

E4206

THE KYRGYZ REPUBLIC

GLOBAL PARTNERSHIP FOR EDUCATION PROJECT
funded by the Global Partnership for Education

ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

Bishkek
April 2013

TABLE OF CONTENTS

I. BACKGROUND

- i. Introduction
- ii. Major Investment Components
- iii. Environmental Category
- iv. Institutional and Implementation Arrangements
- v. Institutional Structure in Environment Management and Education Facilities Planning

II. ENVIRONMENTAL MANAGEMENT FRAMEWORK

- i. Introduction
- ii. Establishment of Environmental Expertise within the Ministry of Education and Science
- iii. Site Specific Environmental Screening and Review
- iv. Monitoring and Supervision

III. ENVIRONMENTAL GUIDELINES

- i. Introduction
- ii. The Sites
- iii. Energy Efficiency, Insulation and Ventilation
- iv. Electrical Systems
- v. Cabinetry and Wood
- vi. Finishes
- vii. Flooring
- viii. Window Treatments
- ix. Exterior and Interior Colors
- x. Demolition work
- xi. Selection of Construction Materials and Construction Methods

Annex 1_	Environmental Administrative, Policy And Legal Framework – Results Of Review
Annex 2	Environmental Guidelines For Civil Works Contracts
Annex 3	Asbestos and PCBs
Annex 4	Memorandum of Stakeholder Consultations (April 18, 2013)
Annex 5	Environmental Screening Checklist
Annex 6	Site-specific EMP Format

I. BACKGROUND

1.1 Introduction

This Kyrgyz Global Partnership for Education Project (GPE) is the Bank's 5th supported operation in the Kyrgyz education sector. MoES has successfully implemented an IDA financed education project, two Education for All (EFA) financed projects, and another IDA operation is scheduled for Board consideration in 2013.

The proposed Project would be organized around three components: (i) expansion of pre-primary education services; (ii) improvement of policy, programs and system effectiveness; and (iii) implementation support. All components would support priorities delineated in MoES Education Strategy 2020 and MTEDP, and complement activities promoted by other donors in the education sector.

1.2 Main Investment Component

The Global Partnership for Education Project (GPE) will support one main investment activity that requires environmental management oversight:

Component One: Expansion of quality pre-primary education (US \$ 11.60 million equivalent, 91.3% of total project cost). The objectives of this component are to increase access to pre-school education for children aged 4-5 years by an estimated 3.7 percentage points and to enable all children who are in the year prior to Grade One to complete a full-year school preparation program. As such, this component would finance the: i) provision of teaching-learning materials and furniture to enable the opening or expansion of pre-school institutions in poor communities with limited or no access to pre-school services, as well as to enable the universal coverage of the full-year preparation program; and ii) training of pre-school and preparation program teachers on the knowledge and skills needed to deliver the pre-school and preparation education programs. The component is constituted of two sub-components that target the kindergarten and the preparation program, respectively; and a third sub-component that pilots inclusive education at the pre-school level. The sub-components reinforce one another by promoting greater coverage, quality and continuity of pre-school education.

Sub-component 1.1: Early education services (US \$ 2.50 million equivalent, 19.7% of total project cost). This sub-component component would enable the establishment or expansion of up to 100 new preschool education institutions enrolling approximately 10,000 children aged 4-5 years. The project would support the development and selection of community proposals to establish new pre-school capacity. For the selected pre-school institutions, the Project would finance teaching-learning materials, furniture and equipment, and, if needed, sanitation facilities. The project would also finance the design and delivery of an in-service teacher training program for teachers hired to work in the new pre-school classrooms, to build their teaching-learning knowledge and skills.

The Project would support interested Aiyl Okmotus (AOs) to develop a proposal to establish new pre-school facilities within existing community structures. The AO/community making a submission would need to guarantee that it will provide and maintain premises that meet national pedagogical, safety, hygiene and sanitation standards; and that the premises are owned by the AO

and will be used as a pre-school institution for a period of not less than five years. Second, the AO and local community would commit to financing all recurrent costs of operating the pre-school institution. Third, the AO would ensure that a suitably qualified teacher will be hired to teach each new class group. Fourth, the village/neighborhood where the pre-school would be situated must not have received financial or in-kind support for a pre-school institution from an internationally-supported project within the previous five years.

The communities would be selected so as to ensure a broad, regionally and ethnically balanced distribution of project funds, while targeting those communities that are poorest and most in need of early education services. Proposals would only be considered from those AOs that receive subsidies from the Republican budget, i.e. the poorest AOs in the country. Proposals in areas with larger numbers of persons living below the poverty line, lower pre-school enrolment ratios, and a higher number of beneficiaries would be more positively evaluated, according to an algorithm that would be elaborated in the Project Operations Manual.

1.3 Environmental Category

The Project will fund minor civil works required to upgrade or convert existing community facilities for use as pre-school education facilities. Minimal to moderate environmental impacts are expected from civil works for rehabilitation or renovation of community facilities in various locations around the country. Specific sites are not yet known, but would be identified in each annual workplan during implementation.

Expected environmental impacts from these sub-projects include dust and noise related to demolition and construction; disposal of construction waste; and waste management during operation of the facilities. This Environmental Management Framework, includes a screening tool to identify sub-project activities that would require environmental assessments and management plans (sub-project EMPs), and provides guidance for preparation of the EMPs. It is anticipated that sub-project activities would fall into category B or C. Should any project activities be determined to have significant safeguards issues such that they would be considered category A, the project would need to be restructured to reflect the change in category. The EMF includes a negative list specifying the land acquisition would not be eligible for funding under the project.

The potential adverse environmental impacts for the project are summarized below and are restricted in scope and severity:

- Dust and noise due to demolition and construction;
- Disposal of construction wastes;
- Risk from inadequate handling of wastewater and solid waste during operation of the building.

These moderate risks can be effectively anticipated in advance of project implementation and addressed by direct mitigation activities in the design, planning and construction supervision process as well as during the operation of the facilities. Project costs associated with environmental mitigation are eligible for funding from the project budget. The Project is classified under the Environmental Category B in accordance with World Bank operational policies and requires the

preparation of an Environmental Management Framework (EMF), since the specific sub-project investments will be identified during implementation, not prior to Appraisal.

The project would finance the construction of hand-washing and sanitation facilities and other minor renovations, if needed by the beneficiary pre-school institution. Accordingly, safeguard measures for civil works and waste management are included in this EMF.

The other project components and sub-components do not involve any works or other potential environmental impacts.

1.4 Institutional and Implementation Arrangements

The Project will be implemented by the MOES with full responsibility for decision-making, implementation and achieving results using its existing organizational structure. It would be supported by a small Project Coordination Unit (PCU) integrated with MOES with augmented fiduciary and monitoring responsibilities, and selective time-bound technical assistance to support the institutions involved in project implementation. Such institutions include: the (MoES), the Kyrgyz Academy of Education (KAE), Oblast In-service Teacher Training Institutes and Methodological Centers (OTTI/OMC), Local Self Governance Bodies (*Ayil Okmoty* - AO), and schools and kindergartens.

The Deputy Minister responsible for Basic Education (DMBE) would be the National Coordinator for the Project. The Deputy Minister would oversee, coordinate, and facilitate Project implementation, reporting regularly to the Minister. With support from the Permanent Secretary of Education, responsible for administrative issues, s/he would oversee, coordinate, and facilitate Project implementation, reporting regularly to the Minister.

MoES departments directly involved in Project implementation would include: the Pre-School, Secondary School, and Out-of-School Education Department (PSSOED), the Capital Construction Unit (CCU), the Office of the Press Secretary, and the Monitoring and Strategic Planning Department (MSPD). Department/Unit heads would provide day-to-day coordination and support to staff, technical assistance and service providers involved in the implementation of activities; nominate a focal point for the Project in their department/unit; and liaise with the PCU Director. At the same time, they would continue reporting directly to the Deputy Minister. In the aspects pertaining to the legal-regulatory framework, they would also report to the Permanent Secretary of MoES.

The Project Coordination Unit (PCU) would work in tight collaboration with MoES Departments to support them. The PCU would be led by a Director responsible for overseeing and coordinating three projects: GPE, SSER, and READ. The PCU would include seven staff: (i) one project coordinator (directly responsible for the GPE project); (ii) two financial management/disbursement specialists; (iii) two procurement specialists; (iv) one translator; and (v) one administrative assistant. The PCU Director would be empowered by a decree of the Minister to oversee, coordinate and request reporting on the activities executed by the departments of the MoES and the KAE, and to work on a close and regular basis with the external technical assistance and service providers working for the departments, the Heads of the Departments, and the Deputy Minister as well as the Permanent Secretary. The PCU Director would report regularly to the Deputy

Minister; PCU staff would report directly to its Director, and work closely as needed with other staff of the MoES and its subordinate agencies.

All project related fiduciary activities would be carried out either directly by the PCU or with its support and oversight. Technical assistance and service providers contracted to support departments directly involved in Project implementation would report to the Head of the Department in which they are placed, and work in close collaboration with the Director of the Project Coordination Unit.

A specialist will be identified within the PCU to be responsible for coordination and supervision of the EMF and environmental risk mitigation measures to be undertaken in the Project. In addition, a local environmental specialist will be recruited by the PCU to support this function. The local environmental specialist and PCU staff will work closely with the MoES procurement team, the CCU and with national and oblast level environmental officials. They will (a) coordinate relevant training for staff, designers and local contractors; (b) disseminate existing environmental management guidelines and develop guidelines for identification, implementation, monitoring and evaluation of mitigation measures; (c) ensure that contracting for construction and supply of equipment includes reference to appropriate guidelines and standards; and (d) conduct periodic site visits to supervise and monitor compliance.

1.5 Institutional Structure in Environment Management and Education Facilities Planning

This section briefly describes existing environmental regulation and standards relevant to the Project and makes reference to institutions at the local and national levels responsible for issuing permits, licenses, and enforcing compliance of environmental standards. Additional details on the environmental regulatory framework can be found in Attachment 1 (Review of the environmental laws and regulations).

The following Kyrgyz Laws and other normative documents define a legal framework which regulates the procedures of waste collection, temporary storage, disinfection and treatment:

- Law on Environmental Assessment, 1999.
- Law on Environment Protection, 1999.
- Law on Ambient Air Protection, 1999.
- Law on Water, 1993.
- Law on Public Health, 2009
- Law on waste of production and consumption, October 18, 2002.
- Law on radioactive safety of population, August 1, 2003.
- Interstate standard GOST 17.9.1.2-2001 on “Environment protection. Handling of waste. Classification of waste. Identification and coding. Main provisions”.
- Directions on the Order of the Public Ecological Assessment, 1999.
- Directions on the Order of the Influence on the Environmental Assessment, 2001.
- State Program on use of Production and Consumption Wastes, 2005 Governmental degree #389 19 August 2005.

The Environmental Protection Law, 1999 is a key legal document which defines policy and legal relationships in area of environmental protection as well as institutional basis for environmental protection.

Environmental protection related permissions are given out in line with the Environmental Protection Law, 199, Law on Ambient Air protection, 2003, Law on waste of production and consumption, October 18, 2002 and Government Decree #103, 2004 on Roster of permissions, issued by the government structures.

II ENVIRONMENTAL MANAGEMENT FRAMEWORK

2.1 Introduction

The Environmental Management Framework (EMF) has been prepared in order to integrate environmental concerns into the design and implementation of the Project. The EMF would support:

- (a) highlighting the EMF follow-up responsibility in the job description of the PCU and MoES staff;
- (b) training of designated PCU and MoES staff;
- (c) guidance and oversight of works contractor regarding site-specific environmental screening and preparation of related sub-project Environmental Management Plans (EMPs) as appropriate for all project supported activities, including renovations at pre-school education facilities; and
- (d) monitoring and evaluation of mitigation measures identified in the site-specific reviews.

2.2 Establishment of Environmental Expertise within the MoES

A Specialist would be identified within the PCU, who would be responsible for coordination and supervision of the environmental plans and risk mitigation measures undertaken in the projects and cooperate with territorial departments for environment protection. The Specialist would work in close coordination with the PCU's procurement staff, MES KR Capital Construction Department and would:

- a) coordinate environmental training for MoES staff, designers and local contractors;
- b) disseminate existing environmental management guidelines for implementation, monitoring and evaluation of mitigation measures;
- c) ensure contracting for construction and supply of equipment includes reference to appropriate guidelines and standards; and
- d) conduct periodic site visits to inspect and approve plans and monitor compliance.

2.3 Site Specific Environmental Screening and Review

As a part of the EMF, all project supported activities for rehabilitation/renovation of the existing pre-school education facilities will be subjected to a site-specific environmental screening and

review process, according to the existing Sanitary Norms and Rules, 2004. The local authorities are obliged according to the law to submit an Environmental Approval for the civil works. This process would minimize site-specific environmental impacts and would use a standardized appraisal format that includes, but is not limited to, review of:

- a) current environmental problems at the sites (soil erosion, water supply contamination, etc.);
- b) potential environmental impacts, if any, due to the project (disposal waste from construction, construction noise and dust, etc); and
- c) potential requirements, if any, for temporary relocation of services for community members during the construction activities.

The site-specific EMPs would need to be disclosed and consulted with affected stakeholders. The PCU environmental specialist would ensure the disclosure and consultation.

2.4 Monitoring and Supervision

The environmental issues including mitigation measures are supervised periodically by the PCU.

No major environmental impacts are anticipated under the proposed program given the relatively small size of the investments. These investments are expected to be environmentally beneficial (functional sanitation facilities) and none of the units to be financed are expected to have any large scale, significant and/or irreversible impacts. The potential negative environmental impacts are expected to be localized and to be mitigated during the construction and operation stages.

Environmental regulations currently in force in the Kyrgyz Republic make control and supervision of construction works mandatory. Contracts and bill of quantities will include clauses for appropriate disposal of construction material and construction waste. Procurement documents will specify that no environmentally unacceptable materials will be used. Bidding documents will include rehabilitation of adequate sanitary facilities, including appropriate disposal of wastewater and sewerage. The environmental management guidelines included in Attachment 2 will be provided to contractors engaged in civil works under the project, and will be made an integral part of the civil works contracts.

The EMP template presented below identifies the potential environmental impacts and related mitigation measures for most of the activities under the rehabilitation the existing pre-school education facilities.

Environmental Management Plan Template

Environmental Component	Impacts	Mitigation Measures
Physical Environment		
Soils	contamination from waste materials	<ul style="list-style-type: none"> • protection of soil surfaces during construction; • control and daily cleaning of construction sites; • provision of adequate waste disposal

		services to assure regular waste discharge and sail
Water	<ul style="list-style-type: none"> • clogging of drainage works • introduction of hazardous wastes 	<ul style="list-style-type: none"> • special attention to drainage, proper disposal of oil and other hazardous materials; • rehabilitation of adequate sanitary facilities and purifying constructions including appropriate disposal of wastewater and sewerage
Air Quality	dust during construction	<ul style="list-style-type: none"> • dust control by water or other means to keep dust down if problem is evident
Noise	noise disturbance during construction or operation	<ul style="list-style-type: none"> • restrict construction to certain hours
Social Environment		
Aesthetic and Landscape	<ul style="list-style-type: none"> • risk of construction debris dumped into nearby water bodies; • disposal of construction waste • risk of unauthorized access to the construction areas 	<ul style="list-style-type: none"> • the building site will be cleaned and all debris and waste materials will be disposed of in accordance with clauses specified in the bills of quantities; • the sites for disposal of construction waste will be government- approved sites; • maximal secondary use of wastes; • fencing of the construction areas to avoid unauthorized access;
Human Health	<ul style="list-style-type: none"> • construction accidents • handling of asbestos material • working under an exposure of noise and dust • potential negative impact of materials used in the construction 	<ul style="list-style-type: none"> • specially designed systems for handling/disposal of hazardous wastes; • training for workers on appropriate methods for handling asbestos materials; • use of individual protection means; • prior health check-ups of workers involved in the renovation works; • ensure a use of only materials which have an appropriate permission;

III. ENVIRONMENTAL GUIDELINES

3.1 Introduction

The Environmental Guidelines section details the specifics to be addressed in the ecological/biologic concept, design and planning of civil works projects for the upgrading of pre-school education facilities. The guidelines cover the handling of construction debris generated, selection of construction materials and construction methods with limited impact on the

environment, and energy saving methods. The guidelines are a base for training and supervision. However, in selecting suitable construction methods and materials for the pre-school facilities, great attention should be paid to locally available traditions, skills and resources in the project sites.

3.2 The Sites

The site specific screening and review should carefully assess the following issues:

- Prior consultation with the affected community to explain the planned works, potential impacts and understand community concerns.
- Dust and noise due to the demolition and construction.
- Dumping of construction wastes, accidental spillage of machine oil, lubricants, etc. (see Annex regarding management of asbestos-containing materials and PCBs in obsolete transformers).

Dust from transportation and handling of construction works will be minimized by sprinkling water and other means such as enclosure of construction sites. To reduce noise, construction will be restricted during certain hours. All debris, construction and wood waste will be stored within the work site. Wood waste will be stored separately and arranged to be recycled instead of disposing it. Open burning and illegal dumping will not be permitted. Proper sites for earth/clay and sand disposal will be determined and prior approval from relevant authority for disposal will be obtained. Stock piling of construction debris on site will be avoided and waste will be disposed of on a regular basis at the authorized government dumping ground.

It is necessary to arrange transport and make agreements with relevant organizations involved in waste and construction debris disposal.

At the end of the rehabilitation and renovation, if the new equipment or systems (e.g., sewerage) are installed, it is necessary to confirm the regularity and safety of each equipment unit or system. It is therefore necessary to create a working commission including representatives of environment protection agencies.

3.3 Energy Efficiency, Insulation and Ventilation

Insulation should be tailored to the seasonal impacts of climate, internal thermal load, and characteristics of exposure. Vapor barriers should prevent moisture intrusion in the roof insulation and outer wall cavities and using damp course.

Window location should be determined on view, ventilation, economy of light, thermal gain, privacy control and interior space functions.

High-efficiency systems for heating domestic water (including solar systems) and for interior space heating should be selected with maintenance and long term running costs in mind. Plumbing should be coordinated to minimize plumbing works and also water service to toilets.

All materials and equipment (to be used) should have a security certificate.

3.4 Electrical Systems

Incoming cables should be located underground. Main entrance feed and panel located away from places of work and waiting is prudent in avoidance of electromagnetic fields. Ground fault wiring near any plumbing fixture is a precaution. Selecting the most energy-efficient light fixtures, lamps, appliances and equipment will reduce energy demand but can introduce undesirable electromagnetic fields. Be aware that close proximity to table, floor and desk halogen, fluorescent and other high-efficiency fixtures and lamps can cause an exposure to harmful electromagnetic fields.

Installation and use of electrical generators has been allowed by local legislation as an alternative source of energy to ensure availability of electricity.

3.5 Cabinetry and Wood

Nontoxic finishes are available but expensive. Selecting the least toxic finishes is advised. All materials should have appropriate permissions on quality and safety (certificate of conformity).

3.6 Finishes

Water-based interior nontoxic, no allergenic paint for drywall or plaster surfaces is preferable to latex or oil-based paints from a respiratory standpoint. Any enamel coating for doors or other surfaces that require a more durable finish is advised to be applied away from interior spaces and be fully aired for over a month before installation. Indoor space should not be occupied until odor and toxins of the paint or finish has been adequately aired.

3.7 Flooring

Traditional tile, marble, stone and terrazzo floors can be hard to stand and walk upon but have legendary durability. Nontoxic grouts and methods of installation should be used. Cleaning considerations should be included in the decision process.

3.8 Window Treatments

Vertical blinds provide light control, are easy to maintain, and require minimal stacking room. Horizontal blind can in combination with a white or light ceiling reflect daylight more deeply into a room. Exterior roller blinds, operable from the interior, are particularly effective in controlling solar thermal gain and interior heat loss, and give the benefit of security. Direct solar radiation can be attenuated by fabric mesh.

3.9 Exterior and Interior Colors

In climates with hot summers, reflective roofs provide a cooling advantage. When cold season occurs, darker-colored exterior walls will benefit by low-angle winter solar gains but be less heated by the light angle of the summer sun. White or very light-colored ceilings and interior side walls allow for deeper reflective penetration of natural light. Doors between interior room spaces can act as reflectors. Gloss white lacquer or enamel doors in the path of incoming daylight can lighten

adjoining spaces. Interior paints and finishes can affect pupils and staff directly. Outdoor finishes with odorous and toxic emissions can also have an effect upon persons indoors through windows, doors and other openings.

3.10 Demolition work

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully demolished and the debris should be sorted and removed as directed by the site-specific EMP (to be determined during the preparation phase of the project). All valuable materials (doors, windows, sanitary fixtures, etc) should be carefully dismantled and transported to the storage area assigned for the purpose. Valuable materials should be recycled within the project or sold.

3.11 Selection of Construction Materials and Construction Methods

Environmentally sound goods and services should be selected. Priority should be given to products meeting standards for recognized international or national symbols. Traditionally well-trying materials and methods should be chosen before new and unknown techniques. Construction sites should be fenced off in order to prevent entry of public, and general safety measures would be imposed. Temporary inconveniences due to construction works should be minimized through planning and coordination with contractors, neighbors and authorities. In densely populated areas, noisy or vibration generating activities should be strictly confined to the daytime.

ENVIRONMENTAL ADMINISTRATIVE, POLICY AND LEGAL FRAMEWORK – RESULTS OF REVIEW

Administrative, Policy and Legal Framework

State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic is a central agency on environmental protection. It has territorial departments.

Environmental protection relations and issues of rational use of natural resources are regulated by the Constitution and the Law on Environmental protection, 1999 and other laws and regulations of different level, other environmental and related international conventions and treaties ratified and signed by the Kyrgyz Republic and legislation and Governmental regulations and Ministerial orders.

Environmental Protection Law (EPL)

Law on Environmental Protection, 1999 is a main legislative document assigning policy and regulating legal relations in environmental protection and nature management, which provides an institutional basis for environment protection. According to the EPL, the highest environmental protection and nature management supervisory functions are imposed to the national and territorial public agencies on environment protection, while the departmental supervision over the environmental conditions on lower levels is on the Ministries and administrative agencies (Article 31. Part V). The Part V also describes the system of state environmental monitoring and interrelations between different public agencies, functions and duties on environmental protection (Part VIII).

The EPL defines general principles of environmental protection policy (Article 3), measures on environmental protection (Article 6), environmental quality regulation (Part II), ecological requirements to maintain economical activity and major directions to implement these principles, including harmonization of environmental protection policy and development programs, interrelations between territorial and ecological development, mandatory implementation of environmental permitting procedures in construction, exploitation and implementation of specific social and economic activities considerably influencing environment and use of economic incentives (Part IV).

The section IV also covers issues of control of activities influencing environment, permitting procedures and environmental assessment, dangerous substances, harmful and solid waste products (Article 23), chemical fertilizers and pesticides, and radiation safety.

Other Environmental and related Legislation and International Conventions and Treaties

Just after the Law on Environmental Protection, a series of other basic environmental and related laws were adopted, including the Law on Environmental Assessment, 1999, the Law on Production and Consumption Wastes, 2001, and the KR Law on Public Health as of 2009.

In addition, several Governmental regulations and official normative legal acts on environmental protection were adopted to support the above stated laws and other issues which are not adjusted in the legislation so far.

Development of the strategies to set up a correspondence in horizontal legislation and regulations on waste collection and discharge is in the process.

Environmental Assessment and Spatial Planning

The Law on Environmental Assessment, 2003, adjusts legal relations in environmental assessment for the prevention of negative environmental consequences as a result of economic and other activities. The law sets general principles and types of environmental assessment, powers, rights and duties of public agencies and the draft law makers. It also defines the order for the state environmental assessment, assessment of environmental influence, removal of environmental assessment discrepancies, and responsibility for violation of the legislation on environmental assessment.

Environmental Permitting Procedure for New Investments

The existing system of environmental permits in the Kyrgyz Republic is based on an individual approach to different environmental components and regulation of air and water protection and waste management by separate statutory acts. The system has not been changed since it was established in 1970, even though there several new laws on environmental protection have been adopted.

The environmental permits in the Kyrgyz Republic are issued according to the Law on Environmental Protection of 1999, the Law on Ambient Air Protection of 2003, the Law on Production and Consumption Wastes of 2001 and Governmental regulation no.103 of 2004 on the Register of Permitting Documents issued by public agencies.

Licensing of dangerous wastes management is based on the Law on Licensing no.12 of 1997, and the Law on the Safety of Dangerous Industrial Projects no.93 of 2001, which also provides permits for the operation of dangerous plants.

The majority of the environmental protection permits are issued by the State Agency for Environmental Protection and Forestry under the KR Government (Table below). However, permits for hydraulic works and sewage discharge are provided by three different agencies (State Agency of Geology and Mineral Resources under the KR Government, State Agency of Ecology and Forestry under the KR Government and Department of Water Resources and Irrigation under the KR Ministry of Agriculture). Observance of the issuance of permits is controlled by inspectors from territorial control and inspection services under the KR Government, at a maximum of once a year as for issuance of environmental permits with a view to promote the project activities

Internal or Self-monitoring system

The internal or self-monitoring system must be created in each company. The system parameters are based on the provisions of environmental agreement and permits. Selective inspection and data analysis must be carried out by the corresponding specialist and relevant state agencies.

ENVIRONMENTAL GUIDELINES FOR CIVIL WORKS CONTRACTS

The contractors are required to use environmentally acceptable technical standards and procedures during the implementation of construction of works. All construction contracts will contain the following requirements:

- Take precautions against negative influence on environment, any environmental damage or loss through prevention or suppression measures (where it is possible) instead of liquidation or mitigation of negative consequences.
- Observe all national and local laws and rules on environmental protection. Identify officers responsible for the implementation of activities on environmental protection conforming to instructions and directions received from the construction and design or environmental protection agencies.
- Store and dispose of construction waste consistent with national regulations and the sub-project (site-specific) EMP
- Minimize dust emission to avoid or minimize negative consequences influencing air quality.
- Provide pedestrian crossing and roads and access to the public places.
- Provide markets with light and transient roundabout connections to assure safety and convenience.
- Prevent or minimize vibration and noise from vehicles during explosive activities.
- Minimize damages and assure vegetation recovery.
Protect surface and underground water from soil pollution. Assure water collection and distribution.

Asbestos and PCBs

1. Asbestos: The project may need to provide advanced environmental training, drawing on official Kyrgyz documents on asbestos, and emphasizing the following main points:
 - The risk presented by asbestos is from inhalation of asbestos fibers in dust, which causes lung disease, including cancer. Asbestos bound in materials (e.g., unbroken roofing sheets) is stable and not a risk.
 - If asbestos are located on the project site, they should be marked clearly as hazardous material.
 - When possible the asbestos will be appropriately contained and sealed to minimize exposure.
 - The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust.
 - Asbestos will be handled and disposed by skilled & experienced professionals using proper protective gear (mask, gloves, and coveralls).
 - Milk is not a prophylactic! In some countries, drinking milk is considered helpful to mitigate the effects of toxic materials. While nutritious, milk has no influence on toxic materials that are inhaled.
 - Asbestos containing materials (roofing sheets) should not be broken or cut. This releases dust.
 - If asbestos material is to be stored temporarily, the wastes should be securely enclosed inside closed containers and marked as hazardous material. Security measures needs to be taken against unauthorized removal from the site.
 - The removed asbestos should not be reused (except for intact roofing sheets, with approval of Public Health Department).
 - Asbestos-containing materials must be disposed in at approved hazardous waste disposal site.

2. PCBs in transformers¹. Polychlorinated Biphenyls (PCBs) are persistent organic pollutants, 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) 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 with chronic exposure, including 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

¹ Background information adapted from the UNDP GEF MSP for PCBs in Kyrgyzstan

chemicals into the environment are of concern, the primary impacts are widely distributed and effectively global in nature, given the chemical's characteristics of bioaccumulating 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.

3. Coordinated global control measures related to POPs were initiated with the creation of the Stockholm Convention on Persistent Organic Pollutants in 2002 and its entry into force in 2004. PCBs were one of the initial 12 POPs covered by the Convention with specific control measures and national obligations of Convention Parties. The Kyrgyz Republic signed the Convention in May 2002 and acceded to it in July 2006, becoming a formal party and assuming the obligations it entails. SAEPF is the responsible national authority. The main activity has been supervising the implementation of the required National Implementation Plan (NIP), which was supported by UNEP. The NIP was approved by Government Decree #371 in July 2006.
4. In general, the profile of PCB use and their residual presence in Kyrgyzstan are typical of that throughout the former Soviet Union. The chemical was never produced in Kyrgyzstan, 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, which is anticipated to constitute the major source of PCBs in the country, 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 with well defined specifications identifiable by manufacturers labeling. Information on these specifications and labeling has been documented in other CIS countries. However, overall information on the quantities of PCBs or PCB containing equipment imported into the country is being clarified within the UNDP Management and Disposal of PCBs in Kyrgyzstan Project.

MINISTRY OF EDUCATION AND SCIENCE OF THE KYRGYZ REPUBLIC

Joint Statement of the Public Stakeholder Consultation Meeting, NGOs and International Partners

**On discussion of the
Environmental Management Plan for the KG Global Partnership for Education**

(Published on the internet – <http://edu.gov.kg> on April 01, 2013)

Date: April 18, 2013

Venue: Bishkek, Ministry of Education and Science of the Kyrgyz Republic

Participants:

1. Rasulova G. – ECD Consulting Company, Coordinator;
2. Djakupova N.I. – “Childhood Institute” PF, Coordinator;
3. Aitikulova B. – Aga Khan Foundation in the Kyrgyz Republic, Education Specialist;
4. Ashymbaeva T.A. – Alamudun Rayon Education Department, Head;
5. Kibiraeva A.S. – Chui Rayon Education Department, Head;
6. Alvard Poghosyan – UNICEF, Education Officer;
7. Atambekov Sh.A. –Capital Constriction Department, Ministry of Education and Science of the Kyrgyz Republic, Head;
8. Duishenova J.K. – Ecology Education and Communication Department under the Public Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic;
9. Jukeeva K. - Ministry of Education and Science of the Kyrgyz Republic, Press Secretary;
10. Boronbaeva E. – Ministry of Health of the Kyrgyz Republic;
11. Sadyekov A. – ARIS Director, (Agency for Development and Cooperation)
12. Usenaliev M.J. – Head, Department for Pre-school, School and Out-of-school Education, Ministry of Education and Science of the Kyrgyz Republic;
13. Marchenko L.U. – Department for Monitoring and Strategic Planning, Ministry of Education and Science of the Kyrgyz Republic;
14. Isaeva A.A. – Senior Specialist, Department for Pre-school, School and Out-of-school Education, Ministry of Education and Science of the Kyrgyz Republic;
15. Sultanova G.K. – Education Specialist, World Bank Country Office;
16. Ainekenova A.R. – Director, PCU SSFER.

Agenda:

Discussion of the Environmental Management Plan in the context of Global Partnership for Education Project. Presentation of project goals.

Within the framework of the Global Partnership for Education it is proposed to support one main investment activity that requires the development of Environmental Management Framework (EMF).

It is proposed to fund minor civil works (100 facilities countrywide) required to upgrade or convert existing community facilities for use as pre-school education facilities. It was therefore required to adjust and approve an Environmental Management Plan (EMP) which will become a guiding document to address environmental issues in the education sector in general.

The main objective of the EMP is targeted to exclude deterioration of the environment during the implementation of planned project activities.

The EMP was in general approved by the stakeholders. It was agreed that the concerns raised during the meeting will be addressed in the Project Operation Manual. Attention of participants was drawn to the problem of inefficient functioning and operation of sewerage constructions throughout the vast country's territory.

The stakeholders made some comments and proposals on the importance of this document for introduction of inclusive education. It was also proposed to outline the activities in accord with necessary scope of rehabilitation/renovation and construction works in the country subject to donor support rendered in other regions.

It was noted that this document envisages implementation of practical activities which do not contradict the Kyrgyz legislation about environment.

By the results of the discussion it was decided to approve the Draft Environmental Management Plan, which was confirmed by the signatures.

EMF GEP Minutes

Программа:

Обсуждение Модели управления состоянием окружающей среды в контексте проекта Глобального партнерства в целях образования. Презентация целей проекта.

В рамках проекта Глобального партнерства в целях образования поддержку получит одно инвестиционное мероприятие, для которого необходимо было разработать Модель управления состоянием окружающей среды (МУСОС) и предлагается выполнить минимальные строительные работы (около 100 учреждений по стране), необходимые для обновления или преобразования уже существующих объектов. Эти работы позволят сообществам использовать помещения в качестве дошкольных учреждений. Таким образом, требуется согласовать и утвердить Модель управления состоянием окружающей среды, который будет использоваться в качестве руководства по решению природоохранных вопросов в секторе образования в общем.

Основной целью МУСОС является предотвращение ухудшения состояния окружающей среды при реализации запланированных мероприятий проекта.

МУСОС в общем был одобрен заинтересованными сторонами. Стороны договорились, что все вопросы, рассмотренные в ходе встречи, будут отражены в операционном руководстве проекта. Внимание участников также было привлечено к проблеме неэффективной работы и эксплуатации очистных сооружений на большей территории страны.

Заинтересованные стороны предоставили комментарии и предложения, касающиеся важности данного документа при внедрении подходов инклюзивного образования. Среди прочего, было предложено определить количество поддерживаемых мероприятий согласно установленному охвату ремонтных и строительных работ по стране с учетом поддержки других доноров в разных регионах страны.

Участниками было отмечено, что данный документ предусматривает реализацию практических мероприятий, не противоречащих экологическому законодательству КР.

По результатам обсуждения, было принято решение одобрить предлагаемый проект Модели управления состоянием окружающей среды, что было закреплено подписями участников.

Подписи:

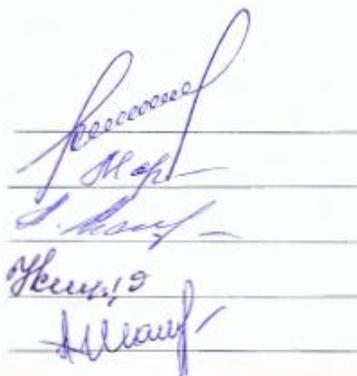
Усеналиев М.Ж.

Марченко Л.Ю.

Исаева А.А.

Жукеева К.

Атамбеков Ш.А.

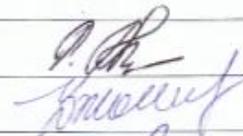


Handwritten signatures of five individuals over horizontal lines.

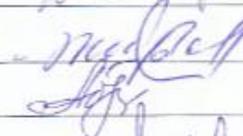
Айнекенова А.



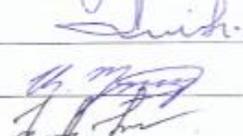
Сатыбеков А.



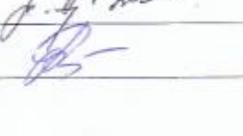
Расулова Г.



Джакупова Н.И.



Айтикулова Б.



Ашамбаева Т.А.



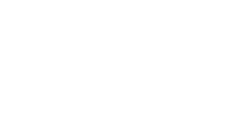
Кибираева А.С.



Алвард Погосян



Дуйшенова Ж.К.



Боронбаева Э.



**ECA Safeguards
Rehabilitation and Construction Mitigation Measures Checklist
For Streamlined Environmental Management Plan**

For low-risk topologies, such as “public building” rehabilitation activities, the ECA safeguards team developed an alternative to the commonly used “full-text” EMP format. The **goal** was to provide an opportunity for a more streamlined approach to minor rehabilitation or small-scale building construction. The **intent** is that this EMP-checklist would be directly used as an integral part of bidding documents for contractors carrying out civil works under Bank-financed projects. The EMP-checklist-type format has been developed to provide examples of “good practices” for mitigation and designed to be user-friendly and compatible with Bank safeguard requirements. The EMP-checklist-type format attempts to cover typical core mitigation approaches to civil works contracts with localized impacts. It is anticipated that this format provides the core element of an Environmental Management Plan (EMP) to meet World Bank Environmental Assessment requirements under OP 4.01.

In terms of **process**, during preparation for projects in which the specific topologies and /or sites are not known a brief Environmental Management Framework would be prepared in compliance with OP 4.01 Annex C.² The EMP-checklist would be included as an annex in the EMF and recommended to be used as the Environmental Management Plan (EMP) for individual sub-activities once identified during the scoping identification phase. Once the typologies are identified, the application of the EMP-checklist is put in place. For each sub-activity in which the specific buildings/sites for rehabilitation, and/or demolition, complete reconstruction and construction is known, the EMP-checklist is completed. The checklist has three sections:

- Part 1 includes the descriptive part that describes the project specifics in terms of the physical location, institutional arrangements, and applicable legislative aspects, the project description, inclusive of the need for a capacity building program and description of the public consultation process. This section could be up to two pages long. Attachments for additional information are requested if needed.
- Part 2 includes the environmental and social screening of potential issues and impacts, in a simple Yes/No format followed by mitigation measures for any given activity. Currently, the list provides examples of potential issues and impacts. This list can be expanded to specific site issues and /or impacts; and good practices and mitigation measures.
- Part 3 will include the monitoring plan for activities during project construction and implementation. It retains the same format required for current EMPs. It is the intent of this checklist that Part 2 and Part 3 be included as bidding documents for contractors.

The practical **application** of the EMP-checklist would include the filling in of Part 1 to obtain and document all relevant site characteristics. In Part 2 the type of foreseen works, would be checked, and the completed tabular EMP is additionally attached as integral part to the works contract and, analogous to all technical and commercial terms, that is signed by the contract parties. Part 3 of the EMP-checklist, the monitoring plan, is designated to construction inspector, for the Contractor’s

² Environmental Management Framework (EMF) : Introduction (Background, Project Objective, Project Description); Policy, Legal And Administrative Framework; Relevant World Bank Policies; Implementation Arrangements
Environmental Screening, Assessment and Management; and Monitoring And Reporting

safeguards due diligence compliance. This plan should be developed site specifically and in necessary detail, defining clear criteria and parameters which can be included in the works contracts, which reflect the status of environmental practice on the construction site and which can be observed/measured/ quantified/verified by the inspector during the construction works. Thus Part 3 would thus be filled in during the design process to fix key monitoring criteria which can be checked during and after works for compliance assurance. During the works implementation phase environmental compliance is checked on site alongside other quality criteria by the PIU's site certified inspector(s).

Site- Specific Environmental Management Plan Mitigation and Monitoring Plan Checklist for Construction and Rehabilitation Activities

PART 1: INSTITUTIONAL & ADMINISTRATIVE				
Country				
Project title				
Scope of project and activity				
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contactors
SITE DESCRIPTION				
Name of site				
Describe site location	Attachment 1: Site Map []Y []N			
Who owns the land?				
Geographic description				
LEGISLATION				
Identify national & local legislation & permits that apply to project activity				
PUBLIC CONSULTATION				
Identify when / where the public consultation process took place				
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	[] N or []Y if Yes, Attachment 2 includes the capacity building program			

PART 2: ENVIRONMENTAL /SOCIAL SCREENING

Will the site activity include/involve any of the following potential issues and/or impacts:	Activity and examples of potential issues and/or impacts	Status If Yes for any	Additional references
	1. Building rehabilitation <ul style="list-style-type: none"> • Site specific vehicular traffic • Increase in dust and noise from demolition and/or construction • Construction waste 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section B below
	2. New construction <ul style="list-style-type: none"> • Excavation impacts and soil erosion • Increase sediment loads in receiving waters • Site specific vehicular traffic • Increase in dust and noise from demolition and/or construction • Construction waste 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section B below
	3. Individual wastewater treatment system <ul style="list-style-type: none"> • Effluent and / or discharges into receiving waters 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section C below
	4. Historic building(s) and districts <ul style="list-style-type: none"> • Risk of damage to known/unknown historical or archaeological sites 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section D below
	5. Acquisition of land ³ <ul style="list-style-type: none"> • Encroachment on private property • Relocation of project affected persons • Involuntary resettlement • Impacts on livelihood incomes 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section E below
	6. Hazardous or toxic materials ⁴ <ul style="list-style-type: none"> • Removal and disposal of toxic and/or hazardous demolition and / or construction waste • Storage of machine oils and lubricants 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section F below
	7. Impacts on forests and/or protected areas <ul style="list-style-type: none"> • Encroachment on designated forests, buffer and /or protected areas • Disturbance of locally protected animal habitat 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section G below
	8. Traffic and Pedestrian Safety <ul style="list-style-type: none"> • Site specific vehicular traffic • Site is in a populated area 	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section I below

³ Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

⁴ Toxic / hazardous material includes and is not limited to asbestos, toxic paints, removal of lead paint, etc.

MITIGATION PLAN		
ACTIVITY	PARAMETER	GOOD PRACTICES MITIGATION MEASURES CHECKLIST
A. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> (a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits (to include not limited to land use, resource use, dumping, sanitary inspection permit) have been acquired for construction and/or rehabilitation (d) All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
B. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (a) During interior demolition use debris-chutes above the first floor (b) Keep demolition debris in controlled area and spray with water mist to reduce debris dust (c) Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site (d) Keep surrounding environment (side walks, roads) free of debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) There will be no excessive idling of construction vehicles at sites
	Noise	<ul style="list-style-type: none"> (a) Construction noise will be limited to restricted times agreed to in the permit (b) During operations the engine covers of generators, air compressors and other powered mechanical equipment should be closed, and equipment placed as far away from residential areas as possible
	Water Quality	<ul style="list-style-type: none"> (a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.
	Waste management	<ul style="list-style-type: none"> (a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. (b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Construction waste will be collected and disposed properly by licensed collectors (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)
C. Individual wastewater treatment system	Water Quality	<ul style="list-style-type: none"> (a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities (b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Monitoring of new wastewater systems (before/after) will be carried out
D. Historic building(s)	Cultural Heritage	<ul style="list-style-type: none"> (a) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notify and obtain approval/permits from local authorities and address all construction activities in line with local and national legislation (b) Ensure that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted, officials contacted, and works activities delayed or modified to account for such finds.
E. Acquisition of land	Land Acquisition Plan/Framework	<ul style="list-style-type: none"> (a) If expropriation of land was not expected and is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the bank task Team Leader is consulted.

MITIGATION PLAN		
ACTIVITY	PARAMETER	GOOD PRACTICES MITIGATION MEASURES CHECKLIST
F. Toxic Materials	Asbestos management	<p>(b) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented</p> <p>(a) If asbestos is located on the project site, mark clearly as hazardous material</p> <p>(b) When possible the asbestos will be appropriately contained and sealed to minimize exposure</p> <p>(c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust</p> <p>(d) Asbestos will be handled and disposed by skilled & experienced professionals</p> <p>(e) If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately</p> <p>(f) The removed asbestos will not be reused</p>
	Toxic / hazardous waste management	<p>(a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information</p> <p>(b) The containers of hazardous substances should be placed in an leak-proof container to prevent spillage and leaching</p> <p>(c) The wastes are transported by specially licensed carriers and disposed in a licensed facility.</p> <p>(d) Paints with toxic ingredients or solvents or lead-based paints will not be used</p>
G. Affects forests and/or protected areas	Protection	<p>(a) All recognized natural habitats and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.</p> <p>(b) For large trees in the vicinity of the activity, mark and cordon off with a fence large tress and protect root system and avoid any damage to the trees</p> <p>(c) Adjacent wetlands and streams will be protected, from construction site run-off, with appropriate erosion and sediment control feature to include by not limited to hay bales, silt fences</p> <p>(d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.</p>
H Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>(a) In compliance with national regulations the contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to</p> <ul style="list-style-type: none"> ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement ▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. ▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.

MONITORING PLAN							
Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
During activity preparation							
During activity implementation							
During activity supervision							