

REQUEST FOR CEO ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project

THE GEF TRUST FUND

Submission Date: October 30, 2010 **Re-submission:** December 16, 2010

Dates

02/28/2011

03/30/2011

02/28/2014

Expected Calendar (mm/dd/yy)

Milestones

Work Program (for FSPs only)

Mid-term Evaluation (if planned)

Agency Approval date

Implementation Start

Project Closing Date

PART I: PROJECT INFORMATION

GEFSEC PROJECT ID: 4012 GEF AGENCY PROJECT ID: 3875

COUNTRY(IES): Georgia

PROJECT TITLE: Disposal of POPs Pesticides and Initial Steps for

Containment of Dumped POPs Pesticides in Georgia

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): Ministry of Environmental

Protection and Natural Resources

GEF FOCAL AREA(s): Persistent Organic Pollutants

GEF-4 STRATEGIC PROGRAM(s): POPs SP-1, POPs SP-2 (see preparation guidelines section on exactly what to write)

NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective: The project's objective is to enhance environmental quality and avoid human impacts by ensuring minimization of POPs pesticide releases in Georgia

Project Components	Indicate whether	Expected	Expected Outputs	GEF Finan	cing¹	Co-Finan	cing¹	Total (\$)
-	Investme nt, TA, or STA ²	Outcomes		(\$) a	%	(\$) b	%	c=a+b
1. Legal and administrative capacity building	TA	1. Legal framework, administrative and technical preparedness for sound POPs pesticides and waste management strengthened	1.1. Baseline hazardous waste legislation and policies reviewed, developed and adopted 1.2 Technical guidelines on safety procedures for POPs pesticides handling, transport, storage and disposal developed 1.3 Government entities trained in hazardous waste export procedures and rules, pesticide site investigation, risk assessment, management options screening for creating a buyer competence for such services	60,000	3	1,838,540	97	1,898,540
2. Minimization of releases of POPs from obsolete pesticides dumps	TA	2. Exposure to POPs pesticides reduced through safe disposal of non-soil mixed pesticides and creating a planning framework for reducing future POPs	2.1 Detailed study of Iagluja dumpsite; development of a long-term site management plan; pre-feasibility study for obsolete PoPs pesticides local destruction options; 2.2 400 tons of non-soil mixed PoPs pesticides buried in concrete sarcophaguses at Iagluja dumpsite, excavated, labeled and re-packed; 2.3 250 tons of non-soil mixed	831,055	85	150,000	15	981,055

		releases at the Iagluja site	POPs pesticides exported for destruction abroad; 2.4 Low cost risk reduction measures (access control, fencing, warning signs, drainage ditches) implemented at Iagluja dumpsite					
3. Monitoring, learning, adaptive feedback, outreach and evaluation	TA	3. Project's results are evaluated, used in adaptive management and replicated	3.1 M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs 3.2 Lessons learned and best practices are accumulated, summarized and replicated at the country level.	8,945	100	-	-	8,945
4. Project management			100,000	40	152,540	60	252,540	
Total Project Cos	Total Project Costs			A1,000,000		B2,141,080		3,141,080

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

B. SOURCES OF CONFIRMED **CO-FINANCING FOR THE PROJECT** (expand the table line items as necessary)

Name of Co-financier (source)	Classification	Туре	Project	% *
European Commission (EU Twinning project)	Multilat. Agency	In-kind	1,700,680	79%
GEF Agency	Multilat. Agency	Grant	150,000	7%
Ministry of Environmental Protection and Natural Resources	Nat'l Gov't	In-kind	240,400	11%
Marneuli Municipality	Local Gov't	In-kind	50,000	2%
Total Co-financing	B2,141,080	100%		

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

C. FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation a	Project b	Total $c = a + b$	Agency Fee	For comparison: GEF and Co- financing at PIF
GEF financing	-	A1,000,000	1,000,000	100,000	1,000,000
Co-financing	-	B2,141,080	2,141,080		1,348,433
Total	-	3,141,080	3,141,080	100,000	2,348,433

D. GEF RESOURCES REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES)¹

GEF Agency Focal Area		Country Name/		(in \$)			
GEF Agency Focal Area	rocai Ai ea	Global	Project (a)	Agency Fee (b)2	Total c=a+b		
UNDP	Persistent Organ	Georgia	1,000,000	100,000	1,100,000		
Total GEF Resources		1,000,000	100,000	1,100,000			

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

² TA = Technical Assistance; STA = Scientific & Technical Analysis.

² Relates to the project and any previous project preparation funding that have been provided and for which no Agency fee has been requested from Trustee.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated person weeks	GEF amount(\$)	Co-financing (\$)	Project total (\$)
Local consultants*	100	50,000	150,000	200,000
International consultants*	8	28,000	-	28,000
Total	108	78,000	150,000	228,000

^{*} Details to be provided in Annex C. Additional provision for 5 days stay in Georgia (DSA) and US\$ 1,000 for travel for each consultant is expected: total estimated additional costs for travel would represent US\$ 5,835 for three consultants

F. PROJECT MANAGEMENT BUDGET/COST

Cost Items	Total Estimated person weeks/months	GEF amount (\$)	Co-financing (\$)	Project total (\$)
Local consultants*	181	92,544	61,640	154,184
International consultants*	-	-	-	-
Office facilities, equipment, vehicles and communications*		2,456	71,680	74,136
Travel*		-	19,080	19,080
Others**		-	-	-
Audit cost, miscellaneous		5,000	-	5,000
Total		100,000	152,400	252,400

^{*} Details to be provided in Annex C. ** For others, it has to clearly specify what type of expenses here in a footnote.

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? yes on no (If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your agency and to the GEF Trust Fund).

H. DESCRIBE THE BUDGETED M &E PLAN:

Monitoring and reporting

Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures by the Project Executive with the support of the Project Manager (PM), and UNDP Country Office (UNDP-CO) with the support of UNDP/GEF Regional Coordination Unit in Bratislava (RCU), and any other relevant members of the project team. The Logical Framework Matrix in Annex A (logframe matrix) provides impact, outcome and output indicators for project implementation along with their corresponding means of verification. The M&E plan and reporting requirements include: inception workshop and inception report, regular interim and annual project reviews by a project executive board, project implementation reviews, short quarterly operational reports for GEF submission and detailed quarterly progress reports in UNDP format, including financial reports, final evaluation, project terminal report. The principal components of the M&E Plan and the indicative cost estimates related to M&E activities are outlined below. The project's M&E Plan will be presented and finalized at the project's inception workshop following a collective fine-tuning of indicators, means of verification and the full definition of project staff M&E responsibilities.

The Ministry of Environmental Protection and Natural Resources through the Division of Waste Management under the Department of Integrated Environmental Management will act as Project Executive. The small Project Management Unit consisted of a Project Manager (PM) and a Project Assistant (PA) will be established and hosted by the Division. The costs of the PMU will be shared by the GEF-project, UNDP and the Ministry of Environmental Protection and Natural Resources. The PM will report regularly on project management matters to the Project Executive which will in turn report to a Project Executive Board (PEB). This is the highest policy-level body of the parties directly involved in the implementation of the project.

Project Inception Phase

A Project Inception Workshop (IW) will be conducted with participation of the project team and key stakeholders. A fundamental objective of this IW will be to assist the project team and key stakeholders to understand the project's goals and objectives and the Project Executive and project team to take ownership in it. The IW participants will also review the logframe matrix (indicators, means of verification, assumptions), imparting additional detail as needed. At the IW, the Project Executive, with support from the PM, UNDP-CO assisted by the RCU and in consultation with the full project team, will fine-tune the progress and performance/impact indicators of the project. Specific targets for the first year implementation progress indicators together with their means of verification will be agreed. Schedules for measuring the impact indicators related to global benefits will be defined. On the basis of this exercise, the Project Executive, with the support of the PM, will finalize and submit to the stakeholders the initial Annual Work Plan (AWP) and the Project Inception Report referred to below. The AWP will include a detailed first year schedule divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project and the detailed project budget for the first full year of implementation.

Additionally, the purpose of the IW will be to: (i) introduce key members of the Project Executive and project team who will support the project during its implementation; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff and other project team members vis à vis the PM; (iii) provide a detailed overview of UNDP-GEF reporting and M&E requirements (described below). The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms.

Monitoring responsibilities and events

A detailed schedule of PEB meetings to review project progress will be developed by the PM in consultation with the rest of the project team and incorporated in the AWP. Such a schedule will include: (i) tentative time frames for PEB meetings and (ii) project related M&E activities.

Day to day monitoring of implementation progress will be the responsibility of the PM, based on the project's AWP. The PM will inform the Project Executive and UNDP-CO and the PEB of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

The specific targets for implementation progress indicators agreed as part of the initial and subsequent AWPs will be used to assess whether implementation is proceeding at the intended pace and in the right direction. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

Measurement of impact indicators related to global benefits will occur according to the schedules defined in the AWPs. Periodic monitoring of implementation progress will be undertaken through UNDP-CO regular meetings with the PM as well as through the regular interim PEB meetings. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

Each calendar quarter the Project Executive, supported by the PM and in consultation with the UNDP-CO will prepare and present to the PEB for review quarterly progress reports described below.

Annual monitoring will occur by June 30 in each year through the Project Implementation Review (PIR) and will be incorporated into the UNDP/GEF Project Implementation Review described below.

The final project review by the PEB will be held in the last month of project operations on the basis of the Terminal Report described below.

Project Reporting

The Project Executive, with the support of the PM and in conjunction with the UNDP-GEF extended team, will be responsible for the preparation and submission of the following reports that form part of the monitoring process:

An Inception Report will be prepared by the Project Executive and the PM immediately following the IW, which will include the first year AWP described above. The Inception Report will also include a detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. The Inception Report will also include a detailed schedule of all monitoring events, including dates of specific field visits, support missions from UNDP-CO or RCU or consultants, as well as time-frames for meetings of the PEB. Finally, as part of the Inception Report, the Project Executive and PM will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. These technical reports will represent the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels. When finalized, the Inception Report will be circulated to project counterparts who will be given a period to respond with comments or queries. Prior to this circulation of the IR, UNDP CO will review the document.

With the support of the PM, the Project Executive will provide short quarterly reports outlining main updates in project progress to UNDP CO and the RCU as a GEF requirement. In addition, detailed quarterly and annual progress reports, including risk monitoring report and financial report in UNDP format will be shared with the PEB for review.

The AWP will be updated by the PM and the Project Executive on an annual basis and reviewed by the PEB.

An annual UNDP/GEF Project Implementation Report (PIR) will be prepared by the PM, the Project Executive, UNDP CO and RCU for submission to UNDP-GEF, coinciding with GEF annual project cycle (from July of previous year to June of the next year). The PIR will reflect progress achieved in meeting the project's AWP and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The PIR will include the following: (i) an analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome; (ii) the constraints experienced in the progress towards results and the reasons for these; (iii) the three (at most) major constraints to achievement of results; (iv) AWP and other expenditure reports (ATLAS generated); (v) lessons learned; and (vi) clear recommendations for future orientation in addressing key problems in lack of progress.

During the last three months of the project the PM and the Project Executive will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learned, objectives met or not met, structures and systems implemented, whether the project has contributed to the broader environmental objective, etc. It will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's activities and acts as a vehicle through which lessons learnt can be captured for other projects under implementation or formulation. The PM and the Project Executive will be responsible for preparing the Terminal Report and submitting it to UNDP-CO and the PEB. It shall be prepared in draft at least two months in advance of the PEB meeting in order to allow for PEB members review the report, and will serve as a basis for discussions at the PEB.

The project will be a subject to independent external evaluation. An independent Final Evaluation will take place 3 months prior to the final project review by the PEB and will look at impact and sustainability of results. The Final Evaluation should also provide recommendations for follow-up activities. The TOR for this evaluation will be prepared by the UNDP CO based on guidance from the RCU and UNDP-GEF.

Learning and knowledge sharing

Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition, the project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identification and analysis of lessons learned is an on-going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months

Table 1. Project Monitoring and Evaluation Plan and Budget¹

Type of M&E activity	Responsible Parties	Budget US \$	Time frame
Inception Workshop	Project executive, Project Management Unit (PMU)	None from GEF funds	Within first three months of project start up
Inception Report	PMU & Project Executive, UNDP CO	None	Immediately following IW
APR/PIR	PMU, Project Executive UNDP CO, RCU	None	Annually (August-September)
Quarterly progress reports	PMU, Project Executive UNDP CO	None	Calendar Quarterly
Annual progress reports	PMU, Project Executive UNDP CO	None	End of calendar year
Project Executive Board Meetings	Project Executive, PMU	None from GEF funds	Following Project IW and subsequently on a quarterly basis
Annual Project Reviews	PMU & Project Executive PEB	None	Annually
Technical reports	PMU, consultants	None	To be determined by Project team
Final Evaluation	UNDP-CO UNDP-GEF RCU External Consultants	US\$8,945 ²	At the end of project implementation
Terminal Report with lessons learned	PMU, Project Executive UNDP-CO	None	At least one month before project end
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	PMU UNDP CO Project Executive and other stakeholders	None from GEF budget. US\$ 8,840 from UNDP portion of funds; US\$ 10,240 from Government funds, in-kind	At least on a bi-monthly basis
Audit	UNDP-CO	None (cost in	Annual

Excluding project team and UNDP staff time and UNDP staff travel expenses

² Including DSA for 5 days of stay in Georgia and travel to and out of Georgia for M&E consultant

Type of M&E activity	Responsible Parties	Budget US\$	Time frame
	Project team	PM Budget)	
TOTAL COST		US\$8,945 GEF US\$8,840 UNDP US\$10,240 GoG in-kind	

<u>PART II: PROJECT JUSTIFICATION</u>: In addition to the following questions, please ensure that the project design incorporates key GEF operational principles, including sustainability of global environmental benefits, institutional continuity and replicability, keeping in mind that these principles will be monitored rigorously in the annual Project Implementation Review and other Review stages.

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

Background

POPs pesticides, mainly DDT, started accumulating in Georgia during early 1970s due to the oversupply of pesticides as a result of the former planned economy system. The POPs pesticides were stored around the country at farming centers and smaller warehouses. Most widely used POPs pesticide – DDT has been banned in 1975, though the last authorized uses were finally phased-out in 1980. The stockpiles were left in the major and minor warehouses owned by former state organization "Sopflkimia" ("Rural chemistry") and state collective farms.

From mid-1970s onwards, once it was realized that these pesticides are obsolete, a major initiative was launched to collect all obsolete pesticides into a hazardous waste dumpsite in a remote area at the Iagluja Mountain, Marneuli district of eastern Georgia. The dumpsite is located on the top of the mountain on clayey sediments well above the groundwater table. Geographic location of the dumpsite is 41°30'42"N, 44°53'23"E, 700m a.s.l. The dumpsite covers territory of approximately 4ha. Distance to nearest populated site 5km.

Iagluja pesticide dumpsite contains a number of concrete sarcophaguses/cells (10) casted for the final storage of the pesticides. According to archive data the pesticides in the sarcophaguses consist of mainly of DDT, while the remaining quantities are mainly different HCH isomers. Laboratory analysis of 2 samples made during 2004-2005 inventories indicates presence of α -HCH and heptachlor. Today pesticides in sarcophaguses are mixed in an unrecognizable paste with some packaging material etc. It should also be noted that local residents have opened some cells of these sarcophaguses for retrieving obsolete pesticides and the steel used as concrete enforcement. The capacity of the concrete sarcophaguses is about 400 tons according to experts estimate.

The less toxic pesticides with approximate amount of 2,700 tons, including HCHs and other organocloride pesticides (POPs uncertain, DDT not found, possibly toxaphene heptachlor) were simply dumped at the site under open skies in trenches and partly compacted together with soil. Today this pesticide-soil mix covers great areas beside the concrete sarcophaguses. According to study by the Institute of Organic Chemistry, the analysis of soil-compacted pesticides stockpile samples show 5-7% content of organochlorine pesticides.

Obsolete pesticides had been dumped at the Iagluja dumpsite from 1976 till 1985. Currently, the dumpsite is in a very bad condition. The dumpsite territory has no fencing, drainage ditches are not operational and grazing animals have free access to the territory and pesticide stockpiles.

The obsolete pesticide collection during 70s and 80s was not extended to minor warehouses. Therefore, some 400 tons of pesticides were left stored in smaller warehouses and stores, more than 200 tons in total in the country. The pesticides are mixed together, and possible labels are not usually illegible. Obsolete pesticide stockpiles were sampled and analyzed during the POPs Enabling Activity project. The laboratory analysis showed that 47 out of 71 unknown chemical samples and all soil samples contained POPs. Particularly, in Kakheti (Achinebuli, Tsnori) heptachlor was discovered, in Shida Kartli (Kaspi, Kareli, Gori) – heptachlor, DDT and DDE, in Khashuri – heptachlor and DDT, in Achara (Batumi, Kobuleti) – heptachlor, DDT and DDE, in Imereti (Zestaponi, Samtredia) – heptachlor and DDT. Though 66% of the samples contained POPs it is impossible to clearly demark the POPs

from the remaining chemicals as everything is mixed after years of mismanagement and deterioration of packages and containers.

POPs related policies and legislation

Georgia is a party to the Stockholm Convention on Persistent Organic Pollutants. The country signed the Stockholm Convention on May 23, 2001 and ratified it on October 4, 2006. The Convention aims at elimination of wastes containing persistent organic pollutants and limitation of POPs use.

In 2003-2007 with assistance of UNDP/GEF government of Georgia developed a National Implementation Plan (NIP) for Persistent Organic Pollutants for 2006-2018. The final draft of the National Implementation Plan for POPs has been cleared at technical level and is ready for final adoption by the government. The NIP draft underlines the collection and elimination of obsolete pesticides (waste) as the most urgent action for the Government of Georgia.

The National Environment Action plan for Georgia outlines hazardous waste management, and obsolete pesticide stocks in particular as one of the priority areas for future environmental action in Georgia. Sound management of persistent organic pollutants is included in the UNDP Country Programme Action Plan for 2006-2010 as one of priority areas too.

There is no special legislation on persistent organic pollutants in Georgia; neither there is definition of POPs included in the relevant environmental legal acts. The control of some POPs substances is integrated in the hazardous chemicals and agrochemicals control legislation.

Hazardous chemicals legislation in Georgia currently undergoes structural transformation process. Until recently, chemicals management legislation in the country has been based on two principal laws: Law "On Hazardous Chemical Substances" (1998); and Law "On Pesticides and Agrochemicals" (1998). The framework Law "On Hazardous Chemical Substances" adopted in 1998 was abolished in 2010 and new legislation currently is being developed to upgrade old system with new that would correspond to the regulatory measures adopted in the European Union.

Most of chemical substances included in the Stockholm Convention on Persistent Organic Pollutants Annexes are regulated by 2005 law "On Licenses and Permits". The law defines a category of chemical substances – Limited Market Access Materials. Chemicals and chemical substances included in this category are subject to permitting for the following areas: production, transportation, export, import, transit and re-export. The permits are issued by a controlling institution – Technical and Construction Inspection.

The permitting system is not yet fully implemented as additional improvements are yet to be made in order to ensure full compliance of the legal system with the requirements of the Stockholm Convention. In particular, the current hazardous chemicals legislation lacks definition of terms, explanatory technical documents and enforcement mechanism. It is expected that the permitting system will become fully operational and enter into force in 2011-2012.

The plant protection chemicals legislation, in contrast, is much better developed. Production, import, storage, sales, advertising and use of plant protection chemicals is subject to registration by National competent authority according to the 1998 Law "On Pesticides and Agrochemicals". Registration of new plant protection chemicals is carried out on the basis of results of state examination or the results of state expertise of accompanying documents. National Service of Food Safety, Veterinary and Plant Protection, a subordinate body of the Ministry of Agriculture performs this function and maintains the list of registered plant protection chemicals - State Catalogue of the Pesticides Allowed for Use in Georgia (the State Catalogue).

The State Catalogue does not include plant protection products - pesticides regulated by the Stockholm and Rotterdam Conventions. Accordingly import, sale and use of pesticides regulated by the Stockholm and Rotterdam conventions are denied in the Georgian market. The market is episodically checked for existence of non-registered plant protection chemicals, but these measures are not enough for preventing illegal import of restricted pesticides.

No specific hazardous or non-hazardous waste legislation exists in the country. Waste containing hazardous chemicals processing is subject to environmental permitting regulated by 2005 law "On Licenses and Permits" and subsequent regulations Nr. 184 of 28.09.2006 "On Limited Access Materials". Wastes regulated by the Order cover categories of waste included in the Basel Convention, lists of EU Regulation No 1013/2006 and OECD Decision C(2001)107.

Environmental permits are issued by the Ministry of Environmental Protection and Natural Resources of Georgia based on environmental impact assessment of the activity. The prerogative for issuing the environmental permit for the activity is that it should exclude emission of hazardous chemicals into the environment.

Georgia is a party to the Basel Convention on Transboundary Movements of Hazardous Wastes (the Basel Convention). 1995 Law "On Transit and Import of Wastes on the Territory of Georgia" transpose Basel Convention requirements into national legislation and bans import and transit of hazardous wastes in Georgia.

Institutional and administrative context

Key government institutions involved in POPs and POPs pesticide management are: the Ministry of Environmental Protection and Natural Resources Protection (MoE) and the Ministry of Agriculture (MoA). The Ministry of Environmental Protection and Natural Resources is a government agency having a mandate for environmental and resource strategy development, legislation and policy formulation, environmental and resource institution building, environmental impact assessment and development of environmental quality standards. In relation to POPs, MoE oversees waste and waste related environmental aspects of hazardous chemicals - POPs pesticide wastes. In particular, MoE issues permits on Environmental Impact and Limited Market Access Materials. The Ministry of Agriculture holds responsibility for governmental management of activities related to agriculture, forestry and rural development. In relation to POPs, the Ministry of Agriculture overviews issues related to new plant protection product registration and control over the plant protection product import and use. Ministry of Agriculture maintains the register of plant protection chemicals – State Catalogue of Pesticides Allowed for Use in Georgia.

Apart from the Ministries of Environment and Agriculture working with practical aspects of POPs legislation and control the Ministry of Economy and Sustainable Development and Ministry of Finance involved in POPs management.

The Ministry of Economy and Sustainable Development with its subsidiary body - Technical and Construction Inspectorate carries out control of Limited Market Access Materials. Ministry of Finance, the State Revenue Service is a body that controls import, export and transit of the Limited Access Materials.

Marneuli municipality in whose territory hazardous waste dumpsite is located is a principal project partner as it will be directly involved in the project. The municipality will undertake activities related to obsolete pesticide extraction and implementation of low-cost site control/protection measures thus, directly contributing to the project implementation.

Apart from the Ministry of Environment and local municipalities which will provide main inputs to the project, it is expected that the Ministry of Agriculture will contribute to the development of POPs pesticides legal basis and technical guidelines by bringing in experience from government's efforts in safe pesticide use and capacity building projects.

Local private companies having experience in hazardous waste handling and transportation will be engaged in labeling, repacking and transportation of PoPs pesticides to the port. Meanwhile, an international company will be hired to provide destruction services to the project.

Academic institutions are expected to provide technical advice on issues related to development of long-term management plan for Iagluja dumpsite and other technical issues upon necessity. Representatives of relevant academic institutions will be included in the project steering group.

Non-governmental organizations will help to maintain the link between Ministry of Environment as a project implementing agency and general public. Representatives of NGOs will be included in the project steering group.

Major issues and barriers

In 2003-2007 through GEF assistance the Ministry of Environmental Protection and Natural Resources developed a POPs National Implementation Plan, which was updated in 2010 through UNDP on-demand consultancy project assistance. Currently, the government is in the process of endorsement of the NIP.

Although, Georgia with its own resources and donor (Dutch) assistance was able to start implementation of some NIP activities, e.g. collection of about 230 tons of non-soil mixed pesticides and temporary storage at purposefully built warehouse in Kakheti region (Badiauri village); still, there are a number of barriers impeding the full-scale implementation of the NIP measures and sound management of POPs pesticides in general. Specifically, technical guidelines on safe management of POPs pesticides do not exist. There is no special legislation regulating POPs control related issues in Georgia, although, according to existing laws, such control is an integral part of regulating hazardous chemicals, pesticides and agrochemicals. Government entities lack knowledge on hazardous waste export procedures, safe disposal of POPs pesticides, contaminated site assessment, etc.

Currently, the primary challenge is the destruction of POPs pesticide stocks from the Iagluja dumpsite and site remediation. It is noteworthy to mention that because of having no ready finances for elimination of pesticides stored in the Badiauri temporary storage and close location of the storage to the settlment in 2010 the government relocated POPs-pesticides from Kakheti to the Iagluja that aggreviated the already poor situation at Iagluja. The other very important aspect is also the development of proper enabling environment, including legal-regulatory and institutional frameworks for environmentally safe POPs pesticide management.

One additional issue with regard to POPs pesticide is the collection and destruction of approximately 100 tons of obsolete pesticides dispersed in minor warehouses scattered along the country. It is expected that through building the Government's capacity within the suggested project will help in tackling such issues.

Without the proposed GEF project intervention, the Iagluja site will continue to leave a negative impact on nearby areas by deteriorating the quality of surface runoff, nearby watercourses, grazing cattle. If access control measures are not implemented, local population and animals will have free access to the dumpsite, and the cattle which will continue to graze in the dumpsite area will increase the exposure of the local population to POPs pesticides.

Furthermore, some activities for pesticides destruction via co-incineration in local cement kilns or small incinerators would be planned since it is a practical and feasible POPs destruction option. In this case, there could be a risk of dioxin emissions in the result of POPs pesticide destruction, if the co-incineration is not properly planned and carried out.

In the absence of the GEF project, the additional POPs pesticides load on the dumpsite coming from the temporary pesticide stockpile in Kakheti region (relocated to the Iagluja dumpsite and stored in less appropriate conditions than in Kakheti), will increase the human exposure to POPs and POPs releases to environment (e.g. water courses), considering the lack of pollution prevention measures.

It should be noted that without the support from the GEF a comprehensive POPs pesticides initiative could not take place. The government would only be able to undertake isolated efforts in tackling the pesticides issue and pool fragmented and insufficient bilateral support. In such baseline circumstances, the associated risks with the POPs releases into the environment would remain and persist since as the whole issue of POPs obsolete pesticides in Georgia would not be addressed in an integrated manner through the capacity building and the disposal of high-priority POPs pesticide stockpiles.

The key challenges in relation to POPs pesticides management in Georgia which need to be addressed through the project are following:

- a) improvement of legal-institutional base;
- b) improvement of institutional and systemic capacity for safe POPs pesticide handling and management;
- c) improvement of technical capacity of the Government to control POPs and hazardous wastes in the country.

Project strategy: Goal, objective(s), outcomes and outputs

The primary objective of the project is to "minimize releases of POPs from obsolete pesticide stockpiles in Georgia and create capacity in management of the POPs pesticide stockpiles". It will directly contribute to the broader goal of supporting "sustainable development through elimination of POPs from the environment". The three principal outcomes will be used as indicators for achieving the overall project's objective. The Outcome 1 - "Legal and administrative capacity strengthened" - will assure that required pre-conditions, such as capacity building through trainings and the improvement of regulatory framework (necessary for project implementation and further POPs related hazardous waste management), are met. The other principal Outcome is the project's Outcome 2 - "Minimization of releases from obsolete pesticide dumps". This outcome will ensure the biggest POPs pesticide stockpile is partly eliminated in an environmentally sound manner and further releases to the environment are minimized. It will also substantially contribute to creating the national capacity in environmentally sound disposal of POPs containing wastes which is currently absent in the country. The last Outcome which was designed in the project structure is to establish project monitoring, accumulation and dissemination of lessons learnt.

The detailed description of the Outcomes and corresponding Outputs is provided below.

Outcome 1. Legal and administrative capacity strengthened

The legal framework for hazardous waste management in Georgia needs to be revised and updated in order to facilitate sound management of such wastes in the country, e.g. obsolete pesticides. Specific areas that lack proper legislative and administrative framework are the chemicals and the management and handling of hazardous wastes.

The outputs that will contribute to the achievment of this outcome are listed below.

Output 1.1 Baseline hazardous waste legislation and policies reviewed, developed and adopted

The existing limited legal framework for the management of chemicals and hazardous wastes will be reviewed, e.g. all relevant Georgian laws, regulating bylaws and standard acts will be reviewed and gap analysis will be performed. Based on such review, the proposals for amendments and/or modification of the existing framework will be developed in order to conform the Georgian legislation to the standards adoped by the European Union and the Secretariats of the Stockholm and Basel conventions.

Output 1.2 Technical guidelines on safety procedures for POPs pesticides handling, transport and storage (disposal) developed

In order to create an enabling environment for sound management of obsolete pesticides, a series of technical guidelines and safety procedures for hazardous waste handling, transport, storage and final disposal will have to be developed and incorporated into the national legislation. It is expected though that this will entail the use of international guidelines as benchmarks and their adjustment in line with national circumstances instead of developing such from the scratch.

Output 1.3 Government entities trained in pesticide site investigation and risk assessment, management option screening for creating a buyer competence for such services.

Under this output government entities will receive training in pesticide site investigation, risk assessment and management options in order to create a buyer competence for such services. In addition, government entities will also receive specialized training in hazardous waste export procedures and rules according to international law (Basel Convention, Rotterdam Convention, hazardous waste transportation rules (UN), ADR and others as applicable).

Outcome 2. Minimization of releases of POPs from obsolete pesticide stockpiles

Given the provisions provided under the Outcome 1 are met, the stockpiles of POPs containing pesticides will be partly eliminated in an environmentally sound manner. The outcome will address the largest obsolete pesticide stockpile in Georgia - the Iagluja pesticide dumpsite. The total amount of obsolete pesticides in Iagluja stockpiles

strored from Soviet period amounts to approximately 400 tons. In addition to this, about 230 tons packed and labeled obsolete pesticides from Badiauri have been recently transported and stored at Iagluja.

Main activities under this outcome include site investigation at the Iagluja dumpsite, obsolete pesticides excavation and repackaging, implementation of low cost access control measures at Iagluja site and exporting pesticides abroad for the final destruction.

The site investigation will help to detail out the POPs pesticides stockpile and assess the POPs content. Additionally, a comprehensive site remediation plan will be developed since the project will cover only non-soil mixed part of obsolete pesticides that constitutes minor part of the whole stockpile at Iagluja. The largest part of pesticides dumped at the site is compacted with soil which would complicate the thermal descruction of such stockpiles. The long-term site management plan will consider options for alternative treatment of pesticides (phytoremediation, for example). The long-term plan will also assess options for local co-incineration of pesticides in a cement kiln.

The proposed technology for pesticide elimination is the destruction in a specialized licensed facility abroad. The main reason for selecting this strategy is the lack of feasible local hazardous waste destruction capacity in the country. Several local hazardous waste destruction options have been considered upon developing a project document, but none of the options were considered sufficiently feasible, ready and implementable to meet the project's needs.

The outputs that will contribute to this Outcome are listed below:

Output 2.1 Volume of non-soil mixed obsolete POPs pesticides stockpile corrected through detailed site assessment and development of long-term site remediation plan

Development of the site remediation plan will help:

- (-) assess the real concentrations, amount and volume of both soil and non-soil mixed POPs pesticides being stored at the dumpsite,
 - (-) propose the best treatment technology, and
 - (-) recommend the timescale for site remediation.

The plan will fix in detail the volume of non-soil mixed POPs pesticides stored in concrete sarcophaguses to be destroyed in hazardous waste destruction facilities after extracting and repackaging. It is important as the current knowledge of non-soil mixed part of POPs pesticides stored in the dumpsite is rather limited and based on expert's estimates only.

The site remediation plan will also include a small prefeasibility study on preparing sample batches of obsolete POPs pesticides for a test burn at local cement kilns. The aim of the study is to determine the potential of using local cement kilns in obsolete pesticides destruction via co-incineration. The objective of the prefeasability study is to determine parameters for POPs pesticides homogenization required for the preparation of optimal feed for pesticide co-incineration in the kilns. A test burn of pesticides and analysis of exhaust gases will be carried out to test the obsolete pesticides destruction and removal efficiency rate (DRE) and stack emissions for dioxins and furans presence and concentrations levels. In order to implement this output, the contract will be outsourced to either international or local company, or consortium of companies through the open competitive bidding process.

Output 2.2 Obsolete non-soil mixed POPs pesticides at Iagluja dumpsite excavated, repackaged

Non-soil mixed POPs pesticides at the Iagluja dumpsite are buried in concrete sarcophaguses and will therefore require excavation. Pesticides in sarcophaguses are stored without containers or pesticides containing containers are in such poor shape that repackaging will be required for safe handling and transportation. New containers and repackaging materials will be UN approved and suitable for POPs pesticides. The packaging will be carried out in accordance with internationally acknowledged standards (FAO, Basel convention guidelines) to ensure safe and effective containment and minimal safety risks. It is estimated that approximately of 400 tons of non-soil pesticides will be excavated from the sarcophaguses and repackaged.

The excavation of pesticides will be carried out by a team of personnel provided by Marneuli Municipality supervised by senior expert. The repacking, labeling and transportation to the port will be conducted by a Georgian company having a license in handling and transporation of hazardous wastes, determined through open competition. There is a couple of local companies in Georgia who specialize in this area. Repackaging works will comply with the internationally acknowledged standards.

The Marneuli Municipality will also provide all necessary equipment and means for pesticide extraction from dumpsite cells (fork-lifts, trucks, excavation machinery etc).

Due to the funds limitation in the project, the destruction of the whole non-soil mixed pesticide stockpile is not considered as possible at this stage and the part of repackaged obsolete pesticide waste that will not be exported will be temporary stored at the Iagluja site. It is suggested to reuse cells of the dumpsite for this purpose, upon extraction of pesticides and following cell cleanup, provided cell structures are in technically satisfactory condition. It is estimated that the volume of cells will allow storing the whole amount of repackaged POPs pesticides which would not go for export and final disposal.

Output 2.3 Implementation of low cost access control measures in Iagluja dumpsite

The so much urgently required low-cost access control measures will help in restricting the access of local population and, most notably, grazing cattle to the site. Such measures will include fencing of the perimeter of the dumpsite area, installation of signs and securing access control to the area. It would also be necessary to restore the drainage ditch along the perimeter of the dumpsite in order to minimize risks of pesticides entering surrounding areas via surface runoff from the site. These activites will be implemented by Marneuli municipality.

Output 2.4 Pesticide destruction facility selected and obsolete pesticide stocks exported abroad for destruction in an environmentally sound manner at specialized destruction facility

The destruction facility will be selected based on the international tender. Only tested and licensed hazardous waste destruction facilities will be considered in the bidding process. The bidding process will follow standard UNDP procurement procedures. Obsolete pesticide destruction technology must be environmentally sound and approved by the Basel convention.

Excavated and repackaged pesticides from the Iagluja dumpsite storage site will be transported to the selected hazardous waste destruction facility. The transportation process shall be done in accordance with international transportation regulations – the Basel convention: Manual for Implementation (UNEP); The IATA Dangerous Goods Regulations and the United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Orange Book); or the European Agreement for the transport of Hazardous Cargo by Road (ADR) and the International Maritime Dangerous Goods Code (IMDG) so as to maintain safety risks of pesticide transportation at the lowest possible level. Given the location of dumpsite, the transportation by road will be required from Iagluja to the sea port.

Once stocks have been repackaged and transported to the destruction facility, POPs containing pesticides will be destroyed within the time period of several months taking into account facility's capacity and safe pesticide utilization requirements.

The exact amount of pesticides exported abroad for destruction will be determined upon corrected amounts of POPs pesticides as a result of site assessment and market prices by the time of destruction. It is expected to export and eliminate approximately 250-300 tons of obsolete non-soil mixed pesticides out of pesticides being stored at Iagluja. This constitutes about $\frac{2}{3}$ of the amount stored at the Iagluja dumpsite.

Outcome 3 - Monitoring, learning, adaptive feedback, outreach and evaluation

This component is expected to ensure that the project delivers sustained results for the country and for the replication of the experience elsewhere where it is appropriate and according to dominant circumstances. The outputs of the component are:

Output 3.1: M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs; and

Output 3.2: Lessons learned and best practices are accumulated, summarized and replicated at the country level.

Details are provided in Part I Section H: Monitoring and Evaluation plan.

Global environmental benefits

Direct global environmental benefits include the disposal of 250-300 (% of dumped non-soil mixed pesticides volume in Iagluja dumpsite) tons of POPs pesticides and follow-up minimization of risks of pesticide waste entering the environment and affecting health of humans and animals. The development of a long-term plan for the remediation of the Iagluja dumpsite will help identify and assess the most appropriate methods for dumpsite remediation, particularly for appoximately 3,000 tons of low chlorine containing pesticide waste. This can be considered as the first step for the dumpsite remediation in long term and elimination of the Iagluja pesticide waste problem.

Increased technical and administrative capacity for hazardous waste (pesticide) management will provide the framework for collecting, repackaging and eliminating additional 300-400 tons of remaining obsolete non-soil mixed POPs pesticide quantities in future. Experience gained from the realisation of the project can be useful for other countries in the region that are seeking to implement similar measures for elimination of obsolete pesticide stockpiles.

DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL AND/OR REGIONAL PRIORITIES/PLANS:

POPs pesticide elimination is the highest priority action as determined by the POPs National Implementation Plan of Georgia as it stands of today. Furthermore, the draft National Environment Action Plan for Georgia outlines hazardous waste management, and obsolete pesticide stocks, in particular, as one of the priority areas for future environmental action in the country. Sound management of chemicals, including system, institutional and staff level capacity development for implementation of the Stockholm convention as well as demonstration of practices and instruments for sustainable management of chemicals, including POPs pesticides are included in the UN Development Assistance Frameworks and UNDP Country Programme for 2006-2010 and 2011-2015 programme periods. In the upcoming UNDAF, sustainable environment is considered as one of the major disaster risk reduction factors and included in the UNDAF outcome 4 under thematic area 3: Disaster Risk Reduction. "Underlying disaster risk factors are reduced, focusing on sustainable environmental and natural resource management". The outcome has targets to increase knowledge on and scale of the use of sustainable environmental and natural resource management practices and tools, which among others presumes the sustainable management of chemicals. In addition, it aims at enhancing the level of compliance with international environmental conventions, including the Stockholm convention. UNDP Country Programme for 2011-2016 further elaborates its plans for the next programme cycles, which among others include such outputs as the adoption of practices and tools for sound management of chemicals and strengthening of systemic, institutional and staff level capacities enhanced for implementation of national environmental commitments and major international agreements on climate change, biodiversity, land degradation and chemicals.

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

The project is a direct continuation of the POPs Enabling Activity project and will contribute to objectives of GEF-4 strategic program 1 "Strengthening capacities for NIP development and Implementation" (SP-1). Under this program eligible countries are supported to the capacity to implement measures required to meet their obligations under the Stockholm convention. Outcomes of the Project component 1 "Strengthening legal and administrative capacity" complies with the GEF Strategic Programme 1 (SP-1) indicators: a) legislative and regulatory framework in place in supported countries for the management of POPs and chemicals in general; b) strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries; c) strengthened and sustainable capacity for enforcement. The project component 2 "Minimization of POPs releases from obsolete pesticide stockpiles" will contribute to reduction of POPs releases and destruction of

POPs in environmentally sound manner as called for in GEF strategic programme 2 (SP-2). SP-2 indicators that are directly relevant to the project component 2 are: a) POPs destroyed in an environmentally sound manner (tons and cost per ton per compound); b) Reduced exposure to POPs, measured as number of people living in close proximity to POPs wastes that have been disposed off or contained.

Objectives of the project are also consistent with GEF-5 focal area objectives. The overall project objective complies with the GEF-5 focal area objective 1.5 (CHEM-1) "Phase out POPs and reduce POPs releases". Under this program eligible countries are supported to the capacity to implement measures required to meet their obligations under the Stockholm convention. Outcomes of the Project component 1 "Strengthening legal and administrative capacity" comply with the GEF Focal Area objective CHEM-1 "Phase out POPs and reduce POPs releases" indicator "Progress in developing and implementing a legislative and regulatory framework for environmentally sound management of POPs, and for the sound management of chemicals in general, as recorded in the POPs tracking tool". The project component 2 "Minimization of POPs releases from obsolete pesticide stockpiles" will contribute to reduction of POPs releases and destruction of POPs in environmentally sound manner as called for in GEF Focal Area Objective 1.4 "POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner (CHEM-1). Indicator directly relevant to the project component 2 is "Amount of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons".

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES.

Major part of funds is dedicated to safe disposal of 250-300 tons of non-soil mixed obsolete pesticides stored at the Iagluja dumpsite. Some portion of funds will be allocated for securing basic access control measures at the site as well as research and study. In addition, the project will provide substantial support for creating an enabling environment for POPs management in the country. Available government and donor funds are not sufficient for eliminating all obsolete pesticide stockpiles in the country. Thus, GEF funds are requested to address immediate threats emanating from the Iagluja obsolete pesticide dumpsite primarily and creating national capacity in obsolete pesticide management to address the remaining obsolete pesticide stockpiles in future. Improvement of legal and regulatory basis of hazardous waste management will make project results more sustainable and will create enabling environment for POPs pesticide management.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The project is a follow up of the MoE efforts in national waste inventories and development of hazardous waste legislation base. The project will integrate other activities of the government in the field of obsolete pesticide management, for instance, experience gained from projects carried out by the Ministry of Agriculture. Implementation of Outcome 1 tasks of the project will be complemented by the activities of the two SAICM projects focused on elaborating the national chemicals profile, assessing national SAICM capacity, setting the national SAICM priorities, and supporting the establishment of Pollutants Release and Transfer Registers and other activities. The project will also coordinate its obsolete pesticide disposal activities with GEF/UNEP project "Demonstrating and scaling up Sustainable Alternatives to DDT for the Control of Vector Bourne Diseases in Southern Caucasus and Central Asia".

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

Project activities are considered fully incremental as they are targeting regulatory strengthening to avoid POPs pesticide releases into the environment and dispose of POPs pesticides from the Iagluja dumpsite in an environmentally sound way as required by the Stockholm convention. In the absence of the GEF project, POPs pesticides exposure risk reduction at the Iagluja dumpsite would not have been addressed. As to the project second component - disposal of POPs pesticides from Iagluja dumpsite, in the absence of the GEF project, limited activities

would have been planned for the incineration of the stockpile locally which would have not removed the substantial part of POPs stockpiles and created POPs emissions resulting from improperly planned and executed stockpile incineration in cement kilns.

Table 2. Summary of Baseline and Incremental Costs

Result	Business-as-Usual and costs	Project incremental value and costs
Outcome 1. Legal framework, administrative and technical	The government works on waste management policies	Enabling environment is created for PoPs pesticides:
preparedness for sound POPs pesticides and waste management	and laws with assistance of other donors. Twinning: US\$	GEF US\$ 60,000
strengthened	985,000	GoG/EU Twinning: US\$1,700,680 in-kind parallel
		GoG: US\$137,860 in-kind
Output 1.1 Baseline hazardous waste legislation and policies reviewed,	Twinning: US\$ 265,000	Baseline hazardous waste legislation developed/updated and adopted
developed, adopted;		GEF: -
		Twinning: US\$1,600,000 in-kind parallel co-funding
		GoG: US\$45,953 in-kind funding
Output 1.2 Technical guidelines on safety procedures for POPs pesticides	Absence of guidelines	Technical guidelines on POPs safe management developed
handling, transport, storage, disposal developed		GEF: US\$20,000 cash funding
,		GoG: US\$45,953 in-kind funding
Output 1.3 Government entities trained in hazardous waste export procedures and rules, pesticide site investigation, risk assessment, management option screening for creating a buyer competence for such services	Lack of capacity and knowledge	Local and national technical capacities created/strengthened in hazardous waste export procedures and rules, pesticide site investigation, risk assessment, management option screening for creating a buyer competence for such services
		GEF: US\$40,000 cash funding
		Twinning: US\$100,680 in-kind parallel co-funding
		GoG: US\$45,953 in-kind funding
Outcome 2. Exposure to POPs	No POPs-pesticide	GEF: US\$831,055 cash funding
pesticides reduced through safe disposal of non-soil mixed pesticides and creating a a planning	minimization/elimination measures	Local municipality: US\$50,000 in-kind
framework for reducing future POPs releases at the Iagluja site		UNDP: US\$100,000 cash co- financing
Output 2.1 Detailed study of the Iagluja dumpsite, development of long-term site management plan; prefeasibility study for local dustruction	Absence of long-term site management plan	Long-term dump-site management plan developed; Pre-feasibility study for local pesticide destruction options developed
options		GEF: -
		UNDP: US\$100,000 cash co-

		funding
Output 2.2 Four hundred (400) tons of non-soil mixed POPs pesticides buried in concrete sarcophaguses at the Iaghluja dumpsite excavated, labelled, re-packaged and transported to the port	Absence of POPs safe management measures at Iagluja	GEF: US\$100,000 cash funding Local Municipality: US\$20,000 in kind
Output 2.3 Two hundred fifty (250) tons of non-soil mixed POPs pesticides exported for destruction abroad	Absence of POPs elimination measures at Iagluja	GEF: US\$731,055 cash funding
Output 2.4 Low cost risk reduction measures (access control, fencing, signs) implemented at Iaghluja dumpsite	Absence of low cost risk reduction measures	GEF: - Local municipality: US\$ 30,000 in- kind
Outcome 3. Project's results are evaluated, used in adaptive management and replicated	No activity in the baseline scenario	Project monitoring and evaluation allows for accumulation of lessons learned for the dissemination to stakeholders GEF: US\$ 8,945
Output 3.1 M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs	No M&E is performed and no adaptive management possible to capitalize on the project needs	
Output 3.2 Lessons learned and best practices are accumulated, summarized and replicated at the country level	No replication of best practices and lessons learned	
Project Overall coordination and management		GEF: US\$100,000 cash
management		UNDP: US\$50,000 cash
		GoG: US\$ 102,540 in-kind

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

Risk	Level	Measures for risk mitigation
Political instability with potential policy shift and staff turnover in the Ministry of Environment	L	The project will ensure a close and adequate contact with key decision makers on the important objectives of the project. Further, the project steering structures would include a broad gathering of key line ministries for ensuring the approval of technical staff influencing political decisions.
Fluctuation in exchange rates may stretch the disposal budget	M	Application of phased disposal strategy will help to report success at early stages. This will facilitate securing of further resources in case the currency fluctuations disturb budgetary control.
Existing data on obsolete pesticide volume in the Iagluja dumpsite is significantly under- estimated and project funding inadequate to extract and eliminate amount of POPs pesticides specified upon investigation of volume of non-soil mixed pesticides at Iagluja dumpsite	M	Investigation into the Iagluja dumpsite will be done at the earliest possible project stage to specify the exact amount of non-soil mixed pesticides. Risk is considered medium since current knowledge on pesticide amount is based on expert's judgment, not measurements.
Releases and exposure of POPs pesticides during re-packaging, storage and transport stages of the project	L	Internationally recognized standards (Basel convention guidelines, FAO guidelines, UN Orange Book, IATA Dangerous Goods Regulations, EU ADR, IMDG) will be followed during repackaging, storage and transportation phases. This will be ensured by proper training and supervision by international experts and experienced local experts
Low cost measures at the Iagluja site are not sufficient for minimizing general public's exposure to POPs from the site	L	The planned investigation into the site will be done at the earliest possible stage to ensure time for appropriate response to increased environmental and human exposure. Risk is not considered high as dumpsite is located in a remote area with favorable geological conditions.
Standards specified in the project are not adhered to during project implementation	L	Independent monitoring will be utilized during the project to ensure that international standards are adhered to.
Overall rating	M	

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

Considering national and global environmental and health risks, the project is cost-effective, as it is aimed at the destruction of POPs pesticide stockpiles and principal outcome of the project is the reduced risks of obsolete POPs pesticides entering the environment and the food chain. Benefits of the project hence are tangible during the project implementation. At the same time project also contributes to building structure of action and framework for eliminating remaining pesticide stockpiles in the future. The proposed pesticide destruction option entailing exporting of pesticide stockpiles abroad for incineration at specialized facility certainly is less cost-efficient in comparison with comparable local pesticide destruction option. However, since the country currently does not have pesticide destruction capacity, the average costs of exporting waste abroad for incineration should present a good medium cost example.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

UNDP is a GEF implementing agency and the Ministry of Environmental Protection and Natural Resources is an executing partner for this project. The UNDP Country Office Georgia will support the project's implementation by maintaining the project budget. The Ministry through its Waste Management Division will have an overall responsibility for achieving the project goal and objectives. The UNDP Country Office will also monitor the project's implementation and achievement of the project outputs and ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with UNDP rules and procedures for National Implementation (NIM).

Local municipalities will be involved in the project as project partners. Local municipalities in whose territory hazardous waste dumpsite is located are principal project partners as they will be directly involved in the project. The municipalities will undertake activities related to obsolete pesticide extraction and repackaging thus contributing to the implementation of the project Outcome 2. The Ministry of Agriculture and its subordinated institutions will contribute to the development of POPs pesticides legal basis and technical guidelines by bringing in experience from government's efforts in safe pesticide use and capacity building projects.

Academic institutions will provide technical advice on issues related to development of long-term management plan for the Iagluja dumpsite and other technical issues. Representatives of relevant academic institutions will be included in the project executive board.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

Overall responsibilities

The project will be executed by the Ministry of Environmental Protection and Natural Resources through the Department of Integrated Environmental Management, which is responsible for development and implementation of waste management policies, including POPs policies in Georgia. In order to perform these functions the Department has a special Waste and Chemicals Management Division. The Ministry will assign a National Project Director (NPD) responsible for implementation of the project as well as for the achievement of the overall project outputs. The NPD will be a senior/mid-level official from the Department of Integrated Environmental Management, but will be ultimately accountable to the Project Executive Board for the overall progress on project implementation. A Project Management Unit (PMU) will be created and will be composed of a Project Manager (PM) and an Assistant. The PMU will be in charge of project day-to-day management. The PMU will be hosted by the Waste and Chemicals Management Division under the Department of Integrated Environmental Management.

The Project Executive Board (PEB) will direct the project and will be the ultimate decision-maker for it. It will ensure that the project remains on course to deliver the desired outcomes of the required quality. The PEB will make management decisions for the project when guidance is required by the Project Manager or when project tolerances have been exceeded. More specifically, the PEB will set up tolerance levels for project stages in terms of duration and disbursement of financial resources. The PEB will review and clear Annual Work Plans (AWP) and annual progress achieved by the project through Annual Project Reviews based on the approved annual work plans. The Annual Workplan and the budget revisions will be sent to the UNDP Regional Center in Bratislava for clearance by the Regional Technical Advisor on chemicals. It will review and approve project stage (quarterly) plans and will authorize any major deviation from these agreed stage plans. The PEB is the authority that signs off on the completion of each stage plan as well as authorizes the start of the next stage plan. It will ensure that required resources are committed, will arbitrate any conflicts within the project or negotiate a solution to any problems between the project and external bodies. The PEB will meet on a quarterly basis (more often if required). Prior to the quarterly meetings, the PM will duly submit the progress report on the previous period and the plan for the next one. The PEB will evaluate submitted documents and be in charge of approving plans and budgets.

The PEB will be composed of the Executive, Senior User and Senior Supplier components. The Executive is ultimately responsible for the project, supported by the Senior User/Beneficiary and Senior Supplier.

The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its outputs. The Executive has to ensure that the project has a cost-conscious approach, balancing the demands of the user (or beneficiary) and supplier. For the project purposes, the Ministry of Environmental Protection through its National Project Director, staff member of the Division of Waste Management, Integrated Environmental Management Department will assume the Executive Role in the Board.

The Senior User/Beneficiary is responsible for specification of the needs of all those who will be primarily using or benefiting from the project outputs, for user liaison with the project team and for monitoring that the solution will meet those needs. The Senior User role commits user resources and monitors project outputs against agreed requirements. Representatives of The Department of International Relations and Environmental Policy Department and relevant Municipal services will represent the Senior User in the PEB.

The Senior Supplier represents the interests of those committing resources either financial or human to the project. The Senior Supplier is accountable for the quality of the outputs delivered by the supplier(s). The Senior Supplier role must have the authority to commit or acquire supplier resources required. UNDP Assistant Resident Representative will represent the senior supplier role together the Head of the Integrated Environmental Management of the Ministry of Environmental Protection and Natural Resources and the Heads of the local Municipalities supported by other major project co-financier donors/donor programme, including EU Twinning programme, etc.

Project Assurance – this is one of the key roles in the project management structure. The Project Assurance will act as an independent and objective quality monitoring agent, avoiding the potential "self-serving bias". In addition, the project assurance will verify the products' or outputs' quality. The Regional Technical Advisor for Chemicals at the UNDP Bratislava Regional Center, Georgia Energy/Environment team leader and Programme Associate will play the Project Assurance role.

For development of relevant regulations for PoP pesticides, trainings and site assessments UNDP will outsource the contract to either individual experts, companies or consortiums of local and international organizations.

Communications

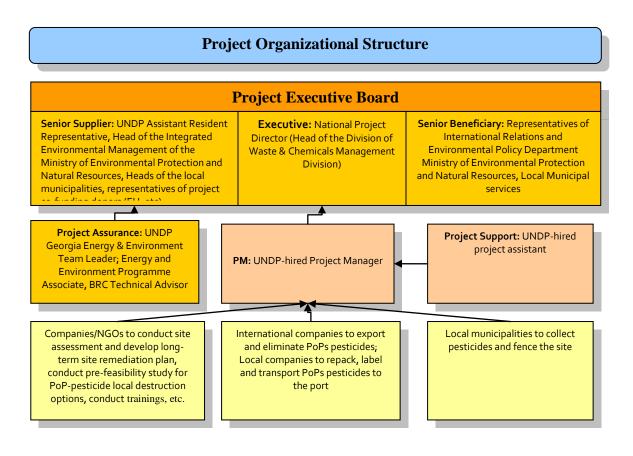
The NPD and the PMU will communicate with a variety of audiences and be in charge of keeping the stakeholders informed of the progress overall and on the most important project events. Further, they will be responsible for building and sustaining the Ministry's commitment to the project and the involvement of project stakeholders. To do this, the Waste and Chemicals Management Division of the Ministry of Environmental Protection and Natural Resources and PMU will develop a communications strategy. They will maintain a high level of transparency and openness throughout the project implementation. The PMU and the Ministry will prepare promotional materials which will bear the logos of all project partners. The same standard will also apply for all other written materials and publications and will also apply to all public events.

Financial and other procedures

Payments will be performed primarily through direct payments. A letter of agreement will be signed between the Ministry of Environmental Protection and Natural Resources and UNDP CO outlining the support services that UNDP will provide to the executing agency during the project implementation. The NPD will authorize the payments to be made on the basis of the budget approved by PEB. During absence of the NPD, the Project Manager will be authorized to process such transactions. UNDP will provide support services as agreed between the parties and set out in the standard service agreement letter between the APA and UNDP. Granting external access to ATLAS system to the project personnel will be part of the standard service agreement.

In accordance with standard UNDP procedures, all resources/equipment gained through project support remains the property of UNDP until project closure when a decision will be taken as to how to dispose of these resources. It is standard practice to leave resources with the implementing partner after project closure as a contribution to the development of national capacity.

In order to accord proper acknowledgement to GEF for providing funding, a GEF should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF.



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

In general, the project design conforms to the structure as outlined in the PIF. Some modifications however have been made due to changes in the co-financing options and sources. Task 2 of the project has been modified to reflect the needs of the Ministry of Environment in line with reduced co-financing share.

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.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Yannick Glemarec, Executive Coordinator, UNDP-GEF	Y. Glemauce	October 30, 2010	Dr. Suely Carvalho, GEF Principal Technical Advisor for POPs/Ozone UNDP/MPU/Chemicals	1-212- 906.6687	suely.carvalho@undp.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Objective: to minimize releases of POPs from obsolete pesticide stockpiles in Georgia and create capacity in POPs pesticide stockpiles management	Risk of POPs exposure to humans and environmental releases decreased Amount of obsolete pesticides stored at the Iagluja dumpsite eliminated in an environmentally sound way	Obsolete pesticide dumpsite at Iagluja containing app. 400 tons of non-soil mixed obsolete pesticides deposited to the site from Soviet period; 230 tons packed and labeled obsolete pesticides, part of which are about 180-190 tons of pesticides, and 2,700 tons soil-mixed obsolete pesticides	Significant part (250 t) of non-soil mixed obsolete pesticides at Iagluja eliminated in an environmentally sound way; risk of POPs exposure reduced; obsolete pesticide handling and disposal capacity strengthened	Project reports, government reports, Field survey data and reports	a) no changes in government policy; b) high commitment of government officials and willingness to participate in the project and contribute to safe management and disposal of obsolete pesticides; c) research reveals no substantial changes in pesticide stockpile volume and composition at Iagluja dumpsite.
Outcome 1: "Leg Output 1.1	al and administrative capacity s Legal acts covering chemicals and	strengthened" No specific hazardous	Legal acts covering	Government	a) high
Baseline hazardous waste legislation and policies reviewed, developed and adopted"	hazardous waste legislation	waste legislation exists	chemicals and hazardous wastes developed	documentation and legal acts	commitment and cooperation among involved government agencies, b) risk of change of government or policy is immitigable
Output 1.2: Technical guidelines on safety procedures for POPs handling, transport and storage (disposal) developed"	Existence of technical guidelines and bylaws	Absence of technical guidelines	By the end of the project technical guidelines and/or bylaws prepared and endorsed by the government, disseminated to involved project stakeholders	Project reports Government reports Surveys	Technical guidelines are consistently applied over the course of project implementation

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Output 1.3 Government entities trained in pesticide site investigation and risk assessment, management option screening for creating a buyer competence for such services	Number of government entities and staff received training; Training workshops organized	No government institutions and staff trained	At least one representative of relevant, involved government agencies trained in pesticide site investigation, risk assessment, management option screening and disposal options selection (Basel convention, FAO)	Project reports Training manuals, reports	a) skilled training providers are available locally or regionally; b) training can be mobilized timely and upon request from interested parties
Outcome 2 "Min	nimization of releases of POPs fr	om obsolete pesticide	e stockpiles"		ı
Output 2.1 Long- term site remediation plan developed and volume of non- soil mixed obsolete pesticides determined	Detailed information on pesticide stockpiles being stored at Iagluja dumpsite; Long-term dumpsite remediation plan; Feasible local POPs pesticide destruction options	No site remediation plan exists, no detailed information on pesticide stockpile is available	Within 12 months of the start of project implementation a long-term site remediation plan is prepared	Project reports; Long-term site management plan for remediation of the Iagluja dumpsite	No additional, previously unknown non- soil mixed obsolete pesticide stockpile revealed
Output 2.2 Obsolete non-soil mixed POPs pesticides at Iagluja dumpsite excavated and repackaged	Amount of obsolete non-soil mixed POPs pesticides excavated and repackaged	Non-soil mixed part of stockpile left in the dumpsite	Within 24 months of the start of project implementation appr. 400 tons of pesticides extracted from sarcophaguses and repackaged in appropriate packaging materials and labeled	Project reports	a) the volume and composition of non-soil mixed pesticides is not substantially different to experts estimate b) international standards are constantly applied to minimize potential impacts on environment and human health c) the excavation and repackaging process is supervised by independent, competent supervisor d) no opposition to excavation works from nearby communities

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Output 2.3 Implementation of low cost access control measures in Iagluja dumpsite	Fencing of the territory of dumpsite (4ha), installation of signs, restoration of the drainage ditch	No access control measures have been documented to exist	By the end of the project the territory of dumpsite is fenced, warning signs installed, access control secured, drainage ditches restored	Project reports	Access control measures provide adequate trespassing protection
Output 2.4 Pesticide destruction facility selected and obsolete pesticide stocks exported abroad for destruction in an environmentally sound way at specialized destruction facility	Obsolete pesticide destruction facility selected; Obsolete non-soil mixed pesticides exported abroad for destruction	Non-soil mixed POPs pesticides left at the dumpsite and escape into the environment	By the end of project substantial amount of the non-soil mixed part of obsolete pesticide stockpile (app. 250 tons) exported abroad for destruction at specialized destruction facility	Project reports; Government reports	a) price established by the tender procedure does not exceed average price for the pesticide destruction b) international standards are applied to minimize potential impacts of obsolete pesticides on environment and human health during transportation
		•			
Output 3.1 M&E and adaptive management are applied to provide feedback to the project coordination process to capitalize on the project needs	M&E and adaptive management applied to project in response to needs, with lessons learned extracted.	 No Monitoring and Evaluation system No evaluation of project output and outcomes 	 Monitoring and Evaluation system developed during year 1. Final evaluation report ready in the end of project 	 Project document inception workshop report. Independent final evaluation report 	 Availability of reference material and progress reports Cooperation of stakeholder agencies and other organiza- tions.
Output 3.2 Lessons learned and best practices are accumulated, summarized and replicated at the country level.	Same as above	Same as above	Same as above	Same as above	Same as above

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)

GEF SECRETARIAT COMMENTS AT PIF

12. Cost effectiveness will have to be explained in details at CEO endorsement. In particular the cost of disposal of obsolete pesticides and containment should be provided.

Response: The general description of cost-effectiveness of the approach is described in Section H (Part II) of the project document. The estimated containment, transportation and disposal costs of obsolete POPs pesticides is currently considered to represent US\$ 3,000/ton which corresponds to medium cost-effectiveness threshold levels applicable to other similar projects. With careful and advance planning on international tenders for the disposal of these POPs materials, the project may achieve better cost-effectiveness in terms of reducing the transportation and destruction costs.

15. CC risks, not discussed here, but do not appear critical for this project. What is missing however, is a recognition of the environmental and health risks inherent to this type of operation; and what safeguards the project will put in place to mitigate them.

Response: The project will plan for site specific environmental assessment and management plan(s) which will cover extraction, handling, re-packaging and transportation of POPs materials. It is expected that obsolete pesticide extraction and repackaging process will be supervised by a competent and experienced specialist in order to minimize risks to human (workers) health and environment (prevent spillages). The pesticide handling on-site will be done in accordance with internationally recognized standards (FAO and Basel convention guidance materials and manuals). Additionally, the project will plan local and international tender documentation where safety and environmental requirements would be specified to a level of detail to ensure qualification of bidders (local companies that will undertake local transportation of pesticides and licensed POPs disposal facilities abroad) through adherence to the guidance materials recommended by the Basel and Stockholm Convention Secretariats. The high-quality technical advice will be provided by qualified and experienced international experts to provide better guidance to the project implementation process.

21. Indicative co-financing about \$ 1,4 million, is relatively low. It is expected that UNDP will leverage more co-financing for a ratio of at least 1:2.

<u>Response:</u> The co-finance commitments have been leveraged to approach the requested 1-to-2 ratio and represent US\$ 2.14 mln.

Annex C: consultants to be hired for the project using GeF resources

Position Titles	\$/ person week*	Estimated person weeks**	Tasks to be performed
For Project Management			-
Local	•		
Project manager	581	144	Provides overall supervision and direction for project activities with responsibility for reporting on progress (full time)
Communications manager	240	37	Provides communication strategy for work with local municipalities (part time)
International			
-			
-			
Justification for Travel, if any:			<u> </u>
For Technical Assistance			
Local			
Pesticide management	500	20	Overview and supervise the obsolete
options consultant			pesticide repackaging process at Iagluja dumpsite. Record the quantity of obsolete pesticides amount extracted and repackaged. Check the repackaging process to avoid mixing POPs pesticides with any inorganic pesticides (mercury, zinc, arsenic containing) or other non-pesticide hazardous waste. Overview and check the cleaning up of the pesticide storage cells upon finishing of repackaging process. During the repackaging process, monitor the compliance to safety standards of the repackaging team and make independent observations of the whole process and prepare report.
Consultant for development of long-term plan for the Iagluja dumpsite remediation (2 positions)	500	80	Elaborate a long-term plan for Iagluja dumpsite remediation. Carry out following principal tasks: a) determine and estimate exact amount/volume of non-soil mixed pesticides in the sarcophaguses; b) determine concentrations of halogens (chlorine in particular) in non-soil mixed part of pesticides and specify pesticide type; c) specify in detail the amount of non-soil mixed pesticides and concentration of

International			halogens and heavy metals; d) develop a long-term site management plan based on obtained information on obsolete pesticides and best available methods for site remediation.
International M&E Evaluation Consultant	3,500	2	Provides independent final evaluation as part of the M&E plan
Obsolete pesticide management options consultant	3,500	4	Provide technical assistance to project management team during crucial project implementation phases, e.g. evaluation of situation at Iagluja dumpsite; provide assistance in drafting of tender documentation, evaluation of tender proposals.
Cement process technical consultant	3,500	2	Evaluate the existing cement kiln feeding process and elaborate proposals for feed process modification in order to accept obsolete pesticides for coincineration at cement kiln in accordance with Basel Convention's guidelines on hazardous waste coincineration. Provide assistance to the Ministry of Environment and in negotiation of technical options and providing advice for further actions.

Justification for Travel, if any: The weekly fee for the international consultants is US\$ 3,500, or \$700/person/day. Additional provision for travel and DSA is expected to cover 5 days of stay in Georgia and US\$ 1,000 provision for travel for each consultant: total estimated additional costs for travel would represent US\$ 5,835 for three consultants. Explanatory note on M&E consultant is contained in section H of the document.

^{*} Provide dollar rate per person week. ** Total person weeks needed to carry out the tasks.

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. PPG GRANT WAS NOT REQUESTED. PROJECT DOCUMENTATIONS HAVE BEEN PREPARED BY A TEAM OF NATIONAL AND INTERNATIONAL CONSULTANT HIRED THROUGH UNDP GEORGIA AND LATVIA OFFICES.
- B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:
- C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

Project Preparation Activities Approved	Implementation Status	Amount Approved	Amount Spent Todate	Amount Committed	Uncommitted Amount*	Co- financing (\$)
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
Total			-			

^{*} Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS

Provide a calendar of expected reflows to the GEF Trust Fund or to your Agency (and/or revolving fund that will be set up)