REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project
THE GEF TRUST FUND

GEF

Submission Date: August 26, 2008
Re-submission Date:

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID:
GEF AGENCY PROJECT ID: 3645
COUNTRY(IES): Nicaragua
PROJECT TITLE: Improved Management and release containment of POPs Pesticides in Nicaragua
GEF AGENCY(IES): UNDP,
OTHER EXECUTING PARTNER(S):
GEF FOCAL AREA(S): Persistent Organic Pollutants,
GEF-4 STRATEGIC PROGRAM(S): POPs SP-1, POPs SP-2
NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

Expected Calendar	
Milestones	**Dates**
Work Program (for FSP)	(actual)
GEF Agency Approval	Sept 2008
Implementation Start	Oct 2008
Mid-term Review (if planned)	
Implementation Completion	April 2011

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: Minimize risk to humans and the environment of exposure to POPs Pesticides through strengthened governmental, institutional and stakeholder capacity for life-cycle management of these substances.

Project Components	Indicate whether Investment, TA, or STA**	Expected Outcomes	Expected Outputs	GEF Financing*		Co-financing*		Total ($)
				($)	%	($)	%	
1. Enhanced institutional capacity for life-cycle management of POPs to enable Nicaragua to meet its Stockholm Convention obligations.	TA	**A** Strengthened legal and regulatory framework for POPs **B** POPs / chemicals legislation enforcement capacity Strengthened **C** Sustainability of chemical management in public institutions increased	**A.1** existing laws updated to address gaps in life cycle management **A.2** Legal prosecution system assessed. **B.1** Training programme for Environmental inspectors, custom official, agricultural extension workers developed and implemented. **B.2** National POPs Pesticide inventory Improved **C.1** Mainstreaming of Sound Management of Chemicals into national development planning. **C.2** Strengthened inter-ministerial coordination body for chemicals management.	300,000	46.1	350,500	53.9	650,500
2. Reduced risk of exposure to people and the environment to POPs including exposure from	TA and Investment	**D.** Improved management and disposal of obsolete pesticide stocks	**D.1** Feasibility study for recollection and safe storage of confiscated POPs pesticides conducted **D.2** Technical	440,000	21.3	1,624,400	78.7	2,064,400

contaminated sites.		**E** Improved Planning and Remediation of Contaminated sites. **F** Food security pilot project at lake Managua implemented.	guidelines for safe handling, storage and final disposal of POPs Pesticides developed. **E.1** Comprehensive training programme for remediation planning and execution undertaken. **E.2** Technical Guidelines for remediation of contaminated sites developed **E.3** National field verification Plan with ranking of known contaminated sites improved and updated. **E.4** Remediation of Coquinsa / Shell contaminated site. **E.5** Remediation plan for Hercasa **E.6**. Financing plan with CABEI for Hercasa site. **E.7** Feasibility Study for el Picacho Airport. **F.1** Dietary advice programme to people exposed to POPs contamination at Lake Managua.					
3. Enhanced awareness by stakeholders and civil society.	TA	**G** Enhanced awareness by stakeholders and civil society.	**G1.** Communication strategy developed and implemented. **G2.** Awareness raising material for project stakeholders about best practices for reducing human and environmental exposure to POPs. **G3.** Documentation of lessons learned and best practices.	80,000	57.1	60,000	42.9	140,000
4. Project management				80,000	50.0	80,000	50.0	160.000
Total Project Costs				900,000		2,114,900		3,014,900

* 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. FINANCING PLAN SUMMARY FOR THE PROJECT ($)

	*Project Preparation**	*Project*	*Agency Fee*	*Total at CEO Endorsement*	*For the record: Total at PIF*
GEF	(from GEF-3) 45,000	900,000	94,500	1,039,500	
Co-financing	28,000	2,114,900		2,142,900	

Total	73,000	3,014,900	94,500	3,182,400	

* Please include the previously approved PDFs and PPG, if any. Indicate the amount already approved as footnote here and if the GEF funding is from GEF-3. Provide the status of implementation and use of fund for the project preparation grant in Annex D.

C. SOURCES OF CONFIRMED CO-FINANCING, including co-financing for project preparation for both the PDFs and PPG. (expand the table line items as necessary)

Name of co-financier (source)	*Classification*	*Type*	*Amount ($)*	*%**
Shell Nicaragua	Private Sector	Cash	1,524,400	71,1
Government of Nicaragua	Nat'l Gov't	In-kind	516,000	24.1
MARENA	Nat'l Gov't	Cash	20,000	0.9
SAICM QSP	Multilat. Agency	Cash	70.500	3.3
UNDP	Impl. Agency	In-kind	12,000	0.6
	(select)	(select)		
	(select)	(select)		
Total Co-financing			2,142,900	100%

* Percentage of each co-financier's contribution at CEO endorsement to total co-financing.

MARENA has been in close negotiation with the Central American Bank for Economic Integration (CABEI), and it is expected that a non-defined amount will be included in their 2009 budget for the activities in the Hercasa / Pennwalt site.

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY(IES) OR COUNTRY(IES)

N/A

E. PROJECT MANAGEMENT BUDGET/COST

Cost Items	*Total Estimated person weeks*	*GEF ($)*	*Other sources ($)*	*Project total ($)*
*Local consultants**	240	60,000	40,000	100,000
*International consultants**				
*Office facilities, equipment, vehicles and communications***		20.000	40,000	60,000
*Travel***				
Total		**80,000**	**80,000**	**160,000**

* Provide detailed information regarding the consultants in Annex C.

** Provide detailed information and justification for these line items.

It is considered important to have access to a dedicated utility vehicle given that presence at the national level would be important to get a proper outreach of the project. Chemical Safety department in MARENA does not currently have access to a vehicle.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	*Estimated person weeks*	*GEF($)*	*Other sources ($)*	*Project total ($)*
*Local consultants**	500	250,000		250,000
*International consultants**	50	175,000		175,000
Total	550	425,000		425,000

* Provide detailed information regarding the consultants in Annex C.

Note: Technical Assistance from other sources is mainly the time of people working in Ministries and Private Companies.

G. DESCRIBE THE BUDGETED M&E PLAN:

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team with support from UNDP/GEF. A Project Inception Workshop will be held within

the first three months of project implementation with the full project team, relevant government counterparts, key counterparts and UNDP. A Project Steering Committee including the government, UNDP, and other stakeholders will be constituted at project inception and will meet quarterly to review project progress, provide strategic guidance, and approve annual work plans and budgets.

Day to day monitoring of implementation progress will be the responsibility of the Project Manager and National Project Director. The Project Manager will, with assistance of international expertise, develop a project Monitoring and evaluation system. This will be validated by the government after which baseline data will be compiled. This baseline will be the bench mark against which progress of the project will be monitored.

The information and outreach material developed, particularly the lessons learned sections will also to some extent provide tools for evaluation. These sections will be partly based on review and evaluation findings and their wide distribution will provide feed-back, further providing data on the impacts of the project.

An international independent evaluator will conduct a terminal evaluation with a lessons-learned section for wide distribution to other countries planning projects under the POPs focal area. The Final Evaluation will take place three months prior to the Terminal Tripartite Review meeting and will focus on the wider impacts of the project activities. The final evaluation will also review the sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation shall also provide recommendations for follow-up activities.

Financial Monitoring

Financial monitoring and adherence to adopted yearly budgets will be controlled through annual project audits. These audits will be done as per standard procedures for Nationally Executed projects as in force for UNDP CO in Nicaragua.

The financial audits will in addition to ensure adherence to bidding and other procedures, emphasize the cost – effectiveness of the action undertaken. The financial audits will further validate the input utilization or '"budget-delivery" which may to a certain degree be used for monitoring the implementation efficiency or speed of the project.

The Monitoring and Evaluation plan and budget can be found in the table below. Budgeted M&E activities have been included in Component 1 of the project.

Type of M&E activity	**Lead responsible party in bold**	**Budget (indicative)**	**Time frame**
Inception Report	Project Implementation Team	None	At the beginning of project implementation
Development of M&E system	Project team, government executing agency	10,000	At the beginning of project implementation
Baseline and update agreed monitoring variables	Project team, M&E expert, Project Steering Committee	10,000	First quarter of project implementation.
Project Implementation Review (PIR)	The Government, Implementing Agency (IA) Country Office, National Executing Agency, Project Team, IA Task Manager, and Target Groups	None	Every year, at latest by July of that year
Implementing Agency (IA) annual reports	The Government, IA Country Office, National Executing Agency, Project Team, IA Task manager, and Target Groups	None	Every year
Frequent Progress reports	Project Manager	None	To be determined by Executing Agency
Terminal Evaluation, including lessons learned	GEF Secretariat, Project team, IA headquarters and Task Manager, IA Country Office, National Executing Agency	20,000 + government in-kind	At the end of project implementation

Terminal Report	IA Country Office, IA Task Manager, Project Team	None	At least one month before the end of the project
Audit	National Executing Agency, IA Country Office, Project Team	10,000 (total for project duration)	Yearly
TOTAL		**50,000 US$**	

PART II: PROJECT JUSTIFICATION

A. DESCRIBE THE PROJECT RATIONALE AND THE EXPECTED MEASURABLE GLOBAL ENVIRONMENTAL BENEFITS:

Nicaragua signed the Stockholm convention on Persistent Organic Pollutants (POPs) in May 2001 and ratified it in December 2005. Nicaragua developed its National Implementation Plan in 2004-6. It was endorsed by the government and was submitted to the Convention Secretariat in April 2006, as the second country in Latin America and the Caribbean. Nicaragua has established a preliminary inventory of POPs chemicals and identified Adjustment of the legal Framework, Institutional Strengthening, Elimination of POPs obsolete pesticide stocks and updated information on and remediation of contaminated sites among their NIP priorities and action plans.

Nicaragua has historically been and continues to be heavily dependent on pesticides to produce its export cash crops, which, in turn, make an important contribution to the country's economic growth. Nicaragua's use of pesticides had been one of the highest globally on a per capita basis. According to Nicaragua's 1999 Agenda 21 National Profile, 80% of all chemicals used in the country are pesticides

The use of chemicals in Nicaragua continues to occur against a backdrop of inadequate law, policy and regulatory infrastructure, while there is virtually no capacity for enforcement. Nicaragua has no national training program for environmental inspectors, and no limited attention is given to this issue among customs officials and agricultural extension workers.

As a result of past widespread importation and use of POPs pesticides on cash crops from the 1950s until the early 1990s, many of Nicaragua's agricultural regions, inland waters and coastal estuaries and ecosystems receiving pesticide runoff are polluted, to a greater or lesser degree, by POPs. In particular toxaphene that was used for many years on cotton crops, and DDT are among the toxic mix of POPs pesticides that contaminate e.g. Nicaragua's two major lakes (Managua and Nicaragua) (NIP 2006, p. 45).

Cleaning and containment of further spread of POPs contamination is urgently needed for POPs hot-spots threatening the eco-systems of the lakes. The Coquinsa / Shell and Hercasa Facility are both located alongside the Lake Managua. The Coquinsa / Shell produced agrochemical products in the past, including Aldrin, Dieldrin and Endrin, and Toxaphene. The production began in 1977 and the operation closed in 1993. Shell Nicaragua is the current owner of the site, and they have in two occasions exported Toxaphene for incineration in The Netherlands. The Hercasa facility located alongside the Lake Managua formulated toxaphene based pesticide products in the past, and has also contributed to the heavy POPs contamination of the lake. The Central America Bank for Economic Integration (CABEI) is the current owner of the site. CABEI has previously financed the incineration in Holland of 95,445 kg of Toxaphene from the site. Both sites are heavily contaminated with POPs and Shell Nicaragua has reserved funds for the remediation of the Coquinsa / Shell site. This includes the containment of an estimated 1.288 m3 of contaminated soils. Apart from these sites there is limited information in Nicaragua about the contaminated sites, their effect on the environment and the people, and the associated costs related to their remediation. The capacity to plan and remediate contaminated sites is therefore limited.

For all the above mentioned reasons, sound management chemicals (and especially POPs pesticides) are a critical factor in the national economy. It has, however, continued to be addressed in isolation from other development issues, hence has not been factored into national planning.

The above mentioned barriers to environmentally sound management POPs Pesticides in Nicaragua have been identified during the development of the NIP and the PDF-A Phase. The sections below describe how the project seeks to address the abovementioned barriers.

The project aims at Enhancing the Institutional Capacity for life-cycle management of POPs in Nicaragua. There is a need to strengthen the legal and regulatory framework for POPs. Draft legislation on pesticides and proposals for toxic chemicals by means of amendments to law 274 were developed during the NIP, but are still in the process of consultations. This and other existing laws will be updated to address gaps in POPs life cycle management. The functionality of the current legal prosecution system will be assessed. There is also a need to strengthen the legislation enforcement capacity in Nicaragua. A training programme for environmental inspectors, custom officials and agricultural extension workers will be developed and implemented. This will improve the institutional enforcement and outreach capacity. The project will also update and improve the current pesticide inventory so that it will cover a larger part of the country. The purpose is to get a more accurate inventory and to detect currently unknown stocks of POPs Pesticides in the country. It is considered important to improve the current inventory on POPs Pesticides. The project will make sure that enforcement and outreach activities to farmers, etc. are done systematically and more frequently in the future. Finally the project aims at improving the inter-institutional coordination for Sound Management of Chemicals (SMC) with the aim to mainstream SMC into National Development Plans in the future. The work will build on the work done during the NIP development that has been documented in the publication "Strengthening of allegiances and networks for the implementation of the National Plan for the Application of the Stockholm Convention".

An important barrier in Nicaragua is lack of investment in activities that will reduce the risk of exposure to people and the environment to POPs Pesticides including exposure from contaminated sites. The project aims at strengthening the capacity in three different areas. The first is related to the improved management and disposal of obsolete POPs pesticide stocks. A feasibility study for recollection and safe storage of pesticides as well as the management practices will be conducted. This would also be relevant for other hazardous and toxic wastes. Technical guidelines for for safe handling, storage and disposal of such chemicals would be developed.

The second part is related to sites contaminated with POPs in Nicaragua. A preliminary list was presented in the NIP document "POPs Contaminated Sites in Nicaragua". Field verification of the sites and further investigation will assist the country in updating the document and ranking the sites according to specific criteria. Formulation of POPs pesticides in the Coquinsa / Shell and Hercasa facilities in the past have contaminated the sites and currently possess a risk of exposure to people and the environment to POPs. The remediation of both sites is a national priority. The project aims at improving the capacity for remediation planning and execution. The pilot project is the remediation of the Coquinsa / Shell site that is currently being undertaken by its owner, Shell Nicaragua, and is done in close collaboration with MARENA. The contamination of the Hercasa site is not quantified at the moment. This will be done and a remediation plan for the site will be developed. The aim is to reach an agreement with CABEI about the future remediation of the site. Finally a feasibility study for the contaminated site at the Picacho Airport will be developed. This airport has been in use for storing and loading organo-chlorine pesticides used for aerial spraying. Unfortunately, the management of these pesticides as well as associated containers has not been in compliance with best practices.

Lake Managua and other areas in the country are contaminated with POPs Pesticides. The project aims at implementing a food security pilot project at Lake Managua that is facing high concentrations of Toxaphene[1]. The project would try to determine the current level of Toxaphene contamination and, if necessary, introduce a dietary advice programme to people living in the area and that are potentially exposed to POPs Pesticide contamination.

[1] Lake Managua (the local name is Lake Cocibolca) is according to the NIP from 2006 contaminated with Toxaphene. The NIP makes reference to a study from 1993 by Calero and Col that detected Toxaphene concentrations of 187 µg/kg in sediments in the lake. This is almost 2000 times higher than the limits established by the Canadian Sediment quality guidelines for the protection of aquatic life that was updated in 2002.

The pilot would provide low cost dietary solutions to the people in order to reduce their risk of exposure to POPs Pesticides.

The project has included a strong communication strategy that aims at enhancing the awareness on POPs by stakeholders and civil society. The NIP developed a communications strategy for citizen awareness with regards to the use and disposal of POPs Pesticides in Nicaragua. The strategy will be updated and implemented under the project.

The project will contribute to the following indicators that have been identified for the POPs focal area:

I – 1 Legislative and regulatory framework in place for the management of POPs, and the sound management of chemicals in general, in supported countries (component 1),

I – 2 Strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries (component 1),

I – 3 Strengthened and sustainable capacity for enforcement in supported countries (Component 1), and

II – 1 Reduced risk of exposure to POPs, measured as number of people living in close proximity to POPs wastes that have been disposed of or contained[2] (component 2 & 3).

The long term goal is to minimize risk to humans and the environment of exposure to POPs Pesticides through strengthened governmental, institutional and stakeholder capacity for life-cycle management of chemicals. This includes the containment of an estimated 1.288 m3 of soils contaminated with Toxaphene at the Coquinsa / Shell site.

The project, through building institutional and technical capacity for management of POPs Pesticides, would enhance Nicaragua's ability to meet its Stockholm Convention obligations, while also contributing to several NIP priorities and realization of provisions within Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes. The project will also contribute substantially with the GEF Strategy to develop capacity for the Sound Management of Chemicals in Nicaragua.

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

This proposal is consistent with the priorities and actions plans that were identified during NIP development. It is also coherent with the National Environmental Plan as well as with the National Policy for Integral Management of Hazardous Substances and Residues that was revised in 2006 and approved by MARENA, via Decree No. 91-2005. There is a synergy with the goals of Nicaragua's national poverty reduction plan.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

This project is fully consistent with Persistent Organic Pollutants Strategic Priority 1, Strengthening Capacities for NIP implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of Chemicals. It is also consistent POPs strategic Priority 2, Partnering in investment for NIP implementation, and Operation Programme No. 14. This project is also coherent with the Support to Sound Chemicals Management Across the GEF Focal Areas. More specifically within the second strategic program by articulating the chemicals related interventions supported by the GEF within Nicaragua's framework for chemicals management.

This project will contribute to the following GEF strategic Objectives in the POPs focal area:

I -1 Legislative and regulatory framework in place for the management of POPs, and the sound management of chemicals in general, in supported countries (component 1),

[2] This includes risk of POPs releases and human exposure through containment of soil contamination (www.gefweb.org).

I -2 Strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries (component 1),

I - 3 Strengthened and sustainable capacity for enforcement in supported countries (Component 1), and

II – 4 Reduced risk of exposure to POPs, measured as number of people living in close proximity to POPs wastes that have been disposed of or contained[3] (component 2 & 3). This includes the containment of 1.288 m3 of soils contaminated with POPs from the Coquinsa / Shell site.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

In recent years, Nicaragua has gained experience with chemicals management issues and processes through participation in several projects, including:

- Development of a POPs NIP in Nicaragua, submitted in April 2006 (GEF project); and participation in the:
  1. Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America (GEF project)[4]
  2. the Basel Convention Regional PCB project for Central America; and
  3. the UNEP Regional Seas: Project for Reduction of Pesticide Runoff to the Caribbean Sea (GEF project).

In addition, the project's implementation will benefit from experiences gained through the execution of a SAICM-funded enabling project, recently approved for execution by UNITAR, entitled , "Updating a National Chemicals Management Profile, developing a national SAICM capacity self-assessment and holding a national SAICM priority-setting workshop in Nicaragua". This project will seek to strengthen broad foundational capacities for chemicals management within the country in support of the Strategic Approach to International Chemicals Management (SAICM). SAICM, adopted in February 2006, supports the achievement of the WSSD Johannesburg Plan of Implementation goal that seeks to ensure that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

The aforementioned initiatives are complementary to this proposal, and will assist Nicaragua's efforts to further strengthen its capacities for improved POPs and sound chemicals management. The project under consideration will work to ensure optimum coordination of synergies between these projects while avoiding duplication of efforts, ultimately contributing positively to the GEF's strategic aim to promote the sound management of chemicals.

E. DESCRIBE THE INCREMENTAL REASONING OF THE PROJECT:

The following table will give an overview of the incremental reasoning of the project:

Expected Outcomes	Baseline	GEF alternative	Incremental Cost
Strengthened legal and regulatory framework for POPs	- Laws do not cover some key and significant aspects to POPs exposure. - There are no laws for Dioxins and Furans	- Existing laws updated to address gaps in POPs life cycle management. - Legal prosecution system assessed.	Incremental cost: 130,000 US$ GEF: 80,000 US$ Co-finance: 50,000 US$
POPs / chemicals legislation enforcement capacity Strengthened	- Nicaragua has a limited capacity to enforce its environmental laws governing chemicals and worker safety.	- Trining Programme for Environmental inspectors, Custom officials and agricultural extension workers developed and implemented for future uses. - refined national POPs pesticide inventory - Capacity to enforce laws improved	Incremental cost: 350,000 US$ GEF: 150,000 US$ Co-finance: 200,000 US$

[3] This includes risk of POPs releases and human exposure through containment of soil contamination (www.gefweb.org).
[4] 6,049.1 kg of POPs (mainly Toxaphene) will be destroyed under this project.

		and increased number of inspections carried out.	
Sustainability of chemical management in public institutions increased	- Ministerial Institutional capacity remains weak and fragmented - Ad hoc approach to chemicals management. - Very limited amount of public funds for Sound Chemicals Management.	- Inter-Ministerial coordination body for chemicals management strengthened. - Mainstreaming of Sound Chemicals Management into national development planning.	Incremental cost: 120,500 US$ GEF: 20,000 US$ Co-finance: 100,500 US$
Budgeted Monitoring and Evaluation Costs	none	Efficient project monitoring including NEX audits, and Final independent project evaluation	Incremental cost: 50,000 US$ GEF: 50,000 US$
Improved management and disposal of obsolete pesticide stocks	- Inappropriate practices for identification, management and recollection of confiscated pesticides.	- Feasibility study for recollection and safe storage of confiscated POPs pesticides conducted - improved management practices of POPs pesticides though the implementation of technical guidelines for safe handling, storage and final disposal.	Incremental cost: 90,000 US$ GEF: 40,000 US$ Co-finance: 50,000 US$
Improved Planning and Remediation of Contaminated sites.	- Contaminated site planning fails to advance beyond inventory and insecure sites continue to pose risk of exposure.	- Improved capacity to plan remediation of contaminated sites - Field Verification of contaminated sites. - Clean up of key contaminated sites will improve ministerial capacity to deal with contaminated sites.	Incremental cost: 2,064,400 US$ GEF: 300,000 US$ Co-finance: 1,524,400 US$[5]
Food security pilot project at lake Managua implemented.	- Awareness of food exposure pathways and mitigation options to risk remains low - Capacity to develop measures to prevent / mitigate risk of exposure remains low.	Awareness raised of chemical risk exposure issues to general and vulnerable populations Dietary advice programme to people exposed to POPs contamination at Lake Managua implemented.	Incremental cost: 150,000 US$ GEF: 100,000 US$ Co-finance: 50,000 US$
Enhanced awareness by stakeholders and civil society.	- Limited information and awareness about bet practices for reducing human and environment exposure to POPs among people exposed to POPs - Limited awareness among policy makers about importance of Sound Chemicals Management.	GEF support will help to raise awareness among populations exposed to POPs. People will be given tools to reduce their risk of exposure to POPs Improved awareness among policy makers about positive effects of Sound Chemicals Management.	Incremental cost: 140,000 US$ GEF: 80,000 US$ Co-finance: 60,000 US$
Project Management	No activity in the baseline scenario	Efficient project monitoring and evaluation, guiding activities towards achieving outcomes.	Incremental cost: 160.000 US$ GEF: 80.000 US$ Co-finance: 80.000 US$
Total			Incremental Costs: 3,014,900 US$ GEF: 900,000 US$ Co-finance: 2,114,900 US$

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED AND OUTLINE RISK MANAGEMENT MEASURES:

RISK		RISK MITIGATION MEASSURE

[5] Co-finance from CABEI has not yet been confirmed (quantified), and actual co-finance is therefore expected to be higher.

Government will not enact new and updated legislations and regulations	M	- Awareness raising among decision makers about necessity to enact legislation in order to live up to Stockholm Convention obligations.
Government will not approve additional funding for chemical management and inspections in the future	H	- Project will document the positive economic and environmental effects sound chemical management will have in Nicaragua in order to influence decision makers.
Contaminated site remediation planning will not trigger investments by owners of the sites	L	- Pilot sites have been chosen according to the willingness of owners to assume responsibility for the future of their sites. Shell Nicaragua has committed funds to the remediation of the Coquinsa / Shell contaminated site, and CABEI has previously financed the destruction of Toxaphene that was stored on the Hercasa contaminated site.
Overall rating	M	

G. EXPLAIN HOW COST-EFFECTIVENESS IS REFLECTED IN THE PROJECT DESIGN:

This project is based on strengthening the foundational capacities in Nicaragua to manage POPs, and the concept of cost effectiveness is complicated to establish for all the activities in component 1. The remediation of the El Coquinsa / Shell S.A. contaminated site includes the containment of an estimated 1.288 tons of soils contaminated with Toxaphene. The soils would probably be exported to Europe at a later stage, but the cost of decontamination is not included in the current co-finance. Procurement processes will undergo international bidding in order to achieve the lowest possible costs.

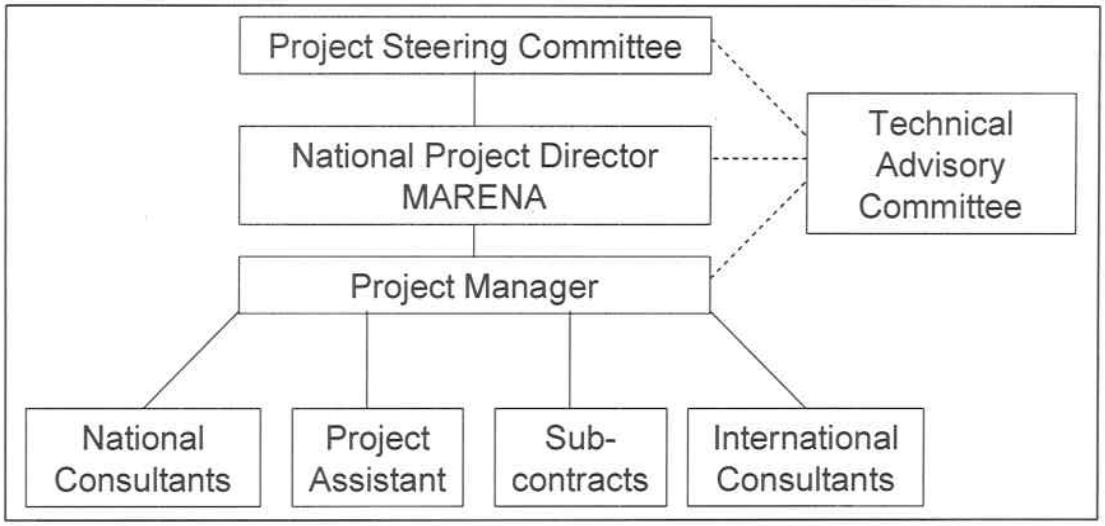
All activities have been developed in a way that is considered the lowest possible cost in order to achieve the proposed outcome.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. PROJECT IMPLEMENTATION ARRANGEMENT:

The project will be executed and implemented through Ministry of the Environment and Natural Resources (MARENA). The actual project components will be directly implemented under the realm of Directorate for Environmental Quality in MARENA. Though the responsibility for execution lies with MARENA several project components will be implemented in close cooperation with other Ministries (especially Ministry of Health and Ministry of Agriculture). Indeed the project success and sustainability relies heavily on a close cooperation between a number of ministries and institutions as well as private sector partners like Shell Nicaragua and CABEI.

Overall, the management arrangement of this project is aiming at supporting the long-term needs for managing POPs pesticides in Nicaragua and creating a solid and sustainable foundation for the Sound Chemicals Management. The actual project implementation will be organized as shown below:



The Project Steering Committee will have representation from other ministries relevant to different project activities such as Ministry of Agriculture and Ministry of Health.

A technical advisory committee will be established to give technical support and assistance to the Project Steering Committee, the National Project Director in MARENA and the Project Coordinator.

The project will be implemented through UNDP Nicaragua under the National Execution Modality (NEX) according to standard UNDP rules and regulations.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

The PDF-A was approved under GEF-3 and has therefore not been submitted for PIF approval. The activities are in line with what was originally planned in the PDF-A document.

PART V: AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for CEO Endorsement.	
Andrew Hudson, *Officer-in-Charge* *UNDP-GEF*	Project Contact Person: Dr. Suely Carvalho GEF Principal Technical Advisor for POPs/Ozone UNDP/MPU/Chemicals Project Contact Person
Date: September 03, *2008*	Tel. and Email: Tel:1-212-906-6687 suely.carvalho@undp.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Project Strategy					
Project Objective:	Minimize risk to humans and the environment of exposure to POPs through strengthened governmental, institutional and stakeholder capacity for life-cycle management of these substances.				
Conceptual Framework	Indicator	Baseline	Target	Means of verification	Critical Assumptions and risks
Component 1: Enhanced institutional capacity for life cycle management of POPs to enable Nicaragua to meet its Stockholm Convention obligations.					
Outcome 1.1 Strengthened legal and regulatory framework	Model legislation of chemical security developed with life cycle aspects	none	1 model legislation	Consensuated draft of the model legislation	Nicaragua will scale-up successful methodologies and follow-up on recommendations through incorporation into legislation, institutional practices
	Chemical safety Legislation strengthened by proposed amendments & norms.	Law 274	Revised Law 274 submitted to national Assembly	Publication in national register	National Assembly will approve the revised law 274. MARENA will take the lead.
Outcome 1.2 Strengthened Enforcement Capacity	Existence of Training programme for Environmental inspectors, custom officials, and agricultural extension workers.	None	1	Curriculum and training programme	Possible to identify potential candidates.
	Number of inspections undertaken	None	Minimum 20	Reports from MARENA	Inspections by trained inspectors will lead to improved capacity to detect unknown stocks of POPs
	Number of prosecutions	none	1 case minimum	Report from MARENA	Strengthened enforcement capacity will lead to prosecution of violations of laws.
Outcome 1.3 Sustainability of chemical management in Public institutions increased	Number of meetings of an effective inter-ministerial coordination committee for POPs governance and broader Chemicals Management	Ad hoc NIP committee	At least 4 meetings a year	Minutes from meetings. Records of Agreements.	Project will serve as the platform to establish a permanent committee for POPs and Sound Chemicals Management in general.
	National budget committed to Chemicals Management	Total 2008 budget	At least 50 % higher in 2012	National Budgets	Increased awareness among policy makers about potential benefits from Sound Chemicals Management will lead to increase in budgets.
	Number of institutions that provide support to improved National Plan of Application	1 institution	5 institutions	Minutes from meetings	Increased coordination will lead to improved support of Plan.
Component 2: Reduced Risk of exposure to people and the environment to POPs including from Contaminated Sites.					
Outcome 2.1 Improved Management and disposal of obsolete pesticide stocks	Number of Technical guidelines for sound recollection, storage and disposal of confiscated POPs pesticides (and other hazardous chemicals).	0	1 technical guidelines developed and implemented	Review technical guidelines	Existence of technical guidelines will lead to improved management practices.
Outcome 2.2 Improved planning and remediation of contaminated sites.	Number of comprehensive training programs for remediation planning and execution	none	1 training programme 10 persons trained	Final evaluation. Training Material	Success depends on engagement of suitable technical experts to develop and implement training on sampling, monitoring planning, etc. Critical to identify qualified local people for training programme.
	National ranking of contaminated sites	Pre-identification from NIP study	Field verified National ranking of contaminated sites	Minutes from inspections and final ranking report	Easy access to sites by owners Development of methodology will lead to actual ranking of sites, and proper measures to protect the sites will be implemented.
	Quantity of contaminated soils removed from Coquinsa / Shell site and contained properly	0	1288 m3	Reports from MARENA and Shell	Shell Nicaragua has committed funds for the containment of contaminated soils at Coquinsa / Shell site, and risk is very low
	Funds committed by CABEI for remediation of Hercasa	0	sufficient	Agreement between	Development of remediation plan for Hercasa site will determine cost of

	facility			MARENA and CABEI	remediation. The assumption is that CABEI will approve funding for remediation once the cost is known.
	Number of feasibility studies for Picacho Airport	0	1	Inspection reports.	Access to the site by owners
Outcome 2.3 Food security project at lake Managua implemented	Number of dietary advice programme implemented at Lake Managua	0	1	Final report from consultants. Evaluation by MARENA.	Preliminary results indicate high concentration of POPs (especially Toxaphene) in sediments in Lake Managua. The assumption is that it will be possible to develop low cost solutions to reduce risk of exposure to POPs to the people living alongside Lake Managua.
Component 3: Enhanced awareness by stakeholders and Civil society					
Outcome 3.1 Enhanced awareness among stakeholders and civil society	Number of refined communication strategies to support project objectives.	One Draft communication strategy from NIP	One Revised communication strategy developed and implemented	Strategy Communication material Radio spots	Communication strategy will complement all the remaining activities in the project, and thereby making it easier to achieve outcomes. It is critical that communication strategy reaches main target groups like policy makers, vulnerable groups, etc.
	Documented lessons learned	0	1 publication	publication	Lessons learned from POPs activities in Nicaragua will be documented.
Component 4: Project Management and oversight					
Outcome 4: Project Management and oversight	Number of reports delivered on time	none	4 quarterly monitoring reports 1 Annual Project Implementation Report	Project files and MARENA archive	Project coordinator will report on a timely basis to the National Project Director in MARENA.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

No formal comments have been received from GEF SEC, STAP, Implementing Agencies and Convention Secretariat given that PIF was never officially presented to GEF SEC. Informal comments from GEF SEC and UNEP have been incorporated in current version of the document.

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT

Position Titles	*$/ person week*	*Estimated person weeks*	*Tasks to be performed*
For Project Management			
Local			
Project Coordinator	500	120	Coordination, Project planning and monitoring. Drafting of TORs for consultancy input, delivery and quality checking of consultant reports. Progress and Financial reporting.
International	----------	----------	----------
For Technical Assistance			
Local			
Legal expert	500	80	Project Component 1.1 i) Review existing laws and propose updates to address gaps in life cycle management. ii) Assess national capacity to prosecute violations of laws, iii) extensive stakeholder consultation and coordination with other key Ministries, iv) inform policy makers on new and updateds proposals.
Enforcement specialist	500	120	Project Component 1.2 i) Institutional coordination of enforcement activities at national and local level, ii) Prepare draft training programme for environmental inspectors, custom officials and agricultural extension workers, iii) Identify candidates for programme, iv) participate in training sessions, v) coordinate training activities by international consultant, vi) systematize and participate in inspection activities throughout national territory.
Institutional coordinator	500	120	Project Component 1.3 i) Mainstreaming of Sound Chemicals Management into national Development Planning, ii) strengthen inter-ministerial coordination body for chemical management, iii) facilitate stakeholder consultation and communication with civil society, iv) cost benefit analysis of Sound Chemicals Management and business as usual scenario.
Chemical expert	500	120	Project Component 2.1 i) Coordination of remediation activities, ii) Facilitate communication between MARENA and owners of contaminated sites, iii) Document lessons learned from

			remediation of Coquinsa / Shell site, iv) monitor post remediation situation at the site, v) participate in the development of remediation plan for Hercasa facility, vi) participate in feasibility study for El Picacho airport, v) identify people to participate in training programme, vi) assist with the implementation of component 2 of the project.
Communication specialist	500	60	Project Component 3 i) review and update existing communication strategy developed at NIP stage, ii) Develop communication material for project components, iii) implement communication strategy for project
International			
Legal expert	3,500	10	Project Component 1.1 i) Guide local legal expert in work related to this component, ii) review existing legislation, iii) assess national legal framework to prosecute legal violations.
International Enforcement Expert	3,500	6	Project Component 1.2 i) Provide guidance to local enforcement specialist, ii) review and approve training programme for chemical inspectors, iii) train 5 chemical inspectors in Nicaragua
International Expert	3,500	34	Project Component 2.2 i) Provide guidance to local coordinator of remediation activities, ii) Develop comprehensive training programme for remediation planning and execution, iii) Develop guidelines for remediation of contaminated sites, including securing areas, excavation of soils, sample and analysis of soils, and monitoring of the site, iv) Provide technical and hands-on training session to a select group of people in Nicaragua, v) evaluate remediation of Coquimsa / Shell site, vi) evaluate remediation plan for Hercasa site and provide recommendations, vii) review feasibility study for Picacho airport, viii) provide recommendations regarding how to institutionalize lessons learned from this component, ix) Provided technical assistance for the implementation of component 2 of the project.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

The PDF-A was approved in the GEF 3. The current project proposal exclusively deals with POPs pesticides, including the strengthening of the institutional capacity to deal with POPs Pesticides, and the effect of POPs pesticides to the environment (contaminated sites) and the people (food security project).

B. DESCRIBE IF ANY FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION.

Government of Nicaragua is currently negotiating the co-finance commitment about the remediation of the Hercasa / Pennwalt site with CABEI. The negotiations have been positive and the expected result is that CABEI will reserve funds in their 2009-11 budget for the remediation of the site. For that reason no figures have been included in this document. However, it is expected to raise the actual co-finance for the project.

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMTATION STATUS IN THE TABLE BELOW:

Project Preparation Activities Approved	*Implementation Status*	*GEF Amount ($)*				*Co-financing ($)*
		Amount Approved	*Amount Spent To-date*	*Amount Committed*	*Uncommitted Amount**	
ACTIVITY 1: Project Design	Completed	9,200	8,500			6,000
ACTIVITY 2: Recollection of Data	Completed	6,700	10,000			4,500
ACTIVITY 3: Workshops and Meetings	Completed	8,300	11,500			3,000
ACTIVITY 4: Stakeholder Consultations	Completed	5,500	3,000			3,000
ACTIVITY 5: Project Monitoring and Reporting	Completed	6,700	7,500			11,500
ACTIVITY 6: Development of MSP	Completed	8,600	4,500			
Total		45,000	45,000			28,000

* Uncommitted amount should be returned to the GEF Trust Fund. Please indicate expected date of refund transaction to Trustee.

MEDIUM-SIZED PROJECT PROPOSAL

REQUEST FOR FUNDING UNDER THE GEF Trust Fund

GEF

GEFSEC PROJECT ID:
IA/EXA PROJECT ID: 3645
COUNTRY: Nicaragua
PROJECT TITLE: Improved Management and release containment of POPs Pesticides in Nicaragua
GEF IA/EXA: United Nations Development Programme (UNDP)
OTHER PROJECT EXECUTING AGENCY(IES):
DURATION: 30 months
GEF FOCAL AREA: POPs
GEF STRATEGIC OBJECTIVES: POPs-SP1 and POPs SP2
GEF OPERATIONAL PROGRAM: OP 14
IA/EXA FEE: 94.500 US$
CONTRIBUTION TO KEY INDICATORS IDENTIFIED IN THE FOCAL AREA STRATEGIES:

I-1 Legislative and regulatory framework in place for the management of POPs, and the sound management of chemicals in general, in supported countries
I-2 Strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries.
I-3 Strengthened and sustainable capacity for enforcement in supported countries.
II-1Reduced exposure to POPs, measured as people living in close proximity to POPs wastes that have been disposed of or contained.

FINANCING PLAN ($)		
	PPG	Project*
GEF Total	45,000	900,000
Co-financing	(provide details in Section b: Co-financing)	
GEF IA/ExA UNDP in-kind	*12,000*	0
Government (in-kind and cash)	16,000	520,000
Others: Shell Nicaragua and SAICM (cash)	0	1,594,900
Co-financing Total	28,000	2,114,900
Total	73,000	3,014,900
Financing from associated activities:		

MILESTONES	DATES
PIF APPROVAL	PDF-A approved in GEF 3
PPG APPROVAL	N/A
MSP EFFECTIVENESS	(expected)
MSP START	Oct 2008
MSP CLOSING	April 2011
TE/PC REPORT*	June 2011

Approved on behalf of the *United Nations Development Programme (UNDP)*. This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the Review Criteria for GEF Medium-sized Projects.

Andrew Hudson
Officer-in-Charge
UNDP/GEF
Andrew Hudson
Date: September 03, 2008

Project Contact Person:
Suely Carvalho
Principal Technical Advisor
UNDP New York
Tel. and email:
Phone: 1-212-906 6687
e-mail: suely.carvalho@undp.org

ACRONYMS

Nicaraguan government institutions and organizations are presented Spanish followed by their English-language equivalent.

ANIFODA	Asociación Nicaragüense de Formuladores y Distribuidores de Agroquímicos (Nicaragua Association of Agrochemical Formulators and Distributors)
CABIE	Central American Bank for Economic Integration (Banco Centroamericano de Integración Económica—BCIE)
CAS	Country Assistance Strategy (United Nations Development Assistance Framework planning)
CATIE	Centro Agronómico Tropical de Investigación y Enseñanza (Tropical Agronomical Center for Research and Training)
CCAD	Central American Commission on Environment and Development (Comisión Centroamericana de Ambiente y Desarrollo)
POPs	Persistent Organic Pollutants (Contaminantes Orgánicos Persistentes —COPs)
CENIDSUT	Centro Nacional de Información y Documentación de Sustancias Tóxicas
CENTOX	Centro Nacional de Toxicología del Ministerio de Salud
CIEMA	Centro de Investigaciones y Estudios de Medio Ambiente (Research Center and Studies of the Environment)
CINCOP	Comité Intersectorial Nacional para los Contaminantes Orgánicos Persistentes (National Intersectorial Committee for the Persistent Organic Pollutants)
CIRA/UNAN	Centro de Investigaciones de Recursos Acuáticos de la Universidad/ Nacional Autónoma de Nicaragua (Center for the Research in Aquatic Resources/National Autonamous University of Nicaragua)
CJA	***Club de Jóvenes Ambientalistas (Club of young Environmentalists)***
CNC	Comisión Nacional de Coordinación (National Coordinating Committee for implementation of Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes)
CPML	Centro de Producción más Limpia (Center of Cleaner Production)
CSOs	Civil Society Organizations
DDT	Dichloro Diphenyl Trichoroethane
DGA	Dirección General de Aduanas (General Directorate of Customs)
DGCA	Dirección General de Calidad Ambiental de MARENA (of DIIA, MARENA)
DIIA	Dirección de Implementación de Instrumentos Ambientales de MARENA
DRENCIAP	Dirección de Registro Nacional y Control de Insumos Agropecuarios, Sustancias Tóxicas y Peligrosas
EMNV	Encuesta Nacional de Hogares sobre Medición de Nivel de Vida (National Survey of Homes on Measurement of the Standard of Life)
ENTRESA	Empresa Nacional de Transmisión Eléctrica, S.A. (National Enterprise of Electrical Transmission, SA)
FAO	Food and Agriculture Organization of the United Nations (Organización de las Naciones Unidas para la Agricultura y la Alimentación)
GEF	Global Environment Facility
Hercasa	Hércules de Centro América, S. A.
ICAITI	Instituto Centroamericano de Investigación y Tecnología Industrial (Central American Research and Industrial Technology Institute of SIECA.)
INTA	Instituto Nicaragüense de Tecnología Agropecuaria (Nicaraguan Institute of Agricultural Technology)
IPM	Integrated Pest Management
IRENA	Nicaraguan Institute of Natural Resources and Environment
LAQUISA	Laboratorios Químicos, S.A.
MAGFOR	Ministerio Agropecuario y Forestal (Ministry of Agricultural and Forestry)
MARENA	Ministerio del Ambiente y los Recursos Naturales (Ministry of the Environment and Natural Resources)
MDGs	Millennium Development Goals
MHCP	Ministerio de Hacienda y Crédito Público (Ministry of Finance and Public Credit)
MIFIC	Ministerio de Fomento, Industria y Comercio (Ministry of Development, Industry and Trade)
MINREX	Ministerio de Relaciones Exteriores (Ministry of Exterior Relations)
MINSA	Ministerio de Salud (Ministry of Health)
MITRAB	Ministerio del Trabajo (Ministry of Labour)
MTI	Ministerio de Transporte e Infraestructura (Ministry of Transport and Infrastructure)
NGOs	Non-Governmental Organizations
NIP	National Implementation Plan
PANIF	Programa Ambiental Nicaragua Finlandia (Environmental Program for Nicaragua)
PCBs	Polychlorinated Biphenyls
PIC	Prior Informed Consent (Rótterdam Convention)

PLAGSALUD	Programa de Plaguicidas y Salud de la OPS en Nicaragua
PNUMA	Programa de Naciones Unidas para el Medio Ambiente
PROMAP	Programa de Manejo de Plaguicidas, MARENA
PRSP	Poverty Reduction Strategy Plan (International Bank for Reconstrution and Development)
PRTR	Pollutant Release and Transfer Register (*Registro de Emisiones y Transferencia de Contaminantes—RETC*)
RAPAL	Red de Acción de Plaguicidas de América Latina
RETC/PRTR	Registro de Emisiones y Transferencia de Contaminantes
SAGSA	Servicio Agrícola Gurdián (Gurdián Agricultural Service)
SAICM	Strategic Approach to International Chemicals Management
SIECA	Secretaría de Integración Económica Centroamericana (Secretariat for the Economic Integration of Central America)
SINAPRED	Sistema Nacional para la Prevención, Mitigación y Atención de Desastres (National System for Disaster Prevention, Mitigation, and Attention)
SINIA	Sistema Nacional de Información Ambiental (National Environmental Information System)
UCA	Universidad Centro Americana
UNA	Universidad Nacional Agraria (National Agrarian University)
UNAN	Universidad Nacional Autónoma de Nicaragua (Nacional Autonamous University)
UNDP	United Nations Development Programme (*Programa de Naciones Unidas para el Desarrollo—PNUD)*
UNI	Universidad Nacional de Ingeniería (National University of Engineering)

PART I - PROJECT

1. PROJECT SUMMARY

PROJECT RATIONALE, OBJECTIVES, OUTCOMES/OUTPUTS, AND ACTIVITIES.

Nicaragua signed the Stockholm convention on Persistent Organic Pollutants (POPs) in May 2001 and ratified it in December 2005. Nicaragua developed its National Implementation Plan in 2004-6. It was endorsed by the government and was submitted to the Convention Secretariat in April 2006, as the second country in Latin America and the Caribbean. Nicaragua has established a preliminary inventory of POPs chemicals and identified Adjustment of the legal Framework, Institutional Strengthening, Elimination of POPs obsolete pesticide stocks and updated information on and remediation of contaminated sites among their NIP priorities and action plans.

Nicaragua has historically been and continues to be heavily dependent on pesticides to produce its export cash crops, which, in turn, make an important contribution to the country's economic growth. Nicaragua's use of pesticides had been one of the highest globally on a per capita basis. According to Nicaragua's 1999 Agenda 21 National Profile, 80% of all chemicals used in the country are pesticides

The use of chemicals in Nicaragua continues to occur against a backdrop of inadequate law, policy and regulatory infrastructure, while there is virtually no capacity for enforcement. Nicaragua has no national training program for environmental inspectors, and no limited attention is given to this issue among customs officials and agricultural extension workers.

As a result of past widespread importation and use of POPs pesticides on cash crops from the 1950s until the early 1990s, many of Nicaragua's agricultural regions, inland waters and coastal estuaries and ecosystems receiving pesticide runoff are polluted, to a greater or lesser degree, by POPs. In particular toxaphene that was used for many years on cotton crops, and DDT are among the toxic mix of POPs pesticides that contaminate e.g. Nicaragua's two major lakes (Managua and Nicaragua) (NIP 2006, p. 45).

Cleaning and containment of further spread of POPs contamination is urgently needed for POPs hot-spots threatening the eco-systems of the lakes. The Coquinsa / Shell and Hercasa Facility are both located alongside the Lake Managua. The Coquinsa / Shell produced agrochemical products in the past, including Aldrin, Dieldrin and Endrin, and Toxaphene. The production began in 1977 and the operation closed in 1993. Shell Nicaragua is the current owner of the site, and they have in two occasions exported Toxaphene for incineration in The Netherlands. The Hercasa facility located alongside the Lake Managua formulated toxaphene based pesticide products in the past, and has also contributed to the heavy POPs contamination of the lake. The Central America Bank for Economic Integration (CABEI) is the current owner of the site. CABEI has previously financed the incineration in Holland of 95,445 kg of Toxaphene from the site. Both sites are heavily contaminated with POPs and Shell Nicaragua has reserved funds for the remediation of the Coquinsa / Shell site. This includes the containment of an estimated 1.288 m3 of contaminated soils. Apart from these sites there is limited information in Nicaragua about the contaminated sites, their effect on the environment and the people, and the associated costs related to their remediation. The capacity to plan and remediate contaminated sites is therefore limited.

For all the above mentioned reasons, sound management chemicals (and especially POPs pesticides) are a critical factor in the national economy. It has, however, continued to be addressed in isolation from other development issues, hence has not been factored into national planning.

The above mentioned barriers to environmentally sound management POPs Pesticides in Nicaragua have been identified during the development of the NIP and the PDF-A Phase. The sections below describe how the project seeks to address the abovementioned barriers.

The project aims at Enhancing the Institutional Capacity for life-cycle management of POPs in Nicaragua. There is a need to strengthen the legal and regulatory framework for POPs. Draft legislation on pesticides and proposals for toxic chemicals by means of amendments to law 274 were developed during the NIP, but are still in the process of consultations. This and other existing laws will be updated to address gaps in POPs life cycle management. The functionality of the current legal prosecution system will be assessed. There is also a need to strengthen the legislation enforcement capacity in Nicaragua. A training programme for environmental inspectors, custom officials and agricultural extension workers will be developed and implemented. This will improve the institutional enforcement and outreach capacity. The project will also update and improve the current pesticide inventory so that it will cover a larger part of the country. The purpose is to get a more accurate inventory and to detect currently unknown stocks of POPs Pesticides in the country. It is considered important to improve the current inventory on POPs Pesticides. The project will make sure that enforcement and outreach activities to farmers, etc. are done systematically and more frequently in the future. Finally the project aims at improving the inter-institutional coordination for Sound Management of Chemicals (SMC) with the aim to mainstream SMC into National Development Plans in the future. The work will build on the work done during the NIP development that has been documented in the publication "Strengthening of allegiances and networks for the implementation of the National Plan for the Application of the Stockholm Convention".

An important barrier in Nicaragua is lack of investment in activities that will reduce the risk of exposure to people and the environment to POPs Pesticides including exposure from contaminated sites. The project aims at strengthening the capacity in three different areas. The first is related to the improved management and disposal of obsolete POPs pesticide stocks. A feasibility study for recollection and safe storage of pesticides as well as the management practices will be conducted. This would also be relevant for other hazardous and toxic wastes. Technical guidelines for for safe handling, storage and disposal of such chemicals would be developed.

The second part is related to sites contaminated with POPs in Nicaragua. A preliminary list was presented in the NIP document "POPs Contaminated Sites in Nicaragua". Field verification of the sites and further investigation will assist the country in updating the document and ranking the sites according to specific criteria. Formulation of POPs pesticides in the Coquinsa / Shell and Hercasa facilities in the past have contaminated the sites and currently possess a risk of exposure to people and the environment to POPs. The remediation of both sites is a national priority. The project aims at improving the capacity for remediation planning and execution. The pilot project is the remediation of the Coquinsa / Shell site that is currently being undertaken by its owner, Shell Nicaragua, and is done in close collaboration with MARENA. The contamination of the Hercasa site is not quantified at the moment. This will be done and a remediation plan for the site will be developed. The aim is to reach an agreement with CABEI about the future remediation of the site. Finally a feasibility study for the contaminated site at the Picacho Airport will be developed. This airport has been in use for storing and loading organo-chlorine pesticides used for aerial spraying.

Unfortunately, the management of these pesticides as well as associated containers has not been in compliance with best practices.

Lake Managua and other areas in the country are contaminated with POPs Pesticides. The project aims at implementing a food security pilot project at Lake Managua that is facing high concentrations of Toxaphene[1]. The project would try to determine the current level of Toxaphene contamination and, if necessary, introduce a dietary advice programme to people living in the area and that are potentially exposed to POPs Pesticide contamination. The pilot would provide low cost dietary solutions to the people in order to reduce their risk of exposure to POPs Pesticides.

The project has included a strong communication strategy that aims at enhancing the awareness on POPs by stakeholders and civil society. The NIP developed a communications strategy for citizen awareness with regards to the use and disposal of POPs Pesticides in Nicaragua. The strategy will be updated and implemented under the project.

The project will contribute to the following indicators that have been identified for the POPs focal area:

I – 1 Legislative and regulatory framework in place for the management of POPs, and the sound management of chemicals in general, in supported countries (component 1),

I – 2 Strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries (component 1),

I – 3 Strengthened and sustainable capacity for enforcement in supported countries (Component 1), and

II – 1 Reduced risk of exposure to POPs, measured as number of people living in close proximity to POPs wastes that have been disposed of or contained[2] (component 2 & 3).

The long term goal is to minimize risk to humans and the environment of exposure to POPs Pesticides through strengthened governmental, institutional and stakeholder capacity for life-cycle management of chemicals. This includes the containment of an estimated 1.288 m3 of soils contaminated with Toxaphene at the Coquinsa / Shell site.

The project, through building institutional and technical capacity for management of POPs Pesticides, would enhance Nicaragua's ability to meet its Stockholm Convention obligations, while also contributing to several NIP priorities and realization of provisions within Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes. The project will also contribute substantially with the GEF Strategy to develop capacity for the Sound Management of Chemicals in Nicaragua.

[1] Lake Managua (the local name is Lake Cocibolca) is according to the NIP from 2006 contaminated with Toxaphene. The NIP makes reference to a study from 1993 by Calero and Col that detected Toxaphene concentrations of 187 µg/kg in sediments in the lake. This is almost 2000 times higher than the limits established by the Canadian Sediment quality guidelines for the protection of aquatic life that was updated in 2002.

[2] This includes risk of POPs releases and human exposure through containment of soil contamination (www.gefweb.org).

Project Goal
Minimize risk to humans and the environment of exposure to POPs Pesticides through strengthened governmental, institutional and stakeholder capacity for life-cycle management of chemicals.

GEF Alternative Scenario

The project, through building institutional and technical capacity for management of POPs Pesticides, would enhance Nicaragua's ability to meet its Stockholm Convention obligations, while also contributing to several NIP priorities and realization of provisions within Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes. This project will also contribute substantially to support the GEF strategy to promote Sound Management of Chemicals. The project will also contribute substantially with the GEF Strategy to implement Sound Management of Chemicals in Nicaragua.

Project components and outcomes

There are four components with associated outcomes and outputs:

Project Components	*Expected Outcomes*	*Expected Outputs*
1. Enhanced institutional capacity for life-cycle management of POPs to enable Nicaragua to meet its Stockholm Convention obligations.	**A** Strengthened legal and regulatory framework for POPs **B** POPs / chemicals legislation enforcement capacity Strengthened **C** Sustainability of chemical management in public institutions increased	**A.1** existing laws updated to address gaps in intentionally produced POPs life cycle management **A.2** Legal prosecution system assessed. **B.1** Training programme for environmental inspectors, custom officials and agricultural extension workers developed and implemented. **B.2** National POPs Pesticide inventory improved. **C.1** Mainstreaming of Sound Management of Chemicals into national development planning. **C.2** Strengthened inter-ministerial coordination body for chemicals management.
2. Reduced risk of exposure to people and the environment to POPs Pesticides including exposure from contaminated sites.	**D**. Improved management and disposal of obsolete pesticide stocks **E** Improved Planning and Remediation of Contaminated sites. **F** Food security pilot project at lake Managua implemented.	**D.1** Feasibility study for recollection and safe storage of confiscated POPs pesticides conducted **D.2** Technical guidelines for safe handling, storage and final disposal of POPs Pesticides developed. **E.1** Comprehensive training programme for remediation planning and execution undertaken. **E.2** Technical Guidelines for remediation of contaminated sites developed **E.3** National field verification Plan with ranking of known contaminated sites improved and updated. **E.4** Remediation of Coquinssa / Shell / Shell including containment of 1.288 m3 of contaminated soils. **E.5** Remediation plan for Hercasa **E.6**. Financing plan with CABEI for Hercasa site. **E.7** Feasibility Study for el Picacho Airport. **F.1** Dietary advice programme to people exposed to POPs contamination at Lake Managua.
3. Enhanced awareness by stakeholders and civil society.	**G** Enhanced awareness by stakeholders and civil society.	**G1.** Communication strategy developed and implemented. **G2.** Awareness raising material for project stakeholders about best practices for reducing human and environmental exposure to POPs.

		G3. Documentation of lessons learned and best practices.
4. Project Management and oversight		

Global Benefits

The project, by enabling Nicaragua to meet its Stockholm obligations, will have global benefits achieved through improved management of POPs and therefore reduce the exposure of POPs to humans and to the environment. Without this project some POPs in Nicaragua would otherwise at some stage in their life-cycle enter the environment and become available for global cycling. Tangible POPs release reduction can be accounted from the containment of 1:288 m3 of soils contaminated with POPs from the Coquinsa / Shell site.

1) Key indicators, assumptions, and risks

The principal indicators of projects success are the following:

I – 1	Legislative and regulatory framework in place for the management of POPs, and chemicals more generally in Nicaragua.
I -2	Strengthened and sustainable administrative capacity, including chemicals management administration within Central Government in Nicaragua.
I – 3	Strengthened and sustainable capacity for enforcement in supported countries.
II – 1	Reduced risk of exposure to POPs of the local communities living close to contaminated sites and depending on fish from e.g. Lake Managua.
II – 2	Reduced exposure due to dietary advice to reduce POPs intake.

The project has the following main risks and assumptions:

RISK		RISK MITIGATION MEASSURE
Government will not enact new and updated legislations and regulations	M	- Awareness raising among decision makers about necessity to enact legislation in order to live up to Stockholm Convention obligations.
Government will not approve additional funding for chemical management and inspections in the future	H	- Project will document the positive economic and environmental effects sound chemical management will have in Nicaragua in order to influence decision makers.
Contaminated site remediation planning will not trigger investments by owners of the sites	L	- Pilot sites have been chosen according to the willingness of owners to assume responsibility for the future of their sites. Shell Nicaragua has committed funds to the remediation of the Coquinsa / Shell contaminated site, and CABEI has previously financed the destruction of Toxaphene that was stored on the Hercasa contaminated site.
Overall rating	M	

COUNTRY OWNERSHIP

a) COUNTRY ELIGIBILITY

Nicaragua ratified the Stockholm Convention in July 2005 and is therefore eligible for GEF support under paragraph. 9(a) of the GEF Instrument.

b) COUNTRY DRIVENNESS

Nicaragua was the second country in Latin America and the Caribbean to develop and submit the National Implementation Plan to the Stockholm Convention Secretariat.

Nicaragua has participated in and is a Party or signatory to a number of international and regional efforts aimed at improved management of POPs chemicals/wastes and other toxic and hazardous chemicals as shown in the table below.

:International Conventions ratified by Nicaragua
The Stockholm Convention on Persistent Organic Pollutants (Party, 2005)
The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Party, 1997)
Vienna and Montreal Protocols (Party, 1993 for both)
London and Copenhagen Amendments (Party, 1999 for both)
UNFCC Kyoto Protocol (Party, 1999)
ILO Convention 13: Use of Lead in White Painting (Party)
ILO Convention 136: Protection Against Hazards of Poisoning Arising from Benzene (1971) (Party)
ILO Convention 139: Prevention and Control of Occupational Hazards caused by Carcinogenic Substances and Agents (Party)
ILO Convention 162: Safety in the Use of Asbestos (Party)

Regional agreements

Nicaragua is a signatory to the 1992 Regional Accord on Transboundary Movement of Hazardous Waste (Acuerdo Regional Sobre Movimiento Transfronterizo de Desechos Peligrosos of the Central America and Dominican Republic Meeting on Health (RESSCAD). In 2000, Nicaragua's Ministry of Health signed Agreement No. 9 to restrict or prohibit use of the 12 UNEP POPs pesticides, among others at the 16th Reunion of RESSCAD.

Poverty Reduction Strategy

According to Nicaragua's Poverty Reduction Strategy (PRS), improving the productivity and management of the natural resource, the environment and agriculture sectors are the most important area of concentration for economic growth. These priorities must be undertaken while at the same time seeking to improve the social sectors of education and health and to strengthen municipalities.

This proposal supports these strategies by providing a safer POPs free environment and workplace for the poor communities in Nicaragua.

1. PROGRAM AND POLICY CONFORMITY

a) PROGRAM DESIGNATION AND CONFORMITY

The project is consistent with the GEF Focal Area Strategy for POPs. The project and its activities are in conformity with the following Strategic Objectives for the POPs focal area and Operational Programme 14. :

Strategic Program 1: Strengthening Capacities for NIP Implementation.

Objective (a) – NIP implementation: The GEF will strengthen and/or build capacity required in eligible countries to implement their Stockholm Convention NIPs in a sustainable, effective and comprehensive manner, whilst building upon and contributing to strengthening a country's foundational capacities for sound management of chemicals.

The project will strengthen Nicaragua's national capacity for NIP implementation by assisting Nicaragua to strengthen its capacity for effective life-cycle management of POPs Pesticides.

The following indicators will be used to measure capacity development for NIP implementation:

- I – 1 Legislative and regulatory framework in place for the management of POPs, and the sound management of chemicals in general, in supported countries (component 1),
- I – 2 Strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries (component 1),
- I – 3 Strengthened and sustainable capacity for enforcement in supported countries (Component 1),

UNDPs focus on Capacity Development, Institutional Strengthening, Technical Assistance, and Good Governance will through this project support the creation of Foundational Capacities for POPs management and consequently strengthened capacity for the general sound management of chemicals in Nicaragua. The project aims at implementing the measures required to meet Nicaragua's obligation under the Stockholm Convention.

Strategic Program 2: Partnering in Investments for NIP implementation.

Objective: The GEF will partner in investments needed for NIP implementation to achieve impacts in the reduction of POPs production, use, and releases, and to reduce the stress on human health and the environment caused by POPs.

The following indicator will be used to measure capacity development for NIP implementation:

- II – 1 Reduced risk of exposure to POPs Pesticides, measured as number of people living in close proximity to POPs wastes that have been disposed of or contained[3] (component

[3] This includes risk of POPs releases and human exposure through containment of soil contamination (www.gefweb.org).

2 & 3). This includes the containment of 1.288 m3 of soils contaminated with POPs from the Coquinsa / Shell site.

II – 2 Reduced exposure, measured in the number of people receiving and adhering to dietary advice to reduce POPs intake.

It is expected that the activities under outcome 2 will leverage additional co-financing for the project implementation, and will thus further increase investment for NIP implementation in Nicaragua in the future, which is promoted under this Strategic Program. These investments would eventually reduce exposure to POPs of people living in close proximity to areas affected by POPs contamination.

Conformity with Operation Program 14

The proposal supports the guiding principles in OP 14.

With respect to the GEF's Operational Program (OP) 14, the project applies, in particular, to:

Paragraph 10, (a), (b), (d) and (e)

- The institutional and human resource capacity for the management of POPs is strengthened.
- The policy and regulatory framework is strengthened to facilitate environmentally sound management of POPs and other chemicals.
- Safe and cost-effective alternatives to POPs are available to developing countries and countries with economies in transition.
- Stockpiles of POPs are managed, and wastes that contain POPs are managed and contained or disposed of, in an environmentally safe manner.

The project will focus on Capacity building as defined in OP 14, and it is in harmony with the proposed Capacity building activities under OP 14.

This project is also coherent with the Support to Sound Chemicals Management Across the GEF Focal Areas. More specifically within the second strategic program by articulating the chemicals related interventions supported by the GEF within Nicaragua's framework for chemicals management. This project will be complemented by the project UNITAR is about to implement in Nicaragua that is being funded by the SAICM Quick Start Programme Trust Fund. Additional resources for mainstreaming the Sound Management of Chemicals into National Development Planning will be requested in the furure.

The project aims at strengthening the existing inter-institutional committee for POPs that will increase the mandate to include all toxic and hazardous chemicals, and additional stakeholders from government and civil society will be invited to participate in the work of the committee. All activities related to legal framework, improved administrative and enforcement capacity will be designed to include all toxic and hazardous chemicals.

Consistent with NIP priorities and Stockholm Convention obligations:
The project supports Nicaragua's ability to meet its Stockholm Convention obligations, while also contributing to realization of provisions within Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes. This project is also in

conformity with, and supportive of, the priorities identified in Nicaragua's NIP, through its emphasis on the following:

- **Adjustment of the legal framework** to guarantee the regulation and the management of POPs throughout their life cycle (legal *obligations under the Stockholm Convention; Art. 8 of the National Policy; a NIP priority).*

- **Institutional strengthening** to enhance Nicaragua's capacity for management of POPs including ministerial technical capacity, capacity for enforcement of legislation, and financial sustainability (Art. 12.2 of the Stockholm Convention; *Art. 7 (2) of the National Policy: strengthening infrastructure and mechanisms of institutions) Art. 7(4) promoting investment in infrastructure required for efficient management of chemicals; Art. 7 (8), creation of environmental initiatives to monitor advances in management of chemicals; NIP priority.)*
  - This project would seek to raise the profile of chemicals management within Nicaragua's national planning and budgeting processes (inclusive of the Ministry of Finance and Public Credit (*Ministerio de Hacienda y Crédito Público—MHCP*), and within the respective ministries which have a role in chemicals management through outreach to decision makers and by examining options for mainstreaming POPs priorities.
  - Ministerial and stakeholder capacity would be strengthened through assessment, training and structural/procedural activities as addressed within this broader foundational chemicals context).

- **Updated information on contaminated sites**.
  - The project would characterize and rank contaminated sites and develop a long-term plan for monitoring, securing and remediating them, while instituting near-term measures, as warranted, to protect the public form or minimize exposure to Nicaragua's legacy of POPs contamination. (*Art. 6 .1(e) of the Stockholm Convention; Art.9 of the National Policy; also a NIP priority.)*
  - Information programs, training, education, awareness and sensitization at all levels, including the general population. The workshops and training sessions, institutionalization of a multi-stakeholder advisory body on chemicals, and the food security pilot would contribute to awareness raising and sensitization for chemicals management and risks (*Arts. 9 and 10 of the Stockholm Convention; Arts. 9 and 10 of the National Policy and a NIP priority*) .

b) PROJECT DESIGN (INCLUDING LOGFRAME AND INCREMENTAL REASONING)

The project goal is to minimize risk to humans and the environment of exposure to POPs Pesticides through strengthened governmental, institutional and stakeholder capacity for life-cycle management of these substances.

The project, through building institutional and technical capacity for management of POPs Pesticides would enhance Nicaragua's ability to meet its Stockholm Convention obligations, while also contributing to several NIP priorities and realization of provisions within Nicaragua's National Policy for Integrated Management of Hazardous Substances and Wastes.

Project outcomes

There are four project four project outcomes with associated components and main activities:

Component 1: Enhanced institutional capacity for life-cycle management of POPs Pesticides to enable Nicaragua to meet its Stockholm Convention obligations.

Outcome A: Strengthened legal and regulatory framework for POPs Pesticides

Expected Outputs:
A1) Existing laws updated to address gaps in intentionally produced POPs life cycle management
A2) Legal prosecution system assessed

Baseline information:

Nicaragua has a National Policy and enabling legislative framework for management of POPs Pesticides, and other toxic and hazardous chemicals as well as a National Policy for the Integral Management of chemical substances and wastes (Presidential decree 95-2005). However, significant gaps exist within the legislative and regulatory capacities of the country with respect to basic risk management and chemical safety aspects of life cycle management of POPs Pesticides, and, in some areas, duplication as opposed to a coordinated holistic approach and clear delineation of legal authority. A lack of institutional and administrative capacity, of a sustainable approach to financing enforcement, and of technical capacity have hampered development of norms, and capacity for awareness raising about existing laws and their enforcement.

Nicaragua has a framework legislation enabling protection of environment and human health. The General Law of Environment and Natural Resources (Law 217), amended in 1996, declares that the environment is integral to the country's economic and social development. The law enables establishment of norms to conserve, protect, improve, and restore the environment and natural resources integral to the environment as based on rational and sustainable use in accordance with the Constitution. The law designates the Ministry of Environment and Natural Resources (MARENA) as the authority for management of toxic and hazardous waste transported abroad for destruction. Any citizen can initiate administrative, civil or criminal actions for infringement of the law.

The Basic Law for the Regulation and Control of Pesticides, Toxic and Hazardous, and other High--Risk Substances (Law 274 – approved in 1998) provides for establishment of norms for the regulation and control of pesticides, toxic and hazardous substances. It serves as enabling legislation for assuring the protection of human health, natural resources, security and labor hygiene, and the environment in general. To this end, the law provides for mandating institutional competence as related to management of import, export, distribution, sale, use, management, and destruction of pesticides, toxic and hazardous substances and other hazardous substances. It determines MAGFOR as the application authority, and grants other competences to MARENA, MINSA, MITRAB, MTI, DGA and the Municipal and Regional Governments.

Nicaragua's General Law of Health (Law 423) authorizes the Ministry of Health (MINSA) to determine the maximum permissible concentrations of polluting agents released to air and water, as well as to promote actions for the control, disposal, and elimination of plastic waste

and polluting chemical agents. The law needs strengthening with respect to POPs and POPs alternative safety and pollution prevention aspects and specific norms need to be developed.

With respect to law governing specific substances, those developed for registration and prohibition of pesticides are the most developed, although gaps in life-cycle management need to be assessed and addressed.

Nicaragua prohibited Stockholm Convention POPs pesticides in 1993 under a decree issued by the then Ministry of Agriculture's General Direction for the Protection of Livestock Health (Dirección General de Protección y Sanidad Agropecuaria del Ministerio de Agricultura). Prohibition extends to import, commercialization, and use in national territories for agricultural uses. In 2004, some POPs alternatives that are acutely toxic, cancer causing, etc. were restricted for use on certain crops via Resolution 23-2004, issued by the Ministry of Agriculture and Forestry (MAGFOR).

Nicaragua in 2005 published in its National Gazette (La Gaceta, Diario Oficial) via Decree No. 91-2005 its National Policy for Integrated Management of Hazardous Substances and Wastes (Politíca Nacional para la Gestión Integral de Sustancías y Residuos Peligrosos). The policy is applicable to substances with characteristics that include any of the following: corrosivity, reactivity, explosiveness, toxicity, ecotoxicity, flammability, persistence, and which can bioaccumulative and/or biomagnify. It calls for life-cycle management of these substances and is predicated upon ten principles: prevention, precaution, participation, dynamic balance between the ecosystem and sustainable economic development, social equality, shared and differentiated responsibilities of government, civil society, economic responsibility (including internalization of costs), life-cycle management, self-sufficiency and proximity; and a focus on the interdependence of ecosystem interactions.

Activities to achieve GEF Alternative Scenario:

- *Gaps assessment in life-cycle management of intentionally produced POPs* in Nicaragua's policy and legislation. This assessment would include an examination of opportunities for improving communications between ministries on permitting as part of the institutional strengthening.
- *Updating existing laws to address gaps in life-cycle management.* (For example, Law 274 the principal legislation for POPs, has not been amended for 10 years, but where recommendations where developed during NIP development).
- *Development of national chemical safety standards* (POPs and other toxic and hazardous substances)
- *Development of regulations and norms for POPs Pesticides* in environmental media (water, soil, sediment, industrial effluent), in food, and relative to disposal/destruction (i.e., acceptable concentrations for disposal in an engineered landfill should one be constructed to receive POPs).
- Analysis of legal framework to prosecute environmental violations and propose amendments to current legislation.

Outcome B: POPs / Chemicals legislation enforcement capacity strengthened

Expected Outputs:
B1) Training programme for environmental inspectors, custom officials and agricultural extension workers developed and implemented

B2) National POPs Pesticide inventory improved

Baseline information:

The capacity of government of Nicaragua to enforce the legislation at the national level is limited. There is therefore very limited information about possible presence of POPs pesticides on the local markets. Large quantities of POPs pesticides were imported and produced in the past, and there could still potentially be substantial quantities present in the country.

MARENA has only three full-time time staff working on chemicals, for whom enforcement constitutes just one aspect of their work. In the absence of adequate technical capacity and human resources, most outreach (training) on detection of adulterated pesticides at this time is performed informally by the Nicaragua Association of Agrochemical Formulators and Distributors who carry out their work with the occasional support of CropLife International. Nicaragua does not have a national training program for Environmental inspectors.

At the Department level, each of the country's nine regions, representing 17 departments (two of which are autonomous departments that have less direct interaction with the federal government) have their own enforcement regimes. With respect to chemicals management, the departments have insufficient budgets and almost no technical capacity as required to adequately enforce chemical laws. MARENA has directed that each region engage a person with the requisite technical background for enforcement and has provided some funds from its budget for training in detection of illegally formulated and adulterated pesticides, which are very common in marketplaces throughout Nicaragua and represent a regional and department policing issue. However, both federal and regional funds at this time are too limited to make a significant impact. At the central level MARENA does not have a dedicated vehicle for environmental inspections and this is a clear barrier for doing inspections including the ability of MARENA to reach areas distant from Managua. This also limits the possibility to train people at the departmental level. MARENA is currently performing almost no inspections and there have been no trials for violating chemical management laws so far.

Activities to achieve GEF Alternative Scenario:

- *Refined and updated Inventory of intentionally produced POPs in Nicaragua.* There is an urgent need to update and refine the current preliminary POPs pesticide inventory in Nicaragua and get a better understanding of the magnitude of the problem at the national level. NIP POPs Pesticide inventory had a limited territorial outreach.
- *Training programme for environmental inspectors, custom officials and agriculture extension workers developed by international expert and tested at the national level.* This would include the development of a systematic approach towards dealing with improving enforcement capacity in a country with limited financial and technical resources.
- *Enforcement of policy and regulations at national and local level.* A person will be hired on a full time basis to improve enforcement capacity at the national level and the local/regional level. This includes training of officers at the provincial and national level.
- *Data and information collection.* Capacity to collect data and information will be strengthened in order to be able to document violations of the laws in Nicaragua and present the cases to the legal system.
- *Improve National capacity to prosecute environmental violations.* An analysis will be made to assess current limited capacity for prosecuting environmental violations. Recommendation

will afterwards be implemented and training / capacity building will be implementation according to the recommendations.

- *Facilitate transportation to allow inspections all over the national territory*. A dedicated vehicle for environmental inspections will be procured in order to be able to cover all Nicaragua.

The enforcement strengthening activities would have the added merit of complementing efforts to improve Nicaragua's capacity for labor law enforcement as part of its domestic commitments to meeting CAFTA objectives for strengthened environmental and labor law enforcement capacity, in particular with respect to the agrochemical and agricultural sectors.

It is considered important to have access to a dedicated utility vehicle given that presence at the national level would be important to get a proper outreach of the project. Chemical Safety department in MARENA does not currently have access to a vehicle.

Outcome C: Sustainability of chemical management in public institutions increased:

Expected Outputs:

C1: Mainstreaming of Sound Chemicals Management into national development planning
C2: Strengthened inter-ministerial coordination body for chemicals management

Baseline information:
Currently there is no national strategy for sustainable financing of chemicals management, inclusive of strategies for domestic support and attraction of ODA in support of national priorities for chemicals management. Nicaragua's ministries are heavily dependent on ODA for operational functions, as is typical of many developed nations. Consequently, ODA funding is channeled to priorities noted in national poverty reduction plans and strategies, including those for millennium development goals, United Nations Development Assistance Framework plans, such as the Common Country Assessment (CCA), and Poverty Reduction Strategies (PRSs). Priorities for foundational chemicals management for toxic and hazardous substances, inclusive of POPs need to be reviewed in light of their contribution to national plans, including millennium development planning and poverty reduction and, if warranted, incorporated within these plans during future iterations/elaboration, and implementation activities for chemicals aligned with national planning cycles. Additionally, innovative options need to be explored within a socio-economic context as a means of "underwriting" capacity to implement priorities for POPs beyond the life of individual projects.

Institutional, administrative and technical capacity is variable within ministries for POPs management. MAGFOR has the most developed capacity relative to pesticide management (in particular, with respect to registration of chemicals imported and manufactured/formulated within Nicaragua, and for export). Nevertheless, significant gaps exist in institutional and technical capacity for life-cycle management of POPs and other toxic and hazardous chemicals among this and the other ministries mandated to address chemicals. There is also a need to articulate the manner in which Nicaragua's National Coordinating Committee for chemicals will function and to develop a mechanism is needed to formalize and clarify the nature of on-going multi-stakeholder input on chemicals management issues.

While the turnover of staff within ministries is low (the trend has been for governments to leave mid-level and lower civil servants in office), staff working on chemicals management activities remain small relative to ministerial mandates involving chemicals, including as applicable to risk prevention, risk reduction, outreach and emergency response, monitoring and surveillance. Typically, staff working on chemicals management also works on other non-chemicals activities.

Activities to achieve GEF Alternative Scenario:

- A ministerial strengthening study as applicable life-cycle chemicals management would be performed as applicable to Nicaragua's six core ministries mandated to manage chemicals (MARENA, MAGFOR, MHCP, MINSA, MTI, MTRAB).
- *Strengthening of the National Inter-ministerial coordinating mechanism for chemicals management - CNC.* A governmental coordinating mechanism for toxic and hazardous wastes (inclusive of POPs) would be formalized through law or other institutional mechanism. This body would meet at least four times a year in order to improve the coordination of activities between the Ministries and promote the Sound Management of Chemicals
- *Mainstreaming.* A socio-economic study would be undertaken to examine options for integrating management priorities for POPs and other toxic and hazardous chemicals within national plans, aligning chemicals management activities with national planning cycles, and for improved communications on chemicals priorities within domestic national planning activities (including via improved networking between ministries charged with chemicals management and the Ministry of Finance and Public Credit).

Budgeted Monitoring and Evaluation Plan

The project has reserved 50.000 US$ for the budgeted Monitoring and Evaluation Plan. The activities will be reflected in the budget under Component 1, and will consist of the following activities:

- *Development of M&E system at the outset of project implementation*
- *Baseline and agreed monitoring variables at the outset of the project implementation*
- *Annual Financial NEX audits*
- *Final Independent Project Evaluation.*

<u>Component 2:</u> Reduced risk of exposure of people and the environment to POPs Pesticides including exposure from Contaminated Sites.

Outcome D: Improved Management and disposal of obsolete pesticide stocks

Expected Outputs:

D1: Feasibility study for recollection and safe storage of confiscated POPs pesticides conducted and protocol developed
D2: Technical Guidelines for safe handling, storage and final disposal of POPs pesticides developed.

Baseline information:

Nicaragua does not have environmentally sound destruction technology for POPs pesticide wastes. It currently has no engineered landfills for solid toxic and hazardous wastes, although under a project funded by the World Bank on solid wastes; consideration is being given to creation of two engineered landfills in Managua that could include segregated cells for receipt of some of the municipality's low-concentration solid toxic and hazardous wastes.

In 1998, Nicaragua exported 103 t (102,239 kg) of pesticide waste to Finland for destruction (Vaughan and Romero, 2000). This amount included DDT (50,884 kg), heptachlor (17,062 kg), endrin (271 kg), toxaphene (4,340 kg) and other pesticides (29,682 kg). In 1999, Nicaragua exported another 320 t (319,760 kg) of obsolete pesticide to Finland for destruction. The total cost for destruction of both exports was US$ 1,400,000 (NIP, citing Vaughan y Romero, 2000). In 2003, the Central American Bank of Economic Integration (CABIE) sent 96 t (95,445 kg) of toxaphene for incineration in Holland (MARENA, 2003). These stocks were from the closed Hercasa factory located on the shores of Lake Managua. Inspections prior to exportation of stocks found the site to be secure. The inspections were conducted by MARENA, MINSA, MAGFOR, Procuraduría del Ambiente and BCIE.

In 2004, as part of NIP enabling activities, Nicaragua carried out a preliminary national inventory of POPs pesticides, which indicated there are no immediate risks of contamination from remaining stocks of obsolete pesticides in warehouses (MARENA, 2004c). The main remaining obsolete stocks found during this inventory are toxaphene (5.1 metric tones), which is stored in two warehouses in MARENA's property in Leon.

DDT was used in agriculture and for health purposes from 1959 through 1991. DDT imports were registered only after 1976, with the last such import occurring in 1980. In the fall of 1988, Nicaragua destroyed 31.5 tons of DDT collected from various warehouses at a cost of USD $5,000 per ton, including repackaging, transport and incineration in Finland. The last authorized use of DDT for agriculture was 1992, and for public health, 1991. DDT was prohibited under Ministerial Decree 23-2000. The remaining POPs stock will be destroyed under the regional GEF-funded project on DDT and its alternatives.

However, POPs are still likely to be present throughout the national territory. Currently POPs are recollected, managed, stored on an ad-hoc basis. A feasibility study would be carried out and a protocol would be developed to systematize and improve the management practices of POPs pesticides in Nicaragua, and technical and managerial guidelines for the sound handling, management, storage, transport and disposal of POPs pesticides would be developed.

Activities to achieve GEF Alternative Scenario:

- A feasibility study would be undertaken for establishment of a centralized collection program for confiscated stocks of POPs. The study would describe and assess the current (baseline) method of disposal for confiscated stocks held by the region as regards amounts, adequacy of storage facilities (using FAO guidance as a measure of best practices), risk of exposure to people and the environment, costs and timelines involved with disposal of stocks and adequacy of personnel and training. The federal government's central storage facility in Managua, designed for storage of registration samples of pesticides, would similarly be assessed.
- Based on quantification of stocks collected on a yearly basis, the study would examine options for collection from the departments/territories of contraband stocks (repackaging, labelling, and transport from regions to a central interim storage facility), dedicated transport costs, and construction costs and siting considerations for a secure, centralized interim storage facility for the contraband stock and their costs.

- Financial support options for long-term operation of the program would be determined and be taken into consideration as part of the mainstreaming activity of this project.
- Development of technical and managerial guidelines for the environmentally sound and safe handling, storage and final disposal of POPs Pesticides would be developed.

Outcome E: Improved Planning and Remediation of POPS pesticide Contaminated sites

Expected Outputs:
E1: Comprehensive training programme for remediation planning and execution undertaken
E2: Technical and Managerial Guidelines for remediation of contaminated sites developed
E3: National field verified Plan with ranking of known contaminated sites improved and updated
E4: Remediation of Coquinsa / Shell contaminated site.
E5: Remediation plan for Hercasa contaminated site
E6: Financing Plan with CABEI for the remediation of the Hercasa site
E7: Feasibility study for Picacho Airport

Baseline information:
POPs used in the past for agriculture were applied most extensively to cotton, the country's main cash crop from the 1960s until the 1980s. Toxaphene was manufactured domestically by the Hercasa Company of South America from 1974 until its closure in 1991, and Endrin, Dieldrin and Aldrin were formulated based on Toxaphene the Coquinsa facility.

El Coquimsa
The old agrochemical formulating plant Coquinsa of Shell Nicaragua is located in the northwestern area of Managua on the foot of the Cost of the Heroes and Martyrs, also known as the Cost of Lead, on the shores of Lake Managua..

Coquinsa has an area of approximately 0.7 hectares and various small office buildings, empty underground tanks for storage, a well for water storage and a hangar with the remaining mixing equipment among other things.

The plant was built in 1976. From 1977 to 1994 pesticide products, mainly for cotton crops for Nicaragua and Central America were produced. The site has remained inactive since 1994. In December 2000 the subterranean storage tank was emptied, removing all of its toxaphene; this toxaphene was sent to Holland for its elimination through incineration. Subsequently, the soils in some areas were contaminated due to the leak in the toxaphene tank. Some of these soils were removed in 2002 and temporarily stored in bags; these form part of the material which will be exported toThe Netherlands for destruction during the project implementation.

Shell Nicaragua has developed an Environmental Management Plan for the clean up of the site. This Environmental Management Plan was approved by MARENA and is being monitored by the Office for Environmental Quality and the Delegation of Territory of MARENA in Managua. The site has been cleaned of the elements of trash and the soil that was contaminated is in the process of being removed. The same is being done to other parts of the site and will have the contaminated soil removed and replaced by clean soil once approved by MARENA. These soils will be sent along with the contaminated material in the hangar to Europe for final disposal. The underground deposits have been removed and replaced with clean soil. An estimated of 1.550 tons of contaminated soil will be removed. The USA EPA

guidelines for contaminated soils in residential areas are used as the technical criteria for the removal of soils.

Hercasa

Lake Managua (Lago Xolotlán), a shallow (mean depth 12.4 m) hypertrophic or nutrient rich lake with turbid waters stirred by prevailing easterly winds, has been the receiving source of past contamination by toxaphene and mercury from the Hercasa and Pennwalt sites, as well as runoff from DDT and other POPs used over a period of five decades. The Hércules de Centroamérica, S.A. (Hercasa), which operated a toxaphene formulating plant from 1974 to June 1991, producing an estimated 79 million tons of products and discharged untreated effluent into Lake Managua during that time. Hercasa obtained chlorine for its toxaphene production from the former Pennwalt mercury-cell chlor alkali facility located adjacent to it. The Pennwalt site discharged between 40 tons and 60 tons of mercury into the lake. Toxaphene and DDT and its metabolites have been found in a number of studies of lake sediment and fish (although there have been few such studies), including at levels above acceptable guidance levels developed in western nations. The latter finding is of potential concern as 100s of people are known to catch the fish, although the number of people consuming fish or the frequency of consumption, including as related to species type and size, has not been determined.

The Hercasa site is owned by the Central American Bank for Economic Integration (CABEI). MARENA has been in close negotiation with the CABEI about the possible clean up of the site. They have agreed on including a non-defined amount in their 2009 budget for the activities in the Hercasa / Pennwalt site. CABEI financed in 2003 the environmentally sound destruction of 95 tonnes of Toxaphene that was stored on this site.

El Picacho

The Picacho Airport is a privately owned property and it was used for aerial spraying purposes only. It is located in the urban area of Chinandega City within the district of the same name in the northwestern region of Nicaragua. During the 1960's and 1970's and during the cotton boom in this region it was the most important runway for airplanes for aerial spraying within the large areas of intense cotton cultivation, most importantly with the dangerous mixes of organochlorine pesticides, particularly POPs.

The activity was carried out throughout the 1980's in decreased intensity due to the change in soil use, agricultural produce and the diminishing cotton industry in Nicaragua. Originally the airplanes carried the pesticide solution from the recipient.A closed circuit loading process was used to protect the workers and to avoid spills within the airports. Regardless, during their intensive use with helicopters and airplanes in the airport there were two sources of contamination due to poor practices: 1) Spills during the mixing and moving of pesticides to the tanks on the airplanes and 2) the pesticides not used during spraying was dropped by the airplanes on the far end of the runway in order to get rid of them.

These practices created a heavy POPs contamination, also spreading to the adjacent to Acome River which is contaminated through run-off of pesticides during the rainy season and through subterranean filtrations, filling up drinking water wells. After closure of the airport for construction, people have unlimited access to the airport area with consequent POPs exposure. with particular risk to the pupils in the nearby school.

From 1994 to 1998 MARENA implemented a project entitled PROMAP (Pesticides Management Program) with financing from the World Bank. This program developed an analysis for the environmental situationin this area. It informed and elevated the awareness to reduce risks, and fenced off the airport to avoid having the population enter these contaminated areas. There was a proposal of discontinuing this activity at the airport and moving it to a new and improved runway in the area. This was not carried out due to lack of financing. In the meantime, smaller airports with smaller operating expenses have built closer to cultivations making the El Pichacho airport redundant.

With the expansion of Chinandega city, the total closure of El Picacho airport and its clean up in order to reduce the load of soil contaminants and contaminant migration towards water supply areas are extremely important . This has also been recognized as a national priority.

Activities to achieve GEF Alternative Scenario:

- A training workshop would be held for remediation assessment procedures for ministry technical staff, inclusive of training materials.
- Development and implementation of a comprehensive training programme for remediation planning and execution. This will improve the national capacity (institutional and in private sector) to deal properly with contaminated sites in the future.
- Develop guidelines for remediation of contaminated sites, including guidelines for securing areas, excavation of soils, sample and analysis of soils, and monitoring of the sites post-remediation.
- Contaminated sites identified during a NIP national inventory would be characterized and ranked , after which a national plan for management of contaminated sites would be developed and executed for site security pending remediation (e.g., secure fences, disaster prevention planning and emergency response. (Some sites may be contaminated by other toxic and hazardous substances in addition to POPs. The characterization and ranking would take this into consideration).
- Remediation of Coquinsa / Shell contaminated site.
- Integration of adopted site investigation, characterization and assessment schemes in national policies and guidance
- Develop a remediation plan for the Hercasa site. This includes site characterization, sampling and analysis, site mapping, development of management options and finally the remediation planning. This will include the determination of the contamination of the site as well as the cost of remediation.
- Negotiate financial agreement with CABEI for the remediation of the Hercasa site.
- Lessons learned and best practices from the remediation of the El Coquimsa S. A. site will be extracted and documented.
- Explore funding options for the remediation of contaminated sites (Priority will be given to sites that pose a direct danger of exposure to POPs for the people living close to the sites).
- A feasibility study would be developed for the Picacho Airport contaminated site in Chinanadega in order to determine the magnitude of the contamination and its effect on the environment. This would include a first estimate of the cost of remediation of the site.

Outcome F: Food Security Pilot Project at Lake Managua implemented

Expected Output:
F1: Dietary advice programme to people exposed to POPs contamination at Lake Managua.

Baseline information:
Lake Managua supports a community of more than 1 million people. It is thought that 1000s of poor people, including women of child-bearing age and children, may consume fish from the lake.

In a study of organochlorines in two fish species in Lake Managua (*Sarotherodon mossambicus* and *Cichlasoma managüense*), toxaphene was detected in 81% of the fish samples collected from the lake in 1991 in concentrations ranging from 24 to 1131 µg/kg fw (UNEP, 2002, citing Calero et al. 1991) and in more than 80% of the fish specimens and in all the sediment samples analyzed in a 1993 study (UNEP, 2002, citing Fomsgaard et. al., 1993). DDT was detected in Lake Managua sediment at 400 times the level set as acceptable by the U.S. Environmental Protection Agency by Nicaragua's Institute for Environmental Affairs in a study undertaken with Dutch assistance. A 2006 biomonitoring study of POPs contaminants in women aged 15-24 from one area of the lake who consumed fish found concentrations of DDT metabolites which correlated with fish consumption (Cuadra, 2006).

Evidence seems to be indicating that people living at Lake Managua could be exposed to POPs through their alimentation habits. It would be important to further study this and look for low cost solutions that could lower the risk of exposure to POPs to the people living alongside Lake Managua.

Activities to achieve GEF Alternative Scenario:

- *A food security pilot activity* would be undertaken for Lake Managua. This pilot would have as its key purpose a determination of whether fish in the lake, in particular those species regularly consumed by poor people who rely on fish as a component of their diet, are contaminated by toxaphene, as well as the other POPs, at concentrations of concern, including as based on the frequency of fish consumption, species and size of fish consumed. Mercury and metals would be included in the sample because of the inter-linked history of the Hercasa toxaphene site and Pennwalt, also taking into account that sampling for metals in the same fish samples is cost-effective.
- Additional fish sampling and analysis to support the dietary habits study. Should the results indicate that concentrations found in fish pose a risk to health that requires intervention, a fish consumption advisory would be developed (taking into consideration economic as well as the full spectrum of health factors impacting upon the poor).
- An outreach and awareness raising campaign would be developed and executed

Associated with the previous activities would be workshops/training sessions in the following:

- Pilot initiation workshop for multi-stakeholders to describe its purpose and Work Plan and raise awareness about data interpretation, risk communication and the purpose of fish advisories, as well as considerations specific to developing nations and Nicaragua;
- Development of a risk communications manual for use by ministries, academia, the health care sector, NGOs and civil society;

The food security pilot in context:
Recognizing that this proposal may be read by those with little knowledge of contaminant issues, it is important to note that even among Canada's Eastern Inuit population, which consumes primarily "country foods," including food known to be contaminated with POPs and mercury at levels that pose a health risk, scientific studies have shown that the benefits of fish consumption outweigh the risks, while local mitigating factors may also be a play (e.g,. natural selenium in the diet may offset some of the adverse effects of mercury). Where risk of exposure is found to be of concern, the risks have proved manageable by consumption strategies that do not preclude consumption of fish but rather provide advice on which fish of which size to eat and number of meals, as pertinent to the local context. Such strategies have been found to be *much preferable* to substitution of fish with other foods that are less nutritious and which could therefore contribute to malnutrition, already a problem among the poor. Further, various studies have found situations in which fish in the local environment are highly contaminated but the population consuming them were found *not* to be at significant risk (likely based on the variety and age of fish species consumed and feeding/breeding habits of these species within a lake). For all these reasons, no conclusions about the risk posed by exopsure of poor populations to POPs , mercury and metals who regularly consume fish in Lake Managua can be drawn until the proposed pilot study is completed and data interpreted by qualified experts.

Component 3: Enhanced awareness by stakeholders and civil society for reducing exposure to POPs pesticides

Expected Outcome
G1: Enhanced awareness by stakeholders and civil society about best practices for reducing human and environmental exposure to POPs Pesticides.

Baseline information:

The project has included a strong communication strategy that aims at enhancing the awareness on POPs by stakeholders and civil society. The NIP developed a communications strategy for citizen awareness with regards to the use and disposal of POPs Pesticides in Nicaragua. The strategy will be updated and implemented under the project.

There is a limited awareness within Nicaraguan government ministries about importance of Sound Chemicals Management and its effect on the national economy. Awareness within Nicaraguan society of POPs is also very low.

Activities to achieve GEF Alternative Scenario:
- Develop and implement communication strategy for project
- Develop awareness raising material for project stakeholders (people living in communities with high risk of POPs exposure, policy makers, etc.)

Component 4: Project Management and oversight

Background information:
A project management and oversight component is designed to provide efficient and effective management support for the implementation of the project.

Proposed activities:
- Coordination, project planning and monitoring.
- Drafting of TORs for consultancy input, delivery and quality checking of consultant reports.

- Progress and financial reporting.

Global Benefits

The project, by enabling Nicaragua to meet its Stockholm obligations, will have global benefits achieved through improved management of POPs and therefore reduce the exposure of POPs to humans and to the environment. Without this project some POPs in Nicaragua would otherwise at some stage in their life-cycle enter the environment and become available for global re-distribution.

Tangible POPs release reduction can be accounted from the containment of 1.288 m3 of soils contaminated with POPs from the Coquinsa / Shell site.

GEF ALTERNATIVE AND INCREMENTAL REASONING

Expected Outcomes	Baseline	GEF alternative	Incremental Cost
Strengthened legal and regulatory framework for POPs	- Laws do not cover some key and significant aspects to POPs exposure. - There are no laws for Dioxins and Furans	- Existing laws updated to address gaps in POPs life cycle management. - Legal prosecution system assessed.	Incremental cost: 130,000 US$ GEF: 80,000 US$ Co-finance: 50,000 US$
POPs / chemicals legislation enforcement capacity Strengthened	- Nicaragua has a limited capacity to enforce its environmental laws governing chemicals and worker safety.	- Trining Programme for Environmental inspectors, Custom officials and agricultural extension workers developed and implemented for future uses. - refined national POPs pesticide inventory - Capacity to enforce laws improved and increased number of inspections carried out.	Incremental cost: 350,000 US$ GEF: 150,000 US$ Co-finance: 200,000 US$
Sustainability of chemical management in public institutions increased	- Ministerial Institutional capacity remains weak and fragmented - Ad hoc approach to chemicals management. - Very limited amount of public funds for Sound Chemicals Management.	- Inter-Ministerial coordination body for chemicals management strengthened. - Mainstreaming of Sound Chemicals Management into national development planning.	Incremental cost: 120,500 US$ GEF: 20,000 US$ Co-finance: 100,500 US$
Budgeted Monitoring and Evaluation Costs	none	Efficient project monitoring including NEX audits, and Final independent project evaluation	Incremental cost: 50,000 US$ GEF: 50,000 US$
Improved management and disposal of obsolete pesticide stocks	- Inappropriate practices for identification, management and recollection of confiscated pesticides.	- Feasibility study for recollection and safe storage of confiscated POPs pesticides conducted - improved management practices of POPs pesticides though the implementation of technical guidelines for safe handling, storage and final disposal.	Incremental cost: 90,000 US$ GEF: 40,000 US$ Co-finance: 50,000 US$
Improved Planning and Remediation of Contaminated sites.	- Contaminated site planning fails to advance beyond inventory and insecure sites continue to pose risk of exposure.	- Improved capacity to plan remediation of contaminated sites - Field Verification of contaminated sites. - Clean up of key contaminated sites will improve ministerial capacity to deal with contaminated sites.	Incremental cost: 2,064,400 US$ GEF: 300,000 US$ Co-finance: 1,524,400 US$[4]
Food security pilot project at lake Managua implemented.	- Awareness of food exposure pathways and mitigation options to risk remains low	Awareness raised of chemical risk exposure issues to general and vulnerable populations Dietary advice programme to	Incremental cost: 150,000 US$ GEF: 100,000 US$

[4] Co-finance from CABEI has not yet been confirmed (quantified), and actual co-finance is therefore expected to be higher.

	- Capacity to develop measures to prevent / mitigate risk of exposure remains low.	people exposed to POPs contamination at Lake Managua implemented.	Co-finance: 50,000 US$
Enhanced awareness by stakeholders and civil society.	- Limited information and awareness about bet practices for reducing human and environment exposure to POPs among people exposed to POPs - Limited awareness among policy makers about importance of Sound Chemicals Management.	GEF support will help to raise awareness among populations exposed to POPs. People will be given tools to reduce their risk of exposure to POPs Improved awareness among policy makers about positive effects of Sound Chemicals Management.	Incremental cost: 140,000 US$ GEF: 80,000 US$ Co-finance: 60,000 US$
Project Management	No activity in the baseline scenario	Efficient project monitoring and evaluation, guiding activities towards achieving outcomes.	Incremental cost: 160.000 US$ GEF: 80.000 US$ Co-finance: 80.000 US$
Total			Incremental Costs: 3,014,900 US$ GEF: 900,000 US$ Co-finance: 2,114,900 US$

PROJECT RESULTS FRAMEWORK

Project Strategy					
Project Objective:	Minimize risk to humans and the environment of exposure to POPs through strengthened governmental, institutional and stakeholder capacity for life-cycle management of these substances.				
Conceptual Framework	Indicator	Baseline	Target	Means of verification	Critical Assumptions and risks
Component 1: Enhanced institutional capacity for life cycle management of POPs to enable Nicaragua to meet its Stockholm Convention obligations.					
Outcome 1.1 Strengthened legal and regulatory framework	Model legislation of chemical security developed with life cycle aspects	none	1 model legislation	Consensuated draft of the model legislation	Nicaragua will scale-up successful methodologies and follow-up on recommendations through incorporation into legislation, institutional practices
	Chemical safety Legislation strengthened by proposed amendments & norms.	Law 274	Revised Law 274 submitted to national Assembly	Publication in national register	National Assembly will approve the revised law 274. MARENA will take the lead.
Outcome 1.2 Strengthened Enforcement Capacity	Existence of Training programme for Environmental inspectors, custom officials, and agricultural extension workers.	None	1	Curriculum and training programme	Possible to identify potential candidates.
	Number of inspections undertaken	None	Minimum 20	Reports from MARENA	Inspections by trained inspectors will lead to improved capacity to detect unknown stocks of POPs
	Number of prosecutions	none	1 case minimum	Report from MARENA	Strengthened enforcement capacity will lead to prosecution of violations of laws.
Outcome 1.3 Sustainability of chemical management in Public institutions increased	Number of meetings of an effective inter-ministerial coordination committee for POPs governance and broader Chemicals Management	Ad hoc NIP committee	At least 4 meetings a year	Minutes from meetings. Records of Agreements.	Project will serve as the platform to establish a permanent committee for POPs and Sound Chemicals Management in general.
	National budget committed to Chemicals Management	Total 2008 budget	At least 50 % higher in 2012	National Budgets	Increased awareness among policy makers about potential benefits from Sound Chemicals Management will lead to increase in budgets.

	Number of institutions that provide support to improved National Plan of Application	1 institution	5 institutions	Minutes from meetings	Increased coordination will lead to improved support of Plan.
Component 2: Reduced Risk of exposure to people and the environment to POPs including from Contaminated Sites.					
Outcome 2.1 Improved Management and disposal of obsolete pesticide stocks	Number of Technical guidelines for sound recollection, storage and disposal of confiscated POPs pesticides (and other hazardous chemicals).	0	1 technical guidelines developed and implemented	Review technical guidelines	Existence of technical guidelines will lead to improved management practices.
Outcome 2.2 Improved planning and remediation of contaminated sites.	Number of comprehensive training programs for remediation planning and execution	none	1 training programme 10 persons trained	Final evaluation. Training Material	Success depends on engagement of suitable technical experts to develop and implement training on sampling, monitoring planning, etc. Critical to identify qualified local people for training programme.
	National ranking of contaminated sites	Pre-identificati on from NIP study	Field verified National ranking of contaminated sites	Minutes from inspections and final ranking report	Easy access to sites by owners Development of methodology will lead to actual ranking of sites, and proper measures to protect the sites will be implemented.
	Quantity of contaminated soils removed from Coquinsa / Shell site and contained properly	0	1288 m3	Reports from MARENA and Shell	Shell Nicaragua has committed funds for the containment of contaminated soils at Coquinsa / Shell site, and risk is very low
	Funds committed by CABEI for remediation of Hercasa facility	0	sufficient	Agreement between MARENA and CABEI	Development of remediation plan for Hercasa site will determine cost of remediation. The assumption is that CABEI will approve funding for remediation once the cost is known.
	Number of feasibility studies for Picacho Airport	0	1	Inspection reports.	Access to the site by owners
Outcome 2.3 Food security project at lake Managua implemented	Number of dietary advice programme implemented at Lake Managua	0	1	Final report from consultants. Evaluation by MARENA.	Preliminary results indicate high concentration of POPs (especially Toxaphene) in sediments in Lake Managua. The assumption is that it will be possible to develop low cost solutions to reduce risk of exposure to POPs to the people living alongside Lake Managua.
Component 3: Enhanced awareness by stakeholders and Civil society					
Outcome 3.1 Enhanced awareness among stakeholders and civil society	Number of refined communication strategies to support project objectives.	One Draft communica tion strategy from NIP	One Revised communication strategy developed and implemented	Strategy Communicati on material Radio spots	Communication strategy will complement all the remaining activities in the project, and thereby making it easier to achieve outcomes. It is critical that communication strategy reaches main target groups like policy makers, vulnerable groups, etc.
	Documented lessons learned	0	1 publication	publication	Lessons learned from POPs activities in Nicaragua will be documented.
Component 4: Project Management and oversight					
Outcome 4: Project Management and oversight	Number of reports delivered on time	none	4 quarterly monitoring reports 1 Annual Project Implementation Report	Project files and MARENA archive	Project coordinator will report on a timely basis to the National Project Director in MARENA.

2.3 PROJECT RATIONALE

Without this GEF sponsored project it is very likely that business as usual will continue where limited attention is being put on Chemicals Management in general and especially on POPs and their related effects on humans and the environment. This project is expected to draw the

attention to decision makers the importance of improved management and release containment of POPs Pesticides and Sound Chemicals Management. It will draw the attention of the policy makers, the general public and the people in risk of POPs exposure to the negative consequences current practices have on the population and on the economy of the country. It will also help raise awareness in order to get Sound Chemicals Management included in National Development Plans and Strategies.

Institutional strengthening would contribute to improved capacity for awareness raising and outreach. Improved compliance (a result of this project) would entail an awareness raising and outreach output to appropriate sectors and stakeholders. Workshops and training activities on risk reduction, including data interpretation and risk communications would also contribute to enhancement of public knowledge of POPs and risk prevention and reduction opportunities.

Project Impact

The project would enhance Nicaragua's national capacity to manage POPs Pesticides, including as accomplished through strengthening the country's inter-ministerial coordination body for chemicals, creation of a stakeholder advisory group and through awareness raising and capacity building workshops and activities. All of the processes created or tested via pilots in this project should build expertise that can be applied elsewhere in Nicaragua and also to other types of toxic and hazardous chemicals.

c) SUSTAINABILITY (INCLUDING FINANCIAL SUSTAINABILITY)

The project recognizes that Nicaragua's ministries have limited financial sustainability beyond project-to-project ODA support. This is not an unusual situation for Highly Indebted Poor Countries like Nicaragua. Motivation for project success is strong. The project will be working with financially strong partners such as Shell Nicaragua and CABEI.

The strategy to obtain sustainability in this project is to show through the good example and practical implementation that Improved Management and release containment of POPs Pesticides, Toxic and hazardous waste is important for a country and its development. Strengthening the legal framework, the relevant institutions and their coordination, including the enforcement capacity, will show the way to a situation where increased attention is being put on the importance of sound management of chemicals, particularly POPs pesticides. This is expected to lead to a situation where additional funding in the national budget will be reserved for these purposes in the future. Capacity building is a key in order to achieve sustainability. The mainstreaming of Sound Chemicals Management into National Development Planning should improve the sustainability of the involved institutions in the future.

Importation and production of Stockholm Convention POPs Pesticides has been prohibited / restricted since 1993 and their use in any application prohibited since 2004. There is no evidence that POPs Pesticides continue entering the Nicaraguan territory. This project will primarily deal with problems created in the past, and is trying to find ways to mitigate the effects through capacity building to plan and remediate contaminated sites, etc. The project also aims at reducing the risk of exposure to POPs Pesticides for people living in areas affected by POPs Pesticide contamination such Lake Managua, where the pilot food security project will be carried out, and though the remediation of sites contaminated by POPs

pesticides such as the Shell Coquimsa site. The awareness raising activities and involvement of NGOs and CBOs will create a positive driving force for sustaining project activities.

Lessons learned from past inadequate POPs Pesticide management will be used for the future management of other toxic and hazardous chemicals in order to avoid similar situations in the future.

d) REPLICABILITY

The project is designed to be replicable at a national or regional level. In particular, the approaches taken to build institutional and technical capacity are replicable, inclusive of mainstreaming for sustainable financing and administration of POPs pesticide management. The project's approach to remediation planning, which includes strengthening of interim chemical safety pending remediation, and capacity building in best practices for sampling and awareness raising in support of reduced exposure of environment and food exposure pathways, will be integrated in national rules and guidance for replication, and can with benefit be replicated elsewhere, representing a pragmatic approach adapted to a developing country context. The deliberate emphasis between project activities and synergies with poverty reduction, including food security in the context of protecting most vulnerable groups, health and environmental and economic sustainability itself represents a model for a workable construct that would be applicable to other types of project planning activities (environmental or other focal areas) and could also be applied within a broader chemical context.

The food security pilot, in and of itself, would serve as a national training exercise for fish sampling and analysis procedures for POPs Pesticides and other toxic and hazardous substances in fish and for development of risk communications in support of mitigating exposure that occurs through food exposure pathways. The experience (capacity) gained could subsequently be applied to other regions within Nicaragua, such as Lake Nicaragua and the lagoon system in Chinandega and also with the Central America region generally.

e) STAKEHOLDER INVOLVEMENT.

Stakeholders and beneficiaries would include the ministries of environment (MARENA), health (MINSA), agriculture and forestry (MAGFOR), workers, particularly in the agricultural sector (MITRAB), farm laborers and their families, the Ministry of Transport and Infrastructure (MTI); Nicaragua's departments and territories; the poor (via enhanced food security capacity), the Nicaraguan economy (indirectly, e.g., via improved access to markets for cash crops; and a nascent private sector environmental service sector, i.e., concession for collection of toxic pesticide wastes and independent environmental inspectors). NGOs and civil society would be beneficiaries via access to a formalized advisory body to the project that would provide input on POPs Pesticides and other toxic and hazardous chemical issues, and via participation in training and as participants/recipients in/of outreach and awareness-raising activities.

Stakeholder	Role	Responsibility
Ministry of the Environment and Natural Resources – MARENA	Beneficiary	Project Lead

Stakeholder	Role	Responsibility
Ministry of Health - MINSA	Beneficiary	Participant
Ministry of Agricultural and Forestry – MAGFOR	Beneficiary	Participant
Ministry of Transport and Infrastructure - MTI	Beneficiary	Participant
Ministry of Work - MITRAB	Beneficiary	Participant
Ministry of Development, Industry and Trade - MIFIC	Beneficiary	Participant
General Directorate of Customs - DGA	Beneficiary	Participant
Municipalities (Managua for food security pilot; municipal associations for centralized obsolete pesticide stock collection).	Beneficiary	Participant
Academia	Beneficiary/	Participant
General Public	Beneficiary (Healthier environment)	--
Agriculture industry (plantations)	Beneficiary	Participant

f) Monitoring and Evaluation

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team with support from UNDP/GEF. A Project Inception Workshop will be held within the first three months of project implementation with the full project team, relevant government counterparts, key counterparts and UNDP. A Project Steering Committee including the government, UNDP, and other stakeholders will be constituted at project inception and will meet quarterly to review project progress, provide strategic guidance, and approve annual work plans and budgets.

Day to day monitoring of implementation progress will be the responsibility of the Project Manager and National Project Director. The Project Manager will, develop a project Monitoring and evaluation system. This will be validated by the government after which baseline data will be compiled. This baseline will be the bench mark against which progress of the project will be monitored.

The information and outreach material developed, particularly the lessons learned sections will also to some extent provide tools for evaluation. These sections will be partly based on review and evaluation findings and their wide distribution will provide feed-back, further providing data on the impacts of the project.

An international independent evaluator will conduct a terminal evaluation with a lessons-learned section for wide distribution to other countries planning projects under the POPs focal area. The Final Evaluation will take place three months prior to the Terminal Tripartite Review meeting and will focus on the wider impacts of the project activities. The final evaluation will also review the sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation shall also provide recommendations for follow-up activities.

Financial Monitoring

Financial monitoring and adherence to adopted yearly budgets will be controlled through annual project audits. These audits will be done as per standard procedures for Nationally Executed projects as in force for UNDP CO in Nicaragua.

The financial audits will in addition to ensure adherence to bidding and other procedures, emphasize the cost –effectiveness of the action undertaken. The financial audits will further validate the input utilization or '"budget-delivery" which may to a certain degree be used for monitoring the implementation efficiency or speed of the project.

The Monitoring and Evaluation plan and budget can be found in the table below. It has been included in component 1 in the project budget.

Type of M&E activity	**Lead responsible party in bold**	**Budget (indicative)**	**Time frame**
Inception Report	Project Implementation Team	None	At the beginning of project implementation
Development of M&E system	Project team, government executing agency	10,000	At the beginning of project implementation
Baseline and update agreed monitoring variables	Project team, M&E expert, Project Steering Committee	10,000	First quarter of project implementation.
Project Implementation Review (PIR)	The Government, Implementing Agency (IA) Country Office, National Executing Agency, Project Team, IA Task Manager, and Target Groups	None	Every year, at latest by July of that year
Implementing Agency (IA) annual reports	The Government, IA Country Office, National Executing Agency, Project Team, IA Task manager, and Target Groups	None	Every year
Frequent Progress reports	Project Manager	None	To be determined by Executing Agency
Terminal Evaluation, including lessons learned	GEF Secretariat, Project team, IA headquarters and Task Manager, IA Country Office, National Executing Agency	20,000 + government in-kind	At the end of project implementation
Terminal Report	IA Country Office, IA Task Manager, Project Team	None	At least one month before the end of the project
Audit	National Executing Agency, IA Country Office, Project Team	10,000 (total for project duration)	Yearly

2. FINANCING (for all tables, expand or narrow table lines as necessary)

FINANCING PLAN, COST EFFECTIVENESS, CO-FINANCING, CO-FINANCIERS

The following tables represents the different aspects of the

a) PROJECT COSTS

Project Components/Outcomes	Co-financing ($)	*GEF ($)*	Total ($)
1. Outcome 1 – Enhanced institutional capacity for life cycle management of POPs and POPs altenatives to enable Nicaragua to meet its Stockholm Convention Obligations.	350,500	350,000	700,500
2. Outcome 2 – Reduced risk of exposure of people and the environment to POPs	1,624,400	390,000	2,014,400
3. Outcome 3 – Enhanced awareness by stakeholders and civil society about best practices for reducing human and environmental exposure to POPs.	60,000	80,000	140,000
4. Project Management and oversight*	80,000	80,000	160,000
Total project costs	2,114,900	900.000	3,014,900

* This item is an aggregate cost of project management; breakdown of this aggregate amount should be presented in the table b) below.

b) PROJECT MANAGEMENT BUDGET/COST[5]

Component	Estimated staffweeks	GEF($)	Other sources ($)	Project total ($)
Personnel*	*240*	60,000	40,000	**100,000**
Local consultants*				
International consultants*		**0**	**0**	**0**
Office facilities, equipment, vehicles and communications		20,000	40,000	**60,000**
Travel				
Total		**80,000**	**80,000**	**160,000**

* Local and international consultants in this table are those who are hired for functions related to the management of project. For those consultants who are hired to do a special task, they would be referred to as consultants providing technical assistance. For these consultants, please provide details of their services in c) below:

The project management budget includes 1 full time position that will be financed by the GEF. The National Project Director is an government official working in MARENA and s/he will be working 50 % of the time on the project.

1 Full time Project Coordinator (30 months at 2.000 US$ per month)

C) CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated staffweeks	GEF($)	Other sources ($)	Project total ($)
Personnel				
Local consultants	500	250,000		250,000
International consultants	50	175,000		175,000
Total	550	425,000		425,000

[5] TORs for project staff will be developed at the inception phase of the project implementation.

d) **CO-FINANCING SOURCES** (expand the table line items as necessary)

Co-financing Sources					
Name of co-financier (source)	Classification	Type	Amount ($)	Status	
				Confirmed	unconfirmed
MARENA	Nat'l Gov't	in cash	20.000	Confirmed	
MARENA	Nat'l Gov't	in kind	300.000	Confirmed	
MAGFOR	Nat'l Gov't	in kind	100.000	Confirmed	
Ministry of Health	Nat'l Gov't	in kind	100.000	Confirmed	
Shell Nicaragua	Private Sector	in cash	1.524.400	Confirmed	
SAICM QSP	Trust Fund	in cash	70,500	Confirmed	
CABEI *	Private Sector	In cash	0		Unconfirmed
Sub-total co-financing			2,114,900		

Notes:

* MARENA has been in close negotiation with the Central American Bank for Economic Integration (CABEI), and it is expected that a non-defined amount will be included in their 2009 budget for the activities in the Hercasa / Pennwalt site.

e) Total budget per component

	GEF	Co-finance	Total
Outcome 1: Enhanced institutional capacity for life-cycle management of POPs and POPs alternatives to enable Nicaragua to meet its Stockholm Convention obligations.			
Component 1.1: Strengthened regulatory framework	80,000	50,000	130,000
Component 1.2: Strengthened Enforcement Capacity	150,000	200,000	350,000
Component 1.3: Sustainability of chemical management for POPs and POPs alternatives in public institutions:	20,000	100,500	120,500
- Budgeted Monitoring and evaluation Costs	50,000	0	50,000
Outcome 2: Reduced risk of exposure of people and the environment to POPs, POPs alternatives and substances with POPs-like characteristics including Contaminated Sites.			
Component 2.1: Sound management and disposal of obsolete pesticide stocks	40,000	50,000	90,000
Component 2.2: Contaminated site remediation planning	300,000	1,524,400	1,824,400
Component 2.3: Food Security Pilot Project for Lake Managua	100,000	50,000	150,000
Outcome 3: Enhanced awareness by stakeholders and civil society about best practices for reducing human and environmental exposure to POPs, POPs alternatives and adulterated pesticides.	80,000	60,000	140,000
Outcome 4: Project Management and oversight.	80,000	80,000	160,000
Total	**900,000**	**2,114,900**	**3,014,900**

Total Budget and Work Plan

Award ID:	00050749
Award Title:	PIMS 3645 NIC MSP POPs Management
Business Unit:	NIC
Project Title:	PIMS 3645 NIC MSP Improved Management of POPs in Nicaragua
Project ID: PIMS no.	3645
Implementing Partner (Executing Agency)	MARENA

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
OUTCOME 1: Enhanced institutional capacity for life-cycle management of POPs to enable Nicaragua to meet its Stockholm Convention obligations.	MARENA	62000	GEF	71200	International Consultants	28,000	28,000	0	56,000	A
				71300	Local Consultants	64,000	72,000	24,000	160,000	B
				72100	Contractual services	13,000	13,000	24,000	50,000	D
				71600	Travel	7,000	7,000	2,000	16,000	
				74100	Professional Services	4,000	4,000	3,000	11,000	
				74200	AV and Printing	2,000	2,000	3,000	7,000	
					Total outcome 1	**118,000**	**126,000**	**56,000**	**300,000**	
OUTCOME 2: Reduced risk of exposure to people and the environment to POPs including contaminated sites.		62000	GEF	71200	International Consultants	50,000	50,000	19,000	119,000	A
				71300	Local consultants	24,000	24,000	12,000	60,000	B
				72100	Contractual services	100,000	100,000	40,000	240,000	D
				71600	Travel	8,000	8,000	5,000	21,000	
					Total Outcome 2	**182,000**	**182,000**	**76,000**	**440,000**	
OUTCOME 3: Enhanced awareness by stakeholders and civil society		62000	GEF	71300	Local Consultant	12,000	12,000	6,000	30,000	B
				74200	AV and printing	10,000	20,000	20,000	50,000	
					Total Outcome 3	**22,000**	**32,000**	**26,000**	**80,000**	
OUTCOME 4: Project Management and oversight		62000	GEF	71300	Local Consultant	24,000	24,000	12,000	60,000	B
				72200	Equipment	20,000	0	0	20,000	C
					Total Outcome 4	**44,000**	**24,000**	**12,000**	**80,000**	
					PROJECT TOTAL	**366,000**	**364,000**	**170,000**	**900,000**	

Budget Notes:

A) International Consultants	Description
Legal Expert	Project Component 1.1 i) Guide local legal expert in work related to this component, ii) review of existing legislation and, iii) assess national legal framework to prosecute legal violations.
International Enforcement Expert	Project Component 1.2 i) Provide guidance to local enforcement specialist, ii) review and approve training programme for environmental inspectors, custom officials and agricultural extension workers.
International Expert	Project Component 2.2 i) Provide guidance to local coordinator of remediation activities, ii) Develop comprehensive training programme for remediation planning and execution, iii) Develop guidelines for remediation of contaminated sites, including securing areas, excavation of soils, sample and analysis of soils, and monitoring of the site, iv) Provide technical and hands-on training session to a select group of people in Nicaragua, v) evaluate remediation of Coquimsa / Shell site, vi) evaluate remediation plan for Hercasa site and provide recommendations, vii) review feasibility study for Picacho airport, viii) provide recommendations regarding how to institutionalize lessons learned from this component.
B) Local Consultants	**Description**
Project Coordinator	Coordination, Project planning and monitoring. Drafting of TORs for consultancy input, delivery and quality checking of consultant reports. Progress and Financial reporting.
Legal expert	Project Component 1.1 i) Review existing laws and propose updates to address gaps in life cycle management. ii) Develop new legislation for Dioxins and Furans, iii) Assess national capacity to prosecute violations of laws, iv) extensive stakeholder consultation and coordination with other key Ministries, v) inform policy makers on new and updated proposals.
Enforcement specialist	Project Component 1.2 i) Institutional coordination of enforcement activities at national and local level, ii) Prepare draft training programme for chemical inspectors, iii) Identify candidates for programme, iv) participate in training of 5 chemical inspectors, v) coordinate training activities by international consultant, vi) systematize and participate in inspection activities throughout national territory.
Institutional coordinator	Project Component 1.3 i) Mainstreaming of Sound Chemicals Management into national Deveopment Planning, ii) strengthen inter-ministerial coordination body for chemical management, iii) facilitate stakeholder consultation and communication with civil society, iv) cost benefit analysis of Sound Chemicals Management and business as usual scenario.
Chemical expert	Project Component 2.1 i) Coordination of remediation activities, ii) Facilitate communication between MARENA and owners of contaminated sites, iii) Document lessons learned from remediation of Coquinsa / Shell site, iv) monitor post remediation situation at the site, v) participate in the development of remediation plan for Hercasa facility, vi) participate in feasibility study for El Picacho airport, v) identify people to participate in training programme
C) Equipment	**Description**
Purchase Vehicle	Dedicated Utility Vehicle for the project implementation
D) Contractual Services	**Description**

Sub-contract 1	Budgeted Monitoring and Evaluation Costs: Development of M&E system, Baseline and update agreed monitoring valuables, Terminal Evaluation including lessons learned, NEX audit.
Sub-contract 2	Feasibility study for recollection and safe storage of confiscated POPs and development of protocol for the same.
Sub-contract 3	Contaminated sites identified during a NIP national inventory would be characterized and ranked , after which a national plan for management of contaminated sites would be developed and executed for site security pending remediation.
Sub-contract 4	Develop a remediation plan for the Hercasa site. This includes site characterization, sampling and analysis, site mapping, development of management options and finally the remediation planning. This will include the determination of the contamination of the site as well as the cost of remediation.
Sub-contract 5	Develop a feasibility study for the Picacho Airport contaminated site in Chinanadega in order to determine the magnitude of the contamination and its effect on the environment. This would include a first estimate of the cost of remediation of the site.
Sub-contract 6	Food security pilot activity for Lake Managua. Determine whether fish in the lake, in particular those species regularly consumed by poor people who rely on fish as a component of their diet, are contaminated by toxaphene, as well as the other POPs, at concentrations of concern, including as based on the frequency of fish consumption, species and size of fish consumed. This includes additional fish sampling and analysis to support the dietary habits study. Develop a fish consumption advisory would be developed. Develop risk communication manual.

Cost effectiveness

This project is based on strengthening the foundational capacities in Nicaragua to manage POPs, and the concept of cost effectiveness is complicated to establish for all the activities in component 1. The remediation of the El Coquinsa / Shell S.A. contaminated site includes the containment of an estimated 1,550 tons of soils contaminated with Toxaphene. The soils are being exported to Europe, and the cost of decontamination and transport is determined through an international bidding process. Additional co-finance is expected to be raised for the remediation of the Hercasa site.

All activities have been developed in a way that is considered the lowest possible cost in order to achieve the proposed outcome.

3. INSTITUTIONAL COORDINATION AND SUPPORT

a) CORE COMMITMENTS AND LINKAGES

UNDP is an IA of the GEF. Its focus is on Technical Assistance, Capacity building, and Governance. Additionally, UNDP is actively promoting the Sound Management of Chemicals. It is a priority for UNDP to promote that countries include Sound Chemical Management in their national development planning and strategies.

This project will contribute to the following UNDP service lines: "Undertaking of replicable local poverty initiatives linked to policy change" and "Improvement of sustainable livelihoods of low-income citizens."

The proposed project is supportive of the Millennium Development Goals, especially MDG 4 (reduce child mortality), MDG 5 (maternal health) and MDG 7 (ensure environmental sustainability), by its emphasis on improving institutional, administrative and technical capacity for management of POPs and POPs alternatives, including pesticides that contribute to unacceptably high rates of morbidity and mortality within Nicaragua as a result of acute and also chronic exposure. MDG 6 (Combat HIV/AIDS, malaria, and other diseases) is to a large extent for DDT and malaria, including alternatives to DDT for vector disease control purposes, addressed through the regional GEF project on DDT. However, this project will reinforce the *sustainability* of outcomes of that project through institutional strengthening and outputs on data gathering and research, resource mobilization, enforcement (i.e., as these pertain to Nicaragua and in particular the ability of the environmental and health ministries to gather and share data on POPs alternatives and monitor best practices of POPs alternatives as applicable to disease vector control). There is also a linkage to MDG 1 eradication of extreme poverty and hunger, given that POPs affect the health, abitlity to learn, etc. and thereby in the long run affect their hability to earn their living.

Linkages to reduced mortality of children five years and under and to improved health of women and children can be expected to occur as a result of greater awareness and outreach to plantation owners and improvements to legislation and its enforcement, relative to safe storage of pesticides, and especially the introduction of the dietary advise programme at Lake Managua

b) CONSULTATION, COORDINATION AND COLLABORATION BETWEEN IAS, AND IAS AND EXAS, IF APPROPRIATE.

In recent years, Nicaragua has gained experience with chemicals management issues and processes through participation in several projects, including:

- Development of a POPs NIP in Nicaragua, submitted in April 2006 (GEF project); and participation in the:

1. Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America (GEF project)[6]
2. the Basel Convention Regional PCB project for Central America; and
3. the UNEP Regional Seas: Project for Reduction of Pesticide Runoff to the Caribbean Sea (GEF project).

In addition, the project's implementation will benefit from experiences gained through the execution of a SAICM-funded enabling project, recently approved for execution by UNITAR, entitled , "Updating a National Chemicals Management Profile, developing a national SAICM capacity self-assessment and holding a national SAICM priority-setting workshop in Nicaragua". This project will seek to strengthen broad foundational capacities for chemicals management within the country in support of the Strategic Approach to International Chemicals Management (SAICM). SAICM, adopted in February 2006, supports the achievement of the WSSD Johannesburg Plan of Implementation goal that seeks to ensure that, by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

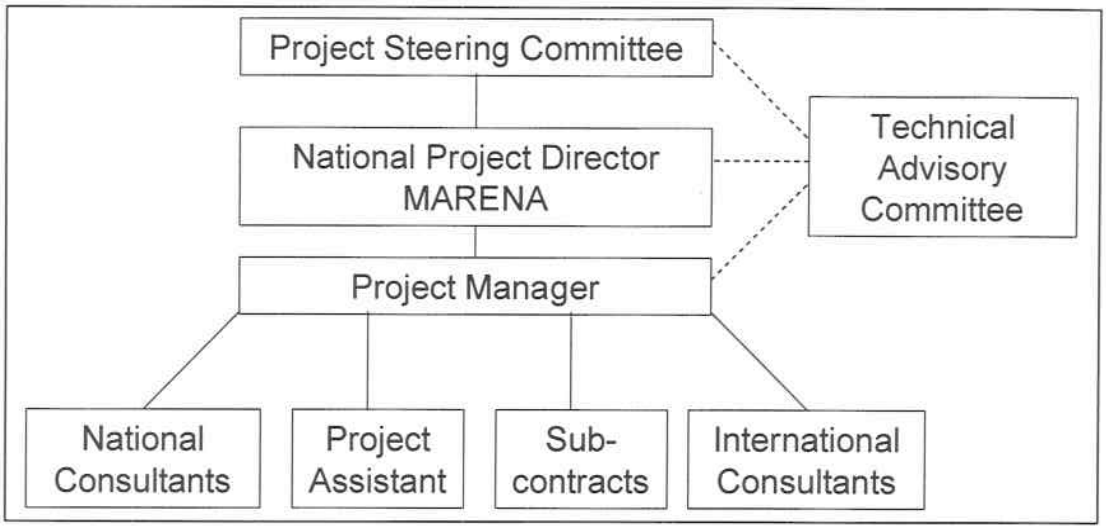
The aforementioned initiatives are complementary to this proposal, and will assist Nicaragua's efforts to further strengthen its capacities for improved POPs and sound chemicals management. The project under consideration will work to ensure optimum coordination of synergies between these projects while avoiding duplication of efforts, ultimately contributing positively to the GEF's strategic aim to promote the sound management of chemicals.

C) PROJECT IMPLEMENTATION ARRANGEMENT

The project will be executed and implemented through Ministry of the Environment and Natural Resources (MARENA). The actual project components will be directly implemented under the realm of Directorate for Environmental Quality in MARENA. Though the responsibility for execution lies with MARENA several project components will be implemented in close cooperation with other Ministries (especially Ministry of Health and Ministry of Agriculture). Indeed the project success and sustainability relies heavily on a close cooperation between a number of ministries and institutions as well as private sector partners like Shell Nicaragua and CABEI.

Overall, the management arrangement of this project is aiming at supporting the long-term needs for managing POPs Pesticides in Nicaragua and creating a solid and sustainable foundation for the Sound Chemicals Management. The actual project implementation will be organized as shown below:

[6] 6,049.1 kg of POPs (mainly Toxaphene) will be destroyed under this project.



The Project Steering Committee will have representation from other ministries relevant to different project activities such as Ministry of Agriculture and Ministry of Health.

A technical advisory committee will be established to give technical support and assistance to the Project Steering Committee, the National Project Director in MARENA and the Project Coordinator. The participation in the committee will be voluntary and could include public institutions as well as civil society.

The project will be implemented through UNDP Nicaragua under the National Execution Modality (NEX) according to standard UNDP rules and regulations.

4. REQUIRED ATTACHMENTS

a) Country Endorsement Letter (RAF endorsement letter if BD or CC project)
b) Confirmed letters of commitments from co-financiers (with English translations)
c) Agency Notification on Major Amendment and provide details of the amendment, if applicable.

Government endorsement letter and Co-financing letters can be found in Annex V and Annex VI.

PART II – SUPPLEMENTAL ANNEXES (TO BE INCLUDED FOR TARGETED RESEARCH PROPOSALS ONLY)

ANNEX A - BRIEFLY OUTLINE THE RESEARCH HYPOTHESIS TO BE TESTED IN THE PROJECT

ANNEX B - EXPLAIN HOW THE RESULTS OF THE RESEARCH PROJECT WILL CONTRIBUTE TO THE OBJECTIVES OF EXISTING OPERATIONAL PROGRAMS, OR THE ASSESSMENT OF POTENTIAL NEED FOR NEW OPERATIONAL PROGRAMS

ANNEX C - ESTABLISH THE INCREMENTALITY BY DESCRIBING THE BASELINE FOR RELEVANT RESEARCH.

PART III - RESPONSE TO PROJECT REVIEWS

a) Convention Secretariat comments and IA/ExA response
b) STAP expert review and IA/ExA response (if requested)
c) GEF Secretariat and other Agencies' comments and IA/ExA response

No formal comments have been received from GEF SEC, STAP, Implementing Agencies and Convention Secretariat given that PIF was never officially presented to GEF SEC. Informal comments from GEF SEC and UNEP have been incorporated in current version of the document.

SIGNATURE PAGE

Country: Republic of Nicaragua_

Implementing partner: MARENA
(designated institution/Executing agency)

Other Partners:

Programme Period: _2008-2011_
Project Title: Improved Management and release containment of POPs Pesticides in Nicaragua
Project ID: 00062821
Project Duration: 30 months
Management Arrangement: NEX

Total budget:	3,014,900 US$
Allocated resources:	
• Government (in-kind and cash)	520,000 US$
• Private Sector (in-kind and cash)	1,524,400 US$
• SAICM (in-kind and cash)	70,500 US$
• Other:	
○ GEF	900,000 US$
○ Donor	_____
○ Donor	_____

Agreed by (MARENA): _____

Agreed by (UNDP): _____

ANNEXES

ANNEX 1. MINISTERIAL ROLES AND RESPONSIBILITIES IN NICARAGUA

Ministries, Sectors	Evaluation Issuance of Technical Norms	Import Export International Transit	Production	Management (handling, storage, disposal, etc.)	Transport	Distribution/ Marketing	Use	Reporting (RETCF) Not operative yet	Monitoring	Treatment	Disposal and Cleanup
Ministry of the Environment and Natural Resources - MARENA	X	X		X			X	X (sub system of enviro info	X		X
Ministry of Health - MINSA	X (toxicological data to inform pesticide registration	X (Inspectors at customs)	X (medicines only)	X (inspect storage facilities; work with MITRAB for Work place but MITRAB)			Indirectly: test health problems in field for intoxication	X information sharing with MARENA	X Food, water, people	X	
Ministry of Agricultural and Forestry – MAGFOR	X	X (inspectors at customs)	X	X		X	X	X information sharing with MARENA	X (storage facilities condition)		
Ministry of Transport and Infrastructure - MTI					X						
Ministry of Work - MITRAB			X worker safety				X when ag workers exposed to conditions inducive to intox Worker Safety.		X Occupational Safety		X Preparation of wastes for export : involved with worker safety
Ministry of Development, Industry and	X Norms for POPs	X Stats, permits	X			X					

Ministries, Sectors	Evaluation Issuance of Technical Norms	Import Export International Transit	Production	Management (handling, storage, disposal, etc.)	Transport	Distribution/ Marketing	Use	Reporting (RETCF) Not operative yet	Monitoring	Treatment	Disposal and Cleanup
Trade - MIFIC	management and Laboratory Accreditation										
General Directorate of Customs - DGA		X			X				X (monitor import and export stats to detect contraband)		
Municipalities				Receive permits for operation and location of enterprises General Plan Municipal Development and Zoning industrial areas							X (solid waste)

Annex II - Studies on POPs pesticide consumption, human and environmental exposure

Pesticide	Last import	Reserves	Adverse effects in humans	Residues in food	Residues in the environment
Aldrin	1977 900 kg (1)	None reported in literature (2)	Two acute poisonings between 1995 and 2004 (3)	There are no updated data. Levels above the MPLs were detected in cattle meat cattle in 1987 (4)	67.7 $pg.g^{-1}$ in sediments of Cocibolca lake (Lacayo y col., 1997).
Chlordane	1984, 260,000 kg (1)	3 kg (2)	There are no reports (3)	There are no updated data. Levels above the MPLs were detected in cattle meat cattle in 1987 (4)	No reports available
Dieldrin	1977 1,002 kg (1)	400 kg (2)	One acute poisoning (3)	Maternal milk and water (CIRA, 1999; Castilho y Col, 2000)	2.67 ng/L in superficial water and 4.51 ng/g in sediments of San Juan river (Lacayo, 1999)
Endrin	1981 10,4251 kg (1)	There is no (2)	There are no reports (3)	Maternal milk and water (CIRA, 1999; Castillho y Col, 2000)	124.13pg/g in sediments of Cocibolca lake (Lacayo y col., 1997).
Hexachlorobenzene	It has never been imported	There is no (2)	There are no reports (3)	There are no reports (3)	There are no reports (3)
Heptachlor	1984 100,000 kg (1)	There is no (2)	There are no reports (3)	Maternal milk (CIRA, 1999; Castilho y Col, 2000,), Tomatos (FHIA, 1998) Shrimps (Cox y King, 1998)	1,117.9 pg/g in sediments of Cocibolca lake (Lacayo y col., 1997). 0.56 ng/g in Ochomogo river (Salvatierra, 1997).
Mirex	It has never been imported (1)	There is no (2)	There are no reports (3)	There are no reports	There are no reports
Toxafeno	1985 Last production	5 640 kg (2)	There are no reports (3)	1.62 mg/kg in shells and 8.50 mg/kg in fishes (Cox y King, 1998) 70,533. 48 ng/L in aquifers of León and Chinandega (CIRA, 1999)	187 µg/kg in sediments of Xolotlán lake (Calero y col, 1993) 1420 ng/g in sediments of marismas of Pacific ocean (Carvalho y col, 1999) 16 mg/kg in soils and fishes (Cox y King, 1998)
DDT	1980 1,072, 270 kg (MINSA, 2001)	2.5 kg (2)	96 acute poisonings between 1995 and 2004 (3)	In lettuce, cabbage, tomato, chiltoma, potato and watermelon (FHIA, 1998). 199.5 µg/kg in mussel (PNUMA, 2002) Levels above to the allowed in water (Castilho y Col, 2000) 0.2 mg/kg in fishes (Cox y King, 1998a)	478 ng/g in coastal waters of Pacific ocean, marine biota (Carvalho y col 2002). 270 µg/kg in marine sediments of Pacific (Carvalho y col 1999) 1302.31 ng/L in fresh water (CIRA, 1999) In sediments of lakes and rivers (Lacayo y col, 1997; Salvatierra, 1997; Cruz y Col, 1999) 977 ng/kg in soils (Carvalho y col, 1999 y Cox y King, 1998)

(1): Palma, 2004; (2): MARENA, 2004c (3): (MINSA, 2004 a), (4): Castillo y de Vos, 1988

ANNEX III - STORAGE CONDITION OF POPS OBSOLETE PESTICIDES, 2004

Firm/warehouse location	Department	Pesticide	Kgs	State of packaging	State of labels	State of warehouse
CEO/CEO	Chinandega	Toxaphene	1,960	*8 metal containers 200 L barrels in normal state, no leaks	Original labels in good condition	Stored in warehouse at high temperature with electricity, without adequate ventilation, and with other types of products
SAGSA, S.A	Leon	Toxaphene	3,680	10 metal containers, no leaks	Non-original labels; good condition	Kept in a warehouse with temperature of 40 degrees C; electric light, poor ventilation, stored with other pesticides that are in leaking containers; spills evident.
MAGFOR DGPSA	Managua	Dieldrin	400	16 metal containers in good condition, no leaks	All original labels	Stored in warehouse with doors, ramp, cement floor, ventilation. Fire prevention equipment, water, and secured
Asociación de Ganaderos (Cattlemen's association) de Madriz	Madriz	Mirex	4	15 original plastic containers, no leaks	All original labels	No warehouse; kept in the association building.
San Ramón Estate (Marlon Sandoval V.)	RAAN	DDT	1	6 original plastic containers, unopened, no leaks	Original labels (donations)	No designated area; kept in a box inside association building.
San Ramón Estate (Marlon Sandoval V.)	RAAN	Chlordane	4	--	--	Kept in a warehouse with doors, and electric lights near the home.
Pulpería de Álvaro Loaísiga	Río San Juan	DDT	1.5	1 regular container, no leaks	Original labels; good condition	No designated area: kept with other commercial products

Source: MARENA, 2004

ANNEX IV: CONSULTANTS TO BE HIRED FOR THE PROJECT

Position Titles	*$/ person week*	*Estimated person weeks*	*Tasks to be performed*
For Project Management			
Local			
Project Coordinator	500	120	Coordination, Project planning and monitoring. Drafting of TORs for consultancy input, delivery and quality checking of consultant reports. Progress and Financial reporting.
International	----------	----------	----------
For Technical Assistance			
Local			
Legal expert	500	80	Project Component 1.1 i) Review existing laws and propose updates to address gaps in life cycle management. ii) Assess national capacity to prosecute violations of laws, iii) extensive stakeholder consultation and coordination with other key Ministries, iv) inform policy makers on new and updateds proposals.
Enforcement specialist	500	120	Project Component 1.2 i) Institutional coordination of enforcement activities at national and local level, ii) Prepare draft training programme for environmental inspectors, custom officials and agricultural extension workers, iii) Identify candidates for programme, iv) participate in training sessions, v) coordinate training activities by international consultant, vi) systematize and participate in inspection activities throughout national territory.
Institutional coordinator	500	120	Project Component 1.3 i) Mainstreaming of Sound Chemicals Management into national Development Planning, ii) strengthen inter-ministerial

			coordination body for chemical management, iii) facilitate stakeholder consultation and communication with civil society, iv) cost benefit analysis of Sound Chemicals Management and business as usual scenario.
Chemical expert	500	120	Project Component 2.1 i) Coordination of remediation activities, ii) Facilitate communication between MARENA and owners of contaminated sites, iii) Document lessons learned from remediation of Coquinsa / Shell site, iv) monitor post remediation situation at the site, v) participate in the development of remediation plan for Hercasa facility, vi) participate in feasibility study for El Picacho airport, v) identify people to participate in training programme, vi) assist with the implementation of component 2 of the project.
Communication specialist	500	60	Project Component 3 i) review and update existing communication strategy developed at NIP stage, ii) Develop communication material for project components, iii) implement communication strategy for project
International			
Legal expert	3,500	10	Project Component 1.1 i) Guide local legal expert in work related to this component, ii) review existing legislation, iii) assess national legal framework to prosecute legal violations.
International Enforcement Expert	3,500	6	Project Component 1.2 i) Provide guidance to local enforcement specialist, ii) review and approve training programme for chemical inspectors, iii) train 5 chemical inspectors in Nicaragua
International Expert	3,500	34	Project Component 2.2 i) Provide guidance to local coordinator of remediation activities, ii) Develop comprehensive training programme

			for remediation planning and execution, iii) Develop guidelines for remediation of contaminated sites, including securing areas, excavation of soils, sample and analysis of soils, and monitoring of the site, iv) Provide technical and hands-on training session to a select group of people in Nicaragua, v) evaluate remediation of Coquimsa / Shell site, vi) evaluate remediation plan for Hercasa site and provide recommendations, vii) review feasibility study for Picacho airport, viii) provide recommendations regarding how to institutionalize lessons learned from this component, ix) Provided technical assistance for the implementation of component 2 of the project.

Annex V – Government Endorsement Letter

Gobierno de Reconciliación
y Unidad Nacional
El Pueblo, Presidente!

Despacho de la Ministra

Managua, September 19, 2007
Ref.: DM-JAS-1085-09-07

Yannick Glemarec
Executive Coordinator UNDP
The United Nations Development Programme -
Global Environment Facility Unit (UNDP-GEF)
Energy & Environment Group, BDP
304 East 45th Street
9th Floor
New York, NY 10017

Subject: Endorsement for Improved Management of POPs in Nicaragua

Dear Sir:

In my capacity as GEF Operational Focal Point for Nicaragua, I confirm that the above project proposal (a) is in accordance with the government's national priorities and the commitments made by Nicaragua under the relevant global environmental conventions and (b) has been discussed with relevant stakeholders, including the global environmental convention focal points, in accordance with GEF's policy on public involvement.

Accordingly, I am pleased to endorse the preparation of the above project proposal with the support of UNDP. If approved, the proposal will be prepared and implemented by the Ministry of Environment and Natural Resources (MARENA). Further, I request UNDP to provide a copy of the project document for information of this before it is submitted to the GEF Secretariat for CEO endorsement.

I understand that the total GEF financing being requested for this project is $ 1.039.500, inclusive of project preparation grant (PPG), if any, and Agency fee (10%) to UNDP for all project cycle management services associated with this project.

I consent to the utilization of the indicative allocations available to Nicaragua in GEF-4 under the GEF Resource Allocation Framework to cover the GEF project preparation and implementation as well as the associated Agency fees for this project.

Sincerely,

JUANA ARGENAL SANDOVAL
Focal Point for GEF
Minister MARENA

20 SEP 2007
M... NICARAGUA
ACCION | INFO
1698

Cc: Rosario Murillo, Coordinator Council for Communication and Citizenship
Samuel Santos, Minister Foreign Relations
Léonie Argüello, UNDP Nicaragua
Raomir Manzanarez, General Secretary MARENA
Hello C. Zamora, Focal Point for POPs
Files

Ministerio del Ambiente y los Recursos Naturales

Km. 12 ½ carretera norte
Frente a Corporación ~~de Zonas Francas~~
Apartado Postal 5123, Managua, Nicaragua
Tel: (505) 263-1273 – 263-1667 Fax: (505) 263-1274
E.mail: jargenal@marena.gob.ni

Annex VI – Co-finance letters and translations

Co-finance letter Shell - Coquinsa

Shell Nicaragua, S.A.
Apdo. Postal 2084
Tels.: (505) 266-1191/6
Fax: (505) 266-1197
Costado E. Shell Las Brisas, Managua, Nicaragua

Managua, 28 de Mayo de 2007.

Licenciada
Juana Argeñal
Ministra
MARENA
Su Despacho

Ref: 117-05-07-CCH

Ref.: Costos Proyecto Coquinsa

Estimada Señora Ministra.

Por medio de la presente le saludo con todo respeto deseándole éxito en sus funciones. Conforme los requerimientos del Lic. Helio Zamora para que Nicaragua logre el co-financiamiento con GEF para dar seguimiento al proyecto MSP, a continuación le detallo el monto de las inversiones que Shell Nicaragua S.A. está realizando durante este proceso de cierre y recuperación ambiental del área de COQUINSA que se está llevando a cabo.:

• Trabajos de demolición y remoción de estructuras	:	162,500.00
• Construcción de almacenaje temporal para suelo afectado	:	11,900.00
• Elaboración del Plan de Manejo Ambiental	:	320,000.00
• Trabajos de remediación incluyendo la supervisión de Royal Haskoning	:	930,000.00
• GPA incluyendo housekeeping y empaque de suelos	:	100,000.00
TOTAL US$		1,524,400.00

En adición a lo anterior, le informo que la planta inició operaciones en el año 1977 y salió de servicio en el año 1993. La eliminación del inventario residual se dio en el año 1,999 por medio de la cia. holandesa AVR. En el año 2002 se hizo una recolección de Toxafeno en sitios varios de la planta y fueron enviados a incinerar a Holanda nuevamente por medio de AVR. Los productos agroquímicos producidos eran formulados a base de Toxafeno y eran drines (aldrin, dieldrin y endrin).

31 MAY 2007

Confiando en que esta información les sea de utilidad para este importante objetivo nacional, me suscribo de Usted.

Atentamente,

Mauricio Aranda Guido
Gerente General
Shell Nicaragua, S.A.

Cc: Lic. Leonie Argüello – Directora de Ambiente y Energía del PNUDE
Lic. Hilda Espinoza – Directora de Calidad Ambiental

PNUD-NICARAGUA		
RECIBIDO:		
ARCHIVO: Nic-00046/7-2		
	ACCION	INFO
RR		
DRR		
	0970	
ZA		—
56	✓	
OBSERVACIONES		

Inscripción en Inglaterra: No. 187255
Oficina Inscrito:
Shell Centre, Londres, SE 17 NA

Shell Nicaragua, S.A.
Apdo. Postal 2084
Tels : (505) 266-1191/6
Fax: (505) 266-1197
Costado E. Shell Los Brisas, Managua, Nicaragua

Managua, 28 de Mayo de 2007.

Licenciada
Juana Argeñal
Ministra
MARENA
Su Despacho

Ref: 117-05-07-CCH

Ref.: Costos Proyecto Coquinsa

Dear Madame Minister,

Through this letter I send my regards and wish you success in all of your endeavors. Following the requirements established by Mr. Helio Zamora so that Nicaragua con achieve co financing with the GEF in order to provide follow up to the MSP project, please find below the amount of the investments that Shell Nicaragua S.A. is carrying out during the implementation and environmental recovery process of the COQUINSA area:

- Work on the removal and demolition of structures: 162,500.00
- Construction of temporary storage for affected soil: 11,900.00
- Elaboration of Management Plan: 320,000.00
- Remediation work including the supervision of Royal Haskoning: 930,000.00
- GPA including housekeeping and soil packaging: 100,000.00

TOTAL US$ 1,524,400.00

In addition to the previous, I would also like to inform you that the plant began operation in 1977 and was out of service in the year 1993. The elimination of the residual inventory came about in 1999 through the Dutch company AVR. During the year 2002 a new collection of Toxaphane was carried out in varios places of the plant and was sent to incinerate in Holland once again through AVR. The agrochemical products produced where formulated with a Toxaphane base and were drines (Aldrine, Dieldrine and Endrine).

31 MAY 2007

Confiando en que esta información les sea de utilidad para este importante objetivo nacional, me suscribo de Usted.

Atentamente,

Mauricio Aranda Guido
Gerente General
Shell Nicaragua, S.A.

Cc: Lic. Leonic Argüello – Directora de Ambiente y Energía del PNUDE
Lic. Hilda Espinoza – Directora de Calidad Ambiental

PNUD-NICARAGUA
RECIBIDO:
ARCHIVO: Ref. 117-05-07-2

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OBSERVACIONES

en Inglaterra: No. 187255
icrito:
re, Londres, SE 17 NA

Government Co-finance table and translation

Gobierno de Reconciliación y Unidad Nacional
El Pueblo, Presidente!

Despacho de la Ministra

Managua, 28 de junio de 2007
Ref.: DM-JAS-0791-06-07

Señor
Alfredo Missair
Representante Residente
PNUD Nicaragua
Su Despacho

Estimado Señor Missair:

Tengo el agrado de dirigirme a usted con referencia al proyecto **"Fortalecimiento de la Capacidad para el Manejo Mejorado de los Contaminantes Orgánicos Persistentes (COPs) y alternativas a COP en Nicaragua"**, cuya propuesta está siendo desarrollada, conjuntamente, entre MARENA y otras instituciones de Gobierno, así como del sector privado y de la Sociedad Civil, apoyados por el PNUD, para acceder a fondos GEF.

Haciendo énfasis en la importancia de obtener los resultados planteados por este proyecto, no solamente para el cumplimiento del Convenio de Estocolmo, sino también para garantizar un ambiente sano y sin riesgos para la población y el medio ambiente nacional y global, el MARENA está plenamente interesado en el desarrollo del mismo.

Además de los US$20,000 en efectivo conseguidos por MARENA para el proyecto, según la información actual obtenida se proyecta el siguiente **aporte en especie** (servicios básicos, local, personal, gastos operativos, laboratorio, etc.) en las tres instituciones del Gobierno de Nicaragua que contribuyen significativamente a la seguridad química, para el período de tres años del proyecto para el manejo mejorado de los COP:

1. Dirección General de Calidad Ambiental (DGCA), en MARENA, con US$140,000.
2. Dirección de Servicios Agrosanitarios (DISAG), en MAGFOR, con US$1,500,000, y
3. Centro de Toxicología (CIVATOX), en el MINSA, con US$450,000.

Agradeciendo su fina atención a la presente, aprovecho la ocasión para saludarle.

Fraternalmente,

JUANA ARGENTINA SOMARRIBA
Ministra

cc.: Lic. Hilda Espinoza, Dirección Gral. de Calidad Ambiental, MARENA
Lic. Guillermo Ibarra, Dir. Gral. Servicios Agrosanitarios, MAGFOR
Dr. Jesús Marín, Dir. Centro Nacional CIVATOX, MINSA
Archivo.-

Ministerio del Ambiente y los Recursos Naturales

Km. 12 ½ carretera norte
Frente a Corporación de Zonas Francas
Apartado Postal 5123, Managua, Nicaragua
Tel: (505) 263-1273 – 263-1667 Fax (505) 263-1274
E.mail: jargenal@marena.gob.ni

Gobierno de Reconciliación
y Unidad Nacional
El Pueblo, Presidente!

Despacho de la Ministra

Managua, 28 de junio de 2007
Ref.: DM-JAS-0791-06-07

Mr.
Alfredo Missair
Resident Representative
UNDP Nicaragua

Dear Mr. Missair

It is my please to write to you with regards to the "Capacity Building for the Improved Management of Persistent Organic Pollutants (POPs) and POPs alternatives in Nicaragua" project, whose proposal is being developed jointly with MARENA and other government institutions, as well as the private sector and the Civil Society supported by UNDP for access to GEF funds.

With emphasis in the importance to obtain the results established by this project, not only to comply with the Stockholm Convention but also to guarantee and safe and risk free environment for society and also the environment on a national and global level, MARENA is very much interested in its development.

Apart from the US$20,000 in cash obtained by MARENA for the project, according to the current information obtained, the next in kind contribution (basic services, local, personnel, operating fees, laboratory, etc.) for the three government institutions in Nicaragua that provide significant contributions to chemical security for the 3 year period within the project's cycle for the improved management of POPs is:

1. General Directory for Environmental Quality (DGCA), in MARENA, with US$140,000
2. Directory for Agro sanitation Services (DISAG), in MAGFOR, with US$1,500,000 and
3. Toxicology Center (CIVATOX), within the MINSA, with US$450,000

With great appreciation for your attention I send you my warmest regards,
Agradeciendo su fina atención a la presente, aprovecho la ocasión para saludarle.

Fraternalmente,

JUANA ARGE[illegible]
Ministra

cc.: Lic. Hilda Espinoza, Dirección Gral. de Calidad Ambiental, MARENA
Lic. Guillermo Ibarra, Dir. Gral. Servicios Agrosanitarios, MAGFOR
Dr. Jesús Marín, Dir. Centro Nacional CIVATOX, MINSA
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