PROJECT IDENTIFICATION FORM (PIF) [1]
PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan		
Country(ies):	Kazakhstan	GEF Project ID:[2]	4442
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	4612
Other Executing Partner(s):	Ministry of Environment Protection of the Republic of Kazakhstan	Submission Date:	2011-11-16
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration(Months)	48
Name of parent program (if applicable): ➢ For SFM/REDD+ ☐		Agency Fee:	340,000

A. FOCAL AREA STRATEGY FRAMEWORK[3]:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Indicative Financing from relevant TF (GEF/LDCF/SCCF) ($)	Indicative Cofinancing ($)
(select) CHEM-1	Outcome 1.3: POPs releases to the environment reduced.	Indicator 1.3 Amount of un-intentionally produced POPs releases avoided or reduced from industrial and non-industrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool.	2,095,000	11,100,000
(select) CHEM-1	Outcome 1.5: Country capacity built to effectively phase out and reduce releases of POPs.	Indicator 1.5.2 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	720,000	3,450,000

[1] It is very important to consult the PIF preparation guidelines when completing this template.
[2] Project ID number will be assigned by GEFSEC.
[3] Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

		recorded through the POPs tracking tool.		
(select) CHEM-3	Outcome 3.1 Country capacity built to effectively manage mercury in priority sectors	Indicator 3.1.1 Countries implement pilot mercury management and reduction activities.	200,000	470,000
(select) CHEM-4	Outcome 4.1: NIPs prepared or updated or national implications of new POPs assessed.	Indicator 4.1.1 Progress in development or update of NIPs as recorded through the POPs tracking tool.	225,000	410,000
(select) (select)				
(select) (select)				
(select) (select)				
(select) (select)				
(select) (select)				
(select) (select)				
(select) (select)	Others			
Project management cost[4]			160,000	581,000
Total project costs			3,400,000	16,011,000

[4] GEF will finance management cost that is solely linked to GEF financing of the project.

B. PROJECT FRAMEWORK

Project Objective: To reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm convention.					
Project Component	**Grant Type (TA/INV)**	**Expected Outcomes**	**Expected Outputs**	**Indicative Financing from relevant TF (GEF/LDCF/SCCF) ($)**	**Indicative Cofinancing ($)**
1. Stockholm Convention NIP update and improved institutional coordination on chemical MEAs (*)	TA	1.1. POPs inventories improved for informed decision making and priority setting	1.1.1: Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, inventories, POPs tracking, monitoring of data reported by responsible parties; 1.1.2: National information system (inventory) on POPs expanded (updated information on uPOPs and new POPs).	375,000	3,220,000
		1.2. National capacities on POPs monitoring, analytical capabilities are assessed	1.2.1: Studies on existing POPs analytical and monitoring capabilities for the whole range of POPs (with focus on new POPs) carried out 1.2.2: Set of recommendations for the improvement of such capabilities formulated		
		1.3. Policy, institutional frameworks and enabling regulatory environment are in place to	1.3.1: Institutional coordination and compliance with international agreements improved through firmer		

		ensure better control on POPs accumulation and emissions	institutionalization of POPs issues into national structures (to ensure synergistic approach across chemicals and sectors) – to be carried out as part of the establishment of a "Green Growth" National Ecological Centre 1.3.2: National legal framework, by aligning institutional roles, reviewed and improved to include the issue of insofar unaddressed POPs, u-POPs and new POPs; 1.3.3: Sectoral technical guidelines updated to include the issue of priority POPs (including HCWM guidelines); 1.3.4: Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement; 1.3.5: Stakeholder consultations held; 1.3.5: Specific action plans on new POPs formulated; 1.3.7: National		

		1.4. General awareness raised on POPs risks and action plans	Implementation Plan (NIP) on Stockholm Convention obligations with inclusion of new POPs reviewed and updated 1.4.1: Public awareness raising campaigns on POPs risks conducted		
2. Assessment of overall mercury situation and formulation of the outline of mercury reduction and containment plan	TA	2.1. Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out	2.1.1: Capacity building programme (trainings) for involved stakeholders developed and implemented on mercury risks, inventories, sources, data tracking; 2.1.2: Mercury situation in Kazakhstan assessed (profile on mercury sources, use and contamination drafted); 2.1.3: Stakeholder consultations to identify priority mercury associated problems held (**); 2.1.4: Outline of National mercury reduction plan developed 2.1.5: Public awareness raising campaigns on mercury risks conducted	200,000	470,000
3. Minimization of uPOPs emissions (and mercury from medical devices) through demonstration of sound HCWM	TA	3.1. Sound HCWM is demonstrated in 2-3 regions of the country	3.1.1: Detailed mapping of current healthcare waste practices and establishment of HCW tracking system; 3.1.2: Individual	2,565,000	11,700,000

			HCWM plans for model facilities developed and implemented; 3.1.3: Training programmes at demonstration sites to enhance capacity on best practices and their application developed and implemented; 3.1.4: Waste minimization and segregation at source at demo sites introduced and uPOPs minimizing technologies, such as autoclaves, deployed; 3.1.5: Cooperation and partnership among key Government and private sector stakeholders on establishment of sound HCWM practices improved		
		3.2 Mercury emissions in HCWM sector are reduced through strengthening of the national policy and regulatory framework (sequestration, phase-out, storage and disposal of mercury waste in HCWM sector) and through demonstration of mercury-free devices***.	3.2.1 Statistics on use of mercury-based devices determined 3.2.2 Hospital facility assessments conducted. 3.2.3 BEP related to the safe management, storage, phase-out and disposal of mercury containing devices implemented at all model facilities (hospitals, HCFs and the CTF) 3.2.4 Non-Mercury containing devices competitively		

			procured and introduced at all participating facilities. 3.2.5 Policies/ guidelines on sequestration, and handling of mercury waste from HCFs developed.		
		3.3. Linkages between sound HCWM practices and minimization of u-POPs (and mercury in medical devices) demonstrated through awareness raising programmes	3.3.1: General awareness raising campaigns carried out to stimulate information exchange on uPOPs (and mercury in medical instruments) risks in health-care sector and approaches for their sound management to avoid health impacts and spread of contamination in environment; 3.3.2: Country-wide replication programme for experience gained developed		
4. Monitoring, learning, adaptive feedback, outreach, and evaluation	TA	4.1. Project's results sustained and replicated	4.1.1: M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted. 4.1.2: Lessons learned and best practices are disseminated at national level	100,000	40,000
	(select)				
	(select)				
	(select)				
	(select)				
	(select)				
	(select)				

Project management Cost[5]	160,000	581,000
Total project costs	3,400,000	16,011,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, ($)

Sources of Cofinancing for baseline project	Name of Cofinancier	Type of Cofinancing	Amount ($)
National Government	Ministry of Public Health	Grant	11,440,000
National Government	Ministry of Environment Protection	Grant	2,996,000
Local Government	Project territory akimats	In-kind	385,000
GEF Agency	UNDP	Grant	75,000
GEF Agency	UNDP	In-kind	100,000
Private Sector	Medical facilities, clean technology companies, waste handling companies	Grant	1,000,000
CSO	NGOs	In-kind	15,000
(select)		(select)	0
(select)		(select)	
(select)		(select)	
Total Cofinancing			16,011,000

[5] Same as footnote #3.

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal area	Country name/Global	Project amount (a)	Agency Fee (b)[2]	Total c=a+b
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				0	0	0

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

[2] Please indicate fees related to this project.

Legend for Project Framework (Part I, Section B):

(*) a) NIP update costs are US$ 225,000; additional activities for capacity building on joint implementation of international instruments is estimated at US$ 150,000 which brings total amount for this component to US$ 375,000; b) NIP component formulated following general guidance of GEF on NIP updates.

(**) These elements are similar in nature for POPs and mercury and the same stakeholder platform will be used for information exchange, awareness raising and capacity building which ensure synergy between the outputs. However, in order to introduce clarity in the way the project design is presented, these elements are listed in the same table as separate outputs.

(***) Output 3.2: US$ 450,000

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A. 1.1. THE GEF FOCAL AREA STRATEGIES

The project is fully consistent with the GEF-5 Chemicals focal area strategy and its Objective 1 - Phase out POPs and reduce POPs releases, and its corresponding outcomes 1.3 (POPs releases to the environment reduced and outcome 1.5 (country capacity built to effectively phase out and reduce releases of POPs) as well as the Objective 3 - Pilot sound chemicals management and mercury reduction, and its corresponding outcomes 3.1 (Country capacity built to effectively manage mercury in priority sectors). The project will contribute to the achievement of GEF's main indicators under this strategic programming area as follows:

Relevant GEF-5 Strategy Indicator	Project's contribution
1.3 Amount of un-intentionally produced POPs releases avoided or reduced from industrial and non-industrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool	The project will support the establishment of an inventory for country unintentional POPs releases, as well as the monitoring of emissions. The project will establish guidelines to be used in HCW incinerators (adhering to international best practices, BAT-guidelines, or similar), along with the necessary rules for enforcement. The project will lead in direct reduction of 5 g I-TEQ/year or more.
1.5.1 Progress in development or update of NIPs as recorded through the POPs tracking tool	The project will result in the update and review of the NIP, paying particular attention to the new substances as well as the preparation of an action plan for the control of unintentionally produced POPs
1.5.2 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 through the POPs tracking tool	The project will address the issue of how to incorporate unintentional POPs (u-POPs) releases into existing environmental protection rules and regulations and will support the establishment of a national information exchange and monitoring system on u-POPs. The project will provide capacity building and promote cross-sectoral collaboration in chemicals management.
3.1 Countries implement pilot mercury management and reduction activities	The project will conduct an assessment of situation with mercury sources and releases and support the establishment of priorities for mercury management in general. And specifically, the national guidance documents on HCWM will elaborate and set benchmarks for safe management mercury waste contained in failed and misused medical instruments and promote mercury-free alternatives. Informed and controlled mercury management and containment will be introduced and piloted in model medical facilities (project sites).

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS, IF APPLICABLE, I.E. NAPAS, NAPS, NBSAPS, NATIONAL COMMUNICATIONS, TNAS, NIPS, PRSPS, NPFE, ETC.:

Kazakhstan's Development Strategy-2030 sets out the main long-term objectives of socio-economic development for the country. Environmental issues are covered under the fourth priority of the strategy, i.e., health, education and welfare of the citizens of Kazakhstan. Kazakhstan's 2020 Strategic Plan for Development was approved in February 2010 by order of a presidential decree. Both of these strategic documents acknowledge the importance of environmental issues and reducing the negative human impacts on the environment.

Management of chemicals at all stages of their life cycle is regulated by laws and other legal documents of different levels: decrees and orders of the President of the Republic of Kazakhstan (ROK), Government Decrees of ROK, resolutions adopted at ministerial level, as well as orders and decisions of individual

ministries and departments. The guidelines of the state environmental policy, including chemical safety, were included into the policy on Environmental Safety, approved by the decree of the President of the Republic of Kazakhstan in 1996. The policy document "Transition of the Republic of Kazakhstan to Sustainable Development" was approved in 2006 by order of a presidential decree and the Environmental Code of the ROK was approved in 2007. Several international chemical and waste conventions were ratified by the country such as the Stockholm Convention on POPs (2007), the Basel Convention on control and transboundary movements of hazardous wastes and their disposal (2003), and the Rotterdam Convention on the procedure of the prior agreed consent on certain chemicals and pesticides in the international trade (2007). In connection with a UNITAR project for SAICM implementation, the country also developed a National Profile on chemicals management, which was approved in 2006.

As a party to the Stockholm Convention and in order to meet its obligations under this Convention, Kazakhstan initiated and completed the development of the National Implementation Plan (NIP) on POPs which was transmitted to the Secretariat of the Stockholm Convention in 2010. The National Implementation Plan (NIP) places clear emphasis on strengthening the current framework for POPs management, and underlines the need to monitor and control unintentionally released POPs. The NIP states the possibility of GEF-backed projects to support the implementation of the Stockholm convention and gives the following priority spheres where strengthening of the current potential and capabilities is essential and necessary:

- Development of the normative and legal basis for realization of the country's obligations under the Stockholm Convention, based on a new "Law on Persistent Organic Pollutants" (Law on Chemical Safety);
- Inclusion of the POPs inventory into the national statistic accountability system and state system of environmental monitoring;
- Development of a targeted long-term program on POPs elimination and reduction of the releases of unintentional POPs sources;
- Feasibility study and realization of projects on POPs elimination; rehabilitation of territories polluted by POPs and reduction of unintentional releases of POPs;
- POPs monitoring;
- Establishment of a chemical and analytical laboratory, oriented to achieving the tasks under the Stockholm Convention;
- Establishment of a dioxin laboratory;
- Establishment of a National Center on Persistent Organic Pollutants.

Being one of the priorities in the NIP, the Ministry of Environment Protection considers it as an important area of work which requires international assistance. The proposed project's objectives, outcomes and planned impacts are consistent with national policies, strategies and programmes of the Government and the country. Furthermore, the NIP recognizes that additional capacity building and enhanced institutional coordination are urgently required in order to meet country's international obligations[6].

B. PROJECT OVERVIEW:

B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

The Republic of Kazakhstan is the ninth geographically largest country in the world, extending 3,000 km west to east and 1,700 km north to south, with a population of 16 million. The country has the largest economy in Central Asia and the bulk of the economy is made up by the industry. The main chemical related challenges faced by Kazakhstan are soil contamination, groundwater pollution, obsolete

[6] National Implementation Plan of the Republic of Kazakhstan on the obligations under the Stockholm Convention on Persistent Organic Pollutants, transmitted to the Secretariat in 2010; National Profile: Assessment of the National Infrastructure on Chemicals Management in the Republic Of Kazakhstan

pesticides, buried hazardous waste, workplace hazards and, most importantly, air pollution. Of particular concern are hazardous wastes, chemical legacy hotspots, particularly POPs.

POPs and u-POPs: Kazakhstan, as the party to the Stockholm Convention, assumed obligations to give priority consideration to waste treatment processes, techniques and practices that avoid the unintentional formation and release of persistent organic pollutants (u-POPs), such as dioxins. The Stockholm Convention lists medical waste incinerators as having the potential for comparatively high formation and release of unintentional POPs, such as dioxins (PCDDs) and furans (PCDFs). It additionally lists the open burning of waste and the burning of landfill sites as sources that can unintentionally form and release POPs into the environment. Further, the process of burning the healthcare waste releases such pollutants as particulate matter, heavy metals (arsenic, cadmium, mercury, lead, etc.), acid gases like hydrogen chloride and nitrogen oxides, carbon monoxide and toxic organic compounds like benzene, chlorophenols, polycyclic aromatic hydrocarbons and dioxins.

The POPs releases in the healthcare sector should be considered as priority area for policy interventions to reduce u-POPs emissions, as this sector is a substantial source of dioxins in the global environment. Primarily, this is the result of inadequate medical waste management and incineration. The sector is also responsible for releases of mercury contained in medical tools and instruments as a result of failures (structural damage) and improper disposal of such measurement devices.

Kazakhstan has 14,434 health treatment and prevention organizations, including more than 1,000 hospitals, 2,000 dispensaries, as well as 9,000 pharmacies and facilities that generate medical waste[7]. According to data collected in 2006 by the State Committee on Sanitary and Epidemiological Surveillance in the Ministry of Public Health, about 12,000 tons of healthcare waste is produced in Kazakhstan annually, which amounts to about 32 tons per day. A summary of the waste produced in the country annually as well as the disposal methods used are provided below.

Data collected in 2006 show significant variations between regions when it comes to the generation of medical waste. For example, official figures for pure medical waste (excluding household and other waste) for Almaty oblast (1.6 million inhabitants) indicate approximately 3.7 tons annually while for Akmola oblast (0.74 million inhabitants) the amount is 1,900 tons and Aktyubin oblast (0.67 million inhabitants) - 3,400 tons. Such discrepancies go to show that the total volume is likely to be underestimated, something which is underlined by the fact that figures for certain waste categories are missing entirely for some regions. In a study by the World Health Organization the average amount of waste generated in one facility bed is estimated to be around 1.4 to 2 kg per day (figures for Eastern Europe)[8]. Given that there are around 120,000 beds in the country's medical facilities, it may indicate that the countrywide waste generation could, as a minimum, reach up to 60,000 tons of waste annually or up to 5 times the waste volume resulted from 2006 survey data (11,974 tons as summarized below).

[7] Status of the collection, use, transport, storage and disposal of waste by medical organizations in the Republic of Kazakhstan, Ministry of Public Health/UNDP, June 2010

[8] WHO, Definition and characterization of healthcare waste, http://www.who.int/water_sanitation_health/medicalwaste/002to019.pdf

Type of healthcare waste	Details	Country total (2005) / kg	Method of disposal
Polymer waste (syringes, tubes, etc)	Syringes	2 094 012	Incineration (either in local medical facility furnaces or in incinerators)
	Tubes, bags, etc	1 824 438	
Dressing materials (cotton, bandages, etc)	Cotton	1 919 914	Incineration
	Bandages	672 784	
	Gloves	202 427	
Medicines (expired, unused, etc.)	Liquid	120 232	Incineration and/or crushing and landfill, after disinfection
	Solid	238 876	
Post-operational biological waste	Joints	82 074	Incineration or landfill after disinfection, in part together with household waste
	Soft tissue	907 806	
Medical instruments	Metallic	76 139	Incineration or landfill after disinfection, in part together with household waste
	Plastic	105 800	
Healthcare equipment	Metallic	95 057	Disassembling, incineration of wood and plastic
	Plastic	33 812	
	Wood	34 132	
	Glass	33 286	
Office waste	Paper	275 150	Incineration, and/or transport to landfill
	Plastic	40 660	
	Metallic	10 426	
Household waste		2 603 508	Transport to landfill
Other waste (construction		603 249	Transport to landfill
TOTAL		**11 973 783**	

According to NIP, the country's u-POPs emissions constitute 340 g I-TEQ. However, as stated in the plan, this figure is "clearly underrated because data on releases from medical waste incineration, uncontrolled fires in landfills and unsanctioned waste incineration in enterprises and households (i.e., on those categories that produce the most release of dioxins and furans) was not included into calculations". An estimate of dioxin releases from medical waste incineration in the country is provided in the table below[9]. The estimates show that a significant portion (about 13 %) of dioxin emissions is in fact overlooked by the currently available official figures.

		Potential Release Route (µg TEQ/t)			Annual release / g TEQ/a			
		Air	Residue		Air	Residue		TOTAL
Medical waste incineration	Incineration, t/a		Fly ash	Bottom ash		Fly ash	Bottom ash	
Uncontrolled batch combustion, no APCS*	678,2	40 000		200	27,126	0	0,1356	27,26
Controlled, batch, no or minimal APCS	6103,4	3 000		20	18,310	0	0,1221	18,43
Controlled, batch comb., good APCS		525	920	ND	0	0	0	0,0
High tech, continuous, sophisticated APCS		1	150		0	0	0	0,0
	6781,5							**45,7**

** assuming 10% of total incinerated medical waste is uncontrolled*

Challenges: The existing Kazakhstan legal system regulating medical waste was established by the introduction of several regulatory acts by the Ministry of Public Health in 2004 and 2007. These acts basically prohibited the disposal of infectious waste in sanitary landfills and contributed to the construction of regional incinerators. Currently in the country there are about 70 such incinerators, of which 39 operate in regional centers. In addition, there are 40 muffle furnaces used for batch-type incineration. However, the changes which were introduced in healthcare legislation were not coordinated with relevant environmental regulatory measures. As a result, since air emissions from the operation of medical waste incinerators are not regulated in Kazakhstan, such incinerators are not equipped with air

[9] Assessed using the UNEP Chemicals Toolkit for identification and quantification of PCDD/PCDF releases, using country data from 2005-2006. The emissions were calculated using estimates of amounts being incinerated in batch combustion. Most of the waste was assumed to be incinerated using controlled batch combustion with minimal APCS. About 10 % of the total HCW accumulated was assumed to be incinerated using uncontrolled batch combustion. This amount (678 tonnes) is likely to be higher, given that 1) the total volume of medical waste was underestimated and 2) the amount incinerated at landfills were not taken into account.

pollution control. Medical waste management is not sufficiently supported or controlled by central healthcare or environmental authorities. In addition to the environmental pollution, the improper management of medical waste poses contamination risks for water, air, soil resources, and sediments in Kazakhstan. It poses the risk of infections spread, especially HIV/AIDS and Hepatitis B, as well as skin infections, respiratory and gastrointestinal infections.

The Ministry of Public Health has conducted studies within boundaries of the cities of Almaty, Astana (capital) and Kyzylorda, in order to evaluate current healthcare waste management practices and their compliance with existing regulations. The studies showed that incineration is the norm, and that chemical disinfection and autoclaving are used very rarely. Disposal methods vary according to regions, and tend to be the least developed in rural areas. Given that the use of the centralized incinerators is very expensive, especially rural facilities have economic incentives for breaking the established rules. Thus, they frequently use batch-type furnaces located on the facility territory for incineration of non-infectious waste. In Almaty and Kyzylorda, virtually all medical waste of class B (used bandages, gloves, disposable syringes, blood transfusion systems, etc) is burned in the institutions' furnaces with the formation of high levels of PCDD/Fs and subsequent releases. It was noted that non-infectious and chemically disinfected waste is commonly sent to unauthorized local landfills, where it might be subject to uncontrolled open air burning. Another issue noted during the study was that the temporary storages for medical waste do not fulfill temperature requirements. Processing areas, equipment and packages used for waste handling do not fulfill sanitary norms either. Also, it was noted that in Kyzylorda the waste disposal of fluorescent lamps and mercury-containing devices from hospitals was not functioning properly and that these were disposed of along with regular household waste.

The current situation regarding the poor handling of medical waste and resulting uncontrolled, emissive release of POPs can be said to be descriptive of the general state of chemical management in the country. The country faces serious knowledge and capacity gaps in safe management, monitoring and controlling the use, storage and disposal of hazardous chemical substances. Another example of chemicals being used without taking POPs issues into consideration can be found the construction sector, where the use of PVC-materials is common. Such materials are disposed of without any control of POPs emissions. Even though recent years have seen some action being taken to control chemicals, especially POPs, there is still no comprehensive system controlling the overall production and use of chemical substances, and many sectors and chemicals uses are completely outside the government control.

To address these challenges, the country has developed a baseline project.

Baseline Project:

The baseline project is implemented through 2 state-funded national programs and investments from the private sector. It is drawing its financing through:

1. Zhasyl Damu (Green Growth) – Ministry of Environmental Protection Sectoral Programme – for 2010-2014 (total budgetary support – US$ 1.8 bln for the whole programme of which the GEF Baseline Project is only a part), and
2. Salamatty - Strategic Plan of the Ministry of Health of the Republic of Kazakhstan for 2011-2015 (total budgetary support – US$ 1.3 bln for the first stage from 2011 to 2013 of which the GEF Baseline Project is only a part).
3. Private sector investment in clean waste management and alternative medical technologies.

Under this Baseline Project considerable efforts towards management of healthcare waste will be achieved.

At outcome level, the baseline project will result in:

1. Regulatory measures on limiting all categories of anthropogenic atmospheric emissions, protecting human/occupational health from those and harmonization of sanitary-normative standards;
2. Improved institutional (cross-sectoral) cooperation on safe chemicals management and health protection;
3. Improved capacity of service and administrative staff to enforce new legislation and handle new, clean technologies;
4. Adequate technical capacity (through investments in high-technology equipment and clean waste management technologies) to handle and dispose of material source for u-POPs generation, reduce u-POPs emissions at source, minimize use of mercury-based tools and address existing measurement devices to reduce exposure to/releases of mercury;

At the activity level, the baseline project will result in:

1. New laboratory capacity - establishment and accreditation of chemical and specialized food control laboratories to match internationally accepted benchmarks;
2. Monitoring systems to control air quality and implement sanitary-normative standards in the country;
3. National Register on different categories of wastes and contaminated sites
4. Implementation of action plans to clean abandoned and contaminated waste sites;
5. Supply of modern medical equipment and tools (in line with ISO and WHO standards) to hospitals and transfer of high-technology and equipment and medical services to local level (with participation of state and private sector);
6. Training and professional programmes for environmental and medical service personnel in line with international standards and technologies.

In order to implement the above listed activities, the Baseline Project will recieve financing through:

1. Zhasyl Damu – Green Growth initiative, to the amount of US$ 2,996,000;
2. Salamatty – National Health Care initiative, to the amount of US$ 11,440,000;
3. Private sector companies (Gegori Wiser, Imeba Iberia, Suez Environment and others), to the amount of US$ 1,000,000, which will go mostly for the transfer of high-technological clean waste management and alternative medical equipment.

The baseline project will make some contribution towards decreasing POPs emissions from the health care sector, but the incremental emphasis on POPs/mercury issues and introduction of BAT/BEP in the sector can be achieved only through additional GEF funding as proposed in the PIF. The GEF project will build its activities on these state- and private-sector' funded programmes in improving BAT/BEP in HCWM in the three pilot project areas which are also covered by the baseline project. Namely they are: Almaty region (south east, former capital area), Karaganda region (central), and South Kazakhstan region (city of Shymkent region).

The baseline activities and outcome/impact contribution of the proposed GEF support are described in detail in Annex 1 attached to the submitted PIF.

B. 2. INCREMENTAL /ADDITIONAL COST REASONING: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) OR ADDITIONAL (LDCF/SCCF) ACTIVITIES REQUESTED FOR GEF/LDCF/SCCF FINANCING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS (GEF TRUST FUND) OR ASSOCIATED ADAPTATION BENEFITS (LDCF/SCCF) TO BE DELIVERED BY THE PROJECT:

The proposed solution builds upon the above described Baseline programs and scenarios. Fragmented policy making processes will be avoided through implementation of complementary activities, better coordination of the various initiatives and through inclusion of cross-cutting issues. This will be backstopped through the demonstration of best practices in the management of u-POPs and mercury releases to illustrate the practical implementation of the new policies, and through quality capacity development for responsible partners. This will provide the basis for the effective enforcement of the new legislation that will meet international standards in the area of Stockholm and Basel conventions, as well as those currently being negotiated under an international mercury convention.

The project aims to contribute technical expertise, provide capacity building and technology transfer in order to support the update of the NIP, carry out mercury assessment resulting in the outline of mercury reduction plan in priority areas, and demonstrate responsible HCWM in order to reduce u-POPs emissions and mercury releases in this sector. This is in line with the priorities stated by the Government – reduction in the emissions of unintentional POPs and dioxin monitoring are both highlighted as extremely urgent areas of work in the NIP.

The main barriers which are presently preventing sound POPs, mercury and HCW management are considered the following:

- strongly limited regulatory framework (no established inventory and monitoring system for u-POPs (and new POPs), no linkages between various sector legislation, such as healthcare and environment, and no guidelines on, and enforcement of control measures over, uncontrolled u-POPs releases and incineration);
- inadequate economic incentives and technical tools (expensive handling of medical waste, inadequate and poorly functioning systems for collection, storage and disposal of waste);
- insufficient systemic and institutional capacity (lack of coordinated, cross-cutting and comprehensive system for sound waste and chemicals management, limited collaboration between government authorities, private service providers, and stakeholders such as producers);
- information and awareness barriers (scarce knowledge on u-POPs impacts, no register and monitoring of u-POPs, HCW and mercury releases to understand the scope of the problem, poor understanding of the linkages between problematic chemical management areas and human health / environmental quality, inadequate knowledge of socio-economic benefits associated with sound waste and chemicals management).

These barriers listed out above are discussed below in detail. Many of the barriers and issues are closely linked with the general state of chemicals management in the country.

Regulatory barriers: It has been recognized that, since the current inventory of unintentionally released POPs is lacking, one should conduct an updated inventory, followed by a monitoring program[10]. Another issue of concern is that obligations of relevant ministries, governmental agencies and bodies are based on

[10] National Implementation Plan of the Republic of Kazakhstan on the obligations under the Stockholm Convention on Persistent Organic Pollutants, transmitted to the Secretariat in 2010

special legal acts that limit mandates to certain streams of chemicals, such as pesticides or hazardous goods, medical drugs, etc. This effectively means that the overall management of chemical safety is poorly coordinated with significant capacity and knowledge gaps existing. Thus, the consultations and coordination during formulation of development plans (and legal acts) that indirectly affect health and environmental safety are not fully informed about the real needs. An example of this is a recently developed legislation on medical waste which was established by the Ministry of Public Health without setting required healthcare waste incineration specifications with assistance of the Ministry of Environment Protection. Another example of gaps in such planning is that, even though hospitals produce waste, they are not required to have a waste handling permit as compared to other facilities or organizations and as regulated by the environmental legislation.

Financial and technical barriers: The costs for handling medical waste in Kazakhstan are high - around US$ 2,000/ton which is primarily due to lack of competition, and centralization of treatment facilities that requires the waste to travel long distances from originating sources. Faced with such costs, medical facilities tend to try minimizing the amount of waste sent for processing, leading to potentially infectious waste being burnt in hospital furnaces, or disposed of as municipal waste. Economic incentives for sound chemicals management, and assessing the indirect costs related to decrease in human health and increase of environmental contamination, do not work effectively in Kazakhstan. The waste placed at local landfills is frequently burned in open air which results in substantial pollution. The costs of proper healthcare waste packaging are very high, leading to waste not being properly sorted and collected at facilities. It is rare that medical facilities have designated areas for cleaning and disinfection of waste containers. Temporary storages for such waste do not meet international standards. A system of rigorous segregation as well as pollution prevention and waste minimization could greatly reduce the amount of waste that requires special treatment. There is little funding generated to promote the use of more effective technologies and approaches. Kazakhstan's administrative mechanisms and legal regulation pertinent to economic development, as well as the compensatory and rehabilitation mechanisms do not function adequately. In addition, the benefits associated with establishing such mechanisms are poorly understood within government agencies. Social and economic benefits are prioritized, human health and chemical linkages are poorly understood, and environmental quality issues constantly are underestimated.

Institutional barriers: In many cases, the functions, responsibilities and competence of various ministries and departments are in duplication, and there is little coordination of activities in different spheres. This is particularly obvious in the case of chemicals management, where three line ministries (Ministry of Public Health, Ministry of Environment Protection, Ministry of Industry and New Technologies) are involved, all in their own respective sector and with little or no collaboration and with no common understanding of what should represent the country's priority actions. There is lack of a cross-cutting and comprehensive system for sound waste and chemicals management in the country due to limited collaboration between government authorities, private service providers, and stakeholders such as users. The life-cycle of waste and the roles of individual actors in ensuring proper waste management and waste reduction are poorly understood. There is no collaboration between public and private stakeholders for setting up a system of sound waste management. Thus, private medical waste companies operate in vacuum, where they simply provide services without proper oversight provided by authorities and without extending support to their customers, the medical facilities. A clearer designation of roles, in connection with enforcement of obligations, is needed together with awareness raising to get actors to work together.

Information and awareness barriers: There is inadequate knowledge of sound waste and chemicals management in the country, and especially of the connection between these and other sectors. They are seen as separate issues, and the economic and social benefits of waste prevention are not understood well. The cradle-to-grave impact (full life-cycle of materials) has yet to be established in the mindset of decision-makers. Healthcare facilities have no concrete knowledge of their waste streams. Studies conducted by central authorities have shown that medical facility workers have little knowledge of the existing normative guidelines on medical waste. The knowledge on POPs issues has been slowly increasing in the country, but the area of unintentionally produced POPs has lacked sufficient attention,

and a comprehensive inventory of these has never been done. As it is stated in the NIP, the unintentional POPs releases are underestimated. When it comes to medical waste, public perceptions and the unwillingness to recycle it is still an issue hindering efficient medical waste management.

Project strategy

This project aims to assist the country in implementing its relevant obligations under the Stockholm convention and to reduce the releases of u-POPs, other globally harmful pollutants and mercury from failed medical devices into the environment by piloting sound healthcare waste management. This will be done through four (4) principal components, of which:

- the first component concentrates on updating NIP, with associated inventories for new POPs and u-POPs, and capacity building in the area of POPs inventories, tracking and reporting. This work will support the current institutional restructuring, which is aimed at improving coordination between Ministries in complying with international obligations. Gaps in the legislative framework for priority POPs will be addressed. Effective coordination between Stockholm, Rotterdam and Basel convention requirements and their implementation in the country will be supported (in line with the merger of the 3 Secretariats), which will also cover ongoing international framework discussions on mercury convention;
- the second component will work in parallel with the first component, but will address the issue of mercury assessment with associated capacity building on carrying out inventories and develop the outline of prioritized plan for action on reduction of mercury releases; the stakeholder consultation and decision-making platform created under the first component bears same function in the context of the second component and ensure synergism;
- the third component will practically demonstrate u-POPs and mercury emissions/releases reduction by piloting modern waste handling approaches at model facilities (waste segregation, minimization at the source, demonstration of affordable non-incineration technologies, introduction of mercury-free devices) with establishment of required partnerships and dissemination and replication of results in the country with the overall target of minimizing POPs releases; and
- the fourth component aims at monitoring and evaluation of results achieved to improve the implementation of the project and disseminate lessons learnt domestically and internationally.

Across all components, the project will plan for information dissemination and awareness raising on key aspects of the project's work.

The project will collaborate with central authorities as well as waste treatment facilities, hospitals and smaller rural clinics in the demonstration territories. The project will provide support for strengthening the implementation of international convention obligations and is expected to improved cross-sectoral governance for sound chemicals management at the national and local levels.

Component 1: Stockholm Convention NIP update formulated and submitted

Outcome 1.1: POPs inventories improved for informed decision making and priority setting

Indicative activities:

- Implement capacity building programme (trainings) for involved stakeholders on POPs risks, inventories, POPs tracking, and systems for monitoring of reporting by responsible national parties (public and private sector);
- Support to the ongoing establishment of a national information and monitoring system on POPs, with specific regard to unintentionally produced POPs and new substances;
- Support the national implementing agency in tracking and providing information on POPs;
- Quantify and share data on priority POPs.

Outcome 1.2: National capacities on POPs monitoring, analytical capabilities are assessed

Indicative activities:

- Review situation with the existing POPs analytical and monitoring capacities for the whole range of POPs (with focus on previously unaddressed and new POPs);
- Develop recommendations for improving the national analytical capacity

Outcome 1.3: Policy, institutional frameworks and enabling regulatory environment are in place to ensure better control on POPs accumulation and emissions

Indicative activities:

- Improve institutional coordination and compliance with international agreements and further institutionalize POPs issues into national structures (to ensure synergistic approach across chemicals and sectors) – to be carried out as part of the establishment of a "Green Growth" National Ecological Centre
- Review of national policies and amendment of regulatory framework concerning unintentionally released POPs, with specific attention to 1) international obligations on unintentional POPs and 2) harmonization of environmental and other sector (including healthcare) policy and regulatory instruments;
- Implement capacity building programme (trainings) for involved stakeholders on POPs risks, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement;
- Analyze and incorporate lessons learnt (including institutional coordination) during the original NIP formulation and implementation in the preparation of NIP update;
- Provide platform for stakeholder consultations on identifying priority actions;
- Revision and update of the National Implementation Plan:

    - Inclusion of new substances listed under the Convention and taking into account recent developments;
    - Support the process to include requirements of the Stockholm Convention regarding new substances into the national legislation and institutions;
    - Update and development of the NIP-included specific action plans, with specific regard to the Action Plan on unintentionally produced releases;
    - Support reporting requirements to the Stockholm Convention Secretariat.

Outcome 1.4: General awareness raised on POPs risks and action plans

Indicative activities:

- Formulate and implement public awareness raising campaigns on health and environment risks associated with POPs

Component 2: Overall mercury situation assessed and initial mercury reduction and containment plan formulated

Outcome 2.1: Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out

Indicative activities:

- Implement capacity building programme (trainings) for involved stakeholders on mercury risks, inventories, sources and data tracking for database purposes;
- Carry out assessment of country's mercury sources, releases, contaminated sites and priority areas for mercury control;
- Provide platform for stakeholder consultations on identifying priority actions;
- Formulation of an outline of the country's mercury reduction plan that considers critical opportunities for material substitution, training, spill response and recovery, personal protection, segregation, containment, long-term engineered storage and encapsulation or amalgamation;
- Formulate and carry out public awareness raising campaign on health and environment risks related to mercury.

Component 3: Minimization of u-POPs emissions (and mercury from medical devices) through demonstration of sound HCWM

Outcome 3.1: Sound HCWM is demonstrated in 2-3 regions of the country (possibly Karaganda and South Kazakhstan oblasts)

Indicative activities:

- Perform detailed mapping of current country healthcare waste practices (including smaller clinics etc) and establishment of HCW tracking system (waste generation, segregation, recycling and disposal) and protocols for HCW movement;
- During PPG phase, identify model facilities and programs in 2-3 areas to exemplify best practices and the linkage between good HWCM practices and the minimization of u-POPs (mercury from medical devices) releases;
- Formulate individual HCWM plans for selected model facilities;
- Deploy or upgrade healthcare waste treatment technologies incorporating best practices and best available technologies, through promoting the use of non-incineration methods such as autoclaves;
- Introduce waste minimization (environmentally preferable procurement practices, source reduction, material substitution, safe reuse) and improve waste segregation and processing practices:

    - Separation of ordinary municipal waste from health care waste;
    - Promotion of cleaner packaging (non-PVC);

- Cooperate with healthcare facilities, local waste management companies and other stakeholders to support the establishment of sound HCWM practices, including the collection (safe handling, labeling and proper storage), transport and disposal (recycling, composting) of healthcare waste from district and rural areas;
- Establish and/or enhance training programs to build capacity for the implementation of best practices and technologies both within and beyond the model facilities, possible establishment of a national training program for certification of HCWM:

    - Provide business and technology development assistance and build the capacity of local authorities and utility companies, as well as private sector companies involved in clean technologies, to develop and manage their services on a commercial basis and to attract financing for the investments needed
    - Non-incineration techniques (autoclaves, etc.) promoted through implementation of technical training program for healthcare facilities

- In support of Outcome 1.2 in Component 1, review of legislation and development of

changes and guidelines, including drafting of technical guidelines for waste disposal technologies and achievable release limits of PCDD/PCDF, complying with international best practices, such as BAT/BEP requirements. These could include the following:

- Establishing guidelines and best practices to avoid or minimize generation of waste that increase the risk for unintended release of POPs (i.e. dioxins and furans from incineration of PVC containing materials);
- Introduction of waste minimization and waste segregation policies (environmentally preferable procurement practices, source reduction, material substitution, safe reuse);
- Establishing of policy and regulatory enforcement mechanisms including new technical guidelines related to the treatment and disposal of medical waste; monitoring and control of HCWM agencies and private companies;
- Discouraging the use and application of PVC containing materials, especially in rural areas (through establishment of appropriate guidelines and inclusion of the issue into relevant legislation) to minimize open air burning of these wastes;
- Establishing of coordinated policy and regulatory enforcement mechanisms; monitoring and control of unintentionally released POPs, including private companies.

Outcome 3.2: Mercury emissions in HCWM sector are reduced through strengthening of the national policy and regulatory framework (sequestration, phase-out, storage and disposal of mercury waste in HCWM sector) and through demonstration of mercury-free devices

- Collect information (statistics) on the use of mercury-containing devices and study current practices with management of mercury devices (operating and failed) in selected hospitals through hospital facility assessments;
- Implement BEP related to safe management, storage and disposal of mercury containing devices;
- Demonstrate mercury-free medical instruments;
- Support formulation of policies/guidelines on sequestration, handling and disposal of mercury-based instruments.

Outcome 3.3: Linkages between sound HCWM practices and minimization of u-POPs (and mercury in medical devices) demonstrated through awareness raising programmes

Indicative activities:

- Formulate and carry out general awareness raising programmes in the context of HCWM;
- Establish partnerships for information exchange between local authorities, private companies and medical facilities with the aim of introducing new technologies and of reducing waste;
- Develop a replication plan, and agreement upon replication plan with major stakeholders
- Implement activities aimed at fostering national replication of pilot facilities; disseminating experience gained and lessons learned through communication and demonstration programme.

Component 4: Monitoring, learning, adaptive feedback, outreach, and evaluation

Outcome 4.1: Project's results sustained and replicated

Indicative activities:

- Carry out and apply M&E results and adaptive management to project's strategy in response to needs
- Disseminate lessons learned and best practices

Expected results:

As part of the nine (9) outcomes outlined above, the project is expected to produce the following:

- An updated National Implementation Plan for POPs which will be submitted for endorsement to the Government;
- National information system on POPs is expanded to include previously unaddressed POPs;
- The authorities responsible for international agreement compliance are better positioned to track and report on progress;
- The country's legal and institutional framework is reviewed and updated to address unintentional POPs and mercury;
- Unintentional POPs releases are reduced in priority sectors (as identified in the NIP and the expanded inventory) through improved and enforced technical guidelines;
- The country's mercury situation is assessed and the outline of mercury reduction plan is developed;
- Medical facilities and waste management companies have the guidance and competence to provide appropriate and effective waste management, minimizing environmental and health hazards (specifically releases of u-POPs and mercury in medical instruments).

Additionally: The project reduces barriers to the implementation of the Stockholm Convention on Persistent Organic Pollutants, and the World Health Organization's policies on safe healthcare waste management and on mercury in healthcare and other identified sectors. It further builds basic capacity of the country in mercury management in the light of the international level discussions on the mercury convention.

An ancillary benefit of this work is the improvement of health delivery systems through the fostering of good healthcare waste management practices, thereby supporting the prerequisites for achieving the U.N. Millennium Development Goals. Through the prioritization of unintentionally produced POPs and the subsequent establishment of institutional and legal framework for their management, this project will significantly improve the possibilities of further reduction of POPs releases in the country.

Finally, by increasing decision-makers' knowledge of the impact of POPs on human health and environmental quality, they would get a more accurate representation of the country's baseline situation and the importance of sound chemicals management. Thus, this project would promote a more holistic approach to the issue of chemicals and waste management, and through this, promote environmentally sound and sustainable development in the country.

Incremental cost reasoning and global environmental benefits: In the baseline scenario, the awareness of decision-makers of the economic and social benefits for promoting sound u-POPs (and mercury) management will not be high enough to lead to substantial improvements in the overall chemicals management in the country. The project is expected to formulate the NIP update and carry out overall mercury assessment. An expected side-effect of the project is improved dialogue, information exchange and facilitation of cooperation between and among decision-makers and chemicals users. As the project will result in the update of the NIP and the establishment of a framework for monitoring and controlling unintentional POPs releases, the project will support the implementation of the Stockholm convention, and the proposed activities are clearly incremental. It will too build the basic capacity of the country in the light of the international negotiations on mercury convention.

The project will support an integrated systems approach to healthcare waste management. In the absence of GEF-supported intervention, fragmented national efforts to control u-POPs are likely to slowly

continue within specific sectors (or pillars, within line ministries) with insufficient collaboration and limited coordination over different spheres of activity. As such, the GEF is also incremental.

While maximizing the environmental objective of minimizing dioxin and mercury releases, the project will, in addition, make substantial contributions to country's national health protection objectives (e.g. patient safety, workplace safety and improvements in the effectiveness of healthcare delivery facilities). Currently, it is estimated that in Kazakhstan about 12,000 tons of healthcare waste is produced annually, which amounts to about 32 tons per day. With the current incineration practices this amounts to about 45.7 g I-TEQ/year of PCDD/PCDF. The project's ultimate benefit is the protection of the global environment and public health, as well as patients, healthcare workers, and communities, from the impacts of dioxin and mercury releases, and the released amount of POPs could be reduced by around 5 g I-TEQ/year or more.

Without external technical assistance, the uncoordinated implementation of chemicals and waste management policy is expected to continue. Even though there is a will to update POPs legislation, there is a concern that without a comprehensive understanding of chemical safety, regulatory changes made would yet again be too narrow in scope and not comprehensive enough to avoid regulatory and enforcement gaps, and leave certain sectors, stakeholders or impacts unaccounted for.

A table showing the baseline projects, the alternative to put in place by the GEF project, as well as the global environmental benefits has been provided at PIF submission stage as a separate annex. The table includes the estimated co-financing for the separate baseline activities.

A more detailed incremental-cost analysis will be developed at the PPG stage.

It should be noted also that this project will closely coordinate its activities with the GEF/UNDP Project on efficient energy lighting in Kazakhstan (EE project) which currently is under formulation (last stages). As that project for Climate Change focal area includes some work on lamp replacements to achieve improved energy-efficiency in public buildings (schools, hospitals), it is planned to link the two projects in order to (1) help the EE project identify priority hospitals which will be covered by the demonstration project on HCWM, and (2) ensure that the formulation and implementation of energy-efficiency programmes in those hospitals are coordinated with mercury-in-instruments management, and, thus, will link to mercury handling issues in model hospital facilities (through formulation of joint mercury-devices handling plans in hospitals).

B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS(GEF TRUST FUND) OR ADAPTATION BENEFITS (LDCF/SCCF). AS A BACKGROUND INFORMATION, READ MAINSTREAMING GENDER AT THE GEF.":

As certain groups of workers are employed in the healthcare sector and deal with medical wastes they are exposed to health risks associated with the handling and disposal of infectious healthcare waste materials. Besides that, improper disposal of such waste through uncontrolled incineration generates hazardous emissions of u-POPs. The workers are also exposed to mercury during improper day-to-day handling, storage and disposal of failed mercury-containing medical measurement devices. Among such workers are nurses and staff responsible for waste handling with low status in the overall hospital hierarchy which limits their opportunities to protect their health. In-hospital patients, where incineration of medical waste is practiced, may also be exposed to such risks. Households (families) which are located in the proximity to the sources of u-POPs emissions (sites with uncontrolled incineration of medical wastes: healthcare facilties, landfills in urban and rural areas) are also exposed to POPs impacts at regular intervals. The end

result of the project, the expected improvements in the regulatory framework to better control u-POPs emissions and mercury containment, will help in safeguarding human's health from harmful chemicals.

B.4 INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS TO BE FURTHER DEVELOPED DURING THE PROJECT DESIGN:

Risk	Risk rating	Risk mitigation strategy
Conflicting interests of The Ministry of Public Health and The Ministry of Environmental Protection	Moderate	A project addressing sound HCWM has been requested both from the Ministry of Public Health (MPH) and the Ministry of Environment Protection (MEP), both of which have been involved in project concept preparation since the beginning. The Ministries have agreed that the MEP would take the lead in the POPs issues while the MPH would focus more on guidelines for sound HCWM within the facilities. Project will ensure appropriate information exchange and frequent meetings between the ministries to ensure coordination
Low interest of hospital facilities to be involved in project, fear of additional burden by introduction of incineration and HCWM guidelines	Low	The project will ensure stakeholder and facility involvement from the very beginning. It will not only focus on the technicalities of POPs reduction, but also on the benefits of sound HCWM including economic savings. It will secure strong engagement from the MPH side.
Rural facilities not involved due to financial barriers	Moderate	In cases, where costs for waste disposal in regional incinerators are prohibitively high, the demonstration and supply of affordable autoclaves for the treatment of plastic medical wastes will add to the risk reduction. Moreover, the project will place specific focus on rural facilities, and develop specific plans and guidelines that take into account geographical and financial challenges which are faced by rural facilities in accessing regional incinerators.
Level of capacity (technical, institutional) is underestimated	Low	The project will ensure a strong focus on targeted awareness raising, capacity building and training programs

The project will be monitored and evaluated on a regular basis according to applicable GEF and UNDP procedures for results-based management. An annual reporting exercise in the form of the project implementation review (PIR) will take place, where the project will be tracked for progress against the relevant performance indicators (included in the POPs tracking tool applicable to u-POPs and capacity building), evaluated for progress made towards development results, and assessed with regard to its degree of adaptive management and its flexibility to respond to changing circumstances.

B.5. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

The project, during the formulation stage, will involve the assement of relevant stakeholders who will be involved involved in the project's development and implementation. Presently, the following list may identify the key partners of the project:

- National government: oveall strategic, development, coordinative and regulatory support;
- Local government: municipalities and regional authorities responsible for the execution of national healthcare and chemicals protection and safe management policies;
- Public and private sectors with organizations involved in HCWM, mercury issues and the production, management, disposal of chemicals.
- Non-governmental organizations which monitor and implement programs to protect the environment and human health from inadequate HCW and chemicals management.
- Workers of hospitals, clinics, healthcare facilities (nurses, doctors, waste handlers).

B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

In recent years there has been some progress in Kazakhstan in mainstreaming the sound management of chemicals and working across sectors, especially when it comes to persistent organic pollutants.

There are two policy instruments adopted which establish basic visionary frameworks for advancing the safeguards against unsafe chemicals management. The policy “Concepts of prevention and liquidation of emergency situations of natural and man-made nature in Kazakhstan" adopted in 2005 declared the need for actions on chemical safety and hazardous chemicals, and the Concept on Environmental Safety of the Republic of Kazakhstan for 2004-2015 includes the decision to develop a program on POPs control, monitoring and management. Furthermore, a national policy on chemical safety is under development, with technical support coming from the ongoing GEF/UNDP project on safe PCB management and disposal. The proposed project will provide thematic policy improvement, capacity building and technical assistance specific to the safe management of u-POPs and mercury.

The Ministry of Environmental Protection (MEP) in Kazakhstan has also recognized the fact that the uncontrolled incineration of medical waste is a significant source of dioxin/furan releases, and it has initiated preliminary work on updating guidelines related to POPs releases, including from incineration processes. The Ministry of Public Health (MPH) currently works on issues related to strengthening the link between healthcare waste and the spread of HIV/AIDS, hepatitis and other pathogens, as well as on promoting safe waste disposal practices. The project will link to these activities to provide technical assistance on existing international safety and emission control norms. In addition, WHO has been involved in several medical waste initiatives in Kazakhstan, and close collaboration with the WHO office in Kazakhstan is foreseen in this project as this is essential in order to ensure that practices developed and promoted by the project are in accordance with and contribute to evolving global best practices. The engagement of WHO is critically important in securing good cooperation from the Ministry of Health and healthcare institutions. Moreover, WHO is instrumental in disseminating information on good practices on the national and sub-national level. Additionally, WHO provides important technical support on HCWM, infection control, health worker safety, and other issues.

The project will also build upon lessons learnt in the Global GEF/UNDP/WHO healthcare waste and mercury management project (www.gefmedwaste.org), considering the knowledge, technical and managerial expertise and experience built up within the project, as well as the tools, guidance materials and contacts with international and national stakeholders that have been developed and established during the implementation of the current project. The project will also closely coordinate with the upcoming GEF/UNDP project on energy-efficient lighting, as that project foresees interventions in the area of mercury management.

The project will build on the implementation experiences of past projects and collaborate with ongoing interventions in the POPs and chemicals sector. These include at least seven completed projects in the POPs and ozone depleting substances (ODS) area supported by GEF/UNDP/UNOPS, as well as POPs projects supported by the World Bank (in PCB management), the Asian Development Bank (in pesticides management), UNIDO (in information campaign support to NGOs) and other organizations.

MEP, together with the World Bank, currently works on a feasibility study for the construction of a national facility for incineration of hazardous waste (with a specific emphasis on PCBs and pesticides). The project will also collaborate with initiatives in the waste management sector, including the ongoing project on sound management of hazardous waste, supported by the EU.

National NGOs, especially GreenWomen, Sustainable Development Promotion Center, NGO Ecocenter, NGO Ecoforum and Karaganda Ecomuseum, have also been involved in several projects regarding POPs reduction, including the formulation of the NIP. NGOs have mainly been responsible for activities related to public awareness, such as writing articles, giving university lectures, holding seminars and developing educational modules for teachers. The abovementioned NGOs are expected to be involved in the HCWM project and will contribute with local knowledge and assist in information dissemination and replication activities.

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

As confirmed in Annex L of the GEF document "Comparative advantages of the GEF agencies", UNDP has a comparative advantage in the area of Persistent Organic Pollutants, in specific with respect to Capacity Building and provision of Technical Assistance. The proposed project will benefit from UNDP's experience in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation.

In its capacity as GEF implementing agency for the UNDP/WHO/HCWH project "Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury" UNDP is particularly well placed to demonstrate BAT and BEP which have been applied, tested and improved under this global project in eight countries, some of which are facing very similar challenges as Kazakhstan. This indicates a strong comparative advantage of UNDP to work on future HCWM projects, replicating, and building upon, the best techniques and practices that have been developed. This project will liaise with the WHO as well as the global healthcare waste project team and draw on experiences and lessons learnt in other countries.

On the country level, UNDP plays an important role in rendering assistance to Kazakhstan with regard to managing liabilities subsumed within international environmental conventions and agreements and has the country in the ratification processes of a number of international agreements. UNDP has assisted Kazakhstan in international treaty ratification and reporting, including the Stockholm Convention on POPs. An ongoing project on the establishment of a PCB management plan for the country has strong linkages with the implementation of the convention. Given that as of yet there has been no systemized interventions in the area of HCWM in Kazakhstan, and given the substantive experience of UNDP in building capacity to safely manage POPs and chemicals, UNDP is well placed to formulate and implement such a project.

C.1 INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

The United Nations Development Programme (UNDP) has committed US$ 75,000 cash to the implementation of the project. In addition, UNDP has contributed with in-kind technical support and assistance for initial scoping meetings with Government counterparts and project stakeholders which took place in the preparation for the formulation of this PIF. Identification of further in-house cash contribution towards the initiative will be undertaken during the PPG stage of the project.

The Resident Representative functions and Country Office human resources and facilities will be available beyond strict cost recovery basis for the successful project implementation. The value of this can be expected to equal to US$ 100,000 in-kind during the life of the project.

During the project formulation, it is expected to coordinate the commitments of stakeholders towards the project's objectives. The total amount of co-finance to be leveraged during the PPG phase is estimated at this stage to reach US$ 16,011,000, both in-kind and grant-based.

C.2 HOW DOES THE PROJECT FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

This project represents a contribution to the fulfillment of Kazakhstan's 2010-2015 UN Development Assistance Framework (UNDAF), in particular Development Outcome 2 on Environmental Sustainability. This outcome calls for "communities, national, and local authorities [to] use more effective mechanisms and partnerships that promote environmental sustainability" (UNDAF, 2009:15). Among the outputs is the specific one with targets the enhanced technical capacities of The Ministry of Environment Protection, industries and other local stakeholders for management, safeguarding and disposal of hazardous waste as well as for phasing out ozone depleting substances (UNDAF, 2009:35). The implementation of measures controlling unintentionally released POPs is an issue of importance in this respect. Kazakhstan's 2008 Country Analysis, prepared in fulfillment of the Common Country Assessment that analyzes the national development situation and identifies key development issues, determined that the "United Nations is well-placed to contribute to environmental sustainability in Kazakhstan, in a gender-sensitive manner" (UN, 2008:34).

The UNDP Country Office will assign two staff members to be responsible for the overall management and supervision of the project implementation. From the programme side the project will be under the overall supervision of the Head of the Energy and Environment unit, who has a M.Sc. in environmental management and 10 years of experience within the environmental field and in project implementation, more than half as director of the GEF/UNDP Small Grants Programme in Kazakhstan. He will be directly supported by an Environment Programme Analyst with a M.Sc. in chemical technology and 6 years of experience in the environmental field, with specific focus on chemicals management and environmental legislation compliance. Implementation support on Procurement, Finance and Human Resources will be provided by three staff members – Head of Finance Unit (BA, 10 years of experience in UNDP finance), Procurement Officer (BA, 4 years of experience in UNDP) and HR associate (MA, 10 years of experience in UNDP). These three staff members are directly supported and supervised by the Operations Manager (MA, 13 years of experience, of which 6 years in UNDP).

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

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

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Ms. Eldana Sadvakasova	Vice Minister of Environmental Protection GEF Operational Focal Point	MINISTRY OF ENVIRONMENT PROTECTION OF THE REPUBLIC OF KAZAKHSTAN	**10/04/2010**

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	**Signature**	**DATE** *(MM/dd/yyyy)*	**Project Contact Person**	**Telephone**	**Email Address**
Mr. Yannick Glemarec Executive Coordinator UNDP-GEF		11/16/2011	Dr. Suely Carvalho GEF Principal Technical Advisor for POPs/Ozone UNDP/MPU/Chemical	212-906-6687	suely.carvalho@undp.org