



**United Nations Development Programme  
Country: Honduras  
PROJECT DOCUMENT**



*Empowered lives.  
Resilient nations.*

Project title: Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal

Country: Honduras      Implementing Partner: The Ministry of Energy, Natural Resources, the Environment and Mines (SERNA)      Management Arrangements: National Implementation Modality (NIM)

UNDAF/Country Programme Outcome: Resilient livelihoods strengthened by implementing conservation actions, sustainable use of biodiversity, adaptation to climate change, reduction of environmental degradation, and risk management

UNDP Strategic Plan Output:

Output 1.3. Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste

UNDP Social and Environmental Screening Category: *moderate*

UNDP Gender Marker: *GEN1*

Atlas Proposal/Award ID (also known as 'project'): *00058184*

Atlas output Project ID (also known as 'output'): 00072164

UNDP-GEF PIMS ID: 5615

GEF ID: 9079

Planned start date:

Planned end date:

1 January 2017

31 December 2021

**FINANCING PLAN**

GEF Trust Fund	USD 3,460,000
<b>Total Budget administered by UNDP</b>	<b>USD 3,460,000</b>

**PARALLEL CO-FINANCING**

Government	USD 8,160,873
Private Sector	USD 18,439,453
<b>Total co-financing</b>	<b>USD 26,600,325</b>
<b>Grand-Total Project Financing</b>	<b>USD 30,060,325</b>

*Brief project description:*

The five-year project led by The Ministry of Energy, Natural Resources, the Environment and Mines will help Honduras to fulfill its requirements under the Stockholm Convention for old and new POPs. Consistent with this objective, the project addresses

environmentally sound management and elimination of POPs pesticides (old and new) stocks, PCBs from obsolete electrical equipment and PBDEs from transport equipment waste, as well as UPOPs reduction from priority waste sources. To achieve the project objective and outcomes, the project is structured into 4 components: Component 1 addresses development of institutional capacities and strengthening of the regulatory, policy and institutional framework to manage POPs issues, reinforcing institutional (public and private) capacities in particular through empowerment of the Chemicals National Management Committee (CNG) fostering improved cooperation of work, and strengthening regulatory and policy framework, towards management/destruction of POPs and toxic chemicals to minimize their releases, particularly related to POPs pesticides, PCBs and PBDEs. Component 2 is aimed to develop examples of combined law fulfillment and technological capacities implementation, through design and development of 3 Pilot ("management") projects. The first will be for sound disposal of public vehicles' foams (with PBDEs), introducing Life Cycle Analysis elements with vehicle importers. Second pilot for POPs pesticides management and stockpile elimination, particularly directed to new POPs pesticides as a product of their in-depth inventory completion. Third pilot will be design and implement a Public-Private Partnership (PPP), for Environmentally Sound Management of PCBs of electrical equipment for decontamination and disposal. Technical Guidelines for Management of "new" POPs (Pesticides, PFOS and PBDEs) will be adapted and implemented. These 3 pilot projects are expected to result in a destruction of 12 ton of PBDEs, 30 ton of pesticides and 60 ton of PCBs, over the project's duration. Component 3 is directed to reduction of UPOPs releases from priority sources, through 2 pilot ("elimination") projects. One on ESM hazardous waste co-processing in cement kilns, in PPP between waste producers/holders, cement companies and government. This pilot will be key for the success of the first 3 projects of component 2. The second pilot will be on BAT/BEP processes for treatment of healthcare to assess technologies and practices and their efficiency applied to avoid UPOPs releases. A third activity is the introduction of a methodological BAT/BEP approach for municipal waste management in 5 communities. Pilots will be complemented by 3 technical guidelines. These 2 pilot projects and the Municipal Solid Waste (MSW) management approach are expected to result in a total UPOPs release reduction of 25 g-TEQ/a over the project's timeframe. Component 4 is aimed to strengthen awareness and educational aspects in the formal sector with focus on risks related to new POPs in this case by updating the Methodological Guide on Sound Management of Chemicals approved by Ministerial Decree in 2014 and training of 500 teachers of the subject of Natural Sciences in its comprehension and use; awareness is also needed in the CNG regarding the importance of sound management of new POPs and PPP, to be achieved through a permanent strategy of communication and capacity building at industrial and government level. Component 4 will also consolidate lessons learned throughout the development of the project's implementation and support dissemination of lessons-learned and experiences at national, regional and global level.

**SIGNATURES**

Signature:	Agreed by Government	Date/Month/Year:
Signature:	Agreed by Implementing Partner	Date/Month/Year:
Signature:	Agreed by UNDP	Date/Month/Year:

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## List of Acronyms and Abbreviations

BAT	Best Available Technologies
BEP	Best Environmental Practices
ERC	Evaluation Resource Center
GEF	Global Environment Facility
HCB	Hexachlorobenzene
HCW	Healthcare Waste
IEO	Independent Evaluation Office
MiAmbiente	Secretary of Natural Resources, Environment and Mines
M&E	Monitoring and Evaluation
MSW	Municipal Solid Waste
MTR	Mid-Term Review
NGO	Non-Governmental Organization
NIM	National Implementation Modality
NIP	National Implementation Plan
PBDE	Polybrominated Diphenyl Ethers
PCB	Polychlorinated Biphenyl
PECB	Pentachlorobenzene
PIR	Project Implementation Report
PCDD/F	Polybrominated dibenzo-p-dioxins and dibenzofurans
POPs	Persistent Organic Pollutants
SAICM	Strategic Approach to International Chemicals Management
SBAA	Standard Basic Assistance Agreement
SDG	Sustainable Development Goals
TE	Terminal Evaluation
UNDP	United Nations Development Programme
UNDP-GEF	UNDP Global Environmental Facility

UPOPs	Unintentional Persistent Organic Pollutants
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## I. DEVELOPMENT CHALLENGE

1. A risk to environment and to human health in Honduras exists owed to Persistent Organic Pollutants (POPs), old and new ones, potential release and to Unintentional Persistent Organic Pollutants (UPOPs) emissions, under presently existing institutional and management models and conditions. The most impacting POPs are POPs pesticides, Polychlorinated Biphenyls (PCBs), newly listed POPs such as Polybrominated Diphenyl Ethers (PBDEs) and UPOPs as Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F), which still remain in the country. Although efforts in their control have been achieved, Honduras still continues to face important challenges with regard to the management and control of hazardous and toxic substances in general, and of those POPs in particular, as is ascertained in the NIP recently updated. As immediate causes and main gaps to be filled are in the need for private management schemes development, the lack of law implementation and enforcement, the insufficient technological capacities existing and the lack of enough knowledge about the subject in priority groups.
2. Based mainly on results for the recent Stockholm Convention NIP update (2015), existing POPs, pertinent for this project are an inventory of 30 tons of POPs pesticides owned by Banco Nacional de Desarrollo Agrícola (BANADESA), as determined in the PPG phase of this project (in NIP an amount of only 0.2 tonne were reported). Also, still 108 ton de PCBs are in existence, (approximately 50% still in operation), and 21.5 ton de PBDEs contained in automotive vehicles of the different kinds. From this, about 12 ton are from buses, including the public transport system.
3. Inventory for PCDD/F determined as part of the preparation of Honduras National Implementation Plan update (2015)<sup>1</sup> indicated releases of 248 g-TEQ/year (base year 2010)<sup>2</sup>, with practically a reduction of 22% with respect to 2005 releases inventory based on the original NIP activities with support of GEF Project 4229. Of these, open sky (waste) burn processes amounts to 175.2 g-TEQ/year (air and soil combined), in which healthcare sector waste is likely included. The country's hospital sector includes 82 private hospitals and 28 public hospitals (2013) with an undetermined amount of health care waste generation, which according to NIP are mostly disposed of in landfill. UPOPs other than PCDD/F exist under the Stockholm Convention's Annex C; however, no release information is available in the 2015 NIP. Exposure of production of lime, bricks and tile workers present one of the greatest health risks given the exposure to UPOPs emissions due to the utilization of material that releases UPOPs such as plastic, used oils and tires among others, as fuel.
4. Honduras does not have the infrastructure for toxicological analyses, nor the systematization in the analysis of epidemiological information to provide data of POPs effects on health, therefore this can only be inferred from a study of the Ministry of Health (NIP Update, 2015), based on public hospital discharges in 2014, which showed evidence of the incidence of growing acute pesticide intoxications, rising rates from 5.8 in 2000 to 8.8 in 2012 per 100,000 inhabitants at hospital level, with a tendency for death rates to also increase.
5. At present conditions, 4 immediate causes are considered to be under the Development challenge, described in the underlined paragraphs to follow, based mainly in three structural causes: lack of Extended Producer Responsibility, scarcity of economic resources and authorities'- generators and society lack of knowledge about importance of problem.
6. There are no existing Public-Private Partnerships (PPP) management models for this type of waste. Honduras has a very limited private infrastructure for management and destruction of POPs, and hazardous waste in general; this may be in part owed to missing of in-depth inventories for investment planning of private sector, and therefore have been no PPP management and destruction models for POPs and other waste. Therefore, elimination of POPs stocks in previous efforts has been achieved by exporting them, with consequently high costs for the country and international cooperation. There is no previous experience on establishment of Public-Private Partnerships for this purpose.
7. Lack of implementation and of enforcement of law fulfillment. In spite of the existing regulations, there are still gaps in regulatory framework for original and for new POPs sound management; namely, Extended Producer Responsibility is not included; present legislation differentiates the competencies for regulation from those for enforcement for the existing institutions and as a consequence the standards for command and control do not achieve the mandate for which they were designed (NIP); Although laws such as ministerial resolutions 09-91 and 014-99 establish the phase out of certain POPs, still chlordane (initial POPs pesticide), as well as chlordecone, lindane (in veterinary use), endosulfan, pentachlorobenzene, sulfuramid, PBDEs and alpha and beta hexachlorocyclohexane (new POPs) are not yet incorporated into a ministerial resolution. PRTR in process of implementation needs stronger mechanisms for its enforcement. A regulatory framework for better interaction between government and private enterprises is still missing as one of the larger barriers that currently persist for optimal management of POPs in the country (In preparatory phase of this project, interest from waste processors and recyclers has been shown, as ascertained in the cofinancing of this project). In particular, cement kiln companies which may become important actors for POPs elimination, recently obtained environmental permits to handle and co-process solid waste materials (papers, HC

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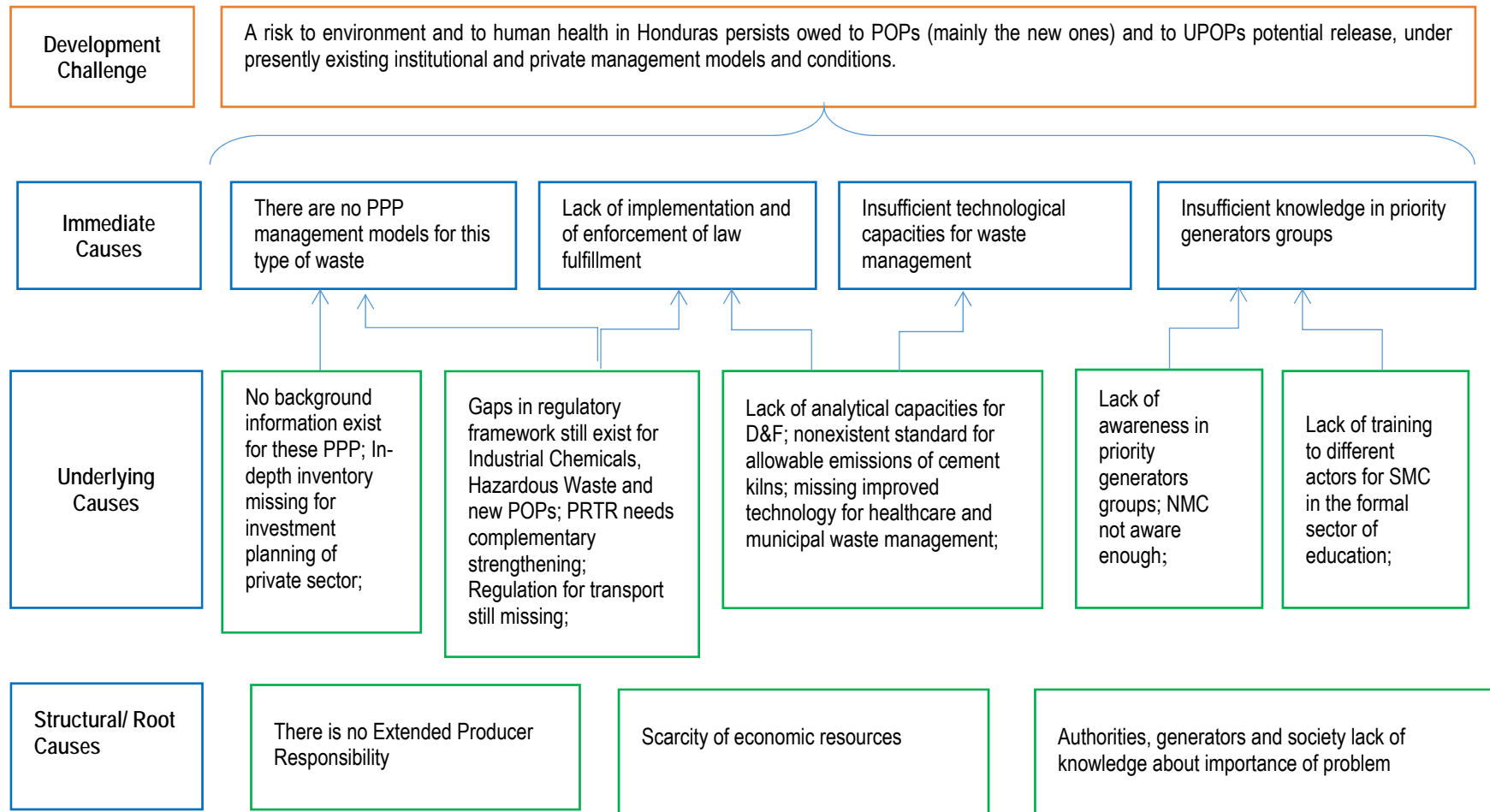
<sup>1</sup> Plan Nacional de Aplicación del Convenio de Estocolmo sobre COP. 2015

<sup>2</sup>Inventario Nacional de Fuentes y Liberaciones de Dioxinas y Furanos

contaminated materials and soil, biomass, bottom ash waste, disused tires, etc.) and some types of plastics. However, companies have a minimum required stark monitor systems and apply different guidelines (those of USEPA and Basel), since there is neither harmonized legal framework nor national standards for the co-processing monitoring, both for continuous or isokinetic measurements. To date, a national framework that prescribes the management and disposal approaches for HCW and provides standardized procedures is lacking.

8. Insufficient technological capacities for waste management. The existing available technology for POPs and waste management in general, requires improvement in its practices, management systems and analytical methods. The hazardous waste management facilities are 20 for the whole country, encompassed mainly by plastic and e waste collectors, small scale incinerators and processors of chemical waste to stabilize them; with hospital waste incinerators of larger units operating with low technology, with important releases of dioxins and furans, while smaller units just disposing of HCW in municipal dumps. Out of those operating, it is ascertained that most of them need of BAT/BEP practices to be introduced and of analytical standards to be developed and certified. Special attention is paid to the 2 cement companies that are interested in co-processing, which only need adaptation of their process line and of technical support, as an important potential means for POPs destruction. They presently operate under permits to handle and co-process solid waste materials (papers, HC contaminated land, biomass, bottom ash waste, etc.) and some types of plastics, but require to have a monitoring of co-processing emissions standard in place. Vehicles foams and upholstery are typically disposed of in municipal dumps from where flame retardants may enter environmental systems and affect health. Additionally, local capacities for pesticides integrated management and disposal are still lacking, which means that international disposal currently has been the present solution. Finally, Backyard burning of solid waste continues to be the second in importance in unintentional POPS emissions. According to National Statistics Institute data, 52% of homes in Honduras continue to use this technique for final disposal of solid wastes. Therefore, in this case, technology in a way of communication tools for solid awareness raising, is needed. Although a technical guideline was published for the design, operation and maintenance of sanitary landfills prepared by the Directorate for Environmental Management (MIAMBIENTE) and a national campaign to create awareness in the population of the importance to not burn solid waste, still more intensive efforts are needed.
9. Insufficient knowledge in priority generators groups. At general society scale, it has been ascertained in the original Stockholm NIP and in its recent update that more knowledge is required in society, about ways to better handle municipal solid waste, being still a common practice the open burning, mainly at rural communities but also in urban areas. In Universities and other educational levels, there is a clear need to introduce concepts that will make aware young people about effects potentially hazardous of chemicals and sound management of those, since they are the professionals which are soon to incorporate at the industry and institutions. At industrial sector, a better attitude toward sound chemical management is required to be furthered, including from safe management of tires, e-waste, automotive scrap, up to electrical transformers with PCBs. Finally, at government level, more information is lacking as to the better enforcement of the existing and the to be- modified regulatory framework.
10. Proposal is fully consistent with the recently approved Honduras NIP update (2015) in several of the goals, namely (where the numbers indicate the following: the first indicates the Strategic guideline, the digit after the "C" indicates the Operational Guidelines, and the "L" the actions lines committed): "5.1C1L1: Consolidate compliance with the legal institutional framework (particularly charged with the management of POPS pesticides); 5.1C2L1: Promote the incorporation of the private sector in the management of POPS; 5.2C2L1: Promote and provide follow up for educational programs linked to the environmentally sound management of chemical products; 5.2C2L4: Promote the incorporation of the environmentally sound management of chemical products in the private sector; 5.3C2L1: Adoption of BAT/BEP for the management of industrial POPS; 5.4C1L1 Integrated management of solid waste for 8 main cities with the highest populations and without an adequate system for the final disposal of solid wastes: Tegucigalpa, San Pedro Sula, Choloma, El Progreso, Danlí, La Ceiba, Choluteca, and Villanueva; 5.4C1L2: Implement BAT/BEP in the national industry; and 5.4C1L3: Develop inventories of unintentionally generated POPS not included in the national inventories".
11. The proposed project also contributes to the overall objective of the Strategic Approach to International Chemicals Management (SAICM), which supports the achievement of the goal agreed at the 2002 Johannesburg World Summit on Sustainable Development of ensuring that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.
12. Furthermore, the project is consistent with the Sustainable Development Goals (SDGs). In particular SDG 3 "Ensure healthy lives and promote well-being for all at all ages", and its target 3.9: "by 2030, substantially reduce the number of deaths and illness from hazardous chemicals and air, water and soil pollution and contamination", as well as SDG 12 "Ensure sustainable consumption and production patterns", and its target 12.4: "by 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment".

Figure 1. Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal, Problem Tree Analysis



## II. STRATEGY

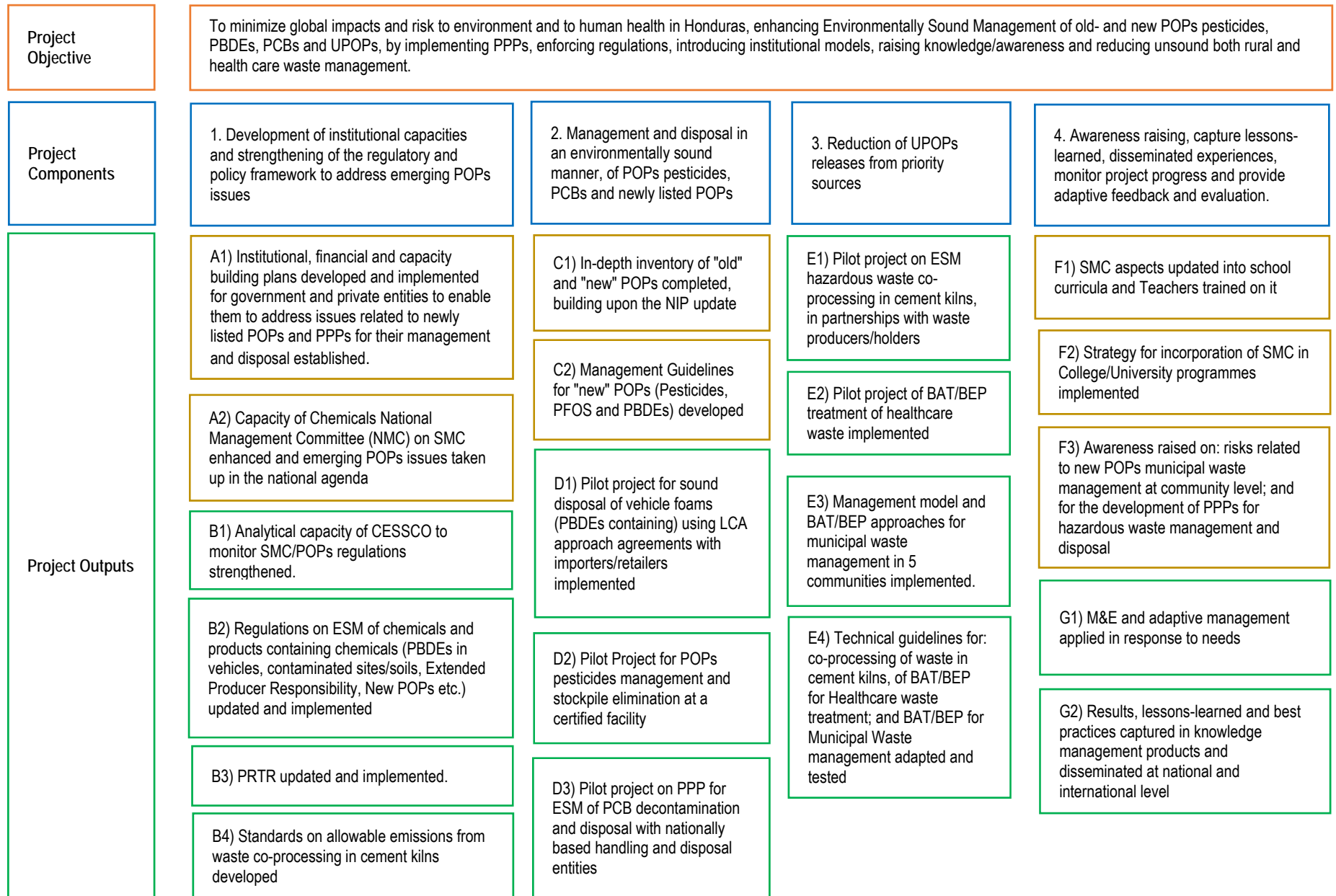
13. Honduras recognizes its status, advances and needs in a position of assuming full responsibility for POPs elimination and adopts the strategy of proposing this project to leverage national resources to further advance in Stockholm Convention implementation and compliance, building on previous achievements. GEF assistance will be very important in reaching this rapidly over the coming years. It also sees this as a key opportunity to ensure that the country has the institutional, regulatory and technical tools available to manage on-going POPs issues into the future, consistent with economic development, country practices and fully aligned with national programs and plans, as reviewed and described in detail in the Stockholm Convention National Implementation Plan (NIP) in 2009 and its update in 2015.
14. The objective of the proposed project is to minimize global impacts and risk to environment and to human health in Honduras, enhancing Environmentally Sound Management of old- and new POPs pesticides, PBDEs, PCBs and UPOPs, by implementing PPPs, enforcing regulations, introducing institutional models, raising knowledge/awareness and reducing unsound both rural- and health care waste management. The strategy is directed to address immediate causes with GEF and cofinancing funding, and through this, establishing basis and/or compensating solutions for the Structural causes in the longer term. For that purpose, key strategic points are to involve Private sector in the POPs waste management, to further advance some regulations and to mainstream waste management in society through training, education and awareness. To achieve this objective, project activities include 4 main components, described in the paragraphs below, as an integrated approach that builds up on previous projects and initiatives, and which complements and enhances key points required to further advance on POPs management and elimination in the country. Preferred strategic organization of activities is in pilot projects, which serve as "operational units", for a better control and administration.
15. Component 1, directed to the first two immediate causes of the development challenge above, will address development of institutional capacities and strengthening of the regulatory, policy and institutional framework to manage POPs issues in 2 key ways. Firstly, reinforcing institutional (public and private) capacities in managerial terms by clearly defining and establishing financial plans for POPs and other chemicals' elimination, in particular through empowerment of the Chemicals National Management Committee (CNG) in order to expand its membership and to increase its advisory role in relation to the import, production, retail, management and potentially the disposal of POPs and wastes containing POPs. This will be accompanied by an update and implementation of the Pollutant Release and Transfer Register (PRTR) Regulation, of the approval and implementation of the regulation on ESM of Industrial Chemicals, Integrated Waste Management Law, Hazardous Waste Regulation and ministerial resolutions on POPs and of the development of a Standard on allowable emissions from waste co-processing in cement kilns. These together will produce an innovator Private sector (enhanced) interaction with government, fostering improved cooperation of work towards management/destruction of POPs and toxic chemicals. This will also be supported by having more clarity on regulations fulfillment by hazardous waste generators, but will lead eventually into a structural cause solution, the Extended Producer Responsibility introduction; additionally, analytical capacity of government laboratory (CESSCO) to monitor SMC/POPs regulations will also be enhanced. These actions will be timely implemented, since many of the causes have been ascertained or reinforced by recently NIP update publication.
16. Component 2, aimed to address mainly second and third immediate causes of development challenge, will produce examples of combined law enforcement and technological capacities implementation, through design and development of 3 Pilot ("management") projects. The first will be for sound disposal of foams (with PBDEs), as part of public vehicles which along the years have been used and are now to be scrapped under "Pro Renova project" led by the National Institute of Transport, and introducing Life Cycle Analysis elements with vehicle importers. Second pilot project will be designed for POPs pesticides management and stockpile elimination, particularly directed to new POPs pesticides, for the first time in a national certified facility and also as a product of their in-depth inventory completion. Third pilot will be innovatory for the country design and implement a Public-Private Partnership (PPP), for Environmentally Sound Management of PCBs of electrical equipment for decontamination and disposal, by establishing nationally based handling and disposal facilities through south-south collaboration; all this is to be technically supported by development of guidelines for Management of "new" POPs (Pesticides, PFOS and PBDEs). Reduction of emissions of PBDEs, UPOPs and PCBs will be achieved through these 3 pilots, which will be linked to pilot 1 of component 3 described below.
17. Component 3, directed mainly to the third immediate cause but which will give sustain and elements to help in the solution of the three structural causes mentioned, is aimed to reduction of UPOPs releases from priority sources, includes 2 pilot ("elimination") projects. One on ESM hazardous waste and other waste such as disused tires co-processing in cement kilns, in PPP between waste producers/holders, cement companies and government. This pilot will be a key for the success of the first 3 projects of component 2, since the waste collected and handled in those, will be conveyed mostly to destruction in the cement kiln. It will involve technical assistance to cement companies in order to introduce process modifications and protocols for sampling and analytical techniques, fulfilling the standard to be developed in component 1. The second pilot will be on BAT/BEP treatment of healthcare will assess technologies and practices and their efficiency applied to avoid UPOPs releases. Project has opted to introduce non-incineration technologies, but they will also be assessed as an option. A third activity and output in this component is the introduction of a methodological BAT/BEP approach for municipal waste management in 5 communities.



- Pilots are to be complemented by 3 guidelines which will be adapted to particular Honduras' situation and be implemented, from existing Basel Convention Guidelines: one of adaptation of hazardous waste co-processing in cement kilns, a second for health care waste treatment and a last one for municipal waste management. These 2 pilot projects and the MSW management approach are expected to result in a total UPOPs release reduction of 25 g-TEQ over the project's duration.
18. Component 4, aimed to address the fourth immediate cause, will strengthen awareness and educational aspects by awareness raising on risks related to new POPs and municipal waste management at community level, in this case by designing and implementing improved ways of making aware and establishment for small communities in the country. Deep awareness is needed in the CNG regarding the importance of sound management of chemicals and hazardous waste, which will be achieved through a permanent strategy of communications and capacity building at industrial and government level. This will build up on the yet insufficient capacities for the development of PPPs for hazardous waste management and disposal, and further support Component 1 activities. Other activity/output, SMC aspects will be strengthened in school curricula with the development and implementation of a strategy to train 500 teachers of Natural Sciences with participation of existent organizational mechanisms of the Ministry of Education in order to cover public and private (mostly private) institutions at the national level and in College/University programs, at the different educational levels, from school through graduate courses on chemicals and their management. Component 4 will also enable consolidation of lessons learned throughout the development of the project's implementation and support dissemination of lessons-learned and experiences at national, regional and global level. A summary of the components and their outputs is presented in Figure 3, Theory of Change Diagram.
  19. Present timely strategy nurtures on previous advances obtained towards the problem prevention and solution in past years that were important but not enough to achieve a mainstreaming of POPs management in Honduras though. Honduras ratified Stockholm Convention in 2005, undertook its NIP in 2006-2009 and updated it in 2013-2015. Through the GEF/UNDP project 4229 "Strengthening National Management Capacities and Reducing Releases of POPs in Honduras", 2011-2015, first actions were taken for implementation of provisions of the first NIP: development of institutional capacity, strengthening of regulatory and policy framework, and elimination of POPs as well as reductions in their emissions, focusing on POPs prioritized in the country's first NIP, in particular the elimination of PCBs used in electrical equipment, obsolete POPs pesticides (listing at that time), and reductions in emissions of Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F), arising principally from the burning of domestic wastes.
  20. Other regulations, which will give support to this project, have been recently approved: the PRTR (Ministerial Agreement 1070-2014), Policy for the Environmentally Sound Management of Chemical Products (Executive Decree PCM-029-2013), creation of the National Commission for the Management of Chemical Products (Executive Decree PCM-035-2013); which includes a special committee for persistent organic pollutants management follow up, and Regulation for the Environmentally Sound Management of PCBs (Ministerial Agreement 1071-2013).
  21. Additionally, nine other regulation proposals have been developed under Project 4229 and as objective of this project will be to foster their approval and/or implementation in order to strengthen its activities: Handbook of functions of the Department of Chemical Products Management (CESCCO-MiAmbiente), Handbook of functions of the Department of Municipal Solid Waste (DGA-MiAmbiente), Handbook of procedures of the of PRTR Regulation (comes under implementation in 2017), Proposal of Regulation of Contaminated Sites Management, Handbook of procedures for Regulation of Contaminated Sites Management, Handbook for Environmental Waste management of PCBs, Reference values of chemical substances in soil, Technical guidelines for BAT/BEP for PCDD/F Reduction associated to Industrial waste management and Proposal of Law on Integrated Solid Waste Management. In relation to PCBs, the goals were achieved under Project 4229: the assessment of 9 potentially PCB contaminated sites, the construction of a storage facility for PCBs, Manual for Better Environmental Practices for the Environmentally Sound Management of electrical equipment with PCBs. These results have been accompanied by training for ENEE personnel and CNG members. Also, Municipal Solid waste (SW) Indicators in 7 regional plans in the 16 regions were established, for the construction of sanitary landfills, expansion of routes for collecting municipal solid residues and the bases for the adequate management of municipal solid residues were established.
  22. The issue of environmentally sound management of chemicals has started to be incorporated in the formal education processes. At undergraduate level, the National Agricultural University (UNA) designed the Environmental Engineering career with a substantial component of environmentally sound management of chemical products. At the National School of Forestry Sciences, the management of chemical substances was included in its post graduate level curriculum and the Central American Technical University (UNITEC) has available a nine-month specialist certificate in Management and Control of Chemical Substances. These achievements will be replicated in other Universities and schools. It has also been introduced at secondary school level.
  23. The strategy here presented is designed to result in the improved management and control of POPs in particular, and of toxic chemical substances in general, in Honduras. The strategy, built upon the participation mainly of private enterprises, communities, universities and other partners, aims to strengthen the collaboration between them based on a reinforced legal and institutional framework and on PPP. The project anticipates to reduce eliminate 102 Ton of POPs (30 MT Pesticides, 60 MT PCBs and 12 MT PBDE waste) and to reduce 25 g-TEQ of UPOPs.

24. Activities, results and lessons-learned from Pilot projects will be documented and shared, in order to assure access to this information by the wider stakeholder community to the experiences and results of Pilot projects. Annual workshops will be organized to create awareness, solicit feedback, and allow for networking among stakeholders during the project.
25. The project strategy will take into account from previous project's results, experiences, recommendations and lessons learned in project UNDP-GEF 4229, which established that institutional capacities should include direct involvement of CESSCO representatives in a systematic way and its new director to take ownership of project, intensive training of CESSCO personnel for monitoring and control, more intensive awareness of municipalities, implementation of PRTR, consider integrated costs for elimination of intentionally produced POPs (pesticides) and implementation of education material for environmentally sound management of chemicals for teachers of primary and secondary education.

**Figure 2 Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal, Theory of Change Diagram**



### III. RESULTS AND PARTNERSHIPS

**Project Objective: To minimize Global impacts and risk to environment and to human health in Honduras, enhancing Environmentally Sound Management of old- and new POPs pesticides, PBDEs, PCBs and UPOPs, by implementing PPPs, enforcing regulations, introducing institutional models, raising knowledge/awareness and reducing unsound both urban and health care waste management.**

26. The project will diminish the impact of POPs to environment in 25 g-TEQ/a of PCDD/F releases and 102 Ton of POPs containing materials. Project will also have as a socially benefic result the implementation of 5 permanent Community-level management models of domestic waste to minimize backyard open burning and to promote environmentally sound disposal of waste. These results will be replicated and extended in their impact after-, or during the project life. It is expected that improved legal framework will have a synergic effect in other waste management improvement.

The objective will be achieved, as shown in global terms in Figure 3, by 6 global technical interventions: 5 Pilot Projects and a scheme of collaboration with communities. This will be supported by activities for strongly focused interaction awareness/collaboration with private sector, of regulations review, update and search to enforce them and by collaborative schemes.

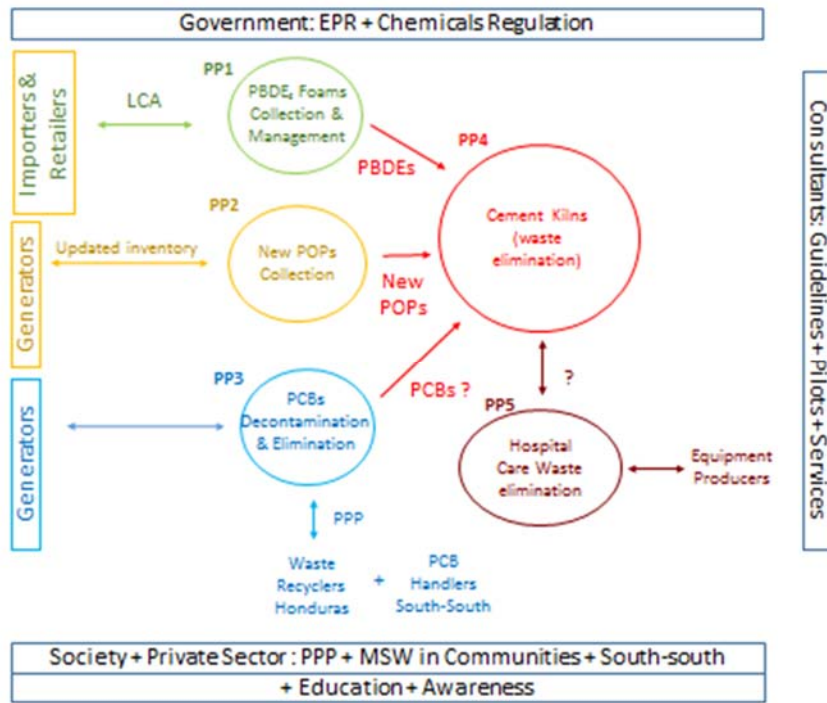


Figure 3. Integrated approach of Project's activities, interaction and stakeholders (PP meaning pilot projects).

The following elaborates on the project structure and its four component design by outcome, outputs and indicative activities.

**Component 1: Develop institutional capacities and strengthen the regulatory and policy framework to address emerging POPs issues.**

27. This component will focus on strengthening institutional capacities, regulations and policies that will reduce the risk of POPs releases in general and in particular associated with new POPs pesticides, PBDEs and UPOPs. The emphasis will be on enforcement and compliance Honduras's reporting obligations under the Stockholm Convention. It will include the integration of these POPs related initiatives within the overall national framework for sound chemicals management and SAICM initiatives. As stated above, Honduras already has laws to regulate management of POPs containing materials and some government

and internationally supported programs on pesticides. Yet, more integration is required particularly for regulations enforcement/compliance and for PPPs fostering.

Outcome A) Key public and private institutions and entities to implement and enforce the regulatory and policy framework for the Sound Management of Chemicals and Wastes, including newly listed POPs.

The outputs to be produced under this outcome (and their corresponding activities) include:

28. *Output A1) Institutional, financial and capacity building plans for government and private entities to enable them to address issues related to newly listed POPs and PPPs for their management and disposal.*

The project will develop a Plan for inter-institutional coordination with regards to the management and elimination of POPs and other hazardous waste. This will include government agencies, such as MiAmbiente and Ministries of Agriculture, Transport and Economy. The plan will encompass the complete life cycle from identification of POPs (old and new) sources through to end of life. The key element of this Plan is to foster efficient and effective collaboration between government agencies and private sector emphasizing on law enforcement.

The plan development will include the following stages: Plan Concept based on regulations and attributions, discussion and refinement in strategy workshops with authorities, plan draft development, review and reality check, and final document.

29. *Output A2) Capacity of Chemicals National Management Committee (NMC) on SMC enhanced and emerging POPs issues taken up in the national agenda*

This output will build and strengthen a culture of integrated planning and collaboration in the NMC, fostering inter-institutional and inter-sectorial coordination between government and private institutions to promote the development of the ESM of Chemicals in general and to take up in national agenda emerging POPs issues in particular, in a coordinated and organized manner and to optimize the use of resources. The project will promote expansion of membership of NMC, to include representative organizations such as chambers of commerce, individual actors (enterprises) and other stakeholders in order to increase its advisory role in relation to the import, production, retail, management and potentially the disposal of POPs and wastes containing POPs. Project will also help to draft agreements to formalize the partnerships between public and private sector actors in the area of the management and disposal of POPs containing wastes. Project will support the design and implementation of a consultation method to Private sector on specific issues such as the co-processing of POPs in cement kilns, the application of a life-cycle approach to the management and disposal of products/wastes containing POPs, and on development of legislative and policy instruments which might have potential implications and opportunities for their activities. Also to warranty that newly-listed POPs are placed on the agenda of the NMC for discussion. The project will facilitate the establishment of mechanisms to increase coordination between public and private sectors. It will also facilitate the negotiation of agreements between cement companies and waste holders, for waste disposal. This will be achieved mainly through information provided to the NMC and permanent workshops for the institutions that form part of it.

Outcome B) Regulations for ESM of chemicals developed and updated as required and infrastructure for their fulfillment strengthened

The outputs to be produced under this outcome (and their corresponding activities) include:

30. *Output B1) Analytical capacity of CESSCO to monitor SMC/POPs regulations strengthened.*

In order to allow the monitoring of the SMC/POPs regulatory framework, the project will support the development in Centro de Estudios y Control de Contaminantes (CESSCO-SERNA) of the further technical capacity required for the handling, analysis and monitoring of the newly-listed POPs, in particular to develop capacities for detecting and analyzing Lindane,  $\alpha$ -Hexachlorocyclohexane,  $\beta$ -Hexachlorocyclohexane, Pentachlorobenzene and PBDEs, and to meet its statutory responsibilities in support of the enforcement of the relevant environmental regulations. This support will consist of staff training, the development and/or update of technical manuals and the provision of laboratory equipment and soil analyses.

The project will also support the update of the plan for institutional and financial sustainability for CESSCO, in particular incorporating responsibilities associated with the management of Industrial Chemicals, newly listed POPs and the implementation of public-private collaboration modalities for POPs and Hazardous waste management.

31. *Output B2) Regulations on ESM of chemicals and products containing chemicals (PCBs, PBDEs in vehicles, POPs contaminated sites/soils, Extended Producer Responsibility, etc.) updated and implemented*

Regulations on ESM of Industrial chemicals and products containing chemicals, such as PCBs, PBDEs in vehicles, POPs contaminated sites/soils, etc., will be developed and/or updated where still more integration (into a ministerial resolution) is required, taking into account the following:

- Inclusion and enforcement of Extended Producer Responsibility;
- compliance of regulations, in particular related to the destruction/management of new POPs (chlordecone, lindane, endosulfan, pentachlorobenzene, sulfuramid and alpha and beta hexachlorocyclohexane);
- compliance of regulations, in particular related to the destruction/management of initial POPs pesticides (DDT, endrine, hexachlorobenzene ) and of obsolete pesticide stocks;
- a sustainable and permanent system of inventory tracking of POPs, including contaminated sites.

Activities will encompass conduction of legal review and gap analysis, prepare regulatory amendments, including enabling of relevant economic instruments applicable to sound chemicals management and conduct training workshops on inspection for substances and products containing new POPs.

Support will also be provided to approve and operationalize regulation initiatives that have been preliminary developed namely: Operationalize the Regulation for Environmental Sound Management of PCBs, Approve and distribute Technical guidelines for BAT/BEP for PCDD/F Reduction associated to Industrial waste management, Approve the proposal of Regulation for the ESM of Industrial Chemicals and products containing chemicals and Proposal for Law on Waste and develop the Regulation of Hazardous Wastes.

For the regulations update, project will support the development of detailed inventories and assessments to quantify existence of newly-listed POPs, including studies on the levels of  $\alpha$ -Hexachlorocyclohexane,  $\beta$ -Hexachlorocyclohexane and pentachlorobenzene in environmental media, stock and use assessments for PBDEs, and assessments on the levels and use of Sulpharamide (Mirex) applied for the control of leaf-cutting ants.

*32. Output B3) Pollutant Release and Transfer Register (PRTR) updated and implemented.*

The PRTR Regulation for Honduras, approved in 2014 (Ministerial Agreement 1070-2014) will be updated to incorporate the new POPs, supported by the results of Output B2 and diffuse sources of contamination. As in the case of Output B2, activities will include conduction of legal review and gap analysis, prepare regulatory amendments, and conduct training on inspection for new POPs substances and products containing new POPs be incorporated in PRTR.

*33. Output B4) Standards on allowable emissions from waste co-processing in cement kilns developed*

MiAmbiente assessed the current situation of waste co-processing in cement kilns and determined it is feasible under the assumption that the temperature is sufficiently high and the required residence is long enough, with acceptable PCDD/F emissions. Examples of wastes to be processed include used tyres and hospital wastes. However, the testing protocols from for instance the Basel Convention Guidelines, and emissions determination under an approved standard are yet to be implemented.

The project will develop the draft standard for continuous or isokinetic measurements, where emissions limits will be established, which will include technical elements adaptation from internationally accepted standards, such as Basel Convention and US Environmental Protection Agency, legal review, participation in meetings to review drafts. It will also include participation in the pilot of co-processing, output E1, where monitoring of emissions will be attested.

**Component 2: Management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs.**

34. This component, will be focused on the management and elimination of PBDEs contained in old vehicles, POPs pesticides, both "old" (still remaining) and "new" (identified in the in-depth inventory) and a fraction of the PCBs stockpile still remaining, through 3 pilot ("management") projects that will combine law enforcement and technological capacities implementation. This will be supported by an in-depth POPs inventory and will develop technical guidelines for the 3 groups of waste and may be linked to output 3.2 of component 3 described below.

**Outcome C) Technical Knowledge on POPs for support of their management developed.**

The outputs to be produced under this outcome (and their corresponding activities) include:

*35. Output C1) In depth inventory of "old" and "new" POPs completed, building upon the NIP update*

The project will develop a national scale inventory of new and some old POPs. The detailed inventory and assessment to identify the quantity and presence of new POPs will focus on some of the substances of more interest to Honduras, which are:  $\alpha$ -Hexachlorocyclohexane,  $\beta$ -Hexachlorocyclohexane, pentachlorobenzene, in environmental media; Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial pentabromodiphenyl ether) in stock and in use; and Sulphamide (Mirex), on the levels and use. The scope of inventory will also include a recheck of some of the old POPs pesticides and PCBs. An inventory on new POPs was developed during the NIP update, as well as an update of the original list of POPs. However, these inventories are many times only indicative of the existing quantities.

Through this work, a more precise and reliable determination of the amount of existing POPs will be obtained and a more precise quantification of those that can be captured for environmentally sound management. This will be supported by estimates of POPs content by chemical analysis of samples. This activity will go way beyond what was achieved in the NIP Update (which in previous experience is normally underestimated in the NIP processes).

*36. Output C2) Management Guidelines for "new" POPs (Pesticides, PFOS and PBDEs) developed*

A series of 3 technical management Guidelines will be developed for the use and sound management of: pesticides in general and POPs pesticides in particular, for Perfluorooctanesulfonic acid (PFOs) and for PBDEs. These will include legal bases, risks to health and to environment, uses and sound management of them as waste. These will be used as tools for awareness rising in industry and for public in general.

Guidelines will be developed taking into consideration other countries' experiences, the results of the project's demonstration activities and the Honduran setting. Guidelines release will include an extended public workshop with authorities and key actors for their implementation.

Outcome D) POPs containing materials stockpile eliminated by innovative approaches

The outputs to be produced under this outcome (and their corresponding activities) include:

*37. Output D1) Pilot project for sound disposal of vehicle foams (PBDEs containing) using LCA approach agreements with importers/retailers implemented*

A pilot (demonstration) project for the management and destruction of foams and upholstery contained in the transport sector will be implemented on the materials that will be obtained from the Ministry of Transport, from the public use buses that are to be scrapped as part of the renewal of the bus system. Arrangements will be made with the Ministry and the bus operators, to supported the development of a new regulation that will consider this based on a recent law. The suggested elimination is considered to be done in one of the cement companies' kilns, which already have a permit to co-process different types of plastics, running a protocol test first to determine emissions and them eliminating gradually. The pilot will include the collection and safe storage.

Upon completion of the pilot project, PBDEs emission will be reduced by 12 ton, which is about 50% of the estimated emission from Honduras. It may be gradually replicated later on for the rest of private vehicles that are to be scrapped.

*38. Output D2) Pilot Project for POPs pesticides management and stockpile elimination at a certified facility*

Since local capacities for safe disposal are still lacking for the integrated management and destruction of POPs pesticides and stockpile elimination, a pilot (demonstration) project for the management and destruction, via a more cost effective commercial options for their environmentally sound destruction and consistent with international standards, will be implemented. This will include an assessment of POPs pesticide generation and stockpiles and waste destruction options available commercially in the export market and will include potential qualification of domestic facilities as required against international standards and guidelines, specifically those issued by the Basel Convention and GEF STAP. South-south collaboration will be explored.

The elimination pilot project will include selection of destruction technologies that are proven to be most appropriate in accordance with the types and volume of pesticides identified. The estimated cost of destruction of POPs pesticides, through export, is about US\$ 5,000/ton and that includes all cost from collection through to destruction abroad. The pilot will also assess the possibilities to develop national capacities in private sector for the collection and preparation for destruction in cement kilns, as a possibility. Alternatively, project will provide support for technical specifications defining the required environmental performance and due diligence/safeguards requirements to be applied during competitive bidding of destruction under this activity.

Environmentally sound destruction of at least 30 tons of estimated inventory of POPs pesticide stockpiles and waste will be performed. GEF funding for this will be used to supplement substantive national co-financing from the government and private sector.

*39. Output D3) Pilot project on PPP for ESM of PCB decontamination and disposal with nationally based handling and disposal entities*

This pilot project aims to test and develop local private sector capacities for management (decontamination) and elimination of PCBs in electrical equipment. The pilot will consist in establishing a PPP between private sector (public and private owners of contaminated equipment, waste handlers and recyclers and waste processors for destruction, such as the cement companies) and the government. The PPP will require signing an agreement. By this collaboration costs will decrease sending to destruction only the oils and cleaning materials product of the decontamination process, abroad or in the cement kilns, and opens the opportunity to recycle the metallic materials contained in used transformers. The estimated cost of destruction of PCBs is about US\$ 3,400/ton and that includes all cost from collection, packing, transport to destruction abroad.

Activities to be developed by the Project are: elaboration of agreement, identification of materials, management of decontamination and destruction.

Environmentally sound destruction of at least 60 tons of estimated inventory of PCBs contaminated materials will be performed. GEF funding for this will be used to supplement national co-financing from the government and private sector. Once the process of either option is tested and determined economically viable, the rest of the PCBs contaminated materials will also be handled.

**Component 3: Reduction of UPOPs releases from priority sources**

40. This component is aimed at reducing UPOPs releases through the use of cement kilns as alternative option to destroy hazardous waste, precursor of UPOPs and through a social/awareness approach with 5 communities for the sound management of municipal waste. This will be achieved via 2 pilot (“elimination”) projects and a collaborative scheme with the communities. Technical guidelines will be developed as a result of these 3 interventions.

*Outcome E) Reduction of UPOPs emissions and elimination of POPs in collaborative schemes*

The outputs to be produced under this outcome (and their corresponding activities) include:

*41. Output E1) Pilot project on ESM hazardous waste co-processing in a cement kiln implemented by establishing official partnerships between waste producers/holders, cement companies and government.*

MiAmbiente has assessed the current situation of waste co-processing in cement kilns and determined that it feasible under the assumption that the temperature is sufficiently high and have the required residue time, and thereby generating acceptable PCDD/F emissions. Examples of such wastes, include used tyres and hospital wastes. However, testing protocols in line with for instance the Basel Convention Guidelines and emissions determination under an approved standard are yet to be implemented. The latter will be part of output B4 and the former is the objective of this output: a pilot project to test not only technical viability and environmental soundness of the process but also economic feasibility for the cement companies and for the hazardous waste generators, of such materials as PCBs, pesticides, hospital care waste and PBDEs containing materials, is included in D1, D2 and D3 outputs.

The pilot project will be developed, based on a screening assessment of candidate cement plants, including demonstrating of how a good operation can work and the development of a best practice guide. The management stages will be in line with international best practices for initial materials handling and storage, mixing and feeding to the kiln, burning and post-burning of gases. It will also include ways to employ safe disposal practices to treat final fly and bottom ashes and monitoring emissions of the overall process.

The project will therefore require support to test its feasibility in all senses: technical, environmentally and economically. A technical manual will also be produced for environmental monitoring to be used by MiAmbiente and municipal environment units. Corresponding training will be provided to the target audiences in both cases in the interpretation and implementation of the provisions of the manuals. Furthermore, although the waste disposal and co-processing will be governed by private businesses, contractual arrangements between those generating the wastes and the cement plant owners will be established, and the project will provide facilitation and advisory support to the negotiation of such arrangements

International expertise on cement kiln co-processing will be needed to evaluate the current scenario and develop the tests at cooperating companies in order to verify and adjust performance and update environmental licensing, providing technical



assistance for the adaptations needed to the kiln in order to be able to co-process PCBs. The target for destruction of PCBs is 60 MT under a PPP; and lessons learnt will be documented and shared with interested parties.

*42. Output E2) Pilot project of BAT/BEP treatment of healthcare waste implemented*

Pilot project of non-incineration alternative treatment of HCW will be implemented in two Hospitals. One with 100 beds located in Tela, Atlántida and the other in a hospital with 127 beds located in Gracias, Lempira (selected during the PPG phase of the project, and they have shown great interest in participating in the project). The first pilot hospital will test waste traceability system (reverse logistics) specifically designed for the type and size of the hospital. The second part will consist in introduction and testing of a new or refurbished autoclave and shredder combination. In the second hospital, treatment system to be tested is by installing a microwave and autoclave technology to be funded by the Honduras Debt Reconversion Program with Spain that is financing Gracias – Lempira, Landfill. It is important to remember that larger units of hospital waste incinerators operate with a simple technology and will require at least of BAT/BET with permanent control of releases of PCDD/F, while smaller hospitals simply dispose of their HCW in municipal dumpms.

*43. Output E3) Management model and BAT/BEP approaches for municipal waste management in 5 communities implemented*

A management model for domestic waste at the community/rural-level will be designed and conducted to reduce open burning in 5 municipalities: Comayagua, Marcovia, Potrerillos, Colosuca and Municipio de Distrito Central (MDC). The activities will be in two areas. First, an integrated Management System for Solid Waste Activities will be designed and implemented and will include the following: Agreements between local authorities and Miambiente signed. Program to improve waste dump sites developed. A needs assessment of the requirements of materials and a place to store valuable and visibly toxic materials will be conducted. A communication campaign for separation at source, collection and commercialization of valuable materials will be established. Local informal waste pickers sector developed. A management information system developed. Workshops with communities will be performed.

The second area of work will be to establish an information and monitoring campaign to reduce the open burning of waste, and will provide information to the community on the health risks associate with that. Awareness raising materials with the results from the project will be produced and replicated in other communities of other municipalities. The expected benefits of the pilot project is a reduction of PCDD/F of 25 gTEQ/year, considering proportionately the population.

*44. Output E4) Technical guidelines for co-processing of waste in cement kilns and for BAT/BEP for Healthcare waste treatment; and BAT/BEP for Municipal Waste management adapted and tested*

As a result of Outputs E1 to E3, a series of 3 technical guidelines will be developed. First, the technical guidelines for the co-processing of waste in cement kilns will include the legal bases, process description and operation, risks to health and the environment and emissions monitoring. This will be addressed to cement kilns operators and authorities. A second technical guideline on BAT/BEP for Healthcare waste treatment will include legal bases, risks to health and to environment, technical aspects related to sound management of hospital care waste and options for its destruction. The third technical guideline is on BAT/BEP for Municipal Solid Waste Management and will include the legal bases; risks to the health and the environment, sound management of MSW, options for management of MSW and benefits obtained from it. It will be used as a tool for the awareness rising of the general public.

The guidelines will be developed taking into consideration the results of the demonstration projects, the experience from other countries as well as the Honduran context. The release of the guidelines release will take place at an extended workshop with the participation of authorities and key actors (first two guidelines) and for general public for the third guideline.

**Component 4: Awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation.**

45. This component is aimed at to raise awareness about the health and environmental risks associated with the environmetally unsound management of POPs and increase the understanding about hazardous chemicals in general and of newly listed POPs in particular, whose identity and implications are less known to the public (and even to specialists and technicians) than those originally listed under the Stockholm Convention. It also includes the documentation of lessons-learned, dissemination experiences and good practices, and to monitor project progress and allow for adaptive feedback and evaluation mechanisms.

**Outcome F) Education and awareness raised on risks of “new” and “old” POPs, and ways in which to minimize their releases. This is for private entities, students and communities as well as for the larger public.**

The outputs to be produced under this outcome (and their corresponding activities) include:

46. *Output F1) SMC aspects updated into school curricula and Teachers trained in it*

The project will update the national education strategy and include ESM of chemicals in the Natural Science subject in the elementary, middle teaching programs, and built on the previous experiences on applying ESM principles in educational curricula and on how to mainstream such activities. The subjects that will be included especially at high school level are (among others), e-waste management, home and agriculture pesticides, new POPs and good practices. The aim is to develop a draft that includes these topics at the level of a Ministerial Decree as part of the national education curriculum. The project will develop a draft of a M&E system on the uptake and impacts of SMC education.

Five hundred (500) teachers are planned to be trained on the Sound Management of Chemicals (SMC) and SMC aspects will be updated into the curricula of the schools.

47. *Output F2) Strategy for incorporation of SMC in College/University programmes implemented*

The project will develop a ESM programme for priority chemicals and related topics and will be included in the higher educational levels. The project will also develop a proposal for the technical educational level to introduce the topic of sound management of pesticides and MSW.

A module (formal university level credits course) on the management of chemical products will be designed, tested and proposed to be introduced in all related pre-grade and post-grade university levels. The project will also develop a proposal to introduce Environmentally Sound Management (ESM) principles of Chemical Products in the educational curricula of universities - as well as training plans of national stakeholders that handle and dispose such products. The aim is to train have 50 people trained on these.

48. *Output F3) Awareness raised on: risks related to new POPs and municipal waste management at community level: and for the development of PPPs for hazardous waste management and disposal*

Four awareness/training courses will be developed for two target groups: one at the community level related to municipal waste management and inception on risks from POPs and hazardous waste; and the second for private sector (industry and services) focused on the characteristics and the way to develop PPPs for hazardous waste management and disposal. Both will include the concept of risks related to the new POPs.

The second course will focus on activities related to the improvement of the understanding of private and public sector stakeholders on emissions, exposure limits and control tools for the newly listed POPs; with particular attention to cement industries and car dealers.

Outcome G) Project results monitored and sustained, adaptive feedback and evaluation undertaken and results replicated

The outputs to be produced under this outcome (and their corresponding activities) include:

49. *Output G1) M&E and adaptive management applied in response to needs*

Project will provide the necessary means for the monitoring and evaluation (M&E) of project results in order to inform adaptive management of the programme and improve the implementation of the project. Mid-term (MTE) evaluation will be executed between the second PIR and third PIR and terminal evaluation (TE) will be prepared by independent evaluation teams and compiled into reports.

50. *Output G2) Results, lessons-learned and best practices captured in knowledge management products and disseminated at national and international level*

This output will enable consolidation of lessons learned extracted throughout the course of the project's implementation and support dissemination of lessons-learned and experiences at national scale, and in collaboration with the GPSC at regional and global levels. Activities, results and lessons-learned from the pilot projects will be published in individual case study reports, which will help ensure access to this information by the wider stakeholder community to the experiences, failures and successes of the pilots undertaken by the project

Partnerships:

51. The implementation of this project requires the active participation of several partners, government partners as well as civil society and private sector partners. Responsibilities of these partners in the project's implementation as well as initiatives supported by these partners in addressing the project's development challenge, have been summarized in the Table below.

Table 1. Partnerships

Partner	Responsibilities of the partner in the project's implementation and other initiatives this partner is implementing that contribute towards the achievement of this project.
<i>Ministry of Environment (MiAmbiente, former SERNA):</i> the lead institution of the environment sector and GEF focal point.	<b>Responsibility in the project:</b> Lead institution as GEF political and operational focal point. Co-financier. Project Board member. Will coordinate with the municipalities. <b>Currently:</b> Other initiatives are: National Implementation Plan (NIP) update of Stockholm Convention; GEF/UNDP Project "Environmental Sound Management of Mercury and Mercury Containing Products and their Wastes in Artisanal Small-scale Gold Mining and Healthcare", deals with unsound management and disposal of Mercury containing products from the healthcare sector. 2015-2018.
<i>Centre for Study and Control of Contaminants (CESCCO)</i> <i>Lead agency in MIAMBIENTE</i> responsible for issues related to chemical pollutants	<b>Responsibility in the project:</b> It will be the operating area in MiAmbiente for all activities of Project. <b>Currently:</b> Conducts all laboratory studies for chemicals. Laboratory dedicated to research and environmental monitoring, which provides laboratory services for environmental pollutants and food
<i>Ministry of Agriculture</i>	<b>Responsibility in the project:</b> Pilot project on POPs pesticides management.
<i>Ministry of Education</i>	<b>Responsibility in the project</b> Teachers training on Environmentally Sound Management of Chemicals (SMC) and update the (ESM) principles of Chemical Products in the educational curricula of universities.
<i>Superior Education Council of the Autonomous National University of Honduras (UNAH)</i>	<b>Responsibility in the project</b> approve formal university course on Environmentally Sound Management of Chemicals (SMC) and introduction of (ESM) principles of Chemical Products in the educational curricula of universities.
<i>Ministry of Transport</i>	<b>Responsibility in the project:</b> Pilot project of PBDEs elimination in public buses
<i>Ministry of Health</i>	<b>Responsibility in the project:</b> Pilot project on Hospital Care Waste management.
<i>The National Management Committee (NMC)</i>	<b>Responsibility in the project:</b> Conducts several proposals of regulations on safe chemical management.
<i>Municipal Governments of Comayagua, Siguatepeque, Potrerillos, Colosuca y MDC</i>	<i>BAT/BEP approaches for municipal waste management in the 5 communities.</i>
<i>Universities</i>	<b>Responsibility in the project:</b> Pedagogical University of Honduras, Central American Technological University, Private University of San Pedro Sula, ESNACIFOR University, University of Agriculture in Catacamas.
<i>Argos Honduras, S.A de C.V.</i>	<b>Responsibility in the project:</b> Pilot projects on ESM hazardous waste co-processing in a cement kiln and in pilots for sound disposal of vehicle foams (PBDEs containing), POPs pesticides management and stockpile elimination at a certified facility and PPP for ESM of PCB decontamination and disposal nationally <b>Currently:</b> coprocesses tires, textile, used oil and other waste in their kiln.
<i>Cementos del Norte, S.A</i>	<b>Responsibility in the project:</b> Pilot projects on ESM hazardous waste co-processing in a cement kiln and in pilots for sound disposal of vehicle foams (PBDEs containing), POPs pesticides management and stockpile elimination at a certified facility and PPP for ESM of PCB decontamination and disposal nationally. <b>Currently:</b> coprocess different types of hazardous waste in their kiln (Expired medicines, HC, HC contaminated material, refrigerant container sponges)
<i>Recyclers Association</i>	<b>Responsibility in the project:</b> Pilot projects on ESM hazardous waste co-processing in a cement kiln and in pilots for PPP for ESM of PCB decontamination and disposal nationally.

<i>National Cleaner Production Center</i>	Pilot projects on ESM hazardous waste co-processing in a cement kiln and in pilots for PPP for ESM of PCB decontamination and disposal nationally.
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Table 2. Stakeholder engagement:

Key Project Stakeholder	Strategy to ensure Stakeholders are engaged
National Government Ministries	They will all form part of Project Board and will participate in the inception workshop and presentations about importance of Project (MiAmbiente, Ministry of Health, Ministry of Labor and Social Security, Ministry of Agriculture and Livestock).
Civil Society Organizations	The project will involve CSOs in a number of project interventions: consultation, validation and collaboration processes for municipal solid waste management; participation in the dialogue and coordination platforms, especially the municipal level platform emphasizing in civil society and private sector; development and implementation of awareness raising and citizenship building programs (CARITAS <sup>3</sup> and Economic Development Centers). It will include the Honduras NCPC as well. They will be informed about benefits of the project to their communities.
Private sector enterprises	The project will involve private sector associations (recyclers association) and directly with private enterprises in participation in the dialogue and coordination platforms, especially emphasizing PPPs establishment for the EMS pilot project and the BAT/BEP Health Care waste pilot; with national government and municipalities, for developing of infrastructure and processes for waste management; and development of awareness raising programs. Their engagement will be assured by warranty of collaboration from Government.
Communities generating and segregating wastes at household level	The project will undertake awareness campaigns on sound waste management targeting households, neighbors' associations, schools, businesses and industries located in the municipalities selected for the waste management activities. Their engagement will be assured by warranty of collaboration from Government.

#### 52. Mainstreaming gender:

According to a preliminary analysis conducted during the project's design phase, gender aspects related to the project's activities can be considered to be the following:

- Government partners Institutions have a weak structure for gender mainstreaming, particularly at municipal level, where their staff lack capacities for a comprehensive approach to this subject.
- Waste pickers: An estimated 80 people in the 5 communities make a living out of waste separation, driving around and separating wastes from household, business or industry garbage before they are collected by the formal collection services, and some 30 people work in the waste dumps as waste pickers. Although no hard data exists, it is recognized that an important percentage of these informal waste pickers are women.

## IV. FEASIBILITY

### Cost efficiency and effectiveness:

53. At the formulation stage of this project, the priority sectors have shown that they are willing to provide their own resources (as co-financing) to implement measures that promote the reduction of POPs and UPOPs releases. However, project partners will require additional support and funding to prepare and implement specific demonstration projects that will aim for technology implementation or equipment complementing in their production and waste management processes. As such the use of GEF funding is entirely complementary. The activities under this project are based on the formalization and implementation of cooperation schemes between main actors in waste management (both domestic waste and hazardous), management of scrapping waste from the transport sector and Health Care Facilities waste, all this also supported by the formation of PPP. The strategy presented in this project is based on considerations that allow GEF and counterpart resources to offer maximum results.

54. Pilot project on co-processing of plastics contaminated with pesticides and of foam with PBDEs in cement furnaces will produce environmental and economic benefits from the segregation and management of obsolete vehicles in which Honduras does not

<sup>3</sup> [www.caritashonduras.org/](http://www.caritashonduras.org/)

have experience on, and the Project considers to incorporate this practice as a pilot, which has been proven to be cost- effective instead of export for destruction.

55. Pilot project on Healthcare Waste Management: will apply practices and technologies, which are being widely used in different parts of the world. Mainly, this demonstration project will take into consideration the results from the GEF/UNDP/WHO/HCWH Global Medical Waste project as well as other HCWM projects implemented worldwide. Such projects and programmes have demonstrated the feasibility of the use of HCW technologies such as autoclaves, chemical treatment, among others. The application of approaches and technologies that have proven successful elsewhere will ensure cost efficiency and cost effectiveness of the proposed project interventions. An additional approach may be taken to build and/or adapt appropriate technologies for development of an autoclave by a waste processor that may be interested on.
56. From the pilot projects, national guidelines for BAT/BEP in each case will be adapted and implemented, for co-processing of waste in cement kilns, of BAT/BEP for Healthcare waste treatment; and BAT/BEP for Municipal Waste management and learned-lessons on UPOPs management in the country and published. Government authorities will obtain sufficient information from all these processes to be able to enforce technical regulations for Health Care waste and PBDEs in a sounder way.
57. Authorities, industry, HC institutions and waste managers will benefit from the strengthening of the CESCO laboratory capacity in the analysis of new POPs which will facilitate the control and monitoring by authorities of the generation of those pollutants, and support partners in meeting national legislative obligations. All these interventions will result in an improvement of the human health and environmental conditions in the country, and in meeting the obligations that Honduras has for Stockholm Convention fulfillment.
58. Finally, coordination with The GEF/UNDP Project “Environmental Sound Management of Mercury and Mercury Containing Products and their Wastes in Artisanal Small-scale Gold Mining (ASGM) and Healthcare”, which aims to protect human health and the environment from Mercury releases originating from the intentional use of Mercury in ASGM, as well as the unsound management and disposal of Mercury containing products from the healthcare sector, being implemented through one joint project unit that operates in CESCO-MiAmbiente, will allow synergies between the actors, such as laboratories, hospitals, waste facility operators, environmental authorities and associations that already play an active role in this POPs project.

#### Risk Management:

The key risks that could threaten the achievement of project results have been summarized in Table 5 below. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and report on the status of risks to the UNDP Country Office. The UNDP Country Office will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. when impact is rated as 5, and when impact is rated as 4 and probability is rated at 3 or higher). Management responses to critical risks will also be reported to the GEF in the annual PIR.

Table 3. Project Risks

Project Risks			
Description	Type	Impact & Probability	Mitigation Measures
Lack of will and commitment of national and municipal institutions for inter-institutional and inter-sectorial coordination for implementation of integrated actions	Organizational	Probability: 1 Impact: 2 Significance: Low Potential impacts: Implementation of un-coordinated, sector-based approaches will continue. Contamination of air, water and soil will continue.	The mandates and roles of each institution have been taken into account in assigning responsibilities for Project implementation at outcome and output level in order to minimize possible conflicts between the partner institutions. This includes their commitments as well as their co-financing. The participating institutions will sign inter-institutional agreements for coordination and implementation of project interventions
Lack of participation of waste processors during pilot projects		Probability: 1 Impact: 3 Significance: medium Potential impacts: Insufficient supply for waste coprocessing will prevail	Information and training campaigns will be part of the outreach strategy to overcome this potential resistance
Concurrent co-financing for implementation of project actions may not be obtained timely	Organizational	Probability: 1 Impact: 3 Significance: Medium Potential impacts: Delays in implementation of project activities. Potentially a reduction in the scope of the project interventions and impacts	Participating institutions have signed co-financing letters. The UNDP CO will monitor the co-financing contributions to the project. The Project Board will be responsible for political level dialogue and negotiations to secure co-financing. In addition, the dialogue platform will constitute a forum to promote awareness raising among managers and decision makers on the importance of securing budgets on a timely basis, and with quality and quantity for the foreseen project actions
Legal modifications may take long time for adoption		Probability: 1 Impact: 3 Significance: medium Potential impacts: Delays in implementation of project activities. Potentially a reduction in the scope of the project interventions and impacts	Emphasis to be made on development of regulative work in the beginning of project with proposal and follow up activities put in place.
Informal workers that benefit from picking and recycling waste in a semi-formal manner oppose to proposed collection-separation- interventions and decide not to participate	Socio-economic	Probability: 3 Impact: 1 Significance: Low Potential impact: Risks due to unhealthy working conditions of informal waste pickers will continue.	Project will support consensus building exercises between private and public sector as well as waste pickers to determine and agree upon the approaches of new waste management interventions which will ensure to safeguard livelihoods, legitimize informal workers, improve their working conditions and result in financial gains. And gender sensitive measures will be undertaken to ensure creating adequate conditions to generate their interest and facilitate their participation. Project will raise awareness of the communities where the collection-separation pilot will be implemented, to engage the population in source separation and setting separated wastes on the designated days for collection.

Social and environmental safeguards

59. Environmental and social grievances will be reported to the GEF in the annual PIR. These are presented in Annex 12

V. TABLE 4 PROJECT RESULTS FRAMEWORK

<p><b>Intended Outcome as stated in the UNDAF/Country Programme Results and Resources Framework:</b>  <b>The population in conditions of poverty and vulnerability to food insecurity in the prioritized regions and municipalities has increased their production and productivity, access to decent work, income and responsible consumption, taking into account climate change and eco-system conservation and sustainable management (SDGs 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 17).</b></p>					
<p><b>Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline:</b>  <b>Number of municipalities incorporating actions to reduce disaster risk and adaptation to climate change in their municipal investment plans.</b></p> <p><b>Extent to which the enabling environment, disaggregated in legal, policy and institutional framework, are in place for conservation, sustainable use, access and benefit sharing of natural resources, biodiversity and ecosystems.</b></p>					
<p><b>Applicable Outputs from the 2014 – 2017 UNDP Strategic Plan:</b>  <b>Output 1.3:</b> Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.</p>					
<p><b>Applicable Output Indicators from the UNDP Strategic Plan Integrated Results and Resources Framework:</b>  Output 1.3 Indicator 1.3.1 Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or sub-national level.</p>					
	<b>Indicator</b>	<b>Baseline</b>	<b>Mid term target</b>	<b>End of Project Target</b>	<b>Assumptions</b>
<p><b>Project Objective</b>  To minimize global impacts and risk to environment and to human health in Honduras, enhancing Environmentally Sound Management of POPs (both, original and new), by implementing PPPs, enforcing regulations and introducing institutional models to control new-POPs pesticides; e-waste (PBDEs) and PCBs disposal, unsound solid waste management and unsound management of Health Care Waste (HCW)</p>	g-TEQ/a of dioxins and furans releases reduced.	At the updated POPs NIP inventory (2015), PCDD/F releases (combined to air and soil, base year 2010) were estimated as 175.26 g-TEQ/yr	10 g-TEQ/a of dioxins and furans releases reduced.	25 g-TEQ/a of dioxins and furans releases reduced.	<ul style="list-style-type: none"> <li>- Firm commitments through stakeholder's consultations and co-financing commitments</li> <li>- Government support for regulations introduction, modification and implementation exists.</li> <li>- Coordination based on trust exists between government and private sector</li> </ul>
	Metric Ton of POPs eliminated	At the updated POPs NIP inventory (2015), totals of 12 Mt of PBDE (in polyurethane foam in public buses), 108 Mt of PCBs and 30 Mt of pesticides are reported	5 Mt of PBDE-containing products, 10 Mt of POPs pesticides and 20 Mt of PCB stocks eliminated.	12 Mt of PBDE-containing products, 30 Mt of POPs pesticides and 60 Mt of PCB stocks eliminated, for a total of 102 Mt of POPs eliminated	
	Number of Community-level management models of domestic waste to minimize backyard open burning and to promote environmentally sound disposal wastes implemented	There are no reported existing management models of this kind	2 communities implemented	5 communities implemented	

Component 1: Develop institutional capacities and strengthen the regulatory and policy framework to address emerging POPs issues.					
Outcome A) Key public and private institutions and entities to implement and enforce the regulatory and policy framework for the Sound Management of Chemicals and Wastes, including newly listed POPs trained	<p><b>Expected Outputs:</b></p> <p>Output A1) Institutional, financial and capacity building plans developed and implemented for government and private entities to enable them to address issues related to newly listed POPs and PPPs for their management and disposal established.</p> <p>Output A2) Capacity of Chemicals National Management Committee (NMC) on SMC enhanced and emerging POPs issues taken up in the national agenda</p>				
	Number of plans developed and implemented to address issues related to newly listed POPs and PPPs.	At the updated POPs NIP (2015) three plans were determined to be needed: of interinstitutional coordination, of incorporation of private sector and of planning for industrial POPs management	Three plans developed and one plan implemented.	Three plans implemented	<ul style="list-style-type: none"> <li>- Amended regulations and integration with an overall SCM framework will facilitate better coordination between authorities for management of pesticides and other POPs</li> <li>- Legal gap analysis will encourage action plan to be developed to support coordination and enforcement efforts of various authorities</li> </ul>
Outcome B) Regulations for ESM of chemicals developed and updated as required and infrastructure for their fulfillment strengthened	<p><b>Expected Outputs:</b></p> <p>Output B1) Analytical capacity of CESSCO to monitor SMC/POPs regulations strengthened</p> <p>Output B2) Regulations on ESM of chemicals and products containing chemicals (PCBs, PBDEs in vehicles, POPs contaminated sites/soils, Extended Producer Responsibility, etc.) updated and implemented</p> <p>Output B3) PRTR developed and implemented.</p> <p>Output B4) Standards on allowable emissions from waste co-processing in cement kilns developed</p>				
	Number of Regulations and Standards on ESM of chemicals and products containing chemicals develop or updated and implemented.	Three regulations are considered in NIP (2015) important for this project: Sound Management of Chemicals (enforcement) approved but not implemented; Transport regulation (for foams management) and PRTR, approved but not implemented; Standard is on allowable emissions from waste co-processing; no standard exists.	Three regulations proposals developed, one regulation implemented and One standard drafted.	Three regulations implemented. One standard approved	<ul style="list-style-type: none"> <li>- Negotiation process for regulations approval is in place</li> </ul>



	One laboratory for handling, analysis and monitoring the newly-listed POPs for enforcement, by provision of staff training, technical manuals and laboratory equipment in place and operating	No capacities available for this activity in government	Staff trained and equipment in place	Laboratory fully operational	
<b>Component 2: Management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs</b>					
<u>Outcome C) Technical Knowledge on POPs for support of their management developed.</u>	<b>Expected Outputs:</b> Output C1) In depth inventory of "old" and "new" POPs completed, building upon the NIP update Output C2) Technical guidelines for "new" POPs (Pesticides, PFOS and PBDEs) developed				
	Document of inventory of "old" and "new" POPs validated by SERNA.	One preliminary inventory at the updated POPs NIP (2015) was estimated for new POPs, but more precision is needed for proper management	One inventory	One inventory.	- Laboratory for new POPs analysis is fully operational
	Technical guidelines for POPs management adapted and implemented: pesticides, PFOS and PBDEs	No specific technical information of this type is available for ESM of POPs.	One guideline	Three guidelines	
<u>Outcome D) POPs containing materials stockpile eliminated by innovative approaches</u>	<b>Expected Outputs:</b> Output D1) Pilot project for sound disposal of vehicle foams (PBDEs containing) using LCA approach agreements with importers/retailers implemented Output D2) Pilot Project for POPs pesticides management and stockpile elimination at a certified facility Output D3) Pilot project on PPP for ESM of PCB decontamination and disposal with nationally based handling and disposal entities				
	Mt of PBDE-containing products, Mt of POPs pesticides and Mt of PCB stocks eliminated through Pilot projects	Partial elimination of POPs was achieved in previous projects ("Strengthening National Management Capacities and Reducing Releases of POPs in Honduras"), however still 100 Mt of PCBs, 60 Mt of pesticides and 24 Mt of automotive foam (with PBDEs) still remain, based on NIP.	5 Mt of PBDE-containing products, 10 Mt of POPs pesticides and 20 mt of PCB stocks eliminated	12 Mt of PBDE-containing products, 30 Mt of POPs pesticides and 60 mt of PCB stocks eliminated	- Transport regulation implemented; - Pilot project established with cement companies - Emissions standard developed to test
<b>Component 3: Reduction of UPOPs releases from priority sources</b>					
	<b>Expected Outputs:</b>				

<p><u>Outcome E) Reduction of UPOPs emissions and elimination of POPs in collaborative schemes</u></p>	<p>Output E1) Pilot project on ESM hazardous waste co-processing in a cement kiln implemented by officializing partnerships between waste producers/holders and cement kilns.  Output E2) Pilot project of BAT/BEP treatment of healthcare waste implemented  Output E3) Management model and BAT/BEP approaches for municipal waste management in 5 communities implemented  Output E4) Technical guidelines for: co-processing of waste in cement kilns, of BAT/BEP for Healthcare waste treatment; and BAT/BEP for Municipal Waste management adapted and tested</p>				
	<p>Mt of hazardous waste destroyed in cement kilns in Pilot project</p>	<p>Presently all hazardous POPs waste has to be exported for destruction.</p>	<p>24 Mt of hazardous waste destroyed in cement kilns in Pilot project</p>	<p>60 Mt of hazardous waste destroyed in cement kilns in Pilot project</p>	<ul style="list-style-type: none"> <li>- Agreements to establish PPP reached;</li> <li>- Agreements of coordination with communities in municipalities reached;</li> </ul>
	<p>Mt of health care waste eliminated in Pilot project</p>	<p>At present, health care in large hospitals is performed in low technology incinerators and smaller hospitals just dispose of those by dumping their waste with MSW</p>	<p>15 Mt of health care waste eliminated in Pilot project</p>	<p>30 Mt of health care waste eliminated in Pilot project</p>	
	<p>Mt ESM of Municipal Solid Waste management in Pilot project</p>	<p>At the updated POPs NIP (2015) weaknesses in communities MSW management were detected, particularly in rural communities as source of UPOPs emissions</p>	<p>2,000 Mt ESM of Municipal Solid Waste management in Pilot project</p>	<p>5,000 Mt ESM of Municipal Solid Waste management in Pilot project</p>	
	<p>Number of technical guidelines: waste coprocessing in cement kilns, BAT/BEP hospitals waste and BAT/BEP for Municipal Solid Waste management adapted and tested</p>	<p>UNEP technical guidelines exist, but not adapted for local implementation.</p>	<p>One national guideline adapted and tested</p>	<p>Three national guidelines adapted and tested</p>	
<p><b>Component 4: Awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation.</b></p>					
<p><u>Outcome F) Education and awareness on risks of "new" and "old" POPs, and ways in which to minimize their releases raised in private entities.</u></p>	<p><b>Expected Outputs:</b>  Output F1) SMC aspects incorporated into school curricula and Teachers trained on it  Output F2) Strategy for incorporation of SMC in College/University programmes implemented  Output F3) Awareness raised on: risks related to new POPs and municipal waste management at community level; and for the development of PPPs for hazardous waste management and disposal</p>				

<u>students and communities as well as the larger public implemented</u>	Number of teachers trained on ESM of Chemicals	Ministry of Education has undertaken a program to train 400 teachers, with XX already trained.	200 teachers trained	500 teachers trained	
	Strategy for insertion of SMC in school curricula in place	No strategy exists presently in the country	Strategy developed	Strategy tested	
	Number of people made aware of risks related to new POPs and municipal waste management at community level; and for the development of PPPs for hazardous waste management and disposal		2000	5000	
<u>Outcome G) Project results monitored and sustained, adaptive feedback and evaluation undertaken and results replicated</u>	Expected Outputs: Output G1) M&E and adaptive management applied in response to needs Output G2) Results, lessons-learned and best practices captured in knowledge management products and disseminated at national and international level				
	Evaluation results M&E and adaptive management applied in response to needs	None	Mid term evaluation	Terminal evaluation	-

## VI. MONITORING AND EVALUATION (M&E) PLAN

60. The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. Supported by Component/Outcome Four: Knowledge Management and M&E, the project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.
61. Project-level monitoring and evaluation will be undertaken in compliance with standard UNDP requirements as outlined in the [UNDP POPP and UNDP Evaluation Policy](#). Though these UNDP requirements are not detailed in this section of the project document, the UNDP Country Office will ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. The additional and mandatory GEF-specific M&E requirements as outlined in this section will be undertaken in accordance with the [GEF M&E policy](#) and GEF guidance materials (link to be added)<sup>4</sup>. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management, and the exact role of project target groups and other stakeholders in project M&E activities, will be finalized during the Inception Workshop and will be detailed in the Inception Report.

### Oversight and monitoring responsibilities:

62. The primary responsibility for day-to-day project implementation and regular monitoring rests with the Project Manager. The Project Manager will develop annual work plans based on the multi-year work plan included in the annexes, including annual targets at the output level to ensure the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for reporting (i.e. GEF PIR), and reporting to the Project Board at least once a year on project progress. The Project Manager will inform the Project Board and the UNDP Country Office of any delays or difficulties as they arise during implementation, including the implementation of the M&E plan, so that the appropriate support and corrective measures can be adopted. The Project Manager will also ensure that all project staff maintain a high level of transparency, responsibility and accountability in monitoring and reporting project results.
63. The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; and, updating the UNDP gender marker on an annual basis based on progress reported in the GEF PIR and UNDP ROAR reporting. Any quality concerns flagged by the process must be addressed by project management. Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Unit as needed. The project target groups and stakeholders including the GEF Operational Focal Point will be involved as much as possible in project-level M&E.
64. Audit Clause: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.

### Additional GEF monitoring and reporting requirements:

65. Inception Workshop and Report: A project inception workshop will be held after the project document has been signed by all relevant parties to: a) re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation; b) discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms; c) review the results framework and discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E plan; d) review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; e) plan and schedule Project Board meetings and finalize the first year annual work plan. The Project Manager will prepare the inception report no later than one month after the inception workshop. The final inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.
66. GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually well in advance of the PIR submission deadline and are reported on

accordingly in the PIR. The PIR that is submitted to the GEF each year must also be submitted in English and shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR. The project's terminal PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

67. GEF Focal Area Tracking Tools: In line with its objective and the corresponding GEF Focal Areas/ Programs, this project will prepare the following GEF Tracking Tool(s): Capacity building, U-POPs, PCBs, pesticides and new POPs, as agreed with the UNDP-GEF RTA. The baseline/CEO Endorsement GEF Focal Area Tracking Tool(s) – submitted in Annex 13 to this project document – will be updated by the Project Manager/Team and shared with the mid-term review consultants and terminal evaluation consultants before the required review/evaluation missions take place. The updated GEF Tracking Tool(s) will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.
68. Mid-term Review (MTR): An independent mid-term review process will begin after the second PIR has been submitted to the GEF, and the final MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the final MTR report will follow the standard templates and guidance available on the UNDP Evaluation Resource Center (ERC). Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.
69. Terminal Evaluation (TE): An independent terminal evaluation (TE) will take place before operational closure of the project. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance available on the UNDP Evaluation Resource Center. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.
70. The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP Independent Evaluation Office will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF Independent Evaluation Office along with the project terminal evaluation report.
71. The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office and/or the GEF Independent Evaluation Office.

TABLE 5. MANDATORY GEF M&E REQUIREMENTS AND M&E BUDGET:

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>5</sup> (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	USD 5,000	USD 20,000	Within two months of project document signature
Inception Report	Project Manager	None	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager	Per year: USD 4,000 (USD 20,000)	USD 24,000	Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually

<sup>5</sup> Excluding project team staff time and UNDP staff time and travel expenses.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget <sup>5</sup> (US\$)		Time frame
		GEF grant	Co-financing	
NIM Audit as per UNDP audit policies	UNDP Country Office	Per year: USD 2,000 (USD10,000)	USD 12,000	Annually or other frequency as per UNDP Audit policies
Lessons learned and knowledge generation	Project Manager	None	None	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager UNDP CO	None	None	On-going
Addressing environmental and social grievances	Project Manager UNDP Country Office BPPS as needed	None for time of project manager, and UNDP CO	None	
Project Board meetings and annual planning workshops	Project Board UNDP Country Office Project Manager	Per year: USD 2,000 (USD 10,000)	USD 12,000	At minimum annually
Supervision missions	UNDP Country Office	None <sup>6</sup>	USD 10,000	Annually
Oversight missions	UNDP-GEF team	None <sup>6</sup>	USD 10,000	Troubleshooting as needed
Knowledge management as outlined in Outcome 4	Project Manager	Per year: USD 5,000 (USD 25,000)	USD 50,000	On-going
GEF Secretariat learning missions/site visits	UNDP Country Office and Project Manager and UNDP-GEF team	None		To be determined.
Mid-term GEF Tracking Tool to be updated by independent international consultant	Project Manager	USD 2,000	USD 12,000	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 20,000	USD 40,000	Between 2 <sup>nd</sup> and 3 <sup>rd</sup> PIR.
Terminal GEF Tracking Tool to be updated by independent international consultant	Project Manager	USD 2,000	USD 12,000	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 30,000	USD 60,000	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	USD 5,000	USD 20,000	
TOTAL indicative COST Excluding project team staff time, and UNDP staff and travel expenses		USD 129,000	USD 238,000	

## VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

72. Roles and responsibilities of the project's governance mechanism: The project will be implemented following UNDP's national implementation modality, according to the Standard Basic Assistance Agreement between UNDP and the Government of Honduras, and the Country Program Action Plan (CPAP). The **Implementing Partner** for this project is *MiAmbiente (former SERNA)* The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of UNDP resources.

73. The project organization structure is as follows:

<sup>6</sup> The costs of UNDP Country Office and UNDP-GEF Unit's participation and time are charged to the GEF Agency Fee.

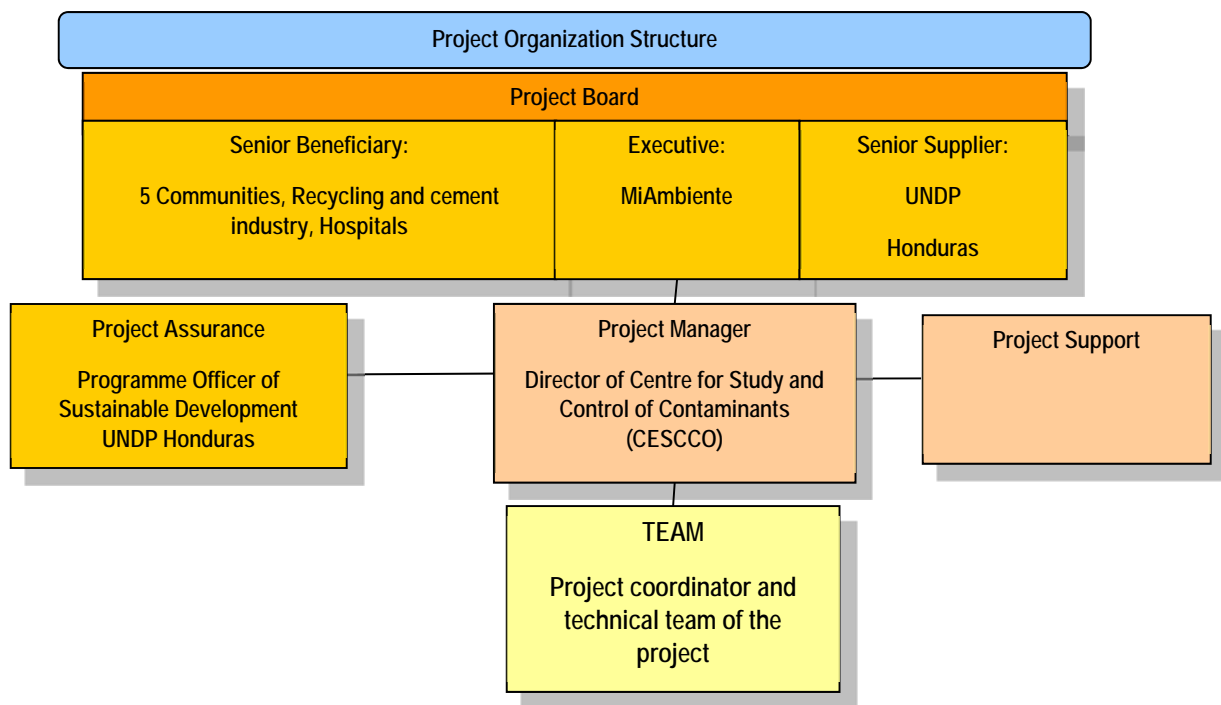


Figure 4. Project Organization Structure

74. The Project Board (also called Project Steering Committee) is responsible for making by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Board are contained in Annex 8. The Project Board is comprised of the following individuals:

1. Minister of MiAmbiente.
2. Director of CESCCO-MiAmbiente.
3. Honduras' Municipal Association (AMHON).
4. Recyclers Association representative.
5. Ministry of Health

75. The Project Manager will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

76. The project assurance roll will be provided by UNDP Deputy Resident Representative or the Program Specialist.

77. Governance role for project target groups:

Target groups are represented by stakeholders listed in the Project Board. Society as a whole will be engaged through decisions by the Ministries.

78. UNDP Direct Project Services as requested by Government: The UNDP, as International Agency for this project, will provide management services for the project as defined by the GEF Council (Annex 11). The Government of Honduras will request to the UNDP direct services for specific projects, according to its policies and convenience. These services (and their costs) are specified in the Agreement (Annex 11). As is determined by the GEF Council requirements, the services costs will be assigned

as Project Management Cost, identified in the project budget. The UNDP and Government of Honduras acknowledge and agree that those services are not mandatory, and only they will be provided following the UNDP policies on the recovery of direct costs.

79. Agreement on intellectual property rights and use of logo on the project's deliverables: In order to accord proper acknowledgement to the GEF for providing funding, the GEF logo will appear together with the UNDP logo on all promotional materials, other written materials like publications developed by the project, and project hardware. Any citation on publications regarding projects funded by the GEF will also accord proper acknowledgement to the GEF.
80. The project aims to be installed in the Chemicals and Hazardous waste Project Management Office, which was installed under the project 4229 and currently runs the Mercury 5229 project and the MIA NAP Project all funded by the GEF and under the address of the Center for Studies and Pollution Control (CESCCO-MiAmbiente). This allows coordination with the National Management Committee (CNG), also with the institution members that are part of Project Board to ensure sustainability. The Chemicals and Hazardous waste Project Management Office operates in CESCCO building, it shares offices with the Department of Chemicals Management of MiAmbiente.

## VIII. FINANCIAL PLANNING AND MANAGEMENT

81. The total cost of the project is USD 3,460,000. This is financed through a GEF grant of USD 3,460,000 and USD 26,600,325 in parallel co-financing. UNDP, as the GEF Implementing Agency, is responsible for the execution of the GEF resources and the cash co-financing transferred to UNDP bank account only.
82. Parallel co-financing: The planned parallel co-financing will be used as follows in Table 6:

Co-financing source	Co-financing type	Co-financing amount US\$	Planned Activities/Outputs	Risks	Risk Mitigation Measures
Argos Honduras SA de CV	In cash & In kind	2,080,120 9,902,929	Infrastructure and operation in coprocessing Pilot project	Change in company decision to implement project	Agreement will be signed from beginning
Cementos del Norte S.A. (CENOSA)	In kind	3,360,000 1,828,304	Infrastructure and operation in coprocessing Pilot project	Change in company decision to implement project	Agreement will be signed from beginning
MiAmbiente	In cash & in-kind	200,000 355,291	Operation of all Project, Offices, vehicles, executive personnel time	Changes in national policies	Institutionalize project
MiAmbiente (CESCCO)	In cash & in kind	250,000 1,250,000	Development of institutional capacities and enforcement. Policy and regulatory framework	Changes in national policy	Institutionalize project
Mancomunidad de Colosuca	In cash & in kind	2,986,000 20,000	Operation in community's activities, infrastructure improvement in waste dump	Changes in municipal policies	Institutionalize project
Secretaria de Educación (DECOAS)	In cash & In kind	494,671 690,594	Personnel and infrastructure in education programmes implementation	Changes in national education priorities	Institutionalize project
Recycle s. de R.L. de C.V	In cash & in kind	297,300 970,800	Infrastructure and operation in pilot Project on PCB management and disposal	Change in company decision to participate in pilot project	Agreement will be signed from the beginning
Municipalidad de Potrerillos	In kind	498,777	Operation in community's activities, improvement in Solid Waste Management	Changes in municipal policies	Institutionalize project



Alcaldia Municipal de Marcovia	In kind	816,000	Operation in community's activities, improvement in Solid Waste Management	Changes in municipal policies	Institutionalize project
Alcaldia Municipal de Comayagua	In kind	599,539	Operation in community's activities, improvement in Solid Waste Management	Changes in municipal policies	Institutionalize project
<b>Total</b>		<b>26,600,325</b>			

The actual realization of project co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF.

83. Budget Revision and Tolerance: As per the UNDP requirements outlined in the UNDP POPP, the project board can agree on a budget tolerance level for each plan under the overall annual work plan allowing the project manager to expend up to the tolerance level beyond the approved project budget amount for the year without requiring a revision from the project board. Should the following deviations occur, the Project Manager and UNDP Country Office will seek the approval of the UNDP-GEF team as these are considered major amendments by the GEF: a) budget re-allocations among components in the project with amounts involving 10% of the total project grant or more; b) introduction of new budget items/or components that exceed 5% of original GEF allocation.
84. Project Closure: Project closure will be conducted as per the UNDP requirements outlined in the UNDP POPP (see <https://info.undp.org/global/popp/ppm/Pages/Closing-a-Project.aspx>). On an exception basis only, a no-cost extension beyond the initial duration of the project will be sought from in-country UNDP colleagues and then the UNDP-GEF Executive Coordinator.
85. Operational completion: The project will be operationally completed when the last UNDP-financed inputs have been provided and the related activities have been completed including the final clearance of the Terminal Evaluation Report that must be available in English, and after the final project board meeting. The Implementing Partner through a Project Board decision, will notify the UNDP Country Office when the operational closure has been completed. The relevant parties will then agree on the disposal of any equipment that is still the property of UNDP.
86. Financial completion: The project will be financially closed when the following conditions have been met: a) the project is operationally completed or has been cancelled; b) the implementing partner has reported all financial transactions to UNDP; c) UNDP has closed the accounts for the project; d) UNDP and the implementing partner have certified a final Combined Delivery Report (which serves as final budget revision).
87. The project will be financially completed within 12 months of operational closure or after the date of cancellation. Between operational and financial closure, the implementing partner will identify and settle all financial obligations and prepare a final expenditure report. The UNDP Country Office will send the final signed closure documents including confirmation of final cumulative expenditure and unspent balance to the UNDP-GEF Unit for confirmation before the project will be financially closed in Atlas by the Country Office.
88. Refund to Donor: should a refund of unspent funds to the GEF be necessary, this will be managed directly by the UNDP-GEF Unit in New York.

## IX. SUSTAINABILITY OF RESULTS

89. The project components will become integral parts of an effective sound chemicals management strategy with institutional and financial long-term sustainability. Component 1 covers activities that will result in an effective regulatory and legal framework, an efficient infrastructure and strengthened capacity for sound chemicals management of new POPs, PBDEs and pesticides. Updating of regulations, including a standard proposal for coprocessing of POPs waste in cement kilns will bring effective enforcement and alignment with the Stockholm Convention (Output B4). This will allow permanent enforcement by the Environmental Protection authority (CESCCO) on POPs sound management with the regulations' amendments prepared.
90. Component 2 covers activities that will result in the management and disposal in an environmentally sound manner of POPs pesticides, PCBs and newly listed POP. The completion of national POPs inventory, including new ones, will be the basis for all future projections. The pilot projects for PBDEs in automotive foams, for pesticides and for PCBs in cement kilns, with the

introduction of international technology will become a solid basis for the destruction of the rest of POPs waste in the country at a sustained economic costs. This will strengthen permanent structure and capacity to ensure infrastructure and technological sustainability, to reduce POPs sensitive releases and ensure efficient and environmentally sound chemical management. Significant co-financing committed to this component and the other pilots will also contribute to successful technology demonstration and the long term sustainability of technological improvements, yielding significant reduction in POPs emissions at processing facilities.

91. Components 3 with its PPP for ESM of Chemical waste is a core part of sustainability of Project, since the Partnership will be established and tested for PCBs destruction in cement kiln, introducing “market forces” in waste management. In the development and testing of the demonstration of BAT/BEP in 2 aspects will sustain a permanent way to manage HCW and MSW even more the already on going perception on the subjects. Also, they will reinforce the feasibility of the demonstrated processes as an economically viable alternative for POPs destruction.
92. Component 4 focus principally on awareness raising and education, which will also become a permanent way assure in the long term the sustainability of all project’s activities and results.
93. As for *replicability*, all of project’s activities, with introduction of international experience, lessons learned and BAT/BEP technology at selected POPs will be appropriately replicable in the country in the future. Replication can be first expanded to the rest of POPs remaining waste and subsequently to other hazardous waste. The replication programme will ensure long-term sustainability of the project achievements

## X.LEGAL CONTEXT

94. This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Honduras and UNDP, signed on January 17<sup>th</sup>, 1995. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”
95. This project will be implemented by the agency (name of agency) (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

## II. RISK MANAGEMENT STANDARD CLAUSES

96. Consistent with the Article III of the SBAA [or the Supplemental Provisions], the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
  - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
  - b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
97. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document [and the Project Cooperation Agreement between UNDP and the Implementing Partner]1.
98. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml). This provision must be included in all sub-contracts or sub-agreements entered into under/further to this Project Document.

99. Consistent with UNDP's Programme and Operations Policies and Procedures, social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
100. The Implementing Partner shall: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
101. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
102. Any designations on maps or other references employed in this project document do not imply the expression of any opinion whatsoever on the part of UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

XI. TOTAL BUDGET AND WORK PLAN

Total Budget and Work Plan			
Atlas <sup>7</sup> Proposal or Award ID:	00058184	Atlas Primary Output Project ID:	00072164
Atlas Proposal or Award Title:	Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal		
Atlas Business Unit	HND10		
Atlas Primary Output Project Title	REDUCING RELEASES OF POPS IN HONDURAS		
UNDP-GEF PIMS No.	5615		
Implementing Partner	MiAmbiente (former SERNA)		

GEF Component/Atlas Activity				Atlas Code	Atlas Budget Description	Amount 2017	Amount 2018	Amount 2019	Amount 2020	Amount 2021	Total	Budget Note
	Responsible Party	Fund	Donor									
Component 1: Develop institutional capacities and strengthen the regulatory and policy framework to address emerging POPs issues	Miambiente	62000	GEF	71200	International consultants		10,000	10,000			20,000	A
	Miambiente	62000	GEF	71300	Local consultants	40,000	70,000	50,000	30,000	20,000	210,000	B
	Miambiente	62000	GEF	72100	Contractual Services - companies		100,000				100,000	C
	Miambiente	62000	GEF	72200	Equipment and Furniture	200,000	200,000				400,000	D
	Miambiente	62000	GEF	75700	Training, workshop, and conferences	20,000	10,000	10,000	10,000	15,000	65,000	E
	Miambiente	62000	GEF	75705	Conference organizing services	1,000		1,000		1,000	3,000	F
	Miambiente	62000	GEF	Subtotal		261,000	390,000	71,000	40,000	36,000	798,000	
	Miambiente	62000	GEF	71200	International consultants		15,000	15,000			30,000	G

<sup>7</sup> See separate guidance on how to enter the TBWP into Atlas

Component 2: Management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs	Miambiente	62000	GEF	71600	Travel	15,000	15,000	10,000	10,000	10,000	60,000	H
	Miambiente	62000	GEF	72100	Contractual Services - companies	100,000	150,000	250,000	150,000	84,000	734,000	I
	Miambiente	62000	GEF	75700	Training, workshop, and conferences		5,000	5,000	5,000	5,000	20,000	J
	Miambiente	62000	GEF	Subtotal		115,000	185,000	280,000	165,000	99,000	844,000	
Component 3: Reduction of UPOPs releases from priority sources	Miambiente	62000	GEF	71200	International consultants	20,000	40,000	50,000	30,000	10,000	150,000	K
	Miambiente	62000	GEF	71300	Local consultants	10,000	20,000	10,000	10,000	10,000	60,000	L
	Miambiente	62000	GEF	71600	Travel	15,000	15,000	15,000	15,000		60,000	M
	Miambiente	62000	GEF	72100	Contractual Services - companies		200,000	350,000	150,000	70,000	770,000	N
	Miambiente	62000	GEF	72200	Equipment and Furniture	50,000	100,000	50,000			200,000	O
	Miambiente	62000	GEF	75700	Training, workshop, and conferences	10,000	10,000	10,446	10,000	10,000	50,446	P
	Miambiente	62000	GEF	Subtotal		105,000	385,000	485,446	215,000	100,000	1,290,446	
Component 4: Awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation	Miambiente	62000	GEF	71200	International consultants			20,000		30,000	50,000	Q
	Miambiente	62000	GEF	71300	Local consultants	10,000	20,000	15,000	10,000	20,000	75,000	R
	Miambiente	62000	GEF	72100	Contractual Services - companies		20,000	10,000	5,000	5,000	40,000	S
	Miambiente	62000	GEF	74199	Translation Costs			10,000		20,000	30,000	T
	Miambiente	62000	GEF	74200	Audio Visual & Print Prod Costs				10,000	10,000	20,000	U
	Miambiente	62000	GEF	75700	Training, workshop, and conferences	30,000	10,000	20,000	10,000	40,000	110,000	V
	Miambiente	62000	GEF	64398/74598	Direct Project Cost	8,200	8,200	8,200	8,200	8,172	40,972	AE
	Miambiente	62000	GEF	Subtotal		48,200	58,200	83,200	43,200	133,172	365,972	
Project Management	Miambiente	62000	GEF	71400	Contractual Services - individuals	20,000	20,000	20,000	20,000	20,000	100,000	W
	Miambiente	62000	GEF	72200	Equipment and Furniture	4,000					4,000	X
	Miambiente	62000	GEF	72400	Communication & Audio Visual Equipment	1,000					1,000	Y
	Miambiente	62000	GEF	72500	Supplies	600	600	600	600	600	3,000	Z
	Miambiente	62000	GEF	72800	Information Technology Equipment	5,000					5,000	AA
	Miambiente	62000	GEF	74200	Audio Visual & Print Prod Costs	2,000	2,000	2,000	2,000	2,000	10,000	AB
	Miambiente	62000	GEF	74500	Miscellaneous	800	800	800	800	800	4,000	AC
	Miambiente	62000	GEF	75705	Conference organizing services	2,000		1,000		2,028	5,028	AD

				Subtotal		35,400	33,400	34,400	33,400	24,982	161,582	
				GRAND TOTAL		564,600	1,051,600	954,046	496,600	393,154	3,460,000	

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
Component 1	261,000	390,000	71,000	40,000	36,000	798,000
Component 2	115,000	185,000	280,000	165,000	99,000	844,000
Component 3	105,000	385,000	485,446	215,000	100,000	1,290,446
Component 4	48,200	58,200	83,200	43,200	133,172	365,972
Project Management	35,400	33,400	34,400	33,400	24,982	161,582
<b>TOTAL</b>	564,600	1,051,600	954,046	496,600	393,154	3,460,000

Summary of Funds

	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Amount Year 5	Total
GEF	564,600	1,051,600	954,046	496,600	393,154	3,460,000
Co-finance	2,128,026	5,320,065	6,650,081	7,980,098	4,522,055	26,600,325
<b>TOTAL</b>	<b>\$2,712,626</b>	<b>\$6,361,665</b>	<b>\$7,603,681</b>	<b>\$8,466,698</b>	<b>\$4,915,655</b>	<b>\$30,060,325</b>

Table 8. Budget notes:

Budget Notes:		
No.	Budget Line	Component 1: Develop institutional capacities and strengthen the regulatory and policy framework to address emerging POPs issues
A	71200	International consultants engaged to support (A1) development of Plan of inter-institutional coordination (\$10,000) and (B4) on Standards on allowable emissions from waste co-processing in cement kilns (\$10,000) in total of 40 workdays at \$500/day
B	71300	Local consultants to develop: (A1) Plan of inter-institutional coordination with regards to POPs (\$30,000); (A2) draft agreements to formalize the partnerships and facilitate the establishment of mechanisms to increase coordination (\$80,000); (B2) legal review and gap analysis and prepare regulatory amendments, including economic instruments applicable to sound chemicals management (\$30,000); (B3) PRTR regulation updated to incorporate the new POPs (\$20,000) and (B4) Standard draft for continuous or isokinetic measurements, where emissions limits will be established (\$50,000)
C	72100	Contractual services to: (B4) support development of technical capacity in (CESCCO-SERNA) for handling, analysis and monitoring of newly-listed POPs: Lindane, $\alpha$ -HCH, $\beta$ -HCH, Pentachlorobenzene and PBDEs and use of Mirex (\$100,000);
D	72200	Auxiliary equipment to: (B4) support development of technical capacity in (CESCCO-SERNA) for handling, analysis and monitoring of newly-listed POPs: Lindane, $\alpha$ -HCH, $\beta$ -HCH, Pentachlorobenzene and PBDEs and use of Mirex by complementing laboratory equipment of CESCCO to also support the inventory development (\$400,000)
E	75700	Training workshops to: (A1) interinstitutional commission (\$10,000); (A2) national Management Commission (\$10,000); (B4) in protocols development for laboratory personnel (\$45,000)
F	75705	(A2) Conference organization with NMG and inter-institutional commission (\$3,000)
		<b>Component 2: Management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs</b>
G	71200	International consultants engaged to support (C2) manuals design (\$5,000); (D1) pilot design for PBDEs (\$10,000); (D2) pilot design for ESM (\$10,000); (D3) pilot design for PPP on ESM (\$5,000)
H	71600	Travel costs for: (D1) pilot for PBDEs (\$20,000); (D2) pilot for ESM (\$20,000); (D3) pilot for PPP on ESM (\$20,000)
I	72100	Contractual services to: (C1) inventory complementation development (\$200,000) and for (D3) pilot for PPP on ESM (\$534,000)
J	75700	Training workshops to (C2) implement guidelines (\$20,000)
		<b>Component 3: Reduction of UPOPs releases from priority sources</b>
K	71200	International consultants engaged to implement: (E1) pilot on PPP-ESM and (E2) pilot on BAT-BEP for healthcare waste treatment (\$150,000).
L	71300	Local consultants to design and supervise: (E1) pilot on ESM (\$10,000); (E2) pilot on healthcare waste management (\$10,000); (E3) activities for MSW management (\$10,000); and (E4) guidelines for coprocessing in cement kilns, PPP-ESM (\$30,000)
M	71600	Travel costs for: (E1) pilot on ESM (\$20,000); (E2) pilot on healthcare waste management (\$20,000) and (E3) activities for MSW management (\$20,000)
N	72100	Contractual services to: (E1) develop and implement pilot on ESM; (E2) develop and implement pilot on healthcare waste management and (E3) develop and implement activities for MSW management (\$770,000)
O	72200	Auxiliary equipment to: (E1) develop and implement pilot on ESM (\$50,000); (E2) develop and implement pilot on healthcare waste management (\$150,000)
P	75700	Training workshops to: (E2) pilot on healthcare waste management (\$20,000); (E3) activities for MSW management (\$30,000) and (E4) guidelines for coprocessing in cement kilns, PPP-ESM (\$30,000)
		<b>Component 4: Awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation</b>
Q	71200	International consultants to undertake (G1) mid-term and final evaluation for a total of 50 workdays at \$1,000/day
R	71300	Local consultants to (F1) develop educational approach for chemicals ESM (\$30,000); (F2) develop prioritization for schools and universities (\$25,000) and (F3) implement awareness and school training (\$20,000) National consultants recruited will be: 300 workdays at \$250/day
S	72100	Contractual services to: (F3) implement awareness and school training (\$40,000)
T	74199	Translation costs for (G1) materials for midterm and final evaluation (15,000) and (G2) materials for results dissemination (15,000)
U	74200	Materials printing for (G2) materials for results dissemination (20,000)

V	75700	Training workshops to: (F1) implement educational approach for chemicals ESM into universities' curricula (\$50,000); (F3) implement awareness and communities training on MSW management (\$20,000) and (G2) results dissemination (\$40,000)
<b>Project Management</b>		
W	71400	All project management personnel: project coordinator (part time), administrative assistant and M&E
X	72200	Standard office equipment and furniture
Y	72400	Communication & Audio Visual Equipment
Z	72500	Supplies for the duration of project period
AA	72800	Information Technology Equipment
AB	74200	Audio Visual & Print Prod Costs
AC	74500	Miscellaneous
AD	75705	Conference organizing services along all project
AE	64398/74598	Direct Project Cost as per signed LOA in Annex 11



## XII. Annexes

Annex 1	Multiyear Plan
Annex 2	Monitoring Plan
Annex 3	Pilot project for sound disposal of vehicle foams (PBDEs containing) using LCA approach
Annex 4	Pilot Project for POPs pesticides management and stockpile elimination at a certified facility
Annex 5	Pilot project on PPP for ESM of PCB decontamination and disposal with nationally based handling and disposal entities
Annex 6	Pilot project on ESM hazardous waste co-processing in cement kilns, in partnerships with waste producers/holders
Annex 7	Pilot project of BAT/BEP treatment of healthcare waste
Annex 8	Social and Environmental Screening
Annex 9	Terms of Reference Project Coordinator and Project Board
Annex 10	Evaluation Plan
Annex 11	Letter of Agreement for Direct Project Services
Annex 12	Letters Co-financing
Annex 13	Responses to STAP, GEF Sec and Council Comments
Annex 14	GEF Tracking Tool for UPOPs emissions Included separately as excel sheet

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## ANNEX 1 Multiyear Work plan

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Component 1: Develop institutional capacities and strengthen the regulatory and policy framework to address emerging POPs issues</b>																					
<b>Outcome A) Key public and private institutions and entities to implement and enforce the regulatory and policy framework for the Sound Management of Chemicals and Wastes, including newly listed POPs</b>																					
<i>Output A1) Institutional, financial and capacity building plans for government and private entities to enable them to address issues related to newly listed POPs and PPPs for their management and disposal</i>																					
Develop Plan for interinstitutional coordination	Project Mgmt Unit (PMU);	X	X	X	X																
Strategic workshops		X		X		X		X				X				X					X
<i>Output A2) Capacity of Chemicals National Management Committee (NMC) on SMC enhanced and emerging POPs issues taken up in the national agenda</i>																					
Promote expansion of membership	PMU;	X	X	X	X	X	X	X	X												
Draft agreements to formalize partnerships	PMU;	X	X	X	X	X	X	X	X												
Facilitate mechanisms to increase coordination	PMU;		X				X				X				X					X	
Permanent awareness workshops	PMU;		X		X		X		X		X		X		X		X		X		X
<b>Outcome B) Regulations for ESM of chemicals developed and updated as required and infrastructure for their fulfillment strengthened</b>																					
<i>Output B1) Analytical capacity of CESSCO to monitor SMC/POPs regulations strengthened</i>																					
Laboratory staff training	PMU;									X	X										
Development and/or update of technical manuals	PMU;					X	X	X	X	X	X										
Provision of laboratory equipment	PMU;					X	X	X	X												
<i>Output B2) Regulations on ESM of chemicals and products containing chemicals (PCBs, PBDEs in vehicles, POPs contaminated sites/soils, Extended Producer Responsibility, etc.) updated and implemented</i>																					
Legal review and gap analysis	PMU;	X	X	X	X																
Prepare regulatory amendments, applicable to sound chemicals management	PMU;					X	X	X	X												
Conduct training workshops on inspection	PMU;							X		X		X		X							
Support detailed inventories and	PMU;					X	X	X	X												

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
assessments to quantify existence of newly-listed POPs																					
<i>Output B3) Pollutant Release and Transfer Register (PRTR) developed and implemented</i>																					
Legal review and gap analysis	PMU;					X	X														
Prepare regulatory amendments	PMU;							X	X												
Conduct training on inspection for new POPs	PMU;									X		X									
<i>Output B4) Standards on allowable emissions from waste co-processing in cement kilns developed</i>																					
Develop Standard draft	PMU;					X	X	X	X												
Participation in monitoring of coprocessing pilot	PMU;									X	X	X	X								
Sub-total Component 1																					
<b>Component 2: Management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs</b>																					
<b>Outcome C) Technical Knowledge on POPs for support of their management developed</b>																					
<i>Output C1) In depth inventory of "old" and "new" POPs completed, building upon the NIP update</i>																					
National scale inventory of new and some old POPs	PMU;					X	X	X	X												
<i>Output C2) Management manuals for "new" POPs (Pesticides, PFOS and PBDEs) developed</i>																					
3 technical management guidelines	PMU;													X	X	X	X				
<b>Outcome D) POPs containing materials stockpile eliminated by innovative approaches</b>																					
<i>Output D1) Pilot project for sound disposal of vehicle foams (PBDEs containing) using LCA approach agreements with importers/retailers implemented</i>																					
Pilot (demonstration) project for the management and destruction of foams and upholstery	PMU;					X	X	X	X	X	X										
<i>Output D2) Pilot Project for POPs pesticides management and stockpile elimination at a certified facility</i>																					
Pilot (demonstration) project for management and destruction of pesticides	PMU;							X	X	X	X	X	X								

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Output D3) Pilot project on PPP for ESM of PCB decontamination and disposal with nationally based handling and disposal entities</i>																					
Pilot (demonstration) project establishing a PPP for PCBs destruction	PMU;			X	X	X	X														
Sub-total Component 2																					
<b>Component 3: Reduction of UPOPs releases from priority sources</b>																					
<i>Outcome E) Reduction of UPOPs emissions and elimination of POPs in collaborative schemes</i>																					
<i>Output E1) Pilot project on ESM hazardous waste co-processing in a cement kiln implemented by establishing official partnerships between waste producers/holders, cement companies and government</i>																					
Pilot project on ESM hazardous waste co-processing in a cement kiln	PMU;							X	X	X	X										
Technical manual for environmental monitoring	PMU; other									X	X										
<i>Output E2) Pilot project of BAT/BEP treatment of healthcare waste implemented</i>																					
Pilot project of non-incineration alternatives for HCW	PMU;											X	X	X	X	X	X				
<i>Output E3) BAT/BEP approaches for municipal waste management in 5 communities implemented</i>																					
A Pilot project to develop a community-level management model of domestic waste	PMU;					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Output E4) Technical guidelines for: co-processing of waste in cement kilns, of BAT/BEP for Healthcare waste treatment; and BAT/BEP for Municipal Waste management issued</i>																					
3 technical guidelines co-processing in cement kilns, of BAT/BEP for Healthcare waste treatment; and BAT/BEP for Municipal Waste	PMU;		X	X			X	X	X												X
Sub-total Component 3																					
<b>Component 4: Awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation</b>																					
<i>Outcome F) Education and awareness on risks of “new” and “old” POPs, and ways in which to minimize their releases raised in private entities, students and communities as well as the larger public implemented</i>																					
<i>Output F1) SMC aspects incorporated into school curricula and Teachers trained on it</i>																					

Task	Responsible Party	Year 1				Year 2				Year 3				Year 4				Year 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop national approach to include ESM of chemicals in elementary, middle and higher education teaching programs	PMU;						X	X													
Five hundred (500) teachers trained																		X	X	X	X
<i>Output F2) Strategy for incorporation of SMC in College/University programmes implemented</i>																					
Elaborate a prioritization program of ESM of chemicals	PMU;				X	X	X	X													
Develop a module (formal university level credits course) on the management of chemical products	PMU;								X	X	X	X									
<i>Output F3) Awareness raised on: risks related to new POPs and municipal waste management at community level; and for the development of PPPs for hazardous waste management and disposal</i>																					
Implement Two awareness/training courses on: risks related to new POPs and municipal waste management and for PPPs development for hazardous waste management	PMU							X	X		X		X		X		X		X		X
<i>Outcome G) Project results monitored and sustained, adaptative feedback and evaluation undertaken and results replicated</i>																					
<i>Output G1) M&amp;E and adaptive management applied in response to needs</i>																					
Monitoring and evaluation (M&E) of project results										X										X	
<i>Output G2) Results, lessons-learned and best practices captured in knowledge management products and disseminated at national and international level</i>																					
Lessons learned																				X	X
Sub-total Component 4																					

## ANNEX 2 Monitoring Plan

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions
<p><b>Project objective from the results framework</b></p> <p>To minimize global impacts and risk to environment and to human health in Honduras, enhancing Environmentally Sound Management of POPs (both, original and new), by implementing PPPs, enforcing regulations and introducing institutional models to control new-POPs pesticides; e-waste (PBDEs) and PCBs disposal, unsound solid waste management and unsound management of Health Care Waste (HCW)</p>	g-TEQ/a of dioxins and furans releases reduced.	Grams of Toxic equivalent of dioxins and furans release reduced by controlling MSW management in their unintentional burning	By calculation from Mt of MSW improved management using UNEP toolkit	Annually  Reported in DO tab of the GEF PIR	Project coordinator CESCCO Director	CESCCO reports to Stockholm Convention	- Coordination exists between government and municipalities
	Metric Ton of POPs eliminated	Mt of PBDE-containing automotive foams, Mt of POPs pesticides and Mt of PCB stocks eliminated	Supervision reports of treatment	Annually  Reported in DO tab of the GEF PIR	Project coordinator	POPs Destruction reports to CESCCO from POPs owner/generators.  PRTR reports from owner/generators	- Pilot destruction projects are implemented
	Number of Community-level management models of domestic waste implemented	Domestic waste management models to minimize backyard open burning and to promote environmentally sound disposal wastes implemented	Supervision reports of advances	Annually  Reported in DO tab of the GEF PIR	Project coordinator (with support from national consultants)	Reports of Solid Waste management by 5 Municipalities	- Management model approach implemented
<p><b>Outcome A) Key public and private institutions and entities to implement and enforce the regulatory and policy framework for the Sound Management of Chemicals and Wastes, including newly listed POPs trained</b></p>	Number of plans developed and implemented to address issues related to newly listed POPs and PPPs.	Number of plans developed and implemented to address issues related to newly listed POPs and PPPs.	Interviews with key staff of NMC	Annually  Reported in DO tab of the GEF PIR	Project Coordinator	Interviews reports and official documents issued	NMC agrees on collaborating with project

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions
Outcome B) Regulations for ESM of chemicals developed and updated as required and infrastructure for their fulfillment strengthened	Number of Regulations and Standards on ESM of chemicals and products containing chemicals develop or updated and implemented.	Number of Regulations and Standards on ESM developed	Number of Regulations and Standards on ESM of chemicals and products containing chemicals develop or updated and implemented.	Reports of advance from government	Annually  Reported in DO tab of the GEF PIR	Project Coordinator and CESSCO Director	Reports and official documents issued on regulations and on lab infrastructure fulfilled
Outcome C) <u>Technical Knowledge on POPs for support of their management developed.</u>	Document of inventory of "old" and "new" POPs validated by SERNA.	Document of inventory of "old" and "new" POPs validated by SERNA.	Document of inventory of "old" and "new" POPs validated by SERNA	Reports of advance from government	Annually  Reported in DO tab of the GEF PIR	Project Coordinator and CESSCO Director	Official document publication in government report to Stockholm Convention
	Technical guidelines for POPs management adapted and implemented: pesticides, PFOS and PBDEs	Technical guidelines for POPs management adapted and implemented: pesticides, PFOS and PBDEs	Documents printed and disseminated with workshops	Printed guidelines and workshops reports	Annually  Reported in DO tab of the GEF PIR	Project Coordinator	Published guidelines by government and Project
Outcome D) <u>POPs containing materials stockpile eliminated by innovative approaches</u>	Mt of PBDE-containing products, Mt of POPs pesticides and Mt of PCB stocks eliminated through Pilot projects	Mt of POPs eliminated through Pilot projects	Mt of PBDE-containing products, Mt of POPs pesticides and Mt of PCB stocks eliminated through Pilot projects	Destruction reports by project	Annually  Reported in DO tab of the GEF PIR	Project Coordinator	Official document publication in government report to Stockholm Convention
Outcome E) <u>Reduction of UPOPs emissions and elimination of POPs in collaborative schemes</u>	Mt of hazardous waste destroyed in cement kilns in Pilot project	Mt of POPs reduced/eliminated through collaborative schemes	Mt of hazardous waste destroyed in cement kilns in Pilot project	Destruction reports by project and CESSCO	Annually  Reported in DO tab of the GEF PIR	Project Coordinator	Official document publication in government report to Stockholm Convention
	Mt of health care waste eliminated in Pilot project	Mt of POPs reduced/eliminated	Mt of health care waste eliminated in Pilot project	Destruction reports by project and CESSCO	Annually	Project Coordinator	Official document publication in government

Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions
		through collaborative schemes			Reported in DO tab of the GEF PIR		report to Stockholm Convention
	Mt ESM of Municipal Solid Waste management in Pilot project	Mt of POPs reduced/eliminated through collaborative schemes	Mt ESM of Municipal Solid Waste management in Pilot project	Destruction reports by project and CESSCO	Annually Reported in DO tab of the GEF PIR	Project Coordinator	Official document publication in government report to Stockholm Convention
	Number of technical guidelines adapted and impemented: waste coprocessing in cement kilns, BAT/BEP hospitals waste and BAT/BEP for Municipal Solid Waste management	Number of technical guidelines adapted and implemented: waste coprocessing in cement kilns, BAT/BEP hospitals waste and BAT/BEP for Municipal Solid Waste management	Documents of guidelines on waste coprocessing in cement kilns, BAT/BEP hospitals waste and BAT/BEP for Municipal Solid Waste management	Printed guidelines and workshops reports	Annually Reported in DO tab of the GEF PIR	Project Coordinator	Published guidelines by government and Project
Mid-term GEF Tracking Tool	N/A	N/A	Standard GEF Tracking Tool available at <a href="http://www.thegef.org">www.thegef.org</a> Baseline GEF Tracking Tool included in Annex.	After 2 <sup>nd</sup> PIR submitted to GEF	Project consultant in coordination/ consultation with project partners	Completed GEF Tracking Tool	Data and information available from project partners
Terminal GEF Tracking Tool	N/A	N/A	Standard GEF Tracking Tool available at <a href="http://www.thegef.org">www.thegef.org</a> Baseline GEF Tracking Tool included in Annex.	After final PIR submitted to GEF	Project consultant in coordination/ consultation with project partners	Completed GEF Tracking Tool	Data and information available from project partners
Mid-term Review	N/A	N/A	To be outlined in MTR inception report	Submitted to GEF same year as 3 <sup>rd</sup> PIR	Independent evaluator	MTR Report	Findings from the MTR will be used to revise the project's progress and to establish the corrective measures to achieve project objectives.
Environmental and Social risks and	N/A	N/A	Updated SESP and management plans	Annually	Project Coordinator UNDP CO	Updated SESP	



Monitoring	Indicators	Description	Data source/Collection Methods	Frequency	Responsible for data collection	Means of verification	Assumptions
management plans, as relevant.							

### Annex 3. Pilot Project for sound disposal of vehicle foams (PBDEs containing) using LCA approach

#### Objective.

To test, demonstrate and evaluate results of a pilot Project for sound disposal of vehicle foams (PBDEs containing) using LCA approach, contained in the public transport, with an expected reduction of 12 Mt, which is about 50% of estimated emission in Honduras.

#### Methodology.

- 1) Legal arrangements: these will be required to be obtained with the Ministry of Transport in order to be able to dispose of foams and upholstery contained in the transport sector and also with bus operators. Pilot project will be conducted by UNDP Project, with support from Ministry and in accordance with MiAmbiente. Legal contract with destruction facility will be established.
- 2) Management process established. First, sampling and characterization of vehicles materials will be developed in order to assess their conditions. Concentration and distribution of PBDEs containing materials will be determined, with support of CESCOO laboratory. Based on these, procedure for materials dismantling and transport to destruction facility will be designed.
- 3) Protocol test in destruction facility. Protocol will be designed and submitted for CESCOO's revision and approval, particularly in the feeding system and the emissions monitoring. Test will be run and results documented and assessed.
- 4) Development of work plan. Materials destruction work plan will be developed, together with destruction facility. It will include organization of activities logistics (collection, transport and safe storage) and operation of project. Destruction tests to be run with gradual feed of PBDEs materials.
- 5) Pilot Project implementation. This will be achieved based on the protocols test indication and along the supply of materials obtained. Results will be documented and reported to CESCOO.
- 6) Replication: A best practices guide for workers involved in the different stages, will be produced for future similar Works.

#### Annex 4. Pilot Project for POPs pesticides management and stockpile elimination at a certified facility

##### Objective.

To test, demonstrate and evaluate results of a pilot Project for pesticides management and stockpile elimination at a certified facility, from remaining “old” and “new” POPs pesticides, with an expected reduction of 30 Mt, which is about 50% of estimated emission in Honduras.

##### Methodology.

- 7) Management process(es) defined and established. Elimination technology will be selected, among nationally available, considering the amount and type of pesticides and also considering best scalable costs, from selection through to destruction. Possibilities to develop national permanent capacities for collection and destruction will be considered for selection as well and their comparison to destruction costs abroad. And qualification of the facilities against international standards and guidelines, specifically those of Basel Convention will be determined.
- 8) Logistics of collection-transport storage will be assessed from those available. In particular collection from sources with small amounts of pesticides will be observed and refined.
- 9) Protocol test in destruction facility. Protocol for tests in cement kiln will be designed and submitted for CESCO's revision and approval, in all the management chain and particularly in the emissions monitoring. Test will be run and results documented and assessed. Whenever possible, different pesticides will be treated in separate lumps.
- 10) Development of work plan. Pesticides destruction work plan will be developed, jointly with destruction facility. It will include organization of activities logistics (collection, transport and safe storage) and operation of project. Destruction tests to be run with gradual feed of pesticides.
- 11) Pilot Project implementation. This will be achieved based on the protocols test indication and along the supply of pesticides obtained. Results will be documented and reported to CESCO.
- 12) Replication: A best practices guideline for workers involved in the different stages, will be produced for future similar Works.

**Annex 5. Pilot project on PPP for ESM of PCB decontamination and disposal  
with nationally based handling and disposal entities**

**Objective.**

To test, demonstrate and evaluate results of a pilot Project of Public Private Partnership for Environmental Sound Management of PCBs decontamination and disposal with nationally based handling and disposal entities, of 60 tons of estimated inventory of PCBs contaminated materials, about 50% of that estimated to remain in Honduras.

**Methodology.**

- 13) Legal arrangements: Agreements will be needed to establish between Ministry of Environment and private enterprises and/or organizations in order to be able to handle and dispose of PCBs (and will be open to other POPs containing materials, like PBDEs foams contained in transport sector and pesticides). Pilot project will be conducted by UNDP Project, with support from the Ministry and in accordance with MiAmbiente. Legal contract with destruction facility will be established.
- 14) Management process(es) defined and established. Elimination technology will be selected, among those nationally available as compared to export for destruction, considering the management stages that include collection, transport, decontamination of electrical equipment (*in situ or ex situ*), oil destruction, and amount to be destroyed in following years. Possibilities to develop national permanent capacities for collection, decontamination of equipment and destruction, through training or joint ventures with companies from other countries (south-south) will be assessed. Qualification of the facilities against international standards and guidelines, specifically those of Basel Convention will be required.
- 15) Logistics of collection-transport storage will be developed and agreed from those available. In particular collection from sources with small size equipment will be worked on.
- 16) Protocol test in destruction facility. Protocol will be designed and submitted for CESCO's revision and approval, particularly in the decontamination stage and in the destruction stage (as part of Pilot 4, Annex 5) in its feeding system and emissions monitoring. Test will be run and results documented and assessed.
- 17) Development of work plan. Management work plan will be developed, together with partner enterprise. It will include organization of activities logistics (collection, transport and safe storage and decontamination in its case) and operation of project. Decontamination tests to be run with PCBs contaminated equipment and other POPs materials.
- 18) Pilot Project implementation. This will be achieved based on the protocols test indication and along the supply of materials obtained. Results will be documented and reported to CESCO.
- 19) Replication: A best practices guide for workers involved in the different stages, will be produced for future similar Works.

Annex 6. Pilot project on ESM hazardous waste co-processing in cement kilns,  
in partnerships with waste producers/holders

Objective.

To test, demonstrate and evaluate results of a pilot Project for Environmentally Sound Management (destruction) of hazardous waste co-processing in cement kilns, in likely partnerships with waste producers/holders, of 60 Mt of estimated inventory of PCBs contaminated materials, about 50% of that estimated to remain in Honduras. In addition to those, other POPs materials and hazardous waste to be also treated in kin.

Methodology.

- 20) Legal arrangements: Agreements will be needed to establish between Ministry of Environment and cement producing companies in order to be able to handle and dispose of PCBs and other POPs containing materials and hazardous waste. Pilot project will be established based on a screening assessment of candidate cement plants. Pilot will be conducted by UNDP Project and in accordance with MiAmbiente and facilitation and advisory support to the negotiation of arrangements supplied by Project. Legal contract with cement facility will be established. Also a covenant with Municipalities, for tires and other waste to be collected and delivered to cement companies, will be signed.
- 21) Destruction/elimination process. Management stages will be examined for development, to be in accordance with international best practices and with Basel and Stockholm conventions, which are: initial materials handling and storage, mixing and feeding into the kiln, waste processing burning and post-burning of gases. It will also include ways to employ safe disposal practices to treat final fly and bottom ashes and monitoring emissions overall the process. Monitoring will be performed under the *ad hoc* Standard implemented for the purpose, under the Project. Project will be assessed to test its feasibility: technical, environmentally and economically.
- 22) Coprocessing Tests protocol. International expertise on cement kiln co-processing will be provided to evaluate current scenario and develop the tests at cooperating companies in order to verify and adjust performance and update environmental licensing, providing technical assistance for adaptations required to the kiln for the co-processing of PCBs; advice will also be supplied for the emissions standard application. Protocol test results will be submitted for CESSCO's revision and approval.
- 23) Collection and delivery of waste for coprocessing. Activities for collection of tires, plastic fraction of hospital wastes and other co-processable waste from close by-as well as other municipalities will be developed. Those wastes will be selected from communities that regularly generate them. Logistics costs will be assessed. Possibilities to develop national permanent capacities for collection and transport will be determined.
- 24) Development of Coprocessing work plan. Plan will be developed, together with partner cement enterprise. It will include organization of activities logistics (collection, transport and safe storage and decontamination of electrical equipment in its case) and operation of project.
- 25) Pilot Project implementation. This will be achieved based on the protocols test indication and along the supply of materials obtained. Results will be documented and reported to CESSCO.
- 26) Replication: A technical guideline will also be adapted from existing ones, for environmental monitoring to be used by MiAmbiente and municipal environment units. Corresponding training will be provided to the target audiences in both cases in the interpretation and implementation of the provisions of the Guideline

## Annex 7. Pilot project of BAT/BEP for treatment of healthcare waste

### Objective.

To test, demonstrate and evaluate results of a pilot Project for BAT/BEP of non-incineration alternatives for treatment of healthcare waste, in hospitals of Honduras.

### Methodology.

- 27) Legal arrangements: Agreements will be needed to establish between Ministry of Environment and hospitals, with support of Ministry of Health in order to be able to handle and dispose health care waste in an environmentally sound management. Two hospitals (100 and 127 beds, respectively) are already selected from preparatory phase of project. Pilot will be conducted by UNDP Project and in accordance with MiAmbiente and facilitation and advisory support to the negotiation of arrangements supplied by Project. Also a covenant with Ministry of Health will be signed.
- 28) Destruction/elimination processes. Destruction and management processes will be selected for development, to be in accordance with international best practices and with Basel and Stockholm conventions. Particularly with regards to traceability system (reverse logistics) specifically designed for the type and size of the hospital and testing of a new or refurbished autoclave (exploring possibilities for smaller units that just dispose of HCW in municipal dumps) and shredder combination. Other treatment system to be tested is by microwave and autoclave technology to be funded by the Honduras Debt Reconversion Program with Spain that is cofinancing. International expertise may be required for the design and, in case required, for refurbishment of autoclave.
- 29) Test protocol. Tests will be run, in accordance with Basel Convention and national law, in 2 hospitals, after process is defined. Tests protocols results will be submitted for CESCO's revision and approval.
- 30) Other hospitals waste management assessment. Smaller units that just dispose of Health Care Waste in municipal dumps will be assessed as part of Pilot project, in order to provide other feasible management options.
- 31) Development of processing work plan. Plan will be developed, together with partner hospitals. It will include organization of activities logistics (collection, transport and safe storage in its case) and implementation of project. Results will be documented and reported to CESCO.
- 32) Replication: A technical guideline will also be adapted from existing ones, for environmental monitoring to be used by MiAmbiente and municipal environment units. Corresponding training will be provided to the target audiences in both cases in the interpretation and implementation of the provisions of the Guideline.

## Annex 8. Social and Environmental Screening (SESP)

### Project Information

<i>Project Information</i>	
1. Project Title	Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal
2. Project Number	PIMS 5615
3. Location (Global/Region/Country)	Honduras

### Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

<b>QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?</b>
<i>Briefly describe in the space below how the Project mainstreams the human-rights based approach</i>
<p>The lack of adequate management of a Hazardous Waste like PBs and obsolete pesticides, presents a biological risk from water or soil pollution that can damage biodiversity resources and ecosystems of global importance. The project represents a direct benefit to environment, specific to the country and global wise. Activities are focused directly to the environmentally sound management POPs waste. The country has activities already in progress but still more are needed.</p> <p>Adequate Hazardous Waste Management in Honduras is a necessary condition for the wellbeing of its people in general. This includes collectors at waste dumps, agricultural workers. Decreased exposure will result in economic benefits for public health systems; will reduce health care costs, workdays lost, and human suffering.</p> <p>The design and subsequent implementation of this project have and will involve a wide range of stakeholders. Since early stage of project formulation, the PPG phase, and during project document preparation, consultation sessions have been conducted with of key stakeholders to exchange experience and knowledge to facilitate project formulation and design where stakeholders' interest and influence were assessed. Consultation missions were undertaken to evaluate municipalities and enterprises to explore their engagement in participating in the project activities. These cooperation and coordination efforts have proven effective to generate efficient and effective stakeholder engagement during project implementation. Such consultations will also assure the interest of potentially marginalized individuals and groups are taken into account in the process of revision of legislations and enforcement.</p>
<i>Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment</i>
<p>With respect to the management of POPs in Honduras, it can safely be assumed that the majority of workers in the agricultural and waste management sectors (including informal collectors in waste dumps), are men. On the other hand, women and children, who spent most time within their communities, might be at greatest risk from close proximity to waste dumps and POPs pesticides contaminated areas.</p> <p>Many of the workers in waste picking informally are women and thus women and children become the group most directly impacted by the health risk in the work place, as well as due to exposure in the contaminated sites where most of this group inhabited.</p> <p>By addressing the POPs release in environmentally sound destruction of PCBs, PBDEs and obsolete pesticides in this project, as well as unintentional POPs, health risks for women and their children will be reduced from exposure, leading to ameliorated health situation for them. During implementation, the project will address the priority concerns of vulnerable groups including female workers and the poor to assess and strengthen capacity to reduce POPs release sensitive streams. The project will ensure female participation in the related activities of training and capacity building. In addition, there will be two overarching interventions – awareness raising and multi-stakeholder's participation – that will contribute to ensuring the successful implementation of gender mainstreaming.</p>
<i>Briefly describe in the space below how the Project mainstreams environmental sustainability</i>
<p>The project activities will become integral parts of an effective sound chemicals management scheme with institutional, financial and environmental long-term sustainability, as it is established with an emphasis on PPPs as well as results for the</p>

communities. Project activities will result in an effective regulatory and legal framework, an efficient infrastructure and strengthened capacity for sound chemicals management in general and of PCBs, PBDEs and other POPs pesticides, in particular. Modifications of Regulation for ESM of chemicals and of PRTR will bring effective enforcement and alignment with the Stockholm Convention. This will allow permanent enforcement by the National Government (CESSCO) on chemicals sound management with the regulations' amendments prepared. The development of project activities and the demonstration of BAT/BEP with the introduction of sound technology and capacity will strengthen structure and capacity to ensure infrastructure and technological sustainability, to reduce POPs sensitive releases and ensure efficient and environmentally sound chemical management. Co-financing for this activity and the demonstration pilot projects will also contribute to successful technology demonstration and the long term sustainability of technological improvements as well as community work, yielding significant reduction in POPs emissions. Development and testing of coprocessing of waste in cement kilns will mainstream even more the already high perception on the subject of hazardous waste management. Pilot projects for PCBs, PBDEs and HCW will help to reinforce the feasibility of the demonstrated processes as an economically viable alternative for POPs destruction, in collaboration with private sector waste management facilities. The project also includes activities focussed mainly on an updated and accurate inventory of pesticides, including new and old. Finally, the project will provide proper infrastructure and strengthened capacity for efficient project monitoring and management to achieve project objectives. The structure and capacity developed will ensure long-term environmental sustainability



Part B. Identifying and Managing Social and Environmental Risks

<b>QUESTION 2: What are the Potential Social and Environmental Risks?</b> <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses).</i>	<b>QUESTION 3: What is the level of significance of the potential social and environmental risks?</b> <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i>			<b>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</b>
<i>Risk Description</i>	<i>Impact and Probability (1-5)</i>	<i>Significance (Low, Moderate, High)</i>	<i>Comments</i>	<i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i>
Potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials during operation of pilot projects	Impact: 3 Probability: 1	Low	All waste will be managed under strict environmental and safety standards by industries to avoid potential emissions	
Potential risks and vulnerabilities related to occupational health and safety due to chemical hazards during Project operation	Impact: 3 Probability: 1	Low	All waste will be managed under strict environmental and safety standards by industries to avoid potential emissions	
Potentially result in the release of pollutants to the environment due to non-routine circumstances with the potential for adverse local impacts	Impact: 3 Probability: 1	Low	All waste will be managed under strict environmental and safety standards by industries to avoid potential emissions	
Potentially result in the generation of hazardous waste	Impact: 3 Probability: 1	Low	All waste will be managed under strict environmental and safety standards by industries to avoid potential emissions	
<b>QUESTION 4: What is the overall Project risk categorization?</b>				
<b>Select one (see <a href="#">SESP</a> for guidance)</b>		<b>Comments</b>		
<b>Low Risk</b>		<input checked="" type="checkbox"/>	Minimal non identified environmental and social risks related to this project may present.	
<b>Moderate Risk</b>		<input type="checkbox"/>		
<b>High Risk</b>		<input type="checkbox"/>		
<b>QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?</b>				

	Check all that apply	<b>Comments</b>	
	<b>Principle 1: Human Rights</b>	<input type="checkbox"/>	None required
	<b>Principle 2: Gender Equality and Women's Empowerment</b>	<input type="checkbox"/>	None Required
	<b>1. Biodiversity Conservation and Natural Resource Management</b>	<input type="checkbox"/>	None required
	<b>2. Climate Change Mitigation and Adaptation</b>	<input type="checkbox"/>	None required
	<b>3. Community Health, Safety and Working Conditions</b>	<input checked="" type="checkbox"/>	Focused Environmental Assessments will be performed in order to prevent POPs releases, during pilot project of coprocessing to protect workers and local residents
	<b>4. Cultural Heritage</b>	<input type="checkbox"/>	None required
	<b>5. Displacement and Resettlement</b>	<input type="checkbox"/>	None required
	<b>6. Indigenous Peoples</b>	<input type="checkbox"/>	None required
	<b>7. Pollution Prevention and Resource Efficiency</b>	<input type="checkbox"/>	None required

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		Answer (Yes/No)
<b>Principles 1: Human Rights</b>		
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? <sup>8</sup>	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Are there measures or mechanisms in place to respond to local community grievances?	No
6.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
7.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
8.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
9.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
<b>Principle 2: Gender Equality and Women's Empowerment</b>		
1.	Is there likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	No
<b>Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below</b>		
<b>Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management</b>		

<sup>8</sup> Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	No
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i>	No
<b>Standard 2: Climate Change Mitigation and Adaptation</b>		
2.1	Will the proposed Project result in significant <sup>9</sup> greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No

<sup>9</sup> In regards to CO<sub>2</sub>, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

<b>Standard 3: Community Health, Safety and Working Conditions</b>		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	Yes
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
<b>Standard 4: Cultural Heritage</b>		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
<b>Standard 5: Displacement and Resettlement</b>		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>10</sup>	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No

<sup>10</sup> Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the rights, lands and territories of indigenous peoples (regardless of whether Indigenous Peoples possess the legal titles to such areas)?	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the traditional livelihoods, physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?  <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i>	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No



Annex 8 - Social  
and Environmental

Signed SESP:

## Annex 9. Terms of Reference for Key Project Staff

The following are the indicative ToRs for the project management staff. The PCU will be staffed by a full-time Project Coordinator (PC) and a full-time Project Administrator/Finance Assistant, both of which will be nationally-recruited positions. ToRs for these positions will be further discussed with UNDP-CO and will be fine-tuned during the Inception Workshop (IW) so that roles and responsibilities and UNDP GEF reporting procedures are clearly defined and understood. Also, during the IW the ToRs for specific consultants and sub-contractors will be fully discussed and, for those consultancies to be undertaken during the first six months of the project, full ToRs will be drafted and selection and hiring procedures will be defined.

### Project Coordinator (PC)

CESCCO, in coordination with the UNDP CO, will select the PC to carry out the duties specified below, and to provide further technical assistance as required by the project team to fulfill the objectives of the project. He/she will be responsible for ensuring that the project meets its obligations to the GEF and the UNDP, with particular regard to the management aspects of the project, including supervision of staff, serving as stakeholder liaison, implementation of activities, and reporting. The PC will be responsible for the day-to-day management of project activities and the delivery of its outputs, including the implementation of CESCCO's quality management system and planning process (in the framework of the project). The PC will support and coordinate the activities of all partners, staff, and consultants as they relate to the implementation of the project. The PC will report to the National Project Director and will be responsible for the tasks described below.

The Government of Honduras ratified the Stockholm Convention on Persistent Organic Pollutants on April 2005. For planning appropriate action in the field of controlling POPs substances and releases as well as fulfilling the reporting requirements of the Convention, Honduras submitted its update of the National Implementation Plan (NIP) on POPs on April 2015. The management of PCBs, UPOPs and w POPs pesticides were considered as priority areas of action in the POPs National Implementation Plan. Consequently, the Government applied for GEF assistance for developing the project – Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal through UNDP. The five-year project will help Honduras to fulfil its requirements under the Stockholm Convention. Consistent with this objective, this project addresses POPs release sensitive PBDEs, PCBs and UPOPs and the environmentally sound elimination and management of new POPs pesticides. To achieve the project objective and outcomes, the project is structured in 6 components:

Component 1: focuses on the development of institutional capacities and strengthening the regulatory and policy framework to address emerging POPs issues.

Component 2: addresses management and disposal in an environmentally sound manner, of POPs pesticides, PCBs and newly listed POPs.

Component 3: Focuses on Reduction of UPOPs releases from priority sources

Component 4: addresses awareness raising, capture lessons-learned, disseminated experiences, monitor project progress and provide adaptive feedback and evaluation.

### *Tasks:*

As per UNDP guidelines in force the Project Coordinator is responsible for

- Timely implementation of the workplan as endorsed by the PSC.
- General and financial administration.
- Design and supervision of technical studies carried out by consultants
- Work planning, scheduling and project progress reporting.
- Ensuring M&E activities are fed back in project planning.
- Writing of Terms of Reference for project consultants.
- Tendering of contractual services.
- Monitoring and the quality control, particularly on safety, of input from consultants and subcontractors providing assistance to the project.
- Tendering for international services.

The Project Coordinator shall coordinate the contracting of all consultants and sub-contracts and monitor their performance.

### *Qualifications (indicative):*

- Degree in Management, Engineering, physical sciences or economics
- Thorough knowledge of legislation and management of hazardous waste
- Minimum of five years' experience on national scale projects implementation
- Knowledge of the Stockholm Convention and Persistent Organic Pollutants highly desirable
- Experience in the management of environmental issues desirable

- Must be fully IT literate.
- Working knowledge of Spanish and English

#### Project Administrator/Finance Assistant

The Project Administrator/Finance Assistant is responsible for the financial and administrative management of the project activities and assists in the preparation of quarterly and annual work plans and progress reports for review and monitoring by CESCOO and UNDP. This position also provides support to the PC for the day-to-day management of the project and secretarial or assistance functions. The Project Administrator/Finance Assistant will have the following responsibilities:

##### *Financial management:*

- Responsible for providing general financial and administrative support to the project;
- Take own initiative and perform daily work in compliance with annual work schedules;
- Assist project management in performing budget cycle: planning, preparation, revisions, and budget execution;
- Assist the PC in all project implementation activities;
- Provide assistance to partner agencies involved in project activities, performing and monitoring general administrative and financial aspects to ensure compliance with budgeted costs in line with UNDP and Government policies and procedures;
- Monitor project expenditures, ensuring that no expenditure is incurred before it has been authorized;
- Assist project team in drafting quarterly project progress reports concerning financial issues;
- Ensure that UNDP procurement rules are followed during procurement activities that are carried out by the project and maintain responsibility for the inventory of the project assets;
- Perform preparatory work for mandatory and general budget revisions, annual physical inventory and auditing, and assist external evaluators in fulfilling their mission;
- Provide assistance in all logistical arrangements concerning project implementation;
- Prepare all outputs in accordance with the CESCOO administrative and financial office guidance.

##### *Administrative management:*

- Make logistical arrangements for the organization of meetings, consultation processes, and media;
- Provide secretarial support for the project staff;
- Carry out the process to request international/local consultants and all project staff, in accordance with UNDP policies and procedures, and after approval of CESCOO;
- Draft agreements for entities related to the project, in accordance with instructions by the Contracts Office at CESCOO and in line with UNDP policies and procedures;
- Draft correspondence related to assigned project areas; provide clarification, follow up, and responses to requests for information;
- Assume overall responsibility for administrative matters of a more general nature, such as registry and maintenance of project files;
- Perform all other administrative and financial related duties, upon request;
- Provide support to the PC and project staff in the coordination and organization of planned activities and their timely implementation;
- Assist the PC in liaising with key stakeholders from the Government counterpart, co-financing agencies, civil society, and NGOs, as required;
- Ensure the proper use and care of the instruments and equipment used on the project;
- Ensure the project utilizes the available financial resources in an efficient and transparent manner;
- Ensure that all project financial and administrative activities are carried out on schedule and within budget to achieve the project outputs;
- Resolve all administrative, financial, and support issues that might arise during the project;

##### *Qualifications and skills:*

- At least an Associate's Degree in finance, business sciences, or related fields;
- Experience in administrative work, preferably in an international organization or related to project implementation;
- Demonstrated ability in the financial management of development projects and in liaising and cooperating with government officials, NGOs, etc.;
- Self-motivated and ability to work under the pressure;
- Team-oriented, possesses a positive attitude, and works well with others;
- Flexible and willing to travel as required;
- Excellent interpersonal skills;
- Excellent verbal and writing communication skills in Spanish and English;
- Good knowledge of Word, Outlook, Excel, and Internet browsers is required;



- Previous experience working with a GEF-supported project is considered an asset.

## Annex 10. Evaluation Plan

Evaluation Title	Planned start date Month/year	Planned end date Month/year	Included in the Country Office Evaluation Plan	Budget for consultants	Other budget (i.e. travel, site visits etc...)	Budget for translation
Midterm evaluation	February, 2019	April, 2019	Yes	International consultants: USD 20,000	Included in consultants' budget	USD 2,000
Terminal Evaluation	September, 2021	September, 2021	Yes	International consultants: USD 30,00	Included in consultants' budget	USD 5,000
Total evaluation budget				USD 55,000		

**Annex 11 – Letter of Agreement for Direct Project Cost**



Annex 11 - Signed Letter of Agreement

**Annex 12 – Co-finance letters**

Co-finance letters in Spanish will be forwarded in a separate file. English translation is included below:

**Annex 13. Responses to STAP, GEF Sec and Council Comments Annex**

Donor/Comment	Answer:
<p><b>GEF Secretariat:</b>  <u>Please elaborate in more detail which synergies could be created, especially with the GEF/UNIDO project.</u></p>	<p>The project will coordinate closely all the activities with the regional GEF/UNIDO project that will be implemented out of Vienna and Argentina. The UNDP-GEF project in Honduras will be implemented under the National Implementation Modality with CESCO in the Ministry of Environment in Honduras, and a full National Project team will be set up for the implementation of the project. The team is like the team that implemented previous UNDP GEF CW projects in Honduras. The project team will take contact with the UNIDO GEF project team at the outset of the project implementation to assure a close coordination of activities and to generate synergies between the two projects.</p>
<p><b>Canada:</b>  <u>We support this project. To improve the clarity of the proposal, we request that the following comments be addressed prior to CEO endorsement:</u>  <u>- Concerning project component 3 (page 4), Reduce UPOPs releases from priority sources: A series of technical manuals and guidelines are proposed as outputs of this project; however, it is unclear whether, and to what extent, existing guidance documents developed and adopted by the international community will be or have been consulted. For example, the Basel Convention has developed a number of relevant technical guidelines for the environmentally sound management of specific wastes (e.g., biomedical and healthcare wastes, used and waste tyres, unintentionally produced POPs wastes). Technical guidelines have also been adopted on environmentally sound co-processing of hazardous wastes in cement kilns. Please elaborate on this component.</u></p>	<p>Basel and Stockholm Guidelines will be made use of. Included in Paragraph 17.:  “...Pilots are to be complemented by 3 guidelines which will be adapted to particular Honduras’ situation and be implemented, from existing Basel Convention Guidelines: one of adaptation of hazardous waste coprocessing in cement kilns, a second for health care waste treatment and a third one for municipal waste management.”</p> <p>UNDP and the Government of Honduras would like to confirm that all technical manuals and guidelines proposed as outputs will build on the work already done at the international level and will be adapted for the local circumstances. Both under the Basel and Stockholm convention, importance technical manuals and guidance have been developed and will be fully utilized in the context con the project. The focus is to adapt existing guidance documents that have already been adopted by the international community to the reality of Honduras.</p>

<p><u>- We note that while the proposal provides information on plans to share experiences from the project with relevant stakeholders (page 20), it does not take into account lessons learned from similar projects and initiatives that have already been carried out. These should be carefully examined to increase chances of the project’s success. In addition, it should be made clear how the proposed project will draw from and build on all the work that has already been done in Honduras to fulfill its obligations under the Stockholm Convention (page 8).</u></p> <p><u>In terms of stakeholder engagement, the related section notes how civil societies and indigenous people will be involved; however, the document provides limited specificity with respect to organizational name and engagement approaches. Given the importance of stakeholder engagement, this section should be expanded in the subsequent document to ensure full and meaningful inclusion of relevant stakeholders, including CSOs and indigenous people.</u></p>	<p>All lessons learned from previous work in other National projects will be made taken advantage of.</p> <p>Addressed in Paragraph 25: Page 10 and in paragraph 51, page 20, stakeholder involvement table (of Prodoc) and in paragraph 58. Also, all along Prodoc mentions are made of previous experiences results.</p> <p>“ 25. Project strategy will take advantage from previous project’s results, experiences, recommendations and lessons learned in project UNDP-GEF 60221, which established that institutional capacities should include direct involvement of CESCO representatives in a systematic way and its new director to take ownership of project, intensive training of CESCO personnel for monitoring and control, more intensive awareness of municipalities, implementation of PRTR, consider integrated costs for elimination of intentionally produced POPs (pesticides) and implementation of education material for environmentally sound management of chemicals for teachers of primary and secondary education”.</p> <p>58. “Finally, coordination with The GEF/UNDP Project “Environmental Sound Management of Mercury and Mercury Containing Products and their Wastes in Artisanal Small-scale Gold Mining (ASGM) and Healthcare”, which aims to protect human health and the environment from Mercury releases originating from the intentional use of Mercury in ASGM, as well as the unsound management and disposal of Mercury containing products from the healthcare sector, being implemented through one joint project unit that operates in CESCO-MiAmbiente, will allow synergies between the actors, such as laboratories, hospitals, waste facility operators, environmental authorities and associations that already play an active role in this POPs project”.</p> <p>From final evaluation of Project 4226 recommendations taken into account:</p> <ul style="list-style-type: none"> <li>• “ (create) institutional capacity created within CESCO/SERNA. Most of the achievements obtained did not have the direct involvement of CESCO/SERNA representatives in a systematic way”</li> <li>• “new director, appointed this year in CESCO, has taken important actions to take ownership of the project outputs and include elements in the next POPs 4 project that will strengthen the sustainability required of POPs 2 results”.</li> <li>• “ intensive training should be given to CESCO/SERNA and Mi Ambiente personnel in general with regard to the approved regulations, policies and technical guidelines”</li> <li>• “CESCO/SERNA should make efforts to work in the future with the remaining municipalities that have not been involved in the pilot project in order to make them</li> </ul>
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	<p>aware of the health and environmental impacts that result from the burning of their solid waste”.</p> <ul style="list-style-type: none"> <li>• “ PRTR regulation has been approved and socialized among the stakeholders, but its implementation is still in the process of completion. The implementation of PRTR among the industrial sector, in the future once the project ends, needs to be strengthened and systematically monitored”</li> <li>• “ Mi Ambiente... needs to make sure that ... technical knowhow that is generated by the activities and results obtained is passed on to their technical teams that will be responsible for the monitoring and controlling of these results”.</li> <li>• “future project budget for the elimination of intentionally produced POPs (pesticides), it is important to include final disposal costs, as well as, packing, field services, and transportation costs. In this project, only the final disposal costs were included”.</li> <li>• “...(Education) Ministry’s formalization of the education material for environmentally sound management of chemicals for teachers of primary and secondary education provided access to a group of target teachers and will facilitate its future implementation in the classroom”.</li> </ul> <p>UNDP response: UNDP and the Government of Honduras can confirm that all the work listed in this project will build on the existing work done in Honduras. UNDP was the implementing agency for the NIP development, the development and implementation of the Full Size Project “Strengthening National Management Capacities and reducing releases of POPs in Honduras” That was completed last year. The projects have been executed via the National Implementation Modality (NIM) in Honduras, where CESCO in the Ministry of Environment has been the responsible institution for the implementation. It is the same institution and project staff that will be in charge of the implementation of the current proposal, which should assure a smooth transition and continuation of activities in Honduras, and should lead to a successful implementation of the Stockholm Convention in the country.</p> <p>UNDP and the Government of Honduras will develop a more detailed stakeholder engagement strategy at the outset of the project implementation. We fully agree on the importance of engaging with CSOs, as it is essential to have full participation to generate public trust in the proposed actions. Every pilot project has foreseen to have a very detailed engagement strategy with CSOs.</p>
<p><b>Germany</b> Suggestion for improvements to be made during the drafting of the final project proposal:</p>	
<p>The proposal could elaborate in more detail which synergies could be created through good coordination and/or joint activities with on-going</p>	<p>Project not implemented, but question addressed in Paragraph 58, with regards to coordination with Mercury project:</p>

<p>and future projects in the field, especially with the GEF/UNIDO Project on Environmentally Sound Management of POPs in Waste of Electronic or Electrical Equipment (WEEE) in Latin-American Countries.</p>	<p>“58. Finally, coordination with The GEF/UNDP Project “Environmental Sound Management of Mercury and Mercury Containing Products and their Wastes in Artisanal Small-scale Gold Mining (ASGM) and Healthcare”, which aims to protect human health and the environment from Mercury releases originating from the intentional use of Mercury in ASGM, as well as the unsound management and disposal of Mercury containing products from the healthcare sector, being implemented through one joint project unit, will allow synergies between the actors, such as laboratories, hospitals, waste facility operators, environmental authorities and associations that already play an active role in this POPs project”</p>
<p>While the involvement of public and private sector actors is sufficiently outlined in the proposal, participation of civil society is only mentioned with regard to the municipal waste management activities under Component 3. We suggest to integrate civil society participation as an integral part of awareness raising and knowledge dissemination activities (Component 4).</p>	<p>Answered in paragraph 48:  <i>“...48. Output F3) Awareness raised on: risks related to new POPs and municipal waste management at community level; and for the development of PPPs for hazardous waste management and disposal</i>  Four awareness/training courses will be developed for two target groups: one at community level for municipal waste management and inception on risks from POPs and hazardous waste; and the second for private sector (industry and services) focused on the characteristics and the way to develop PPPs for hazardous waste management and disposal taken as an opportunity; both will incorporate risks related to new POPs.</p> <p>Second course will emphasize activities related to the improvement of private and public sector stakeholders understanding of emissions, exposure limits and control tools for the newly listed POPs; with particular focus to cement industries and car dealers”.</p>
<p>Since the project focuses much on the newly-listed POPs under the Stockholm Convention, the timely completion of the updated National Implementation Plan (NIP) is crucial for a sound inception and implementation of the project. This accounts especially for Component 1, but also for the other components.</p>	<p>NIP was finalized and submitted; this is considered in Paragraphs 2, 3, 4, 7, 9, 10, 13, and other</p>
<p>Regarding awareness raising, Component 4 relatively focuses activities on the academic sectors, however the barrier 2 discusses lack of awareness in the public and private sectors. This should be clarified for proper allocation of resources.</p>	<p>Answered in paragraph 48:  <i>“...48. Output F3) Awareness raised on: risks related to new POPs and municipal waste management at community level; and for the development of PPPs for hazardous waste management and disposal</i>  Four awareness/training courses will be developed for two target groups: one at community level for municipal waste management and inception on risks from POPs and hazardous waste; and the second for private sector (industry and services) focused on the characteristics and the way to develop PPPs for hazardous waste management and disposal taken as an opportunity; both will incorporate risks related to new POPs”.</p>
<p>The project output 1.1.4 (“Pollutant Release and Transfer System (PRTR) developed and implemented.”) under Component 1 is not sufficiently described. Information on the</p>	<p>Answer: PRTR has been created, but needs update and implementation; this is addressed in paragraph 32:  <i>“...32. Output B3) Pollutant Release and Transfer Register (PRTR) updated and implemented.</i></p>

<p>institutional allocation of and responsibility for the PRTR system is lacking, but required. It has to be clarified if the data bank referred to in Paragraph 56 (“(...) will promote the creation of a centralized data bank to be further used by the NMC (...).”) equates the proposed PRTR system.</p>	<p>The PRTR Regulation for Honduras, approved in 2014 (Ministerial Agreement 1070-2014) will be updated to incorporate the new POPs, supported by the results of Output B2 and diffuse sources of contamination. As in the case of Output B2, activities will include conduction of legal review and gap analysis, prepare regulatory amendments, and conduct training on inspection for new POPs substances and products containing new POPs be incorporated in PRTR”.</p>
<p>Regarding the disposal option on cement kiln the SC BAT/BEP guidelines considerations should be taken into account.</p>	<p>UNDP confirms that SC BAT/BEP guidance will be taken into account during the project implementation.</p>
<p>A socio-economic or livelihood analysis to identify vulnerable groups should be performed.</p>	<p>UNDP confirms that a socio-economic analysis to identify vulnerable groups potentially to be affected by the project will be performed during the implementation of the project.</p>
<p>All components are marked as technical assistance components while GEF is looking for investments components. Please consider which component can become investment component</p>	<p>In the request for CEO endorsement document, component 2 and component 3 have been marked as investment components, as the majority of the activities in these two components are investments.</p>
<p><b>USA</b> The United States supports this GEF concept, which seems to be backed by both the public and private sectors and includes capacity building, technical assistance and awareness campaigns with government organizations, private sector, hospitals and schools and a targeted campaign to reduce community level backyard burning. We especially appreciate the aspects of the proposed project that address inventory and disposal of POP’s in an environmentally-sound manner and reduction of POPs releases. We concur with the STAP recommendation that the assessment of risks associated with this project should be examined and request that, if any elements of this project will involve handling of hazardous waste, appropriate safeguards be followed.</p>	<p>Answer: certainly all safeguards will be followed for handling of all hazardous waste by project personnel as well as by all personnel involved in pilot projects.</p>

#### Annex 14 – GEF Chemicals and Waste Tracking tool



Annex 14 - UNDP  
PIMS5615\_Hondura:

#### Annex 15 – Endorsement letter from GEF Focal Point



Annex 15 -  
Endorsement letter

#### Annex 16 - UNDP Project Quality Assurance Report

