

Initial Environmental Examination

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KGZ : Toktogul Rehabilitation Phase 3 Project

Prepared by Open Joint-Stock Company Electric Power Plant for the Asian Development Bank.

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ABBREVIATIONS

ADB	Asian Development Bank
CAREC	Central Asia Regional Economic Cooperation
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPP	Electric Power Plants
HPP	Hydro Power Plant
HSE	Health, Safety and Environment
IEE	Initial Environmental Examination
PCB	Polychlorinated Biphenyls
SAEPF	State Agency on Environmental Protection and Forestry

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Toktogul Rehabilitation Phase 3 Project

Initial Environmental Examination (IEE)

Abbreviations

ADB	Asian Development Bank
CAREC	Central Asia Regional Economic Cooperation
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPP	Electric Power Plants
HPP	Hydro Power Plant
HSE	Health, Safety and Environment
IEE	Initial Environmental Examination
PCB	Polychlorinated Biphenyls
SAEPF	State Agency on Environmental Protection and Forestry

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Introduction

The backbone of Kyrgyz power generation is the Naryn River with its several hydropower plants (HPP) Kambarata 2, Toktogul, Kurpsai, Tash-Kumur, Shamaldy-Say and Uch- Kurgan. Toktogul HPP, located on the Naryn River in the Jalal-Abad province, is the largest and most important power plant in the Kyrgyz Republic, with installed capacity of 1,200 megawatts (MW). Producing 40% of the country's average electricity output supplying both base and peak load, the Toktogul HPP plays a critical role as a domestic and export power source, and provides voltage and frequency regulation services to the 500 kilovolt Central Asian Power System. The majority of assets is over 30 years old and is approaching the end of their economic lives. Given the increased demand for power in the Kyrgyz Republic, rehabilitation, replacement and augmentation of power sector assets are critical for energy security in the country.

The Asian Development Bank (ADB) finances Toktogul rehabilitation program consisting of 3 phases. Replacement of main transformers and electrical auxiliary system for 4 units, replacement of 500kV cable systems, replacement of 2 turbine generators (units 2 and 4) and rehabilitation of hydraulic steel structure of will be financed under Phase 1 and Phase 2. Phase 3 will continue financing replacement of the remaining 2 turbine generators (units 1 and 3), refurbishment of Toktogul Dam civil structure, and upgrading the dam monitoring system for the 5 HPPs in the downstream Naryn cascade. Eurasian Development Bank is the co-financier for Phase 2 and Phase 3. EPP owns all the generation assets and is the executing agency.

The main environmental impacts of the project related to: (i) occupation health and safety at the project site, (ii) management of the used oil and grease wastes, (iii) disposal of scrap metal and other solid waste, (iv) construction works, and (iv) transportation of construction materials and heavy equipment to the project site, as well as generated wastes out of the project site.

The program is classified as environmental category B under ADB's Safeguard Policy Statement 2009 (SPS 2009). For each phase 1 and Phase 2 an initial environmental examination (IEE) including an environmental management plan (EMP) was prepared to meet the requirements SPS 2009 and KG national regulations. The IEEs were disclosed per ADB public disclosure requirements. As necessary, the IEEs will be updated by the PIU and the implementation consultant (PIC) based on detailed design by the turnkey contractor.

EMPs proposed adequate mitigation measures and a monitoring plan. According to the EMPs, Phase 1 will construct a temporary storage facility at HPP territory to keep the old batteries, scrap metals and oils released from the old equipment which will be replaced. Non-PCB oils and greases can be reused or transported to Osh thermopower plant for burning. Oil-free scrap metals can be sold to 'Djalal Abad Temir' recycling Company which represents the local branch of 'Temir' State Company. The analyses conducted for IEEs Phase 1 and Phase 2 revealed that there is no contamination with PCB in the oils of the 4 transformers, cables, and the generators (Units 2 and 4). However to ensure that the released oils will be PCB-free and can be reused or disposed, it was required that oil from old equipment will be checked before being released. In the frames of Phase I the project implementation consultant (PIC) will procure PCB analyzer and conduct oil testing. Control over placement, storage and utilization of old oil shall

be done by State Inspection on Ecological and Technical Safety. The existing storage room will be upgraded for keeping the old batteries until recycling is possible. The temporary storage facility and PCB analyzer will be used for the whole program.

The PIU established for the program will be responsible for EMP implementation with assistance from PIC and staff of EPP Department “Service of Reliability and Safety”. An Environmental and Hazardous Waste Management (EHWM) specialist will be hired by the loan to work in PIU for building in-house capacity of EPP. The EHWM specialist will receive on-the-job training from PIC environmental specialists and will ensure EPP in-house capacity for EHWM in place before the commencement of physical works starting in Phase 1 until end of the program.

Environmental mitigation measures will be included in the bidding documents. Environmental monitoring will be performed by the PIC. The cost for implementing the EMP will be covered by the loan and the grant. The costs of mitigation measures will be included in the turnkey contract, and the cost for environmental monitoring will be included in the consulting services of the PIC. EPP is responsible for transportation from the storage site and final disposal of scrap metals and released oils.

Phase III of the Project will follow the same arrangements for EMP implementation with similar mitigation measures and monitoring plan for managing oil and scrap metals, health and safety issues, as well as transportation management. Oils of the two turbine generators were not tested for PCBs. Therefore oil test by PIC, using the program’s PCB analyzer, will be required before being released from the equipment. The work of Toktogul Dam civil structure refurbishment will generate limited environmental impacts and wastes from the construction works and will be managed by good practice for site management.

During Phase 1, a Grievance Redress Mechanism (GRM) as proposed in the IEE will be established and approved by an ordinance of EPP. The GRM will be functioned for all phases of the Toktogul rehabilitation program. EPP is responsible to inform affected people about the GRM. A Public Communication Program will be developed by the EHWM specialist, with assistance from the PIC.

Regular environmental audit on the compliance status of the HPP existing facilities will be required during the implementation of Phase 1 and Phase 2. The audit results identified and corrective action plan if developed will be submitted as part of the semi-annual environmental monitoring reports.

1. Executive Summary

1.1 Policy, Legal, and Administrative Framework

The Law on Environmental Protection requires that an Environmental Impact Assessment (EIA) has to be prepared for a planned activity. The Law on Ecological Expert's Review defines the activities that require EIA and states 'Any new construction, reconstruction, expansion or re- equipment of operating economic entities or other entities which are likely to have impacts on the environment'. Consequently, for the ADB project – Toktogul Rehabilitation Phase 3 an Environmental Impact Assessment has to be conducted.

The key government institution responsible for the establishment and implementation of environmental policy and management in the Kyrgyz Republic is the **State Agency on Environmental Protection and Forestry (SAEPF)**. Therefore the EIA report has to be reviewed by the Department of Ecological Expertise within this authority. SAEPF is then responsible for issuing environmental permits for infrastructural projects¹. The Agency is directly ranked under the government and has the status of a ministry. The Agency located at Bishkek is responsible for all nationwide projects of national importance.

The functions of oversight and control to ensure ecological and technical safety are vested upon the newly established agency – State Inspection on Ecological and Technical Safety authorized to inspect state companies and their affiliates to comply with ecological and technical requirements in industry, manufacturing and other types of economic activity.

1.2 Description of the Project

1.2.1 Project location and general situation

The backbone of Kyrgyz power generation is the Naryn River with its several hydropower plants Kambarata 2, Toktogul, Kurpsai, Tash-Kumur, Shamaldy-Say and Uch-Kurgan. Electricity demand in Kyrgyz Republic is highly seasonal with two thirds of domestic consumption taking place in autumn and winter. Although electricity generation capacity has nearly doubled since the Soviet era, load shedding is frequent especially in the winter when hydropower output is limited due to low river discharge, while cuts arise from problems due to technical failures in the outdated

¹ The normal national procedure is: In a first stage, after having finalized the feasibility study to a project, SAEPF issues the permit 'to proceed' based on an EIA/IEE report. In a second step the final environmental approval will be given after submission of a 'Environment Protection Section' (as part of the Design Documentation to the project) giving details of the impacts and quantifying them as far as possible. This document contains then a detailed EMMP which can be part of the tender documentation. The EPS with detailed EMMP has then also to be approved by SAEPF. The fourth and the last stage of OVOS / EIA is the post-project analysis is implemented in one year following the beginning of project activity to ensure the project facility safety to environment and to adjust environmental management activities

generating equipment.

Hydroelectric generation from the Naryn Cascade is central to the present and future economic development of the Kyrgyz Republic also with view on an electric power generation and transmission system regionally managed between the Central Asian Countries in future.

However, the future security of this capability is in some doubt because of the age of most of these facilities. They are over 50 years old, obsolete and many spare parts are no longer available.

Therefore, the rehabilitation of Toktogul HPP being part of the Naryn cascade is of paramount importance.

1.2.2 Category of the Project

Following ‘Environmental Considerations in ADB Operations’ of September 2006, the Project can be considered to be a Category B project requiring an Initial Environmental Assessment (IEE). The Project will not require an acquisition of land and resettlement activities will not become necessary at all. The Project has no Gender elements and regarding Involuntary Resettlement and Indigenous People. Consequently, Category C has been assigned to this Project in this respect.

There is no protected area located nearby and ecologically sensitive habitats will not be affected. All activities will take place within the properties of the existing HPP facilities belonging to Joint Stock Company Electric Power Plants.

1.2.3 Implementation schedule

It is foreseen to finalize the technical analysis and preparation of the draft tender documents during 2016. ADB Loan/grant negotiations are scheduled to February 2016. ADB Board consideration is in the second quarter of the year 2016 and Loan signing is in June 2016. The planned Subsidiary financing agreement effectiveness - July 2016, while ADB loan effectiveness is planned to October 2016. The start of physical works will then be expected in the second quarter of 2017 and last until 2023/2024.

1.2.4 Description of the project and possible impacts

Toktogul Phase 3 consists of three components:

Component 1 **Rehabilitation of Units 1 and 3**

- Replacement of Turbines Unit 1 and 3
- Replacement of Turbine Governor, Unit 1 and 3
- Replacement of cooling water system
- Rehabilitation and uprating of generators Unit 1 and 3
- Replacement of excitation system , Unit 1 and 3
- New unit control and protection system, Unit 1 and 3
- New temp. and condition monitoring system, Unit 1 and 3
- Replacement of power house auxiliary system
- Replacement of power house electrical system
- Replacement of power house common system

Component 2: **Refurbishment of Toktogul Dam Civil Structure**

- Access tunnel, powerhouse and dam lighting system
- Refurbishment of powerhouse and dam elevator system
- Refurbishment and replacement of dam electrical installation system
- Dam fire detection and firefighting system
- Refurbishment of dam drainage system
- Plastering of open reinforcement bar in the galleries

Component 3: **Upgrading Dam Monitoring System for 5 HPPs**

- Overhaul/refurbishment of dam monitoring system
- Dam and its base deformation observation
- Dam base and body seepage regime
- Dam and base temperature regime
- Dam density
- Dam stress-strain state
- GPS network data acquisition and software

Following possible environmental impacts might be associated:

- Possible power shortage during construction;
- Disposal of old oil (around 58 tons).
- Safety and health issues during construction;
- Increased truck movements during construction period also through inhabited areas; transportation of heavy equipment, construction materials and wastes;
- Disposal of iron/steel (app. 3220 tons), and other inner wastes;
- Construction waste from civil works and domestic waste generated by the workers.

In the frames of Project implementation activities no negative effect is expected in transboundary context. Areas of probable significant environmental impact may be areas for old oil collection and storage if such oil is PCB-contaminated. Activities to ensure environmental safety in such cases are provisioned in the Environment Management

Plan. Accidental situations or non-project accidents are not included in this IEE since the Project works do not disturb or interfere with normal functioning of Toktogul Power Plant and implemented in the frames of the existing routine or repair works.

1.3 Description of the Environment

In the following description of the environment of the Kyrgyz Republic and of Djalal-Abad Oblast, only baseline data are given as being possibly relevant for this rehabilitation Project.

1.3.1 General Location

The Kyrgyz Republic is a small, land-locked country with an area of approximately 200,000 km² surrounded by the People's Republic of China, Kazakhstan, Tajikistan, and Uzbekistan. The project area is located in the Djalal-Abad Oblast. This Province consists of 8 rayons (districts).

1.3.2 Climate

In Djalal-Abad Oblast remoteness from significant in size water reservoirs causes the climate's continentality and aridity with hot summer, humid spring and autumn and relatively cold winter. The most amount of precipitation falls to the south-west slopes of Fergana range (up to 1000 mm per year). The south-west part of the province is most arid. Here, at the foothills, amount of precipitation is 100-200 mm per year. Highest precipitations occur on spring and beginning of summer (up to 70 % of annual amount). The second part of the summer is drought.

1.3.3 Water resources

The area of the Oblast is crossed by the largest river of the country. The Naryn River comprises about 30 % of the Kyrgyz Republic's rivers total surface flow. The rivers of Kara-Darya, Kugart, and Kara-Unkur that flow within the limits of the Fergana valley are significant especially in terms of their irrigation capacity. The rivers of Fergana and Chatkal ranges are primarily of snow- and glacier-derived nourishment. They are characterized by early spring floods. In the territory of the Oblast, a network of channels and water reservoirs were constructed to efficiently use the available water resources.

1.3.4 Protected areas

There is several nature protecting areas around the hydro power plants concerned. However, all are located in a distance that any impact caused by the rehabilitation measures (included impact by truck movements) can be

excluded. No Ramsar sites (wetlands) are located within the investigation area.

1.3.5 Socio-economic conditions

After the collapse of the Soviet Union the ethnic situation in Djalal-Abad Oblast has dramatically changed. Due to its location near Uzbekistan, the Oblast is characterized by the availability of many ethnic and language minorities. A lot of Russians, Tatars, Germans, Koreans and other ethnic formations have left the country for Russia, Europe and America causing a change in the ethnic composition of the local community: now dominating ethnic groups are Kyrgyz and Uzbeks, Tajiks, and Turks. Currently, about 0,923 million people inhabit the Djalal-Abad Oblast that comprises 20 % of the total population of the country.

The principal religion in the country is Islam of secular persuasion with a touch of shamanism among ethnic Kyrgyz. Russians and other Slavic people living in the country are members of the Orthodox Church and/or are atheists.

Average size of a household in the Oblast is 4.5 persons.

Djalal-Abad Oblast is one of the most industrial developed provinces of the country, where more than 100 industrial enterprises are located. The enterprises represent practically all the industries: electric power generation, electronics, coal, sewing and shoemaking industry, exploration and excavation of minerals (gold, oil, coal, gas), metal processing, food industry (processing agricultural production), wood processing, machinery construction, building materials production.

In Kyrgyz Republic, treatment of chemical substances in connection with a focus on the development of agricultural and mining sectors, which contribute significantly to environmental pollution, is one of the most important among the issues of waste disposal. Nowadays, in Kyrgyz Republic there are great efforts ongoing to improve the waste management in the country considerably. In 2008 UNDP implemented the project "Capacity building for implementation of the principles of sustainable waste management in the Kyrgyz Republic" (2008-2010). This project is a continuation of the project "Capacity building and capacity building of municipal waste management system in Kyrgyzstan", implemented in 2005-2007.

1.3.6 Health and safety at hydropower plants

At all HPPs there are first aid kits available. These kits are regularly inspected. All workers are instructed what to do in case of an accident, e.g. after a worker is hit by an electric shock. In addition, there is staff specially trained for first aid available. In case of severe injuries the worker concerned

has to be taken to the next hospital.

Workers and other “ITR” (“Engineering and Technical Personnel”) are trained and certified concerning safety aspects when working in a hydropower plant. This training comprises issues like working under high voltage, how to secure a working place with signs, etc.

There are fixed rules and standards in written form provided to the workers/employees. The major principles are reflected at the following two documents: “Safety requirements under the electric units operation” and “Electric plants and grids technical maintenance regulations”.

1.4 Anticipated Environmental Impacts and Mitigation Measures

1.4.1 Construction phase

All Project activities will be restricted to the property of Joint Stock Company Electric Power Plants (EPP). The rehabilitation measures will take place within buildings and caverns of the power plants. Scrap metals, oil, construction waste from civil works and some domestic waste generated by the workers have to be treated or disposed of in an environmental sound manner. All these impacts, extent of impact and proposed mitigation measures are addressed in a tabular form.

During rehabilitation measures single turbines have to be shut down. For very short period (hours) it will also be necessary to shut down all 4 turbines. Shut down shall take place mainly during summer when the power demand is reduced in order to avoid power shortages. For these cases EPP shall develop a plan how to ensure the power supply for the population taking power from other power plants or bringing power in from abroad.

The water availability downstream will not be affected by implementation of the rehabilitation measures. All possible water level fluctuations will be in the range of normal operational reservoir levels.

The dam stability will not be influenced by the foreseen measure. The dam rehabilitation works during the Phase 3 will not have impact on the dam stability and water regime downstream.

All wastes shall be recycled to the greatest extent possible as scrap steel and old oil. The PCB tests of oil from oil-containing equipment were done during the preparation of Phase 1 and Phase 2. The results showed that there is no PCB in the tested oil. During the Phase 3 implementation the remaining volumes of old oil will be subjected to PCB contamination tests from two generator units and auxiliary transformers. Oils and scrap metals will be safely kept at the storage area, which has been built during Phase 1.

1.4.2 Operational phase

Positive impact during operation of the Project will be a more reliable power supply within the Kyrgyz Republic and even within Central Asia referring to the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan (CAREC).

1.5 Analysis of Alternatives

Toktogul HPP is a unique project and of irreplaceable value for Kyrgyzstan. Its value to the country and the region cannot be overstated. Is the vital plant for the frequency and voltage regulation of the 500 KV transmission system connecting the Central Asian countries.

In addition, Toktogul Dam and reservoir provide multi-year storage for all plants that cascade downstream. Also for irrigation and agriculture in the downstream countries, water releases are subject to annual Inter-Governmental Irrigation Agreements (IGIA). Thus to a large extent, trade in electricity is inter-connected with water release agreements

Consequently, no real alternative then to properly maintain the civil structures and the installed equipment and replace deteriorated and worn-out equipment step by step is existing.

1.6 Information, Disclosure, Consultation, and Participation

The ADB policies require that public consultations are held during development of the EIA/IEE. According to these policies, the national environmental consultant held a meeting in Karakul town on November 6, 2015 and a follow up written request was sent to Karakul city municipality on November 12, 2015 Kara-Kul is located next to the dam site of HPP Toktogul about 4 km in air-line distance. During this meeting the national consultant presented measures to be done during Phase 3 of rehabilitation of HPP Toktogul and disseminated a leaflet describing the Project.

Complaints against the rehabilitation Project have not been raised but a major concern is lead to the general waste situation also at HPP Toktogul site. Taking this in consideration recycling activities is most welcome in order not to tighten the situation. As far as it is related to the Project such mitigation measures are given in the EMP. All other issues about existing wastes and its management are heard but are beyond the scope of this Project.

The participants of the meeting addressed that there will be no problem to accommodate the workers during construction. Written feedback from the Karakul Municipality was received on November 20, 2015 expressing public consent with mitigation measures designed for the Project.

1.7 Grievance Redress Mechanism

During implementation of the Project, unexpected impacts might occur or mitigation measures might not be carried out improperly. In these cases and in order to provide timely and effective solution of issues, it is necessary that an efficient channel for the local people to address to have been established. Addresses on environmental concerns should be made of free basis and all the costs should be provided from the Project budget, out of budget line “Contingency”. Mechanism of submitting a grievance and its redressing is provided.

1.8 Environmental Management Plan

Within the IEE an Environmental Management Plan (EMP) has been developed. It contains mitigation and monitoring measures for the construction phase. For the operational phase no additional measures have been identified.

Main focus is given to the generated big amount of scrap metals (some 3220 tons) and 58 tons of old oil to be released from old equipment. Generated amounts of construction wastes are insignificant and by estimates may vary from 10 to 20 cubic meters, while the wastes themselves will primarily be pieces of crushed concrete. Most of the proposed mitigation measures during construction have to be implemented by the contractor what will be monitored by the Project Implementation Consultant (PIC) as discussed in the following. The recycling/reuse of scrap metal and old oil is in the responsibility of EPP at no cost to the loan

It is recommended to monitor regularly the implementation of the proposed mitigation measures during the whole construction period with special focus to proper management of waste disposal and transport issues.

EPP as responsible PIU for the project will recruit a Project Implementation Consultant. The national and international team of consultants will assist EPP as project supervision consultant on the rehabilitation of Toktogul HPP. The Consultant will also provide capacity building training to EPP staff for project management and operation and maintenance for the Project. The Consultant will be essentially an extension of EPP. The Consultant will assist EPP in assuring that the project is implemented according to the specified standards.

Within Joint Stock Company Electric Power Plants a department ‘Service of Reliability and Safety’ exists. This department will deal with all safety and health issues relevant for workers at the HPPs. In order to cover also environmental issues the project will finance an environmental expert with hazardous waste background. The specialist would allow checking whether EMP requirements are considered in the offers and later on in the contract. This person shall support and assist PIU with respect of implementation of

the EMP and to ensure developing an in-house capacity at EPP. Costs for remuneration, office, allowances, transportation etc. have to be considered. The costs will sum up to approximately 100,000 USD.

The Project Implementation Consultant being also responsible for supervision of all environmental issues shall prepare monthly reports including the progress of the implementation of the EMP. These reports shall be submitted to EPP and distributed to all involved departments, e.g. 'Service of Reliability and Safety'. The report shall contain all discrepancies from the EMP and list all HSE relevant incidents and accidents that occur during the implementation of the refurbishment measures. Based on these reports and on own regular construction site audits the Consultant together with EPP/PIU will prepare semi-annual monitoring reports and submit them to ADB.

1.9 Summary Costs for Implementation of the Environmental Management Plan

Extra costs with respect to environmental mitigation are related to additional measures to ensure safe management of the oil wastes, as well as safe stockpiling of scrap metals and other construction wastes. All mitigation measures given above are included in the regular construction costs.

In order to supervise and monitor appropriate implementation of the EMP following costs have been calculated:

Issue	Costs	Remark
Mitigation measures		Included in Contractor contract
Final disposal of oil and scrap metal from the storage area		Cost neutral to EPP as it will be covered by the revenue from the sale of scrap metals
National Environmental safeguard specialist for 3 years to be contracted by EPP	100,000 USD	Included in Capacity support to PIU
International external auditor, twice a year, including travel costs	200,000 USD	Included in PIC contract
Environmental monitoring		
Subtotal		
10% contingencies		

Total	300,000 USD	
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1.10 Conclusion and Recommendation

As it can be seen from the findings only some low negative impacts occur mainly during the construction phase. During the operational phase, the positive impacts are obvious and consist in a much more reliable power supply, not only for the Kyrgyz population but also for the entire Central Asian region taking into account the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan (CAREC).

Mitigation measures are given in Section 9.1 of this report and necessary monitoring actions during construction phase are discussed in Section 9.3. For the operational phase no additional measures have been identified.

The water availability downstream will not be affected by implementation of the rehabilitation measures. All possible water level fluctuations will be in the range of normal operational reservoir levels.

The dam stability will not be influenced by the foreseen measure. None of these measures will interfere with the dam structure.

All wastes shall be recycled to the greatest extent possible as scrap steel and old oil. The analysis revealed that there is no PCB in the oil of the equipment to be replaced in Phase 2. However, it is necessary to test the remaining volumes of oil in the old equipment to be replaced during the Phase 3. For this purpose Project Implementation Unit of Energy Sector Development Project under the KR Ministry of Energy and Industry will be procuring PCB analyzers during I-II quarter of 2016 to implement PCB-content tests in old oil. The PCB-contaminated old oil shall be safely stored, clearly labelled and kept in separate vessels from PCB-free oils at the dedicated area for old oil storage.

Summarizing, if the stipulated measures are implemented, the positive effect of this Project on the social side is eminent (regional, national and international) whereas the negative impacts on the environmental side are very low. The advantages are obvious in having a much more sustainable power supply.

Thus the Project can be constructed and operated without creating significant adverse environmental impact. The need for preparing an IEE to this project is stipulated in the Safeguard Policy Statement 2009.

2. Policy, Legal, and Administrative Framework

2.1 General Provisions

The legislative organ in the sphere of environmental policy and safety is the Jogorku Kenesh (Parliament) and its Committee on land and agricultural issues, water resources, ecology and regional development, responsible for:

- Defining the overall framework for nature protection policy;
- Developing and approving laws and regulations;
- Approving government proposals on resource charges and taxes

The President is responsible for signing of all laws adopted by Jogorku Kenesh, international talks and signing of international conventions and treaties. He has the right to delegate aforementioned functions to Prime-minister or members of the Government while retaining his functions to sign and ratify international treaties and conventions.

The President has the authority to define and announce the boundaries and the status of environmental emergencies and environmental disaster zones.

The central government provides implementation of the common state policy in environmental protection, safety and use of natural resources, land resources management, construction activities, mountain territories, and other important spheres (Constitutional Law on the Government of the KR, 2012, Clause 10, para.7).

Kyrgyz Republic is divided administratively into seven Oblasts (Provinces) plus the metropolitan region of Bishkek, the capital. Each Oblast consists of several rayons (districts) and towns directly subordinated to the Oblast. In each of the Oblasts, there are regional councils, but the main executive authority is represented by the head of the Oblast administration (governor), who is appointed by the central government.

2.2 Environmental Institutions

The key government institution responsible for the establishment and implementation of environmental policy and management in the Kyrgyz Republic is the State Agency on Environmental Protection and Forestry (SAEPF) under the Government of the Kyrgyz Republic.

This executive governmental agency is governed by Prime Minister and the First Vice Prime Minister. The latter is responsible for the issues of economy and industry, environmental protection and policy, environmental and technical safety issues, water resources and the supervision of the respective

ministries and national agencies.

According to legal provisions, the SAEPF is a governmental body in the environmental protection and ecology and industrial safety. Its major aims and purposes are to:

- Exercise State control over environment protection, development and implementation of a common policy in the field of environment protection and nature management;
- Control and license in the field of industrial safety, economic activities and mining.

The oversight body in the sphere of environmental and technical safety is the newly established **State Inspectorate for Environmental and Technical Safety** that is authorized to inspect and control by state profile bodies and their subdivisions on fulfillment of environmental and technical requirements in industrial and other relevant fields. Control will be done by inspections and supervisory field controls.

2.3 National Requirements for Environmental Assessment

The environmental policy of the Kyrgyz Republic is anchored in the 1995 National Environment Action Plan (NEAP) which effectively shaped the evolution of the country's environmental laws and regulations. The two most significant pieces of legislation are the Law on Environmental Protection (No. 53 of June 16 1999) and the Law on Ecological Expert's Review (No. 54 of June 16 1999) with amendments.

The Law on Environmental Protection requires that an Environmental Impact Assessment (EIA) has to be prepared for a planned activity. The Law on Ecological Expert's Review defines the activities that require EIA and states 'Any new construction, reconstruction, expansion or re- equipment of operating economic entities or other entities which are likely to have impacts on the environment'. Consequently, for the ADB project - Toktogul Rehabilitation Phase 3 an Environmental Impact Assessment has to be conducted.

The recently adopted and effective law provides guidelines for EIA drafting: "Regulation of procedures of environmental impact assessment in the Kyrgyz Republic" as of February 13, 2015 #60. According to the currently used Instruction for Procedures for Performance of Environmental Impact Assessment (1997) such an EIA has to contain the following:

- Description of the project or planned activity;
- Possible alternatives for the project or planned activity;
- Description of the existing environment;
- Types and degree of impact on environment and population;

- Forecast of any possible changes in environmental quality;
- Description of socio-economic and ecological consequences; and
- Actions to prevent environmental damage or mitigate the level of ecological risk.

The EIA is then reviewed by the State Agency on Environment Protection and Forest Ecosystems Development – Department of Ecological Expertise. This authority is responsible for issuing environmental permits for infrastructural projects. Normally, the EIA/IEE is to be developed during the process of feasibility study (in Russian it is called “Technico-economic assessment, TEO), namely immediately after the general design documentation has been prepared taking into account all the possible alternatives for locations of the site and technical and technological aspects, including “no action” alternative. After that the EIA/IEE draft report is submitted to SAEPF Environmental Expertise Department (EED) for consideration and getting its conclusion – positive or negative. Negative conclusion means that the report should be additionally improved according to the comments of the EED officers. The positive conclusion is considered to be an official permit “to proceed” to further Project steps.

The next step is the elaboration of the so called “Environment Protection Section” (EPS). It includes specific calculations of amount of wastes, emissions, and effluent generated during construction work and mitigation measures. This stage is a part of the so called “Design documentation”, when specific technical and engineering decisions have already been taken, all the possible alternatives are properly studied, and therefore this required specific figures/amounts/volumes to be taken into account during the construction activities. This document is also subject to be considered and approved by the environmental authorities. It also includes an EMMP, but more specific and detailed. In this document it is called “Action plan on environmental protection” or “Plan of measures on environmental protection”.

The EMMP can be included into the tender documentation so that the contractor can take the costs for implementation of the EMMP into account for developing his financial proposal.

SAEPF is directly ranked under the government and has the status of a ministry. The Agency located at Bishkek is responsible for all nationwide projects of national importance.

2.4 International Agreements

The Kyrgyz Republic has signed or ratified following international agreements and protocols that might have to be considered in the context of the rehabilitation Project.

- The Convention on Environmental Impact Assessment in a Transboundary Context (Espoo);
- The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention);
- Aarhus Convention on Access to Information and Public Participation in Decision-Making and Access to Justice in Environmental Matters;
- Stockholm Convention on Persistent Organic Pollutants;
- Basel Convention on Transboundary Movements of Hazardous Wastes and their disposal.

2.5 ADB Requirements for Environmental Assessment

The environmental policy of the Asian Development Bank (ADB) is grounded in ADB's poverty reduction strategy and long-term strategic framework. The poverty reduction strategy recognizes that environmental sustainability is a prerequisite for economic growth and efforts to reduce poverty. In this context, environmental sustainability is one core issue of ADB's environmental policy.

ADB requires environmental assessment of all project loans, program loans, sector loans, sector development program loans, financial intermediation loans, and private sector investment operations. Environmental assessment is a process rather than a one-time report, and includes necessary environmental analyses and environmental management planning that take place throughout the project cycle.

This IEE was carried out in accordance with the relevant ADB guidelines as there are:

- Safeguard Policy Statement, June 2009, effective since January 2010; Environmental Considerations in ADB Operations OM Section F1/OP, October 1, 2013.

3. Description of the Project

This document represents the Initial Environmental Examination (IEE) of the project Rehabilitation HPP Toktogul Phase 3.

Aim of the Power Sector Rehabilitation is to strengthen and to ensure power supply of the Kyrgyz electricity network generated by the hydropower plant at Toktogul. The Project will also contribute to the power supply of Central Asia referring to the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan (CAREC).

The baseline data for this examination were mainly gained during two field trips to the hydropower plants (HPPs) performed in 2011 and in 2014 during preparation the IEE for Phase 1 and Phase 2.

Technical aspects of possible rehabilitation works have been discussed with the engineering team of Fichtner. In addition, institutional and legal aspects have been clarified at Bishkek in 2011 and renewed in May 2014 concerning environmental permitting procedure for Phase 2, and during the fact finding mission in the period of November 10-23, 2015.

This IEE was carried out in accordance with the relevant ADB guidelines as discussed in Chapter 2.5.

3.1 Project Location and General Situation

The backbone of Kyrgyz power generation is the Naryn River with its several hydropower plants (see



Figure 3-1: Location of hydropower plants of the Naryn Cascade

No.	Name/Location	Capacity	Status
1	Kambarata 1		Planned
2	Kambarata 2	designed for 360 MW, installed 75 MW	Commissioning
3	Toktogul	1,200 MW installed	Operating, rehabilitation measures planned
4	Kurpsai	500 MW installed	Operating
5	Tash-Kumur	450 MW installed	Operating
6	Shamaldy-Say	240 MW installed	Operating, rehabilitation measures planned
7	Uch-Kurgan	180 MW installed	Operating, rehabilitation measures planned

Table 3-1: Hydropower plants along the Naryn River in the Kyrgyz Republic

Electricity demand in Kyrgyz Republic is highly seasonal with two thirds of domestic consumption taking place in autumn and winter. Although electricity generation capacity has nearly doubled since the Soviet era, load shedding is frequent especially in the winter when hydropower output is limited due to low river discharge, while cuts arise from problems due to technical failures in the outdated generating equipment.

Hydroelectric generation from the Naryn Cascade is central to the present and future economic development of the Kyrgyz Republic also with view on an electric power generation and transmission system regionally managed between the Central Asian Countries in future. However, the future security of this capability is in some doubt because of the age of most of these facilities. They are over 50 years old, obsolete and many spare parts are no longer available.

Therefore, the rehabilitation of Toktogul HPPs being part of the Naryn cascade is of paramount importance.

3.2 Category of the Project

According to ADB Project Data Sheet of 14 Jan 2014, Category B has been assigned to this Project.

In the ADB Safeguard Policy Statement 2009, definitions for the different types of projects are given. According to these considerations, projects of Category B are characterized as:

A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required.

The Project will not require any acquisition of land and resettlement activities will not become necessary at all. There is no protected area located nearby and ecologically sensitive habitats will not be affected. All activities will take place within the properties of the existing HPP facilities belonging to Joint Stock Company Electric Power Plants.

The Project has no Gender elements and regarding Involuntary Resettlement and Indigenous People. According to ADB Project Data Sheet of 14 Jan 2014, Category C has been assigned to this Project in this respect.

3.3 Proposed Schedule for Implementation

Phase 3 Processing Schedule

Milestones	Expected completion dates
Concept paper for clearance	September 2015
Due diligence work: IEE preparation	September-November 2015
Fact-finding	November 2015
ADB management meeting	January 2015
ADB Loan /Grant negotiations	February 2016
ADB Board Consideration	Q2 2016
Co-financing partner Board consideration	June 2016
Loan signing	June 2016
Subsidiary Financing Agreement effectiveness	July 2016
Cofinancing partner loan effectiveness	September 2016
Loan effectiveness	October 2016

Source: Asian Development Bank Estimates

The proposed Project implementation schedule presented in the table below.

Activity	Expected commencement dates	Expected completion dates
Component 1: Units 1, 2, 3 and 4		
Preparation of bidding documents to tendering	January 2016	
Rehabilitation works	July 2017	
Design phase	July 2017	August 2019
Equipment procurement and manufacturing	December 2017	August 2019
Equipment delivery	April 2019	January 2020
Commissioning: Unit 1 Unit 2 Unit 3 Unit 4	March 2020 March 2021 March 2022 March 2023	
Component 2: Toktogul Structure Refurbishment		

Mobilisation	May 2017	Oct 2017
Civil works	Oct 2017	Oct 2019
Component 3: Dam Monitoring System Upgrade	Mar 2018	Jun 2020

Main construction activities, requiring the shutdown of turbines/generators, will be done during summer season between March and end of November. This is the time with the lowest power demand during a year.

3.4 Description of the Technical Measures

The focus of the project is Toktogul HPP - the most important power plant of the Naryn cascade and intends to replace several components of the plant, which already cause problems during the daily operation or may fail in the near future. Particular attention is given to improve the safety and reliability of the equipment and the entire installation.

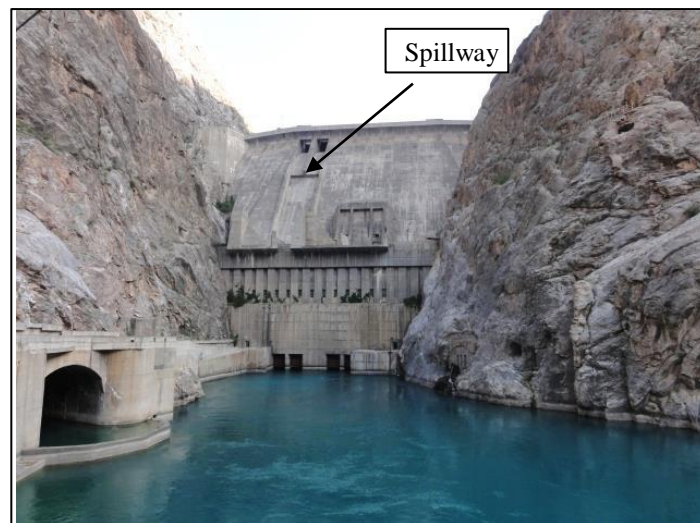


Figure 3-2: Damsite HPP Toktogul



Figure 3-3: Downstream the dam site



Figure 3-4: Reservoir upstream the dam site

At HPP Toktogul following measures are foreseen to be implemented during Phase 3:

- Replacement/Rehabilitation of two Turbines;
- Refurbishment of Toktogul dam civil structures;
- Dam Monitoring System Upgrade



Figure 3-5: Outdated generators to be replaced at HPP Toktogul

With the above rehabilitation measures following possible environmental impacts might be associated with:

- Disposal of old oil;
- Safety and health issues during construction;

- Increased truck movements during construction period also through populated areas; transportation of heavy equipment, construction materials and wastes
- Disposal of steel, copper, ceramics and other wastes.
- Construction waste and workers' domestic wastes

It is expected that around 3220 tons of scrap metals to be generated during Phase 3. There are also some electrical control units, old wire and protection systems and various switchgears which will be scrapped and replaced. However, certain small parts of such equipment (such as relays, wiring, indicators etc.) will be kept as spare parts to ensure the operation of old equipment of Toktogul HPP or other plants, owned by EPP.

The dam refurbishment works bear no ecological consequences or environmental impacts. The only environment-related matter is generation of insignificant amount of crushed concrete as construction waste in the amount of 10-20 m³.

The main amount of scrap metal, which is expected to be released during the rehabilitation, is summarized by equipment in the table below:

Table 3-2: Amount of Scrap Metal by Equipment for Rehabilitation Phase 3 at Toktogul HPP

Equipment	Number of Sets or Pieces	Scrap to be Removed, Total, in tons
Turbine, including Governor System	2	900
Generator (Stator, Rotor, Brackets) including Excitation System	2	2,200
Auxiliary Transformers	20	20
Electrical Panels	2	100
Total		3220

The amount of old oil which has to be disposed of will be in the range of 58 tons. Main portion of oil will be removed from the Turbines, Generators, and auxiliary transformers. This old oil is subject to PCB check.

Quantities of the oil which is expected to be disposed during the rehabilitation project, is listed in the below table by system:

Table 3-3: Amount of Oil to be removed by Equipment for Rehabilitation Phase 3 at Toktogul HPP-

Equipment	Number of Sets or Pieces	Oil to be Removed, Total, in tons
Turbine Bearings and Governor System	2	16
Generator Bearings	2	32

Auxiliary Transformers	20	10
Total		58

4. Description of the Environment

In the following description of the environment of the Kyrgyz Republic and of Djalal-Abad Oblast, only baseline data are given as being possibly relevant for this rehabilitation Project.

4.1 General Location

The Kyrgyz Republic is a small, land-locked country with an area of approximately 200,000 km² surrounded by the People's Republic of China, Kazakhstan, Tajikistan, and Uzbekistan. A large portion of the country is mountainous as it composes a part of the Ten Shan Mountains. Elevation varies from 132 m to 7,439 m (Lenin and Pobeda Peaks). The country is rich in hydropower resources with most of its hydropower plants situated on the Naryn River, the biggest tributary of the Syr Darya. Population is estimated to be 5.4 million (2009 estimates).

The project area is located in the Djalal-Abad Oblast. This Province consists of 8 Rayons (districts) with 75 Aiylokmots (AO, i.e. village councils).



Figure 4-1: Djalal-Abad Oblast and its administrative sub-division

The Oblast occupies an area of 33,500 km² (about 17 % of the whole area of Kyrgyz Republic). More than 70 % of its area is covered by sparsely populated highland of Western Tien Shan. The remaining 30 % represent lands along the boundary between Kyrgyz Republic and Uzbekistan and the Naryn river basin that are densely populated foothills and plain areas of Fergana valley allotted among irrigated cropping (cotton).

4.2 Climate

Due to the remoteness from any oceans, the Kyrgyz Republic has a sharply continental climate, with significant fluctuations of air temperature, long duration and intensity of solar radiance, insignificant cloudiness, and as a whole, modest amount of precipitation.

Frosty weather persists until the end of February and intrusions of cyclones from the South-West during the cold period of the year bring humid, tropical air of the Mediterranean and the Arabic seas, with heavy precipitation in Fergana valley and on the slopes around it.

Djalal-Abad province is located in the belt of subtropics and lies southward of the climate divide that passes along the Talas and Kyrgyz mountain ranges. Cold air masses from the south and north-east are hindered in their intrusion into Djalal-Abad province area. Remoteness from significant in size water reservoirs causes the climate's continentality and aridity with hot summer, humid spring and autumn and relatively cold winter. Humid air masses that bring most part of precipitation enter from the west via Fergana valley. The most amount of precipitation falls to the south-west slopes of Fergana range (up to 1000 mm per year). The south-west part of the province is most arid. Here, at the foothills, the amount of precipitation is 100-200 mm per year.

The highest amount of precipitation falls on spring and beginning of summer (up to 70 % of annual amount). The second part of the summer is drought. The climate follows the altitudinal tones. For foothills (up to an elevation of about 1,100 m), the climate of semi-desert is typical with moderate warm winter (temperature of January is +4°C) and hot dry summer (temperature of July is +26°C). Absolute maximum temperature reaches +43°C. The last late frosts occur in April, the first autumn ones in October. At the most part of the Oblast, up to 600 mm of precipitation a year fall, and only higher in the mountains the amount of precipitation exceeds this level. Snow cover is not stable, sleet falls in winter. Thickness of snow cover along the foothills is 112 kg/m² in the mountain areas. Predominant wind direction is south-west, average annual wind speed is 1.8 m/sec.

4.3 Rivers and Lakes in Djalal-Abad Oblast

The area of the Oblast is crossed by the largest river of the country. The



Naryn River comprises about 30 % of the Kyrgyz Republic's rivers total surface flow. The rivers of Kara-Darya, Kugart, and

Kara-Unkur that flow within the limits of the Fergana valley are significant especially in terms of their irrigation capacity. The rivers of Fergana and Chatkal ranges are primarily of snow- and glacier- derived nourishment. They are characterized by early spring floods. In the territory of the Oblast, a network of channels and water reservoirs were constructed to efficiently use the available water resources.

Two big waterfalls are located in the country park/recreational area “Arslanbob” that is located 70 km from Djalal-Abad, at the foot of the Weber Peak in Babash-Ata range. At the opposite side of the Babash-Ata range, in the valley of the Chong-Kerei, there is Lake Kutman-Kol located. At the north-east side of the Isfandjailoo range, the Lake Kara-Suu can be found at an altitude of 1,900 m. The biggest lake in Djalal-Abad Oblast is Sary-Chelek Lake (507 ha).

4.4 Fish Fauna in Naryn River and Reservoirs

In the Toktogul, Shamaldy-Sai and Uch-Kurgan water reservoirs several species of fishes occur; some of them are native others have been introduced. Following fish species can be found:

Pike Asp (Listed in the Red Data Book KR)	<i>Aspius esocinus</i>
Grass (Chinese) Carp	<i>Ctenopharyngodon</i>
Bighead Carp	<i>Hypophthalmichthys</i>
European Mirror Carp	<i>Ciprinus carpius</i>
Goldfish	<i>Carassius auratus gibelio</i>
Brook Trout	<i>Salmo</i>
Common Marinka	<i>Schizothorax intermedia</i>

Table 4-1: Fish species of the Toktogul, Shamaldy-Sai and Uch-Kurgan water reservoirs

The Turkestan catfish *Glyptosernum reticulatum*, that is also included in the KR Red Data Book, does not inhabit the water reservoirs as this is a fish preferring mobile/moving habitats. This species rather inhabits mountain rivers flowing in the Toktogul, Uch-Kurgan and Shamaldy-Sai water reservoirs than artificial lakes around HPPs, with their sufficiently sedentary habitats.

4.5 Protected Areas

There are several nature protecting areas around the hydropower plants concerned. 4 areas are under the responsibility of the State Agency of Environmental Protection: Besh Aral State Nature Reserve, Chychkan Wildlife Refuge, Padysha Ata Reserve and Saimaluu-Tash National Park. There are also several other protected areas under other responsibilities but

all are located in such a distance that any impact caused by the rehabilitation measures (included impact by truck movements) can be excluded. No Ramsar sites (wetlands) are located within the Project area.

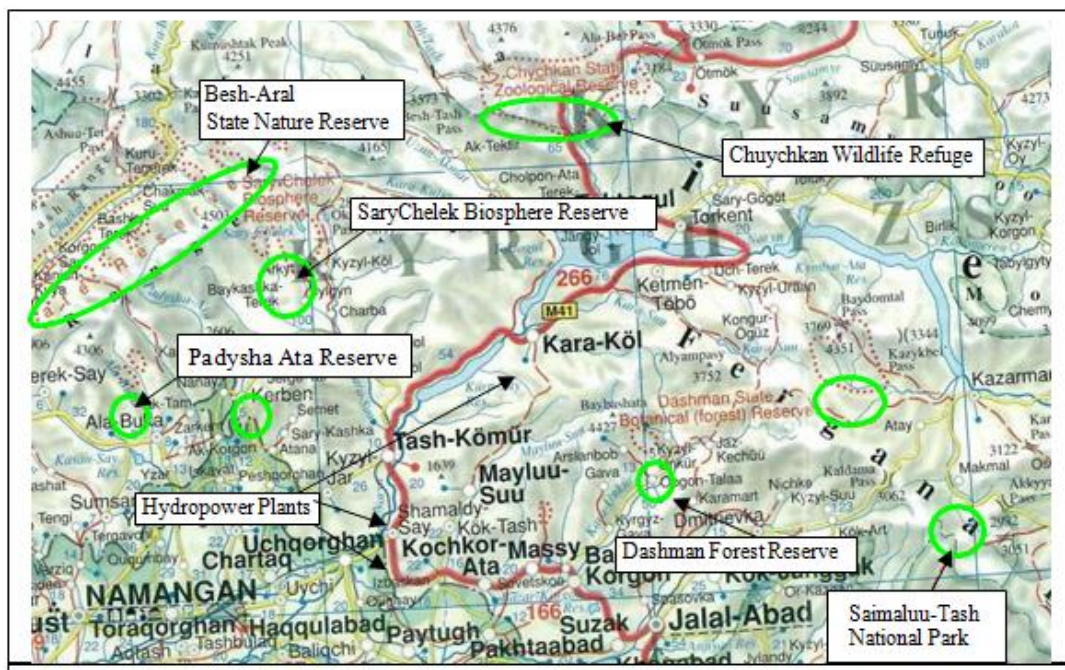


Figure 4-2: Protected areas in the Project area

4.6 Socio-economic Conditions

4.6.1 Kyrgyz population

The population of the Kyrgyz Republic at the end of 2009 was 5,276,100. This shows an increase of 8.4 % since 2000. About 35 % of the population lives in towns; the rest two thirds live in rural areas. There are about 90 ethnic groups living, with the largest ethnic groups being Kyrgyz (68 %), Uzbeks (14 %), and Russians (10 %). Among the 'others' are communities of Dungan (Chinese Muslim), Tajik, Korean, Ukraine, Uygur, Tatar, Kazakh and Turkish. Demographically, the population of the country is young. At the end of 2005, 33% of the total population was composed of children and adolescents, about 58% was employable population, and elderly (retired) people comprised approximately 8 %.

4.6.2 Population in Djalal-Abad Oblast

After the collapse of the Soviet Union the ethnic situation in Djalal-Abad Oblast has dramatically changed. Due to its location near Uzbekistan, the Oblast is characterized by the availability of many ethnic and language minorities. A lot of Russians, Tatars, Germans, Koreans and other ethnic formations have left the country for Russia,

Europe and America causing a change in the ethnic composition of the local community: now dominating ethnic groups are Kyrgyz and Uzbeks, Tajiks, and Turks. Currently, about 0,923 million people inhabit the Djalal-Abad Oblast that comprises 20 % of the total population of the country.

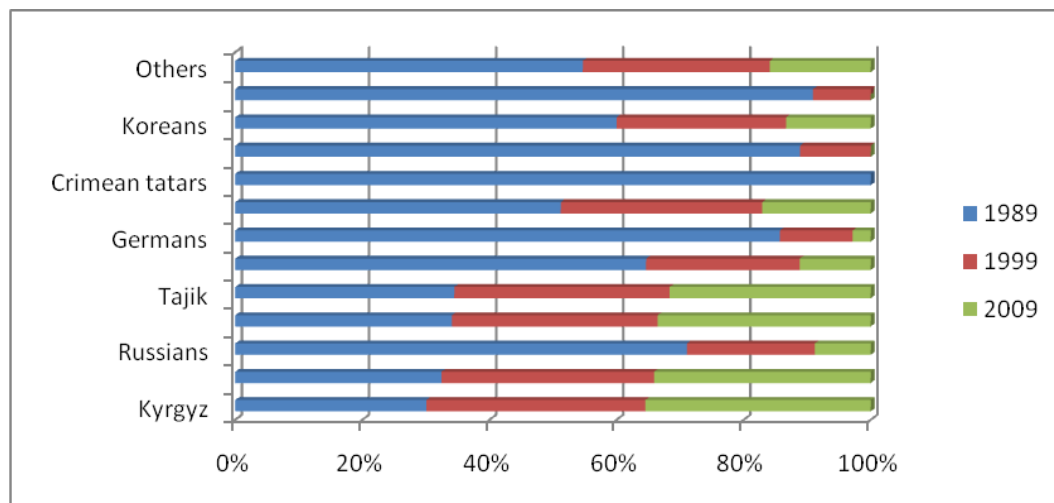


Figure 4-3: Ethnic situation in Djalal-Abad Oblast

The principal religion in the country is Islam of secular persuasion with a touch of shamanism among ethnic Kyrgyz. Russians and other Slavic people living in the country are members of the Orthodox Church and/or are atheists.

Average size of a household in the Oblast is 4.5 persons. After mass migration of Russians and other Slavic people, there was intensive migration processes started among Kyrgyz people as well. Rural Kyrgyz initially moved to Djalal-Abad town, then to Chui Oblast and Bishkek, and lately to the Russian Federation for earnings and employment. High mountain regions that always were the places of traditional dwelling of Kyrgyz people - nomads and cattle-breeders - have practically been depopulated.

Working-age population is growing rapidly, indicating that the human potential of the country is growing. However, there are not enough employment opportunities. The level of unemployment is high. Since 2000, unemployment grew from 7.5 % up to 8.2 % in 2008. The tensest situation emerged in the labor market in 2002, when the unemployment level was 12.5 %. Average age of unemployed people is 31 years. 50.7 % of them are below the age of 29.

Migration is a notable phenomenon for the Kyrgyz population. During 2001-2008, migration outflow was about 269,225 people, or in average more than 29,000 people per year. According to the World Bank, at the last year-end,

Kyrgyzstan was among the top ten developing countries, which received major part of money remittances, and ranked 4th in remittances proportion that was estimated at 28 % of the GDP. Earnings of labor migrants play statistically a significant role in the poverty reduction process. In average, an increase in the share of international remittances in GNP by 10 % causes a reducing proportion of living in poverty population by 1.6-1.9 %. In absolute figures, the amount of money transferred to Kyrgyzstan by migrants in 2008 was as much as US\$ 1,200,000.

According to the integrated investigation of household budgets, the poverty level in consumers' expenditure reduced from 50 % in 2003 up to 43 % in 2005. The number of poor people decreased in 2005 by 3 % as compared with the previous year. For comparison: in 2003 - each sixth citizen got into the poverty stricken category, in 2004 – each seventh one, and in 2005 – almost each ninth citizen. In 2008, poverty level was 44,4 % that is 2,213,000 people, or 412 600 families. Poverty in the country is still mainly a rural phenomenon: about three-quarters of all the poor population lives in rural areas.

4.6.3 Djalal-Abad Oblast economy

Djalal-Abad Oblast is one of the most industrial developed provinces of the country, where more than 100 industrial enterprises are located. The enterprises represent practically all the industries: electric power generation, electronics, coal, sewing and shoemaking industry, exploration and excavation of minerals (gold, oil, coal, gas), metal processing, food industry (processing agricultural production), wood processing, machinery construction, building materials production.

4.6.4 Agriculture in the Oblast

One of the leading industries of the Oblast's economy is agriculture. Cotton growing is one of the most profitable activities in the agricultural sector of the Oblast. In 2002, 71650 tons of raw



cotton was collected in Djalal-Abad Oblast. There are raw cotton processing plants in the Oblast. Also, watermelons, melons and gourds, grapes, fruits and vegetables are cultivated in the Oblast. In 2002, 39,782 tons of vegetables, 23,676 tons of watermelons, melons and gourds, and 31,055 tons of fruits were produced.

4.6.5 Cultural/historical heritage

The Kyrgyz Republic from the earliest times was a part of the Central Asian civilization and an important knot at the active routes of international, diplomatic and cultural communications and dialogues between East and West. Being located right at the Great Silk Road, it took in cultural achievements of different ancient civilizations. Numerous archeological objects in the Kyrgyz Republic form an integral part of the World's cultural heritage.

In Djalal-Abad Oblast, there are several important places of worship and historical monuments dated back to the XI-XII and XVII centuries. The Mausoleum "Shah-Fazil" (XI-XII centuries) that is located near Safid-Bulan village, Ala-Buka district; there is nothing similar among the monuments of Karahanid time in Kyrgyzstan. The Mountain "Arch-Mazar" located nearby the Mausoleum is a Moslem object of worship for the whole Fergana valley. The Mausoleums of Idris Prophet and his standard bearer are located in Jany Bazaar village, Chatkal district and date back to the XVIII century. There is also a mosque located near the Mausoleums.

Rock paintings (petroglyphs) in "Saimaluu-Tash" represent a huge concentration of petroglyphs of Bronze, Sak, Hun and Sarmat epochs (II-I millennium B.C.).

4.6.6 Sector information waste disposal in the Kyrgyz Republic

Over a long period of economic activities in Kyrgyzstan a huge amount of industrial and municipal solid wastes containing radionuclides, heavy metals (cadmium, lead, zinc, mercury) and toxic substances (cyanides, acids, silicates, nitrates, sulfates, etc.) has been accumulated and adversely affecting the environment and human health. In this context, the problem of waste management is becoming increasingly important. Most of the toxic wastes are located on the territory of Issyk-Kul (61.4%) and has increased dramatically since 1997 in connection with gold mine "Kumtor" start-up. Special problem of waste accumulation (about 15 million cubic meters) of overburden dumps, discarded ore and tailings, which occupy large areas near the settlements in the mountains, the drainage basin, etc. The greatest threat of contamination remains in the cross-border areas on the slopes of surrounding mountains of Ferghana valley and Chui (District Mailuu-Suu, Shekaftar etc.). In recent year's stabilization and economic recovery has been achieved and begun to revive old ones, which affects the dynamics of industrial waste. Waste disposed of in legally permitted /organized and illegal/unorganized landfills or stored on the territory of an enterprises. The most polluting industries are mining and processing, leather, cement, construction, electric lamp, casting, tanning, chemical, mechanical, heat, electricity, textile industry enterprises etc. among the wastes of other industries dominated by ash and slag wastes energy sector.

Among the most important wastes are (i) radioactive waste, (ii) chemical

waste and (iii) domestic waste.

In Kyrgyz Republic, treatment of chemical substances in connection with a focus on the development of agricultural and mining sectors, which contribute significantly to environmental pollution, is one of the most important among the issues of waste disposal. At present, there are no sufficient system of legal mechanisms that regulate activities in chemicals management, control and management of produced persistent organic pollutants (POPs).

The requirements to use certain types of chemicals are largely general in nature, relating to any type of economic activity, regardless of the specific chemicals used. Public policy in the use of chemicals is aimed primarily at limiting and eliminating the threat posed by chemicals, including POPs on human health and the environment.

The main problem is not completely solved until now, both in Bishkek and across the country– is the problem of disposal of household waste.

The existing landfill in Bishkek is the only place now to dispose waste. It is located 10 km from the city and takes waste from the city and 22 new-built quarters. The actual life of the landfill, which is in operation since 1972 exceeded the standard period of its use by more than 10 years. Currently, the country has practically no processing plant for solid waste. Less than 1% of all household waste produced today is used as a secondary raw material.

Nowadays, in Kyrgyz Republic there are great efforts ongoing to improve the waste management in the country. Thus, Kyrgyz Republic is a party to the Basel Convention "On the Control of Transboundary Movements of Hazardous Wastes and their Disposal" (1996), the Rotterdam Convention "On the procedure of prior studies agree on Hazardous Chemicals and Pesticides in International Trade" (2000), the Stockholm Convention "On Persistent Organic Pollutants" (2006). Kyrgyzstan is responsible for the priority of "waste management" of the Regional Action Plan for Environmental Protection (REAP), developed in the framework of the Interstate Commission on Sustainable Development (ICSD), the Central Asian countries with the support of UNEP. At present, the development of strategies for waste management in Central Asia is under the finishing. In Kyrgyzstan, completed the project "Assistance to Kyrgyz Republic in the development of the National Implementation Plan under the Stockholm Convention on POPs", which was prepared with the support of UNEP / GEF.

The country adopted a number of laws governing waste management: the Law "On Production and Consumption" (2001), "On Environmental Protection" (1999), "On the tailings and rock dumps" (2001), "On Earth Interior" (1997), "On Radiation Safety of Population" (1999), "On the State Ecological Expertise" (1999), "On Licensing" (1997), "On local self-

government and local state administration" (2002) "On Sanitary and Epidemiological of the Kyrgyz Republic" (2000), as well as a number of subordinate legislation. In the implementation of the Law "On Production and Consumption," in 2004, the State Program of the use of waste production and consumption for the period up to 2010 was adopted.

In 2008 UNDP implemented the project "Capacity building for implementation of the principles of sustainable waste management in the Kyrgyz Republic" (2008-2010). This project is a continuation of the project "Capacity building and capacity building of municipal waste management system in Kyrgyzstan", implemented in 2005-2007.

The project was aimed at:

- improving legislation in municipal waste management;
- elaborating recommendations to establish an effective financial mechanism in waste management system;
- encouraging recycling of production and consumption;
- awareness raising - training activities for public, private entrepreneurs and public employees.
- The analysis showed the lack of:
 - unified tariff system for waste collection, removal and disposal services;
 - standards of formation and accumulation of waste;
 - systematic information on the morphological composition of municipal waste;
 - full statistical report on municipal waste;
 - monitoring of authorized landfills of municipal waste;
 - environmental hazard status of authorized landfill sites;
 - system of separate collection of municipal waste.
- almost complete absence of private sector in providing services to collect, remove and dispose municipal waste.

4.7 Health and Safety at Hydropower Plants

HPP Toktogul is fitted with first aid kits. These kits are regularly inspected. All workers are instructed what to do in case of an accident, e.g. after a worker is hit by an electric shock. In addition, there is staff specially trained for first aid available. In case of severe injuries the worker concerned has to be taken to the next hospital.

Among others, such first aid training is provided by a special department established within Joint Stock Company Electric Power Plants called "Service of Reliability and Safety". The headquarters of this Service is based at Bishkek comprising 6 people working in it.

In the Oblasts branches of this Service are established. In Djalal-Abad Province there are three of them, one at Kara-Kul responsible for Toktogul HPP, and one at Tash-Kumyr being responsible for Uch-Kurgan and Shamaldy-say HPPs. A third branch is located at Kambarata.

Beside first aid instructions, one of the main tasks of this Service is to train workers and other “ITR” (“Engineering and Technical Personnel”) concerning safety aspects when working in a hydropower plant. This Service is training workers in the Oblast; higher skilled engineers will be trained in the headquarters at Bishkek. This training comprises issues like working under high voltage, how to secure a working place with signs, etc.

All workers/employees have to go through an exam to get a competence certificate that shows for what kind of work the worker/employee concerned is qualified. If a worker/employee takes unsatisfactory grade or do not pass (fails) the exam he/she will not get the allowance to do specific works. The higher the qualification the higher the salary is.

There are fixed rules and standards in written form provided to the workers/employees. The major principles are reflected at the following two documents: “Safety requirements under the electric units operation” and “Electric plants and grids technical maintenance regulations”. These requirements and rules are derived from old Soviet and Russian standards. Right now new safety requirements and standards of the Kyrgyz Republic are undergoing the endorsement at the Ministry of Justice KR, and will be available until end of 2011.

With respect to maximum permissible field strength allowed for workers to work in the former USSR a formula to calculate the exposure time of workers is still used in the Kyrgyz Republic. This formula is:

$$T_{[\text{hrs}]} = (50/E) - 2$$

$E = \text{electric field [kV/m]}$

This means that the exposure time in an electric field of 25 kV/m is 0 hrs. Working in an electric field of 25 kV or more is not allowed without special protecting clothing.

The details for the exposure time are laid down in ‘Safety Regulations under Electricity Generating Equipment operation’ (Moscow, Energoatomizdat, 1987).

Using the above formula there are maps in the installations (as HPPs, substations etc.) available that show areas with high electric fields, indicate the allowed working time and show where protection devices are located. Devices to measure electric fields are available at all HPPs.

Similar precautions exist for the strength of magnetic fields. In general, these fields are less critical compared to the electric field.

4.8 Infrastructure

The geographical location of the Kyrgyz Republic in Central Asia provides favorable conditions to use existing transport corridors as transit. Their further development is seen in the transit maximization and providing high level services. Kyrgyz Republic's motor roads extent comprises 34,000 km, of them common use motor roads are 18,000 km. In the common highway network, a special role for the national economy belongs to arterial highways of international importance. The length of motor roads of international importance is 4,160 km, more than 1,600 km of them belong to the sub-regional transport system of Asian and European roads (ESCATO, TRASECA) and international CIS highways.

One of the most strategically important transport arterial roads is the Bishkek-Osh highway with a length of about 678 km. It connects the North and South of the country and forms common economic and political space.



In the Kyrgyz Republic, there are well developed and extent electric transmission lines that comprise 6,600 km with voltage of 110 kV and more, as well as 190 substations with voltage of 500, 220 and 110 kV. The National transmission company “JSC National Electric Grid of Kyrgyzstan” (NEGK) carries out electric power supply from all the internal hydropower generating plants to four national distribution companies, 68 direct consumers, as well as import and export through various international electric transmission lines with 500, 220, 110, and 35 kV to neighboring countries: Kazakhstan, Uzbekistan and Tajikistan.

The electric power transmission system JSC NEGK is integrated into the United Central Asian Power System. The System is based on the Ring 500 KV, extended with general networks of 220 and 110 kV.

5. Anticipated Environmental Impacts and Mitigation Measures

5.1 General

All Project activities will be restricted to the property of Joint Stock Company Electric Power Plants (EPP). The rehabilitation measures will take place within buildings of the power plants. However, some side effects can impact areas far away from the power plant site. Thus about 3220 tons of scrap metals have to be disposed of and later on recycled. In addition, about 58 tons of oil has to be stored in an environmental sound manner for reuse on proper storage sites constructed during the Phase 1.

During rehabilitation measures single turbines have to be shut down. For very short period (hours) it will also be necessary to shut down all 4 turbines. Shut down shall take place mainly during summer when the power demand is reduced in order to avoid power shortages. For these cases EPP shall develop a plan how to ensure the power supply for the population taking power from other power plants or bringing power in from abroad.

An emptying of the reservoir of Toktogul during construction is not foreseen. Downstream impacts are not expected to occur (see also Section 5.2.2). The level of the Toktogul reservoir will remain in the normal operating range of the reservoir depending on the natural inflows. No extraordinary draw-down of the reservoir or water releases (downstream of Toktogul) are required for the implementation of the works.

The measures will not interfere with the dam structure and will not lead to any dam instability at all (see also Annex 11.3). Phase 3 includes rehabilitation works of civil structures of the dam, but these are minor works which will be done in the existing caverns, tunnels, galleries, and powerhouse. Thus the works will have no significant impact neither on environment, nor on the dam safety.

All wastes shall be recycled to the greatest extent possible as scrap steel and old oil. The analysis of old oil during the Phase 2 preparation revealed that there is no PCB in the oil of the equipment to be released in Phase 2. However, any old oil in the Phase 3 is subject to PCB test prior to its release from equipment. PCB-contaminated and PCB-free old oil shall be kept in separate vessels in the dedicated area. Old oil and scrap metals will be safely kept at the storage area, which has been built during the Phase 1.

Positive impact during operation of the Project will be a more reliable power supply within the Kyrgyz Republic and even within Central Asia referring to the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan (CAREC).

Below is the detailed overview of probable impacts with corresponding impact levels and mitigation measures.

5.2 Construction Phase

Impact of/on	Extent of impact	Description and comments	Mitigation measures
Land Acquisition and Use	○	No additional land has to be acquired by Joint Stock Company Electric Power Plants for implementing the refurbishment measures.	
Landscape	○	All rehabilitation measures will take place inside the existing facilities.	
Wildlife	○	All rehabilitation measures will take place inside the existing facilities. If oil extraction and transport to storage sites is properly done no negative impact on wildlife will occur.	
National parks, Wildlife Sanctuaries, other Protected Areas	○	There are no national parks, wildlife sanctuaries or other protected areas affected by the Project.	
Cultural and Historical Sites	○	All rehabilitation measures will take place inside the existing facilities. No archaeological sites are affected.	
Water Resources downstream Transboundary Water	○	Changes of the present water regime will not occur, neither during construction nor during operational phase of the Project.	Eventually need of closing of the intake gates shall be done during high water level of Toktogul Reservoir (see Section 5.2.2). All possible water level fluctuations will be in the range of normal operational reservoir levels.
Transport	■	There is a need to transport heavy material as transformers to the site. A certain amount of smaller truck movements during construction period will also occur.	A transportation Management Plan shall be set up (see Section 5.2.3)

Impact of/on	Extent of impact	Description and comments	Mitigation measures
		General principles	In general, principles of waste minimization shall be followed: first reduction of waste quantity, second recycling as much as possible, third proper dumping of remaining waste.
		Scrap metals	Steel is a raw material and shall be recycled. E.g. "Temir" State Enterprise (Djalal Abad branch, "Djalal Abad Temir") ² is able to take over the scrap metals.
		Used oil	Oil from equipment to be replaced shall be stored safely in roofed and concreted areas being fitted with bunds as provided in Phase 1. PCB-contaminated and PCB-free oil kept separately to avoid cross-contamination. PCB-contaminated oils should be kept safely and clearly labelled until further disposal. PCB-free oil refining can be done on HPP Toktogul site for reuse.
		Ceramic waste	Ceramics are inert and can be used as land filling material, e.g. for new road construction or disposed of at a designated site. But only a small amount of such wastes will be generated
		Construction waste from civil works	The waste from civil works shall be used as land filling material, e.g. for new road construction or disposed of at a designated site
		During construction workers will generate domestic waste	Domestic waste of the workers will be disposed of at HPP site and taken to official dumping site at Karakul city

Impact of/on	Extent of impact	Description and comments	Mitigation measures
Noise Aspects Workers	■	Noise during construction is limited to the duration of construction activities. Beside cranes and trucks bringing in the material no big construction machines are needed; no excavation and foundation works will take place.	Ear protection devices shall be handed out to all workers. Workers are obliged to wear ear protectors where 85 dB(A) are exceeded (see World Bank/ IFC General EHS Guideline, 2007).
	■	Noise by trucks crossing inhabited areas could annoy the population.	Noise caused by trucks can be mitigated by good management to avoid unnecessary truck movements. No movements of big truck shall be allowed between 22:00 and 6:00.
	■	As 50-100 workers will be employed for the period of construction, some social or cultural differences may take place.	The construction Contractor shall develop an awareness program on social and cultural difference including awareness programs on HIV/AIDS/STD aspects.
Air Quality	■	Only during transport of material some very limited dust emissions caused by trucks can occur.	
Worker's Health and Safety	■	Approximately 50-100 mostly skilled workers will be employed during peak time for construction. During construction period health and safety aspects for the workers have to be addresses. Aim shall be 'zero accident' during construction period.	The construction contractor shall implement a Health and Safety Management System (HSMS) during construction. For that a Health and Safety Management Plan for the construction shall be developed prior start of the construction covering among others waste handling, noise protection, sanitary issues, working in height, working under high voltages, working with hazardous material as lead containing paintings to be removed etc.

Impact of/on	Extent of impact	Description and comments	Mitigation measures
Employment	+	Mostly skilled labor from outside the Project area, if not from abroad, will be needed. There may be a need for short-term unskilled labor to assist during needed civil works and when dismantling and removal of old equipment	Workers shall be recruited from the region as far as possible. Offering of employment opportunities for people living in the region shall especially done if unskilled works are required (e.g. for needed civil works). National regulations for child labor policy shall be applied. Whenever possible, working opportunities shall also be offered to women.
Accommodation of workers	■	About 50 up to 100 workers will be needed, mostly skilled workers from outside the area.	Accommodation can be provided as following: about 10 private apartments/rooms are available for renting at Karakul. About 40 people can be accommodated at 'Tourist Hotel' at Karakul. The Tourist Hotel is owned by EPP. About 100 rooms are available in a higher ranked hotel (Kok/Bil Hotel) about 25 km away from Karakul towards Bishkek. In addition, according to the Mayor of Karakul, enough empty space is available to build up a temporary worker's camp at KaraKul. During road construction to Osh a workers camp was constructed at KaraKul. This camp was served with drinking water from arthezian sources fitted with deep well pumps and chlorination equipment. Also a sewer system would be available taking the sewage to the waste water treatment plant about 7 km outside KaraKul (or by specialized trucks). These installations could be revitalized very easily. A municipal landfill is also available to take over the domestic and some of the inert construction wastes.

Impact of/on	Extent of impact	Description and comments	Mitigation measures
Dam stability	○	The dam stability will not be influenced by the minor refurbishment works	The works will be closely supervised by PIC to avoid significant touching dam structure
Power Supply	■	During rehabilitation measures single turbines have to be shut down.	Shut down of turbines will take place during summer (between April and December) when the power demand is reduced in order to avoid power shortages. A plan shall be developed how to ensure the power supply for the population from other power plants or from abroad especially during high demand periods.

Table 5-1: Impact Assessment during construction phase under consideration of possible mitigation measures

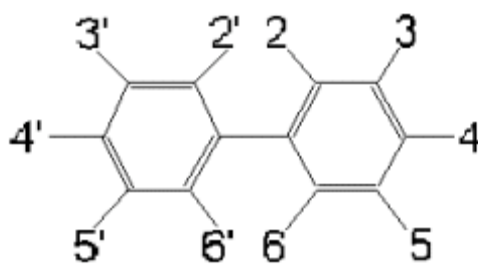
Extent of impact:

■■■	=	high negative	○	=	nil
■■	=	medium negative	+	=	locally positive
■	=	low negative	++	=	regionally positive

5.2.1 PCB in oil of equipment to be replaced

In former times, PCBs have been widely used as coolants and lubricants in transformers, capacitors, and other electrical equipment because PCBs possess good insulating properties and are fire retardant.

These substances consist of two phenyl-rings that can contain different amounts of chlorine molecules in the positions given below:



In general, the acute toxicity of PCB is small, but looking at the chronic effects a high toxic potential of PCBs has to be stated. Especially when burned PCBs can be turned into highly toxic and carcinogenic furans (PCDF) and dioxins (PCDD). Therefore special care has to be lead on this issue.

According to US EPA, a transformer is 'a transformer that contains PCB' if the concentration of PCBs is higher than 500 ppm. Oil containing PCB between 50 and 499 ppm is considered to be polluted with PCB and specific methods for disposal are necessary (e.g. specific incineration plants). According to EU Directive 75/439/EEC and amendments oil containing less than 50 ppm PCB can be burned in a regular incineration plant².

In the course of the rehabilitation of HPP Toktogul Phase 3 oil containing equipment will be replaced. Approximately 58 tons of oil have to be handled. The PIC shall undertake PCB tests before Contactor releases the oil, by using the equipment for such tests procured during the Phase 1. The PCB content in old oil shall not exceed the limits of 0.2 ppm PCB to be considered as PCB-free and oil with PCB content less than 50 ppm can be burned or reused.

5.2.2 Downstream impacts during construction

During construction activities there might a need of closing all intake gates for some hours to maximum one day. The period needed depends on the

² UNEP "Guidelines for the Identification of PCBs and Materials Containing PCBs"; World Bank "Good Practice Note: Asbestos: Occupational and Community Health Issues"; World Bank/IFC "EHS Guidelines: Handling of PCBs, asbestos, and other hazardous substances"

findings of Phase 1. During that time less water will reach the downstream located reservoir of Kurpsai. However, the amount of water being available will not be reduced significantly. All possible water level fluctuations will be in the range of normal operational reservoir levels.

The Kurpsai reservoir has a full supply level of the reservoir of 724 m.a.s.l. The variation between minimum and maximum reservoir level is 10.5 m, i.e. 713.50 - 724,00 m.a.s.l. The turbine outlets of Toktogul have a nominal tailrace level of 720,75 to 724,30 m.a.s.l. as function of the turbine discharge, thus the turbine outlet level is equivalent to the reservoir level of Kurpsai, and the tailrace level of Toktogul is mainly determined by the reservoir level of Kurpsai.

In order to minimize this very low impact even to zero, the closing of gates could be done during high water level situation in Toktogul reservoir. In this case the water could be released via the spillway what would not impact the water availability of Kurpsai reservoir at all. But this possibility will depend on the general water situation during the year of construction concerned.

A transboundary impact will not exist because the existing cascade of four HPP downstream Toktogul will prevent any impact on water release of the last reservoir near Uzbek border Uch-Kurgan.



Figure 5-1: Relationship between Toktogul and Kurpsai HPPs (picture taken from GoogleEarth)

5.2.3 Transportation of equipment to HPP Site

Some of very heavy equipment has to be transported to the site as the transformer. The weight of one transformer without Oil is about 250 tons, the height is 7 meters, the width 3.5 m, and the length is 8. Using this dimension the way from Bishkek via the Töö-Ashuu Pass (see Fig. 11-1)

pass is not possible because the height of the tunnels is not more than 6 m.

A possible transport route through Uzbekistan is difficult due to political reasons and is considered not be practical.

A transport using helicopter is not possible because the max. weight helicopters can carry is about 50 tons.

In principle, the transportation routing to the construction site will be fixed by the construction contractor. There are different routings possible as shown in Fig. 11-1 depending from which country the transformers have to be delivered. The decision will be made during the tender procedure when the construction contractor has been selected.

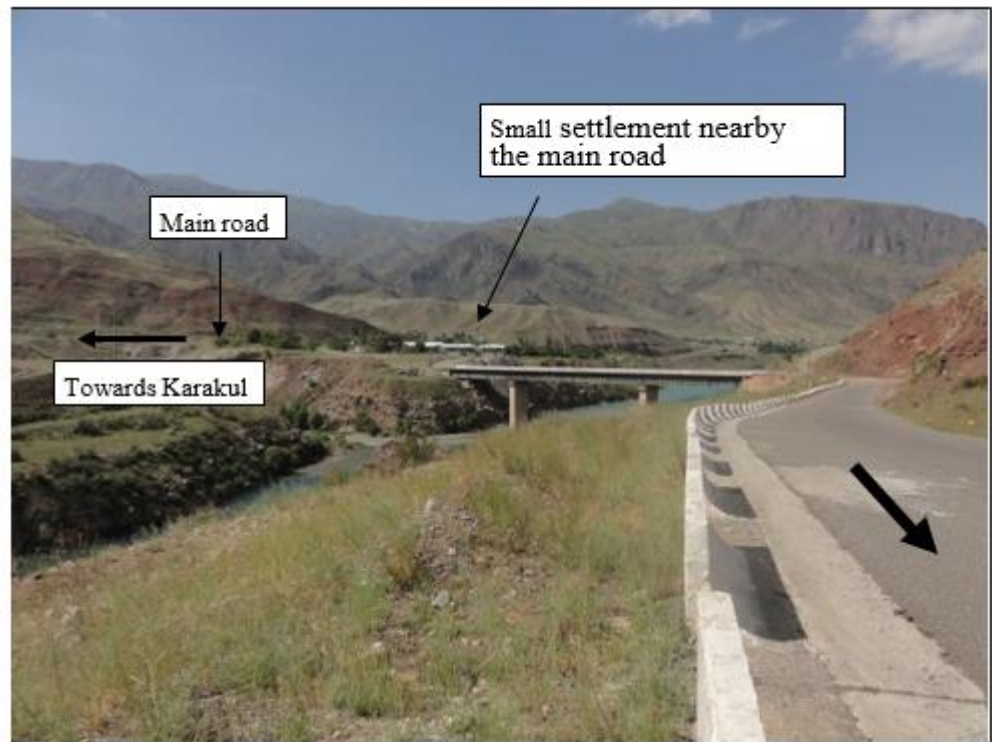


Figure 5-2: Access to HPP site (bold arrow) from main road Toktogul-Karakul- Tash-Kumur-Uch-Kurgan. Bridge crosses River Naryn

The way from the main road Toktogul – Uch-Kurgan to the access tunnel to HPP Toktogul is shown. This way was also used during construction for transporting the main transformers into the site and is useful to be used during the rehabilitation measures.



Fig. 5-1: Access road to HPP Toktogul near entrance gate



Figure 5-3: Bridge over River Naryn to the access tunnel across the transformers has to be taken



Figure 5-4: Bridge over River Naryn to the access tunnel where the transformers have to be taken



Figure 5-5: Gate to the access tunnel

Six months after awarding the contract the contractor shall present a Transportation Management Plan based on a detailed road survey how he intends to bring the transformers.

In addition to these very heavy truck movements (2 to the site, the removal of transformers will be done after having cut it into pieces with e.g. flame cutters done by the recycling company), a certain amount of truck movements will occur during the construction period, bringing in new material and taking out e.g. waste from civil works. The amount of these truck movements cannot be determined seriously at the moment. But the contractor shall avoid unneeded truck movements by proper planning of the construction activities as far as it is possible. If wastes can generate dust (e.g. from civil works) the trucks shall be fitted with tarpaulins when transporting the wastes to the landfills.

5.2.4 Disposal of scrap metals

TEMIR is the only state enterprise in the Djalal-Abad Oblast, which is involved in the disposal of metal waste and recycling of materials. In the Annex 11.12 all needed Certificates and Governmental Decrees of the enterprise TEMIR are attached. Further it includes a price list, what TEMIR pays for delivered materials.

According to the information of the representative of the TEMIR company in Karakul and Toktogul, the company is highly interested in taking the whole amount of metal from Toktogul HPP. The closest point of the scrap metal collection is Shamalysai village located 130 km from Toktogul HPP. All this scrap materials can be transported from the Shamaldysai railway station

directly to a destination point in a buyer-country.

The TEMIR company has flame cutters and autogeneous welders in its disposal, and is able to disassemble/shredder big units using the labor of their own workers. The means of transportation, 40-ton trucks can be rented from the local private companies and /or private owners to transport the metal scrap to Shamaldysai railway station.

A procedure of taking out the scrap metal from the territory of Toktogul HPP should be attentively considered well in advance by HPP management. Because the HPP is a high-security site, access to its territory is prohibited for everybody, except for those officially working there. Therefore, the workers from Jalal Abad TEMIR should have some specially provided documents – passes to enter the territory of HPP. Otherwise, the HPP staff should cut, prepare and bring the scrap metal out from the HPP territory by themselves. Jalal Abad TEMIR's personnel will start working with the metal after that. To make the work of bringing the metal waste from the Toktogul HPP more optimal, it is necessary to elaborate a schedule of demolition works at HPP so that the Jalal Abad TEMIR personnel could prepare their funds sufficient for payment for the scrap metals by the fixed date.

5.3 Operational Phase

Impact on/of	Extent of impact	Description and comments	Mitigation measures
Landscape	○	There will be no changes in the visual appearance of the region compared to the present status. The reservoir will be filled again and all new installations will be constructed within existing sites.	
Wildlife	○	No changes compared to the past situation.	
Electric and magnetic Field	○	Within the hydropower plants an effective system to protect the workers from exposure to electric and magnetic field is in place (see Chapter 4.7)	
Noise Aspects	○	There will be no additional noise generation in future. The new generators will even be more sound protected than the old ones.	
Air Quality	○	No impact on air quality is expected.	
Soil/Water Resources	○	There will be no other influence on soil and water resources as before the start of the rehabilitation measures.	
Fire Protection	+	The situation will be improved by replacing the old water based sprinkler system by CO ₂ or fog fire extinguishers.	The final decision which kind of fire extinguisher will be selected is up to the construction contractor
Workers' Safety	○	There are no changes concerning workers' safety compared to the situation before.	
Socio-economic Aspects	+ ++	The Project will result in a more reliable power supply within the Kyrgyz Republic and even within Central Asia referring to the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan.	

Tab. 5-2: Impact Assessment during operational phase under consideration of possible mitigation measures

Extent of impact:

■■■	=	high negative
■■	=	medium negative
■	=	low negative
○	=	nil
+	=	locally positive

★★ = regionally positive

6. Analysis of Alternatives

Kyrgyzstan has 18 power plants with an installed capacity of some 3,700 MW. Toktogul HPP alone with an installed capacity of 1,200 MW represents a third of the Kyrgyz generation capacity. All existing Hydro Power Plants (HPPs) are heritage from the Soviet times. They are mainly in poor condition and in need of repair because of lack of maintenance in previous years, even decades. The assessments identified some critical replacements/refurbishments necessary to improve safety and reliability of the power plants.

Toktogul HPP is a unique project and of irreplaceable value for Kyrgyzstan. Its value to the country and the region cannot be overstated. Toktogul HPP supplies base and peak load to the Kyrgyz grid and is the vital plant for the frequency and voltage regulation of the 500 KV transmission system connecting the Central Asian countries. The facilities were well constructed, but they are now at an age where many components must be replaced to maintain generating integrity.

There exists no real alternative then to maintain properly the civil structures and the installed equipment and replace deteriorated and worn-out equipment step by step.

Optional (but rather theoretical) scenarios are: Scenario 1:

Full Rehabilitation of the electro-mechanical equipment extends the expected lifetime of the power plant for further 30- 40 years.

Major drawback is the lack of funds to implement such a project.

Scenario 2:

No major overhaul and refurbishment of the installations.

The residual life time expectancy of the power plant is estimated roughly to 5 to 10 years, max. 15 years without any major rehabilitation program.

Subsequently the power plant has to be shut-down as soon as a safe operation cannot be assured in the future. This will lead to power-shortage and load shedding all over the Kyrgyz Republic and will affect the whole region.

Toktogul Dam and reservoir provide multi-year storage for all plants that cascade downstream. Also for irrigation and agriculture in the downstream countries, water releases are subject to annual Inter-Governmental Irrigation Agreements (IGIA). Thus to a large extent, trade in electricity is inter-connected with water release agreements.

7. Information Disclosure and Consultation

Public consultations on the Phase 3 of the Project took place on November 6, 2015 in the Toktogul HPP Administrative Office in Kara-Kul city, which is located 4 km away from the the Toktogul Dam. The meeting was attended primarily by the Toktogul EPP Cascade staff and employees.

The ADB safeguard consultant informed the audience about the reasons of the meeting and explained that such information disclosure is a part of ADB Safeguard Policies and the national law. Presentation also included brief description of the Phase 3 Project, its scope of works, so far identified environmental, social and safety issues and mitigation measures. The information at the meeting provided the scope of works, volumes of wastes generated and mitigation measures for environmental impacts. It explained that IEEs were prepared for all three Phases



The majority of the questions were about the concern of waste disposal. A separate meeting with Toktogul EPP Chief Engineer proved this to be a real problem to requiring proper attendance.

Questions asked during the meeting:

<p>There are many fluorescent lamps at the HPP. We don't know how to dispose them. We have several letters of orders on disposal of the lamps from the environmental authorities. However, there are only two licensed companies authorized for their disposal, yet the cost of their disposal a way higher than the cost of a lamp itself. Their placement in the municipal or other landfill is prohibited by law. Will the Project undertake to resolve this issue?</p>	<p>Lamps released from the project activities will be disposed under the supervision of PIU and PIC environmental specialists, in line with the effective national procedures by a licensed company.</p>
<p>What kind of work is under implementation now at the Toktogul HPP and when the real work will be started?</p>	<p>The project consists of three Phases and the physical works on this Phase may commence second half 2017 after the loan agreement signing, which is scheduled for September 2016. However the first contractor</p>

	mobilization of Phase 1 will be at the end of Mar 2016.
As it is known now that the tested old transformer oil does not contain PCB, will it be possible to use it in transformers with lower current, for distribution networks for example (35/10/0.4 kVt) ?	The PCB-free old oil can be re-used in transformers with lower current according to general procedures in the energy sector. Any old oil in the Phase 3 shall be exposed to PCB-content test.
Old oil storage at the HPP territory, in line with environmental legislation and safety requirements should not be stored there due to the risk of accidents, fires or contamination. The upcoming rehabilitation works will result in much greater old oil volumes to be handled, and this issue is related to available free land and tanks for oil storage.	Storage area for old oil will be constructed during the Phase 1 and it will also be used during the Phases 2 and 3. The Contractor will build a storage facility for old oil storage equipped with vessels for separate storage of PCB-contaminated and PCB-free old oil. .
Accumulation of oiled rugs; are they to be burnt at Osh Thermoplant? Same concerns oiled paper from old cables. Are there items are the subject to PCB tests?	All oiled items, such as rugs, oiled paper etc, will be transported and burned at Osh Thermo Plant oils and greases will be tested for PCBs before final disposal.
Accumulated old oil mix which are not subject to possible regeneration and re-use. This is the mix of low quality oils (transformer, cable and may contain water in it). This type of oil is pure waste with no technical perspective. If it is the subject to PCB test and utilization at Osh Thermoplant as well?	Such wastes will be tested for PCBs and if found as PCB-free they can be treated as additional fuel for Osh Thermo Plant. PCB-contaminated oils will be kept safely at HPP until further disposal.
In the course of transformers replacement the Plant will have to think of on how to get rid properly of ceramic parts and elements. These are isolators and ceramic-body indismountable switches, which contain oil inside. Are there any special procedures on how to proceed with these items?	Only auxiliary transformers will be replaced during Phase 3. Those transformers do not contain much oil and the oil is not expected to contain PCBs. However PCB test will be performed for all oils to ensure the PCB-free oil can be reused. According to the EMP designed for this Project ceramic wastes can be utilized for land filling purpose.

List of participants is in the Annex 11.7.

Other concerns voiced regarding the wastes disposal were about high transportation cost of any type of hazardous wastes from the site to elsewhere, low capacity and poor condition of the local municipal landfill site, unclear wastes utilization procedures on one hand, and high fines and penalties from the controlling agencies, on the other. It was explained to the participants that municipal landfill management matters are beyond the scope of the Project. However, domestic wastes from the workers campsite will be disposed of at the municipal landfill. An approval for such wastes disposal by Project Contractor is in the authority of Karakul Municipality.

8. Grievance Redress Mechanism

During the consultation process, the project impacted persons should be aware of their rights and are familiar with the complaints procedure, in writing or orally. Information about the rights and complaints procedures lies entirely within the sphere of responsibility of the IA/EA.

Complaints mechanism is designed to avoid long litigation, but not to limit a citizen's right to refer the case directly to the court, acting on common law. The Asian Development Bank (ADB) has no direct relation to the complaints procedure, however, it closely monitors the process of implementing their projects and should receive reports about what the complaints received and how they moved forward and provided its mitigation if there was a negative impact. In its budget, a Constructor must provide funds for GRM to be available.

In this case, any claims for redressing grievances and those caught under the impact of the project should be provided free of charge. One of the most important factors when working at the reception complaints from citizens are qualities professional attitude and friendliness, as well as offering assistance. During Phase 1, a Grievance redress mechanism (GRM) as proposed in the IEE has been established and approved by an ordinance of EPP. EPP is responsible to inform affected people about the GRM. The GRM will be functioned for the whole Toktogul Rehabilitation program in all three phases.

In accordance with the ADB's new policies and guidance documents for social sphere, and in particular for GRM, the scope of the GRM is limited to the issues on the involuntary resettlement, environmental performance and information disclosure. Despite the fact that GRM registers complaints for the cases of corruption and fraud, these issues are considered through a separate procedure under ADB's Anticorruption Policy (1998).

GRM not only solves the real problems with the local community during the project, but also has the potential to create a favorable image for the project among local residents in the potentially affected villages. This makes it possible to perform the steps outlined in view of the assistance of the local community and avoid unwanted tension in relations with the locals.

Efforts to redress grievances, for those who find themselves under the project impact should be available free of charge. The main factor when working at the reception complaints from citizens are such qualities of employees receiving complaints and citizens, as a professional attitude

Information leaflets distribution as well as the information boards installation are an effective way of sharing information about opportunities with GRM, including contact data and telephone numbers can help to the local people to file a complaint. A Public Communication Program will be developed by the EHWI specialist, with assistance from the PIC.

8.1 GRM Procedure

The GRM procedure involves several stages.

The **first stage** covers the registration of the complaint. Receiving and registration implies:

- (1) the central focal person (on these issues),
- (2) multiple intake points for grievances;
- (3) procedure for acknowledging the receipt of the complaints and informing the aggrieved person about the expected timeframe for the complaint review and;
- (4) procedures to maintain a log of complaints and queries.

The **second stage** covers screening the complaint for eligibility and really deserves to be considered within this framework. In particular, within this framework a complaint cannot be considered, which:

- (1) is not related to the activities of the Project;
- (2) dealt with more specific processes (e.g. on fraud and corruption);
- (3) nature of the issue that is beyond the official mandate of the GRM;
- (4) complainant has no standing to lodge a grievance.

If the complaint meets all the necessary requirements, it must be assigned to one of the following categories:

- a. Type A: Background, explanation, proposal, request
- b. Type B: the cart complaint alleged violation of the ADB on security measures (2009) and ADB's Public Communication Policy 2011.
- c. Type C: allegation of fraud or corruption (which is covered under separate policies and procedures beyond the scope of this GRM).

The **third stage** includes a mandatory element, which is the GRM Group (GRG). It reviews the complaints. GRG set of 8 people, one of whom is an independent observer:

No	Name of Position	Role in the GRG
1	Representative of IA or EA, OJSV «EPP»	GRG Chairman
2	Representative of OJSV «EPP», safeguard team member	Member GRG
3	Representative of the Jalal Abad Environmental Department	Member GRG

No	Name of Position	Role in the GRG
4	Local focal person for GRM (from Cascade of Toktogul HPPs staff)	Member GRG
5	Certified technical expert, as relevant (from Cascade of Toktogul HPPs staff)	Member GRG
6	Representative of the local administration	Member GRG
7	Representative of the Contractor	Member GRG
8	Representative of the Consultant (PIC)	Member GRG
9	Representative of APs	Member GRG
10	Independent party (Ombudsman Office or NGO)	Independent observer

More specific Terms of Reference are provided in the next section 8.2.

The central focal person should initiate the grievance review and convene the GRG meeting no later than 5 days since the complaint was registered as eligible for the GRM. All supporting documents – photo and video materials, required certificates, legal opinions, technical expert opinions – should be prepared prior to the meeting. The minutes of the each meeting should be agreed and signed by all members of the GRG no later than 3 days following the gathering.

The complaint registered with the GRM should be reviewed and addressed (declared valid or invalid) within 14 calendar days. If the case is a complex and requires an investigation (e.g. scrutiny by technical experts or legal opinion from the state or certified private entities) complaint review period may be extended maximum up to 30 calendar days. In such cases, the written notification should be sent to the complainant, explaining reasons for extension, describing the process and indicating an expected dates for delivering the results of the review.

If the complaint is found invalid, the GRG formulates a response and sends a written letter to the complainant, explaining reasons for the rejection. The complainant can appeal the decision and bring the case to the ADB Accountability Mechanism or the local courts. The project level GRM does not in any way impede the access of the APs to the ADB Accountability Mechanism (AM) or the country's judicial or administrative remedies. Should the AP wish to register a complaint with the ADB AM, the focal person should provide the complainants the following contact information:

Office of the Facilitator:

Email:
www.adb.org/site/accountability-mechanism/contacts
 Fax number: (+63-2) 636-2490
 Asian Development Bank
 6 ADB Avenue, Mandaluyong City
 1550 Metro Manila, Philippines

Special Project Compliance Review Panel

Email: access via
www.adb.org/site/accountability-mechanism/contacts
 Fax number: (+63 2) 636 2088
 Asian Development Bank
 6 ADB Avenue, Mandaluyong City
 1550 Metro Manila, Philippines

The **fourth stage** covers deciding on a complaint resolution process. If the complaint (Type A and B) is found valid by the GRG, a time bound action plan is prepared to address the complaint. The action plan is drafted by the IA/EA or safeguards unit of PIU, discussed with the independent party, complainant(s), and other relevant stakeholders, and then cleared by the IA/EA and ADB for implementation.

Complaints related to the integrity issues (Type C) are registered at the complaints log and forwarded to the ADB Office of Anticorruption and Integrity (OAI) for further review, as relevant. In case of Type C complaints, the focal person should refer the complainants to the ADB OAI and provide the following contract information:

Email: integrity@adb.org / anticorruption@adb.org
 Confidential fax number: (+63 2) 636 2152
 Address for mail correspondence:
 Office of Anticorruption and Integrity (OAI),
 Asian Development Bank,
 6 ADB Avenue,
 Mandaluyong City, 1550 Metro
 Manila, Philippines

And the **fifth stage** includes resolution of the complaint and closing the case. The IA/EA oversees the implementation of the agreed action plan to resolve the complaint. Once the action plan is executed, the IA/EA organizes a complaint closure meeting, where the complainant(s) confirms that closure of the complaint. In case the complaint is not fully resolved, the IA/EA prepares a additional action plan to address the residual issues and agrees it with the complainant(s) for implementation.

Capacity building of the GRG

Establishing a functional GRM involves identifying the capacity gaps within the IA/EA and implementing a capacity building plan designed to address the capacity deficiencies. The elements of the capacity building plan include:

- assessment of an existing grievance mechanism, if relevant, and capacity needs of the IA/EA;
 - developing the mechanisms or procedures designed to bridge the capacity gaps within the IA/EA;
 - delivering a briefing for the GRM members so they can manage implementation of the mechanisms or procedures;
- coaching the GRM members across the entire project processing and implementation cycle.

Monitoring, reporting and evaluation

The IA/EA and Consultant monitor the implementation the complaint resolution process and incorporates the monitoring results to the LARP Implementation Report (in case of category A project for IR – by the independent monitoring agency).

8.2 Terms of Reference for GRG Members

Local Focal Point (LFP):

Once the AP files a complaint, the LPC is to undertake and complete the following tasks:

- screen the complaint for eligibility and, if found eligible, registers it in the complaints log;
- draft a complaint memo to be signed by the complainant, indicating name of complainant, date and place of complaint submission, gathering supporting documents, as necessary;
- send the complaint memo to all members of the GRG, agree the date of the meeting and convene them for a GRG meeting;
- request village authorities to organize the meeting(s);
- facilitate the GRG meetings by providing a storyline for the complaint informed by and based on the actual facts;
- communicate requests and queries of the complainants to the members of the GRG/IA/EA and ADB;
- maintain records of the meetings and communication between GRG and the complainants;
- ensure an administrative and organizational support to the GRG members;
- raise awareness on the GRM of local stakeholders, including CSOs, APs and local authorities.

Representatives of the APs:

At least one representative of the APs from the affected community should participate in the GRG meetings. The specific tasks of the AP representative(s) includes:

- participate to all grievance redress meetings;
- provide relevant information related to the submitted complaints;
- provide other GRG members as relevant with a position note to be

reflected in the final meeting report.

Consultant

(Construction Supervision or Design and Supervision Consultant): Once a complaint is lodged with the GRM, the Consultant is to undertake the following tasks:

- contact the complainant(s) and draft a note with Consultant's understanding of underlying reasons that prompted a complaint;
- participate to all grievance meetings, provide expert opinions and participate in the investigation, as necessary;
- provide other GRG members as relevant with a position note to be reflected in the final meeting report.

Independent party (Office of Ombudsman of CSO):

After the registration of the complaint with the GRM, the copy of the complaint should be sent to the Independent Party (Office of Ombudsman or designated CSO) on the same day. The Independent Party is tasked with the following responsibilities:

- monitor complaint handling process, ensure that review process is transparent, objective and complies with the policy principles set for by the SPS 2009.
- provide recommendations and intervene in the complaint handling process if the process is viewed as biased or breaching the policy principles laid out in the SPS 2009;
- advise the complainant(s) on their rights and entitlements, as necessary;
- participate to all GRG meetings and site visits;
- prepare a position memo at the end of the meeting(s) and forward it to the members of the GRG.

Representative of IA/EA/PIU (chairperson):

After the complaint is filed with the GRM, the representative of the IA/EA will:

- contact the complainant(s), ascertain the facts/gather missing details, and draft a note with his/her understanding of the complaint;
- chair the GRG meetings and ensure that minutes of the meeting are shared with all relevant parties;
- review the content of each response-letter prepared after deliberations to ensure accuracy of answers provided to the complainants;
- ensure the administrative and organizational support for GRG members;
- prepare the chronology of events to understand sequence of developments prompting the complaint;
- ensure agreements reached by the GRG are implemented and that the follow-up actions are taken to address residual issues, as needed.

Technical Expert(s):

In case the case proves to be complex and requires a technical expertise for the GRG to be able to judge the substantive merit of the complaint, the CFP engages a qualified technical expert from the authorized state agency or certified private entities. The technical expert is specifically expected to:

- conduct a due diligence, relevant tests or an investigation;
- prepare a short report based on the results of the examination completed; recommend if further or additional legal opinion or expertise is needed to judge on the substance of the case.

9. Environmental Management Plan

9.1 Mitigation Measures during Construction

Project Activity	Potential Environmental Impact on/by	Proposed Mitigation Measure	Institutional Responsibility	Cost Estimates
Replacement of old equipment	Scrap metals	Scrap metals shall be stored safely until recycling	Contractor	Included in construction contract. Costs for installations of proper storage placed are included in Phase 1 to Toktogul Rehabilitation
		Collecting of scrap metals by local enterprises, such as “Djalal Abad Temir” (Province branch of “Temir” State Enterprise) ³ (see Section 5.2.4)	EPP	No costs, scrap metals can be sold (around 7 Soms per kg)
	Oil pollution of soil and waters	Oil from equipment to be replaced shall be first tested for PCB content. Non-PCB oils can be reused. PCB-contaminated oils shall be stored safely and marked clearly until further disposal. PCB-contaminated and PCB-free oil shall be handled and stored in separate vessels to avoid cross-contamination in roofed and concreted areas being fitted with bunds. .	Contractor	Included in construction contract. Costs for installations of proper storage placed are included in the contractor contract of Phase 1.

³ In 2011 the Consultant had a telephone talk with “Temir” State Enterprise (Djalal Abad branch) and requested official documents certifying that this enterprise has the permissions to deal with this sort of economic activities. The State Enterprise operates on the basis of Governmental Decree and has its own official price list that is revised and passes the approval procedure each year and endorsed also by formerly State Agency on Antimonopoly Policy and Supporting Development of Competitiveness. In January 2012, the State Agency got into the structure of Ministry of Economic Regulation. The merger resulted in the establishment of a new Ministry of Economy and Antimonopoly Policy. In June 2014 a meeting with representatives of Temir was held again. They confirmed to be able to take over the scrap metal and would pay 7 soms per kg.

Project Activity	Potential Environmental Impact on/by	Proposed Mitigation Measure	Institutional Responsibility	Cost Estimates
	Oil waste	Only PCB-free oil can be re-used. Oil wastes with PCB level less than 50 ppm can be burned at Osh Thermo Plant. . PCB-containing oils should be storaged safely for future disposal ⁴ under the guidance of SAEPP	EPP	Included in operational costs
	Ceramic waste	Ceramic is a chemically inert material and can be used e.g. as land-filling material.	Contractor	Included in construction contract
	Construction waste from civil works	The waste from civil works shall be disposed for land filling or in an designated landfill	Contractor	Included in construction contract
General construction activities	Domestic wastes	Domestic waste of the workers will be disposed of at HPP site and taken to official dumping site of Karakul city.	Contractor	Included in construction contract
	Noise emission directed to workers	Ear protection devices shall be handed out to all workers. Workers are obliged to wear ear protectors where 85 dB(A) are exceeded.	Contractor	Included in construction contract

⁴ UNEP "Guidelines for the Identification of PCBs and Materials Containing PCBs"; World Bank "Good Practice Note: Asbestos: Occupational and Community Health Issues"; World Bank/IFC "EHS Guidelines: Handling of PCBs, asbestos, and other hazardous substances"

Project Activity	Potential Environmental Impact on/by	Proposed Mitigation Measure	Institutional Responsibility	Cost Estimates
	Noise emission directed to the population	Good management will avoid needless truck movements; no truck movements in inhabited areas between 22:00 and 6:00.	Contractor	Included in construction contract
	Workers' health and safety	The construction contractor shall develop an Health and Safety Management Plan and install an H&S Management System for the construction phase including training of workers to work at height, under high voltage, wearing protecting clothes etc. (see Section 9.4). In setting up such a plan special attention shall be given to the possible occurrence of lead containing paintings and asbestos containing concrete.	Contractor	Included in construction contract
General construction activities	Employment	Workers shall be recruited from the region as far as possible. Offering of employment opportunities to people living in the region shall especially done if unskilled works are required (e.g. for needed civil works). National regulations for child labor policy shall be applied. Whenever possible, working opportunities shall also be offered to women.	Contractor	Included in construction contract

Project Activity	Potential Environmental Impact on/by	Proposed Mitigation Measure	Institutional Responsibility	Cost Estimates
	Accommodation of workers	<p>Accommodation can be provided as following: about 10 private apartments/rooms are available for renting at Karakul. About 40 people can be accommodated at 'Tourist Hotel' at Karakul. The Tourist Hotel is owned by EPP. About 100 rooms are available in a higher ranked hotel (Kok/Bil Hotel) about 25 km away from Karakul towards Bishkek. In addition, according to the Mayor of Karakul, enough empty space is available to build up a temporary worker's camp at KaraKul..</p> <p>During road construction to Osh a workers camp was constructed at KaraKul. This camp was served with drinking water from artesian sources fitted with deep well pumps and chlorination equipment. Also a sewer system would be available taking the sewage to the waste water treatment plant about 7 km outside KaraKul (or by specialized trucks). These installations could be revitalized very easily. A municipal landfill is also available to take over the domestic and some of the inert construction wastes.</p>	Contractor	Included in construction contract
Transport of heavy transformers	Impacts on Assets along the route	After 6 months of awarding the contract the contractor shall set up a Transportation Management Plan based on a detailed route survey.	Contractor	Included in construction contract

Project Activity	Potential Environmental Impact on/by	Proposed Mitigation Measure	Institutional Responsibility	Cost Estimates
General transport activities	Annoying the population	Proper planning of construction activities to avoid unneeded truck movements. If wastes can generate dust (e.g. from civil works) the trucks shall be fitted with tarpaulins.	Contractor	Included in construction contract
Shut down of single generators	Power shortages for the population	Shut down of generators preferably between April and December when the power demand is low. In cases generators have to be shut down during periods of high demand the power supply shall be ensured by in-feed from other power plants or from abroad.	EPP	Included in regular operational costs

Tab. 9-1: Mitigation measures for the construction

9.2 Mitigation Measures during Operation

During operational phase Project the assessment revealed no specific mitigation measures are needed with regard to the incremental impacts of project investments (section 5.3). However, the generic operational measures related to noise, workers' occupational health and safety, waste management, dam safety etc. will be implemented under the supervision of the EPP's Health and Safety officer, as well as EPP staff assigned for waste management. This is the capacity building program developed by the Environmental and Hazardous Waste Management (EHWM) specialist hired to work in PIU for the whole Toktogul rehabilitation program.

9.3 Monitoring Measures

9.3.1 Construction Phase

Monitoring measure	Parameters to be monitored	Location	Measurement	Frequency	Responsibilities	Cost Estimates
Ensure that mitigation activities are implemented and executed	All mitigation actions as given in Section 9.1 for construction site	Whole construction site	Through regular: <ul style="list-style-type: none"> • Site visits • visual inspections • interviews • record of findings 	Regularly during first 3 years of construction	EPP Department 'Service of Reliability and Safety'.	100,000 USD for 3 years of construction (included in capacity support to PIU)
Ensure that mitigation activities are implemented and executed	All mitigation actions as given in Section 9.1 for construction site	Whole construction site	Through audits by: <ul style="list-style-type: none"> • Site visits • visual inspections • interviews • record of findings 	Twice a Year	Project Supervision Consultant (PIC) and EPP Department 'Service of Reliability and Safety'.	200,000 USD for 12 site audits including international flights (included in PIC contract)

9.3.2 Operational phase

During operational phase no specific monitoring measures are required for project investments since they will not impose any incremental negative impacts. However, monitoring for the generic operational measures related to noise, workers' occupational health and safety, waste management, dam safety etc. will be required by the EPP's Health and Safety officer, as well as EPP staff assigned for waste management. This is the capacity building program developed by the Environmental and Hazardous Waste Management (EHWM) specialist hired to work in PIU for the whole Toktogul rehabilitation program.

9.4 Contractor's Health and Safety (H&S) Obligations

9.4.1 General H&S Targets and Objectives

The Health and Safety (H&S) targets of the Project are:

- zero accidents,
- no hazardous situations to the environment and public;
- no harmful spills to the environment,
- the promotion of welfare and health issues,
- the development of a sound working environment; and
- the integration of the local community.

Considering the defined H&S targets, the H&S objectives for the Project are:

- to design overhead lines and substations that are intrinsically safe, a healthy place to work in and have an as low as reasonable practicable (ASAP) impact on the environment;
- to execute the erection, construction and commissioning and to initiate the start-up of the overhead lines and substation operation without health or environment related incidents and to form the basis for a safe operation and maintenance;
- to comply with the applicable laws and regulations.

9.4.2 H&S Organization

In order to reach the general objectives given above, the Contractor shall develop, implement and operate an H&S Management System (HSEMS). This HSEMS is based on the generally existing HSE policy and goals of the Contractor and on an HSE Management Plan that has to be specifically developed to this Project by the Contractor. This plan shall give all measures how to meet the outlined HSE targets and goals.

The Contractor shall determine persons being responsible for all HSE issues on construction site(s). These H&S officers in charge shall prepare monthly records of all H&S relevant incidences (e.g. worker's fatal and non-fatal accidents), and keep an employment record giving name, age etc. of employed workers. The H&S officers will be responsible for keeping a high health and safety standard at the construction sites as wearing helmets, providing workers with ear protection devices, ensure that workers are belted during working at height etc. They will

also be responsible for regularly teaching of workers in first aid, how to work under high voltage etc. These H&S officers will also take care that all sub-contractors follow this good H&S practice at the construction site(s). A monthly report shall be prepared and submitted to the PIU.

Following key tasks shall be considered by the contractor in order to meet the targets and objectives as defined above:

- build up an H&S team with all project team members as part of coordination meeting (s);
- perform H&S training presenting all relevant governing documents and applicable legislative requirements related to H&S;
- implement measures to meet all risk acceptance criteria and H&S objectives defined for the OHL and Substation project,
- implement H&S requirements in all requisitions/ subcontractors,
- implement H&S requirements in all supply contracts,
- set-up and maintain H&S evaluation and decision making system;
- define and implement all H&S permit requirements;
- implement an office safety and clean desk policy;
- prepare an emergency preparedness and response plan.

The main focus of H&S during construction is the preparation and consideration of a site-specific H&S plan to be prepared by the Contractor and to be submitted to the Employer for approval prior to mobilization. This H&S plan shall:

- consider the H&S targets and objectives defined above;
- cater for the full scope of Contractor's work, including what is done by his subcontractor;
- provide all procedures required for performing H&S tasks that are inherently harmful and/or hazardous, e.g. performing excavations and trenching, confined space entry, work at heights, lifting/ hoisting operations, working with hazardous, dangerous or flammable material or goods, working under high voltage etc.

Any deviation to the H&S requirements must be reported in writing to the Employer for approval. The Contractor shall be responsible for promoting H&S awareness among his employees as well as those of his subcontractors, suppliers, visitors, and persons delivering materials and equipment.

9.4.3 Specific H&S Requirements during Construction (Work and Public Safety)

The following requirements are the minimum requirements with respect to H&S at the construction site. The employer shall have the right to extend these H&S requirements in case of the needed actions to fulfill the H&S targets and objectives:

- Regarding the influx of construction workers, specific attention shall be paid to Sexually Transmitted Diseases (STD)—or Sexually Transmitted

Infections (STI) in general and HIV/AIDS in particular. An awareness program shall be developed and communicated to all workers. This program might also include the provision of condoms for all site staff and labor as appropriate and provide an STI and HIV/AIDS screening, diagnosis and counseling.

- The Contractor's approved H&S plan will be the only applicable and valid H&S plan at site outlining and specifying details regarding H&S. Separate subcontractor or supplier's H&S company policies, H&S management systems or H&S plans are not acceptable at site.
- No personnel or employees are allowed to perform works, tasks or operations which they are not specifically trained and certified to perform. All works will be subject to work permits. No works are allowed to perform without an applicable and valid permit to work.
- At arrival of any personnel on site the Contractor shall secure that they have or will get the required training / certification before any works, tasks or operations are assigned.
- The Contractor shall ensure that his own, his subcontractors' and suppliers' personnel at all times follow all site specific H&S rules and requirements whenever they are present on site.
- The Contractor shall ensure that first aid kits including "eye washers" are available at all work locations and that first aid kits are complete at all times. The Contractor shall ensure that at least one defibrillator will be available on each construction site.
- If applicable, the Contractor shall inform himself about the potential presence of poisonous animals and take all required precautions to avoid accidents.
- The Contractor shall ensure that his personnel have passed an elementary first aid training including cardiac arrest treatment.
- The Contractor shall ensure that safety goggles are handed out and worn by all employees or personnel at all times at working places. Hard hat, safety footwear, working gloves and protective outer clothing suitable for the local climate conditions shall be worn at all working locations. Hearing protection shall be worn in all areas with noise levels at or above 80 db(A).
- All electrical hand tools, extension cables, transportable generators, other non permanent electrical equipment etc. shall undergo short circuit checks by a certified and registered electrician minimum per every three (3) months, prevailing national or international rules.
- Use of drugs and alcohol are strictly prohibited when working or being present on site. Personnel reporting for work that are under the influence of alcohol and/or drugs shall be denied access to site. In such cases, the Employer expects the Contractor to intervene with appropriate measures according to Contractors' terms of employment in order to prevent recurrence. However, the Employer reserves the right to deny continued access to site to such person(s) without further notice if the site safety and security in any way otherwise is felt threatened.

In order to fulfill the health and safety tasks and the environmental requirements stipulated in the EMP the contractor has to set up a Health, Safety and Environment Management Plan (HSEMP) and implement a Health, Safety and Environment Management System (HSEMS) based on statements above.

9.5 Implementation Arrangements

All mitigation measures during construction have to be implemented by the contractor what will be monitored by the Project Implementation Consultant (PIC) during the whole construction period as follows.

As discussed in Chapter 4.7, within Joint Stock Company Electric Power Plants a department 'Service of Reliability and Safety' exists. This is the responsible department for dealing with all safety and health issues relevant for workers at the HPPs. Environmental aspects are not covered by this department. The headquarters of this Service is based at Bishkek comprising 6 people working in it. In the Oblasts there are branches of this Service established. In Djalal-Abad Province three of them exist. The one at Karakul is responsible for Toktogul HPP.

EPP as responsible PIU for the project will recruit a Project Implementation Consultant (PIC). The national and international team of consultants will assist EPP as project supervision consultant on the rehabilitation of Toktogul HPP. The Consultant will also provide capacity building training to EPP staff for project management and operation and maintenance for the Project. The Consultant will be essentially an extension of EPP. The Consultant will assist EPP in assuring that the project is implemented according to the specified standards.

This Consultant assignment will include the update of the environmental management and monitoring plan (EMP) detailing environmental mitigation measures, to address each identified impact and recommend appropriate environmental mitigation measures. He will assess the cost, responsibilities schedule, location and monitoring framework associated with the implementation of the mitigation measures and the EMP and he will assist EPP in monitoring the implementation of the EMP.

In addition, a hazardous waste management specialist may be included in the PIC to review the technical specifications and operating procedures related to the waste management component and carry out the overall supervision.

An Environmental and Hazardous Waste Management (EHWM) specialist will be hired to work in PIU for building in-house capacity of EPP for the whole Toktogul rehabilitation program. The EHWM specialist will receive on-the-job training from PIC environmental specialists and will ensure EPP in-house capacity for EHWM in place before commencement of the construction contracts. This person shall support and assist PIU with respect of implementation of the EMP and to ensure developing an in-house capacity at EPP. In case of discrepancies he/she shall implement proper actions to establish the compliance with the EMP. If this is not possible and if the discrepancy is considered to be severe the person in charge shall be empowered to stop the work immediately until compliance is achieved again. Costs for remuneration, office, allowances, transportation etc. have to be considered. The costs will sum up to approximately 100,000 USD.

The Project Implementation Consultant will be not only responsible for implementation of the technical refurbishment measures but also for all issues concerning health, safety and environment (HSE).

The reporting needs are discussed in Section 9.4.

9.6 Reporting

The Project Implementation Consultant being also responsible for supervision of all environmental issues shall prepare monthly reports including the progress of the implementation of the EMP. These reports shall be submitted to EPP and distributed to all involved departments, e.g. 'Service of Reliability and Safety'. The report shall contain all discrepancies from the EMP and list all HSE relevant incidents and accidents that occur during the implementation of the refurbishment measures. Based on these reports and on own regular construction site audits the Consultant together with EPP/PIU will prepare semi-annual performance and monitoring reports and submit them to ADB (see Section 9.3).

9.7 Summary Costs for Implementation of the Environmental Management Plan

Extra costs with respect to environmental mitigation are related to additional measures to ensure safe management of the oil wastes, as well as safe stockpiling of scrap metals and other construction wastes. All mitigation measures given above are included in the regular construction costs.

In order to supervise and monitor appropriate implementation of the EMP following costs have been calculated:

Issue	Costs	Remark
Mitigation measures		Included in Contractor contract
Final disposal of oil and scrap metal from the storage area		Cost neutral to EPP as it will be covered by the revenue from the sale of scrap metals
National Environmental safeguard specialist for 3 years to be contracted by EPP	100,000 USD	Included in capacity support to PIU
International external auditor, twice a year, including travel costs Environmental monitoring and supervision of mitigation measures	200,000 USD	Included in PIC contract
Subtotal	300,000 USD	
10% contingencies	30,000 USD	
Total	330,000 USD	

10. Conclusion and Recommendations

As it can be seen from Tab. 5-2 only some low negative impacts occur mainly during the construction phase. During the operational phase, the positive impacts are obvious and consist in a much more reliable power supply, not only for the Kyrgyz population but also for the entire Central Asian region taking into account the intention of establishing a regional system in the power sector with coordinated energy generation and energy transmission between the Central Asian countries including export to Afghanistan/Pakistan (CAREC).

Mitigation measures are given in Section 9.1 of this report and necessary monitoring actions during construction phase are discussed in Section 9.3. For the operational phase no additional measures have been identified.

The water availability downstream will not be affected by implementation of the rehabilitation measures. All possible water level fluctuations will be in the range of normal operational reservoir levels.

The dam stability will not be influenced by the foreseen measure. None of these measures will interfere with the dam structure.

All wastes shall be recycled to the greatest extent possible as scrap steel and old oil. The analysis revealed that there is no PCB in the oil restricting its use.

Summarizing, if the stipulated measures are implemented, the positive effect of this Project on the social side is eminent (regional, national and international) whereas the negative impacts on the environmental side are very low. The advantages are obvious in having a much more sustainable power supply.

Thus the Project can be constructed and operated without creating significant adverse environmental impact. The need for preparing an IEE to this project is stipulated in the Safeguard Policy Statement 2009.

11. Annexes

11.1 Record of Meetings and Field Visits

The meeting with SAEPF took place on November 18, 2015 to discuss the IEE components for the Phase 3 of the Project, assessment of environmental impacts and EMP to meet the requirements of ADB safeguard policy and KGZ national regulations, as well as timing for obtaining SAEPF approval. EPP will submit draft IEE by end of Nov 2015 and SAEPF can be expected by end of Dec 2015 prior to ADB management review scheduled in Jan 2016.

SAEPF: Head of the State Ecological Expertise Unit Mr. Arsen Ryspekov

Project team: Ms. Tran T. Thanh Phuong, Senior Environment Specialist, Office of the Director General, ADB, Mr. Sergey Krivoruchko, National Safeguards consultant and Mr. Samat Aldeev PIU Director of EPP

Field visit by ADB safeguard consultant on 5 Nov 2015:

Meeting was with HPP chief engineer, deputy head of industrial and technical department, ecologist.

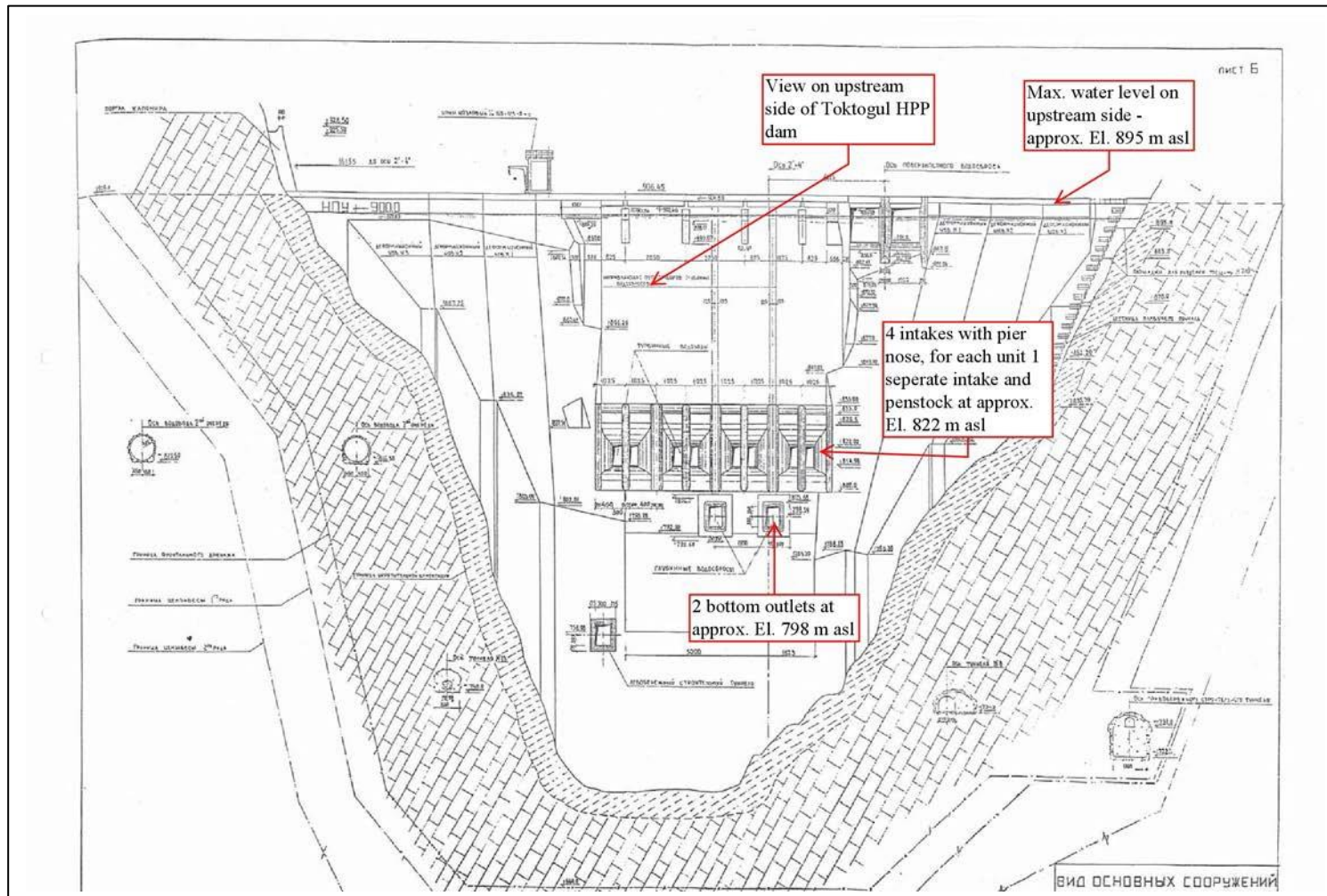
Site visits were conducted to the dam, powerhouse, equipment, municipal damsite, existing storage area for electrical equipment.

11.2 Tasks of Environment and Hazardous Waste Expert within PIU

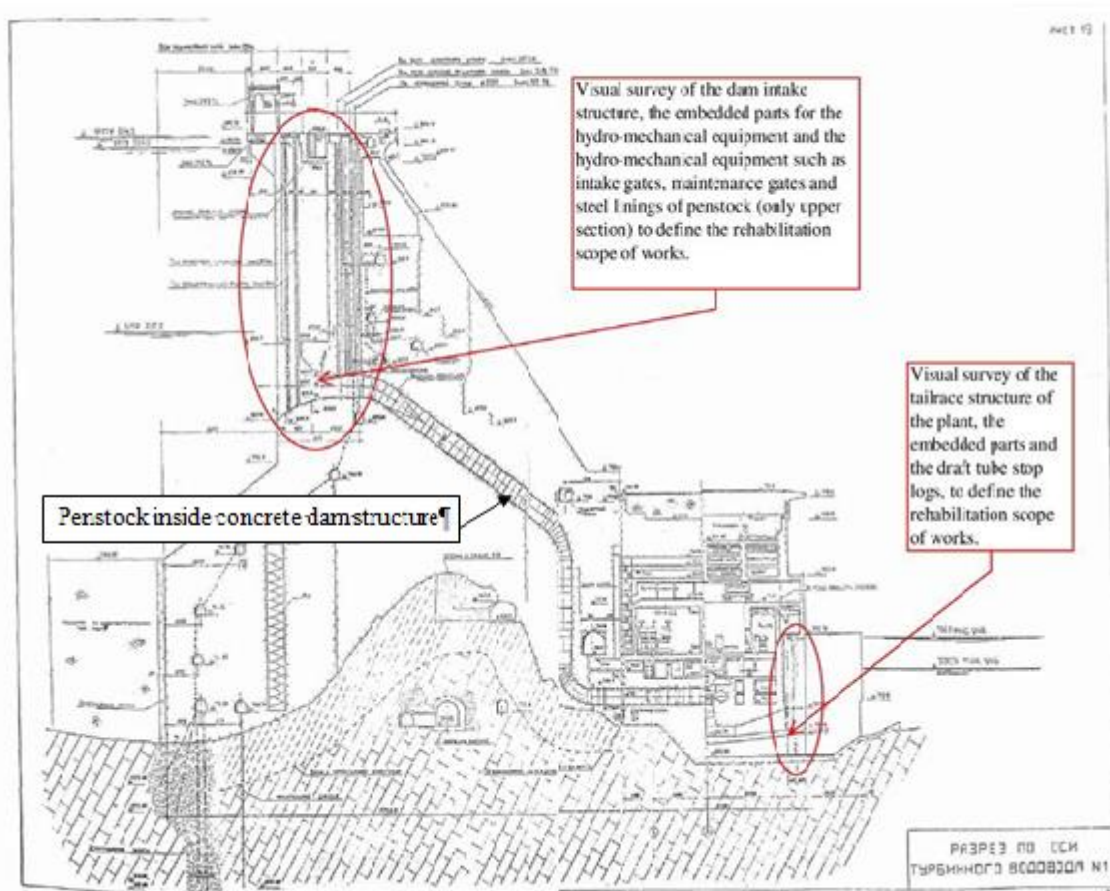
1. The objective of this assignment is to support the Project Implementation Unit (PIU) of Electric Power Plants (EPP) in the environment aspect of ADB financed Toktogul Rehabilitation Phase 2 Project. The consultant will work for the project implementation unit and Project Implementation Consultant (PIC) in monitoring and supervising the implementation of the Environment Management Plan having been developed to this Project.
2. The individual consultant will report to the head of the PIU of EPP. The duration of the assignment is 3 years. Minimum qualification: university degree with at least 5 years of working experience in the field of health, safety and environment.
3. Specific tasks include:
 - Review and endorse the environmental section of periodical project progress reports, ensure the quality of the bi-annual environmental monitoring reports before submission to EPP for submitting it to ADB and take care of required public disclosure of reports in accordance with ADB Safeguard Policy Statement requirements;
 - Supervise the development of an Emergency Response Plan and be responsible for quality assurance before submission to EPP for approval and then to ADB;
 - Coordinate with the EPP Department of Service of Reliability and Safety to ensure the compliance with Environmental Management

- Plan (EMP) and the contractor's health and safety plans;
 - Support PIC in reviewing the technical specifications and operating procedures related to the waste management and carry out the overall supervision of waste disposal;
 - Perform regular site audits including project site, storage area, and the roads used for transportation of equipment to the project site and transportation of oils and other wastes from the project site to the storage and disposal sites, to ensure that all mitigation measures are implemented adequately. In case of discrepancies the consultant shall report immediately to EPP for implementing proper actions to establish the compliance with the EMP.
- Supervise and review the updated Initial Environmental Examination as necessary.

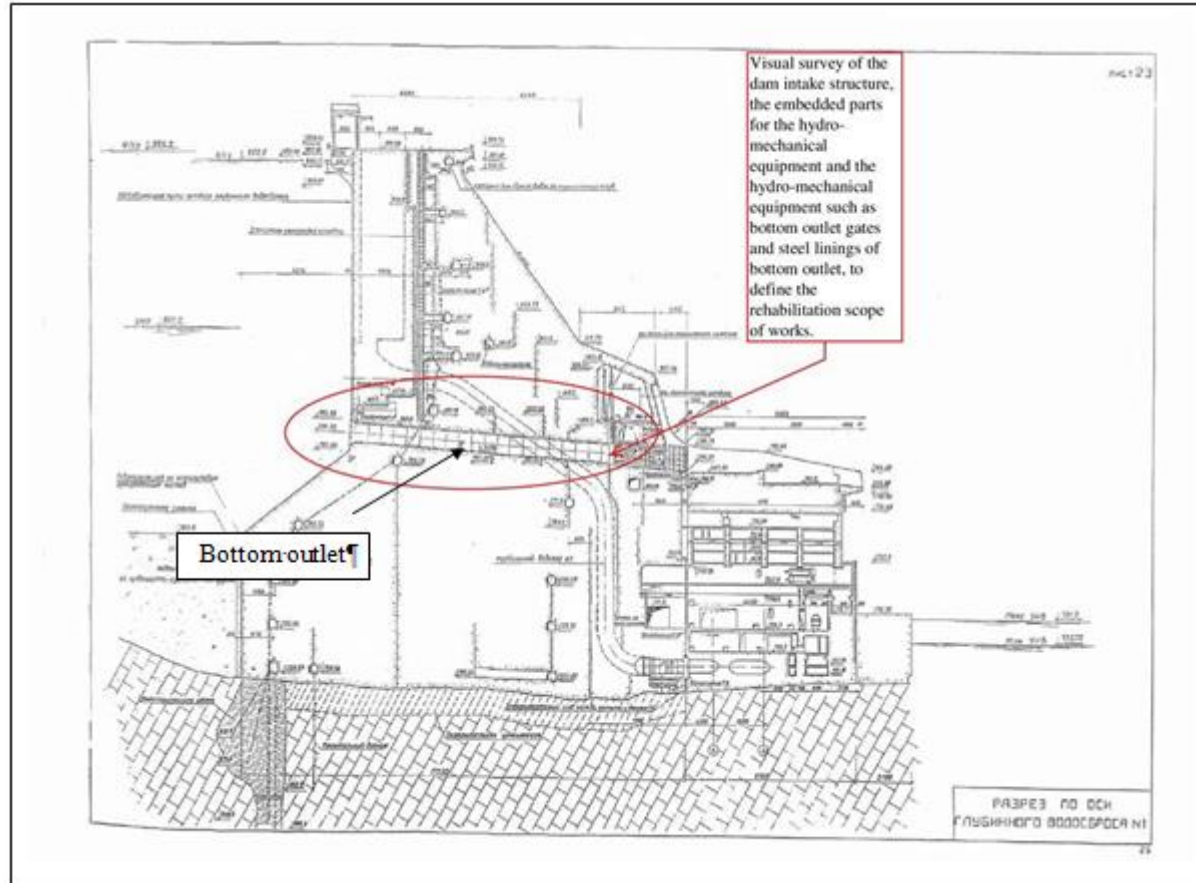
11.3 Schematic drawing of HPP Toktogul



Part A



Part B



Part C

11.4 Certification of Analytical Laboratory (PCB Analyses)



Deutsche Akkreditierungsstelle GmbH

Beliehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV
Unterzeichnerin der Multilateralen Abkommen
von EA, ILAC und IAF zur gegenseitigen Anerkennung

Akkreditierung



Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium

WESSLING GmbH

mit den in der Urkundenanlage aufgeführten Standorten

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

Probenahme sowie physikalische, physikalisch-chemische, chemische und mikrobiologische Untersuchungen von Wässern, Abwässern, Grund- und Fließgewässern, Roh-, Schwimm- und Badebeckenwässern, Eluaten, Böden, kontaminierten Böden, Schlämmen, Sedimenten, Materialproben, organischen Düngemitteln, Bodenverbesserungsmitteln und Substraten, Gärrückständen, Kompost, Bioabfällen, Kraft- und Brennstoffen und Klärschlämmen; Probenahme und Untersuchung gemäß Trinkwasserverordnung mit Ausnahme der radiologischen Parameter; ausgewählte physikalisch-chemische Untersuchungen bei der Wasserprobenahme; Probenahme sowie physikalische, physikalisch-chemische und chemische Untersuchungen von Böden und Klärschlamm im Rahmen der Klärschlammverordnung, Abfällen zur Beseitigung und zur Verwertung, Mineralölen, Mineralölprodukten, Brennstoffen, Althölzern, Sekundärbrennstoffen, Stäuben, Schlacken, Aschen, Bodenluft und Gasen; sensorische, chemische, biologische und mikrobiologische Untersuchungen von Lebensmitteln, Futtermitteln, Bedarfsgegenständen, kosmetischen Mitteln und ausgewählten pharmazeutischen Produkten; Probenahme und molekularbiologische Untersuchungen von Lebens- und Futtermitteln; ökotoxikologische und biologische Untersuchungen von Wässern, Abwässern, Grund- und Fließgewässern, Eluaten von Böden und kontaminierten Böden; Bestimmung (Probenahme und Analytik) von polyhalogenierten Dibenzo-p-Dioxinen und Dibenzofuranen in Wässern, Abwässern, Böden, kontaminierten Böden, Sedimenten, Klärschlämmen, organischen Düngemitteln, Bodenverbesserungsmitteln und Substraten, Kompost und Bioabfällen, Stäuben, Schlacken, Aschen, Abbruchmaterial, Lebensmitteln, Futtermitteln, Aufwuchsmaterialien, bei Emissionen, Immissionen, Arbeitsplatzmessungen und in Innenräumen sowie von Wischproben; Bestimmung (Probenahme und Analytik) von anorganischen und organischen gas- oder partikelförmigen Luftinhaltsstoffen bei Emissionen, Immissionen, Arbeitsplatzmessungen und in Innenräumen; Bestimmung (Probenahme und Analytik) von faserförmigen Partikeln bei Emissionen, Immissionen, Arbeitsplatzmessungen und in Innenräumen sowie in Feststoffen, Stäuben und Böden; Fachmodule Wasser, Boden und Altlasten sowie Abfall; Modul Immissionsschutz

Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 13.06.2013 mit der Akkreditierungsnummer D-PL-14162-01 und ist gültig bis 13.09.2016. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 154 Seiten.

Registrierungsnummer der Urkunde: D-PL-14162-01-00

Im Auftrag

Berlin, 13.06.2013

Andrea Valbuena
Abteilungsleiterin

Siehe Hinweise auf der Rückseite

11.5 PCB Analysis of Oil in Transformers to be Exchanged

BERATUNG | ANALYTIK | PLANUNG



WESSLING GmbH
Impexstraße 5 · 69190 Walldorf
www.wessling.de

WESSLING GmbH, Impexstraße 5, 69190 Walldorf

GefaÖ GmbH - Gesellschaft für angewandte
Ökologie und Umweltplanung
Herr Dr. Hans Back
Impexstraße 5
69190 Walldorf

Geschäftsfeld: Umwelt

Ansprechpartner: B. Füllgrabe
Durchwahl: (06227) 8 209-20
Fax: (06227) 8 209-15
E-Mail: bernhard.fuellgrabe@wessling.de

Prüfbericht

Projekt: Trafo-Öl

Prüfbericht Nr.	CWA14-009992-1	Auftrag Nr.	CWA-04232-14	Datum	04.04.2014
Probe Nr.		14-044090-01	14-044090-02	14-044090-03	
Eingangsdatum		31.03.2014	31.03.2014	31.03.2014	
Bezeichnung		Trafo Oil T 22 18.03.14	Trafo Oil T 21 18.03.14	Trafo Oil T 2 18.03.14	
Probenart		Öl	Öl	Öl	
Probenahme durch		Auftraggeber	Auftraggeber	Auftraggeber	
Anzahl Gefäße		1	1	1	
Untersuchungsbeginn		31.03.2014	31.03.2014	31.03.2014	
Untersuchungsende		04.04.2014	04.04.2014	04.04.2014	

Polychlorierte Biphenyle (PCB)

Probe Nr.			14-044090-01	14-044090-02	14-044090-03
Bezeichnung			Trafo Oil T 22 18.03.14	Trafo Oil T 21 18.03.14	Trafo Oil T 2 18.03.14
PCB Nr. 28	mg/kg	OS	<0,2	<0,2	<0,2
PCB Nr. 52	mg/kg	OS	<0,2	<0,2	<0,2
PCB Nr. 101	mg/kg	OS	<0,2	<0,2	<0,2
PCB Nr. 138	mg/kg	OS	<0,2	<0,2	<0,2
PCB Nr. 153	mg/kg	OS	<0,2	<0,2	<0,2
PCB Nr. 180	mg/kg	OS	<0,2	<0,2	<0,2
Summe der 6 PCB	mg/kg	OS	-/-	-/-	-/-
PCB gesamt (Summe 6 PCB x 5)	mg/kg	OS	-/-	-/-	-/-

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Geschäftsführer:
Hans-Dieter Bossemeyer, Dr. Michaela Nowak
HRB 1953 AG Steinfurt
Zweigniederlassung Walldorf

Prüfbericht Nr.	CWA14-009992-1	Auftrag Nr.	CWA-04232-14	Datum	04.04.2014
Probe Nr.		14-044090-04	14-044090-05	14-044090-06	
Eingangsdatum		31.03.2014	31.03.2014	31.03.2014	
Bezeichnung		Trafo Oil T 4 18.03.14	Trafo Oil T 3 18.03.14	Trafo Oil T 1 18.03.14	
Probenart		Öl	Öl	Öl	
Probenahme durch		Auftraggeber	Auftraggeber	Auftraggeber	
Anzahl Gefäße		1	1	1	
Untersuchungsbeginn		31.03.2014	31.03.2014	31.03.2014	
Untersuchungsende		04.04.2014	04.04.2014	04.04.2014	

Polychlorierte Biphenyle (PCB)

Probe Nr.				14-044090-04	14-044090-05	14-044090-06
Bezeichnung				Trafo Oil T 4 18.03.14	Trafo Oil T 3 18.03.14	Trafo Oil T 1 18.03.14
PCB Nr. 28	mg/kg	OS		<0,2	<0,2	<0,2
PCB Nr. 52	mg/kg	OS		<0,2	<0,2	<0,2
PCB Nr. 101	mg/kg	OS		<0,2	<0,2	<0,2
PCB Nr. 138	mg/kg	OS		<0,2	<0,2	<0,2
PCB Nr. 153	mg/kg	OS		<0,2	<0,2	<0,2
PCB Nr. 180	mg/kg	OS		<0,2	<0,2	<0,2
Summe der 6 PCB	mg/kg	OS		-/-	-/-	-/-
PCB gesamt (Summe 6 PCB x 5)	mg/kg	OS		-/-	-/-	-/-

Prüfbericht Nr. **CWA14-009992-1** Auftrag Nr. **CWA-04232-14** Datum **04.04.2014**

Probe Nr.	14-044090-07
Eingangsdatum	31.03.2014
Bezeichnung	Trafo Oil GTSN 23 18.03.14
Probenart	Öl
Probenahme durch	Auftraggeber
Anzahl Gefäße	1
Untersuchungsbeginn	31.03.2014
Untersuchungsende	04.04.2014

Polychlorierte Biphenyle (PCB)

Probe Nr.	14-044090-07		
Bezeichnung	Trafo Oil GTSN 23 18.03.14		
PCB Nr. 28	mg/kg	OS	<0,2
PCB Nr. 52	mg/kg	OS	<0,2
PCB Nr. 101	mg/kg	OS	<0,2
PCB Nr. 138	mg/kg	OS	<0,2
PCB Nr. 153	mg/kg	OS	<0,2
PCB Nr. 180	mg/kg	OS	<0,2
Summe der 6 PCB	mg/kg	OS	-/-
PCB gesamt (Summe 6 PCB x 5)	mg/kg	OS	-/-

Abkürzungen und Methoden

Polychlorierte Biphenyle (PCB)

EN 12766-1^A**ausführender Standort**

Umweltanalytik Bochum


Bernhard Füllgrabe
 Dipl. Chemiker
 Sachverständiger Umwelt

Seite 3 von 3


 Deutsche
 Akkreditierungsstelle
 D-PL 14162 01-00

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Geschäftsführer:
 Hans-Dieter Bossemeyer, Dr. Michaela Nowak
 HRB 1953 AG Steinfurt
 Zweigniederlassung Walldorf

11.6 Internationally used standards/limit values concerning electric and magnetic fields (50 Hz) for the public and at working places

Source	El. Field strength [kV/m]	Magn. Flux density [μ T]
<u>ICNIRP recommended 50/60 Hz</u> Reference levels for exposure to time-varying electric and magnetic fields (unperturbed r.m.s. values) occupational exposure* general public exposure	10 5	500 100
Limit values according to the European Directive 2004/40/EC exposure of workers*	10	500
<u>Limit (r.m.s) value as per 26. BimSchVer 12/96</u> general public up to 24 hours /day	5	100
Limit values as per VDE V 0848 Part 4/A3 at 50 Hz		
r.m.s. values for equivalent field strength in exposure range 1 for exposure times up to 1 h/d	30	4,240
r.m.s. values for equivalent field strength in exposure range 1 for exposure times up to 2 h/d	30	2,550
r.m.s. values for equivalent field strength in exposure range 1 for continuous exposure	21.32	1,360
r.m.s. values for equivalent field strength in exposure range 2	6.67	424

* exceedance of value requires specific actions

r.m.s. = root mean square (value)

Exposure range 1 includes monitored areas, e.g. operating zones, areas monitored by operators generally accessible areas, in which, owing to the operating mode or the length of stay, it is guaranteed that exposure only occurs for a short period of time

Exposure range 2 includes all areas in which not only short-term exposure can be expected, for example: areas containing residential and social buildings, individual residential sites, parks and facilities for sport, leisure and relaxation, operating zones where a field generation is not expected under normal conditions

(ICNIRP=International Commission on Non-Ionising Radiation Protection, BImSchVer=German Bundesimmissionsschutzverordnung, VDE=Verband Deutscher Elektrotechniker e.V., Cenelec=European Committee for Electrotechnical Standardisation)


11.7 Lists of Participants of the Public Meeting

November 6, 2015 at Karakul city

No	Name	Position
1	Zhedigerov U	Operational and Technical Department, Deputy Chief
2	Atangaraev U.M.	Toktogul PP Director
3	Bekov A.	PP Transport Depot, Director
4	Nurmambetov E.Zh	Ecological and Technical State Inspectorate
5	Bochoev S.Zh	Ecological and Technical State Inspectorate
6	Toktogulov A.S.	Ecological and Technical State Inspectorate
7	Shamatov A.R.	Foreman
8	Duishevaeva A.T.	Controls Department, Deputy Director
9	Karmyshev T.A.	Mobile Control Units, Head
10	Bekbolotov A.K.	Electric & Technical Lab, Head
11	Alkozhoev U.K.	Technical Center, Head
12	Turdumamatov A.K.	Road and Transport Dept., Head
13	Esekeev Zh. A.	Devices Systems Security Dept., Head
14	Zhumanov A. I.	PP Deputy Chief Engineer
15	Moitukeev T. Zh.	MCU, Deputy Head
16	Kadyraliev Sh.K	MTS, Leading Engineer
17	Konurbaev T.D.	PP Energy Center, Director
18	Mamyrov T.A	PP Engineer-inspector
19	Nasirov M.Zh	Deputy Chief Engineer
20	Kamchybekov A.A.	Head of MTS Department
21	Bazarkulov A.T.	Director of Electrical Shop
22	Chargynov A.K.	Electrical Shop, Foreman
23	Mamataev K.K.	Engineer-Inspector

No	Name	Position
24	Kanybekov M.	Energy Center, Chief Foreman
25	Zhumasheva K.	Training Center, Methodologist
26	Chynaliev S.B.	Foreman
27	Tashtanbekov N.	Motor Department, Head
28	Abdyrazakov Z.N.	Mesurements Department, Head
29	Bayalieva R.A.	Operational and Technical Department, Engineer

In addition, on November 16, 2015 a letter was sent from EPP to Municipality of Karakul City with request to duly inform general public and interested parties. This letter is supplemented by brief Project description and updated Project information.

 ЭЛЕКТР СТАНЦИЯЛАР -ЫЧК. АЛДЫНЧЕРДЫК КОМПАНИА-	ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО ЭЛЕКТРИЧЕСКИЕ СТАНЦИИ 720070, Кыргызская Республика г. Бишкек, пр. Жибек-Жолу, 326 Телефон: +996 (312) 651101 Телеракс: +996 (312) 603409 E-mail: ee@intels.kg, www.enargo.kg	ELECTRIC POWER PLANTS JOIN-STOCK COMPANY 326, Jibek Jolu Avenue 720070, Bishkek, Kyrgyz Republic P/c: 129600186007459 OAO «PCK» Банк, г. Бишкек, 5496 1290015, ИР-84 01810200110069 КСД ПРЕДПРИЯТИЯ: 32692351
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16.11.2015 № 34-4/11-1911

на № _____

«О Проекте АБР-ТА-8434 (КБЗ)
Результаты Сторона Энергетики»

Глава Государственной Администрации
г. Кара-Каракуль
Койчешев М.Д.

Уважаемый Мамбет Дюшалиевич,

Согласно национальному законодательству и Защитным Политикам АБР при реализации проектов АБР требуется раскрытие информации по возможным воздействиям на окружающую среду и социальную сферу. Поскольку в настоящее время инициируется третья, заключительная фаза проекта, мы бы хотели предоставить Вам и жителям города Кара-Куль обновленную информацию по намечаемой деятельности в рамках Проекта.


Ранее уже проводились мероприятия по информированию общественности в г. Кара-Куль: 3 октября 2011 года по Фазе I, 23 июня 2014 года по фазе II и 5 ноября 2015 года для сотрудников КТГЭС. В силу изменений, внесенных в план реализации проекта и объемы работ, Проект предоставляет эту информацию для Вашего сведения.

На определенных этапах реализации некоторые виды деятельности могут серьезно нарушать обычную жизнь людей, особенно в ходе доставки крупногабаритных элементов оборудования автомобильным транспортом из г. Бишкек в г. Кара-Куль. Проект уделяет особое внимание вопросам безопасности и осведомленности общественности и применяет смягчающие меры для снижения возможного негативного воздействия.

Мы бы просили Вас распространить эту информацию среди жителей города, гражданских активистов, НПО и других заинтересованных сторон. Мы так же хотели бы получить Ваш отзыв и мнение гражданского сектора с возможными предложениями, которые помогут бы Проекту учесть эти мнения в процессе разработки смягчающих мер.

Поскольку в данное время команда Проекта работает над обновлением пакета смягчающих мер, мы были бы признательны за отклик с Вашей стороны не позднее 17 ноября 2015 года. Ваше мнение важно для нас. Краткая информация по Проекту прилагается. Свои отзывы и предложения, пожалуйста, направляйте ОАО «ЭС» (тел. 0312-670-273, e-mail: ipju@es.kg) и Кривошурко Сергей Александрович, Специалист АБР по защитным мерам (тел. 0555-510-479, e-mail: kss.postbox@gmail.com).

С уважением,
Заместитель генерального директора

 У. Кыдырбаев

ориг.
1.670273

№ 0045450

Проект АБР по Реабилитации Токтогульской ГЭС, Фаза 3

12 ноября 2015 года

Краткая информация по проекту

Азиатский Банк Развития рассматривает вопрос о выделении займа правительству Кыргызской Республики для реабилитационных работ в энергетическом секторе. Проект состоит из трех фаз, и последняя Третья Фаза началась в сентябре 2015 г. Основные работы в рамках Проекта приведены в Таблице ниже:

Фаза 1	<p>Замена основных трансформаторов агрегатов № 1,2,3 и 4</p> <p>Замена четырех силовых кабелей новой кабельной системой 500 kV XLPE</p> <p>Замена трансформаторов 380 V и управления на магистральной шине</p> <p>Замена трансформатора 400 V переменного тока</p>
Фаза 2	<p>Замена / реабилитация двух турбин</p> <p>Замена / реабилитация двух генераторов</p> <p>Замена блок защиты систем трансформатора и шлейфа</p> <p>Реконструкция гидротехнических сооружений из стали и гидромеханического оборудования</p>
Фаза 3	<p>Замена двух оставшихся турбогенераторных установок</p> <p>Реабилитационные работы на плотине Токтогульской ГЭС</p>

Исполнительные агентства:

Министерство энергетики и промышленности Кыргызской Республики

и ОАО Электрические станции

Финансирование	Сумма (в млн. долл. США)
АБР, заем	60
АБР, грант	50
Евразийский Банк Развития (софинансирование)	70
Правительство КР (софинансирование)	20
Общая стоимость проекта	200

Проект

Основные средства в энергосекторе Кыргызстана устаревают, что приводит к коммерческим потерям и нестабильной работе. «Возраст» большей части основных средств превышает 30 лет. На фоне растущей необходимости проведения реабилитационных работ реабилитация и повышение работоспособности основных средств является важным моментом для обеспечения энергетической безопасности страны.

Фаза 3 Проекта по Реабилитации Токтогульской ГЭС включает: а) завершение реабилитационных работ на Токтогульской ГЭС посредством замены 2 оставшихся турбин и трансформаторов, и б) реабилитационные работы на плотине. Кроме того, будут разработаны процессы финансового

управления и бизнес-аудита для улучшения работы; а так же разработку университетской учебной программы для подготовки инженеров-энергетиков. Недавно обновленный объем работ включает покупку ПХБ-анализаторов для ОАО Электрические станции.

ОАО ЭС является собственником этих основных средств и одновременно исполнительным агентством данного проекта.

Приблизительный график работ Проекта:

Фаза 1: сентябрь 2011г- середина 2019г

Фаза 2: вторая половина 2016г – 2020-2021гг

Фаза 3: сентябрь 2015 г- середина 2016г

Социальные вопросы и экология

Основными проблемами в ходе проектных работ являются утилизация большого объема отходов: черного металла и меди, старого трансформаторного и кабельного масла, масляных выключателей, промасленной ветоши и бумаги.

Отходы, связанные с использованием масла, подлежат проверке на содержание в них полихлорбифенилов (ПХБ). В рамках Фазы II анализ старых масел на содержание ПХБ был сделан в Германии. Результаты показали, что во взятых пробах ПХБ не обнаружено.

В результате замены 4 основных трансформаторов и силовых кабелей образуется около 850 тонн отходов старого масла.

Доставка на ГЭС крупногабаритных элементов и оборудования может потребовать специальных мер по регулированию движения автотранспорта на маршруте Бишкек-Каракул.

Источники возможного негативного воздействия	Смягчающие меры
Старое трансформаторное масло (около 400 т)	При наличии в масле ПХБ – сжигание на Ошской ТЭЦ. При отсутствии - возможно вторичное использование
Старое кабельное масло (около 250 т)	При наличии в масле ПХБ – сжигание на Ошской ТЭЦ. При отсутствии - возможно вторичное использование
Промасленная ветошь и бумага	Сжигание на Ошской ТЭЦ
Металлолом и стальные конструкции (4000 т)	Утилизация компанией Кыргыз Темир
Лом цветных металлов (медь)	Утилизация компанией Кыргыз Темир
Нарушение дорожного движения в период доставки крупногабаритных грузов	Перемещение только в дневное время. Сопровождение ГАИ, транспортной службой КТГЭС согласно установленным правилам
Бытовые отходы из лагеря строителей / мест проживания	Утилизация на муниципальной свалке
ВИЧ/СПИД	Подрядчик проводит необходимое обучение и информирование своих рабочих
Культурные различия	Подрядчик проводит необходимое обучение и информирование своих рабочих

В ходе Фазы III выявленные до сих пор вопросы, связанные с экологией и безопасностью, будут проанализированы вместе соответствующими мерами по смягчению на их полное соответствие национальному законодательству и Защитным Процедурам АБР.

Для всех проектов АБР разрабатывается Механизм Рассмотрения Жалоб (МРЖ) в качестве инструмента обратной связи с лицами, чьи права были нарушены в ходе реализации проекта. В данном проекте за создание и реализацию МРЖ несёт ответственность Отдел реализации инвестиционных проектов (ОРИП) Исполнительного агентства ОАО Электрические Станции. Кроме того, для всего проекта будет разработана программа связи с общественностью.

On the 20-th of November Karakul Municipality replied that awareness campaign among local population is in progress and that public does not object mitigation measures as designed by the Project.

**КЫРГЫЗ РЕСПУБЛИКАСЫ
ЖАЛАЛ-АБАД ОБЛАСТЫ
КАРА-КӨЛ ШААРЫНЫН
МЭРИЯСЫ**



**КЫРГЫЗСКАЯ РЕСПУБЛИКА
ЖАЛАЛ-АБАДСКАЯ ОБЛАСТЬ
МЭРИЯ ГОРОДА
КАРА-КУЛЬ**

Кара-Көл шаары, Ленин көчөсү 1,
тел. 5-17-31, факс 5-24-31

e-mail: adm.KaraKul@mail.ru

г. Кара-Куль, ул. Ленина 1
тел. 5-17-31, факс 5-24-31

20.11.15 № 05-13/2179

ОАО “Электрические станции”
заместителью генерального директора
У. Кыдырбаеву

Мэрия города Кара-Куль сообщает на Ваше письмо исх. № 34-4/4-1911 от 16.11.2015г., что проводится разъяснительная работа среди жителей города по распространению информации относительно работ по осуществлению 3 фазы реабилитации Токтогульской ГЭС. Население не имеет возражений относительно смягчающих мер предусмотренных в предложениях.

Мэр-

М.Д. Койчиев

Исп.:
Тамиликова М.О.
(03746) 5-18-37

11.8 Protected Areas at Djalal-Abad Province

State Reserves and Natural Parks of Djalal-Abad Province

No	Name of SPA	Total area ha	Aim of protection	Localization
1.	Sary-Chelek <i>Biosphere Reserve</i>	23868 *	Biodiversity of West Tien Shan, unique lakes, landscape, Sary-Chelek lake	Aksy district, Arkyt village
2.	Besh-Aral <i>State Reserve</i>	112018	Medium-hill terrain communities of Western Tien Shan, Menzbir's marmot	Chatkal district
3.	Padysha-Ata <i>State Reserve</i>	30560	Juniper forests of Western Tien Shan, Semionov's silver fir (abies)	Aksy district
4.	<i>State Natural and National Park</i> «Saimaluu-Tash»	32007	Petroglyphs, protection, recreation, tourism	Toguz-Toro district
TOTAL:		198453		

LIST of State Wildlife Preserve of Djalal-Abad Province

№	Name of SPA	Total area ha	Aim of protection	Localization
1.	<u>Sandalash Zoological (hunting) Wildlife preserve</u>	18830	<i>(Ovis ammon) argali, wild mountain goat, (Capreolus capreolus) roe deer, Menzbir's marmot</i>	Chatkal district
2.	<u>Chychkan Zoological (hunting) Wildlife preserve</u>	63551	<i>Bear (Ursus arctos isabellinus), wild boar, (Capreolus capreolus) roe deer, wild mountain goat, ular, keklik (Chukar partridge)</i>	Toktogul district, Toktogul forestry
3.	<u>Toguz-Toro Zoological (hunting) Wildlife preserve</u>	26600	<i>Bear (Ursus arctos isabellinus), (Capreolus capreolus) roe deer, wild mountain goat, snow leopard</i>	Toguz-Toro district and forestry Kanachu stow
4.	<u>Baltyr-Han Forest Wildlife preserve</u>	504,3	Protection of Semionov's fir (abies)	Aksy district, Avletim forestry
5.	<u>Dashman Wildlife preserve</u>	5000	Walnut forests protection: <i>walnut, apple tree, alycha tree, pear tree</i>	Bazar-Korgon, Arstanbap forestries, Dashman stow
6.	<u>Kuruköl Wildlife preserve</u>	350	Tien Shan fir tree natural timber stand protection	Ala-Buka district and forestry
7.	<u>Miskin-Sai Wildlife preserve</u>	383	Tien Shan fir tree natural timber stand protection	Ala-Buka district and forestry
8.	<u>Uzun-Akmat Wildlife preserve</u>	14771	Semionov's fir (abies) natural timber stand protection	Toktogul district and forestry
9.	<u>Djel-Tiibes Botanical Wildlife preserve</u>	800	<i>Standard Natural Zone of the south semi-desert</i>	Aksy district, Southward from the Tash-Kumyr mountain
10.	<u>Kosh-Tektir Botanical Wildlife preserve</u>	30	Place of Tulip habitation of Место произрастания тюльпана вверх-стремящегося	Ala-Buka district, Near the Sumsar village
11.	<u>Ryazan-Sai Botanical Wildlife preserve</u>	110	To protect Uzun-Akmat grape, (Ficus carica) fig trees, wild pomegranate	Aksy district,

№	Name of SPA	Total area <i>ha</i>	Aim of protection	Localization
12.	<i>Chanch Botanical Wildlife preserve</i>	50	Place of Kaufmann's tulips habitation	Ala-Buka district, south slopes of Sandalash range
13.	<i>Chatkal Botanical Wildlife preserve</i>	600	<i>Standard Natural Zone of the medium hill terrain bushed hay plant (Prangospabularia)</i>	Ala-Buka district, interfluvium of the Ters and Sandalash
14.	<i>Geological Wildlife preserve «Tegerek Water Falls»</i>	-	<i>Water falls up to 20 m high</i>	Kara-Unkur river flood land, Kyzyl-Unkur forestry
15.	<i>Geological Wildlife preserve «Sogon-Tash Cave»</i>	-	<i>Cave in limestones with fanciful stalactites and stalagmites</i>	Bazar-Korgon district, Stov Kara-Unkur, Kyzyl-Unkur forestry
16.	<i>Geological Wildlife preserve «Kara-Djigach cliffs»</i>	-	<i>Rare geomorphological formation – pillars of red sandstone as a result of weathering</i>	Aksy district and forestry
	TOTAL:	131579,3		

11.9 Possible Transportation Routes for Main Transformers

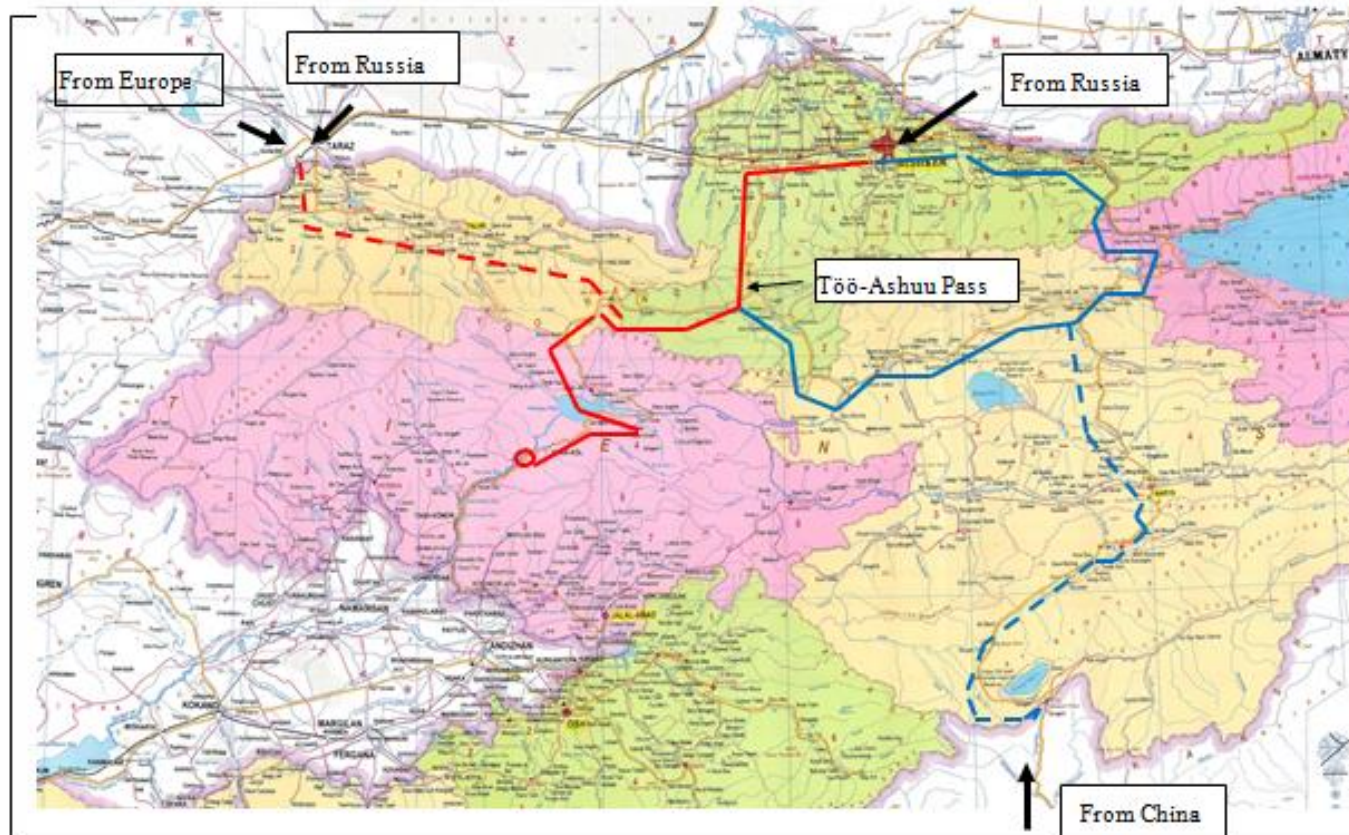


Fig. 11-1: Possible Transportation Routes for Main Transformers

Dimensions of Tunnels along the Road Bishkek-Karakul

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН
ТРАНСПОРТ ЖАНА
КОММУНИКАЦИЯЛАР
МИНИСТРЕЛИГИ



МИНИСТЕРСТВО ТРАНСПОРТА
И КОММУНИКАЦИЙ
КЫРГЫЗСКОЙ
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№ 09-10/2895
На № _____

«06» 05 2014 ж. (г.)

Заместителю генерального
директора
ОАО «Электрические станции»
Назарову Ж. М.

Министерство транспорта и коммуникаций Кыргызской Республики рассмотрев письмо №164-04/И-860 от 29 апреля 2014 года, направляет параметры тоннелей и галереи находящегося на автодороге Бишкек-Ош.

Tunnels and Galleries on the road Bishkek-Osh

№ п/п	Место нахождения галереи	длина	высота	ширина	примечание
	Location of Gallery/Tunnel	Length	Height	Width	Note
1	тоннель им.Кольбасва, перевал Тоо-Ашуу, 130 км Tunnel Kolbasova, Too Ashuu Pass, 130th km	2650	6,7	6,9	максимально допустимая высота для транспортных средств 4,7 м. Max allowed height for auto is 4.7 m
2	тоннель №1, 409 км Tunnel no.1, 409th km	313	8,5	5,5	
3	тоннель №2, 411 км Tunnel no.2, 411th km	355	8,5	5,5	
4	тоннель №3, 426 км Tunnel no.3, 426th km	694	8,5	5,5	
5	тоннель №4, 455 км, г.Таш-Кумыр Tunnel no.4, 455th km, Tash-Kumir city	260	7	10	

№ 0010653

Кириш/Вход. № 164-04/И-860
"12" 05 2014
"Электр станциялар" ААК
ОАО "Электрические станции"

Ex 164-04/204

State Enterprise "Temir"

№ п/п	Место нахождение галереи <i>Location of Gallery</i>	длина <i>Length</i>	начальная высота <i>Starting Height</i>	конечная высота <i>Ending Height</i>	ширина галереи <i>Width of Gallery</i>
1	122+200	48	4,5	4,6	7,3
2	122+800	81	4,4	4,15	7,5
3	123+100	79	4,6	4,7	7,3
4	124+300	44	4,65	4,7	7,1
5	132+100	31	4,5	4,45	7,4

Примечание: Допустимая разрешенная норма высоты для транспортных средств должна составлять 4 метра (Постановление ПКР от 8 августа 2011 года №454).

*Note: Allowed height for transport shall be 4 meters.
(Decision no. 454 Kyrgyz Republic, 8 August 2011)*


Заместитель министра

[Signature]
Д. Абдылдаев

Исп: З. Мамбетжумаев
Тел: 31-43-20

Мамыралиева

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН
ОКМОТУНӨ КАРАШТУУ
АНТИМОНОПОЛИЯЛЫК ЖОНГО
САЛУУ МАМЛЕКЕТТИК
АГЕНТТИГИ



ГОСУДАРСТВЕННОЕ АГЕНТСТВО
АНТИМОНОПОЛЬНОГО
РЕГУЛИРОВАНИЯ ПРИ
ПРАВИТЕЛЬСТВЕ КЫРГЫЗСКОЙ
РЕСПУБЛИКИ

« 11 » *сентября* 20 *11* ж.г.

**БУЙРУК
ПРИКАЗ** № 23

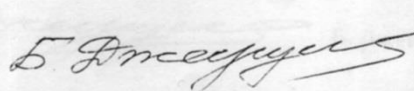
О внесении изменения в Прейскурант цен на лом и отходы цветных и черных металлов и сплавов ГП «Темир», утвержденный приказом Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики от 01.10.2010 г. № 296

В соответствии с Законом Кыргызской Республики «О естественных и разрешенных монополиях в Кыргызской Республике», рассмотрев расчетные материалы, представленные Государственным предприятием «Темир»

ПРИКАЗЫВАЮ:


1. Внести в Прейскурант цен на лом и отходы черных и цветных металлов и сплавов ГП «Темир», утвержденный приказом Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики от 01.10.2010 г. № 296, следующее изменение:
 - позицию 15 Прейскуранта изложить в следующей редакции:
«свинец, класс АЛ, группа 1-2, в том числе пластины свинцовые аккумуляторных батарей б/у».
2. Ответственность за достоверность представленных данных возложить на руководителя Государственного предприятия «Темир».
3. Отделу бухгалтерского учета, финансового обеспечения и документооборота (Нааматова) направить настоящий приказ на государственном и официальном языках в адрес Государственного предприятия «Темир».
4. Государственному предприятию «Темир» разместить настоящий приказ на видном и доступном для потребителей месте.
5. Отделу регулирования монополий (Урустамов), пресс-службе (Кубатбеков) разместить настоящий приказ на официальном сайте Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики.
6. Контроль за исполнением настоящего приказа возложить на А.Мамыралиева, заместителя директора Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики.

И.о. директора



Б.Джамбаев 153

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН
ӨКМӨТҮНӨ КАРАШТУУ
АНТИМОНОПОЛИЯЛЫК ЖӨНГӨ
САЛУУ МАМЛЕКЕТТИК
АГЕНТТИГИ



ГОСУДАРСТВЕННОЕ АГЕНТСТВО
АНТИМОНОПОЛЬНОГО
РЕГУЛИРОВАНИЯ ПРИ
ПРАВИТЕЛЬСТВЕ КЫРГЫЗСКОЙ
РЕСПУБЛИКИ

« 01 » Октябрь 2010 ж.г.

БУЙРУК
ПРИКАЗ № 296

*О согласовании прейскуранта цен на лом
и отходы черных и цветных металлов и сплавов
Государственного предприятия «Темир»*

На основании Закона Кыргызской Республики «О естественных и разрешенных монополиях в Кыргызской Республике» и представленных расчетных материалов Государственного предприятия «Темир»

ПРИКАЗЫВАЮ

1. Согласовать прейскурант цен на лом и отходы черных и цветных металлов и сплавов Государственному предприятию «Темир», согласно приложениям (на 2-х листах).
2. Ответственность за достоверность представленных данных возложить на руководителя Государственного предприятия «Темир».
3. Отделу бухгалтерского учета, финансового обеспечения и документооборота (Мансурова):
 - обеспечить хранение первого экземпляра настоящего приказа на государственном и официальном языках;
 - второй экземпляр настоящего приказа на государственном и официальном языках направить в адрес Государственного предприятия «Темир».
4. Государственному предприятию «Темир» обеспечить размещение настоящего приказа в отделах работы с клиентами, закупочных пунктах и других доступных для обозрения потребителями местах.
5. Отделу регулирования монополий (Шустикова) и отделу анализа, оценки конкурентной среды и мониторинга цен (Кубатбеков) разместить настоящий приказ на официальном сайте Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики.
6. Контроль за исполнением настоящего приказа возложить на А.Мамыралиева, заместителя директора Государственного агентства антимонопольного регулирования при Правительстве Кыргызской Республики.

Директор Б. Джеенбеков Б. Джеенбеков

2010.10.01

Утвержден
постановлением Правительства
Кыргызской Республики
от 25 апреля 2001 года N 191

УСТАВ
государственного предприятия по сбору, скупке,
переработке и реализации лома и отходов цветных
и черных металлов "Темир"

(В редакции постановления Правительства КР от
30 июля 2001 года N 387)

1. Общие положения

1.1. Государственное предприятие по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" (далее Предприятие) создано в соответствии с постановлением Правительства Кыргызской Республики от 30 марта 2001 года N 141 "О государственном предприятии по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир".

1.2. Устав Государственного предприятия по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" является единственным учредительным документом.

1.3. Предприятие является самостоятельным хозяйствующим субъектом, созданным в форме государственного предприятия, основанным на праве хозяйственного ведения. Предприятие осуществляет свою деятельность в строгом соответствии с требованиями законодательства Кыргызской Республики и настоящим Уставом.

1.4. Полное официальное наименование предприятия:

на кыргызском языке: Тустуу жана кара металлдардын сыныктарын жана калдыктарын чогултуу, сатып алуу, кайра иштетуу жана сатып чыгаруу боюнча "Темир" мамлекеттик ишканасы;

на русском языке: Государственное предприятие по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир".

Местонахождение предприятия: Кыргызская Республика, Чуйская область, 722191, с.Аламудун, ул.Набережная, 300.

1.5. Предприятие имеет право в установленном порядке открывать филиалы и представительства на территории Кыргызской Республики.

1.6. Предприятие является юридическим лицом, имеет самостоятельный баланс, имеет право открывать в установленном порядке расчетные и иные счета, в том числе валютные в банках Кыргызской Республики и иностранных банках. Имеет печать со своим наименованием на государственном и официальном языках, штамп, бланки и другую атрибутику.

1.7. Предприятие действует на принципах полного хозяйственного расчета и самофинансирования и вправе заключать хозяйственные договоры и совершать сделки, приобретать имущественные и личные права и нести обязанность выступать истцом и ответчиком в судебных органах.

1.8. Предприятие не вправе продавать принадлежащее ему на праве хозяйственного ведения недвижимое имущество, передавать его в залог.

Предприятие приобретает права юридического лица с момента государственной регистрации в Министерстве юстиции Кыргызской Республики.

1.9. Государственный контроль и регулирование за деятельностью предприятия осуществляет Правительство Кыргызской Республики.

1.10. Изменения и дополнения в настоящий Устав вносятся в установленном законодательством Кыргызской Республики порядке.

1.11. Имущество Предприятия является неделимым и не может быть распределено по вкладам (долям, паям), в том числе между работниками Предприятия.

2. Предмет, цели задачи деятельности Предприятия

2.1. Предприятие создано для организации и ведения хозяйственной и

коммерческой деятельности по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов и увеличения поступления налогов и других платежей в государственный бюджет Кыргызской Республики.

2.2. Реализация целей, указанных выше, составляет деятельность предприятия, которая осуществляется им с использованием имущества, находящегося в государственной собственности Кыргызской Республики, принадлежащего Предприятию на праве хозяйственного ведения в соответствии с положениями Гражданского кодекса Кыргызской Республики, других нормативных правовых актов, а также настоящего Устава.

2.3. В соответствии с основными задачами, стоящими перед Предприятием, оно осуществляет следующие виды деятельности:

- сбор, скупка и переработка лома и отходов цветных металлов;
- сбор, скупка и переработка лома и отходов черных металлов;
- осуществление экспорта лома и отходов цветных и черных металлов;
- осуществление на основе хозяйственных договоров иной деятельности, не запрещенной законодательством Кыргызской Республики.

3. Права, обязанности и ответственность Предприятия

Предприятие для осуществления своих задач, определенных настоящим Уставом, имеет право:

3.1. Покупать за безналичный и наличный расчет материальные ресурсы, имущество, в том числе основные средства, у предприятий, организаций, учреждений и граждан.

3.2. Производить расчеты наличными деньгами с другими предприятиями и гражданами в установленном порядке.

3.3. Приобретать продукцию, товары в порядке оптовой торговли.

3.4. Приобретать в установленном порядке товары, необходимые материалы и изделия в розничной торговле, в кооперативах, а также у граждан.

3.5. Обладать обособленным имуществом, от своего имени приобретать имущественные и личные неимущественные права и нести обязанности, быть истцом и ответчиком в суде, арбитражном суде или третейском суде.

3.6. Самостоятельно заключать договоры с любыми организациями, учреждениями, предприятиями, зарубежными фирмами и физическими лицами в соответствии с законодательством Кыргызской Республики.

3.7. Привлекать для консультирования, обучения работников Предприятия и других целей специалистов на основе заключаемых гражданско-правовых договоров с оплатой по соглашению сторон.

3.8. Направлять в командировки лиц, выполняющих задания Предприятия, в том числе за рубеж, а также для участия в международных конференциях, семинарах, выставках.

3.9. Предприятие имеет право осуществлять внешнеэкономическую деятельность в соответствии с законодательством Кыргызской Республики.

Кроме штатных работников, Предприятие имеет право привлекать на основании временных трудовых договоров, срочных трудовых договоров, договоров подряда, других гражданско-правовых договоров граждан для выполнения работ на Предприятии.

3.10. Режим работы и отдыха работников Предприятия, их социальное обеспечение, социальное страхование регулируются нормами трудового законодательства Кыргызской Республики.

3.11. Предприятие самостоятельно определяет в соответствии с законодательством Кыргызской Республики порядок найма и увольнения работников, формы и системы оплаты труда, сменность работы, принимает решение о введении суммированного учета рабочего времени, устанавливает порядок предоставления выходных дней и отпусков.

3.12. Предприятие самостоятельно определяет продолжительность ежегодных оплачиваемых отпусков, но не ниже предусмотренных Трудовым кодексом Кыргызской Республики. При этом продолжительность их не может быть менее установленной для соответствующих категорий рабочих и служащих государственных предприятий. Предприятие может устанавливать для своих работников дополнительные отпуска, сокращенный рабочий день и другие социальные льготы.

3.13. Предприятие может выступать арендодателем и арендатором.

Предприятие обязано:

3.15. Обеспечить для всех работающих безопасные условия труда и несет ответственность в установленном порядке за ущерб, причиненный их здоровью и трудоспособности.

3.16. Выполнять обязательства согласно законодательству Кыргызской Республики и заключенным договорам.

3.17. Полностью рассчитываться со всеми работниками Предприятия согласно заключенным договорам и контрактам независимо от финансового состояния Предприятия.

3.18. Осуществлять социальное, медицинское и иные виды обязательного страхования работников Предприятия, обеспечивать для них безопасные условия труда и нести ответственность в порядке, установленном законодательством Кыргызской Республики, за ущерб, причиненный их здоровью.

3.19. Своевременно представлять налоговые отчеты Предприятия и уплачивать налоги в порядке и размерах, определяемых законодательством Кыргызской Республики.

Предприятие несет ответственность за нарушение:

3.20. Договорных, кредитных, расчетных и налоговых обязательств.

3.21. Правил безопасности производства.

3.22. Установленного режима природопользования.

4. Управление Предприятием

4.1. Управление Предприятием осуществляет директор Предприятия.

4.2. Директор является единоличным руководителем Предприятия. Он назначается на должность и освобождается от должности Президентом Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики и Администрации Президента Кыргызской Республики.

4.3. Директор Предприятия без доверенности действует от имени Предприятия, заключает договоры, в том числе трудовые, выдает доверенности, открывает в банках расчетные и другие счета, пользуется правом распоряжения средствами, в установленном порядке издает приказы и дает указания, обязательные для всех работников Предприятия.

4.4. Заместители директора Предприятия назначаются и освобождаются от должности Премьер-министром Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики.

4.5. Структура и штатное расписание Предприятия определяются и утверждается директором Предприятия.

4.6. Директор Предприятия имеет право представлять интересы собственника (государства – Кыргызской Республики) в судах, а также выступать от имени учредителя в отношениях с иными организациями, предприятиями, а также с арендаторами в пределах своих полномочий.

5. Учет, планирование, отчетность

5.1. Предприятие осуществляет свою деятельность на основе самостоятельно разработанных планов работы. Перспективные, годовые и текущие планы работы Предприятия утверждаются директором Предприятия.

5.2. Основу планов работы Предприятия составляют долгосрочные и иные договоры, регулирующие отношения Предприятия с поставщиками, арендаторами и потребителями.

5.3. Предприятие свободно в выборе предмета договора, определения обязательств, любых других условий хозяйственных взаимоотношений, не противоречащих законодательству Кыргызской Республики.

5.4. Предприятие осуществляет поставку лома и отходов цветных и черных металлов, в первую очередь, для (отечественных) товаропроизводителей, использующих их в качестве сырья для металлургического производства, в объеме и номенклатуре согласно договору, согласованному с государственным органом, осуществляющим контроль над деятельностью Предприятия.

5.5. Предприятие осуществляет бухгалтерский учет результатов своей работы и ведет статистическую отчетность в установленном законодательством Кыргызской Республики порядке.

5.6. Предприятие представляет компетентным государственным органам

информацию, необходимую для налогообложения и ведения общегосударственной системы сбора и обработки экономической информации.

За отказ в представлении запрошенной в установленном законодательством Кыргызской Республики порядке информации, представление неполной информации или ее искажение, а также за искажение отчетности должностные лица Предприятия несут ответственность, установленную законодательством Кыргызской Республики.

5.7. Главный бухгалтер Предприятия назначается на работу директором Предприятия, подчиняется непосредственно директору, несет ответственность и пользуется правами, установленными законодательством Кыргызской Республики для главных бухгалтеров предприятий (организаций).

5.8. Проверка работы Предприятия осуществляется соответствующими налоговыми, природоохранными и другими государственными органами Кыргызской Республики в соответствии с законодательством Кыргызской Республики.

6. Имущество Предприятия и финансы

6.1. Предприятие основано на праве хозяйственного ведения государственным имуществом и не наделено правом собственности на закрепленное за ним имущество.

6.2. Основой использования имущества является право хозяйственного ведения объектами недвижимости, основными средствами и другим имуществом, являющимся государственной собственностью и переданным на баланс Предприятия с соблюдением предусмотренных законодательством Кыргызской Республики правил и процедур.

6.3. Имущество Предприятия составляют основные фонды и оборотные средства, а также иные материальные ценности, стоимость которых отражается в самостоятельном балансе Предприятия.

6.4. Источниками формирования имущества являются:

- доходы, полученные в результате хозяйственной деятельности;
- кредиты банков и других кредиторов;
- пожертвования организаций, предприятий и граждан;
- и другие источники, не запрещенные законодательством Кыргызской Республики.

6.5. Полученные Предприятием доходы, а также имущество, приобретенное за счет собственных средств, принадлежат ему на праве собственности, в том числе:

- инвентарь, инструменты, все виды оргтехники, приборы, аппараты, а также основные фонды и оборотные средства;
- интеллектуальная, научно-техническая и иная продукция;
- деньги в иностранной валюте, все виды ценных бумаг;
- другое имущество, приобретенное за счет собственных средств.

6.6. Предприятие имеет право выступать рекламодателем.

6.7. Предприятие имеет право передавать другим предприятиям, организациям и учреждениям, обменивать, сдавать в аренду, предоставлять во временное пользование либо займы принадлежащие ему оборудование, транспортные средства, инвентарь, сырье и другие материальные ценности в соответствии с установленными нормами гражданского законодательства Кыргызской Республики.

6.8. Все средства, полученные от деятельности Предприятия, после отчислений государству поступают в распоряжение Предприятия.

7. Реорганизация и ликвидация Предприятия

7.1. Ликвидация и реорганизация Предприятия осуществляются на основании постановления Правительства Кыргызской Республики, а также судом в случаях и порядке, предусмотренных законодательством Кыргызской Республики.

7.2. При реорганизации или ликвидации Предприятия увольняемым работникам выплачивается компенсация и предоставляются другие льготы и гарантии, предусмотренные законодательством Кыргызской Республики.

7.3. Имущество, оставшееся после ликвидации Предприятия, распределяется ликвидационной комиссией в соответствии с законодательством Кыргызской Республики.

7.4. Имущество, оставшееся после удовлетворения требований кредиторов,

переходит в распоряжение учредителя.

7.5. Предприятие считается реорганизованным или ликвидированным с момента внесения соответствующей записи в Государственный реестр юридических лиц Кыргызской Республики.

8. Архивное дело. Сохранность документов

8.1. Предприятие в целях реализации государственной социальной, экономической и налоговой политики несет ответственность за сохранность документов (управленческих, финансово-хозяйственных, по личному составу и др.); обеспечивает передачу на государственное хранение документов, имеющих научно-историческое значение, в национальный архивный фонд Кыргызской Республики, в соответствии с действующим перечнем документов хранит и использует в установленном порядке документы по личному составу.

8.2. При реорганизации Предприятия все документы (управленческие, финансово-хозяйственные, по личному составу и др.) передаются в соответствии с установленными правилами предприятию-правопреемнику.

8.3. При ликвидации и отсутствии правопреемника документы постоянного хранения, имеющие научно-историческое значение, передаются на государственное хранение в национальный архивный фонд Кыргызской Республики, документы по личному составу (приказы, личные дела, карточки учета, лицевые счета и т.п.) передаются на хранение в архив учредителя.

8.4. Передача и упорядочение документов осуществляются силами и за счет средств Предприятия в соответствии с требованиями законодательства Кыргызской Республики.

г.Бишкек, Дом Правительства
от 30 июля 2001 года N 387

ПОСТАНОВЛЕНИЕ ПРАВИТЕЛЬСТВА КЫРГЫЗСКОЙ РЕСПУБЛИКИ

О внесении изменений и дополнений в некоторые
постановления Правительства Кыргызской Республики

В соответствии с распоряжением Президента Кыргызской Республики от 4 июня 2001 года N 174 Правительство Кыргызской Республики постановляет:

1. Внести в Устав Государственного предприятия "Темир", утвержденный постановлением Правительства Кыргызской Республики от 25 апреля 2001 года N 191 "Об утверждении Устава Государственного предприятия по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" следующие изменения:

В разделе 1 "Общие положения":

- в пункте 1.4 слова: "Местонахождение предприятия: Кыргызская Республика, 720000, г.Бишкек, пр.Чуй, 100/5" заменить на слова: "Местонахождение предприятия: Кыргызская Республика, Чуйская область, 722191, с.Аламудун, ул.Набережная, 300".

В разделе 4 "Управление предприятием":

- в пункте 4.2 слова: "Премьер-министром Кыргызской Республики" заменить на слова: "Президентом Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики и Администрации Президента Кыргызской Республики";

- в пункте 4.4 слова: "по представлению директора Предприятия" заменить на слова: "по представлению Министра внешней торговли и промышленности Кыргызской Республики".

2. Временное положение "О порядке сбора, скупки, переработки и реализации лома и отходов цветных и черных металлов", утвержденное постановлением Правительства Кыргызской Республики от 25 апреля 2001 года N 192 "Об утверждении Временного положения о порядке сбора, скупки, реализации и переработки лома и отходов цветных и черных металлов" дополнить пунктом 15 следующего содержания:

"15. Министерству внешней торговли и промышленности Кыргызской Республики в установленном порядке обеспечить выдачу лицензии на экспорт лома и отходов цветных металлов Государственному предприятию "Темир".

Премьер-министр Кыргызской Республики К.Бакиев

г.Бишкек, Дом Правительства
от 30 июля 2001 года N 387

ПОСТАНОВЛЕНИЕ ПРАВИТЕЛЬСТВА КЫРГЫЗСКОЙ РЕСПУБЛИКИ

О внесении изменений и дополнений в некоторые
постановления Правительства Кыргызской Республики

В соответствии с распоряжением Президента Кыргызской Республики от 4 июня 2001 года N 174 Правительство Кыргызской Республики постановляет:

1. Внести в Устав Государственного предприятия "Темир", утвержденный постановлением Правительства Кыргызской Республики от 25 апреля 2001 года N 191 "Об утверждении Устава Государственного предприятия по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" следующие изменения:

В разделе 1 "Общие положения":

- в пункте 1.4 слова: "Местонахождение предприятия: Кыргызская Республика, 720000, г.Бишкек, пр.Чуй, 100/5" заменить на слова: "Местонахождение предприятия: Кыргызская Республика, Чуйская область, 722191, с.Аламудун, ул.Набережная, 300".

В разделе 4 "Управление предприятием":

- в пункте 4.2 слова: "Премьер-министром Кыргызской Республики" заменить на слова: "Президентом Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики и Администрации Президента Кыргызской Республики";

- в пункте 4.4 слова: "по представлению директора Предприятия" заменить на слова: "по представлению Министра внешней торговли и промышленности Кыргызской Республики".

2. Временное положение "О порядке сбора, скупки, переработки и реализации лома и отходов цветных и черных металлов", утвержденное постановлением Правительства Кыргызской Республики от 25 апреля 2001 года N 192 "Об утверждении Временного положения о порядке сбора, скупки, реализации и переработки лома и отходов цветных и черных металлов" дополнить пунктом 15 следующего содержания:

"15. Министерству внешней торговли и промышленности Кыргызской Республики в установленном порядке обеспечить выдачу лицензии на экспорт лома и отходов цветных металлов Государственному предприятию "Темир".

Премьер-министр Кыргызской Республики К.Бакиев

г.Бишкек, Дом Правительства
от 30 марта 2001 года N 141

ПОСТАНОВЛЕНИЕ ПРАВИТЕЛЬСТВА КЫРГЫЗСКОЙ РЕСПУБЛИКИ
О государственном предприятии по сбору, скупке,
переработке и реализации лома и отходов цветных
и черных металлов "Темир"

В целях реализации Указа Президента Кыргызской Республики "Об усилении государственного контроля за сбором, скупкой, реализацией и экспортом (реэкспортом) лома и отходов цветных и черных металлов в Кыргызской Республике" от 18 августа 2000 года Правительство Кыргызской Республики постановляет:

1. Создать государственное предприятие по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир".

2. Государственному комитету Кыргызской Республики по управлению государственным имуществом и привлечению прямых инвестиций определить перечень государственного имущества и в установленном порядке передать его в ведение государственному предприятию по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" для осуществления его деятельности.

3. Министерству внешней торговли и промышленности Кыргызской Республики, Министерству юстиции Кыргызской Республики совместно с заинтересованными министерствами и ведомствами в месячный срок разработать и внести на рассмотрение Правительства Кыргызской Республики проект Устава государственного предприятия по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" и в установленном порядке зарегистрировать его учредительные документы.

4. Государственной таможенной инспекции при Министерстве финансов Кыргызской Республики совместно со Службой национальной безопасности Кыргызской Республики и государственным предприятием по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" усилить контроль за соблюдением законодательства Кыргызской Республики при осуществлении экспортных и импортных операций с ломом и отходами цветных и черных металлов.

5. Министерству внутренних дел Кыргызской Республики оперативно выявлять факты незаконного сбора, скупки и реализации лома и отходов цветных и черных металлов, принимать жесткие меры для перекрытия каналов их незаконного оборота.

6. Министерству внешней торговли и промышленности Кыргызской Республики совместно с заинтересованными министерствами и ведомствами в месячный срок разработать и внести на рассмотрение Правительства Кыргызской Республики проект Временного положения о порядке сбора, скупки, переработки и реализации лома и отходов цветных и черных металлов.

См.:

Временное положение о порядке сбора, скупки, переработки и реализации лома и отходов цветных и черных металлов (утверждено постановлением Правительства КР от 25 апреля 2001 года N 192)

7. Министерству внешней торговли и промышленности Кыргызской Республики, Министерству юстиции Кыргызской Республики, государственному предприятию по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" совместно с заинтересованными министерствами, государственными комитетами, административными ведомствами внести в Правительство Кыргызской Республики предложения о внесении в законодательные акты Кыргызской Республики изменений и дополнений, вытекающих из настоящего постановления.

8. Признать утратившими силу:

- постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 4 марта 1999 года N 129 "О внесении изменений и дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору и скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 15 июня 1999 года N 326 "О внесении дополнения в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору и скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 30 июня 1999 года N 368 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 14 июля 1999 года N 395 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 20 августа 1999 года N 456 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 8 сентября 1999 года N 493 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 5 октября 1999 года N 540 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке, и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 18 ноября 1999 года N 631 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 29 ноября 1999 года N 651 "О внесении дополнений в постановление Правительства Кыргызской Республики от 16 ноября 1998 года N 742 "Об утверждении положений о лицензировании и порядке деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 2 февраля 2000 года N 54 "О дополнительных мерах по упорядочению деятельности предприятий по сбору, скупке, переработке и реализации лома и отходов цветных металлов в Кыргызской Республике";

- постановление Правительства Кыргызской Республики от 20 июня 2000 года N 363 "Об упорядочении сбора, скупки и реализации лома и отходов цветных металлов в Кыргызской Республике".

9. Контроль за выполнением настоящего постановления возложить на Вице-премьер-министра - Министра внешней торговли и промышленности Кыргызской

Республики Сулайманкулова А.Дж.

Премьер-министр Кыргызской Республики К.Бакиев

Утвержден
постановлением Правительства
Кыргызской Республики
от 25 апреля 2001 года N 191

УСТАВ
государственного предприятия по сбору, скупке,
переработке и реализации лома и отходов цветных
и черных металлов "Темир"

(В редакции постановления Правительства КР от
30 июля 2001 года N 387)

1. Общие положения

1.1. Государственное предприятие по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" (далее Предприятие) создано в соответствии с постановлением Правительства Кыргызской Республики от 30 марта 2001 года N 141 "О государственном предприятии по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир".

1.2. Устав Государственного предприятия по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир" является единственным учредительным документом.

1.3. Предприятие является самостоятельным хозяйствующим субъектом, созданным в форме государственного предприятия, основанным на праве хозяйственного ведения. Предприятие осуществляет свою деятельность в строгом соответствии с требованиями законодательства Кыргызской Республики и настоящим Уставом.

1.4. Полное официальное наименование предприятия:

на кыргызском языке: Тустуу жана кара металлдардын сыныктарын жана калдыктарын чогултуу, сатып алуу, кайра иштетуу жана сатып чыгаруу боюнча "Темир" мамлекеттик ишканасы;

на русском языке: Государственное предприятие по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов "Темир".

Местонахождение предприятия: Кыргызская Республика, Чуйская область, 722191, с.Аламудун, ул.Набережная, 300.

1.5. Предприятие имеет право в установленном порядке открывать филиалы и представительства на территории Кыргызской Республики.

1.6. Предприятие является юридическим лицом, имеет самостоятельный баланс, имеет право открывать в установленном порядке расчетные и иные счета, в том числе валютные в банках Кыргызской Республики и иностранных банках. Имеет печать со своим наименованием на государственном и официальном языках, штамп, бланки и другую атрибутику.

1.7. Предприятие действует на принципах полного хозяйственного расчета и самофинансирования и вправе заключать хозяйственные договоры и совершать сделки, приобретать имущественные и личные права и нести обязанность выступать истцом и ответчиком в судебных органах.

1.8. Предприятие не вправе продавать принадлежащее ему на праве хозяйственного ведения недвижимое имущество, передавать его в залог.

Предприятие приобретает права юридического лица с момента государственной регистрации в Министерстве юстиции Кыргызской Республики.

1.9. Государственный контроль и регулирование за деятельностью предприятия осуществляет Правительство Кыргызской Республики.

1.10. Изменения и дополнения в настоящий Устав вносятся в установленном законодательством Кыргызской Республики порядке.

1.11. Имущество Предприятия является неделимым и не может быть распределено по вкладам (долям, паям), в том числе между работниками Предприятия.

2. Предмет, цели задачи деятельности Предприятия

2.1. Предприятие создано для организации и ведения хозяйственной и

коммерческой деятельности по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов и увеличения поступления налогов и других платежей в государственный бюджет Кыргызской Республики.

2.2. Реализация целей, указанных выше, составляет деятельность предприятия, которая осуществляется им с использованием имущества, находящегося в государственной собственности Кыргызской Республики, принадлежащего Предприятию на праве хозяйственного ведения в соответствии с положениями Гражданского кодекса Кыргызской Республики, других нормативных правовых актов, а также настоящего Устава.

2.3. В соответствии с основными задачами, стоящими перед Предприятием, оно осуществляет следующие виды деятельности:

- сбор, скупка и переработка лома и отходов цветных металлов;
- сбор, скупка и переработка лома и отходов черных металлов;
- осуществление экспорта лома и отходов цветных и черных металлов;
- осуществление на основе хозяйственных договоров иной деятельности, не запрещенной законодательством Кыргызской Республики.

3. Права, обязанности и ответственность Предприятия

Предприятие для осуществления своих задач, определенных настоящим Уставом, имеет право:

3.1. Покупать за безналичный и наличный расчет материальные ресурсы, имущество, в том числе основные средства, у предприятий, организаций, учреждений и граждан.

3.2. Производить расчеты наличными деньгами с другими предприятиями и гражданами в установленном порядке.

3.3. Приобретать продукцию, товары в порядке оптовой торговли.

3.4. Приобретать в установленном порядке товары, необходимые материалы и изделия в розничной торговле, в кооперативах, а также у граждан.

3.5. Обладать обособленным имуществом, от своего имени приобретать имущественные и личные неимущественные права и нести обязанности, быть истцом и ответчиком в суде, арбитражном суде или третейском суде.

3.6. Самостоятельно заключать договоры с любыми организациями, учреждениями, предприятиями, зарубежными фирмами и физическими лицами в соответствии с законодательством Кыргызской Республики.

3.7. Привлекать для консультирования, обучения работников Предприятия и других целей специалистов на основе заключаемых гражданско-правовых договоров с оплатой по соглашению сторон.

3.8. Направлять в командировки лиц, выполняющих задания Предприятия, в том числе за рубеж, а также для участия в международных конференциях, семинарах, выставках.

3.9. Предприятие имеет право осуществлять внешнеэкономическую деятельность в соответствии с законодательством Кыргызской Республики.

Кроме штатных работников, Предприятие имеет право привлекать на основании временных трудовых договоров, срочных трудовых договоров, договоров подряда, других гражданско-правовых договоров граждан для выполнения работ на Предприятии.

3.10. Режим работы и отдыха работников Предприятия, их социальное обеспечение, социальное страхование регулируются нормами трудового законодательства Кыргызской Республики.

3.11. Предприятие самостоятельно определяет в соответствии с законодательством Кыргызской Республики порядок найма и увольнения работников, формы и системы оплаты труда, сменность работы, принимает решение о введении суммированного учета рабочего времени, устанавливает порядок предоставления выходных дней и отпусков.

3.12. Предприятие самостоятельно определяет продолжительность ежегодных оплачиваемых отпусков, но не ниже предусмотренных Трудовым кодексом Кыргызской Республики. При этом продолжительность их не может быть менее установленной для соответствующих категорий рабочих и служащих государственных предприятий. Предприятие может устанавливать для своих работников дополнительные отпуска, сокращенный рабочий день и другие социальные льготы.

3.13. Предприятие может выступать арендодателем и арендатором.

Предприятие обязано:

3.15. Обеспечить для всех работающих безопасные условия труда и несет ответственность в установленном порядке за ущерб, причиненный их здоровью и трудоспособности.

3.16. Выполнять обязательства согласно законодательству Кыргызской Республики и заключенным договорам.

3.17. Полностью рассчитываться со всеми работниками Предприятия согласно заключенным договорам и контрактам независимо от финансового состояния Предприятия.

3.18. Осуществлять социальное, медицинское и иные виды обязательного страхования работников Предприятия, обеспечивать для них безопасные условия труда и нести ответственность в порядке, установленном законодательством Кыргызской Республики, за ущерб, причиненный их здоровью.

3.19. Своевременно представлять налоговые отчеты Предприятия и уплачивать налоги в порядке и размерах, определяемых законодательством Кыргызской Республики.

Предприятие несет ответственность за нарушение:

3.20. Договорных, кредитных, расчетных и налоговых обязательств.

3.21. Правил безопасности производства.

3.22. Установленного режима природопользования.

4. Управление Предприятием

4.1. Управление Предприятием осуществляет директор Предприятия.

4.2. Директор является единоличным руководителем Предприятия. Он назначается на должность и освобождается от должности Президентом Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики и Администрации Президента Кыргызской Республики.

4.3. Директор Предприятия без доверенности действует от имени Предприятия, заключает договоры, в том числе трудовые, выдает доверенности, открывает в банках расчетные и другие счета, пользуется правом распоряжения средствами, в установленном порядке издает приказы и дает указания, обязательные для всех работников Предприятия.

4.4. Заместители директора Предприятия назначаются и освобождаются от должности Премьер-министром Кыргызской Республики по представлению Министра внешней торговли и промышленности Кыргызской Республики.

4.5. Структура и штатное расписание Предприятия определяются и утверждается директором Предприятия.

4.6. Директор Предприятия имеет право представлять интересы собственника (государства – Кыргызской Республики) в судах, а также выступать от имени учредителя в отношениях с иными организациями, предприятиями, а также с арендаторами в пределах своих полномочий.

5. Учет, планирование, отчетность

5.1. Предприятие осуществляет свою деятельность на основе самостоятельно разработанных планов работы. Перспективные, годовые и текущие планы работы Предприятия утверждаются директором Предприятия.

5.2. Основу планов работы Предприятия составляют долгосрочные и иные договоры, регулирующие отношения Предприятия с поставщиками, арендаторами и потребителями.

5.3. Предприятие свободно в выборе предмета договора, определения обязательств, любых других условий хозяйственных взаимоотношений, не противоречащих законодательству Кыргызской Республики.

5.4. Предприятие осуществляет поставку лома и отходов цветных и черных металлов, в первую очередь, для (отечественных) товаропроизводителей, использующих их в качестве сырья для металлургического производства, в объеме и номенклатуре согласно договору, согласованному с государственным органом, осуществляющим контроль над деятельностью Предприятия.

5.5. Предприятие осуществляет бухгалтерский учет результатов своей работы и ведет статистическую отчетность в установленном законодательством Кыргызской Республики порядке.

5.6. Предприятие представляет компетентным государственным органам

информацию, необходимую для налогообложения и ведения общегосударственной системы сбора и обработки экономической информации.

За отказ в представлении запрошенной в установленном законодательством Кыргызской Республики порядке информации, представление неполной информации или ее искажение, а также за искажение отчетности должностные лица Предприятия несут ответственность, установленную законодательством Кыргызской Республики.

5.7. Главный бухгалтер Предприятия назначается на работу директором Предприятия, подчиняется непосредственно директору, несет ответственность и пользуется правами, установленными законодательством Кыргызской Республики для главных бухгалтеров предприятий (организаций).

5.8. Проверка работы Предприятия осуществляется соответствующими налоговыми, природоохранными и другими государственными органами Кыргызской Республики в соответствии с законодательством Кыргызской Республики.

6. Имущество Предприятия и финансы

6.1. Предприятие основано на праве хозяйственного ведения государственным имуществом и не наделено правом собственности на закрепленное за ним имущество.

6.2. Основой использования имущества является право хозяйственного ведения объектами недвижимости, основными средствами и другим имуществом, являющимся государственной собственностью и переданным на баланс Предприятия с соблюдением предусмотренных законодательством Кыргызской Республики правил и процедур.

6.3. Имущество Предприятия составляют основные фонды и оборотные средства, а также иные материальные ценности, стоимость которых отражается в самостоятельном балансе Предприятия.

6.4. Источниками формирования имущества являются:

- доходы, полученные в результате хозяйственной деятельности;
- кредиты банков и других кредиторов;
- пожертвования организаций, предприятий и граждан;
- и другие источники, не запрещенные законодательством Кыргызской Республики.

6.5. Полученные Предприятием доходы, а также имущество, приобретенное за счет собственных средств, принадлежат ему на праве собственности, в том числе:

- инвентарь, инструменты, все виды оргтехники, приборы, аппараты, а также основные фонды и оборотные средства;
- интеллектуальная, научно-техническая и иная продукция;
- деньги в иностранной валюте, все виды ценных бумаг;
- другое имущество, приобретенное за счет собственных средств.

6.6. Предприятие имеет право выступать рекламодателем.

6.7. Предприятие имеет право передавать другим предприятиям, организациям и учреждениям, обменивать, сдавать в аренду, предоставлять во временное пользование либо займы принадлежащие ему оборудование, транспортные средства, инвентарь, сырье и другие материальные ценности в соответствии с установленными нормами гражданского законодательства Кыргызской Республики.

6.8. Все средства, полученные от деятельности Предприятия, после отчислений государству поступают в распоряжение Предприятия.

7. Реорганизация и ликвидация Предприятия

7.1. Ликвидация и реорганизация Предприятия осуществляются на основании постановления Правительства Кыргызской Республики, а также судом в случаях и порядке, предусмотренных законодательством Кыргызской Республики.

7.2. При реорганизации или ликвидации Предприятия увольняемым работникам выплачивается компенсация и предоставляются другие льготы и гарантии, предусмотренные законодательством Кыргызской Республики.

7.3. Имущество, оставшееся после ликвидации Предприятия, распределяется ликвидационной комиссией в соответствии с законодательством Кыргызской Республики.

7.4. Имущество, оставшееся после удовлетворения требований кредиторов,

переходит в распоряжение учредителя.

7.5. Предприятие считается реорганизованным или ликвидированным с момента внесения соответствующей записи в Государственный реестр юридических лиц Кыргызской Республики.

8. Архивное дело. Сохранность документов

8.1. Предприятие в целях реализации государственной социальной, экономической и налоговой политики несет ответственность за сохранность документов (управленческих, финансово-хозяйственных, по личному составу и др.); обеспечивает передачу на государственное хранение документов, имеющих научно-историческое значение, в национальный архивный фонд Кыргызской Республики, в соответствии с действующим перечнем документов хранит и использует в установленном порядке документы по личному составу.

8.2. При реорганизации Предприятия все документы (управленческие, финансово-хозяйственные, по личному составу и др.) передаются в соответствии с установленными правилами предприятию-правопреемнику.

8.3. При ликвидации и отсутствии правопреемника документы постоянного хранения, имеющие научно-историческое значение, передаются на государственное хранение в национальный архивный фонд Кыргызской Республики, документы по личному составу (приказы, личные дела, карточки учета, лицевые счета и т.п.) передаются на хранение в архив учредителя.

8.4. Передача и упорядочение документов осуществляются силами и за счет средств Предприятия в соответствии с требованиями законодательства Кыргызской Республики.

г.Бишкек, Дом Правительства
от 18 августа 2000 года УП N 213

УКАЗ ПРЕЗИДЕНТА КЫРГЫЗСКОЙ РЕСПУБЛИКИ

Об усилении государственного контроля за сбором, скупкой, реализацией и экспортом (реэкспортом) лома и отходов цветных и черных металлов в Кыргызской Республике

В целях упорядочения сферы оборота лома и отходов из цветных и черных металлов в республике и пресечения связанных с ним фактов правонарушений, наносящих ущерб экономике и безопасности страны, жизни и здоровью граждан, постановляю:

1. Приостановить с 1 сентября 2000 года выдачу лицензий хозяйствующим субъектам:

- на осуществление деятельности по сбору, скупке, переработке и реализации лома и отходов цветных и черных металлов;
- на экспорт и реэкспорт лома и отходов цветных и черных металлов.

2. Правительству Кыргызской Республики:

- в месячный срок разработать и внести на рассмотрение Жогорку Кенеша Кыргызской Республики соответствующие законопроекты, предусматривающие государственную монополию на сбор, скупку и реализацию лома и отходов цветных и черных металлов, а также введение уголовной ответственности за незаконную деятельность по сбору, скупке и реализации данных видов сырья;

- в двухмесячный срок разработать механизм реализации государственной монополии на сбор, скупку и реализацию лома и отходов цветных и черных металлов;

- усилить контроль и принять жесткие меры к гражданам и юридическим лицам, осуществляющим сбор, скупку, переработку, реализацию и экспорт (реэкспорт) лома и отходов цветных и черных металлов без лицензии;

- привести свои решения в соответствие с настоящим Указом.

3. Контроль за исполнением настоящего Указа возложить на отделы экономической политики, по делам обороны и безопасности Администрации Президента Кыргызской Республики.

4. Настоящий Указ вступает в силу со дня опубликования.

Президент Кыргызской Республики А.Акаев

УТВЕРЖДАЮ:

Директор
Государственного агентства "Темир"



Д. Ирсалиев

2010 г.

СОГЛАСОВАНО:

Директора

ГОСУДАРСТВЕННОГО АГЕНТСТВА ПО
АНТИМОНОПОЛЬНОЙ ПОЛИТИКЕ И
РАЗВИТИЮ КОНКУРЕНЦИИ ПРИ
ПРАВИТЕЛЬСТВЕ КЫРГЫЗСКОЙ РЕСПУБЛИКИ

Б. А. Мамыров Джээнбеков Б.С.

04.10 2010 г.

Прейскурант цен на лом и отходы черных и цветных металлов

№№ п/п	наименование вида лома и отходов	закупочная цена, сом/кг	цена реализации на внутреннем рынке, сом/кг
1	алюминий нелегируемый, класс А, группа 1	30,00	32,30
2	сплавы алюминивые с низким содержанием Mg до 0,8%, класс А группа 2	25,00	27,30
3	сплавы алюминивые литейные, класс А группа 3-10	20,00	22,30
4	стружка алюминия и их сплавов, класс Б	17,00	19,30
5	отходы алюминия и его сплавов, класс Г	13,00	15,30
6	медь 95%, класс А, группа 1, сорт 1-2	170,00	174,10
7	медь 85%-90%, класс А, группа 1, сорт 3-4	70,00	72,50
8	медь с полудой и пайкой класс А, группа 2	40,00	42,30
9	латунь, класс А, группа 3	90,00	92,30
10	латунь, класс А, группа 4-8	50,00	52,00
11	стружка латунная, класс Б	35,00	37,00
12	бронза, класс А, группа 9-12	60,00	62,30
13	радиаторы, класс А, группа 13	40,00	42,00
14	свинец, класс А, группа 1-4	25,00	26,50
15	свинец, класс АЛ, группа 1-2	12,00	12,60
16	вольфрам и его сплавы, класс А, группа 1-2	200,00	215,20
17	вольфрам и его сплавы, класс Б, группа 1-2	130,00	139,88
18	вольфрам и его сплавы, класс В, группа 1-2	6,00	8,60
19	никель, класс А, группа 1	300,00	338,00
20	сплавы никеля, класс А, группа 2-4	200,00	222,80
21	сплавы никеля, класс А, группа 5	15,00	16,14
22	цинк, класс А, группа 1-3	25,00	26,90
23	нихром, класс А, группа 1	120,00	158,00
24	олово, класс А, группа 1	50,00	69,00
25	сплавы молибдена, класс А группа 2	320,00	344,30
26	сплавы молибдена, класс В группа 1	17,00	18,30
27	сплавы молибдена, класс В группа 2	15,00	16,15
28	титан, класс А, группа 1	90,00	96,85
29	сплавы титана, класс А группа 2-3	60,00	64,60
30	сплавы титана, класс В	5,00	5,40
31	магний и его сплавы, класс А, группы 1-5	20,00	21,50

	ЛОМ И ОТХОДЫ ЧЕРНЫХ МЕТАЛЛОВ		
32	стальные лом и отходы №1 (1А,1Б)	6,00	6,75
33	стальные лом и отходы №2 (2А,2Б)	4,00	4,75
34	стальные лом и отходы № 3, № 4 (3А,3Б,4А,4Б)	3,60	4,05
35	негабаритные стальные лом и отходы (5А, 5Б, 6А, 6Б)	3,20	3,58
36	лом для пакетирования №1, №2 (1А, 11 Б, 12А)	2,00	2,46
37	стальная стружка №1 (14 А)	1,40	1,78
38	стальная стружка №2 (15 А, 15 Б)	1,50	1,88
39	вьюнообразная стальная стружка (16 А, 16 Б)	1,50	1,88
40	нержавеющая сталь Б19,Б27-Б28,Б30,Б31,Б46,Б48,Б49,Б63	80,00	86,10
41	нержавеющая сталь Б4,Б25,Б26,Б29,Б35,Б47,Б50-Б52,Б58	20,00	23,00
42	стружка нержавеющей стали Б26	13,00	16,00
43	пакеты из стальных лома и отходов (9А)	2,50	3,50
44	брикеты из стальной стружки (6А, 6Б)	1,50	2,50
45	чугунные лом и отходы № 1 (16А,16Б), №2 (17А)	3,40	4,00
46	негабаритные чугунные лом и отходы № 1 (18А,18Б)	2,50	3,10
47	чугунная стружка (24А, 24Б)	1,50	1,65


Примечание : - закупочная цена указана для юридических лиц с учетом НДС и налога с продаж



Handwritten signature

Жукова Р.А.

Request from EPP and Endorsement from State Agency for Environment and Forestry

	ЭЛЕКТР СТАНЦИЯЛАР <small>АЧЫК АКЦИОНЕРДИК КООМУ</small>	ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО ЭЛЕКТРИЧЕСКИЕ СТАНЦИИ 720070, Кыргызская Республика г. Бишкек, пр. Жибек-Жолу, 326 Телефон: +996 (312) 661101 Телефакс: +996 (312) 663409 E-mail: es@infotel.kg, www.energo-es.kg	ELECTRIC POWER PLANTS JOIN-STOCK COMPANY 326, Jibek Jolu Avenue 720070, Bishkek, Kyrgyz Republic P/c: 1299001880077459 ОАО «РСК Банк», г. Бишкек, БИК 129001, ИНН 01810200110062 КОД ПРЕДПРИЯТИЯ: 22856351
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720070, Кыргыз Республикасы
Бишкек ш., Жибек-Жолу пр., 326

22.01.2016 № 34-24/ч-131

на № _____

Директору
Государственного агентства
по охране окружающей среды
и лесного хозяйства
при Правительстве
Кыргызской Республики
Атаджанову С.С.

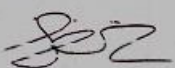
Уважаемый Сабир Садыкджанович,

ОАО «Электрические станции» повторно направляет на Ваше рассмотрение доработанный Национальный отчет о Предварительной экологической оценке (ПЭО) проекта АБР «Реконструкция Токтогульской ГЭС Фаза III», с учетом Ваших замечаний от 14.01.2016г. за № 04-01-28/642.

Приложение: Отчет по ПЭО по проекту «Реконструкция Токтогульской ГЭС Фаза III» на 2 л.

С уважением,

Заместитель
Генерального директора

 У. Кыдырбаев


Исп. ОРМТ
Тел. 66-20-54

№ 0046166

22.01.16


№ 04-2/33-2

1 экз.

<p>КЫРГЫЗ РЕСПУБЛИКАСЫНЫН ӨКМӨТҮНӨ КАРАШТУУ КҮРЧАП ТУРГАН ЧӨЙРӨНҮ КОРГОО ЖАНА ТОКОЙ ЧАРБАСЫ МАМЛЕКЕТТИК АГЕНТТИГИ</p> <p>720001, Бишкек ш. Токтогул көч. 228 тел. (996-312) 352727, факс: 353102, 353094 e-mail: nature_kg@mail.ru, ecokg@aknet.kg, www.nature.kg Биринчи май КРБ, ЖИН: 02001200610051 р/с: 1350108015183485, БИК: 135001, Банк: ОАО «Айыл-Банк» города Бишкек ОКПО: 23994204 0253101 2</p>		<p>ГОСУДАРСТВЕННОЕ АГЕНТСТВО ОХРАНЫ ОКРУЖАЮЩЕЙ СРЕДЫ И ЛЕСНОГО ХОЗЯЙСТВА ПРИ ПРАВИТЕЛЬСТВЕ КЫРГЫЗСКОЙ РЕСПУБЛИКИ</p> <p>720001, г. Бишкек, ул. Токтогула, 228 тел. (996-312) 352727, факс: 353102, 353094 e-mail: nature_kg@mail.ru, ecokg@aknet.kg, www.nature.kg Первомайский РОК, ИНН: 02001200610051 р/с: 1350108015183485, БИК: 135001, Банк: ОАО «Айыл-Банк» города Бишкек ОКПО: 23994204 0253101 2</p>
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Утверждаю
Заместитель директора
Государственного агентства
охраны окружающей среды
и лесного хозяйства
при Правительстве КР

А.А. Рустамов
«29» Января 2016 г.

**ЗАКЛЮЧЕНИЕ
ГОСУДАРСТВЕННОЙ ЭКОЛОГИЧЕСКОЙ ЭКСПЕРТИЗЫ
к отчету «Предварительная экологическая оценка (ПЭО)
проекта АБР «Реконструкция Токтогульской ГЭС Фаза III»**

На рассмотрение в Государственное агентство охраны окружающей среды и лесного хозяйства при Правительстве Кыргызской Республики на государственную экологическую экспертизу представлен отчет «Предварительная экологическая оценка (ПЭО) проекта АБР «Реконструкция Токтогульской ГЭС Фаза III», разработанный ОАО «Электрические станции» в 2015 году.

Предварительная экологическая оценка (ПЭО) проекта АБР «Реконструкция Токтогульской ГЭС Фаза III» состоит из следующих основных разделов:

1. Краткий обзор.
2. Политические, Правовые и Административные Рамки.
3. Описание Проекта.
4. Описание Окружающей Среды.
5. Ожидаемые Экологические Последствия и Смягчающие Меры.
6. Анализ Альтернатив.
7. Раскрытие Информации и Консультации.
8. Механизм Разрешения Жалоб.
9. План Управления Окружающей Средой.
10. Заключение и Рекомендации.
11. Приложения

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График реализации: Начало строительства будет начато во второй половине 2016 года и продлится до 2020/2021 гг.

Описание Проекта и Возможные Воздействия

В ходе работ на Токтогульской ГЭС предусмотрены следующие мероприятия:

- замена/реабилитация двух турбин;
- замена/реабилитация и модернизация двух генераторов;
- замена двух основных трансформаторов, связанных с двумя турбинами / генераторами;
- замена систем управления агрегатами для двух блоков;
- замена систем защиты блока, в том числе соответствующего трансформатора, шлейфа и ограждения для двух блоков;
- замена блока электрических и механических вспомогательных систем (Распределительное устройство МВ и НН, система охлаждения, дренажные и водо-насосные системы и т.д.) для двух блоков (по блокам);
- реабилитация Гидравлических стальных конструкций и гидромеханического оборудования на впуске и ниже по течению;
- реконструкция гидротехнических стальных сооружений и гидромеханического оборудования (напорных водоводов, донных выпускных отверстий, кранов и т.д.).

Согласно Отчету, следующие возможные экологические последствия могут быть связаны с перечисленными мероприятиями:

- возможным отключением электроэнергии в ходе строительства;
- утилизацией старого масла (около 180 тонн, не содержащих ПХД);
- вопросами соблюдения техники безопасности и здравоохранения во время строительства;
- увеличением движения грузовиков в период строительства через населенные пункты; транспортировкой тяжелого оборудования, строительных материалов и отходов;
- утилизацией железа / стали (почти 4 тысячи тонн), и других отходов;
- строительными отходами, образовавшимися в результате строительных работ, и некоторыми бытовыми отходами, образовавшимися в результате жизнедеятельности рабочих.

В рамках мероприятий по реализации Проекта негативного воздействия в трансграничном контексте, не ожидается.

Зонами возможного значительного воздействия на окружающую среду могут являться места сбора и хранения старого масла при условии обнаружения в нём ПХБ. Мероприятия по обеспечению экологической безопасности на этот случай предусмотрены в Плане управления окружающей средой.

Аварийные ситуации на ГЭС и за проектные аварии в настоящем ПЭО не рассматриваются, поскольку работы в рамках Проекта не нарушают нормального функционирования Токтогульской ГЭС и осуществляется в пределах существующих регламентных и ремонтных работ.

Согласно Отчету ПЭО, все мероприятия проекта будут осуществляться на территории объектов, находящихся в собственности ОАО «Электрические станции». Меры по реабилитации будут проходить в пределах зданий и защитных камер электростанций. Утилизация и обращение с металлоломом, маслом, строительными отходами и некоторыми бытовыми отходами жизнедеятельности самих работников производиться в соответствии с установленными правилами по охране окружающей среды.

Все эти воздействия, степень воздействия и предлагаемые меры по смягчению последствий, рассматриваются в табличной форме в Разделе План управления окружающей средой.

Устойчивость плотины не будет подвергаться воздействиям предусмотренных мер. Ни одна из этих мер не будет влиять на конструкцию плотины. Работы по реабилитации плотины во время Фазы 3 никак не отразятся на ее устойчивости и водном режиме ниже по потоку.

Все отходы по мере максимальной возможности будут переработаны как стальной лом, так и старое масло. Результаты анализа показали, что ПХБ не содержится в масле оборудования, подлежащего замене на Фазе 2. Однако необходимо проверить остальные объемы масла в старом оборудовании, подлежащем замене на Фазе 3. Для этих целей Отдел управления проектом «Развитие сектора энергетики» при Министерстве энергетики и промышленности КР в I-III квартале 2016 года закупит экспресс-анализаторы для определения наличия ПХБ в старом масле.

Масла и металлолом будут надежно храниться в специальном хранилище, построенном в период первой фазы Проекта.

План управления окружающей средой (ПУОС) разработан в рамках ПЭО. Он содержит меры по смягчению последствий и мониторингу для стадии строительства.

В период эксплуатации, необходимости в выполнении каких-либо дополнительных мероприятий не требуется.

Особое внимание уделяется большому количеству образовавшегося металлолома (около 3220 т) и 58 тоннам старого масла, которое необходимо слить из старого оборудования. Образовавшегося строительного мусора немного, и, по оценкам, его количество может варьироваться от 10 до 20 куб. метров; мусор, в основном, представляет собой колотый бетон. Большинство мероприятий по смягчению последствий воздействия на окружающую среду во время строительства осуществляет подрядчик, за которым будет наблюдать КРП. Переработка/повторное использование металлолома и старого масла возлагается на ЭС не за счет средств кредита.

Рекомендуется регулярно контролировать осуществление предлагаемых мер по смягчению воздействий в течение всего периода строительства с особым акцентом на надлежащее управление утилизацией отходов и транспортных вопросов.

Консультант по реализации проекта является лицом, которое несет ответственность за контроль всех экологических вопросов, также будет готовить ежемесячные отчеты, в том числе о ходе реализации ПУОС. Эти отчеты должны быть представлены в ОАО «Электрические станции» и распространены среди всех заинтересованных ведомств. Отчет должен содержать все несоответствия ПУОС и перечислить все инциденты и аварии по линии ЗБОС, которые происходят во время выполнения ремонтных мероприятий. На основе этих докладов и по регулярной проверке объектов Консультант вместе с ОАО «Электрические станции»/ ОРП подготовит отчет по производительности за полгода и о результатах мониторинга, и представит их в АБР.

В период подготовки Отчета проведены общественные консультации и встречи с уполномоченными государственными органами, с общественностью г. Кара-Куль Джалал-Абадской области, где все поддержали о необходимости реабилитационных мер, предусмотренные Проектом АБР по реабилитации Токтогульской ГЭС.

Рассмотрев представленные материалы, Государственное агентство охраны окружающей среды и лесного хозяйства при Правительстве Кыргызской Республики выносит положительное заключения государственной экологической экспертизы к отчету «Предварительная экологическая оценка (ПЭО) проекта АБР «Реконструкция Токтогульской ГЭС Фаза III».

При этом необходимо:

- в период реализации проекта ОАО «Электрические станции» обеспечить своевременное представление отчетов в установленной форме по вопросам охраны окружающей среды и оплаты нормативных платежей за загрязнения окружающей среды в Джалал-Абадское территориальное управления ГАООСЛХ.
- перед началом работ необходимо уведомить Джалал-Абадское ТУ ГАООСЛХ.

В случае невыполнения заключения государственной экологической экспертизы и проведения работ не по проектным решениям, заключение автоматически теряет силу.

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**State Agency of the Kyrgyz Republic
On Environment Protection and Forestry
Under the Government of the Kyrgyz Republic**

Approved by:
Deputy Director of SAEPP
Under the Government of the
Kyrgyz Republic
A.A. Rustamov
January 29, 2016

**STATE ENVIRONMENTAL EXPERTISE RESOLUTION
To the Report Initial Environmental Examination (IEE)
Of ADB Project Toktogul Rehabilitation Phase 3**

Report Initial Environmental Examination (IEE) of the ADB Project Toktogul Rehabilitation Phase 3 was submitted to State Agency of the Kyrgyz Republic on Environment Protection and Forestry prepared by JSC Electrical Stations in 2015.

This Initial Environmental Examination (IEE) of ADB Project Toktogul Rehabilitation Phase 3 consists of the following main sections:

- 1 Executive Summary
2. Policy, legal and administrative framework
3. Description of the Project
4. Description of Environment
5. Anticipated Environmental Impacts and Mitigation measures
6. Analysis of Alternatives
7. Information disclosures, consultation and participation
8. Grievance and redress mechanism
9. Environmental management plan
10. Conclusions and recommendations
11. Annexes.

Implementation schedule. Beginning of construction is scheduled to the second half of 2016 and will last until 2020/2021.

Project description and probable impacts.

In the course of Project works at Toktogul HPP the following activities will take place:

- Replacement/rehabilitation of two turbines;
- Rehabilitation/replacement of two generators;
- Replacement of two main transformers attached to two turbines / generators;
- Replacement of control units for two generators;
- Replacement of control and protection system of transformer, cable and fencing of two units;
- Replacement of auxiliary and electrical systems (distributions system, cooling system, drainage and pumping systems etc) for two units;
- Rehabilitation of steel hydraulic systems hydro-mechanical equipment of the dam;
- Reconstruction of hydrotechnical steel structures and hydro-mechanical equipment (pressure pipelines, gates etc).

According to the Report the following probable environmental impacts may take place due to the aforementioned activities:

- Temporary power outage during construction;
- Utilization of old oil (c.a. 180 tons, free of PCB);
- Issues of health and safety during construction;
- Increased heavy trucks traffic during construction via settlements, transportation of heavy equipment , construction materials and wastes;

- Utilization of scrape metal/steel (some 4.000 tons) and other wastes;
- Construction wastes and some household wastes generated by workers;

In the frames of Project implementation activities no negative environmental impact in transboundary context is expected.

The areas of probable significant environmental impact may be the areas for old oil storage provided it is PCB-contaminated. Activities to ensure environmental safety in this case are designed in the Environmental Management Plan.

Emergency and post-project incidents at the HPP are not discussed in this IEE since the Project works do not disturb normal performance of Toktogul HPP and standard repair works.

According to IEE all the Project activities will be implemented within the boundaries of the existing facilities owned by JS Electric Stations. Rehabilitation works will take place within the buildings and protection chambers of the plant. Scrape metal handling and utilization, including oil, construction wastes and some household wastes generated by workers will be done in line with the effective environment protection procedures.

All such activities, their degree of impact and proposed mitigation measures are presented in the form of tables in the section Environmental Management Plan.

Proposed Project activities will not have any impact on stability of the dam and none of such activities will impact the structure of the dam. The works in the Phase 3 will have zero impact on the dam and water regime downstream.

All the wastes, such as scrape metal and old oil, will be recycled to the extent possible. The results of old oil analyses in equipment showed no PCB content which is subject to replacement during Phase 2. However, it is necessary to check the remaining volumes of oil in old equipment to be replaced during the Phase 3. For this purposes Project implementation unit of Energy Sector Development Project under the KR Ministry of Energy and Industry during I-II quarter of 2016 will procure express-analyzers for PCB check in old oil.

Oil and scrape metal will be properly stored in the dedicated area built during the Phase I.

This IEE includes Environmental Management Plan (EMP). It contains mitigation and measures and monitoring activities during construction.

No additional activities required in the period of operation.

Special attention shall be paid to large volumes of scrape metal (c.a. 3220 tons) and 58 tons of old oil to be drained from old equipment. Volumes of construction wastes are insignificant and by estimates it will vary from 10 to 20 cubic meters represented, primarily, by crushed concrete. Most of the mitigation activities and impacts in the course of the works done by subcontractor will be observed by PIU. Scrape metal and old oil recycling/utilization shall be done by ES at the cost of the non-loan funds.

It is recommended to monitor on regular basis proposed mitigation measures during the entire period of construction with special attention to management of wastes and road traffic.

The Project Consultant is the person responsible to control all the environmental issues and shall also prepare monthly reports on EMP implementation. Such reports to be presented to JSC Electrical Stations and distributed among the stakeholders. Such reports shall contain all the deviations to EMP, including all the incidents and emergencies in line with safety requirements as they may take place during construction works. Based on such reports including the results of regular inspections done by PIC, the latter together with JS ES/PIU will prepare Performance Report for the period of six months and on the monitoring results to submit such report to ADB.

In the course of the Report drafting Information disclosure meetings and public consultations took place including meetings with local authorities and general public in Kara-Kul city of Djalal-Abad oblast. All the participants supported the need of rehabilitations measures as designed in the ADB Project to rehabilitate Toktogul HPP.

On having considered the submitted materials State Agency on Environment Protection and Forestry under the Government of the Kyrgyz Republic issues positive statement of the state ecological expertise to the Report "Initial Environmental Examination (IEE) of ADB Project Toktogul Rehabilitation Project Phase III".

However, it is also required:

- In the course of the Project implementation JSC Electrical Stations ensure timely submission of reports in the required form to Djalal-Abad Territorial Department of

SAEPF on the issues of environment protection and ecological payments for environment pollution in Djalal-Abad oblast.

- Duly inform Djalal-Abad Territorial Department of SAEPP on the commencement of works.

In case of failure to follow the requirements of the state ecological expertise and implementation of works beyond the project design this present statement shall automatically be considered null and void.

Chairman of the Expert Commission
Director of the Department of SEE
and Use of Nature

K.K.Djumabekov

Members of the Expert Commission:
Head of the SEE and UN Unit
SEE and UN Unit Leading Expert

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