

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

Report No.: AB5249

<b>Project Name</b>	Integrated Persistent Organic Pollutants Management Project
<b>Region</b>	EAST ASIA AND PACIFIC
<b>Sector</b>	Solid waste management (25%); Other industry (25%); General energy sector (25%); Public Administration-Health (25%)
<b>Project ID</b>	P106885
<b>GEF Focal Area</b>	Persistent Organic Pollutants
<b>Borrower(s)</b>	Government of the Philippines
<b>Implementing Agency</b>	
	Environmental Management Bureau Department of Environment and Natural Resources Visayas Avenue Quezon City, Manila, Philippines
<b>Environment Category</b>	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	September 25, 2009
<b>Date of Appraisal Authorization</b>	November 20, 2009
<b>Date of Board Approval</b>	March 11, 2010

## 1. Country and Sector Background

Among the various sources of air pollution in the Philippines are four million vehicles and several thousand industries and power producers, as well as activities such as open burning from agriculture, solid waste disposal, and cooking and forest fires. This pollution leads to negative health impacts, including cardiovascular and respiratory illnesses both in urban areas and in areas proximate to the pollution sources. In addition, the country's industries and agriculture and power sectors manage a wide variety of chemicals, some of which pose health and safety issues from direct human exposure and from environmental and food contamination.

Among these pollutants and chemicals are classes of compounds referred to as Persistent Organic Pollutants (POPs). POPs are of particular concern because they remain intact in the environment for long periods; are prone to long-range transport; may accumulate in fatty tissues, thereby concentrating through the food chain in animals and humans; and cause severe health impacts, including certain cancers, birth defects, and immune and reproductive system dysfunction. POPs include certain pesticides, industrial chemicals, and their byproducts; they may also be produced unintentionally by some industrial processes and by waste and agricultural burning and forest fires.

The Stockholm Convention, which the Government of the Philippines (GOP) ratified in 2004, is intended to protect human health and the environment from persistent organic pollutants. The Convention originally targeted twelve types of persistent organic pollutants for elimination,

restricted use, and reduced release into the environment.<sup>1</sup> In addition, the Convention includes requirements to undertake the identification and management of POPs contaminated sites; to dispose of POPs stockpiles; to share information, awareness, and research on POPs; and to undertake monitoring and surveillance to guard against further contamination.

## **2. Objectives**

The project development objective (PDO) is to assist the Philippines in minimizing the risk of human and environmental exposure to POPs by strengthening the regulatory framework and improving capacity for and providing demonstrations of, safe management of PCBs, reduction of releases of unintentionally produced POPs, and reduction of exposure to POPs in contaminated sites.

## **3. Rationale for Bank Involvement**

The project is part of the Country Assistance Strategy for the Philippines for the period of 2010 – 2012. It specifically supports CAS Objective 4 to reduce vulnerabilities, including sustainably managing the environment and natural resources, as the project will improve the country's management of air quality and reduce waste and land contamination. The project also supports CAS Objective 3 on public service delivery as it will assist national and local government efforts to increase household access to sanitation services by assisting in the closure of open dumpsites and improving garbage collection services to replace unsafe burning practices. The information and guidelines provided under the project for management of POPs will also support broader mainstreaming of the POPs agenda in the local government sector, energy and health sectors with potential replication under the Bank's programs in these sectors.

As a Global Environment Facility (GEF) Implementing Agency, the Bank has a responsibility to help its client countries achieve GEF-supported global environmental objectives. The GEF is Stockholm Convention's SC's interim financial mechanism, and this project will contribute significantly to achieving the objectives of the corresponding GEF Operational Program for Reducing and Eliminating Releases of Persistent Organic Pollutants (OP14). The Bank has been very active in supporting the Philippine government in improving its environmental management capabilities and in incorporating environmental and social concerns into its sector operations.

## **4. Description**

The project will be financed as a stand-alone GEF Grant. Counterpart financing will be provided by the project partners, including national government agencies, local governments, government corporations, and private landowners.

The Project consists of the following five components.

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<sup>1</sup> In May 2009, the Stockholm Convention added nine chemicals to its list for elimination, restriction, and release reduction. These are not covered under the Philippines' current National Implementation Plan or this project, but they would be considered for future projects.

*Component 1: Strengthening the Regulatory Framework and Capacity Building for POPs Monitoring* (US\$0.84 million; GEF\$0.77 million; co-financing\$0.07 million). The objective of this component is to strengthen the regulatory and monitoring capacity for phasing out the use of and reducing exposure to and releases of persistent organic pollutants (POPs). The component will: (i) assist DENR in developing and updating supporting policies and regulations for POPs management; and (ii) assist DOH and DENR in developing and establishing a national exposure monitoring for POPs through surveys of exposure risks and measuring of POPs in targeted populations; and (iii) undertake long term planning for residual POPs management issues.

*Component 2: Unintentional Persistent Organic Pollutant Release* (\$9.41 million; GEF \$2.54 million; co-financing \$6.87 million). The objective of this component is to better understand and demonstrate the reduction of the releases of dioxin and furan emissions. The component will: (i) assist DENR and DOST in improving knowledge about dioxin and furan emissions through the determination of emission factors for selected sources, verifying the ability of specific technologies to reduce emissions and updating of the existing dioxins/furans inventory; (ii) through DENR assist local governments to demonstrate the reduction of dioxin and furan emissions from municipal solid waste burning in at the household and in disposal sites; and (iii) assist DOST in establishing, disseminating and providing national training to UPOPs generators on guidelines on Best Available Technology and Best Environmental Practices for reducing UPOPs releases.

*Component 3: Environmentally Sound Management of PCBs* (\$9.54 million; GEF \$2.24 million; co-financing \$7.30 million). This component will assist the country to in the process of phasing out PCB use and to minimize the risk of human and environmental exposure to PCBs by strengthening oversight and by improving the on-site management practices by PCB owners in all sectors that use them. It will through training and technical assistance assist: (i) DENR in awareness raising and completing testing, registration and developing a database and inventory of PCB sources; and (ii) PCB owners in implementing on-site PCB management; (iii) DENR in monitoring and enforcement.

*Component 4: Identification, Prioritization, and Demonstration of Management of POPs Contaminated Sites* (\$3.25 million; GEF \$2.14 million; co-financing \$1.11 million). The objective of this component is to strengthen the enabling capacity of the country to reduce risks posed by POPs contamination of the environment by identifying contaminated sites; establishing a strategic framework, technical guidelines, and professional capacity to help address them; and building public knowledge and awareness. The component will assist (i) DENR in undertaking an inventory of contaminated sites and through a hazard ranking system identifying those that pose a high risk to human health and the environment; (ii) DENR in developing a national strategy for contaminated site remediation; (ii) landowners in demonstrating site remediation and site control practices; (iii) DENR in developing guidelines and standards for site remediation and control; and (iv) DENR to improve its capacity for enforcement and to provide training and improve public awareness of contaminated site management. The remediation demonstrations will be funded by the Philippine Charity Sweepstakes Organization (PCSO) through a grant facility they have established for hazardous waste management.

*Component 5: Project Management* (\$1.36 million; GEF \$0.82 million; co-financing \$0.54 million). This component will finance consultants and incremental operating costs of the Project Management Office (PMO) in DENR-EMB for its day-to-day project management activities,

including project management and coordination; information, education, and communication; monitoring and evaluation; and financial management and procurement.

## 5. Financing

A summary of main costs by component is provided in the table below:

### Summary of Proposed Project Cost and Financing

	Total Cost		GEF Funding		Counterpart Funding		PCSO	
	US\$M	%	US\$M	%	US\$M	%	US\$M	%
<b>Component 1:</b> Strengthening the Regulatory Framework and Capacity Building for POPs Monitoring	0.84	3.4%	0.77	9%	0.07	0.4%		
<b>Component 2:</b> Unintentional Persistent Organic Pollutant Release Reduction	9.41	38.4%	2.54	29.4%	6.87	43.3%		
<b>Component 3:</b> Environmentally Sound Management of PCBs	9.54	38.9%	2.24	26%	7.3	46.0%		
<b>Component 4:</b> Identification, Prioritization, and Demonstration of Management of POPs Contaminated Sites	3.25	13.2%	2.14	24.8%	1.11	7%	.94	100%
<b>Component 5:</b> Project Management	1.36	5.5%	.82	9.5%	.54	3.4%		
<b>Unallocated</b>	.12	.5%	.12	1.4%				
<b>TOTAL</b>	<b>24.52</b>	<b>100%</b>	<b>8.64</b>	<b>100%</b>	<b>15.88</b>	<b>100%</b>	<b>.94</b>	<b>100%</b>

## 6. Implementation

1. *Policy and Overall Project Direction.* The DENR, working with concerned agencies, organizations, and other stakeholders, will create an overall Interagency Steering Committee (IASC) and a Technical Working Group (TWG). The IASC will be chaired by the DENR Secretary, and its members will include the heads of offices of the involved agencies and organizations. The IASC will provide overall guidance and direction in implementing the project, particularly regarding interagency coordination, policy development, and interagency pronouncements related to the project. The TWG will be composed of senior technical staff from IASC members and will be chaired by the EMB Director. The TWG will help provide technical guidance to the project, including reviewing outputs and recommendations.

2. *Overall Project Operation and Coordination.* DENR-EMB, through the PMO, will be responsible for overall day-to-day management of the project on behalf of the GOP. Its role will include project monitoring and evaluation, project information management, and implementation of safeguards requirements. The existing PMO for project preparation will be strengthened to continue as supervisor for project implementation.

3. *Role of Decentralized Institutions:* The national regulatory reform, health monitoring, and inventories and overall project management which will be led by the Central offices of DOST, DENR and DOH with coordination with the decentralized offices. The activities of POPs management in relation to waste management is mandated to the local governments and both the regulatory aspects of waste burning and the implementation of better waste management and collection services will be their responsibility. The DENR regional offices and provincial offices will also play a role in the training and oversight of the various components, especially with regard to the POPs management activities under components 2-4.

4. *Oversight and Monitoring.* The DENR Foreign Assisted and Special Projects Office (DENR-FASPO) will provide EMB with oversight and monitoring information, advising on key issues and supporting project implementation.

5. *Partner Agencies.* EMB will work closely with other agencies to implement the project. Other involved agencies and organizations include the following:

- a. Department of Science and Technology, DOST (through its Industrial Technology Development Institute, ITDI)
- b. Department of Health (DOH)
- c. Clark Development Corporation (CDC)
- d. Subic Bay Metropolitan Authority (SBMA)
- e. Participating local governments (LGUs)
- f. National Electrification Administration (NEA)

## 7. Sustainability (and Replicability)

The sustainability of this project is enhanced by GOP project supports and ongoing commitments and programs under the Stockholm Convention and under its own environmental initiatives, including the following:

*Ownership of the Project Activities.* The project supports activities identified under the Philippines National Implementation Plan for the Stockholm Convention, developed by the GOP through a multi-stakeholder process and approved in 2006 for implementation. The project also continues ongoing POPs activities by EMB, including previous grant support on management and risk assessment and capacity building on POPs; GOP's PCB phase out efforts, including work on the inventory, monitoring, and disposal technology; and development of BAT/BEP for dioxin and furan reduction. The project also indirectly supports and leverages GOP efforts to improve solid waste management and air quality, as demonstrated by the commitment to counterpart financing under the project.

*Stakeholder Involvement.* The project components are designed to be highly participatory in order to build awareness of POPs issues and engagement in the development of strategies, regulations, and legal mechanisms; the demonstration of technologies and development of associated guidelines; and the monitoring of the implementation of the project activities. National governments, LGUs, institutes, and companies involved in this project will also help ensure the dissemination of relevant information. This will help ensure ownership and sustain participation in and contribution to the agenda during and after the project. Similarly, public disclosure and dissemination of project outputs and results will help sustain public awareness and demand for project outcomes.

*Sustainability and Replicability of Investments.* The project is designed to demonstrate reduction of dioxins and furans from solid waste management emissions; environmentally sound PCB management; and contaminated site remediation and site control. All are designed to be replicable examples. The approach to helping ensure replicability in all cases combines regulatory control/incentives, guideline development, technology demonstration, and training and awareness. This approach will help ensure sustainability by providing the necessary incentives, knowledge, and examples to replicate activities. Financing will be the largest risk to investment sustainability, especially with regard to those made in solid waste management and contaminated sites. This is being addressed in the solid waste sector through the World Bank's urban program, which is developing long-term mechanisms for solid waste financing for local governments through World Bank lending and national government transfers. For contaminated sites, the project strategy will develop an approach to financing and will also incorporate analysis of the cost-effectiveness of various options to provide affordable approaches.

## 8. Lessons Learned from Past Operations in the Country/Sector

The project incorporated lessons from operations in the local government and environment sector. In particular:

- Ensuring interest and commitments of local governments at the early stage of the subproject development;
- Leveraging co-financing from priorities within the local government;
- Incorporating a strong dissemination and training component to all demonstrations;
- Ensuring roles are consistent with agency mandates and allow for effective separation of regulation and implementation;
- Implementing regulation in a staged manner with attention to the technical feasibility of the regulated pollutants and activities.

## 9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
<a href="#">Environmental Assessment</a> (OP/BP/GP 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 (OD 4.20, being revised as OP 4.10)	[X]	[ ]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]

**Environmental:** The project is an environmental improvement project and is anticipated to have mostly positive environmental and health impacts. Potential impacts that are important to consider to ensure adverse impacts are avoided or minimized include: environmental management in relation to the dump site interventions; ensuring safe environmental management of PCBs; and the safe cleanup and management of contaminated sites chosen for demonstration. None of the sites are in known historical or important cultural areas, however, the project will include procedures for treatment of chance finds based on the Bank's policy and local laws.

These potential impacts will be prevented or mitigated through the development of environmental management plans and environmental assessments for each project activity, as outlined in the project's Environmental and Social Assessment Framework. DENR-EMB will provide oversight for each activity and will approve the EA documents (see Annex 10 for details).

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\* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas.

**Social:** The project will reduce the health risk posed by persistent organic pollutants, improve household garbage collection, improve air quality, and increase awareness of chemical risks in the country. Social issues raised by the project include health and safety issues relating to chemicals handling; communication, consultation, and awareness of contaminated sites; and chemical risks and their management. While not anticipated to be significant, there may be cases where structures (temporary or permanent) used by waste pickers as residence, resting places, or collection points, may have to be relocated in the effort to improve dumpsite security, reorganize dumpsite operations, establish Materials Recovery Facilities on site, or to close the dump completely. Component 2 activities can also directly affect the livelihoods of waste pickers. Similarly, Component 4 activities may involve temporary cessation and relocation of economic and other activities on the contaminated site itself and/or on control sites. Project sites (dumpsites, contaminated sites, and control sites) can also be located in lands with pending ancestral domain claims or with ancestral domain titles. While the probability is slim, there may be a community or communities of indigenous people living on the project sites or depending on the project sites as their primary source of livelihood. To address these social issues, the Environmental and Social Assessment Framework includes policy frameworks to address involuntary resettlement, land acquisition, and impacts on the livelihoods of waste pickers. All costs associated with the implementation of the resettlement activities or social development plan for wastepickers will be included in the costs of the given subactivity and budgeted accordingly, while a JSDF seed grant will assist in developing partnerships for the implementation of these activities. Health and safety procedures will be incorporated into environmental management plans as outlined in the Environmental and Social Assessment Framework and a communications strategy covering all components. A screening mechanism and framework has been developed in case the project activities are undertaken on lands where communities of indigenous peoples are present or have collective attachment or when these communities and territories may be affected by project activities.

#### **10. List of Factual Technical Documents**

1. Integrated Safeguards Data Sheet – Concept Stage
2. Integrated Safeguards Data Sheet – Appraisal Stage
3. Project Information Document – Concept Stage
4. Project Information Document – Appraisal Stage
5. Project Appraisal Document
6. Philippines National Implementation Plan for the Stockholm Convention.
7. Philippines 1<sup>st</sup> and 2<sup>nd</sup> National Inventories of Dioxin and Furan Emissions

#### **11. Contact Point**

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