

KYRGYZ REPUBLIC COMMUNITY DEVELOPMENT AND INVESTMENT AGENCY

URBAN DEVELOPMENT PROJECT

ENVIRONMENTAL MANAGEMENT FRAMEWORK

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ABBREVIATIONS

APS Architectural and Planning Specifications

BoQ Bill of Quantities

DDE Detailed Design and Estimates

EIA Environmental Impact Assessment
EIS Environmental Impact Statement

EMF Environmental Management Framework

EMP Environmental Management Plan

EP Environmental Protection

ETS Engineering and Technical Staff

ETS Engineering and Technical Specifications

FS Feasibility study

IDA International Development Association

KR Kyrgyz Republic
OM Operational Manual
OP Operational Policy

PAP Project Affected Person

SAEPF under State Agency on Environment Protection and Forestry under the Government of

the GoK the Kyrgyz Republic

SEE State Environmental Expertise

SPZ Sanitary Protection Zone
UDP Urban Development Project

WB World Bank

1. INTRODUCTION

1.1 BACKGROUND

This Environmental Management Framework (EMF) prepared for the Urban Development Project (UDP) financed by the International Development Association (IDA) and the Kyrgyz Republic covers procedures and mechanisms that will be triggered by the Project to comply with the World Bank Policy 4.01 Environmental Assessment¹, legislation and normative and legal acts of the Kyrgyz Republic governing preparation and implementation of environmental protection requirements.

EMF will allow ensuring environmental sustainability of subprojects throughout their implementation cycle and to provide the ARIS' engineering and technical staff (ETS) and consultants with adequate institutional, normative and technical framework for future processes and procedures that should be observed when:

- (i) Identifying Environmental Assessment implementation arrangements, including assessment of potential transboundary impact of subprojects implemented under the UDP;
- (ii) Developing separate EMPs for each subproject integrating the complex of impact mitigation measures, environmental monitoring and institutional responsibility into the general project implementation plan by including the EMP into the bidding documents to ensure funding and supervision along with other components of the subproject;
- (iii) Identifying requirements for environmental monitoring and activities on institutional strengthening conducive to beneficial impacts of the project.

1.2 PROJECT CONCEPT

1.2.1 Project objectives and geographic coverage

The Project objectives are to improve (i) water supply in Sulukta and Kerben towns; (ii) improvement of seismic safety and energy efficiency of priority schools and kindergartens in Balykchi and Toktogul towns by decreasing energy consumption that would lead to lower municipal budget expenses on electricity and improve the level of comfort of the premises; (iii) the operation of the street lighting system in Balykchi and Toktogul towns, which would allow decreasing the operation and maintenance costs, decrease the greenhouse effect and "light pollution" by focusing lighting, improving the street lighting and safety; (iv) solid waste collection by rendering technical assistance to selected municipalities and service organizations to improve their performance (billing, collection of payment, increasing their sources of income).

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¹ Annex C OP/BP 4.01. January 1999

UDP implementation areas marked on the map of the Kyrgyz Republic are Balykchi, Toktogul, Kerben and Sulukta.



1.2.2 Project Components and Subcomponents

Component A: Urban Development. *Sub-component A1: Municipal Services.*

This sub-component is expected to finance rehabilitation of water supply system in towns of Sulukta and Kerben, including headworks, water mains and distribution systems, as well as installation of production/supply water meters at water intake/mains to measure the volumes of water supplied to the distribution network.

The Project will support municipal services in improving the access to and the quality of solid waste management services in selected towns.

Sub-component A2: Safe and Energy Efficient Social Infrastructure Pilot.

This sub-component will focus on upgrading/thermo-modernization of priority schools and kindergartens in Balykchi and Toktogul towns. This covers insulation of walls and the roof, replacement of windows, the entrance door and internal doors, repair of internal heating, lighting systems through replacement of incandescent lams by energy saving lamps and replacement of heating boilers. Use renewable sources of energy (that of wind or sun) in one of the schools as a pilot project. Capital repair of schools and kindergartens will be completed considering the analysis of structural and seismic integrity of buildings. Seismic safety of schools will be improved.

The street lighting system is projected to be modernized in the selected towns though replacement of mercury lamps by LED lamps and arranging control posts with adjustable timers.

Component B: Institutional Development

This component is supposed to support: (i) improving billing and payment collection practices to increase the municipalities' and the utilities' own sources of income; (ii) conducting operational trainings on optimization of work, improving the maintenance practices, development of the strategy for controlling the volumes of unaccounted for water and strengthening the capacity for leak detection; (iii) conducting trainings for contractors, design companies, ARIS, utilities and government employees on advanced methods of contract management and construction supervision, including the best practices on upgrading the energy efficiency of buildings.

Component C: Project implementation support

The Component C will support the existing system of subversion under the UDP. Updating the institutional system through development of a new scheme of the project organizational structure is planned to be carried out.

2. WB SAFEGUARDS POLICIES AND PROCEDURES

2.1 REVIEW OF THE WB SAFEGUARD POLICIES (10+1)

The major document regulating the WB environmental safeguard policy is OP 4.01 *Environmental Assessment*, which is one of ten safeguard policies that the projects submitted for the Bank financing are to comply with.

Ten safeguard policies and the +1 policy on *Access to Information* represent the framework of safeguard mechanisms applied by the WB for the sake of interests of beneficiaries, clients, stakeholders and that of the Bank. Applying these policies allows avoiding adverse impacts on the environment and people's lives, minimizing and mitigating potential unfavorable environmental and social project impacts.

- 1. Environmental Assessment (OP 4.01);
- 2. Natural Habitats (OP 4.04);
- 3. Pest management (OP 4.09);
- 4. Cultural Heritage (OP 4.11);
- 5. Forests (OP 4.36);
- 6. Safety of Dams (OP 4.37);
- 7. Involuntary Resettlement (OP 4.12);
- 8. Indigenous Peoples (OP 4.10);
- 9. International Waterways (OP 7.50);
- 10. Disputed Areas (OP 7.60);
- +1. Access to Information

The first six policies are environmental policies and they are taken as focus during preparation of the Environmental Assessment. The seventh and eighth are social and the ninth and tenth are legal,

The objectives of 10+1 safeguard policies are to:

- 1) Avoid negative impacts where possible; otherwise minimize, reduce, mitigate, compensate;
- 2) Match level of review, mitigation and oversight to level of risk and impacts;
- 3) Inform the public and enable people to participate in decisions which affect them;
- 4) Integrate environmental and social issues into project identification, design and implementation.

Principles of OP 10+ 1:

- In case of discrepancy between the requirements of OP 10+1 and those of the national legislation norms, the more stringent ones prevail;
- In case of conflict between the OP 10+1 and the national environmental requirements, the WB policies will prevail (even if some parts of the project are financed by the Government of the Kyrgyz Republic or third parties).

The legal basis for such approach is the Agreement ratified by the Jogorku Kenesh² of the Kyrgyz Republic, which carries the force of an international treaty and prevails over the national legislative acts.

The major requirements of the environmental policies are stated in the Annex 3.

² Jogorku Kenesh (JK) is the legislative body, the Parliament of the Kyrgyz Republic

2.2 SAFEGUARD MEASURES

After survey of the implementation site, environmental sensitivity and the project scale, the following can be stated: (i) UDP will not be implemented in proximity to environmentally critical areas (lagoon/wetland areas, forests and etc) and will not impact them. The Project will not have irreversible impacts and will not impact vulnerable ethnic minorities or cultural heritage sites. The Project is of limited scale, associated with moderate environmental risks that can be easily mitigated during its implementation.

The activities planned under the Project can have certain both positive and negative environmental and social impacts.

The positive impacts include: (a) rational use of water resources following rehabilitation of water supply systems in Kerben and Sulukta towns, which will bring environmental and social benefits; (b) improved energy efficiency of existing schools and kindergartens in Balykchi and Toktogul, which will contribute to saving heat and electricity; (c) projected introduction of renewable sources of energy will contribute to sustainable "green" development; (d) decreasing the greenhouse effect and "light pollution" through upgrading of the street lighting systems.

Potential adverse impacts of project implementation are mainly related to construction works on water intake, laying water mains and water supply networks during rehabilitation of water supply schemes in Kerben and Sulukta towns. These impacts are of temporary nature and are related to pollution of the air resulting from operation of vehicles and machinery, pollution with construction and domestic waste resulting in formation of dust, noise and vibration, movement of vehicles and machinery, dumping of construction materials and accumulation of construction waste and debris. Some risks associated with the project activities are conditioned by improper utilization of construction waste, asbestos- and mercury—containing materials, minor operational and accidental leakage of fuels and lubricants.

All these potential adverse impacts will be mitigated by measures stipulated in this EMP and individual plans to be developed for each subproject with the objective to prevent pollution and exhaustion of natural resources.

The UDP requires mitigation measures under the following safeguard policies:

OP 4.01. Environmental Assessment;

OP 4.12. Involuntary Resettlement;

OP 7.50. International Waterways.

Environmental Assessment (OP 4.01). The anticipated environmental impacts of UDP resulting from construction of water supply systems in Kerben and Sulukta, capital repair of schools, and kindergartens in Balykchi and Toktogul trigger this safeguard policy that requires carrying out environmental assessment and development of EMP³.

The EA will determine potential adverse and favorable environmental impacts of the project and will recommend measures to prevent, minimize, mitigate or compensate for adverse impacts and improve environmental indicators.

The EMP will stipulate preventive and mitigation measures, carrying out environmental monitoring, fulfillment of institutional obligations, timeframe for implementation of activities and their costs in the project budget.

Involuntary Resettlement (OP 4.12). The project does not foresee considerable physical resettlement. Nonetheless, rehabilitation/construction of water distribution networks that will run through populated

³ Par.. 7 of WB OP 4.01 EA Instruments. "Depending on the project, a range of instruments can be used to satisfy the Bank's EA requirement: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment, environmental management plan (EMP). EA applies one or more of these instruments, or elements of them, as appropriate".

areas may require temporary land acquisition or change in livelihood. From this point of view, social safeguard measures stipulated by OP 4.12 may be applied.

The Resettlement Policy Framework (RPF) developed in compliance with provisions of the OP 4.12 and included in the UDP Operational Manual will serve as the guidelines for development of corresponding measures to mitigate and compensate for land acquisition and possible resettlement on land parcels that are not determined yet.

The RPF will guide all activities involving land acquisition, restriction of access to land or services or loss of property. The RPF will highlight potential project impacts indicating the scale of such possible impact on land use/access to land and structures and set amounts and procedures for payment of compensation and relocation allowances.

The Local Self-Government Bodies- the office of the mayor of Kerben, Sulukta, Toktogul and Balykchi are responsible for compensation arrangements within the framework of under the management of impacts caused by land acquisition.

The ARIS' tasks in this case include carrying out social screening, determining the necessity for development of a Resettlement Action Plan (RAP), conducting stakeholder consultations, elaboration of compensation measures, supervision and monitoring.

RAPs are to be developed after determining the exact site for construction works.

International Waterways (OP 7.50). Results of preliminary survey of the territory of works suggest the possibility of insignificant expansion of head water intake on Padysha-Ata River for needs of Kerben town residents. Following the preliminary screening, review of normative and legal acts related to international apportioning of water between the Kyrgyz Republic and the Republic of Uzbekistan as well as guarantees given by the mayor's office of Kerben and the territorial irrigation systems management unit, the following can be stated:

Insignificant expansion of the water intake on Padysha –Ata River for the needs of Kerben town will be accomplished within the limit of water apportioned to the Kyrgyz Republic. Therefore, rehabilitation and construction works on the municipal water supply system does not imply decrease in quantity of water supply to the Republic of Uzbekistan and will not violate interests of the neighboring country.

The information on this issue is enclosed in Annex 4, which, besides the basic information, contains four addenda with relevant conclusions of territorial bodies related to the issue of international apportioning of water,

This Project does not trigger any of the following safeguard policies:

- Natural Habitats (OP 4.04). UDP will not engage in changing the natural habitats;
- **Pest Management (4.09).** No pest management activities will be carried out under the Project;
- Cultural Heritage (4.11). The project will not impact cultural and national heritage objects;
- Forests (4.36). The Project will not cover forests and forest areas;
- Safety of Dams (4.37). The Project does not project construction or repair of dams; The project interventions are not expected to adversely affect water quality or quantity to downstream riparian states, and none of these infrastructure works would depend upon the operation of existing reservoirs and dams in these river basins. There will be no water supply systems that draw directly from a reservoir controlled by an existing dam.
 - **Indigenous Peoples (4.10).** The Project does not impact indigenous people, ethnic minorities or tribal groups;
 - **Disputed Areas (7.60).** The Project will not be implemented in disputed areas and thus will not trigger this strategy.

3. LEGISLATIVE AND INSTITUTIONAL FRAMEWORK

3.1 LEGAL FRAMEWORK FOR ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

The main normative documents governing the environmental protection activities are:

The Constitution of the Kyrgyz Republic 2010 is the foundation for the whole normative and legal framework. It stipulates the right of all citizens for an environment favorable for human's life and health and compensation for damage caused to health or property by nature management activities;

The Law "On Environmental Protection" is basis for comprehensive regulation of public relations in the sphere of interaction between the society and the nature. It sets basic principles of environmental protection and stipulates legal authorities for creating environmental quality, marking special protected territories, promulgation of rules and procedures for natural resources management, setting the environmental monitoring and oversight system, and reinforcing the emergency response procedures.

The law prohibits financing and implementation of projects involving the use of natural resources without obtaining the positive opinion of the state environmental expert review.

Law on Environmental Expertise⁵ ensures compliance of economic and other activities with environmental requirements. This Law is applied to projects that may have environmental impact, including feasibility studies as well as projects for construction, reconstruction, development, reequipment, other projects that may have environmental impact, regardless of their estimate cost and title or ownership type.

The law obliges the project initiator to submit necessary documentation related to the project and its environmental impact to the state environmental expertise. The Expert Commission of the State Agency on Environment Protection and Forestry is responsible for review of the submitted documentation.

Positive decision of the State Environmental Expertise is required to trigger financing or implementation of the project. Negative opinion will ban implementation of the project.

One of the main opportunities for citizen's participation and their associations in decision making on environmental protection and rational nature management is public environmental expertise. Two types of environmental review are implemented in the Kyrgyz Republic: State Environmental Expertise and Public Environmental Expertise.

The Law of KR "On General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic" sets general requirements on ensuring ecological safety during design and operation of economic and other activities involving production, storage, transportation and utilization of products.

Based on the Law the risk categories for each subproject will be determined to fix arrangements for EIA.

The Law of KR "On Water" regulates relations in management and protection of water resources, prevention of adverse impact of economic and other activities on water bodies and waterworks facilities,

⁴ Dated June 16, 1999 #53 (with amendments and additions dated February 4, 2002 #22; June 11, 2003 # 101; August 11, 2004 # 113; August 6, 2005 # 124; April 27, 2009 # 131).

⁵ Dated June 16, 1999 # 54 (with amendments and additions dated June 11, 2003 # 102; February 26, 2007 # 21)

⁶ Dated May 8, 2009 # 151 (with amendments and additions dated March 6, 2012 # 19)

⁷ Dated January 14, 1994 # 1423- XII

reinforcement of legality in water related relations. This Law regulates the quantity and the quality of waters discharged to nature, prohibits discharge of industrial, domestic and other waste and effluents into water bodies.

The Law of the KR "On Interstate Use of Water Bodies, Water Resources and Water Management Facilities in the Kyrgyz Republic" sets forth principles and main directions of the state policy on interstate use of water bodies, water resources and water management facilities of the Kyrgyz Republic. This is not a direct action law as the law enforcement arrangements are not developed yet.

Over one hundred fifty laws and normative acts on environmental protection can be found at http://www.nature.gov.kg/lawbase/index.htm.

The legislative acts listed above set forth the following key tasks on environment protection relevant to the UDP.

- Obligatory State Environmental Review (expertise);
- Natural resources management standards;
- Protection of atmospheric air, land and water from pollution and exhaustion;
- Improvement of environmental monitoring system;
- Norms of maximum safe levels of noise, vibration and other hazardous physical impacts.

3.2 INSTITUTIONAL FRAMEWORK FOR ENVIRONMENTAL ASSESSMENT AND MANAGEMENT

A range of government departments are responsible for management and protection of environment in the Kyrgyz Republic. The chief agency is the State Agency on Environment Protection and Forestry has the main mandate for implementation of legislation of environmental protection mentioned above.

Major Government Bodies Performing Functions on Environmental Protection

Table 3.2.1

| Agency | Relevant Functions | Source of ecological |
|-------------------------------|----------------------------------|-----------------------------|
| | | information |
| State Agency on Environment | 1) Sets the state policy on | Atmospheric air and climate |
| Protection and Forestry under | environmental protection; | change |
| the Government of the Kyrgyz | 2) Promulgates norms of | Water resources |
| Republic (SAEPF) | quality and standards of | Land resources |
| | environmental protection; | Biodiversity |
| www.nature.kg | 3) Establishes special protected | State Forest Resources |
| | areas; | Wastes |
| | 4) Establishes the | |
| | environmental monitoring | |
| | system; | |
| | 5) Carries out ecological | |
| | review on project design and | |
| | performing economic | |
| | activity. | |

| G | D 6 | D: 1 |
|------------------------------------|--|--------------------------------|
| State Inspectorate on | Performs control functions over | Discharge of hazardous |
| environmental and technical | abidance of users of nature | pollutants |
| information under the | resources by the environmental | Discharge of waste waters |
| Government of the Kyrgyz | protection legislation. | |
| Republic | | |
| www.get1.kg | | D (1 |
| Kyrgyz Complex Hydro- | Collects data related to the | Data on reserves of ground |
| geological Expedition | quantity and quality of ground | waters, mineral resources |
| State Agency for Geology and | waters | and use thereof |
| Mineral Resources | | |
| www.geology.kg/- | D C 1 / 1 1 1 | D: 1: |
| Ministry of Health (MH) | Performs bacteriological and | Drinking water quality |
| Department for Sanitary | chemical monitoring of the | Morbidity rate. |
| Epidemiological Supervision | quality of drinking water | |
| (SES) www.med.kg/ | N | TEL 11 C . 1 |
| Agency for hydrometeorology | Monitors the state of atmospheric | The quality of atmospheric |
| under the Ministry for | air and surface waters | air |
| Emergency Situations of the | | The quality of water |
| Kyrgyz Republic | | resources |
| (Kyrgyzgidromet) | | Wastes (uranium and etc) |
| www.meteo.ktnet.kg | DI : 1: 1 | Hydrological data |
| Department of water | Plans, organizes and implements | Use of water resources, |
| management and melioration | measures for administrative, | including intergovernmental |
| under the Ministry of | economic and normative and | water apportioning |
| Agriculture and Melioration of | legal regulation of water use | |
| the Kyrgyz Republic | during operation of water | |
| | management facilities, protection | |
| www.agroprod.kg/ | of lands of water reserves | |
| | regulates interstate relations related to use of water resources | |
| | | |
| | that form on the territory of the | |
| Variation Chata Dasi and Institute | Kyrgyz Republic | Manitarina of land massages |
| Kyrgyz State Design Institute | It is the state design institute for | Monitoring of land resources |
| for Land Management; | land management under the State | Analysis of soil |
| Kyrgyzgiprozem | Registry. | Planning the use of land |
| | It carries out a complex of land management and cadastre | resources |
| | activities throughout the territory | |
| | of the Kyrgyz Republic | |
| | regardless of organizational and | |
| | legal form of land managing | |
| | entities. | |
| National Academy of Sciences | Carries out scientific works on | Flora, |
| www.nas.aknet.kg/ | scientific, technical and social | Fauna, |
| | progress issues conducive to | Endemics listed in the Red |
| | strengthening of the economic | Book of the Kyrgyz |
| | sovereignty of the country, | Republic Ryigyz |
| | national and universal values, and | |
| | environmental protection | |
| National Statistics Committee | It is the key state information and | Statistics of the condition of |
| of the Kyrgyz Republic | statistical body that organizes and | the environment |
| www.stat.kg/ - (NST) | manages accounting and statistics | |
| | | |
| | throughout the Kyrgyz Republic | |

Key government bodies related to the UDP:

- 1. State Agency on Environment Protection and Forestry carries out state environmental expertise;
- 2. State Inspectorate on environmental and technical information under the Government of the Kyrgyz Republic controls compliance with norms and rules of nature management and protection;
- 3. Kyrgyz Complex Hydro-geological Expedition source of information on reserves of ground waters:
- 4. Department for Sanitary Epidemiological Supervision defining quality characteristics of drinking water;
- 5. Department of Water Management and Melioration use of water resources, including interstate water apportioning issues;
- 6. Agency for hydrometeorology hydrological features of surface waters.

3.3 ENVIRONMENTAL IMPACT ASSESSMENT ARRANGEMENTS AND PARTICIPANTS

EIA is a national procedure of environmental impact assessment when the project initiator determines adverse environmental impacts, ensures public participation, evaluates consequences of such impacts and proposes measures for their mitigation. EIA is carried out for activities subject to obligatory environmental review according to the Law of the Kyrgyz Republic "General Technical Regulations on Ensuring Ecological Safety in the Kyrgyz Republic". The list of such activities is attached as Annex 1.

The EIA algorithm adopted in the Kyrgyz Republic and correlation between environmental protection and engineering stages of project design, implementation and operation are described in Annex 6, which provides a comparative analysis of ecological documents according to requirements on international standards and the national legislation.

This matrix was developed for review and outlining the approach of the ARIS to ensure implementation of prevention and mitigation measures related to distribution, design, construction and management of investments. All projects with potential adverse environmental impact are subject to review of the State Environmental Expertise of the SAEPF and fulfillment of social and environmental requirements stipulated by international and domestic norms is a prerequisite for its positive opinion on the project implementation.

Undoubtedly, there are discrepancies between the international and domestic requirements in terms of approaches, criteria and grounds for conducting EIA. Some of these differences are shown in the following table.

Table 3.3.1 Major differences between the international and the national approaches to EIA

| International Approaches | National Approaches |
|---|--|
| Requirements for compliance of projects with | Requirements for compliance of projects with |
| environmental protection measures are | environmental protection measures are |
| determined by the WB | determined by the government bodies and the |
| | project initiator. |
| Prior to investment stage and initial stage the | EIA is required for any project, regardless of its |
| projects are classified by the degree of | technological complexity, the volume of capital |
| potential environmental impact and the need | investments and degree of environmental |
| for EA/EMP of the proposed project is | impact ⁸ . |

⁸ Simplified EIA arrangements in the form of an Environmental Impact Statement (EIS) are foreseen for facilities with insignificant environmental impact (excerpt from the Regulations on carrying out Environmental Impact Assessment in the Kyrgyz Republic, 2015).

LIST

Of projects with insignificant environmental impact for which filling out an Environmental Impact Statement attached to the working design of the planned activity is sufficient for obtaining the opinion of the state environmental expertise

1. Open air parking lot with parking space for no more than 50 cars and garages with boxes for no more than two cars.

| International Approaches | National Approaches |
|---|---|
| determined. | |
| The international legislative norms do not | The legislative documents on EIA are based on |
| apply the "principle of presumed potential | the "principle of presumed potential |
| environmental hazard" in EA procedure. | environmental hazard" of the proposed |
| | economic or other activity. |
| EA/EMP materials are reviewed by creditors | EIA materials are subject to review of |
| and investors. | government bodies following the two –stage |
| | system. |
| The EA at the prior-to-investment and | The EIA at the prior-to-investment and |
| investment stages is based on requirements to | investment stages the study is based on |
| instrumental monitoring of environment and | calculation methods, scientific analysis, |
| correspondence of findings to the national | comparison with similar projects and forecast |
| environmental protection standards. | evaluations. |
| The environmental risks are evaluated by | The environmental risks are evaluated by |
| creditors, investors, owners and serve as one | government bodies that adopt decision on |
| of the basis for decision making on the | possibility of implementation of the investment |
| investment project. | project of entities of any form of ownership. |
| | |

Actors of the UDP EIA are listed in the following table.

Таблица 3.3.2 Participants of the UDP EIA

| ARIS | Executor of EIA | Mayor's offices of Kerben, Sulukta, Balykchi and Toktogul | SAEPF | The public, public organizations, population |
|--|--|--|--|---|
| It is in charge of project preparation and implementation | It is physical or legal entity selected by the initiator and assigned to carry out the EIA | They inform the stakeholders. Assist in holding public hearings Fulfills terms of the contract | It carries out state environmental expertise of EIA documentation and environmental monitoring. | They participate in consultations conducted under the EIA and receive information on potential adverse impact on the environment and public health. |

This list does not include urban development documentation of housing micro-districts, production and public zones of towns and other settlements as well as projects for planting of greenery (the EIS sample is provided in Annex 2).

^{2.} Design documents for certain housing, public and other non-production facilities that do not have autonomous sources of heat and water supply, waste water treatment facilities and grounds for solid waste, and located beyond the special protection natural areas, state forest reserves, protected water works, recreation areas, and not involving cutting of green plantations.

^{3.} Design documents for production facilities that according to the opinion of sanitary epidemiological service do not require arrangement of sanitary and protection zones, and do not have autonomous sources of heat and water supply, waste water treatment facilities and grounds for solid waste, and located beyond the special protection natural areas, state forest reserves, protected water works, recreation areas, and not involving cutting of green plantations.

4. ENVIRONMENTAL MANAGEMENT PLAN AND MONITORING PLAN

The procedures for development of environmental documents compliant with each project development stage are given in details in Annex 6. ARIS will follow the mechanism of development and execution of environmental documents according to correlative list throughout all UDP development stages in line with the requirements of environmental legislation and the World Bank OP 4.01.

DDEs for all subprojects are believed to require a state environmental appraisal (SEA) under the provisions of the Kyrgyz legislation. ARIS will supervise the quality of sections "Environmental protection" to be drafted by a local consultant subject to subsequent review by the State Agency on Environment Protection and Forestry to obtain a positive opinion under SEA.

An individual (site-specfic) EMP will be produced for each subproject, including detailed sections "Environmental protection" (as needed), a state environmental appraisal, the activities ensuring environmental mitigation measures, institutional framework for preventative arrangements, environmental monitoring program with use of templates (Tables 4.1 and 4.2) based on the summary data given in Table 4.3.An environmental Management Plan (EMP) outlines the mitigation, monitoring and institutional strengthening measures to be taken during project implementation to avoid or eliminate negative environmental impacts. For projects of intermediate environmental risk (Category B) an EMP may be an effective way of summarizing the activities needed to achieve effective mitigation of negative environmental impacts.

The format below provides a model for development of an EMP. The model divides the project cycle into three phases: construction, operation and decommissioning. For each phase, the preparation team identifies any significant environmental impacts that are anticipated based on the analysis done in the context of conducting an environmental review or preparing an environmental assessment (if required). For each impact, mitigation measures are identified and listed. Estimates are made of the cost of mitigation actions broken down by estimates for installation (investment cost) and operation (recurrent cost). The EMP format also provides for the identification of institutional responsibilities for <u>installation</u> and <u>operation</u> of mitigation devices and methods.

To keep track of the requirements, responsibilities and costs for monitoring the implementation of environmental mitigation identified in the analysis included in an environmental review or assessment for Category B projects, **a** monitoring plan should be prepared too. A format is provided below.

Like the EMP the project cycle is broken down into two phases (construction, and operation). The format also includes a row for baseline information that is needed to achieve reliable and credible monitoring. The key elements of the matrix are:

- What is being monitored?
- Where is monitoring done?
- How is the parameter to be monitored to ensure meaningful comparisons?
- When or how frequently is monitoring necessary or most effective?
- Why is the parameter being monitored (what does it tell us about environmental impact)?

In addition to these questions, it is useful to identify the costs associated with monitoring (both investment and recurrent) and the institutional responsibilities. When a monitoring plan is developed and put in place in the context of project implementation, the ARIS will request reports from the contractors at appropriate intervals and include the findings in its periodic reporting to the World Bank and make the findings available to Bank staff in the course of supervision missions.

4.1 TEMPLATE OF ENVIRONMENTAL MANAGEMENT PLAN

| Table 4.1 Environmental Management Plan | | | |
|---|-------------------------------------|--|--|
| | | | |
| | | | |
| | (subproject, location, description) | | |

| Environmental and | Impacts | Proposed mitigation measures ⁹ | Institutional | Cost of | | | |
|-------------------|---------|---|----------------------------------|--|--|--|--|
| Social Elements | impacts | | responsibility for mitigation | mitigation activities ¹⁰ | | | |
| | | Construction period | | | | | |
| | | Physical Environment | | | | | |
| Soils | | | | | | | |
| Water Resources | | | | | | | |
| Air Quality | | | | | | | |
| | | Biological Environment | | | | | |
| | | | | | | | |
| | | | | | | | |
| Fauna and Flora | | | | | | | |

⁹Activities requiring financial expenses are to be included in BoQ.

¹⁰ Cost of mitigation activities is defined by a contractor in relevant items in bidding documents.

| Social Environment | | | | |
|----------------------------|--|------------------------|--|--|
| Aesthetics and Landscape | | | | |
| Human Communities | | | | |
| Historical and Cultural | | | | |
| Sites | | | | |
| Safety and health of staff | | | | |
| and population | | | | |
| | | Operation period | | |
| | | Physical Environment | | |
| Soils | | | | |
| Water Resources | | | | |
| Air Quality | | | | |
| | | Biological environment | | |
| Fauna and Flora | | | | |
| | | Social environment | | |
| Aesthetics and | | | | |
| Landscape | | | | |
| Human Communities | | | | |
| Historical and Cultural | | | | |
| Sites | | | | |
| Safety and health of staff | | | | |
| and population | | | | |

TEMPLATE OF MONITORING PLAN

Table 4.2

Environmental Monitoring Plan

(subproject, location, description) will monitoring of parameter be carried will monitoring of parameter be carried will monitoring of parameter be carried What cost of equipment or expenses of parameter is subject to monitoring? out/type of monitoring equipment Subproject implementation stage contractor required to conduct Institutional responsibility for Date of commencement Date of completion ${\bf Monitoring\ cost}^{11}$ out-frequency monitoring? monitoring When ¥ % out? Construction Operation

¹¹ Activities requiring financial expenses are to be included in BoQ.

SUMMARY DATA ON IMPACT AND MITIGATION MEASURES FOR DEVELOPMENT OF INDIVIDUAL MONITORING PLANS

Table 4.3

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------|--------------------------|------------------------------------|---------------------------------------|---------------|--------------------------------|
| Atmosphere air | Operation of vehicle and | Emissions from machinery | Ensure maintenance and repair of | Contract | 1. Inspection of construction |
| | machinery | fuels. | machinery in compliance with the | organizations | sites is carried out by ARIS |
| | | | requirements of exploitative | | to ensure compliance with |
| | | Dust from machinery. | documents of manufacturing plant. | | EMP. |
| | | Dust from transporting of | Operation of vehicles with defective | | 2. State inspectors of |
| | | granular materials | fuel system exceeding the norms of | | Architecture and |
| | | | toxicity of exhausted gases is not | | construction supervision |
| | | | allowed. | | department (ACSD) will |
| | | | | | supervise fulfillment of |
| | | | Limitation of the speed of vehicles | | design solutions in |
| | | | and selection of relevant | | construction and installation |
| | | | transportation routes for | | works or reconstruction of |
| | | | minimization of impact on the | | facilities, quality of |
| | | | receptors sensitive to dust. | | construction materials, |
| | | | | | structures, and participate in |
| | | | Equipping the machinery | | commissioning of |
| | | | transporting granular materials with | | completed construction |
| | | | removable canvas covers. Supply of | | facilities. |
| | | | cement to construction sites in pre- | | |
| | | | pack hermetic packages. | | 3. State ACSD carrying out |
| | | | | | state environmental |
| | | | It is needed to ensure cleanliness of | | supervision have a right to |
| | | | adjacent area, not allowing | | supervise in established |
| | | | construction waste to minimize | | procedure on presentation |
| | | | dusting and contamination. | | of official identification |
| | Welding, insulation, | Emission of contaminants to | Arrangement of proper storage and | | papers in compliance with |

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------|---------------------------------------|--|--|---------------------------|--|
| | finishing works | atmosphere air | transportation of inflammable and contaminating materials (gas tanks, bitumen materials, paints, solvents, glass, and rockwool). | | environmental provisions, normative quality, environmental protection activities in project |
| | Stone, concrete works | Dusting | Dusting during dismantling works and concrete works should be suppressed by sprinkling. ¹² | | implementation. |
| | Handling operations | Dusting | Dust suppressing through sprinkling. 13 | | |
| | Burning of waste at construction site | Smoke pollution. Emission of toxins in burning. | Burning of construction and domestic waste at working area is prohibited. | | |
| Water resources | Site organization | Impact as a result of leakage of oil products in operating of machinery. | Timely removal of oil products from sites to prevent their spilling thereof to underground waters with precipitation. Machinery wash at the site is prohibited. Daily machinery inspection for oil | Contract organizations | ARIS, ACSD |
| | Operations in river bed | Contamination of water bodies. | leakages. Working areas with machinery, cement mixers, and fuel tanks are located beyond water protection zones. The site will be provided with the measures to prevent bed deposits, | | |

¹³ See reference 10

 $^{^{12}}$ Costs are subject to inclusion in BoQ as part of tender documents, as this position is a financial liability of the Contractor.

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------|-------------------|---|--|------------------------|------------|
| | | | including arrangement of hay blocks and/or silt-setting tanks to prevent waste discharge from facilities and excessive turbidity in springs and rivers located in the vicinity. | | |
| Soil | Site organization | Disturbance of soil and vegetation. Soil consolidation. | Arrange cutting and storage of vegetation to save it for further use. 14 Avoid keeping of non-operating machinery at the working area. | Contract organizations | ARIS, ACSD |
| Flora and fauna | Site organization | Damage and cutting of plantations. Disturbance of habitat. | Relocation and fencing of trees. Required tree cutting is agreed with LSGBs and environmental agencies. 15 All marked environmental zones of habitat and protected areas adjacent to the site should not be affected or used during operations. All workers should be prohibited to hunt, conserve fodder or graze livestock, cut trees, or carry out other activities that might be detrimental to these zones. If there are big trees around working areas, they should be marked wand | Contract organizations | |

¹⁴ See reference 10

¹⁵ See reference 10

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------|--|------------------------------------|---|--|------------|
| | Activity types Site organization construction works | 1 | fenced to protect their root system, not allowing damage thereof. E Ensure transfer of fauna beyond construction site etc. Drive and parking of vehicles, operation of machinery closer than 1 m to tree crowns is prohibited during works. If compliance with the requirements to protection of root system is not possible, special protective cover should be applied. Escalation of ground level at tree trunks should not exceed 0.05 m Prior to commencement of works, means of collection and removal of waste should be applied together with location of main types of waste produced during dismantling and construction works. Mineral waste from construction and dismantling works should be separated from common waste and organic, liquid and chemical waste through sorting and keeping in special containers. | Contract organizations Contract organizations Project initiators | Monitoring |
| | | | All documents on waste removal and disposal should be maintained properly as a proof of appropriate | | |

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------------|---|---|--|---|-----------------|
| Noise | Operation of compressors, hammer drills | Noise causes less focused attention, and increased defaults in performance of works. Noise inhibits central nervous system, causes disbolism, heart diseases, stomach ulcer, hyperpiesis. | management of waste at the site. In all possible cases, contractor should ensure recycling of materials (except for asbestos). Proper collection and removal of construction waste should be undertaking by a contracted utility. As for domestic waste, installation of collection tanks and timely removal of waste should be arranged by local SES agencies. Application of vibrator equipment compliant with standards and vibration- and noise- protection equipment. During operations, covers of engines and generators, air compressors and other driving mechanisms should be closed; equipment should be located at the maximum distance from residential premises. Noise during construction works should be limited in time. | | |
| Historical and cultural sites. | Damage and degradation of site structures | | Consider alternative sites. If works are carried out at the site being a protected historical | Contract organizations Project initiators | Local residents |

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|----------------------------------|-----------------------------|------------------------------------|--|------------------------|------------|
| | | | monument, or works are carried in close proximity to such site or at protected historical site, local authorities should be notified thereof. If needed, respective permission should be requested. Once permission is obtained, works should be carried out in thorough compliance with provisions and norms of local and national legislation. | | |
| | | | Works will be arranged to ensure that all artefacts or other incidental findings detected in excavation and construction works are registered and documented properly, following which officials should be notified on these findings, while all works at site should be suspended or adjusted to avoid damage of the findings. | | |
| Safety of workers and population | General conditions of works | Industrial accidents | Local inspections controlling construction works and environmental safety and local population should be properly notified on forthcoming project works. Local communities will be properly notified on works by means of publications and /or notices in mass media and/or bill boards in public | Contract organizations | ACSD |

| Environmental attributes | Activity types | Main types of environmental impact | Preventive/mitigation measures | Responsible | Monitoring |
|--------------------------|----------------|------------------------------------|--|-------------|------------|
| | | | places (and at work sites). | | |
| | | | All permission required by legislation for use of land plots, natural resources, waste landfill, as well as permissions from sanitary inspection etc. in construction and rehabilitation works at this site, have been obtained. | | |
| | | | All works will be carried out though safe and discipline methods to minimize negative impact from industrial process on population and environment. | | |
| | | | Individual protective means should meet safety standards (obligatory application of helmets, protective face masks, when needed, protective glasses, safety belts and boots). | | |
| | | | Sites will be provided with proper information boards and signs informing the workers about the rules and norms of works to be followed. | | |

4.2 PUBLIC CONSULTATIONS

ARIS should undertake organization and holding of public consultations for groups that may be impacted by subproject before finalization of EMP. These groups are usually represented by those who live near construction site, as well as by representatives of local NGOs, LSGBs and other stakeholders.

Public consultations are planned to be held at national and town levels (in Balykchy, Toktogul, Kerben and Sulyukta) to inform stakeholders on planned socio-economic safety measures and to research public opinion.

During public consultations stakeholders will be given an opportunity to express their views on any environment-related issues that may arise in the course of project implementation. Any reasonable issue raised at public consultation, will be included in EMP. Views of the stakeholders will be taken into account during subproject implementation.

Public consultations usually take the form of meetings which enable the best information exchange: subproject initiators inform local communities on their activities and local communities are able to raise issues that are topical for them.

There are also other acceptable methods that can be used for public opinion research such as questionnaires, live TV programs during which population can call and ask questions, round tables, etc.

Public consultations should be minuted and their results should be recorded in final version of EMP. EMP should be developed for each subproject taking into account its specificity.

EMP, design estimates for subprojects and results of public consultations should be submitted to the local office the State for Environmental Protection and Forestry to carry out project environmental impact assessment. Construction activities under subproject should not be started until the approval by the state ecological expertise is obtained. The approval by the state ecological expertise should be kept with design estimates for subprojects for further surrender to operating entity.

4.3 PUBLIC DECLARATION OF THE RESULTS

ARIS should post EMPs on its website after they are approved by the WB, and send them to relevant LSGBs in order they hang them on the information boards located in public places.

4.4 CONSTRUCTION-RELATED ACTIVITIES UNDER EMP AND RESPONSIBILITY

ARIS is responsible for inclusion of all construction-related activities under EMP in tender documentation package to be provided to construction bidders. One month after the results of tender are made public, EMP, elaborated by a contractor, should be approved and environmental monitoring should be carried out.

4.5 SUPERVISION AND REPORTING

ARIS visits construction sites at least once a quarter in order to supervise fulfillment of EMP during subproject implementation. More visits may be required if any issues are identified. If there are topical environmental issues, ARIS should continue its supervision during facility operation. Site visits are made once a month at the start of a subproject, and if there are no problems identified, number of site visits can be reduced (once a quarter, semi-annually, annually).

Site visit report should be submitted after monitoring is performed. In the event of non-compliance with environmental protection measures, a statement specifying the remedial period for contractor should be drawn up.

«Environmental protection» section will be included in regular subproject progress reports prepared by technical supervision engineers. The section should contain compressed information and briefly describe monitoring activities as well as any arising issues and the ways to address them.

ANNEXES

TYPES OF ECONOMIC ACTIVITIES SUBJECT TO EIA

1. Power engineering facilities:

- 1) central heating and power plants, heat power-stations, hydroelectric power stations;
- 2) industrial installations for production of electricity, steam and hot water;
- 3) gas-, oil-, oil products- and hot water pipelines;
- 4) high-voltage power transmission line;
- 5) warehouses for oil and oil products, gas and solid fuel;
- 6) ash dumps.
- 2. Reservoirs.
- 3. Enterprises engaged in extraction and processing of oil, oil products and gas.
- 4. Production of construction materials (cement, asphalt, asbestos sheeting, asbestoscement pipes).

5. Farming:

- 1) farming intensification projects;
- 2) projects for land property management and reorganization;
- 3) projects for water resources management for farming purposes;
- 4) projects for land reclamation for changing the land use type;
- 5) poultry production units, intensive livestock units and fish farms;
- 6) land improvement projects.

6. Mining industry:

- 1) exploration and actual mining;
- 2) mineral output (carbonate of lime, basalt, salt, sand, gravel, clay, etc.);
- 3) coal miming;
- 4) ore mining;
- 5) ore treatment;
- 6) fabrication of base, rare and precious metals;
- 7) dispose and burial of waste, including hazardous and toxic waste.

7. Metal processing industry:

- 1) machine-building industry;
- 2) manufacturing of semiconducting materials;
- 3) air and railway transport repair services;
- 4) manufacturing of radio- and television equipment;
- 5) foundry and metal-rolling production.

8. Glass production.

9. Production of pharmaceutical drugs, biological and protein substances.

10. Chemical industry.

11. Food industry:

- 1) fats and oils production;
- 2) meat and dairy products production;
- 3) sugar production;
- 4) tobacco production;
- 5) wine, spirits production;
- 6) alcohol production;
- 7) brewing;
- 8) canned food production.

12. Textile, leather and paper making industry:

- 1) primary processing of leather and fur;
- 2) chipboard, board and fiberboard industries;
- 3) leather industry;
- 4) paper making industry;
- 5) dye industry;
- 6) manufacturing of industrial rubber.
- 13. Warehouses for toxic, hazardous and radioactive substances.
- 14. Waste water treatment facilities, stack gas cleaning facilities.

- 15. water intake systems for ground water.
- 16. water supply systems in residential areas, hydro land reclaiming systems.
- 17. Construction of motor-roads and railways.
- 18. Airports, fly ground, testing ground, inland ports, motordrome.
- 19. Construction of leisure and tourist facilities.
- 20. Arranging of industrial hub.
- 21. Waste water network.
- 22. Mountain lifts and ski passes.
- 23. Disposal, recycling and burial of industrial and consumer waste.
- 24. Refuelling stations.
- 25. Motor vehicle service and presale preparation stations.

ENVIRONMENTAL IMPACT STATEMENT

| (facility) |
|---|
| Information about project initiator (postal address, telephone number, fax, e-mail) |
| Financing sources: government budget, private/foreign investments, etc.) |
| Location of facility (oblast, raion, residential area or the distance to and direction of the nearest residential area) |
| Overall work duration |
| (Years, months) |
| Project documents |
| (feasibility study, feasibility analysis, design, working project, layout plan, etc.) |
| Design institute (main contractor) |
| Design institutes (sub-contractors) |
| Project chief engineer |
| (Full name) |
| Environmental Specialist |
| (Full name) |

CONDITIONS OF NATURAL RESOURCE USE AND POTENTIAL ENVIRONMENTAL IMPACT OF PROJECTED ACTIVITIES

OPEN AIR

| 1. List of main components in emission | |
|---|--|
| 2. Assumed volume of emission by components (g/sec, t/years) | |
| 3. Assumed ground level concentration of hazardous substances at the | |
| boundary of sanitary protection zone (MPC) | |
| | |
| WATER BODIES | |
| 1. Water supply sources: | |
| For housekeeping and drinking needs | |
| For industrial needs | |
| 2. Water intake (m3/year): | |
| For housekeeping and drinking needs | |
| For industrial needs | |
| 3. Total volume of waste water (m3/year): | |
| domestic water | |
| Industrial water | |
| 4. Volume of disposed waste water (m3/year): | |
| Into existing sewerage network | |
| Into natural water bodies, cesspools, sewage ponds and to ground surface | |
| | |
| 6. Concentration of main contaminants in monitoring section by | |
| components (when disposing waste water into water bodies, to ground | |
| surface) (mg/l): | |
| | |
| LAND | |
| 1. Characteristics and categories of alienated land | |
| 2. Area (ha): | |
| For sustained use by categories: | |
| For temporary use: | |
| Land aquisition: | |
| 3. Land that requires reclamation (ha): | |
| Way of reclamation: | |
| Total cost of reclamation (thousands KGS): | |
| VEGETATION | |
| 1. Types and amount of vegetation exposed to partial or full cutting in the | |
| course of projected activities: | |
| Of which, are listed or subject to be listed in Red Book of the Kyrgyz | |
| Republic: | |
| 2. Area of planned cutting: | |

| WILDLIFE | |
|---|--|
| 1. Sources of direct impact to wildlife including aquatic wildlife: | |
| 2. Presence of migration paths, settlements, nesting and wintering areas on | |
| site | |
| NATURAL AREA OF PREFERENTIAL PROTECTION | |
| 1. Presence of natural area of preferential protection on site (licensed area) | |
| or nearby (less than 5 km away from site): | |
| 2. Assessment of impact made by projected activities on environment and | |
| socio-economic conditions of population life: | |
| Obligation of project initiator for adhering to environmental requirements, environmental standards and norms in the course of construction, operation and closing down of an environmental requirements. | |
| | |
| | |
| | |
| | |
| | |
| (Signature) Full name | |

SAFEGUARDS POLICY OF THE WORLD BANK

For the full text of OP WB safeguard policies and relevant operating procedures in Russian and English, please refer to the links in the end of this Annex.

Below are the key extracts from OP that give the idea of preventive mechanisms of the World Bank and help to understand and analyze information on environmental, social and legal policies.

OP 4.01 Environmental Assessment

EA is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project's potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation.

EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); and trans boundary and global environmental aspects.

EA considers natural and social aspects in an integrated way. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project

OP 4.04 Natural habitats

The Bank promotes and supports natural habitat conservation and improved land use by financing projects designed for environmental conservation. The Bank promotes the rehabilitation of degraded natural habitats and does not support projects that involve the significant conversion or degradation of critical natural habitats.

OP 4.09 Pest Management

In assisting borrowers to manage pests that affect either agriculture or public health, the Bank supports a strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides.

The Bank requires that any pesticides it finances be manufactured, packaged, labeled, handled, stored, disposed of, and applied according to standards acceptable to the Bank. The FAO's Guidelines for Packaging and Storage of Pesticides (Rome, 1985), Guidelines on Good Labeling Practice for Pesticides (Rome, 1985), and Guidelines for the Disposal of Waste Pesticide and Pesticide Containers on the Farm (Rome, 1985) are used as minimum standards.

OP 4.11 Physical Cultural Resources

This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources include everything that remained after ancient inhabitants (holy places and battlefields) and also unique natural sites such as waterfalls and canyons.

The Bank does not support projects threatening cultural resources that are property of population. The Bank supports only those projects that are located or designed in such a way as to prevent damage to the environment.

OP 4.36 Forests

Management, protection and sustainable development of forest ecosystem and its resources are necessary for reducing poverty and sustainable development.

The Bank does not finance plantations that involve any conversion or degradation of critical natural habitats due to potential risk to biodiversity.

The Bank may finance harvesting operations conducted by small-scale landholders, by local communities under community forest management, or by such entities under joint forest management arrangements, if these operations:

- (a) have achieved a standard of forest management developed with the meaningful participation of locally affected communities, consistent with the principles and criteria of responsible forest management; or
- (b) adhere to a time-bound phased action plan14 to achieve such a standard. The action plan must be developed with the meaningful participation of locally-affected communities and be acceptable to the Bank.

OP 4.37 Safety of dams

The Bank distinguishes between small and large dams. Small dams are normally less than 15 meters in height. This category includes, for example, farm ponds, local silt retention dams, and low embankment tanks. For small dams, generic dam safety measures designed by qualified engineers are usually adequate.

OP 7.50 Projects on international waterways

This policy applies to the following types of international waterways: (a) any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states; (b) any tributary or other body of surface water that is a component of any waterway described in (a) above.

This policy applies to the following types of projects: hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways as described above.

If ARIS implements any project that relates to this category, it should familiarize itself with OP 7.50 and strictly adhere to the procedures therein.

OP 7.60 Projects in disputed areas

Projects in disputed areas may raise a number of delicate problems affecting relations not only between the Bank and its member countries, but also between the country in which the project is carried out and one or more neighboring countries. In order not to prejudice the position of either the Bank or the countries concerned, any dispute over an area in which a proposed project is located is dealt with at the earliest possible stage.

Document references to OP WB, Procedures for Environmental Assessment of WB and Environmental Protection Policy of WB are presented below.

OP 4.01 Environmental assessment

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/9367A2A9D9DAEED38}{525672C007D0972?OpenDocument}$

BP 4.01 Environmental assessment

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/C4241D657823FD81852}{5672C007D096E?OpenDocument}$

OP 4.04 Natural environment

http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/71432937FA0B753F8525672C007D07AA?OpenDocument

BP 4.04 Natural environment

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/62B0042EF3FBA64D85}{25672C007D0773?OpenDocument}$

OP 4.09 Pest control

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/665DA6CA8479821685}{25672C007D07A3?OpenDocument}$

OP 4.11 Physical Cultural Resources

 $\underline{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/55FA484A98BC2E6885}\\2567CC005BCBDB?OpenDocument$

OP 4.12 Involuntary resettlement

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/CA2D01A4D1BDF5808}{5256B19008197F6?OpenDocument}$

BP 4.12 Involuntary Resettlement

http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/19036F316CAFA52685256B190080B90A?OpenDocument

OP 4.20 Indigenous population

 $\underline{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/0F7D6F3F04DD703985}\\25672C007D08ED?OpenDocument$

OP 4.36 Forests

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/C972D5438F4D1FB785}{25672C007D077A?OpenDocument}$

BP 4.36 Forests

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/0AE075DC916559D985}{256C79000BDEF0?OpenDocument}$

OP 4.37 Safety of dams

http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/C12766B6C9D109548525672C007D07B9?OpenDocument

BP 4.37 Safety of dams

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/D3448207C94C9262852}{5672C007D0733?OpenDocument}$

OP 7.50 Projects on international waterways

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/5F511C57E7F3A3DD85}{25672C007D07A2?OpenDocument}$

BP 7.50 Projects on international waterways

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/47D35C1186367F33852}{5672C007D07AE?OpenDocument}$

OP 7.60 Projects in disputed areas

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/72CC6840FC533D50852}{5672C007D076B?OpenDocument}$

BP 7.60 Projects in disputed areas

 $\frac{http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/5DB8B30312AD331085}{25672C007D0788?OpenDocument}$

INFORMATION

ON PRINCIPAL PROVISIONS FOR WATER RELATIONS OF THE KYRGYZ REPUBLIC WITH THE REPUBLIC OF UZBEKISTAN

The regional legal framework of water relations with Uzbekistan includes the following intergovernmental agreements:

- 1. Agreement between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on use of fuel and energy and water resources, construction and operation of gas pipes in the Central Asian Region dated 5.04.1996;
- 2. Agreement between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on use water energy resources of the basin of the Syrdaria River dated 17.03.1998;
- 3. Agreement between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on cooperation in environmental protection and conservancy dated 17.03.1998;
- 4. Protocol of intentions between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on use water energy resources of the Naryn-Syrdaria reservoir cascade in 2001;
- 5. Agreement between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on cooperation in hydrometeorology (17 June 1999);
- 6. Agreement between the Governments of the Republics of Kazakhstan, Kyrgyzstan and Uzbekistan on parallel operation of energy systems of the governments of the Central Asia (Bishkek, 17 June 1999).

The KR legal framework of intergovernmental water management policy is as follows:

1. Constitution dated 27 June 2010, (extract from para 3 Article 6):

Agreements effective in the established legal procedure, involving the Kyrgyz Republic and generally recognized principles and norms of international law, are a constituent part of the KR legal system.

2. Water Code dated 21 January 2005 No. 67 (Article 98):

The matters on intergovernmental use of water bodies, water resources and water facilities in the Kyrgyz Republic are regulated by the Constitution of the Kyrgyz Republic, laws of the Kyrgyz Republic, international agreements of the Kyrgyz Republic as well as by generally recognized norms of international law.

3. Law "On intergovernmental use of water bodies, water resources and wate4r facilities in the Kyrgyz Republic" dated 23 July 2001, No. 76 (extract from Article 3):

- recognition of the government's right on water bodies, water resources and water facilities within their territorial boundaries;
- acknowledgement that water is a natural resource having its economic value with all its competitive types, being a subject of sale;
- imposition of charges for water use in intergovernmental water relations;
- implementation of intergovernmental use of water resources in the Kyrgyz Republic based on two or more agreements and contracts concluded between interested countries and ratified according to the norms of legislation of parties concerned;
- intergovernmental agreements and contracts envisage achievement of mutual economic benefit on a fair and equitable basis in use of water resources in the Kyrgyz Republic;
- intergovernmental agreements and contracts envisage addressing the matters on supply of river water, imposition of charges for use and distribution of benefits from use of water reservoirs and other irrigation facilities of the Kyrgyz Republic by other countries;

- establishment of the procedures and amounts of settlement payments in paid intergovernmental use of water resources in the Kyrgyz Republic based on the norms agreed by parties, taking into account the level of world market prices and consumers demand for water resources;
- right of the Kyrgyz Republic, regulating the out flow of its rivers and water supply to water-use countries, on share compensation of the damage and costs of construction and operation of intergovernmental significance structures by neighboring water-use countries;
- enforcement of relations with foreign partners in implementation of intergovernmental acquicultural agreements and projects on a market economic basis;
- cooperation of the Kyrgyz Republic with neighboring interested countries in development, investment and participatory implementation of the programs and projects for preservation, protection and development of complex use of water resources, water bodies and adjacent lands;
- cooperation with foreign partners in developing and integrating of technical means and technologies ensuring thrifty use of water resources.

4. Articles 57 and 58 of Section 11 of the Law "On environmental protection" (extract):

- environmental well-being of a country cannot be ensured at the expense of other countries or without considering their interests;
- if an international agreement, of which the Kyrgyz Republic is a participant, establishes the rules different from those set forth in legislation of the Kyrgyz republic on environmental protection, international agreements should be applied.

5. President's Decree dated 6.10.1997 "On basics of external policy of the Kyrgyz Republic in use of river water resources formed in Kyrgyzstan and flowing to the territories of neighboring countries" (extract):

"To address the matters on participatory water use there is a need to facilitate development of a new water apportioning strategy and economic levers in management of protection and use of water and energy resources... Fulfillment of these complex tasks is possible only based on fair regard to the interests of both the Kyrgyz Republic and other interested countries through subsequent negotiations and relevant intergovernmental agreements, considering the features of water use for each river outflowing beyond the Kyrgyz Republic".

However implementation of the above provisions of the Constitution, Laws and Agreements in the current practice of intergovernmental water relations encounters a number of complications due to impersonal contradictions in national interests within the countries of the Central Asian Region (CAR).

The laws enacted in KR embarrass formation of a regional legal framework for water relations, since the basic normative documents are based on the right of state ownership of all water bodies and resources available and formed in the country as well as on imposing of charges for use of those

The above International Agreements are the framework-type normative legal acts establishing principle cooperation trends, not regulating implementation arrangements or certain indicators.

In this regard, intergovernmental water apportioning continues to be fulfilled with reservation of priorities "of current water use", i.e. in compliance with the norms of international law set forth in other agreements and contracts known as the principle of "historic precedent", i.e. following the quotes for intergovernmental water apportioning established by the Ministry of Water Resources of the USSR in 1980-s.

Moreover, each country reserves a right on in-country water use within an agreed quote; however adequate satisfaction of drinking and domestic needs is recognized as a priority factor.

Therefore, apportioning of outflow of the Padysha-Ata River¹⁶ between KR and Uzbekistan, where construction of a water intake for Kerben Town is planned under the Urban Development Project (UDP), is fulfilled according to the *Protocol on intergovernmental apportioning of the outflow of*

39

small rivers in the Fergana Valley dated 10 April 1980 (Annex 1). It indicates that the water limit for this river is set as 36% of annual outflow.

The institutional body responsible for fulfillment of the Protocol conditions is the Department for Water Management and Land Reclamation (DWMLR) (4-a, Toktonaliev st., Bishkek; tel: +996 312 54 -11-74) and its territorial bodies. Their activity is focused on planning, arrangement and implementation of the measures for administrative, environmental and normative and legal regulation of water use in operating of waterworks facilities, protection of lands of inventory of water resources as well as on regulating intergovernmental water relations in use of water resources formed in KR.

To identify the opportunities regarding the limits of KR, construction of water intake from the Padysha-Ata River for potable and domestic purposes in Kerben Town, ARIS has sent the requests to the authorized parties, particularly to the municipality of Kerben Town, State Agency for Environmental Protection and Forestry under the Government of KR (SAEPF) and territorial bodies of DWMLR.

The above institutions provided responds to the requests (see attached documents No. 1 and 2).

Annexes

- 1. Extract from the *Protocol on intergovernmental apportioning of the outflow of small rivers in the Fergana Valley* dated 10 April 1980;
- 2. ARIS' request to the municipality of Kerben Town and the respond from the Aksy raion administration of irrigation systems of DWMLR;
- 3. Request to and respond from SAEPF;
- 4. Map of water flow route of the Padysha-Ata River and proposed project implementation location.

Supplement 1 to Annex 4

Annex 1 to the Protocol dated 10.04.80

Protocol on intergovernmental apportioning of the outflow of small rivers in the Fergana Valley between the Uzbek SSR and Kyrgyz SSR for irrigation (mln m3)

| No. | River, Canal | 90% flow | Amount | Out of which | |
|-----|--|----------|---|---------------------------|-------------------------|
| | | feed | of water resources used for irrigation | Share of the Uzbek SSR | Share of the Kyrgyz SSR |
| 1 | Karadaria systems of the right bank of the Karadaria River | | 193 | - | 193 |
| 2 | Savai Canal | | 227 | 183 | 44 |
| 3 | K.F.KH | | 800 | 768 | 32 |
| 4 | Akbura | 521 | 426 | 76 | 350 |
| 5 | Aravansai | 154 | 137 | 32 | 105 |
| 6 | Isfairamsai | 566 | 448 | 312 | 136 |
| 7 | Bakhimardansai | 275 | 186 | 136 | 50 |
| 8 | Sokh | 1140 | 1079 | 988 | 91 |
| 9 | Isfara | 375 | 32317 | 27 | 120 |
| 10 | Mallisai | 158 | 66 | 12 | 54 |

¹⁷ Including 176 mln m3 for irrigation needs in the Tajik SSR

_

| 11 | Padshaata with | 322 | 241 | 155 | 86 |
|----|----------------|-----|-----|-----|----|
| | Chartaksai | | | | |
| 12 | Kassansai | 284 | 235 | 216 | 19 |

Annex 2 to the Protocol dated 10.04.80

Percent apportioning of water resources of the rivers of the Fergana Valley for irrigation (%)

| No. | River, canal | Share of the Uzbek SSR | Share of the Kyrgyz SSR |
|-----|-----------------------------|------------------------|-------------------------|
| 1 | Akbura | 18 | 82 |
| 2 | Aravansai | 23 | 77 |
| 3 | Isfairamsai | 70 | 30 |
| 4 | Shakhimardan | 73 | 27 |
| 5 | Sokh | 90 | 10 |
| 6 | Isfara ¹⁸ | 8 | 37 |
| 7 | Mailisai | 18 | 82 |
| 8 | Padshaata with Chartaksai | 64 | 36 |
| 9 | Kassansai (without inflows) | 92 | 8 |

Including 55% of inflow for the Tajik SSR.

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 $^{^{\}rm 18}$ Including 55% of inflow for the Tajik SSR.

Supplement 2 to Annex 4

№ 08-434

23 June 2015

To Apsamatov A.R., Mayor of Kerben

Dear Abdumalik Rysbekovich,

As you know, ARIS is currently preparing Urban Development Project (UDP) that aims at improved access to and quality of municipal services. Construction of water intake in Kerben under UDP is being negotiated.

On 12 June 2015 during the meeting of municipality staff, the representatives of the World bank (WB) and ARIS, it was said that approximate need of population for drinking water and water for household and practical needs is 52 l/sec or about 1 250 thousand m3/year. Water is taken from trans boundary river Padysh-Ata, recourses of which are distributed in accordance to the relevant basin plan and obligation of the Kyrgyz Republic under existing international law, provided for by the Protocol for inter-republic distribution of small rivers flow in Fergana Valley dated 10 April 1980.

In view of the above, please confirm the volume of water needed for drinking and household purposes, based on estimates in urban development master plan and provide ARIS with written permission of relevant authority of the Kyrgyz Republic to deliver necessary volume of water without loss of Padysh-Ata river flow by Uzbekistan, i.e. using water resources in the Kyrgyz Republic.

Best regards,

Umetov B.U.

To: BOUIP Coordinator

Umetov B.

30 June 2015

Referring to your letter dated 23 June 2015 No. 08-434, municipality of Kerben Town, Aksy Raion notifies as follows:

Based on your letter, a request was sent to the raion irrigation system administration. The respond to the request is as follows:

Water resources of the Padysha-Ata River are apportioned according to the Protocol on intergovernmental apportioning of the outflow of small rivers in the ratio of 36% for Kyrgyz Republic, and 64% for the Uzbek Republic.

Potable water supply in Kerben Town (need in 250-300 l/s) will be apportioned within KR's limits.

A. Apsamatov Kerben Mayor

Supplement 3 to Annex 4

To: S. Atajanov

Director of the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic

Dear Sabir,

The Community Development and Investment Agency (ARIS) under the Urban Development Project (UDP) financed by the World Bank is processing preparation of construction of a new water intake for potable and domestic water supply in Kerben Town.

Tentative amount of water intake of 90 l/s is planned to be obtained from the trans-boundary Padysha-Ata River, water resources of which are apportioned between the Kyrgyz and Uzbek Republics (36/64% ratio) respectively. This obligation of the Kyrgyz Republic under the international law is envisaged in Protocol on intergovernmental apportioning of the outflow of small rivers in the Fergana Valley dated 10 April 1980.

In view of the above, I am kindly asking you to provide clarifications regarding: if it is needed to carry out procedures of notification of the Uzbek Republic according to the requirements set forth in the Convention dated 25 February 1991 "On the environmental impact assessment in trans-border areas".

Thank you in advance. I hope for fruitful cooperation.

Regards,

K. Ismailov

ARIS Executive Director

To: The Community Development and Investment Agency (ARIS)

The State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic (the Agency), having viewed your request regarding the environmental impact assessment in the Uzbek Republic, notifies as follows:

The UN Convention "On the environmental impact assessment in trans-border areas" imposes obligations on the Parties regarding environmental impact assessment at early planning stages. The Convention includes general obligations for the governments to notify and consult each other in considering all larger projects that might have a considerable impact on the environment beyond national boundaries.

Starting from 12 January 2001, the Kyrgyz Republic acts as a Party under the Convention.

It is only the Kazakh Republic that ratified the Convention among other countries neighboring to Kyrgyzstan.

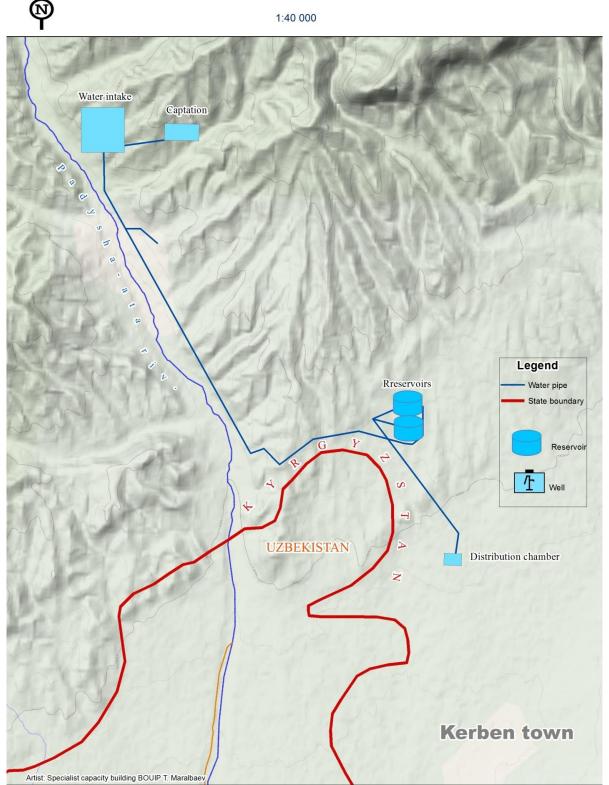
A country, not being a party under the Convention, have no obligations to make decisions on performance of the intended activities at its territory.

In view of the above, the Agency is notifying that according to the provisions of the Convention, there is no need to conduct procedures on assessment of environmental impact with the Uzbek Republic as part of construction of a water intake for potable and domestic water supply in Kerben Town.

S. Atadjanov,

Director

Map
Route of the Padysha-Ata River and proposed location for project implementation
Kerben town



ANNEX 5

THE PROBLEM OF THE USE OF ASBESTOS

As asbestos is often used in construction (mainly for roofing) in the Kyrgyz Republic, it can present a risk for the health of workers and population, who live near buildings that need capital repair with replacement of roofing or demolition. Asbestos is extremely dangerous when inhaled.

In this regards, asbestos should be properly removed, stored in a separate closed area and disposed (with the consent of local administration and environmental inspectors) on a landfill on the special area for disposal of that type of waste.

ARIS specialists should inform beneficiaries on potential risk for their health and recommend not using asbestos as construction material during construction/rehabilitation works.

During reconstruction works, workers should avoid destroying asbestos sheets and properly dispose them at construction sites until final disposal happens. Workers should wear protective over garment, gloves and respirators during work with asbestos sheets.

CORRELATION BETWEEN ENVIRONMENTAL AND ENGINEERING PROJECT STAGES (DESIGN, IMPLEMENTATION AND OPERATION) COMPARISON BETWEEN THE STATE EIA PROCEDURES AND OP 4.01 WB PROCEDURES

| No | Environmental documents in accordance with the international requirements | № | Environmental documents in accordance with the state requirements |
|-----------------------------------|--|-----------------------------------|---|
| 1. | Pre- investment stage. Feasibility study | 4. | Pre - design stage |
| Materials on environmental impact | WB evaluates the need for feasibility study, as well as its scope and mechanisms of implementation depending on the type, location, sensitivity, scale and potential environmental impact of project. | Materials on environmental impact | Preliminary environmental decision of the local office of the State Agency for Environmental Protection and Forestry at the stage of site selection or/and preparation of APS/EPS. |
| 2. | Investment stage | 5. | Investment stage |
| 2.1. | Preliminary engineering | 5.1. | Justification of investments |
| With regard to | Requirements for stages 2.1 and 2.2 documents are set out | With regard to | Project initiator decides on carrying out EIA, including |
| EIA | in accordance with the recommendations of the WB, and based on belonging of a planned facility to a particular category (A, B, C or Financial Intermediary category) and significance of environmental impact: - category A (major industrial facilities, ports, dikes, power stations, irrigation systems, etc.) needs a comprehensive feasibility study, as impacts can be various and quite serious; - category B (agricultural enterprises, power transmission lines, water supply and sewerage systems in rural area, irrigation systems) includes projects, which have completely local impact. This category needs condensed feasibility study or/and EMP; - category C (education projects, health care projects, | EIA | the possibility for trans-border impact: - comprehensive EIA should be implemented for activities under category I danger and for facilities carrying potential significant trans-border impact; - condensed EIA should be implemented for activities under categories II, III danger and recorded as Environmental Protection section in working design; - Environmental impact statement (EIS) should be prepared as a part of working design for facilities that carry minor environmental impact (see footnote 9). |

| No | Environmental documents in accordance with the international requirements | Nº | Environmental documents in accordance with the state requirements |
|-----------------------|--|-----------------------|---|
| | food projects, family planning projects, etc) do not necessarily need feasibility study, as environment impact will be hardly significant; - Financial Intermediary category includes investing WB funds through intermediary in projects that may carry adverse environmental impact. | | |
| 2.2. | Basic engineering | 5.2. | «Feasibility study» (Project to be approved) |
| With regard to EIA | Preliminary environmental assessment for feasibility study. Should be approved by WB. | With regard to EIA | Preliminary EIA is implemented in parallel with feasibility study and for the purposes of analysis of potential project implementation impact, assessment of alternatives, and elaboration of EMP. Findings of preliminary project impact assessment are recorded as EIA report. State Environmental Review should be carried out. |
| 2.3. | Detailed engineering | 5.3. | «Working documentation» |
| With regard to EIA | EA/EMP should be approved by WB. | With regard to EIA | Environmental Protection section or Environmental impact statement as a part of design estimates should be prepared, environmental review should be carried out. |
| 2.4. | Feasibility report | 5.4. | «Tender procedures» |
| With regard to EIA | Incorporation of series of mitigation measures, environmental monitoring arrangements and institutional responsibility arrangements in general project implementation plans. EMP should be included in tender documents to ensure financing of and supervision over other components of project. | With regard to EIA | Approximate estimates of environmental costs should be included in bill of quantities (BQ) in tender documentation. |
| 2.5. | Order for equipment. Delivery and construction. | 5.5. | Order for equipment. Delivery and construction. |
| With regard to EIA | Social and environmental monitoring. | With regard to EIA | Social and environmental monitoring. |
| 2.6. | Acceptance, start-up work, commissioning. | 5.6. | Acceptance, start-up work, commissioning. |
| 3. | Operational stage | 6. | Operational stage |

| № | Environmental documents in accordance with the international requirements | Nº | Environmental documents in accordance with the state requirements |
|-----------------------|---|-----------------------|---|
| With regard to EIA | Simultaneous operations monitoring and environmental monitoring should carried out at stages 3.1 and 3.2 | With regard to EIA | Simultaneous operations monitoring and environmental monitoring should carried out at stages 6.1 and 6.2 |
| 3.1. | Application of designed output. | 6.1 | Application of designed output. |
| 3.2. | Adaptation of facility to market conditions. | 6.2. | Adaptation of facility to market conditions. |
| 3.3. | Ensuring project economic indicators. | 6.3. | Ensuring project economic indicators. |
| With regard to EIA | Environmental audit that should be carried out one year after project commencement to confirm that facility does not carry environmental risks, as well as adjustment of environmental protection measures. | With regard to EIA | Post project analysis that should be carried out one year after project commencement to confirm that facility does not carry environmental risks, as well as adjustment of environmental protection measures. |

INFORMATION ON PUBLIC HEARINGS ON DISCUSSION OF ENVIRONMENTAL MANAGEMENT PLAN (EMP) AND RESETLLEMENT POLICY FRAMEWORK (RPF) UNDER UDP

PROGRAM OF PUBLIC HEARINGS

Goal: Informing population on social and environmental safety of planned construction /rehabilitation social and economic infrastructure facilities in Kerben and Sulyukta under Urban Development Project.

Venue:

Date and time of the public hearings:

| Registration of participants | Meerim Kerimbekova – Project Assistant | |
|---|--|--|
| Opening of the public hearings | Balbak Umetov – Project Coordinator | |
| Presentation of UDP concept | Balbak Umetov – Project Coordinator | |
| Presentation of Environmental Management Plan (EMP) and Resettlement Policy Framework (RPF) under UDP | Elena Kutmanova– ARIS Safeguards Specialist | |
| Discussion of presentation, questions and answers, public speaking, closing remark and closing of public hearings | | |



INVITATION

| Dear |
|--|
| We invite you to participate in public hearings on social and environmental safety of planned construction /rehabilitation social and economic infrastructure facilities in Kerben, Sulyukta, Balykchy and Toktogul under Urban Development Project. |
| Public hearings will be conducted on 2015 at |
| at o'clock, registration of participants starts at o'clock. |
| We request to confirm your participation on the phone or via e-mail |

Minutes

Public hearings to inform Kerben residents

on social and environmental safety of the intended construction of water supply system under the Urban Development Project (UDP) implemented by ARIS

Objective: inform Kerben residents on social and environmental safety of the intended construction of water supply system

Venue: Conference hall at Kerben municipality

Date and time: 14 October 2015, 10 am

Mr. Myrzamamytov Kapar, the vice mayor of Kerben, opened the hearings. He introduced ARIS staf and greeted the participants.

Mr. Umetov Balbak (Project Coordinator), Mrs. Kutmanova Elena (Safeguards specialist) Mr. Chubak Chynaliev (Community investment specialist) delivered their presentations on "UDP concept", UDP Environmental Management Plans and Resettlement Policy Framework", "Role of communities in improvement of water supply services and tariff policy".

The following questions were asked further:

1. What year will the construction be completed? (Barpiev A., Taza-Suu engineer)

Answer: Project duration is up to 2020

2. Does the project envisage review the salaries for SES staff carrying out analysis for residual chlorine? (Chiletova B., SES medical adviser)

Answer: the Project won't cover the salaries for SES staff.

3. Will local employees be hired in construction of the facility? (Abylkasymov B., Head of Jetigen Territorial Administration)

Answer: Local employees will be hired at the discretion of contractors that will be undertaking civil and commissioning works.

4. Due to the absence of construction equipment at Vodokanal, how the construction will be carried out? (Saparov O., Vodokanal engineer)

Answer: Contractors will provide the equipment

5. Does the project envisage construction of sewage or urban waste water treatment facilities? (Chiletova B., SES medical adviser)

Answer: the Project covers construction of water supply system only.

The sewage won't be covered due to limited funds.

6. Will household connections be arranged out of the expense of residnets' of community funds? (Aitmyrzaev N. Deputy of City Kenesh)

Answer: household connections will be financed by residents.

Proposal: Residents would like the Project to cover the entire town and deliver uninterrupted potable water supply to the residents. (Kydyev B., Kerben resident).

DECISION

The hearings participants support the Urban Development Project implemented by ARIS and confirms that Kerben residents will and are ready for implementation of the Project.

Chairperson of the hearings: Myrzamamytov K. (signature endorsed)

Secretary: Tursunbaeva G. (signature endorsed)

Participants of public hearings on community awareness on UDP

14 October 2015, Kerben

| No. | Name | Organization and position | Signature |
|-----|-----------------|---|-------------------------|
| 1 | Tursunbaeva G. | Taza-Suu | All signatures endorsed |
| 2 | Mambetalieva M. | Taza-Suu | |
| 3 | Ibraimova J. | Taza-Suu | |
| 4 | Suelova G. | Taza-Suu | |
| 5 | Niyazbekova B. | Taza-Suu | |
| 6 | Izrailova M. | Taza-Suu | |
| 7 | Kojomuratov A. | Business owner | |
| 8 | Kochkorov K. | Taza-Suu | |
| 9 | Barpaev A. | Taza-Suu | |
| 10 | Satybaldiev A. | Taza-Suu | |
| 11 | Chiletova B. | SES, medical adviser | |
| 12 | Torobekov K. | Kerben municipality, aiyl head | |
| 13 | Asanov A. | Kerben municipality, aiyl head | |
| 14 | Abylgaliev B. | Kerben municipality, aiyl head | |
| 15 | Toktonazarov S. | Kerben municipality, aiyl head | |
| 16 | Alibekov A. | unemployed | |
| 17 | Kyzyev B. | Kerben municipality, aiyl head | |
| 18 | Usubaliev E. | Kerben municipality, aiyl head | |
| 19 | Mamtashev Sh. | Kerben municipality, aiyl head | |
| 20 | Alamatov B. | Kerben municipality, environmental specialist | |
| 21 | Turgunbaev K. | Kerben municipality, specialist | |
| 22 | Ajybaev T. | | |

| 23 | Amanbaev A. | Taza-Suu | |
|----|-----------------|---------------------------------|--|
| 24 | Saparov O. | Taza-Suu | |
| 25 | Bekmyrzaev B. | Kerben municipality, aiyl head | |
| 26 | Turdalieva R. | "Kelechek" foundation | |
| 27 | Tursunbaeva G. | Kerben municipality, secretary | |
| 28 | Bostonov K. | Kerben Kenesh deputy | |
| 29 | Myrzamamytov K. | Kerben Vice Mayor | |
| 30 | Myrzamamytov Z. | Kerben municipality, specialist | |
| 31 | Aitmyrzaev N. | Kerben Kenesh deputy | |
| 32 | Mamyrov E. | driver | |
| 33 | Sehralieva J. | Kerben municipality, specialist | |
| 34 | Jalkylbaeva T. | housewife | |
| 35 | Tursunbev A. | Kerben resident | |
| 36 | Abdybalieva A. | Kerben resident | |
| 37 | Kadyrov M. | Physician at municipal hospital | |
| 38 | Umetov B. | UDP Coordinator | |
| 39 | Kutmanova E. | ARIS specialist | |
| 40 | Chynaliev Ch. | ARIS specialist | |







Minutes

Public hearings on discussion of Environmental Management Plan (EMP) and Resettlement Policy Framework (RPF) as part of the Urban Development Project

Venue and date: Sulukta municipality, 20 October, 2 p.m.

Participants: 48 (list is attached)

Mr. Ibragimov A., Sulukta Mayor, opened the meeting. He greeted the residents and introduced ARIS staff (B. Umetov, UDP Coordinator, Ch. Chynaliev, Community investment specialist, Kutmanova E., Safeguards specialist).

Reporters: *Umetov B.*: presented a concept, implementation timeline, and objective of the Project

Kutmanova E.: delivered a presentation on social and environmental safety measures envisaged in the project. She provided details on environmental safety and 4.12 WB "Involuntary Resettlement" Policy.

Chynaliev Ch.: informed on the role of community in improvement of water supply services and tariff policy.

Question: Mamatov N., Leading specialist of City Council.

Will the water supply system be inspected for leakages and breakdowns before project commencement; will the leakages and breakdowns be repaired during project implementation?

Answer: *Umetov B.:* the project envisages all the activities and measure to repair leakages, breakdowns etc.; those will be reflected in DDEs.

Question: Iskanov M., SES Senior physician.

Does the Project envisage disinfection of potable water?

Answer: *Umetov B.:* Water disinfection is envisaged as an obligation. Without disinfection, the project will not be able to undergo expertise or be implemented.

Question: Karimov A.: Manager of municipality office.

If water meters are installed, how will we be able to irrigate our household plots? There is no irrigation water in the town.

Answer: Chynaliev Ch.: If water is used properly, consumption will not be high, which would result in water savings and sound water use.

Question: Osmonova I.: Municipality Senior specialist.

In winter, water gets frozen in multi-storey residential houses. What will the project envisage to prevent such a situation?

Answer: *Umetov B.*: DDEs will concern relevant measures to prevent freezing.

Question: Osmonova I.:

If water supply network goes through a private area, how will compensation issues be addressed?

Answer: Umetov B.: In such cases, we will attempt to bypass these areas. If we fail to, a Resettlement Action Plan will be developed incorporating all compensation activities. All resettlement procedures will be obligatorily followed.

| Chairperson of the meeting: | Ibragimov A. |
|-----------------------------|--------------|
| Secretary: | Musaev A. |

Participants of public hearings on discussion of UDP EMP and RPF

20 October 2015, Sulukta municipality

| No. | Name | Organization and position | Signature |
|-----|--------------------|---|-------------------------|
| 1 | Kuldashev A. | Sulukta municipality, unit head | All signatures endorsed |
| 2 | Osmonova I | Sulukta municipality, lawer | |
| 3 | Kuzmina I. | Housewife | |
| 4 | Mistubrailov | Sulukta | |
| 5 | Akmotova Ch. | Sulukta municipality | |
| 6 | Usumorbaeva U. | City council, Sulukta | |
| 7 | Saparova K. | Sulukta municipality | |
| 8 | Gafiyatullina R. | Urban statistics | |
| 9 | Bainazarova Z. | Social protection | |
| 10 | Jumagulova Ch. | Sulukta municipality | |
| 11 | Mavayanova R. | Municipal enterprise "Tazasuukonol" | |
| 12 | Zakir kyzy Akmaral | Municipal enterprise "Tazasuukonol" | |
| 13 | Tashieva R. | Assistant at boarding school | |
| 14 | Karimberdieva D. | Assistant at boarding school | |
| 15 | Rakhmanberdiev T. | Sulukta city administration | |
| 16 | Yrysov K. | Municipality inspector | |
| 17 | Kurbanbaeva P. | SGUSR senior specialist | |
| 18 | Murzaeva N. | SGUSR sector head | |
| 19 | Sattarova B. | SGUSR leading specialist | |
| 20 | Urmanov E. | Sulukta municipality, senior specialist | |
| 21 | Dosov B. | Nunicipal Department of the Interior | |
| 22 | Isabaev A. | City council deputy | |
| 23 | Jurabaev I. | Secondary school # 1, supply manager | |
| 24 | Shadnev M. | City council deputy | |
| 25 | Saparbaev K. | Secondary school # 1, principal | |
| 26 | Mukhmadiev M. | Kyzyl- Bel | |
| | | | 1 |

| 27 | Mamatov N. | City council, senior specialist | |
|----|-----------------|---------------------------------|--|
| 28 | Tashbaev D. | Head of finance unit | |
| 29 | Usmanov M. | Kerben Vice Mayor | |
| 30 | Elmurzaev Z. | Kerben municipality, specialist | |
| 31 | Orozkulova A. | Medical adviser | |
| 32 | Mamyrov E. | | |
| 33 | Abdieva Z. | | |
| 34 | Joombaev T. | Sulukta "Taza-Suu" | |
| 35 | Raimkulov Ch. | Sulukta "Taza | |
| 36 | Umurzakov A. | Sulukta "Taza | |
| 37 | Babaev R. | Sulukta "Taza | |
| 38 | Komolidikov | Sulukta "Taza | |
| 39 | Karimov A. | Office director | |
| 40 | Burkhanbekov S. | Nurse at Sulukta hospital | |
| 41 | Umaralieva N. | Nurse at Sulukta hospital | |
| 42 | Kurbanbaev F. | Head of Amuraev street | |
| 43 | Tolobaev G. | Otbasarov aiyl head | |
| 44 | Ibragimov A. | Sulukta mayor | |
| 45 | Ismailov K. | Chairperson of city council | |
| 46 | Umetov B. | BOUIP Coordinator | |
| 47 | Chynaliev Ch. | ARIS Investment specialist | |
| 48 | Kutmanova E. | ARIS specialist | |







Minutes

Public hearings on discussion of Environmental Management Plan (EMP) and Resettlement Policy Framework (RPF) as part of the Urban Development Project

Venue and date: ARIS Head Office, 102, Bokonbaev st., Bishkek;

22 October 2015, 10:00 am

Participants: 21 (list is attached)

Umetov B., BOUIP Coordinator: opened the meeting; greeted the participants and introduced ARIS staff engaged in preparation of UDP. He also presented a concept, implementation timeline, and objective of the Project.

Kutmanova E.: delivered a presentation on social and environmental safety measures envisaged in the project. She provided details on environmental safety and 4.12 WB "Involuntary Resettlement" Policy.

Chynaliev Ch.: informed on the role of community in improvement of water supply services and tariff policy.

Question: Toktogulov U., medical adviser in common hygiene for DPD and SES.

- 1. Will water disinfection be envisaged? If so, will there be advanced disinfection technologies?
- 2. Will DDEs be approved by SES bodies?
- 3. Does the Project envisage construction/rehabilitation of sewage systems in the towns?

Answer: Umetov B.: the Project obligatorily envisages advanced water disinfection technologies; all approval procedures will be followed according to approval law, involving environmental agencies, SES etc.

The project doesn't include sewage works; it is only about construction/rehabilitation of water supply systems.

- **Question: Ryspekov Arsen,** head of the unit under the State Environmental Expertise (State Agency for Environmental Protection and Forestry of GoK)
 - 1. If DDEs are developed by a foreign firm not licensed at the territory of the Kyrgyz Republic, is design adaptation envisaged?
 - 2. What is the relationship between communities and UDP?

Answer: Umetov B.:

- 1. DDEs will be obligatorily adapted according to local legislation requirements.
- **Question:** Dautalieva A. Aren't subprojects duplicated in the towns covered by UDP with ADB or EBRD subprojects?
- **Answer:** Before selection of subprojects, WB and ARIS staff viewed the situation and consulted with ADB and EBRD; following this, construction facilities were selected; so there is no any duplication with other donors.
- **Proposals: 1. Ryspekov A.** It would be good to envisage construction of sewage systems, waste water treatment facilities, and domestic waste landfills in future projects.
 - **2. Toktogulov U.** It would be good for future projects to provide Vodokanals with laboratory so their laboratory units can check water quality for residual chlorine and other constituents.

3 Dautalieva A. Improve communication with KR Gosstroi in project implementation to upgrade a policy in urban construction and urban planning.

Decision:

Consider EMPs and RPF, developed under UDP, acceptable for implementation.

Chairperson: Umetov B.

Secretary: Kerimbekova M.





| No. | Name | Organization/position | Signature |
|-----|-------------------|---|-----------|
| 1 | Ryspekov A. | Head of the unit under the State Environmental Expertise (State Agency for Environmental Protection and Forestry of GoK) | |
| 2 | Toktogulov U. | Medical adviser in common hygiene for DPD and SES | |
| 3 | Orozalieva Y. | ARIS procurement unit | |
| 4 | Krek N. | "Clean world" NGO | |
| 5 | Jumaliev B. | ARIS legal consultant | |
| 6 | Aitbaev T. | LMDP economist | |
| 7 | Mambetkulova A. | ARIS Deputy Executive Director | |
| 8 | Karasartov K. | MIS specialist | |
| 9 | Shestoperov V. | Infrastructure engineer | |
| 10 | Chynaliev Ch. | Investment specialist | |
| 11 | Abdyldaev B. | Procurement specialist | |
| 12 | Yrysbekova A. | M&E specialist | |
| 13 | Abdiev A. | LMDP vet specialist | |
| 14 | Ashyrbekov Z. | Procurement specialist | |
| 15 | Aida | Disbursement specialist | |
| 16 | Damira Temirbaeva | Procurement specialist | |
| 17 | Baigonchokov U. | M&E specialist | |
| 18 | Dautaliev A. | Taza Tabigat NGO | |
| 19 | Kutmanova E. | Safeguards specialist | |
| 20 | Koichukeeva A. | VIP PR specialist | |
| 21 | Umetov B. | Coordinator | |