Egypt, EcoConCerv.DHV, and FCG, July 2010

91. Law 4, however, explicitly concerns the permit to operate. It states that "All industries that need an operation permit under Law 21 of 1958 (on industry organization and promotion) or the Law 55 of 1977 (concerning the installation and operation of thermal machines and boilers) need to apply for an environmental license and have to carry out an Environmental Impact Assessment (EIA) prior to operation or modification." The environmental license to operate is in fact the same letter of approval that EEEA issues after the EIA or Form B is approved. Such a letter consists of: (a) general statement requesting that the proponent comply with the content of Form B without specifying the mitigating and monitoring measures that are included in the ESMP and (b) specific requirements related to compliance with standards and appropriate installation to control pollution.

G. Compliance Monitoring

92. The Central Department for Environmental Inspection & Environmental Compliance (CDEIEC), the EIA Department of EEAA, and the relevant RBO are collectively responsible for monitoring the compliance on the EIA reports or Form B. The General Directorate for Environmental Compliance (GDEC) is responsible for reviewing, and following-up on compliance actions plans (CAP) (see Paragraph 97 below), whereas the General Directorate for Environmental Inspection (GDEI) is responsible for inspecting polluting enterprises, reviewing and verifying the environmental register, imposing fines and taking non-compliant industries to court. CDEIEC has been supported in terms of capacity building by several donors' projects, such as the Egyptian Environmental Policy Program (EEPP), EPAP I, and EPAP II. CDEIEC has also published guidelines for an environment register, as well as guidelines[52] for hazardous waste, medical waste (autoclaving and incineration). In the same context, EPAP II has prepared a very comprehensive hazardous waste inspection manual in English and Arabic and has provided on the job training to CDEIEC and the RBOs on the use of this inspection manual. It is expected that during project implementation, the PCB and OP manual will be based on the inspection manual as well as on the FAO, World Bank and IFC guidelines as stated above.

93. To facilitate the process of monitoring the EIA Department, at the end of each year, the CDEIEC and RBOs will be provided with a list of new establishments for which letters of approval for EIA reports or Forms B have been provided. Such a list will enable the GDEI and the respective RBO to prepare their compliance and inspection plans. Furthermore, copies of EEAA letters of approval will be routinely shared with the Competent Administrative Authorities (CAA) as well with the national press to improve disclosure to other interested parties.

94. Essentially, the CDEIEC and particularly GDEI will take the lead and coordinates with others to prevent any redundancy or duplication with the RBOs. The GDEI sets inspection policies and is responsible for inspection planning, coordination, and has the authority to inspect any industrial establishments in Egypt – with or without being accompanied by the relevant RBO. GDEI is usually mobilized for large polluters or in response to a major public outcry about environmental violations, mostly from large industries which may be publicly owned and operated.

95. Annual and quarterly inspection plans are prepared by the CDEIEC. Annual inspection plans are also prepared at the RBO and sent to CDEIEC for review, modification, and approval so as to maximize synergy and avoid duplications.

96. There are three monitoring instruments for environmental inspections: (a) online monitoring; (b) self-monitoring; and (c) the compliance action plan (CAP):

[52] http://www.eeaa.gov.eg/arabic/main/inspection.asp

(a) ***An online monitoring system*** in real-time was established in 2006 in the cement industry[53]. Dust emissions from 16 cement companies are being continuously monitored at an interval of 30 minutes as these companies contribute to a large share of dust emissions especially in Greater Cairo. The online monitoring has been effective in enabling the cement companies to comply with the national standards and to improve their performance. An online monitoring system was also planned to be installed in 2010 in the fertilizer production facilities, however, such a system has yet to be implemented and is likely to be delayed as a result of the post-revolution circumstances that slowed down the production and working conditions in these industries. EEAA also plans to introduce online monitoring in the power sector, and studies were also initiated for this purpose.

(b) ***Self-Monitoring*** is required under Law 4 of 1994 and reiterated in Law 9 of 2009. The instrument for self-monitoring is the environmental register that should be prepared by each establishment and kept for at least 10 years, as stipulated by Article 22 (1) of Law 9 of 2009. The format and content[54] of the environmental register were revised in the Annex 3 of the Executive Regulations of 2009 so as to include also a requirement for a yearly estimation of pollution loads for air, drainage and waste (see Annex 8). During periodic inspection, the GDEI reviews the environmental register and in case of lack of compliance and/or false reporting by the establishment, EEAA could take the following actions[55]:

i. In case the violation represents an imminent danger to the population, EEAA requests the Governor or the Competent Administrative Authority (CAA) to close the establishment until the imminent danger is removed.
ii. In case the violation is not an imminent danger, but requires more time to be rectified, the polluting enterprise requests, and is usually granted another sixty days to achieve compliance. In case the violation still persists after re-inspection, EEAA can file a suit for compensation damage, close the unit that is polluting or close the establishment. EEAA also sends the file to the prosecutor general for a legal verdict. In accordance with the administrative law, any of the two parties could require reconciliation before the prosecutor general would pursue the court case.
iii. In case the polluting enterprise agrees to the reconciliation, the proponent pays a fine and is asked by the CDEEC to prepare a compliance action plan for depollution over a period of time (CAP, see below) which is negotiated between the two parties and is formally approved. Once approved, the court case is suspended and the CAP is monitored regularly by CDEEC. In case of non-compliance with the plan, the court case is resumed and a verdict is pronounced by a judge.

(c) ***The Compliance Action Plan (CAP)*** was piloted in EPAP I, made fully operational in EPAP II and now extended to polluting enterprises that are breaching Article 22 (1) of Law 9 of 2009. The CAP is considered by EEAA as an alternative for legal procedures and heavy fines for enterprises that show commitment to control pollution in their establishments. EPAP II has developed detailed CAP guidelines[56] that were used for the 24 sub-projects that under implementation. In addition, 82 CAPs were prepared and approved in 2010[57] by GDEC for enterprises that are not financed by EPAP II.

97. There are still some deficiencies regarding the environmental register and the CAPs:

[53] MSEA Report , 2007, p. 42-45).
[54] http://www.eeaa.gov.eg/arabic/main/inspection.asp
[55] Industrial Pollution Control Policies in Egypt, EcoConCerv.DHV, and FCG, July 2010
[56] S. Massoud: Practical Compliance Action Plan Guidelines, EPAP II
[57] MSEA Annual Report of 2010: www.eeaa.gov.eg

(a) The environmental register does not include yet an estimate of the pollution loads as required now in Law 9 of 2009, because EEAA did not establish the methodology for estimating the carrying capacity over an air shed as required by the law and the revised executive regulations of 2009 do not contain a table of permissible values of loads and qualitative loads of pollutants to the productive units in different industries.

(b) The content of the CAP used by EPAP II is different from the one required by GDEC. The CAP is more elaborate in EPAP II. It provides a description of the project, an estimate of emissions and technologies, as well as a plan of investments with detailed schedule. The CAP prepared by polluting enterprises (other than those financed under EPAP II) is limited to a table which reflects the necessary investments with the technology used, their costs, and a detailed implementation schedule. Such difference between the content of the two CAPs is expected since the CAP is financed from EPAP II funds and is a requirement for the polluting enterprise to obtain a combination of loan and grant to control pollution[58]. On the other hand, the CAP requested by GDEC is self- financed by the polluting enterprise and therefore is limited to the preparation of a table as the environment register completes the CAP content in terms of project description and emissions measurements. These are also issues related to expertise and sufficient resources for each polluting establishment to prepare a CAP that is costly especially for heavy industries.

(c) At present, an installation or enterprise that manufactures, stores, packages, or imports pesticides does not report the amount of POPs in the environmental register. Also transformers or capacitors contaminated with PCBs are also not reported during inspection. **As a gap-filling measure, it was agreed that the environmental register will include reporting on POPs and PCBs after that the CDEIEC staff received from the Project appropriate training.** The environmental register will be prepared by the respective establishment that would benefit from the POPs project, on the basis of the risk assessment report that will be financed under Component 3 of the project. The PMU will ensure that such an establishment prepare its environmental register and will submit it for GDEC approval as a requirement for financing the treatment and disposal of POPs on their sites.

H. Track Record of Inspections

98. Table 3 summarizes the number of inspections conducted by CDEEC and the RBO during the year of 2010. Fines from environmental violations are also presented in Table 4 and amounted to L.E. 45.6 million (US$ 7.8 million) for 2010. These fines are included as revenues in the Environmental Protection Fund's budget.

Table 3: The Number of Inspections carried out by the GDEI and the RBOs during 2010[59]

[58] EPAP II provides for each qualified polluting enterprise. through the National Bank of Egypt a loan in the amount of 80% of the pollution control investments and 20% grant on condition that EEAA certify that the polluting enterprise has installed the equipment and reduced pollution to acceptable levels

[59] EPAP II Aide Memoire, January 2011

Items	RBOs	Central Inspection Unit
	1/1/10 -31/12/10	1/1/10-31/12/10
Inspected establishments	2981	1315
Complying establishments	576	326
Requests to comply	141	18
Requests for 60 days grace period	-	-
Referred for possible prosecution	1914	971
Establishments for which court decision was issued*	151	-

99. In addition the fines collected from industrial facilities and other sources during the year 2010 amounted to L.E. 45.6 million (US$7.8 million equivalent) and were deposited in the Environmental Protection Fund (EPF) account by the end of 2010 as presented in Table 4.

Table 4: Fines collected and deposited in EPF account by the end of 2010[60]

Month	Collected Fines, LE	Month	Collected Fines, LE
January	26,934,529	July	1,816,865
February	4,010,306	August	2,797,313
March	1,208,775	September	951,584
April	979,266	October	907,635
May	2,023,662	November	1,376,653
June	1,504,294	December	1,116,946
Total		45,627,828	

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I. Local Mechanism for Redressing Grievances

100. A positive and unprecedented aspect of the Environment Protection Law 4 of 1994 is that it allows any citizen and/or any organization to report and challenge at court any violator of this law including sector ministries and governorates. In the case of EIA reviews, the revised environmental regulations have established the following appeal system: The project proponent has the right to

[60] EEAA legal department

appeal in writing on the results of the EIA[61] within 30 days from the date of notification. A Permanent Review Committee is established by decree from the Minister in Charge of Environmental Affairs and consists of a Counselor from the State Council, an EEAA representative, a representative from the Competent Administrative Authority (CAA), three independent experts to be nominated by the CEO of EEAA and a representative of the proponent. The proponent submits all the necessary technical and legal documents to the Committee for their review. The Permanent Review Committee is convened by the CEO of EEAA, within 15 days[62] of receipt of all the documents from the proponent who is allowed to attend the meeting, but will not have the right to vote. A decision is reached by a simple majority among committee members. The decision reached by the Committee is final. In case the decision is further challenged by the proponent, it is referred to the administrative court for a verdict

VII. Strength and Weaknesses of the Institutional Arrangements.

A. Strengths

101. **New Expectations after the Revolution**. Since the last preparation of the Safeguards Diagnostic Review for EPAP II, there has been substantial change in the socio-economic conditions of Egypt as a result of its Revolution in January 2011 which has shaken Egyptian society to its deepest roots. Even before the revolution, there has been also substantial improvement of the legislation by enacting Law 9 of 2009 to amend Law 4 of 1994, establishing new Executive Regulations, providing substantive modifications in EIA guidelines and reorganizing and expanding new departments (in particular, strengthening the monitoring and enforcement functions).

102. Above all, the call for democracy, equity and justice ranks high among the virtues of Egyptian society. What was hidden before by the old regime in terms of poor environmental conditions, poor health and lack of hygiene is being surfaced in the press, and the media and shown on TV and could not be tolerated once the socio-economic situation will improve. The role of civil society is becoming vibrant and influential. The media and the press have been more forceful for pressing the Government to improve the environmental conditions of Egypt's citizens and especially for the poor and disadvantaged. NGOs are now more listened to by the Government and are being active in the field. Public opinion is now beginning to influence the policy formulation process and to help create a significant responsible behavioral change towards the environment. One major outcome is that despite the Government tight economic situation, the Ministry of Planning and International Cooperation has agreed to allocate counterpart funds for co-financing the POPs project in the amount of US$ 15.0 million over 5 years stressing the need to address the impacts generated by hazardous chemicals and wastes.

103. **Revamping of the EIA regulations**. The environmental Laws 4 and 9 and their executive regulations are considered above all other laws regarding the environmental aspects, and therefore provide some transparency on how establishments should implement the regulations[63]. Law 9 of 2009 has now given the responsibility to EEAA to regulate emission loads in addition to emission concentrations, therefore aiming a policy to control and reduce pollution for each establishment (Article 5). It also requires that national consultants providing environmental services be certified (Article 13, 1). It requires that an EIA be prepared prior to commencement of implementation of the project (Article 19, 1); emphasize the need for every establishment to maintain an environmental register reflecting the pollution loads (Article 22, 1); prohibit the burning of municipal waste and solid waste (Article 37, 2); and requires that any polluter compensate for the environmental damage

[61] Law 4/1994: Article 21 and Article 14 of the Executive Regulations (ERs).
[62] Law 4/1994: Article 21 and Articles 15, 16 of the ERs
[63] Industrial Pollution Control in Egypt, Environment Strengthening of the EEAA to improve its environmental policies formulation and environment management capabilities, EcoConServ, DHV and Finish Consulting Group, November 2009,

(Article 1, Section 28, 1). Similarly, the Executive Regulations of Law 9 provided additional requirements for the EIA. The screening of projects is more transparent with the expansion of the positive lists with thresholds. Forms A and B were revised and expanded; the EMP consists of three components with cost associated for mitigating, monitoring and institutional measures; public hearing is mandatory for projects in Category "C" requiring an EIA report; and disclosure of Form B and the Executive Summary on the website of the Ministry is also required. All modifications have contributed to the improvement of the effectiveness of the EIA system. This led to an increase of applications from proponent to seek approval of Form B or the EIA report as a permit to obtain a license from the CAA to construct and operate.

104. **The expansion/reorganization of the EEAA Departments** is one of the indications that the Ministry of State of the Environment is committed to the improvement of the environment. The Central Inspection Department has been reorganized into a Sector Department with specific functions and responsibilities whereas it consists of two General Directorates. The EEAA has also established a new Sector Department for the Protection and Improvement of Industrial Environmental and Energy to support the industry in improving their environmental performance on a voluntary basis. These two departments were understaffed. Now they are functional and working. Furthermore, there has been a constructive coordination between the three sector departments namely environment management, industrial environment and environmental inspection and environmental compliance on agreeing on projects that would be eligible for EPAP II or PPSI financing. Such coordination is expected to be replicated in the POPs projects as the three departments will be involved in project implementation.

105. **Establishment of Environment Units in Sector Ministries.** The sector ministries that will be participating in the POPs project have a unit on environment management issues as well as the technical expertise to address the hazardous issues within their competencies. The POPs project will enable them to improve their technical and management capacity in the field of PCB management or obsolete pesticides in a coordinated manner. The RBOs have also been strengthened with provision of technical assistance and support. Their numbers have increased from 8 to 11, covering all the 26 governorates of Egypt, and three of the RBOs (Cairo, Alexandria and Suez) will be strengthened through technical assistance and training on technologies for handling and disposing POPs as well on monitoring and enforcement.

B. Weaknesses

106. Despite the improvement in the legal and institutional framework, there are a number of challenges that should be addressed**.** Although they cannot all be resolved through the POPs project, there is a clear indication that the decision makers are fully aware of them, but would like to resolve them on a gradual basis, taking into consideration the current post revolution economic and social constraints prevailing in Egypt.

(a) **Lack of knowledge**. The results of the preliminary stakeholder analysis[64] carried out during the preparation of the project showed a lack of technical knowledge on POPs and PCB, a weak technical and managerial capacity to solve the problems of PCB and POPs due to the lack of experience and insufficient training, and a weak enforcement of the law. Groups at risk are not protected. Component 2 of the project will include a program to raise awareness and strengthen its position in political decision making in Egypt in order to convince stakeholders that there is an urgent need to solve POPs problems and implement the Stockholm Convention.

[64] Tauw Group, October 2011

(b) **Limited Staff**. One of the major constraints is the lack of staff related to the Directorate General for EIA, and the Directorate General for Hazardous Waste and Substances. Both directorates are severely understaffed and are working in under duress. The EIA department lacks computer facilities to process their work. The EIA reports and Form B are processed manually and are still stored in a storage room and on shelves without any retrieval system. Although the EIA department requires an electronic copy, there is no database or electronic filing system of all these documents. Also, the substances and hazardous waste general directorate staff is limited to 5 technical staff and cannot implement all the requirements of the Stockholm Convention. Together with the sector ministries (health, agriculture, industry and petroleum) they lack training on the secure storage of pesticides, developing and implementing sustainable strategies for future pesticides management, workshops with the basics of sound PCB management, development of knowledge, increased awareness of stakeholders and management of the requirements of the Stockholm, Rotterdam and Basel Conventions. A comprehensive training program (both technical and managerial) is included in Component 2 of the Project. It includes sound management of PCB and pesticides, secure storage of pesticides, best environment practice and best available technology for treatment and disposal of POPs and PCBs.

(c) **Limited Inter-Ministerial Cooperation**. Given the number of ministries that are involved in the POPs projects, the relation of these ministries is complex and unclear. A stakeholder analysis was conducted during the preparation of the project and it was determined that the multitude of responsibilities necessitates a high degree of inter-agency coordination and cooperation[65] for effective management of this project; yet, with the exception of the Agriculture Pesticide Committee, few formal mechanisms for such coordination exists.

(d) In order to strengthen such collaboration, the overall project coordination would be the responsibility of the **GEF National Steering Committee (GNSC)**, which was established some years ago to oversee all GEF projects in Egypt. For the purposes of the project, the GNSC would be strengthened by the addition of policy makers from the cooperating ministries, as well as the National Project Director and Project Manager. The GNSC would meet quarterly to review project progress, approve annual work programs and budgets, and to resolve any inter-ministerial disputes. A sub-committee of the GNSC, the **POPs Project Sub-Committee (PPSC),** would also be formed. It would be chaired by the National Project Director and would have working level representatives of the Cooperating Ministries, the Project Director and Project Manager. The PPSC would meet monthly to oversee day-to-day project implementation matters and, approve the selection of the sub-projects and oversee the implementation of the different project components. At the operational level, there will be a Project Management Unit (PMU) at EEAA and two Project Coordination Units (PMU) one at the Ministry of Agriculture and Land Reclamation and the other at the Ministry of Electricity and Energy. The PMUs will work together for the selection, design and implementation of the sub-projects that will be financed. They will also receive training and capacity building in their respective fields.

(e) **Insufficient Public Participation and Awareness Raising on POPs and PCBs**. These have not been given sufficient attention by the government with the exception of the awareness activities implemented by a dedicated **NGO,** Day Hospital Institute for Development and Rehabilitation**.** Yet, public participation and involvement of the project affected people (principally the farmers and workers handling pesticides) are essential in every POPs project. Until now, EEAA does not have a communications strategy on hazardous waste, and its

[65] Tauw Group, October 2011

impacts on health to convince and strengthen its position in political decision making in Egypt in order to convince stakeholders that there is an urgent need to solve POPs problems. Stakeholder participation and awareness raising are expected to increase at two levels: at the level of the EIA system as all sub-projects to be selected will be subject to an EIA for which public consultation and disclosure are required by the national EIA system; and at the level of the implementation of components as the Project will assist in developing a long-term Pesticide Management Strategy using a participatory approach which, *inter alia*, will include a communications strategy. The Project will also finance a dedicated sub-component on Public Awareness and Participation with the objective to develop and maintain a system for informing stakeholders of the nature and dangers of POPs (and other hazardous substances), and for inviting public participation in decision-making related to such substances.

(f) **Shortcomings in monitoring and enforcement.** Despite the significant improvement in monitoring and enforcement since the last SDR of 2005, there are still weaknesses inherent into the system itself. This is no specific or written strategy on environmental compliance and enforcement. PCBs and POPs are not being inspected, though a private sector trader was sentenced for 5 years in jail because he was transporting PCB-contaminated oil from the fertilizer plant Kima in Aswan to be sold in the market[66]. The preparation of annual inspection plans appears in some instances random and based on certain aspects such as risks from large industries, complaints from citizens, magnitude of violation from large industries[67]. The POPs Project will replicate the system of coordination successfully implemented in EPAP II whereby the PMU of EPAP II meet regularly with the cooperation between GDEIEC, the EIA Department to plan ahead the preparation and review of the EIA as well as the inspection and compliance activities. EPAP II subprojects classified as Category "B" projects requiring the preparation of form B. EPAP II staff are fully familiar with the content of CAP which have similar requirements as Category "C" projects. The PMU will certainly benefit from the experience of EPAP II staff in meeting the requirements of the national EIA system in Egypt. Furthermore, the hazardous waste management strategy that will be developed during the project will include specific actions for reinforcing the application of the law regarding hazardous waste and in particular the OPs and PCBs.

VIII. GAP-FILLING MEASURES AGREED WITH EEAA TO ACHIEVE THE EQUIVALENCE AND ACCEPTABILITY

107. The following actions will be taken by EEAA to fill in the gaps and sustain the equivalence and acceptability during the implementation of the POPs Project:

Gaps	Actions to be taken	Implementation Steps	By Whom	By When
Weak coordination among EEAA departments involved in POPs	*1. Include in the Operational Manual of the Project a description of the roles, responsibilities, coordinating mechanism, monitoring and follow up for establishing an inter-sectoral system within EEAA for coordinating the EIA process with the compliance/inspection process*	*- Description in the Operational Manual of the roles and responsibilities of the PMU, Environmental Management Department, CDEIEC and others related to the EIA process and the compliance / inspection of Obsolete Pesticides and PCBs*	*-PMU Manager/ Consultant*	*April 2014*

[66] CDEI private communication, May 2012

[67] Industrial Pollution Control in Egypt, Environment Strengthening of the EEAA to improve its environmental policies formulation and environment management capabilities, EcoConServ, DHV and Finish Consulting Group, November 2009

		- Official decree issued by EEAA on the roles, responsibilities and coordination mechanisms	*-PMU Manager; CEO of EEAA*	*June 2014*
Insufficient Compliance with the requirements of the Stockholm Conventions	*2. Complete the legal and regulatory frame work for POPs management in compliance with the Stockholm Convention*	*- Prepare TORs for a comprehensive study to harmonize existing POPs-related legislation with requirements of the Stockholm Convention as described in Annex 15 to this SDR* *- Contract a legal consultant* *- Draft legal regulations for submissions to the Legal Council of the Government*	*PMU Manager*	*May 2014* *.* *December 2015*
Lack of procedural guidelines for POP projects	*3. Develop general EIA procedural guidelines to include: (a) specific criteria, processes and standards to be followed in the preparation and review of EIA for POPs sub-projects;(b) detailed TOR for a comprehensive EIA report for POPs including hazardous risk assessment and (c) guidelines for environmental reviewers*	*- Review good international Practices including FAO and WHO* *- Adapt sector guidelines to Egyptian conditions on pesticides, obsolete pesticides and PCB-contaminated equipment* *- Prepare TORs for POPs and checklist for reviewing EIA reports in general* *- Approve and publish the guidelines, TORs and checklist on the website of EEAA*	*-PMU* *-PMU* *EIA Department in EEAA* *EEAA Board of Directors*	*June 2014* *July 2014* *October 2014* *September 2014*
Insufficient knowledge of POPs and PCBs and contract management	*4. Develop and provide training to the EEAA staff, RBOs, sector ministries and NGOs on the use and applications of (a) the specific guidelines and EIA TORs for POPs including PCBs; (b) self- monitoring and inspection of POPs sites including PCB-contaminated sites. Organize awareness campaigns with local NGOs targeting the public and particularly the Youth-Develop and provide training to PMU on monitoring and supervision of contracts of PCBs operators*	*- Design training program and develop training materials* *- Organize and conduct training on TOR and monitoring and enforcement for EEAA staff and RBO and in particular the staff that will be assigned to monitor the EMSP and Forms B* *- Organize and conduct public awareness campaigns in collaboration with local NGOs involved in the POPs* *- Organize and conduct training on contract management and award as well as monitoring and supervision of contracts*	*- PMU* *-PMU* *EEAA Department of Hazardous Waste Management* *PMU*	*October 2014* *Bi annually as of March 2015* *Annually as of June 2015* *January 2015*
Weak enforcement for PCBs	*5. Ensure that existing obsolete pesticides and PCB contaminated sites maintain an environment register to be inspected annually by CDEIEC using the format in Annex 3 of the Executive Regulations of Law 9 of 2009*	*-Update the content of the environmental register by including questions on OPs and PCBs* *- Conduct semiannual inspections based on the EIA and the environmental register for the major collection center*	*-PMU* *RBO and GDEI*	*April 2015* *July 2015 and semiannually thereafter*

		sites for which EIAs and Form B were prepared		
Lack of assessment of the quality of the ESIA reports	*6. Carry out every two years, a review of the quality of EIA reports and Forms B and introduce corrective measures for sustaining the improved EIA process*	*- TORs for the review of the EIA reports prepared and consultant selected* *- Report on the quality of the EIA reports and Form B*	*PMU* *PMU*	*May 2015* *July 2015, and January 2017*

IX. MONITORING AND REPORTING

108. As part of its reporting to the World Bank, the PMU will prepare the following report to be incorporated as appropriate in the annual progress report of the Project with a focus on the following key elements:

(a) Implementation status of the above gap-filling measures;

(b) Progress made in the implementation of the environment and social management plan to be part of Form 'B' for sites considered to be Intermediate Collection Centers of Obsolete Pesticides and PCBs;

(c) Status report on:

i. Disclosure of EIA summary reports and Forms 'B' to be prepared for Intermediate Collection Centers of obsolete pesticides and PCBs.

ii. Environment registers for Intermediate Collection Centers of Obsolete Pesticides and PCBs.

iii. Number of inspections carried out by CDEIEC on hazardous waste projects.

(d) The reports on quality of the EIA reports and Forms B pertaining to hazardous waste projects and in particular those related to pesticides and PCBs.

X. ROLES AND RESPONSIBILITIES OF EEAA AND THE WORLD BANK

109. EEAA will be responsible for the following actions:

(a) Satisfactory implementation of gap filling actions set out above to achieve and sustain equivalency and acceptability;

(b) Review and approval of the EIA reports related to the Intermediate Collection Centers and Form B for site specific areas for treatment and disposal of Obsolete Pesticides and PCBs;

(c) Disclosure of the Executive Summary of the EIA reports related to hazardous waste projects and in particular those related to Obsolete Pesticides and PCBs; and

(d) Performance of annual spot checks and audits of a sample subprojects financed the POPs project for their compliance with the relevant Egyptian Laws and Regulations, and with

health and safety of the workers and the residents living nearby the storage sites and imposition of corrective actions to achieve compliance.

110. The World Bank is responsible for the following actions:

(a) Monitor the implementation of the gap filling measures that are applicable to the types of subprojects financed under the POPs project;

(b) Review during the first 18 months of project implementation the EIA reports and Form B related to obsolete pesticides and PCBs;

(c) Review the reports on inspection or compliance for all the subprojects to be financed by the Project;

(d) Bi-annual supervision of project implementation, including field visits to subprojects under construction or commissioning or those completed; and

(e) Agreement on remedial actions to be taken by EEAA to achieve compliance and sustain equivalence and acceptability of Egyptian EIA system for the Project.

XI. PUBLIC CONSULTATION AND DISCLOSURE

111. A public consultation meeting was held on June 13, 2012 and attended by 64 representatives from ministries (Environment, Energy and Electricity, Industry, International Cooperation), research institutes and universities, 3 media representatives as well as 16 NGOs. The workshop was conducted in Arabic. The meeting was chaired by the acting Chief Executive Officer of the Egyptian Environment Affairs Agency (EEAA). A list of attendees is attached in Annex 5.

	Relevant section in the SDR	**Issues Raised**	**Remarks /Responses**
1	The SDR report	Additional time is required to review the report.	The first draft of the SDR was already posted on the EEAA website. A two week period will be further provided to communicate the remarks electronically.
2	Use of Consultants	The project budget will be totally allocated to technical assistance and no funds would be provided for treatment and disposal of POPs.	The GEF budget of US$ 8.1 million includes a technical assistance component of about US$ 2.2 million (about 10 percent of the project cost) and the balance will be for training, treatment, and disposal of PCBs
3	Equivalence	What are the major difference between the Egyptian EIA system and the Bank environment assessment policy?	The major differences were: (i) on the analysis of alternatives which, for the Egyptian system, is limited to site and technical alternatives, instead of alternatives on inputs, outputs,

			demand and cost effectiveness; (ii) the content of the Environment and Social Management Plan which, under the national EIA system, weighs heavily toward the environment impacts and not social impacts; and, (iii) a lack of disclosure of the executive summary as required in the national EIA guidelines of 2009
4	Inclusion of Ministry of Manpower	The report does not include the Ministry of Manpower as one of the ministries involved in work safety and in occupational health related to POPs and PCBs. Also the presentation did not mention the role of the Ministry of Health.	The revised report will include the Ministry of Manpower. The role and responsibilities of the Ministry of Health, particularly the role of the General Directorate of Occupational Health.
5	Storage issues of PCB-contaminated oil at the Ministry of Electricity and Energy	In anticipation of the participation in the POPs project, the Ministry of Electricity and Energy issued a circular prohibiting all power plants and substations to dispose of the used oil contaminated with PCBs. This has created a serious storage problem that can only be solved unless the project implementation is expedited.	Best efforts will be made to complete the appraisal of the project before August 2012 and consideration will be given for revising the time schedule of implementation to address the storage issue during the first year
6	El Saff storage of pesticides	Proposal to purchase an incinerator for the disposal of the pesticides in El Saff.	The purchase of an incinerator cannot be justified from technical, financial, social and environmental points of view.
7	El Saff storage of pesticides	There is little information on the amount, composition and types of pesticides and such facility should be closed safely.	The storage facility is already closed and the POPs project will finance specific mitigating measures to prevent further deterioration of the stored materials and degradation of the site.
8	Public Consultation	Consultations should be made in public places to enable the citizens to provide their comments, in view of the new spirit of partnership, especially after the revolution of January 25th, 2011	As a result of the gap filling measures under the SDR for EPAP II, EEAA has institutionalized public hearings for projects classified as category C. During the acceptability assessment, the World Bank team verified that some consultations take place in public places such as for the third phase of the metro line, public hearings took place in a mosque and at an

			engineering club. Consultations will also take place on the ESIA in public places (to the extent possible) for any subprojects under the POPs Management Project.
9	Enforcement	Enforcement of the law is weak, as district attorneys and judges are not trained on environmental law and it would be preferable to have outside expertise to evaluate such cases.	The first component of the project will include training and special reference will be made in the project document that such training would also involve judges and lawyers.
10	Follow up on enforcement and compliance	A tripartite committee composed of EEAA, an NGO and the operator will be established to follow up on the project.	The steering committee of the project will include a representative of the NGOs to follow up on the project.
11	Gap filling measures	The gap filing measure No. 4 related to the development and provision of training and proposed the following modifications : (i) participation of the NGOs in the training programs organized by the project; (ii) organization of public awareness campaigns by provision of materials, brochures and equipment related to pesticides and other hazardous substances; (iii) target the youth in the awareness campaigns in schools; (iv) strengthening the NGOs network involved in hazardous waste and pesticides.	The Project will develop under Component 1 the enhancement of national capacity, which includes training and awareness campaigns, and that Component 2 will develop a long-term pesticide management strategy, which will take into account the NGOs' proposed ideas.

ANNEXES

Annex 1: Detailed Description of the Project Components

Background

The **Project Development Objective** is to manage and dispose of targeted POPs stockpiles and PCBs in an environmentally sound and cost-effective manner while strengthening Egypt's technical and institutional capacity through a "learning by doing" approach. POPs are chemical substances that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment. They are considered highly toxic, causing birth defects as well as potential damage to the immune, respiratory, and reproductive systems. Women and children are noted to be especially vulnerable.

Twelve POPs -- known as the "Dirty Dozen" -- include nine pesticides (DDT being the best known), polychlorinated biphenyls (PCBs)[68] as well as dioxins and furans (D/Fs).[69] And as POPs can be transported through the environment to regions where they have never been used or produced, the international community has called for urgent global action. The Stockholm Convention (SC) is the United Nations treaty negotiated to eliminate POPs. Under the Convention, countries commit to reduce and / or eliminate the production, use, and / or release of the 12 POPs. The Government of Egypt (GOE) ratified the Stockholm Convention for controlling the emissions of POPs in May 2002 and has drafted its National Implementation Plan (NIP) in accordance with the provisions of the Convention. The NIP was submitted to the Stockholm Convention on March 16, 2006.[70]

Egypt's POPs priorities, as outlined in the NIP, include: (1) the management and environmentally sound disposal of PCBs and obsolete pesticides; (2) action plans to address unintentional releases of D/Fs, (3) institutional and regulatory strengthening measures as well as (4) awareness building and stakeholder involvement activities. To help achieve such goals, the Egyptian Environmental Affairs Agency (EEAA) requested the Bank prepare a GEF project that would focus on the following critical areas:

- Institutional and regulatory strengthening measures for POPs management
- Management of obsolete pesticide stocks
- Sound management and disposal of PCBs

Based on this request, the Bank prepared a Project Identification Form (PIF), which was approved by the GEF Council in June 2009 and included in GEF's work program. A GEF Project Preparation Grant (PPG) was issued and used to upgrade inventories, compare technical options for POPs management and disposal, propose institutional strengthening measures and develop project cost estimates. This Project Preparation Study was completed in October 2011.

The current database for the proposed project is relatively extensive, especially for pesticides. An initial PCB inventory was completed in and around Cairo by the Japanese International Cooperation Agency (JICA). An initial evaluation showed that dioxin and furan emissions are high, particularly from industries in the region around Cairo, as well as from the open burning of waste in uncontrolled landfills and hospital waste incineration activities. More recently, in 2009, the Bank, through

[68] PCBs were developed for their low conductivity and volatility and high thermal stability and were widely used as dielectrics in power transformers and capacitors, as well as for other industrial purposes.
[69] Dioxins and furans (D/Fs) are also referred to as Unintentional POPs (UPOPs). D/Fs are byproducts, oftentimes generated from the production of herbicides, pesticides and paper – amongst other activities. D/Fs can also be produced when certain products are burned.
[70] Between May 2009 and May 2011, the Stockholm Convention added ten additional chemicals (referred to as "new POPs) to the original twelve, which include pesticides, industrial chemicals and by-products.

financing from a Canadian trust fund, prepared an inventory, which built upon the previous work and prepared a more detailed and complete inventory.

The proposed **Project Design** includes components to support the environmentally-safe management and disposal of POPs; policy and legal development; capacity building as well as technical components related to project management. For pesticides and PCBs, the project design is aimed at substantially reducing the incidence of such chemicals, as well as demonstrating sound techniques for future POPs management and disposal; for dioxins and furans, project work is limited to enabling activities (i.e. development of a national strategy and action plan; associated legislation and regulations for improving inventories, managing emissions from selected industries, and monitoring D/F levels in food and feed). A detailed description of Project Components can be found in the following section.

1. **Component 1:** Institutional and Regulatory Strengthening Measures for POPs Management ($1.78 million, including GEF $0.92 million)

Sub-component 1.1: *Strengthen legal and regulatory framework and enforcement capacity regarding the use, storage, transport and disposal of POPs chemicals.* Egypt's current legal and regulatory framework for hazardous wastes in general and POPs in particular will be reviewed to identify potential gaps in the Egyptian system. Guidelines consistent with regional and international good practices will be developed and adopted.

Sub-component 1.2: Enhancement of National Capacity and Public Awareness. This is to be done through a phased program for strengthening hazardous wastes management at EEAA and the cooperating ministries - Ministry of Agriculture and Land Reclamation (MALR) and Ministry of Electricity and Energy (MEE) for long term POPs management. A Capacity Development Plan for POPs Management for each ministry / agency will be developed by the end of the first project year. Particular attention will be given to developing effective enforcement mechanisms along with review of intra- and inter-agency coordination mechanisms and strengthening measures. The sub-component will also support the design and delivery of a comprehensive training program for EEAA and the cooperating ministries in the areas of POPs management and associated hazardous wastes and hazardous substances management.

The sub-component will also support the development and implementation of a public awareness strategy for informing stakeholders of the nature and dangers of POPs (and other hazardous substances), as well as the planned project activities, and for inviting public participation in decision-making. Mechanisms will be developed for ensuring stakeholder participation in all project activities.

Sub-component 1.3: Develop a set of initial measures for Unintentional POPs (dioxins and furans). The development of the initial measures will include enhancing and gap filling of existing legislation and regulations for (i) improving inventories, (ii) managing emissions from selected industries, and (iii) monitoring levels in food. This will provide the context for Egypt's efforts towards setting its strategy for reasonable and achievable standards, developing cost sharing models and ensuring compliance. The document will be developed in a fully participatory manner, with input from the industrial sector, NGOs, and government agencies, especially Ministry of Trade and Industry (MTI).

Component 2: Management of Obsolete Pesticide Stocks ($10.21 million, including GEF $2.69 million)

Activities under this Component will directly support the PDO by supplying EEAA and MALR staff with the hands-on experience needed to manage the long-term cleanup of POPs and other dated pesticides. There are three sub-components.

Sub-component 2.1: *Secure Storage of Pesticides:* This component will assess the relative risks of all pesticide storage sites and ensure that all identified stocks of POPs pesticides and other obsolete pesticides which pose a high or medium risk to human health and safety and/or the environment are securely packaged and stored in accordance with best international practice.

Of the total 2,400 to 4,800 tons of obsolete pesticides stockpile, it is estimated that up to 1,700 tons are POPs pesticides and around 3,100 tons are obsolete pesticides The SPMP will support disposal of all known POPs pesticides and ensure the secure storage of the remaining stockpile, until sufficient funds can be obtained for their disposal. Those sites where pesticides are to be repackaged, transferred, stored temporarily prior to future disposal (or readied for disposal) are called Intermediate Collection Centers (ICCs).This sub-component will support preliminary site assessments of all ten ICCs in the public sector, which include Al-Adabeya Port, El Saff, Giza, Nassreya and Alexandria Port. The potential list of the remaining ICCs is in Annex 2. Each site will be assessed and rated according to risk to human health and the environment and those which are seen to pose the highest risk will be subjected to more detailed site assessments and development of action plans. The first site to be addressed is the Al-Adabeya Port where 220 tons of Lindane has been stockpiled.

The project will also support the assessment of seven pesticide factories and a random sampling of the approximately 12,000 pesticide traders will also be undertaken to determine conditions of storage and status of obsolete pesticides. All data collected will be included in the POPs Inventory and Tracking System, detailed in Component 4.2.

Best international practices and guidelines will be reviewed and adapted for use in Egypt and used as a manual for training staff and guiding further project operations. The Central Agricultural Pesticides Laboratory under MALR's Agricultural Research Center would be strengthened in order to support the project in the proper identification and of chemicals, testing of pesticide contaminated sites for residues, soil contamination and the like. The SPMP will ensure that repackaging, whether for disposal or for safeguarding, will be handled by specialist contractors and will generally take place with minimum dislocation.

Sub-component 2.2: Destruction of High-Risk Stocks. This subcomponent will support demonstration projects for disposal of all identified stocks of POPs and other high-risk obsolete pesticides, together with some medium-risk pesticide stocks, in an environmentally sustainable manner, in order to demonstrate sound methodology for future actions. The stockpile at Al-Adabeya Port has been identified as an immediate priority action for repackaging, transportation and exportation to a disposal facility. However, the technology and location of disposal for the other stockpiles will be determined based on the more detailed analyses and cost-effectiveness studies to be undertaken under the project.

Sub-component 2.3: Development of a Long-Term Pesticides Management Strategy based on an assessment of effectiveness of existing laws to prevent the accumulation of stocks volumes and also composition of future flows of obsolete pesticides using factors such as: trends of agricultural production, usage of pesticides and non-agricultural uses of pesticides, Integrated Pest Management (IPM), incentives and penalties etc. The Strategy is expected to be based on regional and international best practices and will include proposed legal and regulatory changes, institutional needs and staff development; roles and responsibilities of stakeholders and will be finalized after extensive stakeholder consultation.

Component 3: Management of PCBs ($9.93 million, including GEF $3.12 million)

It is estimated that Egypt has more than100,000 transformers which could be a potential cause of environmental contamination resulting in long-term public health risks. The GOE has determined that all high-concentration PCB stocks (above 50 parts per million (ppm) will be managed by the MEDPOL, an arm of the Mediterranean Action Plan. The management of the remaining low-concentration stocks (about 60%) will be supported under this component. Activities will directly support the PDO by supplying EEAA and MEE/EEHC staff with the hands-on experience needed to manage the long-term management of PCBs.

Sub-component 3.1: *Secure Storage of PCBs:* EEHC will identify five sites as potential ICCs, which will then be assessed with regard to necessary environmental and safety compliance requirements. If these sites are found to be compliant, this subcomponent will finance the construction of specially-equipped buildings for the storage of contaminated transformers and decontamination. Those above the cutoff will be tagged and decommissioned and stored at ICCs for future disposal, as and when GOE has adequate funding.

Training and management plans to prevent further cross-contamination from unsound maintenance and handing practices will be developed and implemented as a priority, including spot checking to confirm that the sale of PCB-contaminated "electrical oil" has ceased. This subcomponent will also support the establishment and maintenance of a comprehensive program for sampling, and analysis activities related to PCB containing equipment. An extensive inventory on the numbers of PCB equipment and potential levels of contamination in the country will also be undertaken.

Sub-component 3.2: Site Remediation and Decontamination of Stocks: This sub-component will support the decontamination of identified contaminated transformers and potential recycling activities. It will also support site assessments for all transformer repair shops and any suspected sites of PCB spills or leakage, and remediate ICCs and other EEHC contaminated sites as required, based on risk assessment.

Sub-component 3.3: Development of strategy for management of PCBs and PCB contaminated equipment: Based on the inventory, a detailed strategy will be developed to set priorities for investments for phasing out all PCB equipment by 2025, as per the National Implementation Plan and also support achievement of the goal of environmentally sound management of PCB waste by 2028, as required under the Stockholm Convention.

Component 4: Project Management ($1.68 million, including GEF $1.37 million)

Sub-component 4.1: Establish and maintain a Project Management Unit (PMU): As national Executing Agency for the project, EEAA will be principally responsible for project implementation and a Project Management Unit (PMU) has been established to supervise project implementation. A senior manager in the waste management division of EEAA has been selected as the National Project Director and will report directly to the Chief Executive Officer of EEAA on project matters. The National Project Director will be supported by a Project Manager and fiduciary, administrative and procurement and technical staff and consultants. The GEF National Steering Committee (GNSC) will be responsible for overall project coordination and will integrate policymakers from the MALR, MEE, MTI and other relevant Ministries and agencies.

Sub-component 4.2: Monitoring and Evaluation (M&E): This sub-component will support EEAA in enhancing the existing system of inventorying and tracking hazardous substances and POPs (from generation to ultimate disposal) to a comprehensive one based on regional and international best

practice examples. Attention will be given to making available the necessary monitoring and data processing equipment, software, staffing and training and also addressing the needs for sustaining the system after project closure and will examine the feasibility of expanding the system to a full-fledged Pollutant Release and Transfer Register for hazardous and other wastes. The PMU will develop a system for monitoring project performance indicators (including needs for field monitoring and data processing). Staff in EEAA and the Cooperating Ministries will be trained to produce data needed for quarterly project reporting.

Project Cost Table

Project Components	GEF Financing	GOE Financing	% Financing	Project cost (US$ Mil)
1.Institutional and Regulatory Strengthening Measures for POPs Management	0.92	0.86	7.54%	1.78
2. Management of Obsolete Pesticides	2.69	7.52	43.26%	10.21
3. Management of PCBs	3.12	6.81	42.08%	9.93
4. Project Management	1.37	0.31	7.12%	**1.68**
Total Project Costs **Total Financing Required**	**8.10**	15.5		**23.6**

Annex 2: Sites of Obsolete Pesticides that are candidates for the project

#	Location	Tonnes POPs*		Tonnes OPs*		Total tonnes		Assumptions**			
		Min	Max	Min	Max	Min	Max				
1	ICC El-Saff, Giza***	6	480	344	444	350	924	Information CSD report is used for the minimum quantities			
2	Petroleum institute Nasr city, Cairo			149	149	149	149	Information CSD report			
3	MIWR 6-7 sites			60	70	60	70	Information CSD report			
4	El Behira – Damanhour			1	1	1	1	Information CSD report			
5	Dammeitta – Dammeitta			4	4	4	4	Information CSD report			
6	MoA Bathim, Giza	3	5			3	5	30-40 drum	0 -200		kg/drum
7	Agricultural bank of Credit and Development, Cairo			1,032	1,032	1,032	1,032	Information CSD report			
8	Noueba Port, South Sinai, near Sharm-El-Sheik	12	140			12	140	7 containers	1 container 20 tonnes	140	Tonnes
9	Suez, Adabaya Port***	220	220			220	220	>6 containers			
10	Alexandria Port	120	120	120	120	240	240	12 containers	1container 20 tonnes	240	Tonnes
								6 containers POPs	6 containers OPs		
	Pesticides factories										
11	Kafr El-Zayat factory (Gharbia - Kafr El-Zayat)	0	100	0	100	0	200	To estimate the quantities of POPs still present at these 7 factories the factory management should be consulted			
12	El-Nasr Co. (Abo-Rawash - 6th of October, Giza	0	100	0	100	0	200	From information gathered by one of our local team expert Dr. Saad and Dr. Zidan it is concluded that these factories don not probably retain any obsolete pesticides stocks			
13	Framchem (Abo Rawash,6th of October, Giza)	0	100	0	100	0	200				
14	El-Watanya Company	0	100	0	100	0	200	Because as mentioned in table 5.2 our experiences teaches that (former) production sites almost always include hotspots of highly contaminated soil or contaminated material, we have included in the estimate of the maximum an average of 100 tonnes of POPs and 100 tonnes of OPs			
15	El- Helb (Domyata Governarate)	0	100	0	100	0	200				
16	Adwia Company, Al Abour,	0	100	0	100	0	200				

	Cairo							
17	Oil and Chemicals Company, Hawamdia, Giza	0	100	0	100	0	200	
18	12,000 traders	0	0	300	600	300	600	Because POPs are banned since 1996 is assumed that all stocks of POPs are long sold and used but there could be still remains of OPs
19	Private	0	0	0	0	0	0	
	Total	**363**	**1,667**	**2,009**	**3,119**	**2,371**	**4,786**	
	Roundup total	**260**	**1,700**	**2,000**	**3,100**	**2,400**	**4,800**	

Annex 3: Equivalence Analyses

Summary Matrix on Environmental Assessment

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
Objective: To help ensure the environmental and social soundness and sustainability of investment projects. To support integration of environmental and social aspects of projects into the decision- making process.	The expressed long-term objective of Law 4 of 1994 and its further amendments is to ensure sustainable economic development that meets present needs without compromising future generations' ability to meet their own needs. EIA is defined as in important instrument to that end an constitute a tool in the integrated environmental management approach. The purpose of EIA is to ensure the protection and conservation of the environment and natural resources, including human health and safety aspects, against uncontrolled development.	Law No. 4 of 1994, Prime Minister's Decree No. 338 of 1995 Issuing the Executive Regulations of the Environment Law promulgated by Law 4-1994 and the Guidelines and procedural guidelines for Egyptian Environmental Impact Assessment, issued by EEAA (December 2009 and enforced since July 1, 2009). Beside the above, Egypt has other relevant sectoral laws of interest that contribute to the reinforcement of EIA including but not limited to Law No.102 of 1983 on Protected Areas, Law No.124 of 1983 on Fisheries and Aquatic Life, Law No. 53 of 1966 on Agriculture, Law No. 48 of 1982 on Protection of the Nile Against Pollution, and the Law No. 117 of 1983 on Protection of Antiquities.	No gaps Social impacts were not specifically mentioned in Law No. 4 of 1994. However, for its implementation, EEAA has adopted Guidelines with mandatory procedural and sectoral guidelines[71] and some of them include socio-economic and cultural issues.	Ensure that Sectoral Guidelines for EIA for POPs hazardous waste storage sites include reference to assessment of social impacts.

[71] Sectoral guidelines provide examples on developing project-specific TORs for environmental assessment.

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
Operational Principles: 1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment (EA) so that appropriate studies are undertaken proportional to potential risks and to direct, and, as relevant, indirect, cumulative, and associated impacts. Use sectoral or regional environmental assessment when appropriate.	A screening process is in place and consists of three categories: (a) projects that require the preparation of a full EIA (Category C - Black); (b) projects that require only a summary description of the project, its impacts and appropriate mitigation measures (Category B - Grey); (c) projects that do not require an EIA (Category A - White). EEAA reviews all Category C (Form A) and B (Form B) projects for their potential impacts and determines the need for an EIA or a limited environmental analysis. The screening forms to submit to EEAA, adopted in 2006 and revised in 2009, include comprehensive requirements to assess potential cumulative and associated impacts, use of regional and sectoral EAs and specific information on cleaner production etc	Current guidelines for Projects under Categories B and C do mention the need to characterize and take into account the existence or use of hazardous substances and chemicals in Projects in order to classify them and decide on the scope of the required EIA (Article 10 of the Executive Regulations and 2006 Procedural Guidelines as revised in 2009 (page 14).	Gap	By January 2012 EAA shall adopt Procedural Guidelines including rules, processes and standards to be applied to EIA for POPs-related subproject. EEAA shall develop specific detailed ToRs for the preparation of EIA including hazardous risk assessment and guidelines for reviewers of EIA.

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
2. Assess potential impacts of the proposed project on physical, biological, socio-economic and physical cultural resources, including transboundary and global concerns, and potential impacts on human health and safety.	Category B and C projects are required to assess impacts on human health, physical, biological, socio-economic and physical cultural resources and transboundary emissions. Selection of sites for future Landfills for hazardous wastes including POPs shall be subject to full EIA in compliance with the 2009 Guidelines on Principles and procedures for EIA which conforms with the requirements under this Operational Principle. Safety measures are mandated by Article 57of the Regulations to the 1994 Law.	Form B and sectoral guidelines. Egypt is signatory to numerous international conventions on environmental matters related to biodiversity, wetlands, climate change etc., and Law 4, 2004 and its amendments mandate compliance with international conventions including those dealing with impacts of global concerns. Sectoral guidelines mandate compliance with relevant conventions.	No significant gaps	None

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
3. Assess the adequacy of the applicable legal and institutional framework, including applicable international environmental agreements, and confirm that they provide that the cooperating government does not finance project activities that would contravene them.	Sectoral guidelines and generic TORs for EIA prepared by EEAA oblige project developers to describe and assess the applicable legal and institutional framework and comply with international conventions ratified by Egypt. This assessment is necessary to ensure the proposed project will be in compliance with all legal and regulatory requirements. However, the legal framework applicable to POPs seems not to be fully consistent with the requirements of the Stockholm Convention to which Egypt is Party	Mandatory sectoral guidelines and sample TORs prepared by EEAA refer to applicable legal and regulatory frameworks including international conventions to which Egypt is a party.	There is no substantial inconsistency between the provisions of the Convention of Stockholm and the applicable law in force in Egypt. Any inconsistency will be filled through the Guidelines and EIA on the conduct and content of the EIA and definition of appropriate mitigation. Therefore this gap will not affect the Project activities.	See Principle Operational 1 above on Guidelines and ToRs for EIA related to POPs-Subprojects and A study will be undertaken by EEAA to assess the current legal and regulatory framework applicable to POPs and identify provisions to be adopted to update the domestic legal framework and to further bring it to compliance with international Conventions and agreement ratified by Egypt appropriate.

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
4. Provide for assessment of feasible investment, technical, and siting alternatives, including the "no action" alternative, potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and their institutional, training and monitoring requirements associated with them.	The "no project" alternative must be considered under the EIA for all Category C and B projects. The other points listed under principle 4 are referred to in varying degrees of detail in the sectoral guidelines.	2009 Amendment to Law 4 of 1994 2009 Guidelines on Principles and Procedures for EIA Sectoral guidelines and sample TORs prepared by EEAA.	No significant gaps	

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
5. Where applicable to the type of project being supported, normally apply the Pollution Prevention and Abatement Handbook (PPAH). Justify deviations when alternatives to measures set forth in the PPAH are selected.	Emissions, wastewater discharge, noise and indoor air pollution standards are defined in the Executive Regulations for Law No. 4 of 1994. The 2009 Guidelines for Principles and Procedures for EIA and various other instruments refers explicitly to emission standards recognized and applied by the EU and the US-EPA as reference to be followed in various sectors.	No reference to PPAH guidelines in the Law No. 4 of 1994 or in the complementary Executive Regulations. However, EEAA in its regular practice refers to the PPAH and some other emissions standards such as those enacted and applied within EU. Sectoral guidelines have been prepared by EEAA. Also, monitoring is provided for under the EIA Guidelines, including performance indicators to "demonstrate the sustainability of the project." Parameters and indicators recommended to be included in the monitoring system include: (a) quality of water, (b) noise and air quality, (c) relevant health indicators, (d) waste management and (e) complaints received if any.	No gap	None

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
6. Prevent and, where not possible to prevent, at least minimize, or compensate for adverse project impacts and enhance positive impacts through environmental management and planning that includes the proposed mitigation measures, monitoring, institutional capacity development and training measures, an implementation schedule, and cost estimates.	The EIA emphasizes both positive and negative impacts with major focus on the mitigating measures for addressing negative impact. Egyptian EIA procedural guidelines require the development of an EMP. However, no specific requirements are given in the guidelines for EMP implementation arrangements such as budget or the staffing of the implementing agency.	Review Sectoral Guidelines for hazardous wastes storages, including POPs to ensure they require the proponent to provide a budget, staffing and monitoring capacity to implement the EMP.	Moderate gap	As mentioned under the Operational principle 1 above, the Guidelines will be issued by January 2013

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
7. Involve stakeholders, including project-affected groups and local non-governmental organizations, as early as possible, in the preparation process and ensure that their views and concerns are made known to decision makers and taken into account. Continue consultations throughout project implementation as necessary to address EA-related issues that affect them.	The environmental legislation provides for NGOs to be represented in the Board of the EEAA and the sectoral guidelines and TORs for EIA require proponent to hold public consultations with all interested and/or affected parties. The 2009 Guidelines for principles and procedures for EIA requires the consultation process and outcome to be fully documented as part of the EIA Report.	2009 Amendments to the Law 4, 1994 and the 2009 Guidelines for principles and procedures for EIA.	No significant gaps	None

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
8. Use independent expertise in the preparation of EA where appropriate. Use independent advisory panels during preparation and implementation of projects that are highly risky or contentious or that involve serious and multi-dimensional environmental and/or social concerns.	It is a common practice to use independent consultants and experts to prepare EIAs. The EEAA uses the services of external experts to review EIA, including international experts to review EIAs for large and complex projects and to advise on the clearance process.	Although there is no explicit reference to "Independent Advisory Panel" of experts in the Law 4 and its 1995 Implementing Decree, article 13 of said decree states that EEAA may "resort to any experts whose names are included in a list to be issued by the EEAA according to the criteria set by the EEAA's Board of Directors, so that such experts may give their opinions on the assessment of the environmental impact of an establishment intended to be constructed and for which a permit is being requested"	*Gap :* EIA for Landfills processing, handling or storage facilities for hazardous wastes including POPs does not include use of independent advisory panels	By December 2012, the Implementation Manual of the project shall describe in details the roles, mandates of each institution involved in EIA review, compliance monitoring and coordination mechanism.
9. Provide measures to link the environmental assessment process and findings with studies of economic, financial, institutional, social and technical analyses of a proposed project.	There is no such specific requirement. However, sectoral EIA guidelines require that proponent must provide analysis of alternatives including the no-action alternative and EEAA has the mandate to review consistency of EIA and other project design features.	None	*No significant gaps.* As decided under the EPAP II, this gap can easily be addressed by ensuring early conduct of EIA.	*None.*
10. Provide for application of the principles in this table to sub-projects under investment and financial intermediary activities.	Not applicable as there is no FI Category.	Under Law No. 4 of 1994 and its Executive Regulations, CAA and EEAA are required to screen and review all sub-projects for their potential impacts.	*No significant gap*	*None*

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
11. Disclose draft EA in a timely manner, before appraisal formally begins, in an accessible place and in a form and language understandable to key stakeholders.	EEAA is requiring since 2009 mandatory disclosure in the EIA procedural Guidelines and sectoral guidelines that were already issued. EIA reports and Form B will be disclosed.	2009 Manual on 'Principles and Procedures for EIA'	*No significant gap*	

Summary Matrix on Pest Management

Bank Policy (OP/BP 4.00) Requirements **(Objective and Operational Principles)**	**Egypt's Equivalent Requirements**		**Gaps and differences between OP/BP 4.00 and Egypt's requirements**	**Remarks and System improvements to be undertaken by Mauritius before implementation of the project activities**
	Objectives and Operational Principles as stated in Mauritius' corresponding laws, rules, regulations, procedures	**Mauritius' corresponding laws, rules, regulations, procedures**		
Objective: To minimize and manage the environmental and health risks associated with pesticide use and promote and support safe, effective, and environmentally sound pest management.	Egypt has a substantial amount of laws and regulations dealing with dangerous chemicals control and pesticides, administered respectively by the Ministry of Health and Populations, Ministry of Agriculture, Ministry of Industry, Ministry of Health and the EEAA This legal framework applies the "Integrated Pest Management" as first line of defense against risks associated with use of pesticides in agriculture. It complies with standards established by FAO/WHO, EU and US-EPA.	Law 4-94 as amended to date and numerous decrees and regulations (see above note)	There are no laws requiring IPM/IVM.	None
Operational Principles: 1. Promote use of demand driven, ecologically based biological or environmental pest management practices (Integrated Pest Management [IPM] in agricultural projects and Integrated Vector Management [IVM] in public health projects) and reduce reliance on synthetic chemical pesticides. Include assessment of pest management issues, impacts and risks in the EA process.	Although there are no laws requiring IPM, in practice, this type of pest management is the "first line of defense" adopted in Egypt and is being implemented consistently in various sub-sectors of agriculture In practice, pesticide management is a required component in the EA.	Legal provisions to be added FAO/WHO Codex Alimentarius, Vol 2.B Pesticides Residus. 2nd Edition Rome 2000 disseminated in Egypt through the Ministry of Agriculture and the Ministry of Health. Ministry of Agriculture IPM program Implementation Manual (see Main Equivalence analysis Paragraph 23 Footnote 7 the analysis of this policy and practice)	There are no laws requiring IPM/IVM however, it is now an established policy and practice to implement the IPM for all agriculture sector.	None

2. Procure pesticides contingent on an assessment of the nature and degree of associated risks, taking into account the proposed use and intended users. Do not procure formulated products that are in WHO Classes IA and IB, or formulations of products in Class II unless there are restrictions that are likely to deny use or access to lay personnel and others without training or proper equipment	Under applicable laws and regulations, it is required that any person who imports, exports, manufactures, sells, distributes or otherwise handles, in the course of a business activity, a dangerous chemical, shall ensure that the dangerous chemical marketed is provided with a safety data sheet when delivered to a user. It includes pesticides in the definition of a "dangerous chemical." The laws and regulations also provide that no person shall place on the local market a dangerous chemical which can be substituted by a less harmful or less dangerous chemical. Products classified by WHO as highly hazardous are prohibited.	Resolution 3059		None
3. Follow the recommendations and minimum standards as described in the United Nations Food and Agriculture Organization (FAO) International Code of Conduct on the Distribution and Use of Pesticides (Rome, 2003) and procure only pesticides that are manufactured, labeled, handled, stored, applied and disposed of according to acceptable standards as described in FAO Pesticide Guidelines on Storage, Labeling, and Disposal (Rome, 1985).	According to applicable laws and regulations every person who imports, exports, manufactures, sells, stores, distributes or trades in any chemical substance shall ensure that the chemical substance is classified and labeled in accordance with the classification and labeling requirements specified in the Resolutions 3059. Furthermore, that Resolution provides that no person shall import, export, manufacture, sell or distribute any dangerous chemical unless it is packaged in accordance with requirements set out in the Resolution. The Resolution states that where there are no national standard in force for packing, containers and tanks, relevant internationally recognized standards, recommendations or norms should be referred to. Reference is made to US and EU standards. In practice, the Agriculture Ministry regularly monitors the pesticide residue levels in fresh vegetables and fruits produced locally. The maximum residue levels are within the WHO/FAO Codex Alimentarius	See relevant Annexes in Resolution 3059	The Ministry of Agro Industry specifically refers to FAO/WHO standards	None

	norms.			
4. Support policy reform and institutional capacity development to (a) enhance implementation of IPM- and IVM-based pest management, and (b) regulate and monitor the distribution and use of pesticides.	No formal provisions in laws and regulations. However, within the Ministry of Agriculture, the offices in charge of extension are assisting agriculture producers and operators with advisory services including training to ensure implementation of IPM and decrease reliance on chemicals. IPM training programs are regularly implemented; and Monitoring is done on regular basis on pesticides residues in all agricultural products including fresh vegetables to ensure that WHO/FAO, US-EPA and EU standards are met.	No provisions in Egypt Laws and Regulations, but policy documents and programs in agriculture refer to WHO, FAO, US-EPA and EU standards as mandatory.	No gap in substance	None
5. Disclose draft mitigation plan in a timely manner, before appraisal formally begins, in an accessible place and in a form and language that are understandable to key stakeholders.	Ministry of Industry's website and Ministry of Agriculture's website and other Government and non Governmental websites disclose relevant information about pest management including IPM.		No provisions	None

Equivalence Analysis
Summary Matrix on Environmental Assessment

Bank Policy (OP 4.00) Requirements	**Government of Egypt's Equivalent Requirements**	**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**

(Objective and Operational Principles)	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.		
Objective: To help ensure the environmental and social soundness and sustainability of investment projects. To support integration of environmental and social aspects of projects into the decision- making process.	The expressed long-term objective of Law 4 of 1994 and its further amendments is to ensure sustainable economic development that meets present needs without compromising future generations' ability to meet their own needs. EIA is defined as an important instrument to that end and constitute a tool in the integrated environmental management approach. The purpose of EIA is to ensure the protection and conservation of the environment and natural resources, including human health and safety aspects, against uncontrolled development.	Law No. 4 of 1994, Prime Minister's Decree No. 338 of 1995 Issuing the Executive Regulations of the Environment Law promulgated by Law 4-1994 and the Guidelines and procedural guidelines for Egyptian Environmental Impact Assessment, issued by EEAA (December 2009 and enforced since July 1, 2009). Beside the above, Egypt has other relevant sectoral laws of interest that contribute to the reinforcement of EIA including but not limited to Law No.102 of 1983 on Protected Areas, Law No.124 of 1983 on Fisheries and Aquatic Life, Law No. 53 of 1966 on Agriculture, Law No. 48 of 1982 on Protection of the Nile Against Pollution, and the Law No. 117 of 1983 on Protection of Antiquities.	*No gaps.* Social impacts were not specifically mentioned in Law No. 4 of 1994. However, for its implementation, EEAA has adopted Guidelines with mandatory procedural and sectoral guidelines[72] and some of them include socio-economic and cultural issues.	Ensure that Sectoral Guidelines for EIA for POPs hazardous waste torage sites include reference to assessment of social impacts.

[72] Sectoral guidelines provide examples on developing project-specific TORs for environmental assessment.

Bank Policy (OP 4.00) Requirements (Objective and Operational Principles)	Government of Egypt's Equivalent Requirements		Gaps and differences between OP 4.00 and GOE's requirements.	System improvements that would be undertaken by the Government of Egypt during implementation of the project activities
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
Operational Principles: 1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment (EA) so that appropriate studies are undertaken proportional to potential risks and to direct, and, as relevant, indirect, cumulative, and associated impacts. Use sectoral or regional environmental assessment when appropriate.	A screening process is in place and consists of three categories: (a) projects that require the preparation of a full EIA (Category C - Black); (b) projects that require only a summary description of the project, its impacts and appropriate mitigation measures (Category B - Grey); (c) projects that do not require an EIA (Category A - White). EEAA reviews all Category C (Form A) and B (Form B) projects for their potential impacts and determines the need for an EIA or a limited environmental analysis. The screening forms to submit to EEAA, adopted in 2006 and revised in 2009, include comprehensive requirements to assess potential cumulative and associated impacts, use of regional and sectoral EAs and	Current guidelines for Projects under Categories B and C do mention the need to characterize and take into account the existence or use of hazardous substances and chemicals in Projects in order to classify them and decide on the scope of the required EIA (Article 10 of the Executive Regulations and 2006 Procedural Guidelines as revised in 2009 (page 14).	*Gap.*	By January 2012 EAA shall adopt Procedural Guidelines including rules, processes and standards to be applied to EIA for POPs-related subproject. EEAA shall develop specific detailed ToRs for the preparation of EIA including hazardous risk assessment and guidelines for reviewers of EIA.

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
2. Assess potential impacts of the proposed project on physical, biological, socio-economic and physical cultural resources, including transboundary and global concerns, and potential impacts on human health and safety.	Category B and C projects are required to assess impacts on human health, physical, biological, socio-economic and physical cultural resources and transboundary emissions. Selection of sites for future Landfills for hazardous wastes including POPs shall be subject to full EIA in compliance with the 2009 Guidelines on Principles and procedures for EIA which conforms with the requirements under this Operational Principle. Safety measures are mandated by Article 57of the Regulations to the 1994 Law.	Form B and sectoral guidelines. Egypt is signatory to numerous international conventions on environmental matters related to biodiversity, wetlands, climate change etc., and Law 4, 2004 and its amendments mandate compliance with international conventions including those those dealing with impacts of global concerns. Sectoral guidelines mandate compliance with relevant conventions.	*No significant gaps.*	None

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
3. Assess the adequacy of the applicable legal and institutional framework, including applicable international environmental agreements, and confirm that they provide that the cooperating government does not finance project activities that would contravene them.	Sectoral guidelines and generic TORs for EIA prepared by EEAA oblige project developers to describe and assess the applicable legal and institutional framework and comply with international conventions ratified by Egypt. This assessment is necessary to ensure the proposed project will be in compliance with all legal and regulatory requirements. However, the legal framework applicable to POPs seems not to be fully consistent with the requirements of the Stockholm Convention to which Egypt is Party	Mandatory sectoral guidelines and sample TORs prepared by EEAA refer to applicable legal and regulatory frameworks including international conventions to which Egypt is a party.	There is no substantial inconsistency between the provisions of the Convention of Stockholm and the applicable law in force in Egypt. Any inconsistency will be filled through the Guidelines and EIA on the conduct and content of the EIA and definition of appropriate mitigation. Therefore this gap will not affect the Project activities.	See Principle Operational 1 above on Guidelines and ToRs for EIA related to POPs-Subprojects and A study will be undertaken by EEAA to assess the current legal and regulatory framework applicable to POPs and identify provisions to be adopted to update the domestic legal framework and to further bring it to compliance with international Conventions and agreement ratified by Egypt appropriate.

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
4. Provide for assessment of feasible investment, technical, and siting alternatives, including the "no action" alternative, potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and their institutional, training and monitoring requirements associated with them.	The "no project" alternative must be considered under the EIA for all Category C and B projects. The other points listed under principle 4 are referred to in varying degrees of detail in the sectoral guidelines.	2009 amendment to Law 4 of 1994 2009 Guidelines on Principles and Procedures for EIA Sectoral guidelines and sample TORs prepared by EEAA.	*No significant gaps.*	

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
5. Where applicable to the type of project being supported, normally apply the Pollution Prevention and Abatement Handbook (PPAH). Justify deviations when alternatives to measures set forth in the PPAH are selected.	Emissions, wastewater discharge, noise and indoor air pollution standards are defined in the Executive Regulations for Law No. 4 of 1994. The 2009 Guidelines for Principles and Procedures for EIA and various other instruments refer explicitly to emission standards recognized and applied by the EU and the US-EPA as reference to be followed in various sectors.	No reference to PPAH guidelines in the Law No. 4 of 1994 or in the complementary Executive Regulations. However, EEAA in its regular practice refers to the PPAH and some other emissions standards such as those enacted and applied within EU. Sectoral guidelines have been prepared by EEAA. Also, monitoring is provided for under the EIA Guidelines, including performance indicators to "demonstrate the sustainability of the project." Parameters and indicators recommended to be included in the monitoring system include: (a) quality of water, (b) noise and air quality, (c) relevant health indicators, (d) waste management and (e) complaints received if any.	*No gaps*	*None.*

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
6. Prevent and, where not possible to prevent, at least minimize, or compensate for adverse project impacts and enhance positive impacts through environmental management and planning that includes the proposed mitigation measures, monitoring, institutional capacity development and training measures, an implementation schedule, and cost estimates.	The EIA emphasizes both positive and negative impacts with major focus on the mitigating measures for addressing negative impact. Egyptian EIA procedural guidelines require the development of an EMP. However, no specific requirements are given in the guidelines for EMP implementation arrangements such as budget or the staffing of the implementing agency.	Review Sectoral Guidelines for hazardous wastes storages, including POPs to ensure they require the proponent to provide a budget, staffing and monitoring capacity to implement the EMP.	*Moderate gap*.	As mentioned under the Operational principle 1 above, the Guidelines will be issued by January 2013

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
7. Involve stakeholders, including project-affected groups and local non-governmental organizations, as early as possible, in the preparation process and ensure that their views and concerns are made known to decision makers and taken into account. Continue consultations throughout project implementation as necessary to address EA-related issues that affect them.	The environmental legislation provides for NGOs to be represented in the Board of the EEAA and the sectoral guidelines and TORs for EIA require proponent to hold public consultations with all interested and/or affected parties. The 2009 Guidelines for principles and procedures for EIA requires the consultation process and outcome to be fully documented as part of the EIA Report.	2009 Amendments to the Law 4, 1994 and the 2009 Guidelines for principles and procedures for EIA.	*No significant gaps.* .	None

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
8. Use independent expertise in the preparation of EA where appropriate. Use independent advisory panels during preparation and implementation of projects that are highly risky or contentious or that involve serious and multi-dimensional environmental and/or social concerns.	It is a common practice to use independent consultants and experts to prepare EIAs. The EEAA uses the services of external experts to review EIA, including international experts to review EIAs for large and complex projects and to advise on the clearance process.	Although there is no explicit reference to "Independent Advisory Panel" of experts in the Law 4 and its 1995 Implementing Decree, article 13 of said decree states that EEAA may "resort to any experts whose names are included in a list to be issued by the EEAA according to the criteria set by the EEAA's Board of Directors, so that such experts may give their opinions on the assessment of the environmental impact of an establishment intended to be constructed and for which a permit is being requested"	*Gaps:* EIA for Landfills processing, handling or storage facilities for hazardous wastes including POPs does not include use of independent advisory panels	By December 2012, the Implementation Manual of the project shall describe in details the roles, mandates of each institution involved in EIA review, compliance monitoring and coordination mechanism .
9. Provide measures to link the environmental assessment process and findings with studies of economic, financial, institutional, social and technical analyses of a proposed project.	There is no such specific requirement. However, sectoral EIA guidelines require that proponent must provide analysis of alternatives including the no-action alternative and EEAA has the mandate to review consistency of EIA and other project design features.	None	*No significant gaps.* As decided under the EPAP II, this gap can easily be addressed by ensuring early conduct of EIA.	*None.*

Bank Policy (OP 4.00) Requirements **(Objective and Operational Principles)**	**Government of Egypt's Equivalent Requirements**		**Gaps and differences between OP 4.00 and GOE's requirements.**	**System improvements that would be undertaken by the Government of Egypt during implementation of the project activities**
	Objectives and Operational Principles as stated in GOE's corresponding laws, rules, regulations, procedures, and sectoral guidelines.	**Egypt's corresponding laws, rules, regulations, procedures, and sectoral guidelines.**		
10. Provide for application of the principles in this table to sub-projects under investment and financial intermediary activities.	Not applicable as there is no FI Category.	Under Law No. 4 of 1994 and its Executive Regulations, CAA and EEAA are required to screen and review all sub-projects for their potential impacts.	*No significant gap.*	*None.*
11. Disclose draft EA in a timely manner, before appraisal formally begins, in an accessible place and in a form and language understandable to key stakeholders.	EEAA is requiring since 2009 mandatory disclosure in the EIA procedural Guidelines and sectoral guidelines that were already issued. EIA reports and Form B will be disclosed.	2009 Manual on 'Principles and Procedures for EIA'	*No significant gap*	

Equivalence Analysis
Summary Matrix on Pest Management

Summary Matrix on Pest Management				
Bank Policy (OP/BP 4.00) Requirements **(Objective and Operational Principles)**	**Egypt's Equivalent Requirements**		**Gaps and differences between OP/BP 4.00 and Egypt's requirements**	**Remarks and System improvements to be undertaken by Mauritius before implementation of the project activities**
	Objectives and Operational Principles as stated in Mauritius' corresponding laws, rules, regulations, procedures	**Mauritius' corresponding laws, rules, regulations, procedures**		
Objective: To minimize and manage the environmental and health risks associated with pesticide use and promote and support safe, effective, and environmentally sound pest management.	Egypt has a substantial amount of laws and regulations dealing with dangerous chemicals control and pesticides, administered respectively by the Ministry of Health and Populations, Ministry of Agriculture, Ministry of Industry, Ministry of Health and the EEAA This legal framework applies the "Integrated Pest Management" as first line of defense against risks associated with use of pesticides in agriculture. It complies with standards established by FAO/WHO, EU and US-EPA.	Law 4-94 as amended to date and numerous decrees and regulations (see above note)	There are no laws requiring IPM/IVM.	None
Operational Principles: 1. Promote use of demand driven, ecologically based biological or environmental pest management	Although there are no laws requiring IPM, in practice, this type of pest management is the "first line of defense" adopted in Egypt and is being implemented consistently in various sub-sectors of agriculture In practice, pesticide	Legal provisions to be added FAO/WHO Codex Alimentarius, Vol 2.B Pesticides Residus. 2nd Edition Rome 2000 disseminated in Egypt through the Ministry of Agriculture and the Ministry of Health.	There are no laws requiring IPM/IVM however, it is now an established policy and practice to implement the IPM for all agriculture sector.	None

practices (Integrated Pest Management [IPM] in agricultural projects and Integrated Vector Management [IVM] in public health projects) and reduce reliance on synthetic chemical pesticides. Include assessment of pest management issues, impacts and risks in the EA process.	management is a required component in the EA,	Ministry of Agriculture IPM program Implementation Manual (see Main Equivalence analysis Paragraph 23 Footnote 7 the analysis of this policy and practice)		
2. Procure pesticides contingent on an assessment of the nature and degree of associated risks, taking into account the proposed use and intended users. Do not procure formulated products that are in WHO Classes IA and IB, or formulations of products in Class II unless there are restrictions that are likely to deny use or access to lay personnel and others without training or proper equipment	Under applicable laws and regulations, it is required that any person who imports, exports, manufactures, sells, distributes or otherwise handles, in the course of a business activity, a dangerous chemical, shall ensure that the dangerous chemical marketed is provided with a safety data sheet when delivered to a user. It includes pesticides in the definition of a "dangerous chemical." The laws and regulations also provide that no person shall place on the local market a dangerous chemical which can be substituted by a less harmful or less dangerous chemical. Products classified by WHO as highly hazardous are prohibited.	Resolution 3059		None
3. Follow the recommendations and minimum standards	According to applicable laws and regulations, every person who imports, exports, manufactures,	See relevant Annexes in Resolution 3059	The Ministry of Agro Industry specifically refers to FAO/WHO standards	None

as described in the United Nations Food and Agriculture Organization (FAO) International Code of Conduct on the Distribution and Use of Pesticides (Rome, 2003) and procure only pesticides that are manufactured, labeled, handled, stored, applied and disposed of according to acceptable standards as described in FAO Pesticide Guidelines on Storage, Labeling, and Disposal (Rome, 1985).	sells, stores, distributes or trades in any chemical substance shall ensure that the chemical substance is classified and labeled in accordance with the classification and labeling requirements specified in the Resolutions 3059. Furthermore, that Resolution provides that no person shall import, export, manufacture, sell or distribute any dangerous chemical unless it is packaged in accordance with requirements set out in the Resolution. The Resolution states that where there are no national standard in force for packing, containers and tanks, relevant internationally recognized standards, recommendations or norms should be referred to. Reference is made to US and EU standards In practice, the Agriculture Ministry regularly monitors the pesticide residue levels in fresh vegetables and fruits produced locally. The maximum residue levels are within the WHO/FAO Codex Alimentarius norms.			
4. Support policy reform and institutional capacity development to (a) enhance implementation of IPM- and IVM-based pest management, and (b) regulate and monitor the	No formal provisions in laws and regulations. However, within the Ministry of Agriculture, the offices in charge of extension are assisting agriculture producers and operators with advisory services including training to ensure implementation of IPM and decrease reliance on chemicals. IPM training	No provisions in Egypt Laws and Regulations, but policy documents and programs in agriculture refer to WHO, FAO, US-EPA and EU standards as mandatory.	No gap in substance	None

distribution and use of pesticides.	programs are regularly implemented; and Monitoring is done on regular basis on pesticides residues in all agricultural products including fresh vegetables to ensure that WHO/FAO, US-EPA and EU standards are met.			
5. Disclose draft mitigation plan in a timely manner, before appraisal formally begins, in an accessible place and in a form and language that are understandable to key stakeholders.	Ministry of Industry's website and Ministry of Agriculture's website and other Government and non-Governmental websites disclose relevant information about pest management including IPM.		No provisions	None

Annex 4
Description of the Decree 865

i. Adopts the criteria and standards issued by the World Health Organization (WHO), Food and Agriculture Organization (FAO), their Joint Meeting on Pesticide Residues (JMPR) and the International Authority for Research on Cancer (IARC) for the valuation and assessment of toxicity of pesticides, as well as adopts the recommendations of the United States Environment Protection Agency (USEPA), European Commission (EC), PIC and POPs regarding the definition of authorized pesticides to be registered, used and circulated (Article 1);
ii. Entrusts the Agricultural Pesticides Commission to study and valuate all pesticides used in Egypt in order to verify the compatibility with regulations and standards provided for in Article 3; and
iii. Mandates the aforementioned Commission to define the allowed and prohibited pesticides in Egypt (Article 4).

22. Other regulations of interest to POPs pesticides include:
    a. Decree No. 411 of 1995 establishing the Sub-Committee on Domestic Pesticides, dated November 01, 1995 which describes the mandate of the Sub-Committee to study and examine registers, in particular for poisonous and toxicity level as well as active materials and residues;
    b. Decree No. 3209 of 2003 on pesticides dated September 9, 2003, dealing with reports and standards of the Environment Protection Agency of USA (EPA) which shall be taken in consideration for the valuation of carcinogenic effects of pesticides related to the registration, use, preparation, circulation and testing, in accordance with Law on the protection of food quality of 1996 (article 1). All Decrees incompatible with this Decree are now abrogated (article 2).
    c. Ministerial Decree No. 89 of 2001 concerning the analysis of pesticides residues and the heavy elements in food, dated January 22, 2001;
    d. Decree No. 165 of 2002 prohibiting the importation of dangerous and hazardous substances and waste listed in the attached annexes, dated September 5, 2002. This Decree stipulates that:
        i. import of dangerous and hazardous substances and waste listed in its attached Annex 1 shall be prohibited (article 1);
        ii. an Industrial Register must authorize the use, storage, transport, circulation and recycling of these substances (article 2);
        iii. the circulation and transport of these substances outside the designated facilities must be authorized by the Industrial Control Department (article 3); and
        iv. the revision and updating of the list of hazardous substances and waste shall be carried out every two years (article 4);
    e. Decree No. 1445 of 2003 dated February 26, 2003, defining the hazardous substances and prohibiting their handling, import and trade which provides that:
        i. the substances listed in the attached list are to be considered hazardous waste and their import, commerce and circulation shall be prohibited (article 1); and
        ii. the treatment of the aforementioned substances shall be executed according to the requirements and conditions established by the Ministry of Environment;

f. Decree No. 3059 dated December 30, 2004 on agricultural pesticides repeals Decree No. 3209 of 2003 on pesticides[73]. It forms a comprehensive set of regulations and has 13 Annexes, providing that:

i. production, preparation, refilling, importation, circulation and trade of agricultural pesticides, without prior registration with the Ministry of Agriculture and Land Reclamation according to the rules, requirements and measures provided for in this Decree, shall be prohibited (article 1);

ii. the registration of pesticides shall comply with regulations issued by FAO and WHO (article 2); and

iii. the application form shall require the following information: (1) registration and utilization certificates of the country of origin; (2) High Quality Certificate from the industry; (3) pesticide analysis methods; (4) studies concerning the risks to public health; (5) enclosure of 20 copies of the Technical Bulletin; (6) a study of poisoning and toxicity to the environment and mammals (article 3); the Registration Certificate shall be approved and issued by the National Commission on Pesticides after the approval by the Ministry of Agriculture and Land Reclamation (article 6); (7) the Secretary of the Commission shall adopt the pesticide's label (article 7); (8) the Registration Certificate is valid for 3 years, renewable (article 8); (9) requirements and conditions for the revocation of the registration of pesticides are given (article 11); (10) the packages used for pesticides shall be hermetic and vacuum-sealed (article 18); (11) trade in Pesticides of High Risk without a special authorization from the National Commission on Pesticides shall be prohibited (article 20); (12) the transport of pesticides shall be carried out by suitable means compatible with technical and environmental requirements and conditions (article 29); However, the Bank team was not able to gather information about the standards applied to the acceptable level of pesticides in soils and sludge. Ministry of Agriculture staff said informally that EU and FAO standards are applied as far as residual pesticides and dioxins and furans in food products are concerned. Such standards are to be enforced in order to facilitate foodstuff export to European countries and the USA.

[73] It goes without saying that proper and effective implementation and enforcement of this Resolution, along with the other Resolutions listed in this Section will help reduce the amount of POPs and associated risks.

Annex 5

Preliminary Risk Assessment of Potential Intermediate Collection Centers

The Nasreya Hazardous Waste Center (NHWC)

1. NHCW is situated in Al Nasreya situated a 50-60 Kms , south east of Burg El-Arab district, in the Alexandria Governorate. It is surrounded, from the eastern side, by a charity house (House of orphans) at a distance of 1 km, and a school at a distance of 1.5 km. In the western side, there are some illegal houses at a distance of 500 m. Towards the south east side, there are illegal buildings (such as a mosque, building encroachments, etc. at a distance of 30 m. From the north, there is a paved road and open undeveloped land (desert). The site is surrounded by fence from all sides with a length of 500 meters and a width of 300 meters. The site also has two gates, one of them for emergency only.

2. The Nasreya Hazardous Waste Treatment Centre (www.nasreya.com) has been managed entirely by the Governorate of Alexandria. The Center operates as self sufficient revenue generating an annual profit of L.E. 1.2 million in 2009 and is operated by 14 engineers trained in hazardous waste under the leadership of an active director. The Center includes a hazardous landfill with a capacity of 40,000 tons and a surface of 14,000 m^2, a physical-chemical treatment plant for inorganic liquid hazardous waste, a solidification unit, and storage units for organic and inorganic wastes. Two small incinerators were recently installed and are used for now as a pilot operation for the disposal of solid organic hazardous wastes (primarily pharmaceutical wastes). However, the total quantity of incinerated hazardous wastes generated is relatively small. Each incinerator is equipped with a two-stage combustion system including an afterburner to destroy potential contaminants of concern to control the emissions. The stack height is approximately 6 meters from the ground, which complies with the regulatory requirement of at least 3 meters above the building structure. The incinerator is located at the farthest southeastern corner of the facility near the fence line. Locating the incinerator in this position ensures that any emissions from the incinerator exit the facility to the south, which is the downwind direction. Since there are no known receptors in this direction, within at least for 5 km from the facility, this condition ensures that there is no potential adverse impact on any receptors in and around the facility.

3. A rapid visit by the World Bank team in September 2010 indicated that the management of the landfill, the use of the testing laboratory as well as the storage of inorganic waste in the vicinity of the two small incinerators should be substantially improved (see pictures below). Subsequent to the World Bank visit, the RBO and CDEIEC undertook periodic inspection of the Center, however, in the absence of an EMSP or the environmental register, it is not possible to improve the management of the Center.

4. During project preparation, a preliminary hazardous waste risk assessment was conducted by the Tauw Consultant[74] to the project. It included a study on the topography, land use, climate, geologic setting, hydrology, soil properties, site characteristics, issues and risks and proposed mitigating measures. The overall result of such assessment showed that there are no adverse environmental impacts from the facility. All wastes treated in the treatment units are stored and handled within the boundary of the facility.

[74] Boudewijn Fokke, Preliminary Hazard Assessment for Nasreya HWTC Alexandria Governorate, Egypt, TAUW report, 31 August 2011 Reference N004-4740948BFF-beb-V01-NL

5. However, the preliminary risk assessment recommended that the Center could be be considered as an Intermediate Collection Center (ICC) for obsolete pesticides provided that the following actions be implemented as part of the comprehensive risk assessment that will be conducted as part of a comprehensive ESIA that will be prepared by the operator.

a) The recently illegally built houses and mosque nearby the Nasreya Hazardous Waste Treatment Centre should be taken into account when carrying out the ESIA. ;
b) Air and soil monitoring should be undertaken to address air and soil pollutions in and around the landfill;
c) Organic air emissions from hazardous waste tanks, surface impoundments, and containers should be controlled from risks posed by volatile organic compounds;
d) A Health and Safety Program (HSP) should be developed for the landfill site, taking into consideration the specific needs of the workers and the community surrounding the Center. The HSP must address the safety for each equipment as well as the overall safety of workers;
e) Visitors must not be allowed in areas where their health and safety may be compromised
f) Use of goggles, masks, hard hats, and protective clothing, and using selective inhalators should be provided for all workers. Proper equipment design and recommended safety procedures must be followed. Regular health and safety training procedures, as required for the overall hazardous waste facility, if followed, should be adequate for the operating personnel at the stabilization area; and
g) The medical records, environmental record and accident record should be made available on the site.

Pictures from the Site

Picture 1; Storage of Plastic Jerks

Picture 2: Storage of tires

Figure 3: Small incinerator with no gas treatment

Figure 4: Waste storage

Figure 5
Sink in the laboratory

6. El Saff area lies in the eastern side of the River Nile, between El Saff town in the south and El-Tebbin in the north. It belongs to Gizah Governorate. El-Saff canal crosses the area of study, it has a length about 52 Km. The storage is located inside the granary (170 m x 90 m) of the Credit Development Bank, at a limited locality called Zerzarh. The storage (40 m x 25 m) which lies at the south-eastern corner of the granary has an area of 1,000 square meters and a height of 10 meters. The floor is made of concrete. The store has four doors (two on the northern side while the others on the southern side of the store). It has high openings (in the walls and over the ceiling) for comprehensive ventilation. The granary is bordered to the north and west by residential areas which are vulnerable, at a distance less than 100 m. The site is bordered in the northern and eastern sides by a building for mills, mountainous area, and many brick kilns.

7. In the past, El Saff pesticide store was away from residential areas which have expanded with population growth and urbanization. Therefore, the pesticide store containing obsolete stocks is situated inside densely populated area and could threaten the health of the local people and their livestock.

8. The major environmental issues in el El Saff as identified by the Consultant Tauw in an annex to the report are[75]:

a) **Soil contamination**: Soil analysis conducted in three soil samples around El-Saff storage site revealed a high concentration in herbicide Ametryn (main pesticide stored in El-Saff) with a concentration of 128 ppm at 20 cms soil depth in sample 3. Ametryn is not a POP however since the soil contamination is in the same direction of the groundwater flow and that the Nile is considered as a drain for groundwater aquifer, the site is considered to be a hotspot of high potential hazard. The high concentration of this pesticide is caused probably by the poor handling in terms of loss during storage or transportation, during partial repacking or conditioning for test and poor condition of storage inside the storage site. Also, sulfur which is mainly used in fungicides, was also detected with a concentration of 459 ppm at a soil depth of 15 cms in sample #2.

b) **Potential Air Contamination:** Potential emissions from the storage site can cause air contamination, affecting the whole food potentially can contaminate food (like eggs, milk, fish or cheese).

c) **Potential Health and Water Quality Issues.** Until now, no health related issues have been identified due to the presence of obsolete pesticides in water resources. However, as the concrete and clay shields of the site will further deteriorate over time, the amount of pesticides in the soil and thus in the waters is expected to increase. Consequently, the water quality of ground and surface waters should be monitored.

d) **Lack of Emergency Response:** There is no any emergency response plan for the storage site.

9. The preliminary assessment concluded that El Saff Storage Site requires a more detailed hazard assessment program. Such assessment will be part of the comprehensive EIA that will be conducted as part of component 3 of the project. Tauw Consultants recommended that El Saff be considered suitable for the temporary storage of repacked obsolete and POPs pesticides on condition that the pesticides are repacked in an environmentally acceptable manner and the site is managed

[75] Boudewijn Fokke , Preliminary Hazard Assessment for El Saff Storage site Gizah Governorate, Egypt, 31 August 2011,Reference N003-4740948BFF-beb-V01-NL

adequately. The following corrective actions (among others to be identified during the full-scale EIA and risk assessment) were recommended:

(a) POPs pesticides should be stored safely, preferably in dedicated areas away from other materials and wastes
(b) Storage Site should be re-designed to prevent the release of POPs to the environment by any route.
(c) Some basic principles of safe storage of wastes consisting of, or contaminated with, POPs are as follows:
    - Storage rooms, buildings and containers should be located and maintained in conditions that will minimize volatilization, including cool temperatures, reflective roofs and sidings, a the construction of a shaded location, etc.
    - In warmer climate, the storage site should be maintained under negative pressure and a ventilation system should be established with carbon filtration of exhaust gases to mitigate the potential hazard for those who work at the site and those living and working in the vicinity of the site.
(d) Dedicated building and containers should be in good condition and made of hard plastic or metal, and with wood, fiberboard, drywall, plaster or insulation
(e) Storage sites should have fire alarm systems
(f) Liquid wastes should be placed in containment trays or a curbed, leak proof area
(g) Contaminated solids should be stored in sealed containers such as barrels or pails, steel waste containers or in specially constructed trays or containers.
(h) A complete inventory of wastes in the storage site should be undertaken and kept up to date as waste is added or disposed of
(i) The outside of the storage site should be labeled as a hazard
(j) The site should be subjected to routine inspection for leaks, degradation of container materials, vandalism, integrity of fire alarms and fire suppression systems and general status of the site
(k) Emergency response plans should be in place for all POPs in use, in storage, and in transport

Annex 6

Issues Raised/Comments at the Public Consultation Workshop Held on June 12, 2012

1. The Mission participated in the consultation workshop of the Safeguard Diagnostic Review (SDR) which took place on June 13, 2102 at the Cairo House and was chaired by Ms. Fatma Abou El Shouk, Acting CEO of EEAA. The meeting was attended by 64 representatives from ministries (Environment, Electricity and Energy, Industry, International Cooperation), research institutes and universities, and three media representatives, as well as 16 NGOs (a copy of the Agenda and the List of Attendees are attached in Annex 4 and Annex 5 respectively). The workshop was conducted in Arabic, with Power Points provided in English. It consisted of two presentations by EEAA staff: an overview of the POPs situation in Egypt; and, the project description, as well as a review of the Egyptian EIA system, followed by a session for question and answers. The Bank made a presentation on the draft SDR (a copy is attached in Annex 6), which was followed by discussions and clarifications.

   (a) **Review of the report:** The meeting requested that more time be provided to review the report and provide comments. It was clarified that the draft SDR and its Arabic executive summary is on the web site of the EEAA, and a further two weeks will be provided to enable all readers to provide their comments.

   (b) **Use of consultants:** One participant expressed concern that the project budget would be entirely allocated to consultants and that there will not be sufficient funds for treatment and disposal of POPs, as was the case in many projects that were implemented in Alexandria. The Bank team clarified that the GEF budget of US$ 8.1 million includes a technical assistance component of about US$ 2.3 million (about 10 percent of the project cost) and the balance will be for training, treatment, and disposal of PCBs.

   (c) **Equivalence Assessment**: Clarification was requested on the major difference between the Egyptian EIA system and the Bank environment assessment policy. The Bank team replied that the major differences were: (i) on the analysis of alternatives which, for the Egyptian system, is limited to site and technical alternatives, instead of alternatives on inputs, output, demand and cost effectiveness; (ii) the content of the Environment and Social Management Plan which, under the national EIA system, weighs heavily toward environmental rather than social impacts; and, (iii) a lack, in practice, of disclosure of the executive summary (which is a required action as per the National EIA Guidelines of 2009).

   (d) **Acceptability Assessment:** The report does not include the Ministry of Manpower as one of the ministries involved in work safety and in occupational health related to POPs and PCBs. Also the presentation did not mention the role of the Ministry of Health. The Bank team replied that the revised report will include the Ministry of Manpower. However, the report does describe the role and responsibilities of the Ministry of Health – particularly the role of the General Directorate of Occupational Health. The Bank team also clarified that the POPs Project Steering Committee will include representatives of these ministries to ensure cooperation and coordination among sector ministries in the POPs management.

   (e) **MEE Concern:** The representative of the Ministry of Electricity and Energy commented that, in anticipation of their participation in the project, the Ministry had already sent a general circular to all their power and distribution plants to stop any disposal of used oil from their transformers and capacitors. This has created a storage problem issue and therefore the implementation of the project should be speeded up, so as to dispose properly of these used oils.

The Bank team replied that best efforts will be made to complete the appraisal of the project before August 2012. Consideration will also be given to revise the time schedule to address these storage issues during the first year of project implementation.

(f) **Al Saff Storage Facility for Obsolete Pesticides (OPs)**: Two different issues were raised: (i) the need to purchase an incinerator to be installed within the facility to incinerate the pesticides. The Bank team replied that the purchase of an incinerator cannot be justified from technical, financial, social and environmental points of view; and, (ii) there is little information on the amount, composition and types of pesticides and such a facility should be safely closed down. The team replied that the storage facility is already closed and the POPs Project will finance specific mitigating measures to prevent further deterioration of the stored materials and degradation of the site.

(g) **Public Consultation:** One participant stated that such consultations should be made in public places to enable the citizens to provide their comments, in view of the new spirit of partnership, especially after the revolution of January 25th, 2011. An EEAA representative replied that the new EIA guidelines of 2009 require public hearings and sets forth the procedures for such consultations. Such public hearings are taking place and EEAA has in fact stopped a project in carbon black because of the opposition of four or five stakeholders. The Bank team also replied that, as a result of the gap filling measures under the SDR for EPAP II, EEAA has institutionalized public hearings for projects classified as Category C (corresponding to projects classified as Category A under the World Bank EA policy). The Bank team also mentioned that, in the EA report of the third phase of the metro line, public hearings took place in a mosque and at an engineering club. The team assured the audience that consultations will also take place on the ESIAs in public places (to the extent possible) for all subprojects under the POPs Management Project.

(h) **Enforcement:** One participant expressed concern that enforcement of the law is weak, as district attorneys and judges are not trained on environmental law and it would be preferable to have outside expertise to evaluate such cases. An EEAA representative clarified that three workshops had already been held for judges and prosecutors, and in fact all violations are referred to the economic tribunal and not to the administrative tribunal. The Bank team also clarified that first component of the project will include training and special reference will be made in the project document that such training would also involve judges, lawyers and prosecutors.

(i) **Follow up on enforcement and compliance:** One NGO participant referred to the Bank presentation, in which it was stated that the private contractors for the collection and disposal of PCBs (or obsolete pesticides) would prepare the EIA and would be responsible for implementing the mitigating measures. The participant requested that a tripartite committee composed of EEAA, the NGO and the operator be established to follow up on the project. The WB team indicated that the steering committee will include a representative of the NGOs to follow up on the project.

(j) **Gap Filling Measures:** Many NGOs representatives referred to the gap filing measure No. 4, related to the development and provision of training and proposed the following modifications: (i) participation of the NGOs in the training programs organized by the project; (ii) organization of public awareness campaigns by provision of materials, brochures and equipment related to pesticides and other hazardous substances; (iii) targeting youth in the awareness campaigns in schools; (iv) strengthening the NGOs network involved in hazardous waste and pesticides. An EEAA representative indicted that information on PCBs and POPs is already on the EEAA

website and that it would be ready to provide additional support to NGOs in this regard. The Bank team also clarified that the Project will develop under Component 1 the enhancement of national capacity, which includes training and awareness campaigns, and that Component 2 will develop a long-terms pesticide management strategy, which will take into account the NGOs' proposed ideas.

Annex 7
List of Key Officials Met

Name	Title	Contact Information
Egypt Environmental Affairs Agency (EEAA)		
Dr. Fatma Abou Shouk	Head of the Environmental Management Sector and Acting CEO, EEAA	Phone: 202-2525-6475 Email: faboushouk@mailcity.com
Ms. Yasmine Fouad	GEF Unit Director	Phone: 2-010-1555-292 Email: gefunitegypt@gmail.com
Eng. Elham Refaat Abdel Aziz	Director of Hazardous Substances Director	Phone: 010-918-3010 Email: emorefaat@yahoo.com Elhamaziz73@yahoo.com
Ms. Hoda Omar	International Relations Officer and GEF Officer	Phone: 012-335-2319 Email: gefunitegypt@gmail.com
Mr. Tarek Salah	GEF Officer	Phone: 010-117-0070 Email: tarek_slah@yahoo.com
Mr. Mohamed Nabil Badran	Environmental Researcher Sustainable Development Dept. Environmental Management Sector	Phone: 010-084-04648 Email: Mohamed_n.badran@yahoo.com
Mr. Mahmoud El Nady	Environmental Researcher Sustainable Development Dept. Environmental Management Sector	Phone: 0100-364-0547 Email: alnady.mahmoud86@gmail.com
Dr, Raouf Okasha	Advisor to EEAA on PCBs	Phone: 0122-447-8445
Ministry of Electricity and Energy (MEE)		
Eng. Mohamed Mousa Omran	First Under Secretary of State for Research, Planning and Authorities Follow-Up	Phone: 202-2261-6305 010-168-9868 Email: momran@moee-tmo.gov.eg
Eng. Mostafa Ibrahim Khamis	Under Secretary of State for Authorities Follow-Up	Phone: 202-2401-7845 Email: mostafa.i.khamis@hotmail.com
Eng. Ahmed Mohamed Mehina	General Manager for Technical Follow-Up	Phone: 202-22616523 Email: ahmed.moee@gmail.com
United Nations Environment Programme		
Ms. Johanna Suikkanen	Associate Programme Officer, Division of Technology, Industry and Economics	Phone: 33-1-44-37-19-84 Email: Johanna.suikkanen@unep.org
Ministry of Industry and Foreign Trade, Egypt National Cleaner Production Center		
Ms. Doaa Mahmoud Tawfek	Cleaner production specialist	Phone: 201-22-333-8032 Email: dtawfik@encpc.org
Federation of Egyptian Industries		
Eng. Adel Mohamed Taha	Chemical and wood sectors coordinator, Environmental Compliance Office and Sustainable Development	Phone: 202-2390-4603 Email: ataha@eco-fei.net
Egyptian NGOs		
Mr. Said Abdella	Board Member, Crop Life, Egypt	Phone: 202-3582-8088 Email: saidabdella@croplife-eg.com
Dr. Wafaa Menecy	Chair, Environmental Pioneers Organization	Phone: 002-033-23-8100 Email: wafaa_menecy@hotmail.com
Eng. Anan Helal	Consumer Protection Society	Email: ananhelel@ymail.com

Annex 8
Model Environmental Register
(Appeared in Annex 3 of the Executive Regulations of Law 4)

1. Name and address of establishment
2. Name and job title of person in charge of filling in the Register.
3. Period covered by the current data.
4. Type of activity and nature of raw materials and production during the corresponding time period.
5. Laws governing the establishment.
6. Special conditions set by the EEAA for the establishment.
7. Statement of the types of emissions, the rates of discharge (per hour/ day/ month/ year), and method of disposal thereof.

   7/1 - Gaseous
   7/2 - Liquid
   7/3 - Solid
   7/4 - Others

8. Rates at which tests are conducted on each type of emission emanating from the establishment.

   8/1 Random samples [experimental]

   * Date, time and place of each sample.
   * Rate of sample collection.
   * Indicators requiring to be measured (daily/ weekly/ monthly).

   8/2 Samples of compound wastes

   * Date and time of sample collection.
   * Places of mixing and percentages of mixture in the compound sample.
   * Indicators requiring to be measured (daily/ weekly/ monthly).

9. Extracted materials after treatment processes.

10. Extent of efficiency of treatment method.

11. Date and signature of officer in charge.

Annex 9

List of Attendees to the Public Consultation Meeting Held in Cairo on June 13, 2012

Safeguards Diagnostic Review
For
Piloting the Use of Egyptian Systems to Address Environmental Issues in the Proposed GEF-Financed
Egypt: Sustainable Persistent Organic Pollutants (POPs) Management Project (P116230)

Equivalence and Acceptability Assessment Report

Cairo House

Wednesday 13 June 2012

NO	Name	Position	Tel.	E-mail
A) Professors				
1.	Ahmed El Ghorab	Professor at the National Research Center	01125384944	Aghorab21@yahoo.com
2.	Dr.Nabeil Mahfouz Ibraheim	Professor, Faculty of Agriculture, Cairo University	01060701032	Agric-nabilss@hotmail.com
3.	Dr .Mohamed Sameir Amein	Professor at the faculty of Science-Ein Shams University	01005417272	hamzamsa@yahoo.com
4.	Samya Kabani	Professor of pesticides, Faculty of Agriculture	01004026344	Selkabbany5@yahoo.com
5.	Al Sayed Mohamed Helmy khater	Researcher at the National Research Center	01222159878	emhkhater@gmail.com
6.	Dr.Magda Ebeid	Institute of Environmental Studies and Research	01222711467	Magda_ebeid@yahoo.com, Magda_ebeid@hotmail.com
7.	Dr.Wassim Mostafa Kamal	underground water Research Institute	01116184983	waseemmostafa@yahoo.com
8.	Gihad Ahmed Abou El Ata	Professor of environmental occupational medicine - Faculty of Medicine, El Kasr El	23638045	gehadaboelata@yahoo.com

NO	Name	Position	Tel.	E-mail
		Einy		
B) CSOs				
9.	Dr.Wafaa Menesy	Chair of Environmental Pioneers	01005130918	Wafaa_menecy@hotmail.com
10.	Saeid Mohamed Mohamed Abdelleh	Crop Life	01001364080	Said_abdella@hotmail.com
11.	Anan Roshdy Helal	Chairman of Ein Masr Association for Consumer Protection and Environment	0122342835	ananhelal@gmail.com
12.	Medhat Mourees Mekhaeil	Association for Consumer Protection and Environment	0122342835	ananhelal@gmail.com
13.	Raouf Okasha	Hospitals Day Association	01224478445	roufokasha@yahoo.com
14.	Mahmoud Ibraheil	Secretary of Youth, Mansheyet Nasser Association for Youth	01111603605 01276662088	Hoka7775@gmail.com
15.	Sameir Mahmoud Abdel Baky	Secretary of the Young Women Muslim	01224337512	Samerkahmoud81@yahoo.com
16.	Mahmoud Mohamed Mohamed	Nile Youth Association	01006406268	
17.	Samer El Mufty	Samer El Mufty environmental forum – El Sawi Water Wheal "NGO"	01006846845	samermufty@yahoo.com
18.	Mariam Mikhail rizk	Association Voice of Masr el kadima	01222881600	Mariam-mikhail@hotmail.com
19.	Islam salah el din	Salam el saeyd Association	01209030400	drwafaaaref@yahoo.com
20.	Randa yassin abd el fatah	Public relations - Charity moderation Association	01227232077	Ra-m.h.r@yahoo.com
21.	Ekbal El Samalouty, Prof.	Future Eve Association chairman	01000028880	Hfd_96@yahoo.com Hfd96@hotmail.com
22.	Dr.Sanaa El Sayed Mostafa	Al Thanaa Community development and environmental protection Association	045-2567245	Althanaa821@yahoo.com
23.	Nabil Ismail	Member of Al	045-2567245	Althanaa821@yahoo.com

NO	Name	Position	Tel.	E-mail
	Amer	Thanaa Association		
24.	Conslt.Mohamed Mohamed Abdel Moneim Fawaz	the Board of Directors Chairman – El Afoa Egyptian Association	01115098999	
C) Others				
25.	Dr.Manal Samy Ahmed Farag	Environmental Researcher, EEAA Alexandria	01005504944	M5samyfarag@gmail.com
26.	Ahmed Momen Saad	Environmental Researcher, EEAA Alexandria	01018883028	Deserteagel55@yahoo.com
27.	Samar Mohamed El Shenawy	Programs Director	01144035816	Maresho_11211@yahoo.com
28.	Adel Mohamed Taha	Center for Environmental Commitment, Union of Egyptian Industries	01001199595	ataha@eco-fec.net
29.	Wael Tahawy	Journalist- Al Dostour	01009996466	waelkamthawy@yahoo.com
30.	Fateen Soliman	Journalist- Nile	01007983411	
31.	Mohamed Mohamed Mohamed Ali	Environmental Affairs Researcher, Ministry of Environment	01144755034	
32.	Chemist .Elham Refaat Abdel Aziz	General Manager, Environmental Development Department	01009183010	emorefaat@yahoo.com
33.	Dr.Alaa Sarhan	World Bank		
34.	Dr.Sherif Arif			
35.	Khaled Mohamed Roshdy	Bio-energy Financial and Administrative Manager	01225077074	khaled@egyptbiomass.com
36.	Shereif Ibraheim	Networks Engineer	01006911897	sheriff@smres.org
37.	Chemist .Hossam Ahmed	Institute for Studies of mineral identification	01117864949	E2rc@thewayout.net
38.	Hanan Ibraheim Shawky	EEAA	01005248369	shawky@link.net
39.	Nahla Refat Sakr	Researcher, Ministry of International Cooperation	01111456724	msakr@mic.gov.eg
40.	Dr.Mohsen Hamed Beheiry	Director of the Laboratory Oil, Company of South	01227215897	

NO	Name	Position	Tel.	E-mail
		Cairo Electricity Distribution		
41.	Mohamed Farouk Amein	EEAA	01007181159	Mohamedfaro76@hotmail.com
42.	Enaam Megahed Bakr	EEAA- Cairo Branch	01153026657	enaambakr@gmail.com
43.	Dr.Mahmoud Shawky	Director of the Central Administration to assess the environmental impact	01003066922	mshawky1953@yahoo.com
44.	Hekmat Abdel Rahman Seleim	General Directorate of Environmental Studies - Electricity Holding Company,	01096530435	Hekmat_seleem@yahoo.com
45.	Mohamed Nabil Badran	Environmental Development Department	01008404648	Mohamed_n.badran@yahoo.com
46.	Chemist. Hoda Aly El Sayed Moussa	General Manager of Environmental Management	03-5571761 01002249988	Hali_ea@yahoo.com
47.	Lobna Saad Mohamed Aly	Environmental Affairs Second Researcher- Greater Cairo Branch	01000779544	Lobnasaad14@yahoo.com
48.	Mohamed Abou Shama	Environmental Affairs Researcher- Greater Cairo Branch	01276908112	
49.	Shaimaa Tarek Khamiss	General Authority for Industrial Development – chemical Specialist	01143306795	Shaimaa.tarek07@yahoo.com
50.	Eng.Ahmed Mohamed Abdel Hamid Mehina	General Manager of Environmental Monitoring – Ministry of electricity	01226646944	Ahmed.moee@gmail.com
51.	Eng.Ahmed Taha	Environmental Specialist - General Industrial Development Authority	236130129	Environment.ida@gmail.com
52.	Khaled Mubarak	Journalist – Al Ahram news paper	01221345024	Khaled.mubarak@yahoo.com
53.	Eng.Maysoun Nabil	EPAP II	01110015565	Maysounali2@gmail.com
54.	Reham Galal	Economic Researcher - MOPIC	01288951488	rgalal@mic.gov.eg

NO	Name	Position	Tel.	E-mail
55.	Moataz Yousef Ahmed	Chemist - Electricity Holding Company, Egypt	01007652151	Moataz_yousef91@yahoo.com
56.	Soha Abdo Abd El Rihim	GEF unit – EEAA	01016173502	gefunitegypt@gmail.com
57.	Yasser Mohamed El Saed Askar	Industry Unit – EEAA	01001110867	Ya13673@yahoo.com
58.	Kawthar hefni	Head of The central department of environmental crises and disasters	01003364159	Kawthar @hotmail.com
59.	Dina Youssef Ahmed	Environment Affairs Specialist - environmental media Department Cairo airport	01115744483	dinaaboelezz@yahoo.com
60.	Johanna Suikkanen	UNEP – Associate programme officer		Johanna.suikkanen@unep.org
61.	Doaa Mahmoud Tawfik	Cleaner production specialist – ENCPC	01223338032	Eng.doaatawfek@yahoo.com
62.	Ghada abd el hafiz	Environment Affairs Specialist - Cairo Airport Company	01004366277	Ghada.soliman75@yahoo.com
63.	Mahmoud El Nady	Environmental Affairs researcher – EEAA	01003640547	Alnady.mahmoud86@gmail.com
64.	Dr. Ezzat Lewis	Head, Climate Change Central Department & NOU Focal Point to: MP / UNFCCC / IPCC & DNA Coordinator – EEAA	01222181424	eztlws@yahoo.com
65.	Dr. Emad Adly	National Coordinator GEF/SGP- Cairo	01222130678	aoye@link.net
66.	Hoda Omar	GEF unit officer	01223352319	gefunitegypt@gmail.com
67.	Ms.Yasmine Fouad	GEF Unit Director	01001555992	gefunitegypt@gmail.com

Annex 10

The Agenda for the Public Consultation Meeting Held in Cairo on June 13, 2012

Public Consultation Workshop

Safeguards Diagnostic Review

For

Piloting the Use of Egyptian Systems to Address Environmental Issues in Egypt Sustainable Persistent Organic Pollutants (POPs) Management Project Financed by GEF Equivalence and Acceptability Assessment Report

Cairo House

Wednesday 13 June 2012

10:00 – 10:30	
10:30 – 10:40	**Opening Remarks** Dr. Fatma Abou el Shouk- Director of Environmental Management Sector - EEAA Dr. Alaa Sarhan – Senior Environmental Economist - MENA / IBRD
10:40 – 11:00	**Overview of POPS status in Egypt & Overview of Sustainable POPs Management project (GEF/IBRD)**
11:00 – 11:15	**Overview of EIA system in Egypt**
11:15 - 11:30	**Over view of The Safeguards Diagnostic Review (Part 1 Equivalence Assessment)**
11:30 - 12:00	**`Coffee Break**
12:00 – 12:30	**Over view of The Safeguards Diagnostic Review (Part 2) Acceptability Assessment**
12:30 – 13:00	**Discussion and comments**
13:00 – 13:15	**How to harmonize the national EIA system with the EIA in World bank (The gap filling measures)**
13:15 – 14:30	**Discussion**
14:30 -- 15:30	**Lunch**

Annex 11

Letter of No Objection to Disclose the Report by EEAA

Annex 12

Status of the Gap-Filling Measures Agreed Upon under the EPAP II Project

1. As requested in the actions for the UCS and in the MTR, the PMU subcontracted an Egyptian consulting firm, Environics, to undertake a review of the quality of the forms B (equivalent to category B project in accordance with the World Bank's Operational Policy on environmental assessment, OP 4.01) in EPAP II subprojects, comment on their completeness with respect to the new EIA guidelines, and recommend corrective measures to sustain the improved EIA process. The draft report which was presented during the mission showed that:

    a) All Form B EIAs for the EPAP II sub-projects submitted after July 2009 (the effective date of the new EIA guidelines) should include an environment management plan (EMP) and self-monitoring plan.
    b) Forms as well as EIA approval have been posted on the EEAA website
    c) The new EIA system is not fully operational but gradual implementation has been witnessed in a transition phase
    d) The new EIA system needs to be publicized so that all operators and investors are aware of such system
    e) A number of recommendations regarding the need to prepare specific TOR for environment reviews, the use of sector guidelines, and the strengthening of the EIA department should be implemented.

2. The co-financiers expressed concern about the delay in the application of the EIA component of the UCS system. The mission met with Dr. Fatma Abou Shok, undersecretary for environment management, to discuss this matter and urge the MSEA to comply with the UCS system as agreed upon. It was agreed that, irrespective of the new executive regulations, the new environmental guidelines should be applicable to all EPAP II sub-projects. In this regard the following actions were agreed upon and the co-financiers recommended the PMU to oversee the implementation and report to the Bank on a bi-monthly basis:

    - All new EPAP applications should use the new Form A or Form B as per the new EIA system.
    - All EPAP applications for approval since July 2009 should amend the EMP to conform to the new EIA guidelines.
    - Within one week the following activities related to the UCS should be implemented: 1) the old Form A and B should be removed from the EEAA website and will be replaced by the new forms; 2) official notification will be issued by EEAA to all the RBOs and EMUs informing them that the new EIA guidelines (issued January 2009) are in full force and with no further delays.

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3. The schedule of actions for ensuring the sustainability of the UCS system is as follows:

Actions to be taken	By Whom	Status as of June 2010
1. Sustain the progress made and continue to improve the EIA process. a. Carry out annual review of the quality of EIA, Forms A and B approved and introduce corrective measures for sustaining the improved EIA process; b. Train a core group of EIA trainers (local EIA consultants and EIA reviewers at EEAA); and c. Train EEAA, RBO, EMU and EPF staff, NGOs, EIA consultants and reviewers, media, sector ministries, and participating banks.	EIA Department of EEAA, assisted by a team of independent consultants and a core group of trainers.	a. Review of the EIA form B was carried out by an independent consultant and specific recommendations were made to improve the quality (see above), as well as measures for ensuring sustainability. The PMU will follow on the recommendations and will report bi-monthly to the Bank on the status of progress of these recommendation b. Four workshops are being conducted annually by EEAA in co-operation with the NGO Union for training of trainers (Universities and consultants) in May 2009, Nov. 2009, Feb.2010, and May 2010. c. EPAP II has conducted 3 workshops in Cairo, Alex & Aswan to introduce the new EIA guidelines since the last supervision mission.

Actions to be taken	By Whom	Status as of June 2010
2. Introduce public environmental performance ratings to promote voluntary compliance by polluting industries. a. Introduce, on a pilot basis, a Program for Pollution Control Evaluation and Rating (PROPER) in Alexandria and Qalubiya; and b. Evaluate the experience and extend the program to other similar 'hot spot' areas.	CID and Industrial Unit of EEAA, and respective RBOs	a. - The consortium DHV/PLACENTER and ECOCONSERVE is still working on the finalization of PROPER - The testing phase has been implemented in 14 companies in 6th of October governorate. - A training workshop was held in last February to train Cairo and Alex RBOs on how to apply PROPER in the hot spots. b. - A pilot phase also has been implemented in 17 companies in 6th of October governorate. - EPAP II has prepared a large workshop to introduce PROPER to the different industries, NGOs, media, and consultants on 2 June, 2010. - The final Consultant report is to be submitted by the consultant in June 2010
3. Improve compliance monitoring. a. Train CID, RBO, and EMU staff on providing guidance to industries in preparation of CAPs; and b. Develop a database on compliance status on: (i) maintenance of environmental registers, as mandated under Law 4-1994, by industries participating in EPAP II; (ii) implementation of agreed CAPs; and (iii) monitoring actions taken against those who are not in compliance	CID and Industrial Unit of EEAA, and respective RBOs.	a. Two training workshops have been conducted through EPAP II to train CID, RBO, and PMU staff on providing guidance to industries in preparation of CAPs b. The Consortium has designed the proposed database by modifying the existing module of Egyptian Regional Environmental Management Information System (EREMIS). Five cases are being applied through EREMIS and the results will be available by June 2010.

Annex 13

Bringing the Egyptian Legal and Regulatory Framework to Compliance with the Stockholm Convention

The national obligations to comply with the Stockholm Convention is mandated by the Constitution of Egypt which obliges the Government to give full effect to international conventions and agreements ratified by the President of the Republic after approval of the Parliament. The Convention includes the following required actions from the Government of Egypt as Party to the Convention:

1- Categorizing substances in accordance with the annexes of the convention.

Annex (A): Aldrin, Chlordan, Dieldrin, Endrin, Hexachlorobenzene, Heptachlor, Mirex, Toxaphene, PCBs.
Annex (B): DDT.
Annex (C): Chlorinated Dioxins ،Chlorinated Furans ،Hexachlorobenzene.

2- Activities related to reduction of intentional releases from production and use.

i. Legal and administrative actions should be taken in order to eliminate the production, use, export and import of chemical substances listed in annex (A) of the convention and to reduce production and use of the others listed in annex (B) of the convention.

ii. Encouragement of the use of the best available techniques and the best environmental practices.

iii. Any chemical substance listed in annexes (A) or (B) is not to be imported except for the following cases:
    a. For the purpose of sound elimination from the environment.
    b. For a purpose allowed to any state that is a party in the convention.

3- A record of specified exemptions:

According to Stockholm Convention requirements: There should be a record of specified parties that have exceptional exemptions according to the Convention. This record should include a list of the specified exemptions and another of the expiry dates for each of the specified exemptions.

4- Taking actions to reduce or eliminate unintentional releases from the production of the POPs:
According to Stockholm Convention requirements:

i. Setting a work plan as a part of the national implementation plan within two years from the date of putting the convention in force. This work plan should include the convention in force including the following:
ii. An assessment of present and expected releases.
iii. An assessment of the efficacy of the laws and policies related to the management of releases.
iv. Development of strategies to fulfill the required obligations in addition to encouraging learning, awareness and training on such strategies.
v. Presentation of those strategies and their success in fulfilling obligations in reports presented every five years according to the items of the Convention.

vi. Preparation of an agenda for the implementation of the work plan that includes strategies and specified actions.

vii. Development and usage of alternative substances and products to prevent the formation and release of the chemicals under annex (C), taking into consideration the general instructions concerning actions related to the prevention and reduction of releases under annex (C) of the Convention.

viii. Encourage of use of the best available techniques and the best environmental practices.

5- Actions for reduction or elimination of releases from stored substances and residuals:

According to Stockholm Convention requirements:

i. The state should develop some strategies suitable for defining the following: (a) storage of chemicals or substances that contain chemicals listed in annex (A) or (B) or (c); (b) products and used materials and wastes that are consisting or have become contaminated with any of the chemicals listed in any of the annexes (A), (B) or (C); (c) the state should also manage stores, as needed, in a safe way that is environmentally sound; and (d) suitable actions should be taken, when such products and substances turn into wastes, in the following ways:
   a. They are to be handled, collected, transported and stored in an environmentally sound way.
   b. They are to be eliminated in an environmentally sound way.
   c. They are not to be transported across international borders unless related guiding rules, criteria and principles are taken into consideration.

ii. Seeking to develop suitable strategies to define the areas contaminated with the chemicals under annexes (A), (B) or (C).

6- Listing Chemicals in Annexes (A), (B) and (C):

According to Stockholm Convention requirements: Suggestions are to be presented to the Convention Secretariat to list one or more chemicals in annexes (A), (B) or (C). The suggestions should include data about the substance, its persistence degree, its biological accumulation, the possibility of its long-term environmental transportation and its hazardous impact. The Secretariat, then, being convinced of the suggested substance, presents it to the Committee for discussing POPs.

7- Information Exchange: According to Stockholm Convention requirements:

i. The State is required to allow information exchange on the following: (a) Reducing or eliminating the production, use, releases from POPs. (b) Alternatives for the POPs including information about their hazards and their socio-economic costs. (c) Defining a national connecting centre to exchange such information.

ii. The Secretariat takes the role of directing information exchange about the POPs, including the information presented by the parties, international governmental organizations and non – governmental organizations.

8- In the field of media, of education and awareness of the public:

According to Stockholm Convention requirements must be met for the following items:

i- Increasing awareness of leading authorities and decision makers concerning POPs.

ii- Making information about POPs available to the public through different means.

iii- Raising awareness especially of woman and child, on POPs and their health and environmental effects.

iv- Having the public share in the process of managing POPs with their hazardous effect on public health and the environment, and giving them the opportunity to participate in implementing the items of the convention at national level.

v- Training workers, chemists, women, employees and administrators on how to deal with POPs.

vi- Exchanging educational and awareness materials of the public about the POPs and their alternatives on both international and national levels.

vii- Giving the public the opportunity to gain information about POPs and their alternatives and establishing special information centers on both regional and national levels.

viii- Setting a record of releasing and transporting the POPs for the purpose of collecting and publishing information about average annual quantities of the chemicals referred to in the Convention that are released and are to be eliminated.

9- In the fields of research, development and monitoring:

According to Stockholm Convention requirements: Encouraging researches on POPs and their alternatives and also on the following:

i- Their sources and releases to the environment, their levels, direction and transfer.

ii- Their effect on human health and the environment.

iii - Their social, economic and cultural effects.

iv- Means of reducing or eliminating their releases. Using a methodology for the process of encompassing the sources releasing POPs and for the analytic means of measuring the level of releases. This methodology includes:

a- Encouraging the national and international efforts to support national capacities to carry out scientific researches and to encourage analyses and data exchange.

b- Encouraging researches aimed at reducing the effects of POPs on reproductive health and making them available to the public.

10- In the field of technical support:

According to Stockholm Convention requirements: States that are parties of the Convention are required to co-operate in the following:

i- Providing technical support for building, developing and strengthening the state capacities to fulfill its obligations.

ii- Establishing regional centers for building capacities and exchanging technology.

11- In the field of resources and financial mechanisms:

According to Stockholm Convention requirements:

i- States are required to have new extra financial mechanisms to face extra costs of implementation actions through defining mechanisms required to provide consistent adequate financial resources, that are managed by responsible inter- national entities that monitor and assess the use of such. The National Implementation Plan (NIP) for Persistent Organic Pollutants (POPs) – Egypt 2005, resources and present regular reports to the conference on the consistency and adequacy of the funds for the connected activities of implementation this Convention.

ii- The State is required to provide financial support and financial resources, within limits of potentials, for national activities working on the fulfillment of the objectives of the convention.

12- Presenting reports:

According to Stockholm Convention requirements: Periodical reports are presented, (in a form that is determined by the conference of the parties on its first meeting), to the conference of the parties on:

i. Actions taken for the implementation of Convention obligations.
ii. The efficacy of such actions in fulfilling the objectives of the Convention.
iii. The Secretariat is to be provided with the following:
    a. Statistic data about the total quantities of the production, imports and exports of each of the chemicals stated in Annexes (A) and (B) or about a reasonable estimation of such data.
    b. A list of the States, to the most practical limit, from which each of the substances had been imported and other states to which each had been exported.

13- Efficiency assessment:

According to Stockholm Convention requirements:

i. The conference of the parties is to make an assessment of the convention four years after starting to put it in force. This assessment is made regularly later on as decided by the conference of the parties.

ii. The conference of the parties is to be provided with comparative monitoring data about chemicals in annexes (A), (B) and (C) and about its transfer, regionally and internationally, to the environment. These arrangements: (a) Should be made regionally, wherever possible, according to financial and technical capacities using programs and mechanisms as much as possible. (b) The conference of the parties is to be provided with reports on the results of monitoring activities on a regional and an international basis and within limited periods that are decided by the conference of the parties.

14- Non-compliance:

According to Stockholm Convention requirements: The conference of the parties, as practically early as possible, takes proper actions to define whether there is a case of non-compliance to of the convention measures and to deal with states that are parties and are proven not to be complying.

15- Measures under Annex (A) to the Convention:

– Elimination:

According to Stockholm Convention requirements:

a. Any quantities of a chemical substance, in the form of manufactured substances, that had been used earlier before starting to carry take action to participate in the, is not to be listed under the annex, unless the responsible party had already told the secretariat that a certain type of chemicals was still being used.
b. The Secretariat is to be informed if any of the chemical substances of the annex was being produced or used in manufacturing of other products within a closed system of a specified location in a way that is not expected to affect humans or the environment greatly. This is not to be considered a specified exemption.
c. Use of PCBs compounds found in electrical instruments (Such as transformers and condensers and others that contain quantities of liquid substances) is to be stopped by 2025.
d. Measures for eliminating the use of PCBs compounds are taken according to the following priorities : (a) Exerting consistent efforts to define and to stop using instruments that contain more than 10% of PCBs compounds and of quantities that exceed 5 litres. (b) Exerting consistent efforts to define and to stop using instruments containing PCBs compounds with a concentration that exceeds 0.005% and quantities that exceed 0.05% litres. (c) Reduction and control of the cases of exposure to the hazards caused by PCBs compounds according to the following measures:
    i. Using such compounds only in tight and sound instruments or in areas where hazards release to the environment can be reduced to the minimum level and treated fast.
    ii. Not using these compounds in areas related to the production or preparation of foods or feedstuffs.
    iii. Taking all the possible measures for protection from electrical faults that could lead to breaking out of fire in residential areas with schools and hospitals. In addition, instruments should be checked regularly for leakage possibilities.
    iv. Not exporting or importing instruments containing PCBs compounds except for the purpose of environmentally sound management of wastes.
    v. Not allowing the reuse of liquids containing PCBs compounds that exceed a concentration of 0.005% in other instruments except for maintenance and repair purposes.
    vi. Exerting efforts needed to manage liquids, containing compounds of PCBs and equipment contaminated with these compounds or containing them it in a concentration that exceeds 0.005%, in an environmentally sound way. This is to be achieved as early as possible and before year 2028.
e. The State is required to present a report to the Conference of the Parties on the progress gained in the process of eliminating PCBs compounds every five years to be considered by the conference of the parties when necessary.

16- Measures under Annex (B) to the Convention:

– Restriction:

According to Stockholm Convention requirements:

i. Any quantities of a chemical substance, in the form of manufactured substances, that had had been used earlier before starting to take action to participate in the convention, is not to be listed under the annex; unless the responsible party had already told the secretariat that a certain type of chemicals was still being used.

ii. The Secretariat is to be informed if the DDT substance was being produced or used in manufacturing of other products within a closed system of a specified location. This information should include the following:

   a. Information about the total production and use of this substance, or at least a probable estimation of such information.

   b. Information about the nature of the closed system of a specified location, including the quantity of any pollutant that does not turn into the preliminary substance of the POPS in the final product.

iii. The Secretariat is to make such information available both to the conference of the parties and to the public.

   a. The kind of production and use is to be terminated after ten years, unless the concerned party presented a new notification to the secretariat.

   b. The kind of production or use is not to be considered of the exemplary nature.

   c. Production and use of DDT is to be prevented except for the parties that inform the Secretariat about it. Accordingly, a record of the DDT should be kept available to the public.

iv. Each State has to keep the production and use of DDT limited to fighting disease carriers, according to the recommendations and guiding principles of the international health organization concerning DDT. This is to be applied in case the state had no available, effective safe, local alternatives of a proper cost.

v. In case a state that is not listed on the record of DDT needed to fight disease carriers, the secretariat is to be notified as early as possible in order to add that state to the list. Meanwhile, the international health organization is to be notified too.

vi. Each state using DDT has to give the secretariat and the (WHO) information every three years about the quantity used, the conditions of the use in relation to the strategy of that state fighting diseases. This is to be achieved in a form decided by the conference of the parties in consultation with the (WHO).

vii. Each state uses DDT is required to set a working plan as part of the implementation plan. The plan should include the following:

   a. Working out organizing mechanisms to guarantee the reduction of the use of DDT to fighting disease carriers.

   b. Developing alternative products and proper means and strategies, including strategies for the management of fighting, to guarantee the consistent efficacy of such alternatives.

   c. Taking actions to support health care and to reduce infected cases with disease.

   d. Every state, according to its potential, is required to support research and development of alternative, safe chemicals and other products, following methods and strategies of the states using DDT that match with the circumstances of such a state. This is to be achieved for the purpose of relieving human and economic burdens that could result from the spread of a disease. In this respect, Egypt has banned the production, import and use of the chemicals according to the following laws and decrees (Decree of the Ministry of

Agriculture no 53-1966 and its amendments, Decree of the Ministry of Agriculture no 60-1986 that bans the use of pesticides included in the chemical under annexes (A) and (B), Decree of the Ministry of Agriculture no 258-1990 that bans importation of these substances, Decree of the Ministry of Internal Trade no 55-1996 that made a list of chemicals not to be imported, produced, or used. This list includes substances referred to in annexes (A) and (B) of the Convention).

Based on the above, the following table shows the various obligations and duties binding on the Stochkolm Convention Parties. It shows that the Government has taken bold steps to implement its obligations and duties and to enforce the provisions of the Convention.

Requirements of the Stockholm Convention	***How it is addressed by Egypt***
Categorizing substances in accordance with the annexes of the convention: (i) Annex (A): Aldrin, Chlordan, Dieldrin, Endrin, Hexachlorobenzene, Heptachlor, Mirex, Toxaphene, PCBs; (ii) Annex (B): DDT; and (iii) Annex (C): Chlorinated Dioxins, Chlorinated Furans, and Hexachlorobenzene.	
Activities related to reduction of intentional releases from production and use: (i) Legal and administrative actions should be taken in order to eliminate the production, use, export and import of chemical substances listed in annex (A) of the convention and to reduce production and use of the others listed in annex (B) of the convention, (ii) Encouragement of the use of the best available techniques and the best environmental practices, and (iii) Any chemical substance listed in annexes (A) or (B) is not to be imported except for the following cases: (a) For the purpose of sound elimination from the environment, and (b) For a purpose allowed to any State that is a party in the Convention.	Egypt has banned production, import and use of chemicals of annex (A) and annex (B) included in a list of other chemicals in accordance with the following laws and regulations: -Law on Agriculture No 53- 1966 as amended to date -Decree no. 60- 1986(Ministry of Agriculture) that bans use of pesticides including chemical substances under annexes (A) and (B); -Decree no. 258- 1990 (Ministry of Agriculture) that bans importation of chemical substances under annexes (A) and (B); - Decree no. 55 - 1996 (ministry of Commerce) defining a list of chemicals not to be imported, produced or used. This list includes pesticides under annexes (A) and (B) of the Convention. - - Guidelines for the safe handling of hazardous substances in general and of POPs in particular in order to inform on the safe handling of hazardous substances from different technical aspects issued by EEAA. These guidelines were issued in Arabic and include best international practices on information related to the substance, its classification, degree of hazard, packing group, CAS number, safety phrases, risk phrases, synonyms, molecular weight, melting point, boiling point, potential hazards, emergency response, transport, handling, treatment, disposal, first-aid compatibility, consistency and storage. These guidelines also provide clear and brief notes on about 300 chemical substances in addition to the substances listed under the Stockholm Convention on POPs (9 pesticides).
3- A record of specified exemptions: There should be a record of specified parties that have exceptional exemptions according to the convention. This record should include a list of the specified exemptions and	There is no record of specified exemptions because of the absolute ban concerning all the chemicals under annexes (A) and (B) of the convention, according to the above-listed applicable laws and

another of the expiry dates for each of the specified exemptions.	regulations.
4- taking actions to reduce or eliminate unintentional releases from the production of the POPs, including: (i) Setting a work plan as a part of the national implementation plan within two years form the date of putting the convention in force. This work plan should include the convention in force including the following; (ii) An assessment of present and expected releases; (iii) An assessment of the efficacy of the laws and policies related to the management of releases; (i) Development of strategies to fulfill the required obligations in addition to encouraging learning, awareness and training on such strategies; (v)Presentation of those strategies and their success in fulfilling obligations in reports presented every five years according to the items of the convention; (vi)Preparation of an agenda for the implementation of the work plan that includes strategies and specified actions; (vii) Development and usage of alternative substances and products to prevent the formation and release of the chemicals under annex (C), taking into consideration the general instructions concerning actions related to the prevention and reduction of releases under annex (C) of the convention; and (viii) Encourage of use of the best available techniques and the best environmental practices.	Egypt completed a preliminary inventory- as a part of the national implementation plan- to assess the present and the expected unintentional releases of POPs. Egypt is also bounded to the specified time for this plan in the convention (within two years after the convention came to effect), in accordance with the general instructions concerning actions related to the prevention and reduction of releases under annex (C). Egypt has also taken the following steps: Under the supervision of EEAA, Egypt runs the project of improving the quality of air (CAIP) that aims at cleaning the air pollutants as (benzene, carbon monoxide, lead, carbon dioxide, nitrogen dioxide and sulphur dioxide). Moreover, the chemicals of POPs that are released unintentionally are now to be included among the main pollutants of the air as part of the strategy of improving the quality of air. According to law no 4 of 1994 (articles 19,20,21), the competent administrative authority or the authority giving license requires an EIA to assess the impact on the environment caused by the industry requiring a license, in accordance with guidelines approved by EEAA in coordination with competent administrative authorities. Then, the EIA is reviewed by EEAA and must be endorsed before any permit is issued. Egypt developed a Cleaner Production Strategy to establish integrated CP procedures for the Egyptian industry within an agreed national Policy. The industrial sources of unintentionally produced POPs are now to be included among the Egyptian cleaner production strategy. In the framework of reducing unintentionally produced POPs, the NPCU has prepared a plan for rising awareness. This plan includes organizing workshops for stakeholders and decision makers in both public and private sectors to increase awareness concerning the hazardous effects of unintentionally produced POPs on health and environment, and the legal framework for these releases on both local and international levels.
Actions to reduce or eliminate the release from stored substances and residues, including: (i)-development of strategies suitable for defining conditions of environmentally sound storage of chemicals or substances that contain; (a) Chemicals listed in annex (A) or (B); (b) Products and used materials and wastes that consisting or containing contaminated with any of the chemicals listed in any of the annexes (A), (B) or (C); (ii)- actions when such substances and residues turn into wastes, including (a) environmentally sound handling,	So far, the Government has established a Committee on pesticides management and monitoring (including data recording) under the supervision of the Minister of Agriculture. That Committee has recommended and followed on the establishment of a safe collection, transportation and storage of obsolete pesticides. A comprehensive report is being prepared on the status of obsolete pesticides.

collection, transportation, storage and final disposal or elimination, and (b) prohibition of transportation across international borders unless related guiding rules, criteria and principles are taken into consideration; and iii- development of suitable strategies to define the areas contaminated with the chemicals under annexes (A), (B) or (C).	
Parties to the Stockholm Convention to make recommendations to include one or more chemicals in the lists of Annexes (A), (B) or (C). The recommendation should include data about the substance, its persistence degree, its biological accumulation, its potential long – term environmental and its hazardous impact. The recommendation is to be made to the Convention secretariat which, after considering the merit of the recommendation, presents it to the POPs committee.	
Parties to the Stockholm Convention are required to adopt an implementation plan to comply with their obligations under the Convention and to present that plan to the COP within two years after the Convention came to effect. The implementation plan shall discuss the domestic institutional arrangements for implementation including consultation and participation of stakeholders	Egypt has complied by starting on the preparation of the National Implementation Plan in 2003, the draft of which was released in 2005 and presented to the Secretariat of the Convention in 2006..
Information exchange: (i) The state is required to allow information exchange on the following: (a) reduction or elimination of the production, use and releases from POPs; (b) alternatives to POPs including information about their hazards and their socio–economic costs; (c) defining a national data center to exchange such information; and (ii) the Convention Secretariat takes act as POPs information sharing center among member countries, including the information presented by the parties, international governmental organizations and non–governmental organizations.	Egypt has established the Egyptian Hazardous Substances Information and Management System (EHSIMS) which considered the best practices in the field of environmental information systems. The objective of this project is the initiation of a hazardous substances management system in Egypt, by providing basic guidelines and information for the purpose of ensuring sound and safe handling of such substances and by disseminating of such information through an information network. All of POPs substances are dealt with in the EHSIMS www.ehsims.org The EHSIMS has many of useful outputs, most of which are concerned with information exchange, the following are some examples of such outputs: The Database which has sub-databases (i) first database: Contains 5400 chemical substances and compounds including all features, characteristics and information related to these substances and compounds; (ii) second database: contains a sample on the unified permitting forms that include information and data on the establishments as well as the required data for issuing the permitting form; and (iii) third database: for decision makers to help prepare reports by different ministries, and (iv) an Importers Database whose objective is to locate their warehousing places using the GIS system in order to increase awareness concerning the safe handling of Hazardous Substances.

	Connecting the System Data Network with the Internet (Web-Base Application): In order to increase awareness on the national level for those who are dealing with hazardous substances, the system data network has been connected with the internet in which any information on hazardous substances is available; furthermore data on hazardous substances found on the database of the system can be printed. The Information Network connects the EEAA and the various ministries involved in POPs (Ministries of Agriculture, Industry, Electricity and Energy, Health and Population, Petroleum, Irrigation Scientific Research) in addition to the Customs Authority, the Civil Defense, and the regional centers for Basel Convention and the Egyptian Petroleum Company. The Network is open to any new Ministries that might join the system in the future. The EHSIMS website contains every information and data about the system as well as the list of hazardous substance, the required procedures for issuing permitting forms and the responsible authority in each Ministry. Egypt is participating in Information Exchange Network on Capacity Building for the Sound Management of Chemicals: INFOCAP which is an information exchange mechanism designed to enhance effective cooperation among countries and organizations which are providing and/or receiving assistance related to the sound management of chemicals. INFOCAP has an overall and long-term goal to facilitate the systematic exchange and public accessibility of information and experiences which are relevant to planning, implementing, evaluating and coordinating capacity building projects for the sound management of chemicals information about technical assistance and funding sources available from countries and organizations which provide support including information on ways, means and formal procedures to apply for such assistance.
The Convention requires Member countries to develop programs to encourage the following items: (i) increasing awareness of leading authorities and decision makers concerning POPs; (ii) making information about POPs available to the public through different means; (iii) raising awareness especially of woman and child, on POPs and their health and environment. Effects; (iv) having the public share in the process of managing POPs with their hazardous effect on public health and the environment, and giving them the opportunity to participate in implementing the items of the convention at national level; (v) training workers, chemists, women,	Egypt is equipped with a plan for the awareness and education of the public concerning POPs. This plan is also aiming at authorities and decision makers, women and children and was made public through workshops involving all stakeholders. Also the plan includes training of workers, employees and administrators on how to manage POPs in the way of reducing their effects on human health and environment.

employees and administrators on how to deal with POP; (vi) exchanging educational and awareness materials of the public about the POPs and their alternatives on both international and national levels; (vii) giving the public the opportunity to gain information about POPs and their alternatives and establishing special information centers on both regional and national levels; and (viii) setting a record of releasing and transporting the POPs for the purpose of collecting and publishing information about average annual quantities of the chemicals referred to in the convention that are released and are to be eliminated .	
Member countries are required to encourage researches on POPs and their alternatives including: (i) their sources and releases to the environment, their levels, direction and transfer; (ii) their effect on human health and the environment; (iii) their social, economic and cultural effects; (iv) means of reducing or eliminating their releases.	Egypt has searched for new alternatives for POPs and has collected all data related to these alternatives, definition, properties, sources, releases to the environment, levels, direction, transportation and effect on public health and environment, data related to their social, economic and cultural effects, and the means of reducing or eliminating releases of POPs are also collected.
States that are parties of the convention are required to co-operate in the following: (i) providing technical support for building, developing and strengthening the state capacities to fulfill its obligations; and (ii) establishing regional centers for building capacities and exchanging technology.	A long term local expert in the field of POPs and the preparation of related national implementation plans and strategies was appointed. Local experts of experience in the field of issues related to POPs were consulted. A long term international expert in the field of issues related to POPs implementation plans for the Stockholm Convention on was appointed. A group of international experts in the field of preparing and implementing national implementation plans related to the Stockholm Convention on POPs was consulted. The personnel working in the hazardous substance department at EEAA were trained to raise their awareness concerning the following issues: (i) procedures for POPs analysis and monitoring ; (ii) POPs effects on health and environment; (iii) POPs inventories. A number of training courses were for national institutions involved in POPs management and monitoring including: the Custom Authority, NGOs, regional branches of EEAA, environmental offices in different governorates, the national steering committee and concerned departments at EEAA. Training provided relates to : (i) PCBs inventory; (ii) sources of unintentionally produced POPs (dioxins & furans) ; (iii) health impacts of organochlorine insecticides and unintentionally produced POPs; (iv) source of dioxins and furans releases; (v) hazardous waste incineration in cement kilns; (vi) health impacts of POPs; (vii) analysis and assessment of POPs; (viii) socio-economic impacts of POPs; and (ix) on the Czech experience in the preparation of the national implementation plan related to Stockholm convention on POPs.

In the field of resources and financial mechanisms: (i) States are required to have new extra financial mechanisms to face extra costs of implementation actions through defining mechanisms required to provide consistent adequate financial resources, that are managed by responsible inter- national entities that monitor and assess the use of such resources and present regular reports to the conference on the consistency and adequacy of the funds for the connected activities of implementation this convention, and (ii) The state is required to provide financial support and financial raises, within limits of potentials, for national activities working on the fulfillment of the objectives of the convention.	EEAA supports small industries in Egypt to develop their clean technologies and to achieve health and environment protection. This support is technical and financial and is provided by the "Environmental Protection Fund". EEAA and the Ministry of Agriculture have implemented a nationwide investment project to collect obsolete pesticides, including POPs. Collected obsolete pesticides were repacked and transferred to a storage store for final safe disposal.
Under the Stockholm Convention, reporting is an important obligation to be fulfilled by member States. Periodical reports are presented, (in a form that is determined by the conference of the parties on its first meeting), to the COP on: (i) actions taken for the implementation of convention obligations; (ii) the efficacy of such actions in fulfilling the objectives of the convention (iii) the secretariat is to be provided with the following (a) Statistic data about the total quantities of the production, imports and exports of each of the chemicals stated in Annexes (A) and (B) or about a reasonable estimation of such data. (b) A list of the states, to the most practical limit, from which each of the substances had been imported and other states to which each had been exported	
Efficacy assessment: (i) the COP is to make an assessment of the convention [on regular…] basis following [decision of the COP];(ii) the COP must be provided with comparative monitoring data about chemicals in annexes (A), (B) and (C) and about its transfer, regionally and internationally, to the environment.	
The COP, as practically early as possible, takes proper actions to define whether there is a case of noncompliance to of the convention measures and to deal with states that are parties and are proven not to be complying.	
Annex (A) – Elimination: (i)-any quantities of a chemical substance, in the form of manufactured substances, that had been used earlier before starting to carry take action to participate in the, is not to be listed under the annex, unless the responsible party had already told the secretariat that a certain type of chemicals was still being used; (ii)- the Convention Secretariat is to be informed if any of the chemical substances of the annex was being produced or used in manufacturing of other products within a closed system of a specified location in a way that is not expected to affect humans or the environment greatly; (iii)- Use of PCBs compounds found in electrical instruments (Such as transformers and condensers and	Egypt does not import chemicals of annexes (A) and (B) not even for the purpose of sound environmental elimination or any other purpose allowed such as fighting disease carriers, as in annex (B) related to DDT. Egypt has also complied by starting to work on a preliminary inventory – as part of the National Implementation Plan – to assess present and expected quantities of chemicals under annexes (A) and (B) of the Stockholm Convention – Egypt is also bound to the time specified in the convention for this plan, which is two years starting from the time of putting the convention in force, and in accordance with the general guidelines concerning procedures of

others that contain quantities of liquid substances) is to be stopped by 2025; (iv)- Measures of eliminating the use of PCBs compounds are taken according to the following priorities (a) exerting consistent efforts to define and to stop using instruments that contain more than 10% of PCBs compounds and of quantities that exceed 5 liters. (b) exerting consistent efforts to define and to stop using instruments containing PCBs compounds with a concentration that exceeds 0.005% and quantities that exceed 0.05% liters. (c) Reduction and control of the cases of exposure to the hazards caused by PCBs compounds according to the following measures: (A) using such compounds only in tight and sound instruments or in areas where hazards release to the environment can be reduced to the minimum level and treated fast; (B) not using these compounds in areas related to the production or preparation of foods or feedstuffs; (C) taking all the possible measures for protection from electrical faults that could lead to breaking out of fire in residential areas with schools and hospitals. In addition, instruments should be checked regularly for leakage possibilities; (D) not exporting or importing instruments containing PCBs compounds except for the purpose of environmentally sound management of wastes; (E) not allowing the reuse of liquids containing PCBs compounds that exceed a concentration of 0.005% in other instruments except for maintenance and repair purposes; (F) exerting efforts needed to manage liquids, containing compounds of PCBs and equipment contaminated with these compounds or containing them it in a concentration that exceeds 0.005%, in an environmentally sound way. This is to be achieved as early as possible and before year 2028. (v)- The state is required to present a report to the conference of the parties on the progress gained in the process of eliminating PCBs compounds every five years to be considered by the conference of the parties when necessary.	elimination and reduction referred to in annexes (A) and (B).
16- Annex (B) – Restriction (i)-any quantities of a chemical substance, in the form of manufactured substances, that had had been used earlier before starting to take action to participate in the convention, is not to be listed under the annex; unless the responsible party had already told the secretariat that a certain type of chemicals was still being used. (ii)-the secretariat is to be informed if the DDT substance was being produced or used in manufacturing of other products within a closed system of a specified location. This information should include the following: (a) information about the total production and use of this substance, or at least a probable estimation of such information; (b) Information about the nature of the closed system of a specified location, including the quantity of any pollutant that does not turn into the	

primary substance of the POPS in the final product; (c) the secretariat is to make such information available both to the conference of the parties and to the public; (d) the kind of production and use is to be terminated after ten years, unless the concerned party presented a new notification to the secretariat; (e) the kind of production or use is not to be considered of the exemplary nature; (iii)- Production and use of DDT is to be prevented except for the parties that inform the secretariat about it. Accordingly, a record of the DDT should be kept available to the public. (iv)- Each state has to keep the production and use of DDT limited to fighting disease carriers, according to the recommendations and guiding principles of the international health organization concerning DDT. This is to be applied in case the state had no available, effective safe, local alternatives of a proper cost. (v)- In case a state that is not listed on the record of DDT needed to fight disease carriers, the secretariat is to be notified as early as possible in order to add that state to the list. Meanwhile, the international health organization is to be notified too. (vi)- Each state using DDT has to give the secretariat and the (WHO) information every three years about the quantity used, the conditions of the use in relation to the strategy of that state fighting diseases. This is to be achieved in a form decided by the conference of the parties in consultation with the WHO. (vii)- Each state uses DDT is required to set a working plan as part of the implementation plan. The plan should include the following: (A) working out organizing mechanisms to guarantee the reduction of the use of DDT to fighting disease carriers; (B) developing alternative products and proper means and strategies, including strategies for the management of fighting, to guarantee the efficacy of such alternatives; (C) taking actions to support health care and to reduce infected cases with disease; (D) member states, according to their respective potential, are required to support research and development of alternative, safe chemicals and other products, following methods and strategies of the states using DDT that match with the circumstances of such a state.	