

**PROJECT INFORMATION DOCUMENT (PID)  
APPRAISAL STAGE**

Report No.: PIDA84

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<b>Project Name</b>	Egypt: Sustainable POPs Management Project (P116230)
<b>Region</b>	MIDDLE EAST AND NORTH AFRICA
<b>Country</b>	Egypt, Arab Republic of
<b>Sector(s)</b>	Central government administration (50%), Sub-national government administration (50%)
<b>Theme(s)</b>	Pollution management and environmental health (67%), Environmental policies and institutions (33%)
<b>Lending Instrument</b>	Specific Investment Loan
<b>Project ID</b>	P116230
<b>GEF Focal Area</b>	Persistent Organic Pollutants
<b>Borrower(s)</b>	Ministry of International Cooperation
<b>Implementing Agency</b>	Hazardous Substances Department
<b>Environmental Category</b>	A-Full Assessment
<b>Date PID Prepared/Updated</b>	17-Mar-2014
<b>Date PID Approved/Disclosed</b>	18-Mar-2014
<b>Estimated Date of Appraisal Completion</b>	13-Mar-2014
<b>Estimated Date of Board Approval</b>	25-Apr-2014
<b>Decision</b>	

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**I. Project Context**  
**Country Context**

Egypt is in a process of political transition. The country has undergone dramatic political changes since the 2011 revolution that toppled the former political regime. Socially inclusive economic development, job creation, poverty reduction, transparency, citizen participation, and governance have come to the forefront of the political and social debate. In July 2013, an interim government was formed. After a referendum held January 14-15, 2014 in which the Constitution was approved, the country is scheduled to hold presidential and parliamentary elections within six months.

Since 2011, the macroeconomic picture has deteriorated due to unresolved political tensions. With confidence weakened by the ongoing political uncertainty, social unrest, and delay in agreement on an ambitious economic stabilization and reform program that could be supported by the IMF and other international financial institutions, output growth has been slowing. Real GDP decelerated to 2.6 percent in the first quarter of 2012/13 and further to 2.2 percent in the second quarter. In FY12, Foreign Direct Investments (FDI) net outflow was US\$0.4 billion. Output growth has remained subdued during FY13 at 2.3 percent, similar to the year before (about 2.2 percent) while the fiscal

deficit is continuing to increase. Unemployment is rising correspondingly, reaching 13 percent in June 2013, and the strong currency depreciation is pushing up inflation (currently at 8 percent) . The deterioration of security has particularly impacted the tourism and real estate sectors, and has deprived the country of much needed foreign direct investments. A sizeable stimulus package in excess of 1 percent of GDP, mainly a sharp increase in public investment to support the economy, is expected.

Environmental protection has assumed increasing importance in Egypt over the last 20 years, as a result of improving public education and awareness and a vocal civil society. A study on Cost of Environmental Degradation, undertaken in 2009, showed that this cost amounted to 4.8 percent of GDP, plus a further 0.6 percent of damage to the global environment. About two-thirds of the degradation is the impact on human health. Prior to the political transition, the Government of Egypt had begun taking steps to improve environmental sustainability in a number of areas, and had made good progress on pollution management, working with industry for greater accountability, and with the donor community on specific investment programs. Although some progress has been made since these estimates were made, the percentages are unlikely to have dramatically changed. In the current political climate where citizens demand greater accountability, there is a thriving debate regarding improved service delivery on solid waste management, and the sustainability of Egypt's energy strategy.

### **Sectoral and institutional Context**

As the Egyptian economy grew, so did the use of chemicals in a wide spectrum of its sectors. In the rural areas, agrochemicals are extensively used. In industrial areas, toxic chemicals are widely used in a multitude of sectors, such as textiles, tanning and metal finishing; mining and processing manufacturing found in every town and in urbanized areas throughout the country. In addition, a growing number of chemicals are used in homes and surrounding domestic environments. Human populations are exposed to emissions of toxic and carcinogenic chemicals in air-borne pollution that arise from industrial facilities, thermal power stations and from transportation, open burning of garbage and agricultural residues. In addition, human exposure arises from water pollution in three main sectors: agriculture, industry, and domestic. Discharge of untreated, or partially treated, industrial and domestic wastewater, leaching of pesticides and residues of fertilizer and navigation are often factors that affect the quality of water. The main source of ground water pollution is attributed to anthropogenic activities such as discharge of industrial wastes and drainage of agrochemicals while pesticides are considered the main source for soil pollution. The chemical industry is by far the main source of hazardous wastes in the developed regions in Egypt. Recent estimates have indicated that about 50% of all industrial activities are concentrated in Greater Cairo and about 40% in Alexandria. Due to the lack of sufficient treatment and disposal facilities, hazardous industrial wastes generated by industries are disposed indiscriminately in nearby desert areas or transported to public dump sites and mixed with municipal waste .

Obsolete pesticides constitute an immediate threat to the health of humans and livestock, particularly since they are often stored in populated areas, which may sooner or later leak into and contaminate groundwater and the environment in general. There are two factors that have contributed to indiscriminate dumping and possible scavenging: the absence of designated storage and disposal sites in Egypt, and the high cost of export to proper disposal facilities.

Many of the toxic emissions from anthropogenic sources, as listed above, and obsolete pesticides

are comprised of Persistent Organic Pollutants (POPs) which are considered some of the most dangerous pollutants for human health and environment. POPs have four distinct characteristics: (i) they are toxic, causing adverse health effects, such as birth defects, damage to immune and respiratory systems, (2) they are environmentally persistent and resist breakdown by natural processes, and can remain in the environment for decades (3) they bio-accumulate exponentially up the food chain, reaching the greatest magnitudes in mammals and humans and (4) they are semi-volatile, which enables them to travel great distances through cycles of evaporation and atmospheric cycling and deposition.

Recognizing the importance of the issue, the Government of Egypt (GOE) ratified the Stockholm Convention on Persistent Organic Pollutants (POPs)\* and completed a National Implementation Plan (NIP) in accordance with the requirements of the Convention. The NIP (i) provided an assessment of the older generation of transformers and condensers, manufactured before 1980s which contain Polychlorinated biphenyls (PCBs) that are being phased out and need proper storage and disposal measures and (ii) provided a preliminary inventory of industrial source wastes which have the potential to generate comparatively high quantities of Dioxins and Furans during disposal.

The NIP recommended actions relating to (i) amendment of laws and legislations (ii) completion of inventory and collection and processing information about sources and emissions of POPs, PCBs and dioxins and furans (iii) completion of database on hot spots and remediation of the contamination sites (iv) disposal of obsolete pesticides and PCBs (v) improvement of coordination between the Ministry of State for Environmental Affairs (MSEA) and other institutions (vi) strengthening environmental inspection, monitoring, evaluation and reporting and (vii) establishing a mechanism for information exchange and community participation.

To help achieve the goals highlighted in the NIP, the GOE sought funding from the Global Environment Facility (GEF) through the World Bank. The GEF Council approved the project concept in June 2009. A Project Preparation Study, completed in October 2011, found that POPs pesticides (including new POPs) account for 10 to 30 percent of the estimated 2,250 to 4,600 tons of obsolete pesticides in Egypt, mostly stored in inadequate conditions. There are more than 100,000 transformers in the distribution systems, of which about 40 percent contain high-concentration PCBs (i.e. above 50 parts per million). Most of these PCBs are contained but leakage could result from old and damaged equipment or maintenance and repair.

The Ministry of State for Environmental Affairs (MSEA) and its Executive Agency (EEAA), as well as the Ministry of Water Resources and Irrigation has done a great deal in the way of environmental sustainability. There is a strong commitment to control industrial discharges, as well as to stricter and more consistent monitoring of all factors that influence drinking water quality and urban air pollution. In 2007, a solid waste management master plan was prepared to estimate the cost of upgrading the current solid waste management systems, and proposed a detailed governorate-by-governorate assessment. However the track record for implementing and enforcing environmental laws has been mixed. The MSEA has instituted an integrated national network to monitor air pollutants, surface water and groundwater. Sewerage systems now cover 75 percent of cities and 10 percent of villages. Significant investments have been made into industrial pollution control and management of hazardous waste. EEAA has established a National Hazardous Substances Information and Management System to initiate the management system for hazardous substances in Egypt.

The GOE has identified the urgent need of implementation of environmentally sound management of POPs and PCBs according to international best practices. The proposed Sustainable POPs Management Project (SPMP) aims to support the GOE in achieving the objectives and targets laid out in the NIP, specifically with regard to disposal and sustainable management of obsolete pesticides, PCBs and instituting a systematic process and methodological steps for inventorization, prioritization and long-term management of POPs.

\*The Stockholm Convention on Persistent Organic Pollutants (May 2001) was aimed at reducing and eliminating releases of 12 of the most dangerous POPs, including eight pesticides (aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex, and toxaphene); two industrial chemicals (polychlorinated biphenyls or PCBs and hexachlorobenzene); and three unintended by-products (polychlorinated dibenzo-p-dioxins and dibenzofurans, hexachlorobenzene, and PCBs)

## II. Proposed Development Objectives

The project development objective is to demonstrate the improved management and disposal of targeted POPs stockpiles and PCBs in an environmentally sound and cost-effective manner.

## III. Project Description

### Component Name

Component 1: Destruction of High Risk Stocks of Obsolete Pesticide

### Comments (optional)

Activities under this Component are focused on the environmentally sound disposal of high risk stocks known and inventoried at time of project appraisal.

### Component Name

Component 2: Decontamination of PCB-containing transformer oils

### Comments (optional)

Activities under this Component will focus on the procurement of equipment for dechlorination and purification of PCB contaminated oils, which will produce oil suitable for reuse in transformers.

## IV. Financing (in USD Million)

Total Project Cost:	23.60	Total Bank Financing:	0.00
Financing Gap:	0.00		
<b>For Loans/Credits/Others</b>			<b>Amount</b>
Borrower			15.50
Global Environment Facility (GEF)			8.10
Total			23.60

## V. Implementation

Institutional and Implementation Arrangements:

The executing agency for Sustainable POPs Management Project (SPMP) is the Egyptian Environmental Affairs Agency (EEAA), which has a responsibility for regulating hazardous substances including POPs in Egypt. It is under the responsibility of the Council of Ministers and a Minister of State for Environmental Affairs is assigned to both oversee the work of EEAA and to chair its Board of Directors. The EEAA will have the principal responsibility for project oversight

and implementation and will establish a Project Management Unit (PMU), to be headed by a National Project Director, who will be a designated senior EEAA official. The PMU will include a team, led by a Project Manager (consultant) and technical and fiduciary specialists, as well as consultants. An important mechanism for transferring technical knowledge for POPs safeguarding and disposal will be a team of project consultants, with considerable international experience in POPs management, to support each of the technical and capacity building components.

The following Ministries (the Cooperating Ministries) will also have a significant role in project execution:

- i. Ministry of Agriculture and Land Reclamation (MALR) is responsible for the management of pesticides, through its Pesticides Committee; through its Agricultural Research Center, the MALR would be responsible for the activities related to obsolete pesticides.
- ii. Ministry of Electricity and Energy (MOEE) oversees the Egyptian Electricity Holding Company (EEHC), which operates the power grid and has responsibility for stocks of PCBs and PCB-contaminated equipment in the public sector; it would be responsible for inventory, sampling and decontamination activities.

The PMU will include one full-time representative each from MALR and MOEE/Egyptian Electricity Holding Company (EEHC) at EEAA. A second Focal Point would be designated at the respective parent Ministries to provide part-time day-to-day liaison.

Overall monitoring and oversight of the GEF portfolio in Egypt is the responsibility of the GEF National Steering Committee (GNSC), whose membership includes the participating ministries in addition to other ministries with direct relevance to the GEF in Egypt. The GNSC meets monthly to review overall implementation progress of GEF projects, resolve any inter-ministerial disputes and endorse new GEF project concepts.

A POPs Project Steering Committee (PPSC) will be formed to guide and coordinate project implementation and maintain inter-ministerial cooperation. It would be chaired by the CEO of EEAA and include representatives of EEAA, MALR, MEE, and Ministry of International Cooperation (MOIC). Specifically the PPSC will resolve inter-ministerial implementation issues, provide policy guidance to the PMU and review the status of implementation of the project. A number of other ministries and agencies will also have limited roles in project implementation, under the coordination of EEAA. EEAA management has confirmed that the present project and the MEDPOL project will cooperate closely, so as to avoid gaps or overlaps, following the general principal that MEDPOL will handle all high-concentration stocks (through export for incineration), while this project will decontaminate low-concentration stocks in-country.

A Project Manual has been developed, which provides details of implementation decision-making procedures and reporting processes and respective responsibilities. It includes fiduciary requirements and safeguards measures and will be finalized prior to grant effectiveness.

## VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x

Pest Management OP 4.09	x	
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12		x
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

**Comments (optional)****VII. Contact point****World Bank**

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