UNDP Project Document[1]
Government of: Kyrgyzstan

United Nations Development Programme

PIMS # 4101

Management and disposal of PCBs in Kyrgyzstan Project:

Brief Description

Polychlorinated Biphenyls (PCBs) are a class of synthetic organic chemicals. Since the 1930s, PCBs were used globally for a variety of industrial uses (mainly as dielectric fluids in capacitors and transformers but also as flame retardants, ink solvents, plasticizers, etc.) because of their chemical stability. In the 1970s it became generally recognized that their chemical stability also represented a serious threat to human health and the environment if they were released. PCBs are considered to be immune-toxic and affect reproduction with specific adverse effects associated to the chronic exposure being damage to the immune system, liver, skin, reproductive system, gastrointestinal tract and thyroid gland. While local impacts close to the source of release of these chemicals into the environment are of concern, the primary impacts are widely distributed and effectively global in nature, given the chemical's characteristics of bio-accumulating higher in the food chain and being subject to long range, multi media transport mechanisms.

The project will provide Kyrgyzstan with the tools to achieve effective compliance with respect its Convention obligations and the objective of substantively minimizing the environmental and health risks, both local and global. It has been developed to specifically address the principle barriers identified during project preparation through (1) Component One: Identification of PCBs and Enhancing Awareness, (2) Component Two: Strengthening Legislative and Regulatory Measures, and Supporting Institutions, (3) Component Three: Development of Technical Capacity for Sustainable PCB Management, (4) Component Four: Securing PCB Stockpiles and Wastes, and (5) Component Five: Monitoring, learning, adaptive feedback, outreach and evaluation.

[1] For UNDP supported GEF funded projects as this includes GEF-specific requirements

Acronyms

ADR	International Carriage of Dangerous Goods by Road
ARR	Annual Review Report
AWP	Annual Workplan
BEP/BAT	Best Environmental Practice and Best Available Technologies
CDR	Combined Delivery Report
CEIT	Countries with Economies in Transition
CEO	Chief Executive Officer
CP	Country Programme
CPD	Country Programme Document
FAO	Food and Agriculture Organization
FSP	Full Size Project
GDP	Gross Domestic Product
GEF	Global Environment Facility
GOST	State Standards
HQ	Headquarters
IA	Implementing Agency
IW	Inception Workshop
KR	Kyrgyz Republic
M&E	Monitoring and Evaluation
MEA	Multilateral Environmental Agreement
NEAP	National Environmental Action Plan
NEX	National Execution
NGO	Non-governmental Organization
NIP	National Implementation Plan for the Stockholm Convention
OFP	Operational Focal Point
PB	Project Board
PBM	Project Board Meeting
PCB	Polychlorinated biphenyls
PDF	Programme Development Facility
PIC	Prior Informed Consent
PIR	Project Implementation Report
PMU	Programme Management Unit
POPs	Persistent Organic Pollutants
PPG	Project Preparation Grant
RCU	Regional Coordination Unit
SAEPF	State Agency for Environmental Protection and Foresty
SAICM	Strategic Approach to International Chemicals Management
SIEG	State Inspections for Energy and Gas
SRF	Strategic Resource Framework

TOR	Terms of Reference
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United National Development Programme
UNDP CO	UNDP Country Office
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNITAR	United Nations Institute for Training and Research

1. SITUATION ANALYSIS

1.1 Global context and significance

1.1.1 Issue background and baseline

Polychlorinated Biphenyls (PCBs) are a class of synthetic organic chemicals. Since the 1930s, PCBs were used globally for a variety of industrial uses (mainly as dielectric fluids in capacitors and transformers but also as flame retardants, ink solvents, plasticizers, etc.) because of their chemical stability. In the 1970s it became generally recognized that their chemical stability also represented a serious threat to human health and the environment if they were released. PCBs are considered to be immune-toxic and affect reproduction with specific adverse effects associated to the chronic exposure being damage to the immune system, liver, skin, reproductive system, gastrointestinal tract and thyroid gland. While local impacts close to the source of release of these chemicals into the environment are of concern, the primary impacts are widely distributed and effectively global in nature, given the chemical's characteristics of bio-accumulating higher in the food chain and being subject to long range, multi media transport mechanisms. Based on these characteristics they are generally classified as persistent organic pollutants (POPs). Through the late 1970s and 1980's the production and use of PCBs was generally discontinued, with regulatory bans being applied in many countries. However, there were and remain substantial global inventories of the chemical remaining in operating electrical equipment, stockpiles of retired equipment and PCB contaminated waste, and on localized sites where concentrated releases have occurred.

Coordinated global control measures related to POPs were initiated with the creation of the Stockholm Convention on Persistent Organic Pollutants[2] in 2002 and with it coming into force in 2004. PCBs were one of the initial 12 POPs covered by the Convention with specific control measures, and specification of national obligations of Convention Parties for POPs management generally and PCBs in particular. The Kyrgyz Republic (KR) signed the Convention in May 2002 and acceded to in July 2006, becoming a formal party and assuming the obligations it entails.

Kyrgyzstan's active attention to the POPs issue began in 2002 upon signing the Convention with the Ministry of Ecology and Emergency Situations and subsequently the State Agency for Environment Protection and Forestry (SAEPF), acting as the responsible national authority. This attention was primarily directed to the preparation of the required National Implementation Plan (NIP)[3] with the support of a GEF Enabling Activities Grant through the United Nations Environmental Programme (UNEP) acting as implementing agency. The NIP was approved by Government Decree #371 in July 2006 and has been included in the Concept on Environment Security in KR, adopted by Presidential Decree of KR on 23 November, 2007, #506. The NIP was formally received by the Convention Secretariat in April, 2009, noting that the delay was associated with an overall institutional restructuring with the government during that period, including the transfer of POPs focal point responsibility to the newly established SAEPF.

In parallel with Kyrgyzstan's assumption of obligations under the Stockholm Convention the country has been proactive in signing, ratifying, and becoming an active party to a number of other chemicals related environmental conventions and agreements that have synergy with the Stockholm Convention. These include the Montreal Protocol (2000) and all its current amendments (2003, 2005), the Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and its Disposal (1996), the Rotterdam Convention on Prior Informed Consent (PIC) for Certain Chemicals and Pesticides, the Arhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in

[2] http://chm.pops.int/Portals/0/Repository/convention_text/UNEP-POPS-COP-CONVTEXT-FULL.English.PDF

[3] National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants – Republic of Kyrgyzstan, Bishkek, 2006.

Environmental Matters (2000). The country has also subscribes to the 2008 Dubai Declaration on a Strategic Approach to International Chemicals Management (SAICM).

In general, the profile of PCB use and their residual presence in Kyrgyzstan should be typical of that throughout the former Soviet Union. The chemical was never produced in the country but would have been imported primarily as a dielectric fluid in larger scale electrical equipment, mainly power transformers and capacitors, but also likely in smaller scale electrical devices such as ballasts in fluorescent lights and switches. The electrical equipment, that is anticipated to constitute the major source of PCBs in the country and that which might be practically captured, would have been produced in other parts of the Soviet Union (Russian Federation, Kazakhstan, Armenia and Uzbekistan) between approximately 1958 and 1993. This would typically be equipment characteristic of specific applications and with well defined specifications identifiable by manufacturers labeling. Information on these specifications and labeling has been documented in other CIS countries[4]. PCBs would also likely have been a constituent of other products such as paints, specialized lubricants and certain polymers. However, overall no accurate information on the quantities of PCBs or PCB containing equipment imported into the country remains available.

The NIP indicates that the inventory of larger scale electrical equipment where PCB type equipment would likely be found, occurs in the power, mining, metallurgy, machine building and building materials industrial sectors. The NIP identified an overall inventory estimate of 19,230 transformers and 2,373 large capacitors operating in the country and provided a sectoral and regional profile of where this equipment existed. The majority of power transformers (96%) in operation are in the power generation sector and specifically the 6 enterprises involved in it. Regionally, 84% of these are in Chui, Osh and Jalal-Abat Oblasts. Similarly, most of the operating capacitors (90%) are in the power generation sector with 82% concentrated in Osh and Yssyk-Kul oblasts. However only two operating transformers (Type TNZ) and 789 in-service capacitors (Type KC) were identified as potentially containing PCBs based on their specification types and a limited sampling program. No actual stockpiles and wastes were identified. Similarly, no reliable information was available on the fate of any retired PCB equipment and waste stockpiles that might have existed in the past, or on transformer maintenance practices and potential for cross contamination in non-PCB equipment. Likewise, orphan equipment that might have been abandoned, or sites that might have potential PCB contamination were not specifically identified. The NIP work also provided a review of the current legal and regulatory framework governing waste and chemicals management as well as the various institutional responsibilities for it, and assessment of the technical required support capacity such as analytical and monitoring capability, and management infrastructure.

A principle conclusion of the NIP was that initial inventory of both in-service and out of service PCB contaminated equipment requires further development. Similarly, the need for regulatory measures specific to POPs management were noted without detailed elaboration, as was the need to better define institutional responsibilities for PCB management. The absence of capacity to analyze and monitor PCBs was noted as was the need to develop supporting PCB storage and management infrastructure including developing plans for eventual disposal of POPs stockpiles. It also highlighted the very low level of awareness regarding the issue among virtually all stakeholders, particularly in the government and among holders of electrical equipment and associated maintenance service providers. These conclusions along

[4] "National Plan of the Republic of Belarus for Implementation of the Stockholm Convention on Persistent Organic Pollutants, Annex 4, Pages 94-97", Ministry of Natural Resources and Environmental Protection, Minsk

http://chm.pops.int/Countries/NationalImplementation/tabid/253/language/en-US/Default.aspx

with others applicable to POPs generally were formulated into an Action Plan that was nominally adopted in 2007 for inclusion as part of national environmental policy. However, very limited implementation of the NIP action plan has occurred to date, pending receipt of additional international assistance.

In 2008, during the initial conceptual consideration of current project, a review of the NIP results and the current situation generally concurred with the findings while noting a number of significant questions and gaps that need to be addressed. In particular, the absence of any PCB inventory of substance stood out. In fact if taken at face value the NIP would suggest that no substantive issue with PCBs existed, something that would contradict experience in virtually any other country. A comparative assessment with similar CIS countries in the region suggested that a more realistic number might be in the range of approximately 50 PCB transformers in service. The absence of any stockpiles of retired equipment and associated wastes was similarly questioned as was the absence of any information on potentially PCB contaminated sites. As a consequence the GEF PPG work undertaken in 2009 has focused on elaborating the inventory and investigating historical practices associated with the maintenance and trade of electrical equipment, both in service and retired. This work was undertaken by State Inspection for Energy and Gas[5] who are responsible for the operational and technical regulatory control of electrical equipment and service providers, and involved the review of inspection records, enterprise surveys and site visits. The following summarizes the results of this work which effectively forms of baseline for the proposed project in terms of the physical magnitude of the issue being addressed:

- Twenty two (22) in-service TNZ transformers were located in various enterprises around the country accounting for an inventory of 96 tons of future material requiring decontamination and/or disposal and containing an estimated 32 tons of PCB oil

- Up to eight (8) of these transformers, while nominally operational, are not utilized[6] and an additional 2 are located in a sensitive location.

- Two (2) TNZ transformers and 1.8 tons of PCB oil drained from a transformer that was returned to service using mineral oil have been identified in storage and an additional two (2) TNZ transformers have been tentatively identified as having been retired and stored but this has not been verified.

- Fifty Four (54) electrical equipment repair and servicing sites have been identified which could potentially handle PCB containing equipment, with three (3) historically handling most of the requirements of the power and industrial sectors. The historical records available on what was done are limited, technical guidance documents (instructions) were generally not in place or accessible. No actual testing or screening of oil has been practiced. However, informal information on transformer maintenance and servicing practices suggest that replacement of PCB oil with mineral oil is practiced, leaving both a PCB oil waste and a cross contaminated transformer, and cross contamination may have also occurred through the use of common filling equipment (two suspect cases such as this have been included in the in-service inventory).

- 1,458 Power capacitors in service have been identified, accounting for an inventory of 83 tons of future material requiring disposal and containing an estimated 34.5 tons of PCB oil. No stockpiles of retired capacitors have been identified suggesting no control has generally been exercised on their disposal.

[5] An agency under the current Ministry of Industry, Energy and Fuel Resources but which will be transferred under the new Ministry of Energy in a current government re-structuring.

[6] Large units potentially accounting for 70% of the in-service inventory and located at a large foreign controlled chemical and metallurgical plant

- The absence of stockpiles of PCB contaminated equipment is generally explained by their sale and export of the equipment for scrap, something that is attributed to the lack of awareness of the issue and the absence of any national regulatory controls on trade in such equipment, notwithstanding its prohibition under both the Stockholm and Basel Convention.

- Informal information collected indicates that there is an active trade in used electrical equipment, including PCB containing equipment, and that this involves import of used equipment from neighbouring countries.

- There remains access limitations for regulatory authorities to private facilities and associated records. As a consequence, it is anticipated that additional PCB equipment will be added to the inventory as this barrier is addressed

The PPG work also examined the current state of legislative and regulatory development related to POPs, PCBs in particular, and associated waste management issues. Beyond declarative high level commitments, there has been limited progress in giving effect to international obligations assumed under the Stockholm Convention and related aspects of the Basel Convention in the overall national environmental legislative and regulatory framework. This represents a fundamental requirement for moving forward with substantive PCB management. The highest priority areas identified for implementing specific regulatory requirements related to PCBs are: i) mandatory registration, labelling, inspection and status reporting for PCB equipment in service and PCB stockpiles; ii) ESM standards for environmentally sound and secure storage, handling, transportation, and ultimately disposal of PCB containing equipment, stockpiles and waste; iii) clear legal definition of PCB containing equipment, stockpiles and wastes that are subject to ESM in terms of content and their classification as hazardous waste, consistent with accepted international standards; iv) establishment of permissible levels of PCBs in environmental media and human receptor paths; v) control measures related to the phase out, elimination, import, export and trade (re-use) of PCB containing equipment and PCB stockpiles and waste consistent with Convention Obligations; vi) provision for unrestricted regulatory access to information and sites potentially associated with PCBs along with the right and capacity for its use in reporting, dissemination and analysis. It was also noted that the country needed to upgrade its overall waste management legislation and regulation, inclusive of integrating POPs and the overall sound management of chemicals waste into it. With respect to the latter, the current UNDP project on waste management is undertaking this kind of work including drafting of a new law on wastes that will explicitly include PCBs and POPs generally.

Investigation of various technical and infrastructure capacity limitations has also been undertaken at the PPG stage. More specifically it is apparent that a major constraint on the having an effective regulatory regime is the absence of national analytical and monitoring capacity for PCBs. While there are several laboratory facilities with capability and capacity to undertake chlororganic pesticide analysis, there is no capability to do PCB analysis, either in support of verifying PCB containing equipment and stockpiles or in monitoring impacts in environmental media and human receptors. Another obvious deficit is the absence of any infrastructure capable of storing PCB stockpiles and waste or serving as a basis for future development of treatment capability if warranted.

Institutionally, the responsibilities for various aspects of PCB management remain somewhat fragmented and in some areas overlap. Regulatory control responsibility for electrical equipment along with the

principle technical competence in the area lies with the State Inspection for Energy and Gas (SIEG) within the Ministry of Energy[7]. Historical responsibility for a number of these areas and particularly things like physical handling of hazardous waste and cleanup of contaminated sites has been with the Ministry of Emergency Situations (MES) that formally had responsibility for environmental protection before the formation of SAEPF. The responsibility for the issue in terms of international obligations and regulatory implementation is the State Agency for Environmental Protection and Forestry (SAEPF). Competence and responsibility for issues associated with determination of maximum allowable concentration and, in part, definitions and management of hazardous waste lies with the Ministry of Health. Ministry of Energy through a common interest in the POPs issue, the Ministry of Agriculture who are responsible for obsolete pesticide management are also a significant institutional stakeholder, particularly where common regulatory measures, infrastructure, technical expertise and training are involved. This Ministry along with SAEPF is also involved in sound chemicals management along with the National Academy of Science (Institute of Chemistry and Chemical Technology). Finally, the significant issues associated with import and export of PCBs which constitute an immediate Convention compliance concern underline an important role for the State Customs Committee. There is a general recognition of this diverse range of institutional stakeholders and an interagency coordinating structure is being developed. Under the chairmanship SAEPF, the Inter-Agency Working Group on Implementation of the Stockholm Convention has been formed and is operating although the process of its official empowerment remains to be completed.

A final major area that transcends the above limitations is the need for a substantially greater level of awareness about the PCB issue and the country's obligations respecting their environmental sound management. This applies at all levels from the public generally, communities that might be immediately affected, NGOs and private business through to the various government stakeholders. Of particular importance are holders of PCB equipment and service providers involved in its installation, servicing and maintenance. There are substantial needs related to training in the evaluation, handing, storage, and disposition of PCBs both with this group and at the inspection and enforcement level in the various responsible government agencies.

1.1.2 Global and environmental benefits

The principle global environmental benefit from the project is the mitigation or elimination of risks associated with the release of POPs into the environment and their subsequent global distribution with resultant ecological and human health impacts from exposure to these chemicals. This will be achieved directly during the project period by activities related to the capture, secure storage and disposal of POPs stockpiles and waste (Component 4). It will also be achieved indirectly though strengthening technical, regulatory and institutional capacity (Components 1, 2 and 3). In the near term this will have an immediate global impact through elimination of historic practices where PCBs and PCB contaminated material appears to have been randomly disposed of and exported for direct recycling and re-use, both likely resulting in release of PCBs into the general environment and subsequent global distribution. In the longer term, these project components provide a basis for sustaining environmentally sound management of future PCBs through to their environmentally sound elimination in accordance with the Stockholm Convention. The following summarizes specific global environmental benefits attached to the reduction in POPs release risk that will be derived from the project:

[7] SIEG was until under the Ministry of Industry, Energy and Fuel Resources, but as a consequence of recent government restructuring is now under the Ministry of Energy.

- Providing physical capacity to secure present and future PCB stockpiles such that random release is prevented until they are destroyed. This covers an estimated 210 tons of PCB contaminated equipment and material containing 75 tons of PCBs that might otherwise be released.
- Environmentally sound disposal of up to 50 tons of or 25% of currently identified volume of PCB contaminated equipment in the country.
- Support for regional solutions related to treatment and disposal of PCBs in the longer terms should create more cost effective solutions for ultimate elimination of PCB stockpiles and waste in a region remote from existing capacity, something that should further stimulate capture and timely destruction of PCBs.
- Phase out of 4 priority transformers accounting for 34 tons of PCB containing equipment from service.
- Elimination of exposure risk to PCBs to individuals in close proximity to existing stockpiles, and in the future those that might experience such exposure due to the continuation of historical practices.
- Planning complete phase out of PCB containing equipment in service on a prioritized basis
- Developing capacity for identification, assessment, prioritization, and clean up action respecting PCB contaminated sites.
- Strengthening capability to effectively monitor and analyze for PCBs in the environment and human receptor paths enabling better decision making on priority actions in preventing uncontrolled PCB release, as well allowing performance measurement on the effectiveness of such actions as contributing to global monitoring of the concentration of PCBs in the environment.
- Providing for a comprehensive national legislative and regulatory base for control of PCBs and eliminating gaps that allow uncontrolled release.
- Developing the knowledge base in terms of information management and technical capacity to sustain planning, decision making and program execution related to PCBs, as well as engage in effective information exchange nationally and globally.
- Creating a high level of awareness by policy makers, stakeholders and the public on the need for environmentally sound management of PCB which will stimulate sustained attention to the issue and timely responses

The project also provide broader global benefits into the future through the linkages that it has with introducing and expanding sound chemicals management concepts and a strategic approach to international chemicals management (SAICM). At a practical level, the further development of POPs management capability generally and specifically hazardous waste management infrastructure and capacity to address contaminated sites and past environmental liabilities constitute primary tools in addressing the broader chemicals management issues and as such contributes to the country's ability to make its contribution in this area of global impact.

1.1.3 Linkages with CP, UNDAF and CCA

The project is aligned with the National Action Plan contained in the National POPs Implementation Plan (NIP). Kyrgyzstan's specific policy priorities and commitments related to POPs are defined by Government Decree #371 in July 2006 approving the NIP and its subsequent inclusion in the Concept on Environment Security in the Kyrgyz Republic, adopted by Presidential Decree of KR on 23 November, 2007, #506. In parallel, the country has made similar policy commitments to a number of other chemicals related environmental conventions and agreements. These include the Montreal Protocol (2000) and all its current amendments (2003, 2005), the Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and its Disposal (1996), the Rotterdam Convention on Prior Informed Consent (PIC) for Certain Chemicals and Pesticides, the Arhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (2000). The country has

also subscribes to the 2008 Dubai Declaration on a Strategic Approach to International Chemicals Management (SAICM).

It fits with the country's evolving priorities associated with sound chemicals management as reflected in the other priority environmental management initiatives related to addressing national priorities associated with other POPs issues, hazardous waste management and SAICM that are being supported by the Government.

The NIP is part of national programmes, such as Complex Development Framework (CDF), National Strategy for Poverty Alleviation (NSPA), the National Action Programme on Environmental Protection, the National Action Programme on Environmental Hygiene, and the State Programme on Utilizing Production and Household Wastes. The NIP and other national environmental projects should be complementary and the NIP development and implementation should be integrated into an overall national system for the sound management of chemical substances, as it would provide obligatory observance of precautions, prevention and systematic control of pollution. POPs monitoring should be a harmonic part of the national system for ecological monitoring. POPs should be a separate part of all directions of ecological policy including the overall procedure for state bodies' reporting on chemical substances, in systems of raising the population's awareness about the environmental situation, forming social assistance for nature conservancy programmes, training staff and creating a material, technical and scientific base[8].

The project is consistent with UNDAF and Country Programme Action Plan through the following outcomes and outputs:

- UNDAF (2005-2010) outcome:
    - Poor and vulnerable groups have increased and more equitable access to quality basic social services and benefits, in a strengthened pro-poor policy environment
- Country Programme Action Plan (2005-2010) outputs:
    - The Coordination Body for Sustainable Development (CBSD) is able to design and implement priority environmental management and sustainable development initiatives;
    - Expanded collaboration between key stakeholders in the area of environmental management for sustainable development on national and sub-regional levels;
    - Increased institutional capacity to implement international conventions and agreements;
    - New financial mechanisms and partnerships are introduced for the environmental protection;

1.2 Key Barriers

As reflected above, Kyrgyzstan, while proactively assuming national obligations under the Convention, has fallen somewhat behind in meeting them and preparing for those that will apply in the future. The overarching barrier to reversing this situation is the absence of national capacity and resources to so, something that is directly linked to the country's modest means, and underlies the importance of

[8] National Implementation Plan for the Stockholm Convention on POPs in the Kyrgyz Republic, Bishkek, 2006 http://chm.pops.int/Countries/NationalImplementation/tabid/253/language/en-US/Default.aspx

international assistance. At a more specific level, the following major barriers can be identified and which are being explicitly targeted in the project's design:

- *Incomplete knowledge on the extent and impact of the PCB issue*: A significant information gap remain that limit the ability to define the physical extent of issue in terms of the how much PCB equipment, stockpiles/wastes, where contaminated sites exist, and what their impacts are.
- *Limited awareness about the issue and dissemination of knowledge on how to address it.* The level of awareness generally is low, particularly at a practical level among key stakeholders including technical and environmental regulators, customs officials, equipment owners and service providers. The means to collect and disseminate information and skills necessary to increase this awareness are also lacking.
- *Absence of effective regulatory instruments:* The necessary detailed regulations and standards to ensure that PCBs can be effectively captured and managed remain to be put in place leaving significant opportunities for avoidance and ultimately continuing release of PCBs into the general environment.
- *Limited availability of technical tools*: There are key gaps in technical capacity in the form of required analytical capability, and supporting procedures, techniques and practices to address knowledge barriers, support regulatory control, and plan for sustainable management of PCBs into the future.
- *Absence of infrastructure and operational capacity:* Currently, even if PCBs could be identified and captured there is no dedicated capacity to physically provide for its environmentally sound management. Having basic physical capacity to secure POPs stockpiles and wastes, with resources to start ESM disposal is urgently required.

Uncertainties associated with the country's institutional structure and fragmentation of responsibilities that have characterized the past several of years have also been a barrier to the country addressing the POPs issue generally and PCB issues in particular. However, the country appears to be now effectively addressing these issues, something international assistance activities like UNDP's Environmental Management Program, the GEF financed PPG work associated with this project, and the parallel projects on POPs pesticides and sound chemicals management noted below have and are making a contribution to.

1.3 Stakeholder analysis

During the NIP development and preparation of the current project[9] a stakeholder analysis was performed which is summarized below.

Ministry/Department	Function
Ministry of Energy	The Ministry is responsible for power development policy and issues related to standardization, metrology and tariff development. It also carries out state supervision over the energy supplying organizations regardless of their form of property, officials and customers, connected to development, transfer, distribution and consumption of electricity, heat energy, compliance to normative legal acts of the Kyrgyz Republic, requirements on rules of using fuel, electricity and heat energy as well as safety exploitation of electrical equipment.
State Electricity and Natural Gas Inspectorate under Ministry of	Organizes and carries out the necessary measures for production and use chemicals in the fuel-energy complex and wastes processing.

[9] Due to ongoing government changes, the roles of listed government stakeholders may be adjusted and such changes will be taken onboard when initiating the project implementation

Energy	It also carries out state supervision over the energy supplying organizations regardless of their form of property, officials and customers, connected to development, transfer, distribution and consumption of electricity, heat energy, compliance to normative legal acts of the Kyrgyz Republic, requirements on rules of using fuel, electricity and heat energy as well as safe exploitation of electrical equipment.
State Agency for Environment Protection and Forestry (SAEPF)	Develops and implements policies for environmental protection, conservation of biological diversity and forest ecological systems, rational use of natural resources, sustainable development of mountain areas and assure the state's ecological security. It also organizes and implements government control over environmental protection and natural resources use and implements multilateral environmental agreements (MEAs).
Ministry of Emergency Situations	Develops and implements policies to prevent industrial accidents. Its Mining and Technical Supervision Department (Gosgortehnadzor) is responsible to supervise the application and use of highly toxic substances in mining industry, and the State agency for Hydrology and Meteorology under the MES performs systematic weather, water resources, meteorological conditions, agricultural and pasture observations. It analyses state of environment and process trends.
Ministry of Health	Develops and implements policies to prevent harmful influence of chemical substances on human health and people livelihoods, administers national registers of potentially toxic chemical substances in the country. It monitors pesticides including POPs.
Ministry of Agriculture	Develops and administers policies on the use of fertilizers and pesticides in agriculture. It also takes part in controlling water resources from chemical pollution.
Ministry of Labor and Social Protection	Develops and implements policies related to occupational health associated with chemical production and use.
Ministry of Transport and Communications	Implements necessary measures and develops rules on any type of transport of chemical substances.
Ministry of Interior	Implements government control over illegal application of chemical substances.
Ministry of Justice	Carries out governmental registration of all normative-legal statements related to chemical management.
State Customs Inspectorate	Regulates exports and imports of chemical substances and toxic wastes.

The project will closely work with awareness raising and trainings at PCB holder level. This group will be specifically targeted by the project to further promote ESM of PCB materials and future waste.

The project will be implemented in close coordination and collaboration with relevant government institutions, regional authorities, industries, public and local authorities and NGOs, as well as with other related relevant projects in the region.

There are a number of related international initiatives planned or underway in Kyrgyzstan and regionally with which this project will coordinate activities and some of which will provide beneficial parallel financing. The following lists these specific initiatives:

- UNDP's multi-year Environmental Management Program that covers environmental policy, management and partnership discussions with various stakeholders and expertise accumulation and sharing through local and international expertise in a range of focal areas is directly linked to the project through the involvement of UNDP supervision and associated access to experts working on it. Coordination with initiative will serve to link the PCB management into the developing national framework for hazardous waste management as well as overall development of the national environmental management system.
- Sound chemicals management work will be linked to the project through involvement by UNDP and SAEPF in two SAICM Quick Start Trust Fund Projects being undertaken under the supervision of the Academy of Science. These are a UNDP/UNEP administered project entitled "Kyrgyzstan, UNDP, and UNEP Partnership Initiative for the Integration of Sound Management of Chemicals Considerations into Development Plans and Processes" and the UNITAR QSP project entitled "Updating a National Chemicals Management Profile, Developing a National SAICM Capacity Assessment, and Holding of a National SAICM Priority Setting Workshop in Kyrgyzstan". These initiatives provide a mechanism for mainstreaming PCB management to the development of a sound chemicals management framework in the country.
- GEF/UNDP Project "Design and Execution of a Comprehensive PCB Management Plan for Kazakhstan" being implemented at the same time as this project has a number of similar activities and outputs where coordination and information exchange will be mutually beneficial, particularly development of regulatory documents, coordination on customs issues, and the development of regional infrastructure.
- GEF/UNDP Project "PCB Stockpiles Management in Latvia" completed in 2009 provides lessons related to disposal activities and regulatory development, the latter involving harmonization of requirement within the EU that can offer useful experience.
- The Obsolete Pesticide Study: Kyrgyzstan, Tajikistan, and Uzbekistan is a regional project financed by the Canadian POPs Trust Fund through the World Bank provides synergy in common areas such as regulatory development, contaminated site identification and infrastructure development. It is being implemented in Kyrgyzstan by NGO Milleukontakt.
- GEF/World Bank Project "Persistent Organic Pollutant Stockpile Management and Technical/institutional Capacity Upgrading in Belarus" similarly being initiated offers an opportunity for exposure to a relatively advance NIP program in a CIS region with particular benefits gained from exposure to experience developing and implementing regulatory measures, their alignment with international standards, the development of a relatively advanced inventory system and a well developed environmental and health monitoring system for POPs.

1.4 Baseline analysis

In the absence of international assistance and specifically GEF funding, it is reasonable to assume that progress on the implementation of the NIP and efforts toward compliance with the Stockholm Convention would have been minimal. Essentially, the business as usual case would be the continuation of the situation that existed at the start of this Project's PPG stage when no active work was being undertaken on POPs generally and PCBs in particular. This situation would likely have continued indefinitely with the worst case being that PCBs in the country would continue to simply "disappearing" over time but in reality being released into the environment both locally and globally (assuming export of contaminated material continued unabated), all with consequential health and environmental impacts. At the same time the absence of any effective controls on illicit PCB trade and use would have made the country an increasingly attractive repository or "pollution haven" for used PCB containing equipment as other neighbouring countries put pressure on the continued use of PCB equipment and assignment of financial responsibility for environmental sound management to owners.

2. Strategy

2.1 Project Rationale and Policy Conformity

The project is designed to be aligned with GEF strategic programs and priorities, and specifically the POPs Focal Area Strategy and Strategic Planning for GEF-4. At a high level the POPs Component directly supports the overarching GEF goal for the POPs focal area, namely protection of human health and the environment by assisting countries to reduce and eliminate production, use, and releases of POPs, and consequently contribute generally to capacity development for the sound management of chemicals.

Following from this goal, the strategic objective of the GEF under the POPs focal area, in the mid-term is to assist eligible partner countries to implement their obligations under the Stockholm Convention and to achieve the purposes of the Convention, including to reduce and eliminate production, use, and releases of POPs. The GEF goal and its strategic objective are directly addressed in the project objective and its overall design. Similarly the project outcomes and the indicators match the impacts and main indicators defined in the GEF strategy, as applicable to PCBs. In meeting these objectives, the project is designed to fall under GEF POPs Strategic Program 1 (Strengthening capacity for NIP development and implementation) and Strategic Program 2 (Partnering in investments for NIP implementation).

In the case of Strategic Program 1 (SP1), Kyrgyzstan should be considered a country that, while having completed a basic NIP, still has significant capacity limitations in terms of the knowledge base, tools, and capability to be able to undertake substantive implementation of it. Therefore it requires a broad range of assistance in capacity strengthening and urgent actions directly related to current Convention compliance short falls. As such, a priority for GEF assistance would be attached to the country under SP1 as a country currently lagging behind in NIP implementation. More specifically, the country needs to expand the information base defining the scope of the PCB issue, substantively increase awareness of the issue and its implications, implement the basic practical regulatory measures needed to exercise effective control over PCBs, and be equipped with the basic technical tools to support these activities. Components 1, 2 and 3 are specifically designed to achieve this with outcomes that are aligned with the overarching SP1 outcome of the country having the capacity to implement the measures required to meet their obligations under the Convention, including POPs reduction measures. Similarly, the projects outputs are aligned with the overall SP1 indicators, namely: i) legislative and regulatory framework in place in supported countries for the management of POPs and the sound management of chemicals in general; ii) strengthened and sustainable administrative capacity, including chemicals management administration within the central government in supported countries; and iii) strengthened and sustainable capacity for enforcement in supported countries.

With respect to Strategic Program 2 (SP2), the country, while still requiring basic capacity strengthening, has immediate requirements for technical assistance in infrastructure to ensure urgent risks of PCB releases are addressed. Furthermore, notwithstanding its limited financial capacity, the government is willing to provide significant co-financing to these ends, thus does represent a country that demonstrates a willingness to follow through on their commitment to phase out/reduce the targeted POPs (PCBs) which is to be targeted under SP2. The project design is directly aligned with the SP2 objective of achieving impacts through the reduction of use and releases, and reduction of the stress on human health and the environment caused by POPs (PCBs) through the development of capacity to replace PCBs in use, capture and securely store PCBs stockpiles and waste, and to destroy available PCB stockpiles and wastes. This is consistent with the desired SP2 outcome of reducing POPs (PCBs) use and releases, through phase-out, destruction in an environmentally sound manner, and use of substitute products and alternative processes, that lead to reduced environmental and health risks resulting from POPs (PCBs). The key indicators for SP2 covering PCBs phased out and destroyed and reduced population exposure are

generally aligned with those adopted for project outputs, noting that in this case population exposure reduction is difficult to quantify given the likely very wide distribution of exposure associated with traditional practices being eliminated by the project.

2.2 Project Goal, Objective, Outcomes and Outputs/activities

The overarching theme that underlies the GEF Project Scenario described below is providing the country with the tools to achieve effective compliance with respect its Convention obligations and the objective of substantively minimizing the environmental and health risks, both local and global. The project design has been developed to specifically address the principle barriers identified above within the overall project component framework set out in the original PIF but with appropriate expansion and modification of outcomes and outputs based on the PPG work.

In the following the four primary project components listed in the Project Framework are described along with the sub-components each of which are aligned with the outcomes and outputs as elaborated in Annex A. Component 1(Identification of PCBs and Enhancing Awareness) address barriers associated with incomplete knowledge and awareness and is aligned with Outcomes 1(a) and 1(b). Component 2 (Strengthening Legislative and Regulatory Measures, and Supporting Institutions) targets the current absence of effective regulatory instruments and need to support ongoing institutional development and is aligned with Outcome 2. Component 3 (Development of Technical Capacity for Sustainable PCB Management) addresses barriers associated with the absence of appropriate technical tools to address the PCB issue and is aligned with Outcome 3. Component 4 (Securing PCB Stockpiles and Wastes) initiates the creation of basic infrastructure and planning of its future development for ESM PCB management and is aligned with Outcome 4. In structuring the project in this fashion, it is recognized that there is a high degree of interdependence between components and sub-components with outputs from one being perquisites to achieving outcomes of others.

Component 1- Identification of PCBs and Enhancing Awareness (US$211,000, GEF US$125,000): This component addresses remaining knowledge deficits related to defining the scope of PCB issue in the country and the lack of awareness that remains a major constraint on doing this. Its four sub-components are:

- Detail PCB Inventory (Output 1.1): This covers the necessary further development of a national PCB inventory that fully captures all in-service PCB equipment, as yet unidentified PCB stockpiles and wastes, and initiates the process of establishing an inventory of potentially PCB contaminated sites. It will focus on obtaining on-site verification of inventories, identifying where cases of transformer oil replacement and cross contamination may exist, trace disposition of retired equipment and PCB oils removed after retirement or during transformer servicing. It includes capacity to undertake field screening testing and will be linked to the development of regulations related to registration and labeling (Output 2.1). SIEG will take the operational lead with the involvement of SAEPF.
- Data management, mapping, reporting, and information exchange capability (Output 1.2): This involves provision of a primary support tool for sustaining the inventory process as well as Convention reporting obligations on an ongoing basis to be used by SAEPF and SIEG.
- Technical instructions on identification, sampling, servicing, handling and storage of PCB containing equipment (Output 1.3): This provides a basic information, awareness and training product for use by SAEPF and SIEG in undertaking the detailed inventory work and associated regulatory development. It will cover technical aspects of PCB containing equipment identification, servicing practices, labeling requirements, site inspection for integrity, sampling protocols for verification of PCBs, handling of PCB containing equipment, ensuring that it is environmentally secure in service and in storage. Storage standards and associated safety and emergency response practices.

- Information products/programs for stake holder and public awareness (output 1.4): This will include a program to enhance awareness and technical understanding of the issue among stakeholders directly involved with operation, servicing and regulation of PCB containing equipment, stockpiles and waste. A primary target would holders/owners of PCB equipment and maintenance service providers as well as staff of government organizations, both at a policy level and who are directly involved in the process. In addition, broader awareness activities among the public at large and affected communities, something that would be undertaken in partnership with an NGO who are already active in the area.

GEF co-financing of this component will be directed to local consultants undertaking these sub-components, international experience inputs as required, awareness materials, and the purchase of screening test kits and portable analysis equipment for inventory verification work. National co-financing will be provided though staff and logistics cost contributions from Ministry of Energy principally for use of its field staff in the identification of PCB containing equipment and stockpiles with additional staff related in-kind contributions from SAEPF and Ministry of Health, particularly in awareness related activities. Additional international co-financing will come from cash and in-kind contributions from UNDP's country office and specifically its ongoing Environmental Management Program a part of which is a UNDP-sponsored project "Municipal waste management" (Clean City), and from the current Canadian POPs Trust Fund financed POPs pesticide technical assistance program where the NGO local implementing organization (Milleukontakt) will cooperate with awareness activities.

Component 2- Strengthening Legislative and Regulatory Measures, and Supporting Institutions (US$125,000, GEF US$50,000): This component addresses the major gaps in national regulation identified above which are needed both to make Component 1 effective in terms of fully defining the scope of the PCB issue, but also in reversing the current situation where PCBs are essentially "disappearing" when no longer in use, something that represents a material risk to human health and the environment, both nationally and elsewhere. The sub-components involved address the specific regulatory measures that will be developed as outputs. These are:

- Regulations requiring registration, labeling, and status reporting of PCBs (Output 2.1): This covers the establishment of a general regulatory requirement that all PCB containing equipment in-service as well as PCB stockpiles and wastes be registered, labeled, operated/ secured to minimize risk of PCB release, and their status be regularly verified and reported. It will include requirements and reference standards applicable to relevant activities associated with implementing such a regulations including safety measures and emergency response capability. This kind of regulatory measure represents the basic mechanism that will allow tracking and ultimate capture of PCBs for eventual elimination.
- Hazardous waste classification of PCBs (Output 2.2): Ensuring that PCBs stockpiles and wastes are appropriately integrated into the national waste classification system and hazardous waste regulations is required to ensure that PCB containing equipment becomes a hazardous waste upon its retirement without possibility of re-use or recycling in the absence of being declassified consistent with international standards. This involves defining PCB wastes in terms of content consistent with international standards.
- MACs for PCBs (Output 2.3): Maximum allowable concentrations (MACs) for POPs in environmental media and human receptors such that impacts can be monitored consistent with international standards will be implemented.
- Regulations on use/re-use bans, import/export of PCBs (Output 2.4): Control of import/export and trade of PCBs represents a current gap in the regulatory regime and one where current practices raise questions about current national compliance with the convention. More specifically there is an urgent requirement to ban the import, export and sale of POPs

containing equipment and other materials except for purposes of environmentally sound treatment and disposal. This will require the involvement of the State Customs Committee and integration of their procedures and coding practices with PCB related regulatory control measures[10].

- Provision for Unrestricted Regulatory Access (Output 2.5): This will address the need to remove any legal barriers or jurisdictional ambiguities related to the access by responsible authorities to POPs containing equipment, stockpiles, waste or contaminated sites or related records and information.

GEF co-financing of this component will be directed to local consultants undertaking these sub-components, international experience inputs as required. National co-financing will be provided though staff and logistics cost contributions from the three principal institutional stakeholders in the government involved in regulatory control of POPs, SAEPF, Ministry of Energy and Ministry of Health. Additional in-kind contributions not included at this time are anticipated from the State Customs Committee. In addition, UNDP is making cash contributions to this Component from its Waste Management Program, something that will substantive help main streaming PCB regulatory measures into the country's overall waste management regulatory framework.

Component 3 - Development of Technical Capacity for Sustainable PCB Management (US$ 565,000, GEF US$260,000): This component addresses specific support technical capacity needs related to PCB management, knowledge development, awareness, regulatory and operational perspectives. As such it is intended to directly support the other three components and their outputs. It includes four sub-components as follows:

- Capacity for PCB analysis (Output 3.1): This will be developed in the laboratory of the Department of Sanitary and Epidemiology Inspectorate in Ministry of Health. This facility has been chosen as a host for national capacity for PCB analysis that currently does not exist in the country. This selection was made on the basis of its current international accreditation status, the substantial investment being made in this capacity by the Government, and the role this laboratory, and the Ministry of Health generally have in the various regulatory aspects of the project. It will provide a national laboratory service with sufficient capacity for PCB analysis serving the needs of other regulatory authorities (particularly SAEPF and SIEG), equipment holders and service providers, as well as extending environmental media and human receptor monitoring to encompass PCBs, something that has not been possible to date. This arrangement will be supported by legal agreements that ensure that this capability is available to all who require these services.
- Long term PCB phase out plan (Output 3.2): This involves using the outputs from the inventory development work to prepare a plan for the phase out of PCB containing equipment in the country, consistent with the schedule requirements in the Convention. It is will use the detailed inventory (Output 1.1) and implemented regulations on registration (Output 2.1) as its primary inputs. It will particularly examine the potential for the use of equipment replacement incentives to accelerate phase out.
- Standards and capacity for contaminated site management (output 3.3): This will assist in developing capacity in the assessment of PCB contaminated sites, establishing basic standards for it, and preparing for their cleanup. It will include a robust training activity focused on

[10] Kyrgyzstan already has experience with Prior Informed Consent (PIC) procedures applied to ozone depleting substances including pursuing bi-lateral agreements with neighboring countries. This should provide a useful basis for pursuing similar arrangements for PCBs.

developing local capability in this area and will be undertaken in association with a similar program being undertaken under a Canadian POPs Trust Fund project on POPs pesticides.

- Strategy for pre-treatment and disposal of PCB stockpiles (outputs 3.4): This involves analysis of longer term options that might be available for the country in handling the PCB stockpiles, wastes and residuals of contaminated sites. Recognizing the country's relatively remote location and modest requirements, it will particularly focus on regional cooperation in developing cost effective capacity and be coordinated with feasibility study work being undertaken on transformer decontamination.

The GEF co-financing for Output 3.1 is specifically directed to adding a modern gas chromatograph, associated support equipment, methods development support and training dedicated to PCBs analysis such that current absent capability for PCB analysis exists. The government's more substantial co-financing relates to a larger laboratory upgrading program with the GEF financed aspects being an integral part of this program to ensure a wide spectrum of priority pollutants, including POPs are covered. GEF co-financing for the other planning and technical assistance sub-components will support local consultants and international inputs. UNDP is providing both cash and in-kind contributions to these sub-components as well.

Component 4 - Securing PCB Stockpiles and Wastes (US$890,000, GEF US$400,000): This Component constitutes the major component of the project and is directed to developing the basic infrastructure and expertise needed to ensure secure storage for PCB wastes and stockpiles to be accumulated in the future, support environmentally sound disposals of priority stockpiles available during project implementation and undertake detailed feasibility work on developing local/regional capacity to process PCB stockpiles such that disposal costs are optimized. The four sub-components are elaborated as follows:

- Development of secure PCB storage (Output 4.1): This sub-component capitalizes on the commitment of the Ministry of Energy to assume national responsibility for PCB stockpile and waste storage, inclusive of co-financing of at least two national secure PCB storage facilities, one in the north (Bishkek and surrounding areas) serving the northern part of the country and one in the south (Osh and surrounding areas) serving the southern part of the country. These will be based in existing premise under their jurisdiction, care and custody. These will be developed in accordance with specifications consistent with guidance provided by the Basel Convention and adopted by the Stockholm Convention[11,12].
- Feasibility of local/regional transformer de-contamination (Outcome 4.2): This sub-component will support an evaluation of options for decontaminating PCB equipment such that they are safe for recycling of materials or in some cases potentially re-use. This will be done in conjunction with the development of secure PCB storage facilities noted above such that should a local option for this activity be attractive a secure location and supporting infrastructure are available. It will also examine options associated with utilizing a regional capability noting that specific interest exists in work in this area to be undertaken in Kazakhstan under the recently approved parallel GEF/UNDP PCB project in that country.
- PCB service provider capacity (Output 4.3): This sub-component addresses the need for qualified service providers (equipment maintenance and repair), including as applicable holders of PCB containing equipment, to handle the operational aspects of environmentally

[11] http://www.basel.int/pub/techguid/tg-POPs.pdf

[12] http://www.basel.int/pub/techguid/tg-PCBs.pdf

sound PCB management, and by extension POPs and hazardous waste management generally. It will involve establishing sustainable national training capacity for the safe handling, packaging, transportation, and as applicable other activities associated with the identification and capture of PCB stockpiles. It will be done in partnership with SIEG who will provide training facilities and trainers through their institute. It will be closely linked to the awareness activities in Component 1.

- Disposal of Current PCB Stockpiles: This sub-component allocates financing for the environmentally sound disposal of the modest buy important pending PCB stockpiles now identified and seen to be at some risk of potentially not being captured before the regulatory capacity to be implemented under the project becomes effective. An estimated 8-10 tones of PCB stockpiles/wastes in associated with 4 PCB containing transformers and 1.8 tons of PCB oil are currently stored at holders sites. In additional up to 8 large transformers constituting a large part of the currently identified PCB inventory in service plus two smaller units in a sensitive location could be captured subject to negotiation of some assistance with replacement costs. The GEF financing along with a cash contribution from UNDP will be used to maximize the amount of PCB stockpiles that can be captured directly and exported to qualified disposal facilities. The project is estimated to have the capacity to provide for environmentally sound disposal of up to 50 tons of PCB stockpiles through export to qualified facilities and a demonstration incentive program that will target stimulating replacement of approximately four transformers at priority locations (educational institutions). Alternative scenarios may also occur involving draining and flushing of in-service units to capture concentrated PCBs for immediate disposal while leaving transformer casings as lower priority PCB wastes for secure storage or potentially being returned to service. Disposal will be undertaken by a qualified international waste management contractor on a turn-key basis with custody being assumed at the point of shipment and the contract covering all activities from that point through to final disposal. It will be undertaken in accordance with international standards and practices consistent with guidance documents issued by the Basel Convention and adopted by the Stockholm Convention[10,11].

GEF co-financing related to secure storage will cover upgrading costs specifically those involving imported equipment such as materials handling, security, fire protection, and safety equipment with the major portion of the costs being nationally co-financed by the Ministry of Energy in the form of providing suitable sites, buildings and operational care and custody. For the transformer decontamination sub-component, GEF co-financing will cover international and local consultants and potentially a demonstration if practical. Depending on how this initiative develops, it may also involve export of units if environmentally sound decontamination capacity is available in Kazakhstan. National co-financing in the form of staff time and logistics support will be provided by the Ministry of Energy and UNDP will provide cash contributions. The GEF will co-finance training of service providers, specifically international trainers, program materials and local consultant and support services. SIEP will provide training facilities staff and logistics support. For the disposal sub-component, GEF-financing will be directed to disposal costs under a contract with a qualified international waste management contractor handling the collection, transport, export and ultimate environmentally sound disposal of the PCBs designated for disposal. It will also finance an international consultant that will independently monitor and verify this work's completion and it being done in accordance with international standards. UNDP with a significant cash contribution will finance the envisioned transformer replacement incentive program.

Component 5 - Monitoring, learning, adaptive feedback, outreach and evaluation (US$ 20,000, GEF US$ 20,000): This component links to Outcome 5, namely that the project results are sustained and replicable with outputs being i) M&E and adaptive management applied to project in

response to needs and extract lessons learned (Output 5.1) and ii) Lessons learned and best practices are replicated at the national level (Output 5.2). Details are provided in Part I Section H: Budgeted Monitoring and Evaluation plan.

The table below provides a summary cost estimate coving the proposed GEF scenario by Component and Sub-Component described above and cross referenced with outcomes and outputs.

Project Outcome	**Sub-Component/Output**	**Cost (US$x1000)**			
		GEF	**National**	**Other**	**Total**
Component 1: Detailed Identification of PCBs and Enhancing Awareness		**125**	**45**	**41**	**211**
Outcome 1(a): Comprehensive Identification of PCBs	Output 1.1: Detailed PCB Inventory	55	10	5	70
	Output 1.2: Data management, mapping, reporting and information exchange capability	15	10	5	30
	Output 1.3: Technical instructions on identification, sampling, servicing, handling and storage of PCB containing equipment	10	10	5	25
Outcome 1(b): Informed Stakeholders and Public	Output 1.4: Information products/programs for stake holder and public awareness	45	15	26	86
Component 2: Strengthening of Legislative and Regulatory Measures along with Supporting Institutions		**50**	**40**	**35**	**125**
Outcome 2: Regulatory Framework for Control of PCBs	Output 2.1: Regulations requiring registration, labeling, and status reporting of PCBs	10	10	10	30
	Output 2.2: Hazardous waste classification of PCBs	10	10	5	25
	Output 2.3: MACs for PCBs	10	10	5	25
	Output 2.4:Regulations on use/re-use bans, import/export of PCBs	10	5	10	25
	Output 2.5: Provisions for unrestricted regulatory access	10	5	5	20
Component 3: Development of Technical and Institutional Capacity for Sustainable PCB Management and Disposal		**260**	**290**	**15**	**565**
Outcome 3: Technical Capacity Strengthening for PCB Management	Output 3.1: Capacity for PCB analysis	180	270	-	450
	Output 3.2: Long term PCB phase out plans	20	10	5	35
	Output 3.3: Standards and capacity for contaminated site management	40	5	5	50
	Output 3.4: Strategy for pre-treatment and disposal of PCB stockpiles	20	5	5	30
Component 4: Securing PCB Stockpiles and Wastes.		**400**	**430**	**60**	**890**
	Output 4.1: Development of secure storage capacity	100	350	5	455
	Output 4.2: Feasibility of local/regional transformer de-contamination	70	30	5	105
	Output 4.3:PCB service providers capacity	90	50	-	140
	Output 4.4:Disposal of current PCB stockpiles	140	-	50	190
Component 5: Monitoring, learning, adaptive feedback, outreach and evaluation		20	-	-	20

		Cost (US$x1000)			
	Output 5.1: M&E and adaptive management applied to project in response to needs and extract lessons learned	15	-	-	15
	Output 5.2: Lessons learned and best practices are replicated at the national level	5	-	-	5
Total Costs for Outcomes		**855**	**805**	**151**	**1,811**
Project Management		**95**	**95**	**-**	**190**
Total Project Costs		**950**	**900**	**151**	**2,001**

2.3 Project Indicators, Risks and Assumptions

The Project Indicators, Risks and Assumptions are fully represented in the Strategic Results Framework (Annex A) as well as the Risk Identification and Mitigation tables in the corresponding GEF CEO Endorsement Document (Section G). It is strongly advised to refer to these indicated annexes and sections of the CEO endorsement document.

2.4 Incremental Reasoning and Incremental Cost Analysis

Given the base case of essentially no action on implementation of the Convention in the absence of GEF funding, all GEF funding and associated co-financing is considered incremental. Similarly, GEF funds are to be directed to achieving project outcomes which meet the global project environmental objectives and which result in significant global environmental benefits. Likewise, the project outcomes and the resultant global environmental benefits match with the GEF goals, objectives and strategic programs for the POPs Focal Area during GEF-4 as described in Section 2.1. above.

The co-financing associated with the project involves funds that would not otherwise have been spent to achieve the outcomes and objectives above in relation to global environmental benefit, as opposed to national benefit, and to maintaining Convention compliance. It is acknowledged that there are national benefits from the project overall and from the GEF's contribution, in terms of prevention of local environmental and human exposure. However, these benefits apply equally in a global context. Similarly, the technical and regulatory strengthening co-financed by the GEF also has significant local benefits though enhancing local capability in environmental protection generally. However, they benefits are recognized by the GEF strategy documentation as being globally significant as well. In effect national benefits are coincident with global benefits, rather than being independent of them.

As described above in defining the baseline situation, the level of global environmental benefit in terms of POPs release reduction in the absence of the GEF's intervention would not occur with substantive implementation of the NIP not being initiated. For this reason, all project are considered incremental, as are costs that would reasonably apply to supporting broader chemicals management where linked to PCB management activities.

The Incremental Cost Matrix prepared in CEO endorsement document provides an overall summary of the incremental costs, both the GEF and co-financing estimated for the project, linked specifically to the project outcomes from Annex A of CEO Endorsement, the baseline, and global environmental benefits.

2.5 Country Ownership: Country Eligibility and Country Drivenness

On May 16, 2002 Kyrgyz Republic signed the Stockholm Convention on persistent organic pollutants and ratified it on July 19, 2006 thus demonstrating its national policy position respecting cooperation with the international community on the POPs issue.

Nationally, Kyrgyzstan's specific policy priorities and commitments related to POPs are defined by Government Decree #371 in July 2006 approving the NIP and its subsequent inclusion in the Concept on Environment Security in the Kyrgyz Republic, adopted by Presidential Decree of KR on 23 November, 2007, #506. In parallel, the country has made similar policy commitments to a number of other chemicals related environmental conventions and agreements. These include the Montreal Protocol (2000) and all its current amendments (2003, 2005), the Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and its Disposal (1996), the Rotterdam Convention on Prior Informed Consent (PIC) for Certain Chemicals and Pesticides, the Arhus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (2000). The country has also subscribes to the 2008 Dubai Declaration on a Strategic Approach to International Chemicals Management (SAICM).

The NIP is part of national programmes, such as Complex Development Framework (CDF), National Strategy for Poverty Alleviation (NSPA), the National Action Programme on Environmental Protection, the National Action Programme on Environmental Hygiene, and the State Programme on Utilizing Production and Household Wastes. The NIP and other national environmental projects should be complementary and the NIP development and implementation should be integrated into an overall national system for the sound management of chemical substances, as it would provide obligatory observance of precautions, prevention and systematic control of pollution. POPs monitoring should be a harmonic part of the national system for ecological monitoring. POPs should be a separate part of all directions of ecological policy including the overall procedure for state bodies' reporting on chemical substances, in systems of raising the population's awareness about the environmental situation, forming social assistance for nature conservancy programmes, training staff and creating a material, technical and scientific base.

The project is specifically aligned with the National Action Plan contained in the NIP. The Table below illustrates the correlation between PCB related NIP Action Plan provisions and the proposed project.

PCB Related NIP Action Plan Provisions	Proposed Project Component/Outcome/Output
Bring the POPs national legal base into conformity with the Stockholm Convention requirements	Component 2, Outcome 2
Transfer the amended POPs legal provisions into practical tools	Component 2, Outcome 2, Outputs 2.1, 2.1, 2.3 and 2.4
Increase capacity for controlling POPs impact on human health and the environment	Component 2, Outcome 2, Outputs 2.1, 2.1, 2.3 and 2.4 Component 3,Outcome 3, Output 3.1
Improve data management and reporting in the field of POPs-containing chemicals	Component 1,Outcome 1(a), Outputs 1.1 and 1.2
Assess the impact of POPs and other toxic substances on human health and the environment	Component 2, Outcome 2, Output 2.3 Component 3, Outcome 3, Output 3.1
Develop a strategy for identification of POPs stockpiles and POPs-contaminated products and wastes	Component 1, Outcome 1(a), Output 1.1 Component 3, Outcome 3, Output 3.3
Upgrade the capacity of local authorities and staff in preparing, eliminating and reinstating stockpile sites	Component 1, Outcome 1(b), Output 1,4 Component 3, Outcome 3, Output 3.3 Component 4, Outcome 4, Outputs 4.1, 4.3
Withdrawal of PCB-contaminated equipment	Component 3, Outcome 3, Output 3.2 Component 4, Outcome 4, Output 4.4.
Destroying PCB-contaminated equipment and materials	Component 4, Outcome 4, Output 4.4

Regional cooperation in identifying technologies for destroying POPs-stockpiles	Component 3, Outcome 3, Output 3.4 Component 4. Outcome 4, Output 4.2
On-site remedial work and monitoring	Component 3, Outcome 3, Output 3.3 Component 4, Outcome 4, Output 4.3
Final destruction of POPs-pesticides and PCB-contaminated equipment and materials	Component 4, Outcome 4, Output 4.4
Provide for holding POPs in a safe and environmentally sound manner until destruction	Component 1, Outcome 1(a), Output 1.1 Component 2, Outcome 2, Output 2.1 Component 4, Outcome 4, Outcome 4.1
Repackaging and centralized storing of POPs	Component 1, Outcome 1(a), Output 1.1 Component 2, Outcome 2, Output 2.1 Component 4, Outcome 4, Outcome 4.1
Implement measures to reduce the impact of POPs-contaminated soils on human health and the local environment.	Component 3, Outcome 3, Output 3.3 Component 4, Outcome 4, Output 4.3
Improve public awareness and education	Component 1, Outcome 1(a, b), Outputs 1.3 and 1.4
Public hygiene education on POPs problems	Component 1, Outcome 1(a, b), Outputs 1.3 and 1.4
Upgrade the capacity of local authorities in the environmentally safe management of POPs stockpiles	Component 1, Outcome 1(b), Output 1.4 Component 4, Outcome 4, Output 4.3
Upgrade the capacity of the Customs authorities on the movements of hazardous wastes	Component 1, Outcome 1(a, b), Outputs 1.3 and 1.4 Component 2, Outcome 2, Output 2.4, 2.5
Research, development, monitoring of POPs and similar chemicals	Component 2, Outcome 2, Outputs 2.2, 2.3 Component 3. Outcome 3, Output 3.1 Component 4, Outcome 4, Outputs 4.2 and 4.4

The project also fits with the countries evolving priorities associated with sound chemicals management as reflected in the other priority environmental management initiatives related to addressing national priorities associated with other POPs issues, hazardous waste management and SAICM that are being supported by the Government. These initiatives are elaborated in a list in Section 1.3 above.

2.6 Type of financing support provided with GEF resources

The financing support provided will be in the form of a grant that serves to cover costs where foreign expenditures are required and along with UNDP's cash co-financing where local costs may be efficiently covered, recognizing the limited government and enterprise resources available to address PCB issues generally. However, the GEF grant will leverage significant in-kind and cash co-financing for the project that would otherwise not be devoted to this global issue. This type of Grant funding is consistent with the GEF Focal Area Strategy as described above.

2.7 Sustainability

At a high level, the primary sustainability requirement for the project is that the capacity developed by it remains intact and is utilized as the country moves forward with PCB and broader POPs and sound chemicals management activities into the future. The primary mechanism that the project design incorporates to achieve this is the approach of matching the specific sub-components with the institutions that currently have expertise and who would be responsible for them into the future. This is intended to ensure that a high level of ownership is achieved and the results are broadly championed for use into the future. An integral part of this overall approach is capitalizing on the interagency coordination mechanism established during the PPG stage such that sustainability is not undermined by institutional fragmentation.

Another strategic feature of the project design that will promote sustainability is the recognition that this is just one of a number of related initiatives being undertaken in the country and which are mutually reinforcing and have common purpose within the evolving framework of sound chemicals management being embraced as a major national environmental priority. The above interagency mechanisms will allow these various initiatives to transfer and share information as well as gain economies and build networks through joint training, potentially infrastructure development and generally through building a network of experts with common interests. Furthermore this has a regional dimension through the utilization of CIS experience in countries further ahead in PCB management but where commonality of language as well as historical legal and institutional systems may better resonate and again acceptance that excessive promotion of international "best practice".

Within the above framework, the detailed project design at the component and sub-component level has a number of features that are intended to promote sustainability as noted below:

- The project places a high emphasis on training, Russian language guidance material, and information exchange, largely at a practical working level where skills in PCB management are directly required and can be immediately applied. All training conducted under the project will utilize written and replicable training materials and a "train the trainers" approach, notably embedding this training in the curriculum of national training institutes such as those utilized by the Ministry of Energy and Ministry of Health.
- The project aims to ensure an end to the occurrence of illicit practices associated with re-use, trade and import/export as well as the likely random disposal of PCB oils and wastes of PCB and has proposed effective regulatory interventions for doing so. This is supported by regulation and awareness initiatives that should ensure that the rules and the implications of avoidance are well known. However the ability to sustain a change in practice also require the availability of cost effective and competitive alternatives, something the project will provide the basis for through development of secure storage capability, setting up modalities for public /private sharing of liabilities for disposal, and creating incentives for replacement of PCB equipment.
- The project substantively contributes to the sustainability of PCB phase out in the longer term through its support of a formal long term PCB phase plan and supporting the investigation of local and regional treatment and disposal options which will collectively provide the government with a "road map" in addressing future PCB stockpile issues.
- Ensuring the long term care and custody of any stored PCBs stockpiles (like any hazardous waste generally) is a fundamental sustainability issue. The project substantively mitigates this through the assumption of that responsibility by the government through the Ministry of Energy as a long term obligation. This also sets a useful precedent for effective use of state backstopping of such liabilities.
- Environmental sustainability and integrity of the near term operational aspects of PCB management funded under the project are underpinned by the application of a safeguards approach to the specification and monitoring applied to secure storage facility development and stockpile disposal operations. This is specifically achieved through the use of a qualified technical expert to provide technical support and monitoring of these particular outputs.

2.8 Replicability

Given the particular status of Kyrgyzstan as a small country that has only just starting to aggressively address the PCB issue, the project is primarily a beneficiary of experience developed elsewhere. However, the approach used to consolidate institutional stakeholders and focus on specific barriers and priorities to initiate actual action may have application in other countries. In addition, there potentially are some specific aspects of the project that could be replicable. These include:

- The adoption of a regional perspective of the issue, particularly in relation to facilities/technology development and addressing import/export questions that result in non-compliance with the Convention.
- Proactively integrating PCB management with other initiatives related to POPs, hazardous waste management and sound chemicals management through a cooperative rather than competing approach between initiatives.
- Focusing responsibilities where practical expertise and working level involvement exists in undertaking PCB management activities.

1. PROJECT RESULTS FRAMEWORK:

2.

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: Sustainable development principles integrated into poverty reduction policies and programmes.
Country Programme Outcome Indicators:
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): Expanding access to environmental and energy services for the poor.
Applicable GEF Strategic Objective and Program: **Objectives:** To reduce and eliminate production, use and releases of POPs **Program:** (1) POPs SP1 Strengthening Capacities for NIP Development and Implementation, (2) POPs SP2 Partnering in Investments for NIP Implementation
Applicable GEF Expected Outcomes: (1) GEF eligible countries have the capacity to implement the measures required to meet their obligations under the Convention, including POPs reduction measures. As such measures will address the full range of chemicals (e.g., pesticides, industrial chemicals, and unintentionally produced by-products). Countries will also be implementing measures that will improve their general capacity to achieve the sound management of chemicals. (2) Sustainably-reduced POPs production, use, and releases, through phase-out, destruction in an environmentally sound manner, and use of substitute products and alternative processes, that lead to reduced environmental and health risks resulting from POPs.
Applicable GEF Outcome Indicators: (1) Indicators for Outcome 1: (a) legislative and regulatory framework in place in supported countries for the management of POPs and the sound management of 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 in supported countries. (2) Indicators for Outcome 2: (a) POPs phased out from use (tons and cost per ton per compound) (c) POPs destroyed in an environmentally sound manner (tons and cost per ton per compound and mode of destruction) (d) Reduced exposure to POPs, measured as the number of people living in close proximity to POPs wastes that have been disposed of or contained

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Objective: Minimizing environmental and health risks associated with PCBs though strengthening technical and regulatory capacity for the environmentally sound management and disposal of PCBs in Kyrgyzstan	• Established and sustainable operational and regulatory capacity undertaking identification and management of PCBs in compliance with Stockholm Convention obligations by 2011	• NIP adopted based on preliminary knowledge of issue. • Absence of implementation capacity, either institutionally or physically. • Fragmented institutional responsibility for issue.	• Functional regulatory regime covering import/export, identification, capture and securing PCBs for future disposal. • Operation capacity for ESM of current and future stockpiles and waste. • Informed PCB holders and qualified service providers to undertake PCB management activities. • Clear assignment of responsibilities within the government.	• Regulatory monitoring of sources of PCBs and work of service providers. • National environmental performance reports. • Country Convention compliance status. • Project Progress and M&E reports	• Overall government commitment and assumption of appropriate responsibility. • Regulatory enforcement resources and capacity available. • Accurate monitoring and reporting. • Availability of candidate service providers in the government and/or private sector.
Outcome 1(a): Comprehensive identification of PCB in the country including in-service electrical equipment, PCB stockpiles/wastes and potentially PCB contaminated sites maintained	• Detailed inventory of PCB containing and contaminated equipment in service, existing PCB waste stockpiles and PCB contaminated sites in place in 2011	• Incomplete inventory of in service equipment and inventories of PCB waste stockpiles, cross contaminated equipment and contaminated sites.	• Comprehensive PCB inventory for in-service equipment, waste stockpiles and contaminated sites that will be maintained on an ongoing basis	• On-site verification by trained experts. • Screening sampling results. • Regulatory reporting on labeling and registry measures. • Convention reporting.	• Cooperation of PCB holders. • Parallel implementation of labeling and registration measures. • Ongoing budget support for monitoring and sampling.
	• Data management and mapping system operational and used for reporting in 2011.	• No formal consolidated PCB information system or associated reporting capability.	• Publically accessible PCB information system operational, maintained, and used for reporting and information exchange under the Convention	• Response from stakeholders. • Validation of information as PCB management activities are implemented. • Use in convention reporting.	• Responsible agency assigned and resourced to operate and maintain system. • Detailed inventory information available
	• Supply of 250 PCB screening test kits and 4 portable analytical units with 10 personnel trained in their use by 2010.	• Absence of capability to cost-effectively identify and categorize PCB contaminated materials acting as a major barrier to inventory development.	• Screening capacity to effectively support detailed inventory maintenance as PCB management is undertaken into the future.	• Regulatory reporting on labeling and registry measures.	• Cooperation of PCB holders • Availability of personnel. • Availability and acceptance of internationally accepted screening tools. • Commitment of authorities to sustain the capability.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	• Technical instructions on identification, sampling, servicing, storage, and handling of PCB containing equipment in service and upon retirement, available in 2010.	• No consolidated guidance available to holders of PCBs, relevant authorities or service providers on the practical primary management of PCBs.	• Availability and application of technical instructions for management of current and future PCB inventories.	• Project Progress and M&E reports. • Expanded identification of PCB equipment in inventory.	• Implementation of regulatory labeling and registry measures. • Cooperation of PCB holders. • Availability of authorized service providers
Outcome 1 (b): Informed stakeholder community including potential holders of PCBs, government agencies, and service providers involved in PCB management, NGOs, impacted communities, and the general public.	• Publically accessible information on PCBs and their management including: i) a maintained official web site; ii)a widely distributed brochure; iii) media exposure (two annual campaigns during project); iv) information events (two during project).	• Low level of general awareness related to PCBs and chemicals management generally across all stakeholders. • No current information products or programs.	• Widely accessible current information on PCBs and ongoing management activities. • Integration into a national information program on sound chemicals management	• Project Progress and M&E reports. • Monitoring of press and media coverage. • Web site utilization	• Sustaining capacity to maintain awareness efforts and key programs. • Active participation and partnership with NGO community. • Interest and participation of stakeholders.
	• Educational curricula related to chemicals (including PCBs) impacts on environment and human health, and management actions for addressing the issue during the project.	• Limited active educational efforts or tools available.	• Inclusion of chemicals management and particularly PCBs in relevant educational programs, and active R&D interest in addressing it.	• Project Progress and M&E reports. • Content of educational and academic publications. • Enrollment in relevant courses	• Sustaining interest and capacity in educational institutions to maintain educational programs. • Active participation and partnership with educational and research institutions.
	• Training and information seminars on chemicals management including PCBs for relevant government agencies, the academic community, affected communities, NGOs, and holders of PCBs (4 events during the project).	• Key stakeholders generally have limited awareness of the issue or actions required of them to address it.	• Well informed stakeholder community engaged in addressing the issue with a high level of understanding and technical capacity.	• Project Progress and M&E reports. • Attendance at training information events. • NGO/stakeholder feedback.	• Active participation and partnership with NGO community. • Interest and participation of stakeholders.
Outcome 2: Development/and implementation of priority regulatory measures to control the import/ export, report, management and ultimate elimination of PCBs	• Regulations requiring registration, labeling and status reporting of potential all PCB and PCB containing materials in use in 2010.	• No current regulations requiring declaration/reporting/unique identification by holders of presence of PCB waste stockpiles or PCB containing equipment.	• A comprehensive national regulatory registry of all PCB containing equipment in service that is maintained and updated such that its status and fate can be tracked	• Project Progress and M&E reports • National legal and regulatory registers. • Analysis of PCB inventory results and response rates. • Frequency of compliance reporting required of potential PCB holders under applicable regulations.	• Cooperation and compliance of PCB holders and service providers. • Government commitment to timely processing of required regulations. • Sustaining government support for enforcement of regulatory measures and compliance reporting on them.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	• Adoption of appropriate hazardous waste classification of PCBs and PCB contaminated materials in 2010.	• PCB waste classification not well defined in current waste management regulations allowing potential avoidance of proper management.	• Explicit inclusion of high concentration PCB wastes as priority hazardous wastes in national waste management legislation/regulations. • Consistency of these with applicable international standards and the Basel Convention on trans-boundary movement of hazardous waste.	• National legal and regulatory registers. • Equivalency comparisons with international standards. • Basel convention reporting.	• Government commitment to timely processing and application of required regulations. • Acceptance of international experience and precedents respecting regulatory practice and standards.
	• Establishment of MACs for PCBs in environmental media, consistent with international standards in 2011.	• MAC's for PCBs in main environmental media are either not defined or can be practically applied.	• Realistic and enforceable MACs for soil, water and air established that are consistent with international standards.	• National legal and regulatory registers. • Equivalency comparisons with international standards. • Environmental monitoring results	• Government commitment to timely processing of required regulations. • Acceptance of international experience and precedents respecting regulatory practice and standards. • Availability of screening and laboratory analysis.
	• Enactment of legal ban on new use, re-use, trade, import, and export of PCBs and PCB contaminated equipment and materials in 2010.	• No regulation of PCB trade, use and import/export. • Uncontrolled trade in contaminated PCB equipment occurs including export of stockpiles and waste and import of used PCB equipment. • Re-Use of PCBs occurs. • In appropriate declassification of PCB contaminated equipment occurs	• Effective implementation and enforcement of use, re-use, trade, import and export bans including ensuring trade in scrapped contaminated PCB equipment and import of used PCB equipment is eliminated.	• National legal and regulatory registers. • Customs reporting information • Control through inventory reporting, and effective identification, labeling and registry of PCB contaminated equipment in service. • Compliance reporting required of potential PCB holders under applicable regulations. • Basel Convention reporting.	• Cooperation and compliance of PCB holders, service providers and customs officials.. • Government commitment to timely processing of required regulations. • Acceptance of international experience and precedents respecting regulatory practice and standards. • Sustaining government support for enforcement of regulatory measures and compliance reporting on them.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	• Legal measures allowing unrestricted regulatory access to information and locations that may have PCBs, (wastes stockpiles, PCB containing equipment and site contamination in 2010	• Legal barriers on the ability of authorities to access inspect and access sites.	• Allowance in practice of access by mandated regulatory authorities to sites potentially containing or contaminated by PCBs, including rights to initiate assessment.	• Project Progress and M&E reports • National legal and regulatory registers. • Compliance reporting required of potential PCB holders under applicable regulations.	• Cooperation and compliance of PCB holders and service providers. • Government commitment to timely processing of required regulations. • Sustaining government support for enforcement of regulatory measures and compliance reporting on them.
Outcome 3: Technical capacity and operational plans in place for the management of PCBs on a long term basis including a designated national laboratory facility.	• Basic national analytical laboratory capacity to analyze for PCBs operational with upgraded equipment installed and trained personnel in place (10 people) by 2011.	• Currently no laboratory is equipped to specifically undertake PCB analysis, although some facilities offer an opportunity to be upgraded.	• One accredited national laboratory capable of doing routine PCB analysis in soil, water and air samples inclusive of trained personnel and accessible to responsible regulatory authorities, PCB holders and service providers.	• Project Progress and M&E reports. • Legal agreements on access and use. • Procurement documents on supply of equipment as necessary. • Accreditation documents and training certificates. • Laboratory records,	• Availability and agreement on long term access to a suitable facility for purposes of upgrading. • Government commitment to support the operation of such a facility in the long term.
	• Strategy and plan for pre-treatment and disposal of PCB stockpiles and wastes in place in 2011.	• No plan in place to develop or access pre-treatment or disposal capacity exists for PCB waste stockpiles.	• Comprehensive strategy and plan adopted, defining selection and the process of implementation of pre-treatment and disposal options both to be applied in the country (i.e. equipment decontamination, soil management, potential cement kiln utilization) and through export, including potential regional initiatives.	• Project Progress and M&E reports. • Expert assessment of strategy and plan documentation. • Evaluation against international practice and experience, standards, and guidance documents (i.e. Basel Convention, GEF/STAP)	• Detailed inventory accurately estimates long term pre-treatment and disposal needs. • Participation of PCB holders, local service providers, scientific experts, and international technology suppliers.
	• Development of standards and methodologies for ongoing identification and assessment of contaminated sites, inclusive of 15 trained service provider staff to undertake it.	• Minimal local capacity exists respecting contaminated site clean- up generally and specifically with respect to PCB contamination.	• Operational capability within responsible government agencies and/or commercial service providers to undertake assessment and clean-up of PCB contaminated sites consistent with international practice.	• Project Progress and M&E reports. • Expert assessment of standard and methodology documentation. • Evaluation against international practice and standards.	• Designation of responsible operational authorities and availability of local service providers. • Detailed PCB inventory accurately identifies potential contaminated sites.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	• Long term plan for the monitoring and phase out of PCB containing equipment in service consistent with Convention requirements (2025) formally adopted.	• The phase out of PCB equipment is currently uncontrolled and includes practices such as selling/exporting PCB contaminated equipment for scrap, importing used PCB equipment for new or replacement installations, and replacing PCB oils in transformers to de-classify the equipment.	• A fully elaborated detailed plan endorsed by responsible authorities and PCB holders for replacement of in service PCB equipment identified in the detailed national inventory (Outcome 1), consistent with Convention obligations.	• Project Progress and M&E reports. • Expert assessment of the plan. • Concordance evaluation with Convention requirements.	• Detailed PCB inventory accurately identifies PCB containing equipment in service and projects its operation life. • Effective regulatory controls are in place governing the identification, labeling, and status reporting of PCB containing equipment. • PCB equipment holder assumption of replacement responsibility.
Outcome 4: Sustainable capacity to capture, package and securely store PCB stockpiles/wastes and ESM disposal of priority stockpiles.	• Secure storage capacity for PCB stockpiles and wastes at major holders sites and central site(s) for material without a secure storage option (orphan material and equipment from sensitive locations) by 2012.	• No hazardous waste storage suitable for PCB waste stockpiles is available. • Temporary facilities for obsolete pesticides established but with no long term operational structure. • No provision for secure storage at holders sites.	• Two nationally designated secure storage facility established and equipped with necessary infrastructure for PCB waste stockpiles under continuing care and custody of a responsible government authority. • Major holders have secure storage facilities to accommodate PCB contaminated equipment when retired as an option.	• Project Progress and M&E reports. • Design review documents. • Procurement documents. • Facility regulatory approvals	• PCB regulations and detailed inventory in place. • Establishment of sustainable operational and custody arrangements. • Timely regulatory approvals.
	• Feasibility assessment and decision respecting decontamination of PCB containing equipment to allow retention in service or minimization of elimination obligations.	• Some PCB containing electrical equipment (transformers) are in critical applications and have long remaining service lives. • Current practices involving replacement of oil do not meet international standards and result in retention of PCB contaminated equipment.	• Establish the feasibility of environmentally sound transformer decontamination locally as an option to replacement and export of large volumes of materials for ESM disposal.	• Project Progress and M&E reports. • Expert assessment of assessment results and demonstration performance.	• Local decontamination is cost effective relative to replacement. • Existing transformers can be practically decontaminated to a low POBs level based in international benchmarks. • PCB holder cooperation
	• Trained and equipped service providers capable of undertaking packaging, transportation, and residual contamination cleanup for PCB wastes including training of 30 staff by 2010.	• Limited trained capability in the safe handling of PCB contaminated materials and general absence of such capability among holders of PCBs and private service providers.	• Fully operational service provider capacity to support the securing of PCB waste stockpiles and transport to the designated national facility or export for disposal.	• Certifications of service providers and staff.	• Cooperation of potential service providers.

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	• Disposal of 50 MT of PCB stockpiles by export to a qualified disposal facility by 2012.	• No identified and secured stockpiles with most stockpiles likely being exported as scrap but leaving residual contamination in the form of waste materials and contaminated soils at unknown locations. • No assigned responsibility for hazardous waste management generally and PCBs in particular.	• Environmentally sound disposal of 50 MT of POPs waste and local experience for future disposal requirements.. .	• Destruction certificates • Basel convention notices and consent documentation • Waste transport tracking documents. • Applicable government resolutions. • Budget allocations. • Demonstration of effective assumption of responsibility by designated organizations.	• Availability of suitable disposal facilities. • Transit permissions from transit countries. • Government leadership in undertaking clear designation of responsible organizations. • Cooperation of stakeholder agencies and other organizations.
Outcome 5: Monitoring, learning, adaptive feedback, outreach and evaluation	M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.	• No Monitoring and Evaluation system • No evaluation of project output and outcomes	• Monitoring and Evaluation system developed during year 1. • Mid-term-evaluation of project output and outcomes conducted with lessons learnt at 30 months of implementation. • Final evaluation report ready in the end of project	• Project document inception workshop report. • Independent mid-term evaluation report. • Final evaluation report	• Availability of reference material and progress reports • Cooperation of stakeholder agencies and other organizations.

Outcome 1(a): Comprehensive Identification of PCBs
Output 1.1: Detailed PCB Inventory (In-service equipment, stockpiles and wastes, contaminated sites)
Output 1.2: Data management, mapping, reporting and information exchange capability
Output 1.3: Technical instructions on identification, sampling, servicing, handling and storage of PCB containing equipment
Outcome 1(b): Informed Stakeholders and Public
Output 1.4: Information products/programs for stake holder and public awareness
Outcome 2: Regulatory Framework for Control of PCBs
Output 2.1: Regulations requiring registration, labeling, and status reporting of PCBs
Output 2.2: Hazardous waste classification of PCBs
Output 2.3: MACs for PCBs
Output 2.4:Regulations on use/re-use bans, import/export of PCBs
Output 2.5: Provisions for unrestricted regulatory access
Outcome 3 Technical Capacity Strengthening for PCB Management:
Output 3.1: Capacity for PCB analysis
Output 3.2: Long term PCB phase out plans
Output 3.3: Standards and capacity for contaminated site management
Output 3.4: Strategy for pre-treatment and disposal of PCB stockpiles

Outcome 4: Operational Capacity for Management of PCB Stockpiles and Waste
Output 4.1: Development of secure storage capacity
Output 4.2: Feasibility of local/regional transformer de-contamination
Output 4.3:PCB service providers capacity
Output 4.4:Disposal of current PCB stockpiles
Outcome 5: Monitoring, learning, adaptive feedback, outreach and evaluation
5.1: M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.
5.2: Lessons learned and best practices are replicated at national level

TOTAL BUDGET AND WORKPLAN

Award ID:	00058537	Project ID(s):	00072737
Award Title:	PIMS 4101 MSP PCB KG		
Business Unit:	KGZ10		
Project Title:	Management and Disposal of PCBs in Kyrgyzstan		
PIMS no.	4101		
Implementing Partner (Executing Agency)	Ministry of Energy		

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
OUTCOME 1a: Comprehensive identification of PCB in the country including in-service electrical equipment, PCB stockpiles/ wastes and potentially PCB contaminated sites maintained **OUTCOME 1b:** Informed stakeholder community including potential holders of PCBs, government agencies, and service providers involved in PCB management, NGOs, impacted communities, and the general public.	**NEX**	**62000**	**GEF**	71200	International Consultants	$5,000	-	-	$5,000	x
				71300	Local Consultants	$45,000	$25,000	-	$70,000	Output 1.4 included
				72100	Contractual services	$15,000	$10,000	-	$25,000	Output 1.4 included
				72200	Equipment (basic computer)		$5,000	-	$5,000	x
				72300	Materials and Goods		$5,000	$5,000	$10,000	x
				71600	Travel	$5,000	$5,000	-	$10,000	Output 1.4 included
					Total Outcome 1	**$70,000**	**$50,000**	**$5,000**	**$125,000**	
OUTCOME 2: Development/and implementation of priority regulatory measures to control the import/ export, report, management and ultimate elimination of PCBs	**NEX**	**62000**	**GEF**	71200	International Consultants	$5,000	-	-	$5,000	x
				71300	Local Consultants	$30,000	$10,000	-	$40,000	x
				72100	Contractual services	$5,000	-	-	$5,000	x
					Total Outcome 2	**$40,000**	**$10,000**	**-**	**$50,000**	

OUTCOME 3: Technical capacity and operational plans in place for the management of PCBs on a long term basis including a designated national laboratory facility.	**NEX**	**62000**	**GEF**	71200	International Consultants	$5,000	$10,000	$5,000	$20,000	x
				71300	Local Consultants		$25,000	$25,000	$50,000	x
				72300	Materials and goods	$165,000	-	-	$165,000	x
				72100	Contractual services	$10,000	$5,000	$10,000	$25,000	x
					Total Outcome 3	**$180,000**	**$40,000**	**$40,000**	**$260,000**	
OUTCOME 4: Sustainable capacity to capture, package and securely store PCB stockpiles/wastes and ESM disposal of priority stockpiles.	**NEX**	**62000**	**GEF**	71200	International Consultants	$10,000	$15,000	$15,000	$40,000	x
				71300	Local Consultants	$15,000	$60,000	$15,000	$90,000	Output4.3 (training) incl
				72300	Materials and goods	-	$60,000	-	$60,000	
				72100	Contractual services	$10,000	$35,000	$160,000	$205,000	Output 4.3 (promo) incl
				71600	Travel	$1,000	$2,000	$2,000	$5,000	
					Total Outcome 4	**$36,000**	**$172,000**	**$192,000**	**$400,000**	
OUTCOME 5: Monitoring, learning, adaptive feedback and evaluation	**NEX**	**62000**	**GEF**	71200	International Consultants	-	$10,000	$10,000	$20,000	x
					Total Outcome 5	**-**	**$10,000**	**$10,000**	**$20,000**	
PROJECT MANAGEMENT UNIT	**NEX**	**62000**	**GEF**	71300	Local Consultants	$22,600	$22,600	$22,800	$68,000	x
				71600	Travel	$4,000	$3,000	$3,000	$10,000	x
				72200	Equipment	$10,000	-	-	$10,000	x
				74500	Miscellaneous (office supplies, communication)	$1,000	$1,000	$1,000	$3,000	x
				74500	Miscellaneous (audit)	$1,000	$1,500	$1,500	$4,000	x
					Total Management	**$38,600**	**$28,100**	**$28,300**	**$95,000**	
					PROJECT TOTAL	**$364,600**	**$310,100**	**$275,300**	**$950,000**	

Summary of Funds: [13]

	Amount Year 1	Amount Year 2	Amount Year 3	Total
GEF	**$364,600**	**$310,100**	**$275,300**	**$950,000**
Government in-cash	$200,000	$70,000	-	$270,000
Government in-kind	$100,000	$435,000	$95,000	$630,000
UNDP in-cash	$25,000	$45,000	$45,000	$115,000
UNDP in-kind	5,000	$10,000	$5,000	$20,000
NGO in-cash	$8,000	$8,000	-	$16,000
Co-Financing Total	**$338,000**	**$568,000**	**$145,000**	**$1,051,000**
TOTAL	**$702,600**	**$878,100**	**$420,300**	**$2,001,000**

[13] *Summary table should include all financing of all kinds: GEF financing, cofinancing, cash, in-kind, etc...*

WORK PLAN (IMPLEMENTATION SCHEDULE)

Outcomes	Outputs	2009			2010												2011												2012												2013		
		Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1			Q2			Q3			Q4			Q1		
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Key Project Management Activities	Project Submission/Approval Review																																										
	Project Agreement Negotiated/Signed																																										
	Contracting International Consultant																																										
	Contracting International Consultants Component 1																																										
	Contracting International Consultants Component 2																																										
	Contracting International Consultants Component 3																																										
	Contracting International Consultants Component 4																																										
Outcome 1. Detailed Identification of PCBs and Enhancing Awareness	1.1 Detailed inventory of PCB containing equipment, existing PCB stockpiles/wastes and PCB contaminated sites																																										
	1.2 Data management and mapping capability to support inventory, reporting and information exchange.																																										
	1.3 Technical instructions for potential holders of PCB containing equipment on identification, sampling, servicing, and handling upon retirement.																																										
	1.4 Informed stakeholders (government																																										

	agencies, holders of PCBs, service providers, NGOs, impacted communities, public) inclusive of information products
Outcome 2. Strengthening of Legislative and Regulatory Measures, and Supporting Institutions	2.1 Regulations requiring registration, labeling and status reporting of PCBs.
	2.2 Hazardous waste classification of PCBs and PCB contaminated material
	2.3 Establishment of MACs for PCBs in environmental media, consistent with international standards.
	2.4: 2.4 Enactment of legal ban on new use, re-use, trade, import, and export of PCB containing equipment and PCB contaminated materials.
	2.5 Provision for unrestricted regulatory access to information and locations that may have PCBs for purposes of inspection and assessment.
Outcome 3. Development of Technical Capacity for Sustainable PCB Management	3.1 Upgraded analytical laboratory capacity to analyze for PCBs including upgraded equipment and trained personnel in an existing accessible national facility
	3.2 Long term plan for the phase out of PCB containing equipment in service consistent with Convention requirements developed and adopted.
	3.3. Standards and

	methodologies for identification and assessment of contaminated sites, inclusive of trained service provider staff to undertake it.
	3.4 Strategy/plan for pre-treatment and disposal of PCB stockpiles and wastes adopted.
Outcome 4. Securing PCB Stockpiles and Wastes.	4.1 Establishment of secure interim storage capacity for PCB stockpiles/ waste at holder's sites and/or government controlled sites.
	4.2 Feasibility evaluation of local/regional transformer decontamination and a potential demonstration.
	4.3 Trained service providers capable of undertaking packaging, transportation, and residual contamination cleanup for PCB wastes.
	4.4 Disposal of stockpiles collected through export to qualified destruction facilities.
Outcome 5. Monitoring, Learning Adaptive Feedback, Outreach and Evaluation	5.1M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.
	5.2 Lessons learned and best practices are replicated at national level

3. MANAGEMENT ARRANGEMENTS SEE UNDP POPP FOR FURTHER DETAILS

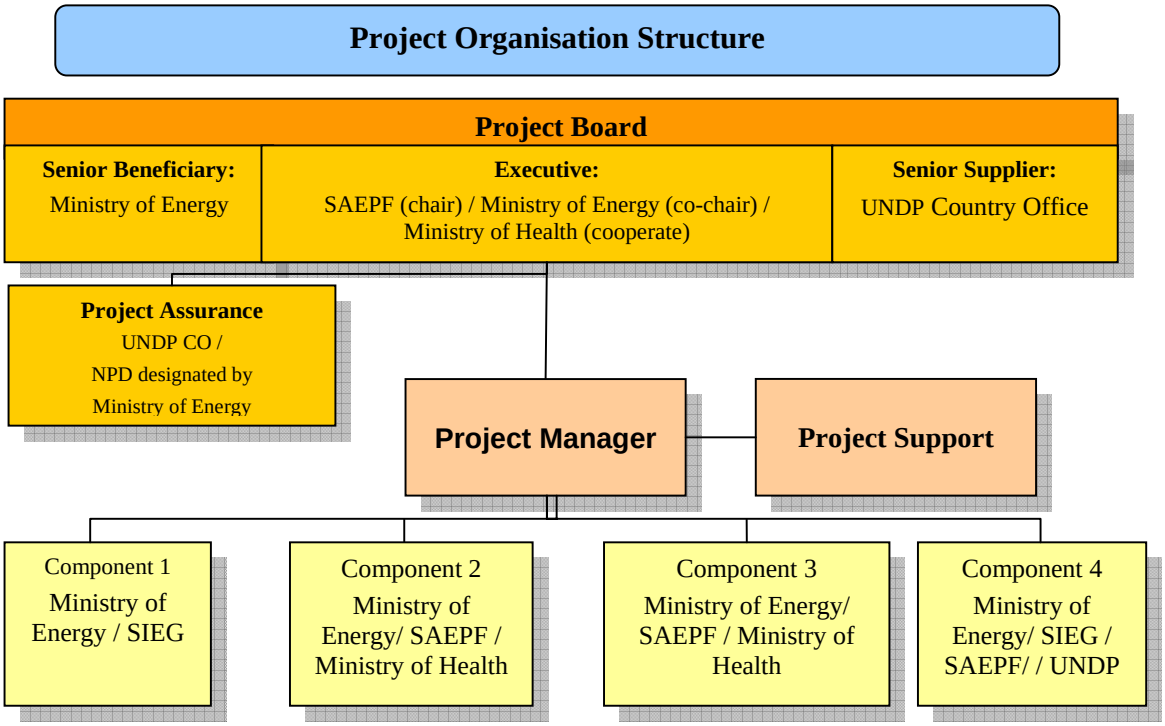
The project will be executed following established UNDP national execution (NEX) procedures. The Executing Agency/Implementing Partner will be the Ministry of Energy. The Executing Agency/Implementing Partner will appoint a National Project Director and will hire with GEF funding a Project Manager and an administrative/financial assistant. A summary of the roles and responsibilities of the National Project Director, the Project Manager, and the Administrative and Financial Assistant are provided below.

The National Project Director will be a high-level government official primarily responsible for overall implementation of the Project. This responsibility includes representing and supporting project objectives at high decision making levels within the Government of Kyrgyzstan. The National Project Director also takes the primary responsibility for representing the Project to co-financiers, as well as for ensuring that the required government support to reach the milestones of the Project is available.

The Project Manager will assume overall responsibility for the successful implementation of project activities and the achievement of planned project outputs. S/he will work closely with the national and international experts hired under the project, as well as the Project Assistant, and will report to the National Project Director and to the UNDP Country Office. The Administrative and Financial Assistant will provide assistance to the Project Manager in the implementation of day-to-day project activities. S/he is responsible for all administrative (contractual, organizational and logistical) and accounting (disbursements, record-keeping, cash management) matters related to the project.

The Executing Agency/Implementing Partner will establish a Project Board (PB) to give advice and guide project implementation. This will be chaired by the representative of SAEPF and co-chaired by the representative of Ministry of Energy. The PB will consist of representatives of all key stakeholders and will ensure the inclusion of industries' interests. The participants will include but not limited to: State Agency for Environment Protection and Forestry, Ministry of Agriculture, Ministry of Health, Ministry of Emergency Situations, Ministry of Labor and Social Security, Ministry of Industry and Trade, Ministry of Transport and Communications, Ministry of Energy, Ministry of Education and Science, Ministry of Internal Affairs, Ministry of Defense, Committee of Customs Control at the Ministry of Finance, Industry representation, NGOs. Ministry of Energy will represent the interests of Senior Beneficiary. UNDP CO will play the role of Senior Supplier—being a GEF Implementing Agency represented in the country. Project assurance will be ensured by GEF OFP, UNDP CO together with the UNDP GEF RCU. The PB will monitor the project's implementation, provide guidance and advice, and facilitate communication, cooperation, and coordination among stakeholders and other project partners. At the initial stage of project implementation, the PB may, if deemed advantageous, wish to meet more frequently to build common understanding and to ensure that the project is initiated properly. Further details on the PB are provided in the monitoring and evaluation section of the document.

The project will hire short-term national and international experts for specific project assignments for indicative scope of the assignment of key experts/ consultants). Project activities will be contracted out on a competitive basis through tenders.



Project Board is responsible for making management decisions for a project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.

In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP Project Manager.

Potential members of the Project Board are reviewed and recommended for approval during the PAC meeting. Representatives of other stakeholders can be included in the Board as appropriate. The Board contains three distinct roles, including:

1) An Executive: individual representing the project ownership to chair the group.
2) Senior Supplier: individual or group representing the interests of the parties concerned which provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project.
3) Senior Beneficiary: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.

4) The Project Assurance role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Manager and Project Assurance roles should never be held by the same individual for the same project.

Project Manager: The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.

Project Support: The Project Support role provides project administration, management and technical support to the Project Manager as required by the needs of the individual project or Project Manager.

The project will be implemented in close coordination and collaboration with all relevant government institutions, regional authorities, industries and NGOs, as well as with other related relevant projects in the region.

The UNDP-CO will be an active partner in the project's implementation. It will support implementation by maintaining the project budget and project expenditures, contracting project personnel, experts and subcontractors, undertaking procurement, and providing other assistance upon request of the National Executing Agency. The UNDP-CO will also monitor the project's implementation and achievement of the project outcomes and outputs, and will ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with national regulations and established UNDP rules and procedures for national project execution. PCB holding companies will operate through their revised internal guidelines in procuring replacement equipment and other services as their part of project financing.

In order to accord proper acknowledgement to GEF for providing funding, a GEF logo will appear on all relevant GEF project publications, including, among others, project hardware purchased with GEF funds. Any citation on publications regarding this project will also accord proper acknowledgment to GEF.

4. MONITORING FRAMEWORK AND EVALUATION

The project will be monitored through the following M& E activities. The M& E budget is provided in the table below.

Project start:

A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

The Inception Workshop should address a number of key issues including:

a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
b) The GEF-4 and as appropriate GEF-5 Focal Area Strategy inclusive of targets will be presented and linked to project outcomes, outputs and indicators

c) Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
d) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
e) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
f) Plan and schedule Project Board meetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 12 months following the inception workshop.

An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Managment Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).
- Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc... The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually:

- Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

  The APR/PIR includes, but is not limited to, reporting on the following:

  - Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
  - Project outputs delivered per project outcome (annual).
  - Lesson learned/good practice.
  - AWP and other expenditure reports
  - Risk and adaptive management
  - ATLAS QPR
  - Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits:

UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. The international expert undertaking independent monitoring, particularly in relation to environmental safeguards will be part of these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

Mid-term of project cycle:

The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation (June 2011). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project:

An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. This will include input from the Independent expert undertaking environmental safeguards monitoring on the overall environmental performance achieved in relation to PCB storage and disposal activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. 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 results.

Learning and knowledge sharing:

Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

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.

Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

M&E Work Plan and budget

Type of M&E activity	Responsible Parties	Budget US$	Time frame
Inception Workshop and Report	▪ Project Manager ▪ UNDP CO, UNDP GEF ▪ International Technical Support/Safeguards Expert	Staff time	Within first two months of project start up
Measurement of Means of Verification of project results.	▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	None	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on *output and implementation*	▪ Oversight by Project Manager ▪ Project team	None	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	▪ Project manager and team ▪ UNDP CO ▪ UNDP RTA ▪ UNDP EEG	None	Annually
Periodic status/ progress reports	▪ Project manager and team	None	Quarterly
Mid-term Evaluation	▪ Project manager and team ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team)	Indicative cost: 10,000	At the mid-point of project implementation.
Final Evaluation	▪ Project manager and team, ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (i.e. evaluation team)	Indicative cost: 10,000	At least three months before the end of project implementation
Project Terminal Report	▪ Project manager and team ▪ UNDP CO ▪ local consultant ▪ International Technical Support/Safeguards Expert	Staff time	At least three months before the end of the project
Audit	▪ UNDP CO ▪ Project manager and team	None (cost in PM Budget)	Yearly
Visits to field sites	▪ UNDP CO ▪ UNDP RCU (as appropriate) ▪ Government representatives ▪	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US$ 20,000††††	

†††† Costs only for International Consultant supporting M&E as part of Technical support/safeguards monitoring. It is estimated that additional US$30,000 from project management salaries will be devoted to M&E activities. Audit costs in the Project Management component are US$5,000.

5. LEGAL CONTEXT

This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA and all CPAP provisions apply to this document.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of Kyrgyzstan and the United Nations Development Programme, signed by the parties in 1993. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

The UNDP Resident Representative in Kyrgyzstan is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) Revision of, or addition to, any of the annexes to the Project Document;

b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;

c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and

d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

6. ANNEXES

Risk Analysis. *Use the standard UNDP Atlas Risk Log template. For UNDP GEF projects in particular, please outline the risk management measures including improving resilience to climate change that the project proposes to undertake.*

The Project Indicators, Risks and Assumptions are fully represented in the Strategic Results Framework (Annex A) as well as the Risk Identification and Mitigation tables in the corresponding GEF CEO Endorsement Document (Section G). It is strongly advised to refer to these indicated annexes and sections of the CEO endorsement document.

Agreements. *Any additional agreements, such as cost sharing agreements, project cooperation agreements signed with NGOs[‡‡‡‡] (where the NGO is designated as the "executing entity", letters of financial commitments, GEF OFP letter, GEF PIFs and other templates for all project types) should be attached.*

GEF OFP Endorsement letter is attached to the submission package

[‡‡‡‡] *For GEF projects, the agreement with any NGO pre-selected to be the main contractor should include the rationale for having pre-selected that NGO.*

Terms of Reference:

National Project Manager

Interest in Poly-Chlorinated Biphenyls, PCBs, is due to their harmful effects and tendency for long-range transboundary environmental transport. They have been included in the initial list of globally managed Persistent Organic Pollutants under the Stockholm Convention.

Kyrgyzstan is committed to safe management of PCB as demonstrated by signature of the Stockholm Convention and its subsequent ratification on 19 July 2006. For planning appropriate action in the field of controlling POPs substances and releases as well as fulfilling the reporting requirements of the Convention, Government of Kyrgyzstan developed an Action Plan for PCB management as a part of its draft National Implementation Plan (NIP) on POPs.

The PCB Action Plan evolved into a project called "Management and Disposal of PCBs in Kyrgyzstan" which is a joint undertaking by The Government of Kyrgyzstan, public/private sector partners and UNDP. The Global Environment Facility is providing substantive grant funding for co-financing the project.

The Project includes the following components:

Component 1: Detailed Identification of PCBs and Enhancing Awareness

Component 2: Strengthening of Legislative and Regulatory Measures along with Supporting Institution

Component 3: Development of Technical and Institutional Capacity for Sustainable PCB Management and Disposal

Component 4: Securing PCB Stockpiles and Wastes.

Reporting directly to the National Project Director, A Project Manager will be recruited for the entire implementation period of the project.

As per UNDP guidelines in force the Project Manager is responsible for

- Timely implementation of the workplan as endorsed by the Project Steering Committee;
- General and financial administration;
- Work planning, scheduling and project progress reporting;
- Monitoring project deliverables and ensuring M&E activities are incorporated in project planning;
- Writing of Terms of Reference for project support staff, project consultants;
- Tendering of contractual services where applicable;
- Monitoring and the quality control, particularly on safety, of input from consultants and subcontractors providing assistance to the project;
- Support the tendering for international services pertaining to PCB waste transportation and disposal;
- Coordinate Documentation related to transboundary shipment of hazardous waste

The Project Manager shall coordinate the contracting of entities responsible for the capacity building, training, transporting, collection and proper storage as well as final disposal of the PCB equipment and monitor their performance.

Duration of assignment: 3 years

Qualifications:

- A degree in Management, Engineering, physical sciences or economics;
- Thorough knowledge of legislation and management of hazardous waste
- Knowledge of industrial sized power equipment and their management desirable.
- Minimum of five years post qualification experience at mid-management level
- Knowledge of the Stockholm Convention and Persistent Organic Pollutants highly desirable;
- Experience in the management of Environmental issues desirable;
- Must be fully IT literate.
- Working knowledge of Russian and English

Note: Additional TORs for project staff and experts will be developed when the programme will be initiated.

SIGNATURE PAGE

Country: The Kyrgyz Republic

UNDAF Outcome(s):

Poor and vulnerable groups have increased and more equitable access to quality basic social services and benefits, in a strengthened pro-poor policy environment

Expected CP Outcome(s):

Sustainable development and global environmental principles integrated into grass root levels and programmes

Expected CPAP Output(s):

Output A 2.9.1

The Coordination Body for Sustainable Development (CBSD) is able to design and implement priority environmental management and sustainable development initiatives

Output A 2.9.2

Expanded collaboration between key stakeholders in the area of environmental management for sustainable development on national and sub-regional levels

Output A 2.9.3.

Increased institutional capacity to implement international conventions and agreements

Output A 2.9.4

New financial mechanisms and partnerships are introduced for the environment al protection and conservation

Implementing Partner: State Inspectorate on Energy and Gas under the Ministry of Energy of the Kyrgyz Republic

Partners: The Ministry of Energy of the Kyrgyz Republic, The State agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic, The Ministry of Health

Programme Period:	**2010-2013**
Programme Component: Energy and Environment	
Project Title: **Management and disposal of PCBs in Kyrgyzstan**	
Atlas Award ID:	00058537
Project ID:	**00072737**
PIMS #:	4101
Start date:	June 2010
End Date	June 2013
LPAC date:	9 February 2010

Total resources required	US$ 2,001,000
Total allocated resources:	
• Regular UNDP:	US$ 115,000
• Other:	
o GEF	US$ 950,000
o Government	US$ 320,000
o In-kind	US$ 600,000
o Other	US$ 16,000
In-kind contributions	

***Agreed by (UNDP)** **

Mr. Neal Walker

Resident Representative

NAME | SIGNATURE | Date/Month/Year 19/05/2010

** **Interim arrangement under Fast Track Activation effective 4 April by 30 October 2010.**

Annex 2: UNDP Strategic Plan: Key Focal Areas + Key result areas + Provisional Corporate Outcomes		
Key Focal Area	***Key result area***	***Provisional Corporate Outcomes***
Poverty Reduction and MDG achievement	1. Promoting inclusive growth, gender equality and MDG achievement	1. MDG-based national development strategies promote growth and employment, and reduce economic, gender and social inequalities
		2. Enhanced national and local capacities to plan, monitor, report and evaluate the MDGs and related national development priorities, including within resource frameworks.
		3. Policies, institutions and mechanisms that facilitate the empowerment of women and girls strengthened and implemented.
		4. Macroeconomic policies, debt-sustainability frameworks, and public financing strategies promote inclusive growth and are consistent with achieving the MDGs.
		5. Strengthened capacities of local governments and other stakeholders to foster participatory local development for the MDGs.
		6. Policies, strategies and partnerships established to promote public-private sector collaboration and private-sector and market development that benefits the poor and ensures that low-income households and small enterprises have access to a broad range of financial and legal services.
	2. Fostering inclusive globalization	1. Enhanced capacities of developing countries to compete internationally and to negotiate interpret and implement agreements on trade, intellectual property, and investments in a manner which prioritizes poverty and inequality reduction and human development.
		2. Strengthened national capacities to negotiate and manage development finance, including aid and debt, consistent with the achievement of the MDGs and other internationally agreed development goals.
	3. Mitigating the impact of AIDS on human development	1. AIDS response integrated into poverty reduction strategies, MDG-based national development plans, and macroeconomic processes.
		2. Strengthened national capacity for inclusive governance and coordination of AIDS responses, and increased participation of civil society entities and people living with HIV in the design, implementation and evaluation of AIDS programmes.
		3. Policies and programmes implemented through multi-stakeholder approaches to protect the human rights of people affected by AIDS. Mitigate gender-related vulnerability, and address the impact of AIDS on women and girls.
		4. Accelerated implementation of AIDS funds and programmes financed through multilateral funding initiatives, including the Global Fund to fight AIDS, Tuberculosis, and Malaria.
Democratic governance	1. Fostering inclusive participation	1. Civic engagement, through civil society organizations, voluntary associations, trade unions, political parties, and private sector organization, enables all people to influence public policy processes.
		2. Electoral laws, processes and institutions strengthen inclusive participation and professional electoral administration.
		3. Communication channels support government accountability and transparency through e-governance, independent journalism, and access to information policies.
	2. Strengthening responsive governing institutions	1. National, regional and local levels of governance expand their capacities to manage the equitable delivery of public services and support conflict reduction.
		2. Legislatures, regional elected bodies, and local assemblies have strengthened institutional capacity, enabling them to represent their constituents more effectively.

		3. Effective, responsive, accessible and fair justice systems promote the rule of law, including both formal and informal processes, with due consideration on the rights of the poor, women and vulnerable groups.
	3. Support national partners to implement democratic governance practices grounded in human rights, gender equality and anti-corruption	1. Strengthened national, regional and local level capacity to mainstream human rights in government policies and institutions.
		2. Strengthened national, regional and local level capacity to mainstream gender equality and women's empowerment in government policies and institutions.
		3. Strengthened national, regional, and local-level capacity to implement anti-corruption initiatives.
Crisis Prevention	1. Enhancing conflict and disaster risk management capabilities	1. Solutions generated for natural disaster risk management and conflict prevention through common analysis and inclusive dialogue among government, relevant civil society actors and other partners (i.e. UN, other international organizations, bilateral partners).
		2. Disaster – strengthened national capacities, including the participation of women to prevent, reduce, mitigate and cope with the impact of the systemic shocks form natural hazards.
		3. Conflict – strengthened national capacities, including the participation of women, to prevent, reduce, mitigate and cope with the impact of violent conflict.
		4. Other
	2. Strengthening post-crisis governance	1. Early post-crisis resumption of local governance functions to facilitate recovery.
		2. Disaster – post disaster governance capacity strengthened, including measures to ensure the reduction of future vulnerabilities.
		3. Conflict – post-conflict governance capacity strengthened, including measures to work towards prevention of resumption of conflict.
		4. Other
	3. Restoring the foundations for development at local level	1. Gender equality and women's empowerment enhanced in post-disaster and post-conflict situations.
		2. Conflict – post-crisis community security and social cohesion restored.
		3. Post-crisis socio-economic infrastructure restored, economy revived and employment generated; crisis affected groups returned and reintegrated.
		4. other
Environment and sustainable development	1. Mainstreaming environment and energy	1. Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems.
		2. Other
	2. Catalyzing environmental finance	1. Countries develop and use market mechanisms to support environmental management.
		2. other
	3. Promote climate change adaptation	1. Strengthened capacity of developing countries to mainstream climate change adaptation policies into national development plans.
		2. Other
	4. Expanding access to environmental and energy services for the poor.	1. Strengthened capacity of local institutions to mange the environment and expand environment and energy services, especially to the poor.
		2. Other