

WORK PLAN BY THE NOMINATED STOCKHOLM CONVENTION CENTRES

Name of the Regional Centre: CETESB - Companhia de Tecnologia de Saneamento Ambiental

Work plan submitted by:

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This work plan covers the period from 1st September 2008 to 31st December 2009

1. Introduction and Background

Brazil signed the Stockholm Convention on Persistent Organic Pollutants on May 23rd of 2001, on the date it opened for signature and ratified the Convention on June 16th of 2004. As required in the Article 7 (1a,b) of the Convention, Brazil recognized its obligation to develop a National Implementation Plan (NIP) and to transmit it to the Conference of the Parties (COP) within two years of entry into force of the Convention, more specifically September 2006 (Article 26.2).

Brazil is the largest developing country in Latin America with an urban population estimated in 184 million people in 2007. Their continental dimension is characterized by significant regional differences in relation to political, administrative, economic, social and demography aspects. It has developed a large integrated economy in which chemicals production, trade and use form an important component. These factors represent significant challenges and efforts to protect human health and environment, and make the development of a NIP a complex task. The Ministry of Environment of Brazil (MMA) proposed to meet its obligation by developing the NIP in two phases:

- Provisional National Plan: a preparatory phase where the existing information available from the Government and stakeholders was composed to elaborate a provisional plan for transmission by the deadline.
- National Implementation Plan: the preparation of an update and more comprehensive plan involving a complete assessment of the country situation with regards the POPs: inventories, strategies and action plans for reduction and elimination of POPs, build sustainable capacity. These activities are object of a Full Size GEF Project for the development of a National Implementation Plan as a first step to implement the Stockholm Convention in the country, executed by MMA with the assistance of the United Nations Environment Programme (UNEP). The deadline is estimated for September 2009.

The information consolidated in provisional plan points to several problems and challenges to be deal in relation to persistent organic pollutants in Brazil, which can be resumed as:

- consolidation of the legal instruments to implement the regulatory framework;

- identification and characterization of contaminated sites;
- development of inventories on the production, use, trade, stockpiles and wastes of products listed in the Annexes of the Convention;
- identification of unintentional sources of POPs and determination of emission factors;
- development of a laboratorial infra structure and logistic to give support for the implementation of actions established in the convention.

In relation to the other countries of Latin America and Caribbean (GRULAC) although almost of them have signed and ratified the convention (exception Belize and Colombia), only Argentina, Bolivia, Chile, Ecuador, Mexico, Nicaragua, Peru and Uruguay had transmitted their National Implementation Plan.

Considering the problems reported in the NIPs relating to the implementation of the Convention in Brazil and in the region and considering the experience of CETESB acquired over its 40 years of existence in:

- Environmental Quality Control: monitoring and evaluation of air, water and soil quality; development and evaluation of technical proposals and environmental standards;
- Control of Pollution and its Sources: enforcement and monitoring pollution of sources; ordering action in contaminated sites;
- Environmental analysis: organic and inorganic compounds, fecal indicators and pathogens (bacteria, protozoan, virus), aquatic communities, ecotoxicology including genotoxicity, bioassays, field analysis;
- Emergencies: prevention, preparation for, and responses to spills and other environmental emergencies;
- Technology Transfer: dissemination of information and training practitioners of environmental protection techniques;
- Pollution Prevention: after the 1992 Rio Conference, CETESB set the goal to implement Agenda 21 and to promote sustainable development. During the last years it has implemented a new approach aiming at the source pollution prevention, as a complementary action to the enforcement mandate,

CETESB, a Nominated Regional Centre to support the Stockholm Convention, will contribute to increase the technical cooperation with and among countries by providing them with information, advice, and by stimulating research and training for the improvement of surveillance and quality control of POPs at the environment and to give support in the development of legislation and standards. This is an important activity to facilitate the exchange of information, experience and expertise among developing countries and countries with economies in transition, as well as to stimulate the integration process of various national actions towards self-reliance and to put in practice several activities recommended by the Convention.

2. Goals and Objectives

1. Goal/s

Technical assistance to developing countries from Latin America and Caribbean and countries of Portuguese language in the Stockholm Convention implementation for

capacity building in:

- POPs monitoring (PCBs, organochlorine pesticides and dioxin and furans) in the region;
- Identifying and managing contaminated sites and hazardous waste;
- Air pollution emission factors;
- Environmentally sound technologies for air pollution control.

2. Objectives

- To start up the dioxin and furans laboratory for analysis of environmental samples - air, ashes, soil and sediments - within one year to implement the source-based analytical data of unintentionally produced POPs;
- To strengthen six existing laboratories from GRULAC for monitoring PCBs and organochlorine pesticide in environmental samples - water, solid waste, soil, sediment, fish - in a 15 days laboratory practical training in the second trimester of 2009;
- To enhance the technical capacity in the country for analysis of POPs in human blood and milk;
- To promote technology transfer on identification and management of contaminated sites and hazardous waste, environmentally sound technologies for air pollution control and application of air pollution emission factors through training courses about one week duration within one year to strengthen the environmental agencies of the region in relevant aspects of Stockholm Convention;
- To facilitate the access of technical information at the CETESB website by countries from GRULAC by December 2009, preparing Spanish and English version.

3. Constraints and Resources

Constraints

- The difficulty to maintain a laboratory of dioxin and furans operating: maintenance of the equipment, difficulty in the importation of standards and reference material. To guarantee financial resources for the Lab operation the Centre intend to sell analyses and also obtain resources from Projects.
- The difficulty in the communication with other countries of the region. CETESB is a State Environmental Agency, and the contact of the Centre with the other countries from the region usually must be in the Federal sphere. To overcome this constraint the Centre intends to work very close to the Ministry of Environment of Brazil.
- The Portuguese language. Brazil is the unique country of GRULAC that speaks Portuguese with sometimes make difficult the communication with other countries from Spanish and English language, mainly for technical courses. To deal with these constraints all material of training will be given in the mother language of the participant and if necessary the courses will be translated.
- The financial resources to support air tickets and per diem of courses and lab training attendants. The Centre will apply a Project in the way to get these resources.

Resources

- Professional staff: CETESB employs 1,941 people across the São Paulo State, including the headquarters offices in São Paulo city, 36 regional offices and 15 laboratories. Our staff is highly qualified and technically trained and includes engineers, chemists, biologists, pharmacists, geologists, policy analysts, lawyers, computer specialists, technicians and others.
- Laboratory facilities: The CETESB laboratories have a basic infrastructure to perform physic-chemical analyses, microbiological and parasitological tests, hydrobiological analyses, toxicity and mutagenicity bioassays, toxicological analyses, sampling and field analyses, for all kind of environmental matrices. These labs are equipped with analytical instruments based on leading-edge technology and realize about 200,000 analyses per year. In concern with the physical chemical analyses, the focus of Stockholm Convention on POPs, the laboratories provide facilities, equipment and personnel needed for investigations conducted to support environmental enforcement efforts such as industrial effluents, industrial solid waste, contaminated soil, air emissions, air quality monitoring and ground water. Besides, these laboratories are in charge of analyzing samples for surface water, soil and ground water monitoring programs. They also operate as laboratories with experience in specialized analytical techniques: gas chromatography with ECD detector, gas chromatography / mass spectrometry (CG/MS/MS); TOX and EOX analyzer, for the detection of organochlorine pesticides lindane, endosulfan, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, hexachlorobenzene, mirex, DDT, toxaphene and PCB's (congeners 28, 52, 101, 118, 138, 153 e 180). At the moment CETESB is installing a CG/MSHR in a new building Lab, for analysis of dioxin and furans. The Air Emission Laboratory is involved in different tasks such as evaluating industrial processes and projects of air pollution control, execution and/or analysis of emission samplings in industrial sources of pollution, calibration of components of sampling systems in ducts and stacks chimneys and calculation of emission impacts of industrial sources of pollution of the air of the São Paulo State. CETESB has a vehicle emission laboratory that can make analysis of carbon monoxide, hydrocarbons, aldehydes and nitrogen oxides from light duty vehicles. CETESB's labs are recognized as excellence centres in Brazil and in Latin America. They carry out analyses in compliance with the most strict international quality standards and have 150 parameters accredited (NBR ISO/IEC 17025) by INMETRO. The analytical methodologies applied at the laboratories are in compliance with the methods established by ABNT (Brazilian Association for Technical Standardization) and international institutions, such as Standard Methods for Water and Wastewater (USA), USEPA, ISO (International Standardization Organization EU) and DIN (German Institute for Standardization-EU), Environment Canada.
- Contaminated sites: CETESB maintains a multidisciplinary investigation team, who conduct environmental drilling (Direct Push and Hollow Steam Auger), soil sampling, monitoring well installation, ground-water sampling, and non-invasive site investigation with geophysical equipment (GPR, EM-31, EM-34 and EM-61).
- Library: CETESB has a library, "Professor Doutor Lucas Nogueira Garcez", with about 37,000 publications (books, technical reports, journals, thesis, series, etc). It

is the most specialized and complete library in environmental pollution in Latin America, with more than 22 thousand consults per year, attending more than 6,000 users in 2003. It coordinates the REPIDISCA (Pan American Network of Information in Environmental Health) at South Region and São Paulo State.

- Office Equipment:
 - Personal computers installed with update software: 2,000
 - All-in-one printer: printer/copier/scanner/fax: 12
 - All-in-one printer: printer/photocopier/scanner: 03
 - Fax machines: 181
 - Scanners: 34
 - Corporative printers: 125
 - Multimedia projector: 23
 - Microphones: 21
 - Audio-visual records: Video cassette: 27; TV: 50; Film projector: 50.
- Installed and operational communication facilities: telephone, fax and internet connection (MPLS). All the areas of CETESB are interconnected by the Intranet, and have access to the Internet. The web site of CETESB shows relevant information about environmental quality: water quality reports (inland, recreational, groundwater), contaminated sites, regulation, guidelines, emergencies, cleaner production guides, etc.
- Meeting facilities: CETESB provides open courses and specialized practical training, as well as course by mail, for national and international public. For these purpose there are 3 classrooms that accommodate 25 persons and two auditoriums for meeting with fix chairs, one with capacity for 70 persons and other one for 217 persons. The classrooms and the auditoriums are very well equipped and count with a logistic support. CETESB has held many national and international meetings in the environmental field.
- Networks:
 - SPC (Sustainable Production and Consumption): CETESB and UNEP have reached an agreement for the establishment of an Information and Training Network on Sustainable Production and Consumption (SPC) for the Latin America and Caribbean region. This is going to be developed under the UN's Marrakech Process with the main aim of promoting sustainable patterns of consumption and production in this region. UNEP will be program manager and network coordinator while CETESB will work as an associate institution to the network, as well as a technical advisor responsible for feeding information and reviewing training courses on SPC. UNEP will provide the network server for installation at CETESB which is going to operate it. This CETESB-UNEP agreement was star Ted in July'2008.
 - ReLASC (Latin American Network on Prevention and Management of Contaminated Sites): CETESB is coordinating the implementation of a regional networking enterprise sustained by public and private organizations, which main purposes are to stimulate and give support to the production, diffusion and sharing of systematized knowledge and information on soil and groundwater contamination prevention, remediation, hazardous waste cleanup, and brown fields redevelopment. So far, Argentina, Brazil, Chile, Mexico and Uruguay are already partaking of the networking project.
 - RELAC (Network of Environment and Health Laboratories for Latin America and

Caribbean): CETESB is member of RELAC, a regional forum of interchange, analysis and information dissemination in quality assurance for environment and health laboratories. It is administrated by CEPIS (PAHO/WHO) and figures on professionals of all Latin America and Caribbean region that gives support each other in different analytical areas.

4. Strategy and Activities/Project

Strategy

- Assessing gaps and capacity building needs at the regional level to the topics of technical assistance of the Centre, namely: POPs analyses, identification and management of contaminated sites and hazardous waste, environmentally sound technologies for air pollution control and inventory of air pollution;
- Assessing the needs for dioxin and furans analyses in the region;
- Organizing technical courses to support Stockholm Convention implementation;
- Organizing laboratory practical training for POPs monitoring;
- Documents translation

Activities

Objective 1. To start up the dioxin and furans laboratory for analysis of environmental samples - air, ashes, soil and sediments - within one year to implement the source-based analytical data of unintentionally produced POPs

- to set up and give priority with the MMA to the demand for dioxin and furans analysis in national level at a first step and after in a regional level;
- to train CETESB professionals for air sampling;
- to prepare standard operating procedure for sampling and analysis;
- to acquire certificated reference material (CRM);
- to establish a maintenance contract for CGMS/HR and the peripheric;
- to establish quality assurance and quality control methods;
- to contract proficiency test;
- to prepare the lab for accreditation;
- to initiate the analysis in the environmental samples according the established with MMA.

Objective 2. To strengthen six existing laboratories from GRULAC for monitoring PCBs and organochlorine pesticides in environment samples - water, solid waste, soil, sediment, fish - in a 15 days laboratory practical training in the second trimester of 2009

- to consult state, national and regional spheres through the Environment Ministry of Brazil in relation the needs for POPs analysis training;
- to select the 6 training participants based in needs to strengthen the lab analysis in the region as well as in the laboratory infrastructure;
- to produce technical material in the adequate language for the participants;
- to train the analysts: sampling, sample preparation, clean up, analysis, reports, QA/QC;
- to discuss with the participants the process of laboratory accreditation.

Objective 3. To enhance the technical capacity in the country for analysis of POPs in human blood and milk.

- to set up and give priority with the MMA to the demand for PCBs and organochlorine pesticides in national level;
- to train CETESB professionals for PCBs and organochlorine pesticides analyses in human blood and milk;
- to prepare standard operating procedure for sampling and analysis;
- to acquire certificated reference material (CRM);
- to establish quality assurance and quality control methods;
- to contract proficiency tests;
- to validate the methods;
- to conduct analysis in human blood and milk samples according the established with MMA.

Objective 4. To promote technology transfer on identification and management of contaminated sites and hazardous waste, environmentally sound technologies for air pollution control and estimating the contribution of air pollution sources through training courses about one week duration within one year to strengthen the environmental agencies of the region in relevant aspects of Stockholm Convention

- to consult state, national and regional spheres through the Environment Ministry of Brazil in relation the needs to attend the following training courses:
 - Air pollutants emission factors;
 - Cleaner Production: a tool for sustainability;
 - Procedures for the management of contaminated sites;
 - Techniques for investigation of contaminated sites;
 - Environmental management of terrestrial transport of hazardous substances
 - Response actions for chemical emergencies;
 - Industrial solid waste management: characterization, classification, treatment and disposal techniques;
 - Technologies for air pollution control: particulate matter, gas, fume, and odour system verification.
- to establish a training agenda for the courses according with the demand obtained, setting up four courses for the period of this work plan;
- to produce course material in the adequate language;
- to search for financial resources to support the participation of courses attendants;
- to start up the training courses.

Objective 5. To facilitate the access of technical information at the CETESB website by countries from GRULAC by December 2009, preparing Spanish and English version (Clearance House Mechanisms).

- to translate the general information of CETESB website for English and Portuguese;
- to create at the website one link for the Centre;
- to select the technical material produced in CETESB related to Stockholm to be included at the Centre linkage.
- to integrate at website the ReLASC, RELAC and SPC networks.

5. Appendices, including budget and schedule

Appendix 1: Budget

ACTIVITIES	FUNDING SOURCES (U\$)				
	GEF	CETESB	MMA	JICA	TOTAL
1.Start up Lab. Dioxin and Furans	150,000.00	353,000.00	295,000.00	714,400.00	1,512,400.00
2. Strengthen Lab. GRULAC for monitoring PCBs and OCPs in environmental samples	21,500.00	9,200.00	-	-	30,700.00
3. To enhance analysis capacity for POPs analysis in human blood and milk	47,100.00	228,500.00	-	-	275,600.00
4. Technology transfer in technical topics of Stockholm Convention*	189,000.00	39,000.00	-	-	228,000.00
5. Clearance house mechanisms	60,000.00	-	-	-	60,000.00
TOTAL	467,600.00	629,700.00	295,000.00	714,400.00	2,106,700.00

*4 courses

Appendix 2: Schedule

ACTIVITIES	MONTHS							
	2	4	6	8	10	12	14	16
GEF Project								
Preparation and Submission	XX							
Approval		XX	XX					
Agreement with MMA								
Elaboration of an agreement with MMA	XX							
Approval of Agreement CETESB/MMA	XX							
Dioxin and Furan Labs								
Set up priorities of analysis with MMA	XX	XX						
Training air sampling		XX	XX					
SOP for sampling and analysis	XX	XX	XX					
Acquisition of CRM		XX	XX	XX				
Maintenance contract for CGMS/HR		XX	XX	XX				
QA/QC	XX	XX	XX	XX	XX			
Proficiency test (PT)					XX	XX	XX	
Prepare lab for the accreditation		XX	XX	XX	XX	XX	XX	XX
Analysis of environmental samples						XX	XX	XX

ACTIVITIES	MONTHS							
	2	4	6	8	10	12	14	16
Strengthen Lab.GRULAC for monitoring PCBs and OCPs in environment samples								
Set up needs in the region for POPs training	XX	XX						
Selection of the participants			XX	XX				
Production of technical material		XX	XX	XX				
Training course					XX			
Enhance technical capacity for POPs analysis in human blood and milk								
Set up priorities of analysis with MMA	XX	XX						
Training detection PCBs and OCPs in human blood and milk;		XX	XX	XX				
SOP for sampling and analysis	XX	XX	XX					
Acquisition of CRM		XX	XX	XX				
QA/QC	XX	XX	XX	XX	XX			
Proficiency test (PT)					XX	XX	XX	
Methods validation				XX	XX			
Analysis of human blood and milk						XX	XX	XX
Technology Transfer /Training Courses								
Search in the region the need of training in the topics of CETESB courses	XX	XX						
Select the 4 courses more demanded			XX					
Select the attendants for the courses			XX					
Establish a course agenda			X	X				
Prepare the technical material	XX	XX	XX	XX				
Financial support for travel and accommodation for the attendants	XX	XX	XX	XX				
Training course					XX	XX	XX	XX
Website CETESB Regional Center Stockholm Convention Spanish/English								
Select the material of CETESB website to be translated	XX	XX	XX	XX				
Build the website of CETESB / Regional Center of SC in Spanish and English				XX	XX	XX	XX	
Link the website with other networks (ReLASC, RELAC and SCP)						XX	XX	XX

Appendix 3: Parties being served by the centre during the period covered by the work plan

The countries from GRULAC and countries of Portuguese Language selected to receive the technical assistance according the needs demanded.

Appendix 4: Ongoing projects, funding sources, partner agencies

Project: Supporting the implementation of CETESB as a Regional Centre for Stockholm Convention on POPs

Funding sources: GEF, MMA, JICA, CETESB

**Partner
agency**



GEF

THE GEF TRUST FUND

PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

Submission Date:

Re-submission Date:

PART I: PROJECT IDENTIFICATION

GEFSEC PROJECT ID¹:

GEF AGENCY PROJECT ID:

COUNTRY(IES): Regional GRULAC -Latin America and Caribbean and Countries of Portuguese Language

PROJECT TITLE: Technical assistance for capacity building in POPs managing and monitoring.

GEF AGENCY(IES): (select), (select), UNDP

OTHER EXECUTING PARTNER(S): Environment Ministry

GEF FOCAL AREA (S): Persistent Organic Pollutants, (select), (select)

GEF-4 STRATEGIC PROGRAM(S): POPs - SP1

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N/A

INDICATIVE CALENDAR	
Milestones	Expected Dates
Work Program (for FSP)	N/A
CEO Endorsement/Approval	
GEF Agency Approval	
Implementation Start	
Mid-term Review (if planned)	
Implementation Completion	

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: Technical assistance to developing countries from Latin America and Caribbean and countries of Portuguese language in the Stockholm Convention implementation for capacity building in: POPs monitoring, identifying and managing contaminated sites and hazardous waste, air pollution emission factors and

¹ Project ID number will be assigned initially by GEFSEC.

environmentally sound technologies for air pollution control.								
Project Components	Indicate whether Investment, TA, or STA**	Expected Outcomes	Expected Outputs	Indicative GEF Financing*		Indicative Co-financing*		Total (\$)
1. Stabling capacity of dioxin and furans analysis of environmental samples	STA	Laboratory set up for analysis of dioxin and furans in environmental samples (air, ashes, soil and sediments) -	1. Four staff trained 2. Twenty analysis of dioxin and furans 3. lab prepared for accreditation					
2. Strengthening of laboratories from GRULAC for PCBs and organochlorine pesticides	TA	15 days laboratory practical training	1. Six GRULAC professionals trained in analysis on PCBs and organochlorine pesticides					
3. Enhancing the technical capacity in the country for analysis of POPs in human blood and milk.	STA	Laboratory set up for PCBs and organochlorine pesticides analyses in human blood and milk	1. Three staff trained 2. Two hundred analysis of blood and milk					
4. Promoting technology transfer for the environmental agencies of the GRULAC and countries of portuguese language in relevant aspects of Stockholm	TA	Four training courses about identification and management of contaminated sites and hazardous waste, environmentally sound technologies for air pollution control and estimating the	1. Eighty professionals trained 2. Strengthening the environmental agencies of the region in relevant aspects of Stockholm Convention					

Convention		contribution of air pollution sources						
5. Clearance house mechanism	TA	Creating at the website one link for the Regional Centre Translating the general information of CETESB website for English and Spanish	A. General information of CETESB and Regional Centre in English and Spanish B. Information exchange C. Public Awareness ??					
. Project management								
Total project costs								

* List the \$ by project components. The percentage is the share of GEF and Co-financing respectively to the total amount for the component.

** TA = Technical Assistance; STA = Scientific & technical analysis.

B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation*	Project	Agency Fee	Total
GEF				
Co-financing				
Total				

* Please include the previously approved PDFs and planned request for new PPG, if any. Indicate the amount already approved as footnote here and if the GEF funding is from GEF-3.

C. INDICATIVE CO-FINANCING FOR THE PROJECT (including project preparation amount) BY SOURCE and BY NAME (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Amount
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Project Government Contribution	(select)	
GEF Agency(ies)	(select)	
Bilateral Aid Agency(ies)	(select)	
Multilateral Agency(ies)	(select)	
Private Sector	(select)	
NGO	(select)	
Others	(select)	
Total co-financing		

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES)*

GEF Agency	Focal Area	Country Name/ Global	(in \$)			
			Project Preparation	Project	Agency Fee	Total
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
(select)	(select)					
Total GEF Resources						

* No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

PART II: PROJECT JUSTIFICATION

SC 1- 15

BRAZIL SIGNED THE STOCKHOLM CONVENTION (SC), RATIFIED IT ON JUNE 16, 2004

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Accordingly to the Stockholm Convention (SC) in its Article 12 - Technical Assistance, there are two paragraphs which basis the issue; they are:

Paragraph 1 is written “The Parties recognize that rendering of timely and appropriate technical assistance in response to requests from developing country Parties and Parties with economies in transition is essential to the successful implementation of this Convention.”

Paragraph 4 is written “ The Parties shall establish, as appropriate, arrangements for the purpose of providing technical assistance and promoting the transfer of technology to developing country Parties and Parties with economies in transition relating to the implementation of this Convention. These arrangements shall include regional and sub regional centres for capacity-building and transfer of technology to assist developing country Parties and Parties with economies in transition to fulfill their obligations under this Convention. Further guidance in this regard shall be provided by the Conference of the Parties.”

As a follow up, at its first meeting the Conference of the Parties adopted the Guidance on technical assistance and transfer of environmentally sound technologies in its paragraph 10 of [SC 1/15](#) , areas of technical assistance and transfer needs and priorities are identified. So, the activities of this project is related to all of them, mainly: 1. item (c) about training for decision-makers, managers and personnel responsible for issues related to the Convention in (i)Persistent organic pollutants identification;(ii)Technical assistance needs identification; (vi)Risk assessment and management of polychlorinated biphenyls (PCBs), dioxins and furans; (viii) Development of pollutant release and transfer registers; 2. Item (d) The development and strengthening of research capacity at the national, subregional and regional levels, including: (i) The development and introduction of alternatives to persistent organic pollutants, with special emphasis on reducing the need for specific exemptions; (ii)The training of technical personnel. 3. item (e) The development and establishment of laboratory capacity, including the promotion of standard sampling and analysis procedures for the validation of inventories, 3. item (f)The development, implementation and enforcement of regulatory controls and incentives for the sound

management of persistent organic pollutants; Item (g) The identification and disposal of persistent organic pollutant wastes, including transfer of environmentally sound technologies for the destruction of such wastes; item (h) The identification and promotion of best available techniques and best environmental practices a Item (i) The identification and remediation of sites contaminated with persistent organic pollutants; item (k) The promotion of awareness-raising and information-dissemination programmes, including awareness-raising among the general public, of issues related to the Convention; and item (m) Effectiveness evaluation, including monitoring of levels of persistent organic pollutants.

At its second meeting the Conference of the Parties adopted terms of reference for regional and sub regional centres for capacity-building and transfer of technology under the Stockholm Convention as well as criteria for evaluating their performance . [SC-2/9](#): Technical assistance - Annex I: Terms of reference for regional and subregional centres for capacity-building and transfer of technology under the Stockholm Convention and Annex II: Criteria for evaluating the performance of regional or subregional centres for capacity-building and technology transfer

At its third meeting the Conference of the Parties adopted terms of reference for the process of selecting regional and sub regional centres for capacity-building and transfer of technology. [SC-3/12](#): Terms of reference for the selection regional and subregional centres for capacity-building and the transfer of environmentally sound technologies under the Stockholm Convention and Annex: Terms of reference for the selection regional and subregional centres for capacity-building and the transfer of environmentally sound technologies under the Stockholm Convention.

There are 12 nominated regional centre of SC in the world. From GRULAC – countries form Latin America and the Caribbean there are four regional nominated centre of SC : National Centre for Environmental Research and Training(CENICA) Mexico , Centro de Investigacion e Informacion de Medicamentos y Toxicos (CIIMET),Facultad de Medicina, Universidad de Panamá - Panamá , Basel Convention Regional and Coordinating Centre Technological Laboratory of Uruguay (LATU) Uruguay and CETESB – Companhia de Tecnologia de Saneamento Ambiental do Estado de São Paulo (CETESB) in Brazil. These centres were nominated on November 30th of 2007

Brazil is made up of 26 states and a federal district with a population of about 184 million people. Cetesb is in Sao Paulo, which is the most important state in brazil with a population of 40 million people. Due to Brazil's size, its regional differences and varied industry, our market is supplied with a large number of chemical products which are widely traded and used, and pops are among them .

Cetesb is an organization which has been working on environmental protection for forty years and its mission is to improve and assure the quality of Sao Paulo state's environment in order to achieve social and economic sustainable development. Since it has been created in 1976, Cetesb has been increasing its actions. So, nowadays, in order to achieve our mission, cetesb perform its action in different fields.

1. Control of pollution and its sources- it enforces regulations and monitors sources of pollution
2. Environmental quality control: environmental air quality control - it monitors and evaluates the air quality by automatic and manual control and it creates more than 200,000 (two hundred thousand) data per year; water quality in lakes, rivers, groundwater, beaches and sediments quality in almost 400(four hundred) it creates 80.000 (eighty thousand) data per year; and soil quality and development and evaluation of technical proposals and environmental standards;
3. Environmental analysis: Cetesb carries out around 200.000(two hundred thousand) analyses of different kinds such as chemicals, biological, ecotoxicological, toxicological and microbiological per year. Cetesb has got accreditation from ISO 17025 for around 200 assays ;
4. Emergencies: Cetesb works on prevention, preparation and responses to spills and other environmental emergencies
5. Technology transfer: Cetesb disseminates information for national and international level and provides training in a variety of environmental protection techniques. each year, about one thousand people attend by these trainings
6. International cooperation - cetesb keeps international cooperation with environmental agencies in Canada, Usa, Germany And Japan.
7. Cetesb also cooperates with four world networks, such as RELASC-stands for in english latin-american prevention and control on soil and groundwater contamination network - Requilac stands for in english latin american and caribbean chemical emergency response network - SPC - sustainable production and consumption information network for latin america and the Caribbean network of regional governments for sustainable development
8. Pollution prevention: after the 1992 rio conference, cetesb set the goal to implement agenda 21 and to promote sustainable development. during the last years it has implemented a new approach aiming at the source pollution prevention, as a complementary action to the enforcement mandate.

Cetesb is a well structured organization with a large staff composed of 1941(one thousand and forty-one) employees of different backgrounds such as engineers, chemists, biologists, pharmacists, geologists, policy analysts, lawyers, computer specialists, technicians, and operators. It has 37 regional offices and 15 labs.

This project is based on the principles of Article 12 of the Stockholm Convention about technical assistance

so, this project aims to provide technical support to developing countries in Latin America and in The Caribbean and to Portuguese speaking countries.

In order to assist the countries to build their capacity to the Stockholm Convention , Cetesb as a nominated regional centre will take the following actions:

- it will provide laboratories with the necessary know-how to monitor POPS (PCBS, chlorinated organic pesticides and dioxin and furans)
- it will train technicians to identify and manage contaminated sites and hazardous waste
- it will define air pollution emission factors
- it will devise guidance to apply environmentally sound technologies for air pollution control.

CETESB, a Nominated Regional Centre to support the Stockholm Convention, will contribute to increase the technical cooperation with and among countries by providing them with information, advice, and by stimulating research and training for the improvement of surveillance and quality control of POPs at the environment and to give support in the development of legislation and standards. This is an important activity to facilitate the exchange of information, experience and expertise among developing countries and countries with economies in transition, as well as to stimulate the integration process of various national actions towards self-reliance and to put in practice several activities recommended by the Convention.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

Decision SC-2/9 in its Paragraph 3 of Annex I establishes that each centre, in accordance with its area of expertise, may be entrusted by the Conference of the Parties to the Stockholm Convention with the implementation of specific tasks related to priorities identified in a particular region or subregion being served by centre. The Paragraph 9 of the same Decision settles: *“ Each centre will therefore have to establish objectives and a concrete work plan taking into consideration the availability of resources. An analysis of national implementation plans of the Parties in the region should serve as the primary basis of the work plan, which should be kept continuously under review.”*

In elaborating its Work Plan, where the present project is supported, CETESB considered the information furnished by Environmental Ministry of Brazil as well as the information of the Parties available at Stockholm convention website.

Latin America and Caribbean region (GRULAC) includes 33 countries; out of them 29 are Parties of POPs Convention. The article 7 of the POPs Convention establishes each Party shall transmit its implementation plan to the Conference of the Parties within two years of the date on which this Convention enters into force for it. Eleven countries (Antigua and Barbuda, Argentina, Barbados, Bolivia, Chile, Ecuador, Mexico, Nicaragua, Peru, Saint Lucia and Uruguay), that correspond to 35 % of GRULAC Parties, have already transmitted their National Implementation Plan (NIP) according data available at Stockholm Convention website. In relation the remaining countries 38% of them has the deadline over and 28% are within the time to transmit the NIP.

The priorities identified at the NIPs transmitted are listed below:

- Dioxins and Furans (PCDD/PCDF): reduction of emission, promotion BAT/BEP, Inventory (75%);
- PCBs – inventory, management and elimination (75%);
- Public information, awareness and education (75%);
- Stockpiles and wastes of POPs: reduction, elimination, hazardous risk, Environmentally Sound Management (63%);
- Registry and Inventory of POPs / PRTR – develop / maintain / updating (38%);
- Monitoring /Analytical capacities for POPs (38%);
- Prevention and management of contaminated sites (25%);
- Legislation, Policies and Institutional Strengthening (25%).

In relation to Brazil although the country has not yet transmitted its NIP, it was elaborated a Provisional National Plan (first phase of NIP development), where the information consolidated points to several problems and challenges to be dealt in relation to persistent organic pollutants in Brazil, which can be summed up as:

- consolidation of the legal instruments to implement the regulatory framework;
- identification and characterization of contaminated sites;
- development of inventories on the production, use, trade, stockpiles and wastes of products listed in the Annexes of the Convention;
- identification of unintentional sources of POPs and determination of emission factors;
- development of a laboratorial infra structure and logistic to give support for the implementation of actions established in the convention.

The Project designed aims to qualify the Parties in POPs identification, giving support for monitoring and inventory activities in different matrix, and to build capacity in subjects of concern in Articles 5 and 6 of Stockholm Convention (management of wastes and stockpiles, BAT/BEP,

contaminated sites, unintentionally produced POP).

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS:

According to described by GEF-4 there are three strategic programs:

Strategic Program 1: Strengthening Capacities for NIP Implementation

Strategic Program 2: Partnering in Investments for NIP Implementation

Strategic Program 3: Partnering in the Demonstration of Feasible, Innovative Technologies

and Best Practices for POPs Reduction

Therefore, this project is expected to contribute to Strategic Program 1: Strengthening Capacities for NIP Implementation. As it was set forth in Part A - this project is based on the principles of Article 12 of the Stockholm Convention that it is about technical assistance.

So, this project aims to provide technical support to developing countries in Latin America and in the Caribbean and to Portuguese speaking countries and it will be expected to strengthen and sustainable the administrative capacity, including chemicals management administration within the central government in supported countries.

In order to build upon and contribute to strengthening the Latin America and in the Caribbean GRULAC and Portuguese language countries' s foundational capacities for sound management of chemicals more generally, CETESB project plans to develop five main objectives :

1. To prepare the process to start up the dioxin and furans laboratory within a period of one year - analysis of environmental samples - air, ashes, soil and sediments.
2. To strengthen six existing laboratories from GRULAC. CETESB intends to offer six participants a 15 fifteen day practical training course including sampling, sample preparation, cleaning up, analyses, reports, quality assurance and quality control which it will enable them to monitor PCB and chlorinated organic pesticides in environmental samples.
3. To enhance Brazilian's technical capacity to analyze PCBS and organ chlorine

pesticides presence in human blood and milk.

4. To promote technology transfer from GRULAC. CETESB intends to offer four training course to GRULAC and Portuguese speaking countries in order to enable them to deal with their environmental problems caused by pops, within next year. Each training course will last one week and it will be attended by 20 participants.
5. To translate to Spanish and English technical information at the CETESB website to GRULAC countries and PORTUGUESE speaking countries.

So, this project will contribute to implement the GRULAC and Portuguese countries Stockholm Convention NIPs in a sustainable, effective and comprehensive manner.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

As the present project involves technical assistance and capacity building some Projects and activities were identified related to the activities of the Centre:

- “Assessment of existing capacity and capacity building needs to analyze POPs in developing countries” – This Project was GEF funded and developed by UNEP Chemicals Branch of the Division of Technology, Industry and Economics (DTIE). The information gained in this project will form the basis for laboratory training.
- “Supporting the Implementation of the Global Monitoring Plan of POPs in Latin America and Caribbean States (GRULAC) – This Project was GEF CEO approval for the PIF on October. The objective of the Project is build capacity in GRULAC countries to contribute with national POPs analysis to the reporting under the Global Monitoring Plan of POPs. The technical assistance of the Regional Centre proposed in the present Project will complete the activities of the GMP project.
- “Establishment of PCB Waste Management and Disposal System” – This Project is in the phase of CEO Endorsement/Approval. This project is being developed by the Government of Brazil with the assistance of the World Bank and has as objective to enhance the capability to manage and dispose of PCB oils, PCB containing equipment and other PCB waste in a sustainable manner in order to achieve timely compliance with the Stockholm Convention requirements for PCB management, and to minimize risk of PCBs exposure to the population and the environment.
- SPC (Sustainable Production and Consumption Network): CETESB and UNEP have reached an agreement for the establishment of an Information and Training Network on Sustainable Production and Consumption (SPC) for the Latin America and Caribbean region. This is going to be developed under the UN's Marrakech Process with the main aim of promoting sustainable patterns of consumption and production in this region. UNEP will be program manager and network coordinator while CETESB will work as an associate institution to the network, as well as a technical advisor

responsible for feeding information and reviewing training courses on SPC. UNEP will provide the network server for installation at CETESB which is going to operate it. This CETESB-UNEP agreement was signed in July 2008.

- RELASC (Latin American Network on Prevention and Management of Contaminated Sites): CETESB is coordinating the implementation of a regional networking enterprise sustained by public and private organizations, which main purposes are to stimulate and give support to the production, diffusion and sharing of systematized knowledge and information on soil and groundwater contamination prevention, remediation, hazardous waste cleanup, and brown fields redevelopment. So far, Argentina, Brazil, Chile, Mexico and Uruguay are already partaking of the networking project.
- - RELAC (Network of Environment and Health Laboratories for Latin America and Caribbean): CETESB is member of RELAC, a regional forum of interchange, analysis and information dissemination in quality assurance for environment and health laboratories. It is administrated by CEPIS (PAHO/WHO) and figures on professionals of all Latin America and Caribbean region that gives support each other in different analytical areas.

E. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :

GEF support is required to guarantee the actions of CETESB as regional Centre for GRULAC and countries with Portuguese language. The Project gives emphasis to capacity building for POPs analysis, training for management of wastes, stockpiles, contaminated sites and inventories, as well as to facilitate the access of technical information. These are topics essential to the success of Stockholm Convention implementation to developing country Parties and Parties with economies in transition to the successful implementation of the Convention. Without GEF involvement in the Project, the technical assistance and the technology transfer to these Parties will be prejudice and consequently it will more difficulty to attend the objectives of the Convention.

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MEASURES THAT WILL BE TAKEN:

According to the five described proposals objectives there are some risks that might be prevent, as summed up:

There are two main difficulties to maintain a laboratory of dioxin and furans operating: 1. maintenance of the equipment, 2. difficulty in the importation of standards and reference material. In order to guarantee financial resources for the Lab operation, the Centre intend to sell analyses and also obtain resources from Projects.

To meet the second and third objectives which are to strengthen six existing laboratories from GRULAC and to promote technology transfer from GRULAC, there are two main difficulties: 1. First it is the Portuguese language. Brazil is the GRULAC unique country that speaks Portuguese so it may become harder the communication with Spanish and English countries speaking, mainly for technical courses. To deal with these constraints all training material will be provided with two languages, Spanish and English, and if it is necessary the courses will be translated. 2. Second difficulty is on the contact with others Brazil's States and GRULAC countries: usually, it is carried out by the Federal sphere and although CETESB has some international cooperation projects, CETESB is the Sao Paulo State Environmental Agency and as a Regional Centre of Stockholm Convention must have to become linked with Brazil's states and Latin America and Caribbean countries. In order to facilitate and to get going the whole actions the Centre – CETESB intends to work very close to the Brazil's Environment Ministry to get contact with the GRULAC countries by means of an official agreement with MMA.

G. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

The Project provides the tools to developing country Parties and Parties with economies in transition, to develop and strengthen their capacity to implement part of their obligations under this Convention. The knowledge acquired will facilitate the Parties with the monitoring and inventory activities, sound management of chemicals, wastes, stockpiles and contaminated, and consequently help them to establish their priorities for NIP development and implementation. This process generates global benefits since higher the number of Parties in compliance with the Convention, more efficient the measures for reduction and elimination of intentional and unintentional POPs production and consequently lower the human risks associated with these chemicals. Parties that receive technical assistance can multiple the knowledge strengthening more the subregion and region.

H. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

GEF has a large experience in capacity building Projects in several developing country Parties and Parties with economies in transition. GEF is still the principal entity entrusted with the operations of the financial mechanisms. The decision SC-1/16 - Technical assistance: regional and subregional centres. In its Paragraph 1(f) mentions the centres should have access to the resources of the financial mechanisms of the Convention. The Paragraph 31 of the Decision SC-2/9 – Technical Assistance also adds:

“Activities in the area of capacity-building and the promotion of transfer of technology undertaken by regional and subregional centres to assist developing country Parties and Parties with economies in transition in the implementation of the Convention according to Article 12 of the Convention may be funded as appropriate and as mutually agreed through the financial mechanism of the Convention which was established under Article 13 and consequently must be consistent with the guidance to the financial mechanism adopted by the Conference of the Parties in its decision SC-1/9 and set forth in the annex to that decision.”

**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 [country endorsement letter\(s\)](#) or [regional endorsement letter\(s\)](#) with this template).

<i>(Enter Name, Position, Ministry)</i>	Date: <i>(Month, day, year)</i>
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<i>(Enter Name, Position, Ministry)</i>	Date: <i>(Month, day, year)</i>
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B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.	
<i>Name & Signature</i> GEF Agency Coordinator	Project Contact Person
Date: <i>(Month, Day, Year)</i>	Tel. and Email:
<i>Name & Signature</i> GEF Agency Coordinator	Project Contact Person
Date: <i>(Month, Day, Year)</i>	Tel. and Email: