



PROJECT IDENTIFICATION FORM (PIF) ¹

PROJECT TYPE: Full-sized Project
 TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Continuing regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Latin American and Caribbean Region		
Country(ies):	Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Cuba, Ecuador, Jamaica, Mexico, Peru and Uruguay	GEF Project ID: ²	4881
GEF Agency(ies):	UNEP	GEF Agency Project ID:	
Other Executing Partner(s):	Stockholm Regional Centre in Uruguay	Submission Date:	19.03.2012
		Resubmission Date:	05.09.2012
		Resubmission Date:	14.09.2012
		Resubmission Date:	18.09.2012
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration (Months)	48
Name of parent program (if applicable):		Agency Fee (\$):	363,600
• For SFM/REDD+ <input type="checkbox"/>			

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CHEM-1	1.5 Country capacity built to effectively phase out and reduce releases of POPs	1.5 Country capacity built to effectively phase out and reduce releases of POPs	GEFTF	3'396'000	5'815'200
Sub-Total				3'396'000	5'815'200
Project Management Cost ⁴			GEFTF	180'000	1'584'000
Monitoring and Evaluation Cost			GEFTF	60,000	
Total Project Cost				3'636'000	7'399'200

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² Project ID number will be assigned by GEFSEC.

³ Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

B. PROJECT FRAMEWORK

Project Objective: To strengthen capacity for implementation of the revised POPs Global Monitoring Plan in the Latin American and Caribbean region and create the conditions for sustainability of the networks						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
1. Develop the regional components for the project	TA	Regional coordination of POPs monitoring activities for implementation of the revised Global Monitoring Plan is strengthened, taking into account the lessons learned from the first project	<ol style="list-style-type: none"> 1. Functional regional management structure 2. Detailed workplan for the project, including strategies for demonstrating the value of monitoring data for national policy-making 3. Updated UNEP POPs laboratory database, including laboratories from newly included countries and information related to new POPs and new matrices 4. List of needs of identified laboratories for POPs analysis 	GEFTF	155'000	259'200
2. Upgrade the network for air samples to comply with the revised and amended guidance document and include more sites/countries	TA	Network for air samples in the region is upgraded, including more sites/countries (Argentina, Barbados, Colombia and Cuba) and in compliance with revised and amended guidance document	<ol style="list-style-type: none"> 1. Clear Terms of Reference for participants in the air sampling network 2. Sites description for new air samplers 3. Existing samplers include newly listed POPs and sustainability of existing sorbents tested 4. Needs for the creation of a global network of active samplers assessed 	GEFTF	495'000	1'584'000
3. Training	TA	Technical personnel is able to carry out sampling in participating countries and analysis in designated laboratories of the 12+10 POPs	<ol style="list-style-type: none"> 1. Strengthened capacity of participating laboratories for sampling and analysis of the 12+10 POPs in core matrices 2. Enhanced knowledge of methodologies for monitoring PFOS in water 3. Enhanced knowledge of methodologies for monitoring brominated flame retardants 	GEFTF	1'414'000	2'472'000
4. Quality enhancement	TA	Quality of laboratory analysis of presence of POPs in GRULAC countries enhanced	<ol style="list-style-type: none"> 1. Plan for inter-laboratory framework 2. Documented results of analysis of reference materials and proficiency tests from the 2nd inter-calibration study 3. List of recommendations for strengthening of the plan for inter-laboratory framework 4. Documented results of analysis of reference materials and proficiency tests from the 3rd inter-calibration study 	GEFTF	432'000	400'000

5. Analysis of national GMP samples	TA	High quality data on presence of POPs in GRULAC countries available	1. Mothers' milk sample containers collected; pools prepared, and shipped to the laboratories 2. Cartridges from air samplers collected and shipped to the laboratories 3. Samples analyzed at subregional POPs laboratory and in back-up laboratories 4. Summary reports	GEFTF	600'000	900'000
6. Lessons learned and dissemination of results	TA	Governments and stakeholders engaged in the implementation of the GMP issue in countries and reporting to Conference of the Parties	1. A list of recommendations for development of the action plan for the establishment of sustained POPs monitoring infrastructure in the region, taking into account the outcomes of and lessons learned from the project 2. Plan for the establishment of sustained laboratory infrastructures in the region, including a business plan 3. Lessons learned collected and collated in a lessons learned report 4. Reports and information material for dissemination of the project's results at national and international levels	GEFTF	300'000	200'000
Sub-Total					3'396'000	5'815'200
Project Management Cost ⁵				GEFTF	180'000	1'584'000
Monitoring and Evaluation				GEFTF	60,000	
Total Project Costs					3'636'000	7'399'200

C. INDICATIVE Co-financing FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Antigua and Barbuda, Argentina, Barbados, Brazil, Chile, Colombia, Cuba, Ecuador, Jamaica, Mexico, Peru and Uruguay	Unknown at this stage	6'699'200
GEF Agency	UNEP	In-kind	200'000
Others	Stockholm Regional Centre in Uruguay	Grant, in-kind	500'000
Total Co-financing			7'399'200

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNEP	GEFTF	Persistent Organic Pollutants	Regional	3'636'000	363'600	3'999'600
Total Grant Resources				3'636'000	363'600	3'999'600

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

⁵ Same as footnote #3.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 The [GEF focal area/LDCF/SCCF](#) strategies /[NPIF](#) Initiative:

The GEF is the financial mechanism of the Stockholm Convention and, as such, supports activities to meet its objectives. As reflected in Article 16 of the Convention, an important element for effective implementation of the convention is the availability of reliable information on POPs levels in humans and in the environment. Following the completion of the 1st Global Monitoring Report (UNEP/POPS/COP.4/33), the Conference of Parties requested in its decision SC-4/31 “*the financial mechanism of the Convention (...) to provide sufficient financial support to further step-by-step capacity enhancement (...) to sustain the new monitoring initiatives with provided data for the first monitoring report.*” The project is therefore in line with the GEF chemicals strategy’s objective 1: phase out POPs and reduce POPs releases.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

NA

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

NA

A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

Countries participating in this project are all Parties to the Stockholm Convention and therefore committed to implement Article 16. These countries have also developed and submitted their National Implementation Plans (NIPs) to the Stockholm Convention Secretariat, and have indicated the development of monitoring capacity as a component of their NIP. Brazil is developing its NIP and it is expected to finish the NIP by December 2012.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

Article 16 of the Stockholm Convention indicates that the effectiveness of the Convention shall be evaluated four years after the date of entry into force of the Convention and periodically thereafter. The Effectiveness Evaluation includes a Global Monitoring Plan (GMP), which monitors the presence of POPs in the environment and in humans. Such monitoring and subsequent assessment should be undertaken at regional basis. One of the objectives of the GMP is to assess regional and global transport. The GMP focuses initially on the core media mother’s milk/blood to examine human exposure, and ambient air to examine long-range transport.

The Conference of Parties (COP) has completed its first effectiveness evaluation at its fourth meeting in 2009 (COP4) based in part on the Regional Monitoring Reports, summarized in the Global Monitoring Report. Among other things, the Monitoring Report stresses the limited data available and constrained capacity for sustained monitoring in the Latin American and Caribbean region. In order to improve this situation for future assessments, the reports stresses that “*Capacity-building for persistent organic pollutant monitoring programmes for most countries in the region remains the top priority recommendation*” and provides some detailed recommendations in this regard. These include in particular: “*performance of inter-calibration tests; improving skills for sampling and analysis; strengthening the infrastructure in existing laboratories to provide capability to analyse the core media; institution of quality assurance and quality control policies and procedures; and financial assistance to establish long term programmes and self-sufficient laboratories.*” (Stockholm Convention on Persistent Organic Pollutants (December 2008), *First Regional Monitoring report Latin American and the Caribbean Region*, <http://chm.pops.int/Portals/0/Repository/GMP/UNEP-POPS-GMP-RMR-GRULAC.English.PDF>)

The COP4 also agreed upon the essential modalities for the environmental monitoring component of the subsequent evaluations and included 9 new chemicals in the POPs list (Decision SC-4/10-18; Annexes A, B, and C) and during COP5 added endosulfan as a POP to be listed in Annex A (Decision SC-5/3).

This project will be designed based on the results from the GEF GMP project (2009-2012), which focused on the 12 original POPs. This project will include the new POPs added during COP-4 and COP-5. This project will also continue the training of staff in participating laboratories and strengthening the performance of sampling and analysis that will enable the national laboratories to improve their ability to analyse POPs according to international standards consistent with GMP Guidelines. In this regard, the project will strengthen the capacity of GRULAC countries for monitoring POPs concentrations in the key media and will facilitate reporting under the effectiveness evaluation. This project will also develop a long-term effectiveness evaluation plan for the region, which will ensure frequent generation of data and provision of it to the Stockholm Convention.

As Parties to the Convention, GRULAC countries are eligible for application of GEF funds to strengthen the monitoring capacity at national level and so to contribute with national data to the GMP. A first project entitled “Supporting the implementation of the POPs Global Monitoring Plan in the Latin American and the Caribbean Region” was conducted by UNEP DTIE Chemicals Branch with financial assistance from the GEF from 2008 to 2010, in parallel to three other regional projects (East-South Africa, West Africa, and Pacific). This project enabled provision of quality data on human exposure and environmental concentration of the 12 POPs originally included for the effectiveness evaluation.

This series of projects has generated an abundance of results and lessons learned. Highlights include:

Capacity building at POPs Laboratories:

In the four UNEP/GEF GMP project participated 28 countries from the Pacific Islands, African and Latin American/Caribbean regions; four more countries from GRULAC – Bahamas, Barbados, Cuba, and Haiti – received similar training from UNEP financed by the SAICM QSP programme, which served as co-financing to the GRULAC GEF MSP project. This complementarity resulted in the following training courses that UNEP organized in the regions through its Expert Laboratories:

Region (Funding)	Number of training courses for POPs Labs	Number of countries participating
Pacific project (GEF)	1	8
West Africa project (GEF)	3	6
South-East Africa project (GEF)	5	6
GRULAC Project (GEF):	7	8
GRULAC Project (SAICM)	2	4
Regional WS (AMS, BCN):	2	
Total:	20	32

Training sessions realized in GRULAC laboratories in 2010:

Lab Training Planner 2010																																					
	mon	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun	mon	tue	wed	thu	fri	sat	sun	mon	tue							
June																																					
July				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
August							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
September				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
October				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
November	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
December			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				

In addition, developing country laboratories have been provided with consumables and small materials such as GC columns, analytical standards, solvents or sorption materials. In the GRULAC region, seven of the eight countries in the UNEP/GEF GMP project have received one-week training sessions (Antigua and Barbuda could not be served because the laboratory was not operational) by the Expert Laboratory at CSIC in Barcelona, Spain. Further, one laboratory in Barbados (by IVM VU Amsterdam) and five laboratories in Cuba have been trained on-site in 2010. The training overview schedule is shown below in the graphics. In general, it can be stated that all laboratories had some experiences with POPs analysis and equipment was present. Further, it should be noted that at CETESB, Brazil, support was provided to start-up a dioxin laboratory (which in addition received assistance from third party in Germany). In addition, dioxin laboratories existed in Jamaica and Peru. The main objective was to train the laboratory staff in the analysis of the core matrices, polyurethane foams (PUFs) and mothers' milk but also other matrices of national interest were included. Most countries selected sediment or fish.

Mothers' milk

The WHO/UNEP protocol for the collection and analysis of pooled mothers' milk has been adapted by the regional coordinator to the national needs. Where necessary, advice and courses were given. The WHO/UNEP Reference laboratory in Freiburg, Germany, provided the countries with glassware where necessary. From the Latin American and the Caribbean region a quite comprehensive set of mothers' milk pool were received. It should be noted that the first set consisted of the co-financed samples (from Stockholm Convention secretariat through agreement between UNEP and WHO) from Antigua and Barbuda, Chile, Uruguay. The second set of samples was collected and analyzed during this GRULAC GEF or SAICM QSP projects and included the samples from Barbados, Chile (2nd set), Cuba, Haiti, Mexico, and Peru. Ecuador and Brazil were not able to collect samples.

POPs could be detected in all samples from all regions; however at different scales. Highest concentrations were observed for DDT, followed by PCB. Aldrin and endrin were not identified in any sample; mirex and toxaphene were detected only in few cases and at low concentrations. Dioxin-like POPs were detected in all samples with PCDD/PCDF and dioxin-like PCB (dl-PCB) contributing to the total toxic equivalent (TEQ). Interestingly, there were countries with higher contribution through PCDD/PCDF; others had more PCB. In the GRULAC region, PCDD/PCDF and dl-PCB were present in all samples. For PCDD/PCDF, the concentrations ranged from 2.4 pg TEQ g⁻¹ fat to 9.7 pg g⁻¹ fat; dl-PCB were lower and the total TEQ had a maximum of 12.1 pg-g⁻¹ fat. For comparison, the total TEQ in the Africa region was 12.5 pg g⁻¹ fat.

In the GRULAC region, the highest concentrations, like in other regions, was for DDTs; however, the range with a minimum of 119 ng g⁻¹ fat and a maximum of 626 ng g⁻¹ fat was lower than for example in Africa (range: 211 ng g⁻¹ fat -1,743 ng g⁻¹ fat). In general, POPs pesticides but also PCB were higher in Africa than in Latin America; toxaphenes, heptachlors were typically below 10 ng g⁻¹ fat. HCB had a maximum of 14 ng g⁻¹ fat in GRULAC and only 5 ng g⁻¹ fat in Africa. Mirex was the only POP that had higher concentrations in GRULAC than in Africa (a known fact that mirex had very limited applications in the past. Drins were higher in Africa (11.2 ng g⁻¹ fat) than in the GRULAC region (max 7.6 ng g⁻¹ fat) but still in the same order of magnitude.

Ambient air with Passive Air Samplers (PAS)

All countries in the GEF GMP (and the SAICM QSP) projects were equipped with Passive Air Samplers (PAS) to set-up a PAS network. Within the project, samples were taken for one year: each sampler did carry one PUF, which was exposed for three months according to the recommendation from the GMP guidance document, then exchanged and stored until analysis.

The projects showed great cooperation from the participating countries and a total of 129 PUFs were analyzed for POPs pesticides and indicator PCB. Presently, we can only use the data that were generated by the expert laboratories since the developing country laboratories still have some problems with this matrix (which was new to all laboratories). As the interlaboratory study did show, the difference between the laboratories is still too large to allow more than one laboratory to report results.

The results show large differences between POPs and regions. For example: Africa and Pacific Islands region was high in DDT and drins (aldrin, endrin, dieldrin) whereas in GRULAC region all concentrations were extremely low. On the other hand, mirex was only detected – although at very low concentrations – in the GRULAC region. PCB were present in all countries but at different concentrations: the highest concentrations throughout the year was observed in La Havana, Cuba (SAICM QSP project) due to the fact that the sampler was positioned at the entry to the harbor and the industrial zone.

For PCDD/PCDF and dl-PCB, the four 3-months PUFs were combined into one result to provide an annual average. All samplers gave quantifiable results. The concentrations in the Latin American and Caribbean countries were quantifiable; however, sometimes only because of very sensitive detection limits had been achieved by the UNEP Expert lab. Some of the national laboratories were not able to detect these low concentrations. The highest TEQs were observed in Cuba, Peru, and Democratic Republic of Congo.

It should be noted that the PUFs from PAS are snapshots and characteristic of the collection capacity of the sampler but also of the location where the PAS is placed. From the results and the feedback from the countries it became evident that further harmonization is needed to have a better representativeness of the sampling site. Some countries have placed the samplers in urban areas (DR Congo, Cuba) whereas others placed them in (the most) remote site of the country (defined as background). Further definition and generic characterization is necessary for better comparison of the results.

Interlaboratory comparison study:

With the assistance of GEF funding, the so far largest interlaboratory study on persistent organic pollutants, named the “First Worldwide UNEP Interlaboratory Study for Persistent Organic Pollutants (POPs)” has been implemented during 2010-2011. Its goal was to test the capabilities of laboratories in the analysis of the twelve initial POPs listed in the Stockholm Convention. The UNEP Interlaboratory Study was performed according to internationally agreed standards (following ISO-International Organization for Standardization and ILAC-International Laboratory Accreditation Cooperation). Such proficiency tests are valuable management tools to allow external quality controls of the performance of a laboratory that undertake chemical analysis.

The basis for the interlaboratory study is laid down in the **Databank of Operational POPs Laboratories**, which was developed by the UNEP/GEF Global project on POPs laboratory capacity building⁶ from 2005 to 2007. Since that Chemicals Branch maintains this databank and makes it available on its Web-site (<http://212.203.125.2/databank/Home/Welcome.aspx>). Presently there are more than 230 POPs laboratories registered. Of these, 103 subscribed to the First Worldwide UNEP Interlaboratory Study on POPs, which offered a number of test samples for analysis (i.e., standard solutions for POPs pesticides, for PCB, and for dioxin-like POPs; and real samples such as sediment, fish, mothers’ milk and flyash).

⁶ Assessment of Existing Capacity and Capacity Building Needs to Analyze POPs in Developing Countries, WebSite <http://www.chem.unep.ch/Pops/laboratory/default.htm>

Finally, this proficiency test had 83 POPs laboratories from 47 countries representing all UN regions reporting results for at least one POP and one sample type back to UNEP. The distribution of the laboratories per group of POPs and region was as follows:

1. Simple POPs (PCB and organochlorine pesticides), 12 laboratories came from WEOG region and 61 laboratories came from the other four UN regions (10 from Africa, 35 from Asia, 3 from CEE, and 23 from GRULAC);
2. Complex POPs (polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans, dioxin-like polychlorinated biphenyls), 10 laboratories came from WEOG region and 40 came from the other four UN regions (3 from Africa, 32 from Asia, 1 from CEE, and 4 from GRULAC).

As can be seen from the summary above, the GRULAC region is equipped with quite a number of POPs laboratories including dioxin laboratories (three within the UNEP/GEF project in Brazil, Jamaica and Ecuador but also in Colombia, Argentina and Costa Rica).

In order to determine the "true" concentration of (here) POPs in a sample, a chemical laboratory must be able to prove that it is capable to identify and quantify chemicals (=analytes) of interest at concentrations of interest. Such accuracy and precision in the determination of POPs is required by article 16 of the convention and subsequent guidance developed for the Global Monitoring Plan (GMP). The needs and support are documented in COP decisions SC-3/16, SC-4/31 and 5/18. To provide reliable monitoring information for the Parties to the Stockholm Convention, the guidance in the GMP document aims to "confirm a 50% decline in the levels of POPs within a 10 year period". This means that POPs laboratories must be capable – at any time – to analyze samples for POPs within a margin of $\pm 12.5\%$.

The assessment showed that while the measurement of test solutions was largely satisfactory, results for real sample matrices - sediment, fish, human milk - more frequently were unsatisfactory to demonstrate downward trends as required under the Convention. Particular difficulties were experienced in the analysis of media with high lipid contents (fish, human milk) and for the lower chlorinated PCB and organochlorine pesticides (including DDT). Laboratories from developed countries did not necessarily show a better performance than the developing country laboratories. Especially the overall very good performance of dioxin laboratories from China was stunning.

UNEP has established criteria to generate high quality POPs data through the 2005-2007 Global POPs Capacity building project, which include presence of analytical equipment, identification of analytes for reporting, orientation for data acceptance. These criteria are being further developed for the revised Guidance document for the Global Monitoring Plan (GMP) together with the regional and global coordination groups under the auspices of the Secretariat of the Stockholm Convention (see document). In order to be able to establish time trends for POPs concentrations in the environment and humans, it was agreed that for a given POP chemical, the variance between laboratories analyzing the same sample should be less than 25% (see above: from 12.5% above the true value to 12.5% below the true value). It was further agreed that POPs laboratories should prove their performance regularly in interlaboratory comparison studies; preferentially on an annual basis.

However, the results of the First round has demonstrated that in all UN regions, the quality of the POPs data is not yet at the desired or necessary level. Especially for true samples – sediment, fish, mothers' milk – the relative standard deviations range up to 250%, which indicates that certain laboratories still have severe difficulties.

For the GRULAC region it can be concluded that:

The POPs laboratories in the GRULAC region participate well in international projects. Sometimes, their analytical difficulties are not related to the POPs analysis *per se* but they have learned to pay attention to other parameters such as determination of fat or humidity to report the results in the desired unit.

The GRULAC region recognized that although their participation in the interlaboratory study was high (And they should be applauded for having accepted this challenge), the results are not yet. The laboratories expressed their desire to continue in these proficiency tests and improve their performance. A first step will be to improve the internal QA/QC schemes.

The regional GEF project (2009-2012) has received high political attention and countries have committed to set aside resources to continue with POPs monitoring and ask for continuation of the just finalized project.

It was also recognized that administrative procedures need improvement and authorities have to be trained to facilitate the import and export of samples and materials to be analyzed for POPs, to ship standards and laboratory equipment.

More emphasis will be put on environmental matrices to be selected for POPs analysis to increase the knowledge about the presence of POPs in GRULAC. Subsequently, the day-to-day work needs better structure and more systematic, practicable approaches.

It was recommended to continue the good experiences and networks for human and environmental samples and coordinate within the region.

In line with the conclusions and recommendations of the 1st monitoring reports, several challenges and capacity-building needs were put forward in order to enable the region to effectively contribute to future monitoring reports and for countries to fulfill their obligations under the Stockholm convention. These include:

- Improve/perfect the process established in phase 1, including improving political visibility of the project and its value for Sound Management of Chemicals (SMC), improve coordination between national/regional levels, develop mechanisms for South-South collaboration and sharing of experience, more training for laboratory personnel;
- Ensure continuity/sustainability of the effort, including continued inter-calibration studies to improve quality of analysis and comparability of data within the region;
- Include more countries and sites where data were missing for the first report;
- Include new POPs and provide adequate training and capacity-building.

The present project is proposed as a continuation of the 1st project presented above, and intends to continue building capacity of countries in the region for sustained monitoring of POPs in a step-by-step process, as called for by the Stockholm Convention COP. The goal of the project is therefore to strengthen capacity for implementation of the revised POPs Global Monitoring Plan in the GRULAC region and create the conditions for sustainability of the networks.

In particular, proposed activities will include updating of the UNEP POPs laboratory database; training of participating laboratories in sample collection, transport, storage and analysis; development of a regional inter-laboratory framework for improving quality of sample analysis; collection and analysis of human and environmental samples in contribution to the 2nd monitoring report; and development of a plan for establishment of sustained laboratory infrastructures in the region.

The First Worldwide UNEP Interlaboratory Study on POPs had 83 laboratories from 47 countries participating. It is envisaged to have a similar coverage and distribution of laboratories for the two coming rounds of interlaboratory studies, which – upon approval of this and sister projects - will be implemented in 2013 and 2015, respectively. The increase in number of countries participating is desirable; however, more important would be the continuous participation of the same laboratories in such proficiency testing to improve already existing capacities but to include more POPs and more matrices. This project will also build capacity in participating countries on monitoring “new” POPs. It is understood that the national laboratories trained for the 12 initial POPs may not be necessarily capable to analyze the 10 “new” POPs. Therefore new partnerships and collaboration with specialized labs may be necessary.

With this project, the momentum generated by the First Worldwide UNEP Interlaboratory Study, will be maintained since laboratories and the users of analytical data have understood that the results must be trustworthy between data generators. Laboratories that performed well are aware that they need to continue demonstrating their proficiency and laboratories not yet at the necessary performance level are willing to improve and undergo further tests to finally achieve. All laboratories and clients/ stakeholders are aware that each of the interlaboratory comparison studies is a snapshot and that the proficiency of the laboratories will change upon exterior factors such as change in personnel, acquisition of new equipment and sometimes even procurement of analytical standards or consumables. For each POP or each matrix that will be analyzed for the first time in a POPs

laboratory, the laboratory must demonstrate its capabilities on an objective, internationally agreed basis.

For the GRULAC region and with the assistance of the GEF, expanding and improving capacity for the initial POPs and developing capacity for the analysis of brominated flame retardants such as the new hexabromo biphenyl and polybrominated diphenyl ethers is a realistic goal for the next step in POPs monitoring. The now operational laboratories with mass spectrometric detection would form a good basis for such work. With respect to the analysis of PFOS and its precursors, no laboratory has yet been identified but it can be assumed that adequate instrumentation exists in several GRULAC countries. Utilizing the same approaches and understanding of the importance of criteria for quality assurance and quality control, it can be expected that soon, PFOS data can be generated in the GRULAC region. The region is committed to actively participating in the implementation of the Global Monitoring Plan of the Stockholm Convention.

- B.2. [Incremental/Additional cost reasoning](#): describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated [global environmental benefits](#) (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

In line with the GMP implementation plan, the project builds on existing POPs monitoring programmes and networks, and operates in close collaboration with the coordination groups established under the Stockholm Convention. Without the GEF resources, the programmes would not be able to perform collection and analysis of POPs containing sample with sufficient quality and comparability. As a result, data from the region would be missing or incomplete from the monitoring report, while the GRULAC region is critical for assessing global transport and levels of POPs. It should be noted that for the first time, one data point for dioxin-like POPs in ambient air was generated in 2011.

The Global Environmental Benefit has to be seen in the context of the efforts of the COP to establish an effective global system for monitoring of the effectiveness of the implementation of the Stockholm Convention. The project contributes to these efforts by strengthening the monitoring capacity at national level and with this enabling the participating countries to contribute national data to the GMP in a regionally and internationally agreed and harmonized approach.

In addition, the project will contribute to the current efforts towards improving the understanding of human exposure to and environmental concentration of POPs at the national, regional and global levels including spatial and time trends. As such, the project will facilitate the adoption of effective risk reduction measures at the national and international levels, and therefore the minimization of the global risks to humans and the environment.

This project will continue to assist countries to build capacity on POPs monitoring in the region and will use as a baseline the results obtained from the UNEP GEF project to support the GRULAC programme to build capacity on GMP (2009-2012). In addition, this project will include the new POPs adopted during COP-4 and COP-5. The capacity building for POPs monitoring programs for most countries in the region remains to be a priority and the continuation of the GMP activities has been highlighted by countries in the region at different for a, including COP-5. One of the main conclusions of the Phase I of the GMP project for POPs (2009-2012) indicated that more qualified data on POPs concentration are needed in order to improve and complement the baseline of POPs levels in the region. In particular, resources are required to improve analytical facilities and methods for the determination of all POPs. This entails more trained personnel and the acquisition of appropriate analytical facilities and the funds to maintain and operate the instruments.

From 2009 to 2012 UNEP has implemented a GEF project on building capacity for POPs monitoring in the GRULAC region. This project concluded that:

- Form mothers' milk, in the region the highest concentrations, like in other regions, was for DDTs. This suggest the need to continue the periodic monitoring of POPs in the region;
- For PCDD/PCDF highest TEQs were observed in Cuba and Peru;
- POPs laboratories in GRULAC are not having problems in POPs analysis per se but they have problems with other parameters such as determination of fat or humidity;

- The laboratories participating in the inter-laboratory study have expressed their desire to continue in these proficiency tests and improve their performance;
- While the participation of laboratories in GRULAC was high, the QA/QC still remains an issue.

This project will also contribute to strengthen the regional network and coordination in the region. Sustainability of the monitoring of POPs in the region will be ensured by the maintenance of these networks and the exchange of good practice and knowledge that has already started.

- B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF](#).

As the proposed project is of a scientific nature that does not directly impact people's productive activities, the gender equity issue takes a different dimension than for pure emissions reductions activities. The particular vulnerability to POPs exposure of women in childbearing age is taken into account in the design of the monitoring activities, notably by the incorporation of mother's milk as one core matrices of the POPs GMP.

The collection of mothers' milk samples will be conducted on the basis of the ethical clearance as required by WHO, and after signature of the statement of interest by both, health and environment sector. In addition, the POPs laboratory will apply the standards as established in "Good Laboratory Practices" (GLP) which includes in particular the laboratory management of human resources.

More generally, data generated through the project will allow a more accurate knowledge of human exposure and environmental concentration of POPs at the national, sub-regional and global levels, therefore enabling an assessment of the effectiveness of the measures adopted and the development of more efficient measures where relevant.

- B.4. Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

A program involving twelve countries has obvious logistical risks. The Basel Convention Coordinating Centre/Stockholm Convention Regional Centre in Uruguay will execute this project and will coordinate the activities in the region. WHO has been a long-term partner in POPs work in the region and has representatives in Fiji, Samoa and Kiribati. All countries have WHO focal points. With this the project builds on an already existing network with proven capacity to carry out the project activities. Based on the positive experience made during the global UNEP/GEF Laboratory Project, the LATU Laboratory in Uruguay was selected as regional hub for the POPs analysis training activities in the GRULAC region. The work accomplished by this laboratory during the first POPs monitoring project confirmed its capacity in this regard (??).

Some issues, in particular at the logistical level, were raised at the final workshop of the first POPs monitoring project (Barcelona, Spain, 21-23 March, 2011). These issues were further discussed during a brainstorming meeting on POPs monitoring (Geneva, Switzerland, 14-15 July, 2011) gathering the partners of the first POPs monitoring projects, and possible solutions were proposed. These will be further discussed during the sub-regional workshop to be held in component 1 of the project, and the issues will be addressed in the revised workplan and project arrangements.

The other major risk is the ability to do the laboratory work. As indicated above, the Stockholm/Basel Center in Uruguay has shown to be demonstrate their own performance but also coordinate analytical results for the basic POPs chemicals; only dioxin-like compounds analyses were done in an experienced international partner laboratory. It is therefore expected that the present set-up can be enabled to deliver analytical results for the newly included POPs. For Quality Assurance purpose, a number of samples will be analyzed twice at national laboratories and in an experienced partner laboratory.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Key stakeholders and beneficiaries are Governmental Ministries and Agencies including the national focal points for the Stockholm Convention, research institutions, and to a lesser extent private institutions. The main beneficiary is the Conference of the Parties to the Stockholm Convention and especially the Parties in the South-East Asian region. The participating countries will be able to provide significant input to Article 16 of the Stockholm Convention by providing sub-regional data to the effectiveness evaluation and the Global Monitoring Plan for POPs.

The main direct beneficiaries will be the participating laboratories receiving training and consumables/spares. Other direct beneficiaries are the environment and health sectors in all participating countries. *Jointly, they will collect/organize the collection of mothers' milk and blood samples for the GMP through the mothers donating the breast milk and blood.*

Ministries of Environment or other related institutions from the participating countries involved in the implementation of the monitoring component of the NIP will enhance their experiences in ambient air monitoring and interpretation of data.

Indirect beneficiaries are the general public since for most of the countries the first time, national data will be generated in a systematic and comparable way that will characterize their exposure to POPs. The ambient air data will provide information as to the "import" of POPs from neighboring regions and the human data will provide information as to the present exposure at the top of the food-chain. The staff operating the networks together with the laboratories in the region but also in cooperation with the expert laboratories will share experiences and mutually assist each other.

The Stockholm Regional Centre in Uruguay will be the executing agency. It will provide administrative and technical supervision in the implementation of the project. UNEP Chemicals will provide support to the Executing Agency and will closely liaise with the Stockholm Convention Secretariat, other co-funding partner, including the World Health Organization who is implementing a global mothers' milk survey.

Key stakeholders in the project will be ISO (International Organization for Standardization) and ILAC (International Laboratory Accreditation Cooperation) as well as IUPAC (International Union of Pure and Applied Chemistry) to guarantee that (other) internationally agreed standards are followed. In reverse, the results and criteria from the UNEP/GEF projects will feed into their decision documents and projects.

In order to provide highest technical standards, it is envisaged that the Executing Partner will subcontract the expert laboratories from Free University Amsterdam-IVM, the Netherlands, and The Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Spain, for training and mirror analysis of samples, and organization of inter-calibration studies. The WHO Reference laboratory for mothers' milk at Chemisches Untersuchungsamt Freiburg (CVUA Freiburg), Germany, will assist in matters related to this ore matrix. Further coordination will be done with the programs implementing air monitoring activities such as Environment Canada, RECETOX-Czech Republic.

B.6. Outline the coordination with other related initiatives:

Within UNEP, this project forms part of two projects under our Programme of Work (PoW) in the biennium 2012-2013 and beyond into the next Medium Term Strategy (MTS). The development of global guidelines and standards together with the interlaboratory comparison study is embedded in project 52-P5 "Schemes for reporting of progress in sound management of harmful substances and hazardous waste and tools for monitoring and assessment" under the priority area "Harmful Substances and Hazardous Waste". Output C "Capacity built and inventory of chemical analytical laboratories and their performances established for use in the chemicals and waste MEAs/international agreements" addresses the quality assurance/quality control aspect of chemical analytical laboratories.

The activities in the developing countries and the coordination with the Secretariat of the Stockholm Convention is demonstrated by the project 53-P3 "

The was conducted by Chemicals Branch of UNEP's Division of Technology, Industry and Economics from 2009 to 2011 within its project 52-P5.

This project will have direct linkages to the global new POPs GEF project and will use the guidelines developed under that project. In reverse, this project will contribute to the UNEP/GEF Global new Pops analytical project through experiences gained on the ground.

UNEP DTIE Chemicals Branch will assist the Executing Agency to coordinate with other UNEP/GEF regional projects on POPs monitoring, including the UNEP/GEF sister projects on Global Monitoring Plan of 12 initial and 10 new POPs in Africa, Asia, and the Pacific to be submitted to the GEF Secretariat soon.

The project will also contribute to the 6th round of the UNEP/WHO mothers' milk survey by providing data on POPs concentrations in mothers' milk in the Latin America and Caribbean region.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

C.1. Indicate the co-financing amount the GEF agency is bringing to the project:

UNEP will provide an in-kind co-finance of approximately 200,000 USD to the project. UNEP co-finance will focus on technical support and liaison with relevant institutions and programmes (e.g. the Stockholm Convention, GMP projects in other regions) and representation at key meetings.

C.2. How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The fifth thematic priority (Harmful Substances and Hazardous Waste) of the UNEP Mid Term Strategy has as its objective: *to minimize the impact of harmful substances and hazardous waste on the environment and human beings*. This MTS sets out the main areas of work of UNEP and is in line with UNEP's comparative advantage in the GEF. The UNEP strategy for GEF V is based on the three pillars of the UNEP MTS 2010-2013, which are described as follows:

- a) That States and other stakeholders have increased capacities and financing to assess, manage and reduce risks to human health and the environment posed by chemicals and hazardous wastes;
- b) That coherent international policy and technical advice is provided to States and other stakeholders for managing harmful chemicals and hazardous waste in an environmentally sound manner, including through better technology and best practices;
- c) That appropriate policy and control systems for harmful substances of global concern are developed and in place in line with States' international obligations.

All GEF proposed interventions in GEF V, whether POPs, mercury, chemicals or Ozone, are complementary to UNEP's Subprogram 5 (Harmful Substances and Hazardous Waste), executed by UNEP DTIE OzonAction and Chemicals Branches, for the years 2010 – 2013. The Mid Term Strategy for the years 2014-2017 is currently under development and will include the Subprogram 5 on Harmful Substances and Hazardous Waste), so continuous support for the project is ensured.


UNEP has Chemicals and POPs related staff capacity in the Regional Office for Latin American and the Caribbean (ROLAC), based in Panama City, Panama. The UNEP Regional Office for Latin America and the Caribbean will assist UNEP DTIE to identify further opportunities of cooperation with ongoing and planned activities in the region. UNEP DTIE and UNEP ROLAC have started to identify potential common activities on chemicals wastes and capacity building. Last but not least, experts from the UNEP DTIE and ROLAC offices will provide substantial input throughout the duration of this project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE <i>(mm/dd/yyyy)</i>
Her Excellency Diann BLACK LAYNE Ambassador and GEF NOFP, Ministry of Foreign Affairs Antigua and Barbuda	GEF Operational Focal Point	Ministry of Foreign Affairs	10.04.2012
Ms. Graciela CONESA General Program Coordinator, Ministry of Environment and Sustainable Development Argentina	GEF Operational Focal Point	Ministry of Environment and Sustainable Development	22.03.2012
Mr. Rickardo WARD Project Manager, Ministry of Environment and Drainage Barbados	GEF Operational Focal Point	Ministry of Environment and Drainage	14.03.2012
Mr. Rodrigo VIEIRA General Coordinator for External Financing, Ministry of Planning, Budget and Management, Secretaria de Assuntos Internacionais, Brazil	GEF Operational Focal Point	Ministry of Planning, Budget and Management	02.05.2012
Ms. Ximena GEORGE-NASCIMENTO Secretaria de Relaciones Internacionales, Ministerio del Medio Ambiente/ Ministry of Environment Chile	GEF Operational Focal Point	Ministry of Environment	29.03.2012
Mrs. Aljandra TORRES DROMGOLD Ministry of Environment, Ministry of Environment and Sustainable Development Colombia	GEF Operational Focal Point	Ministry of Environment and Sustainable Development	03.05.2012
Mr. Enrique MORET HERNANDEZ Director, Department for International Affairs, Ministry of Science Technology and Environment (CITMA) Cuba	GEF Political /Operational Focal Point	Ministry of Science, Technology and Environment (CITMA)	02.04.2012
H.E. Marcela AGUINAGA Minister of Environment/ Ministra de Ambiente, Ministry of Environment Ecuador	GEF Operational Focal Point	Ministry of Envirtonment	undated
Miss. Leonie BARNABY Senior Director, Ministry of Land and Environment Jamaica	GEF Operational Focal Point	Ministry of Land and Environment	19.03.2012
Ms. Claudia GRAYEB BAYATA Director General for North America, Asia Pacific and The Caribbean, Ministry of Finance and Public Credit Mexico	GEF Operational Focal Point	Ministry of Finance and Public Credit	14.03.2012
Mr. Jose Antonio GONZALEZ NORRIS Director of the International Cooperation and Negotiations Directorate, Ministry of Environment Peru	GEF Operational Focal Point	Ministry of Environment	14.03.2012
Mrs. Maria Valeria PEREZ GUIDA Advisor to Director, Ministry of Housing, Land Planning and Environment, National Directorate of Environment Uruguay	GEF Operational Focal Point	Ministry of Housing, Land Planning and Environment	14.03.2012

B. GEF AGENCY(IES) CERTIFICATION:

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	Date <i>(mm/dd/yyyy)</i>	Project Contact Person	Telephone	Email Address
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