

CENTER FOR EDUCATION PROJECTS IMPLEMENTATION UNIT

ARMENIA EDUCATION IMPROVEMENT PROJECT

**ENVIRONMENTAL AND SOCIAL
MANAGEMENT FRAMEWORK**

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LIST OF ACRONYMS

BP	Bank Policy
CEP	Center for Education Projects Implementation Unit
CIF	Competitive Innovation Fund
EIA	Environmental Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
AEIP	Armenia Education Improvement Project
MNP	Ministry of Nature Protection
NACET	National Center of Education Technology
NGO	Non-Governmental Organization
O&M	Operation and Maintenance
OP	Operational Policy
RA	Republic of Armenia
SNCO	State Non-Commercial Organization
WB	World Bank

1. INTRODUCTION

The Republic of Armenia requested World Bank assistance for the implementation of the Armenia Education Improvement Project (AEIP or Project) aimed at rehabilitation and improvement of selected school infrastructure in various regions of Armenia. High schools were established in Armenia during 2008 – 2011. A number of reforms have been carried out to strengthen the quality of education by introduction of new structural and content measures since then. The World Bank support to high schools had initially been launched during the phase one of the Education Quality and Relevance Project (APL 1), and was then continued during phase two of the Education Quality and Relevance Project (APL 2). Project activities were mainly directed at the improvement of quality of education, enrichment of resources and facilities of high schools. However, there are many high school buildings, which are still in a need infrastructural improvement. As the previously implemented Projects, the AEIP's objectives include provision of technical assistance and investment for further strengthening of Armenia's education system.

The development objective of the AEIP is to: (i) improve school readiness of children entering primary education; (ii) improve physical conditions and the availability of educational resources in upper secondary schools; and (iii) support quality and relevance improvements in higher education institutions in Armenia. It will be comprised of the following three components: (i) Enhancing the Quality of Pre-Primary and General Education, (ii) Mainstreaming of the Competitive Innovation Fund (CIF) for Higher Education Institutions (HEI) into full implementation, and (iii) Project management, monitoring and evaluation. The first component includes the Enrichment of Upper Secondary Schools, through which the rehabilitation of up to 17 high schools is envisioned by the Ministry of Education and Science.

The Center for Education Projects Implementation Unit (CEP) of the Ministry of Education and Science of the Republic of Armenia (RA) will have the overall responsibility for implementing of the AEIP.

AEIP is classified as environmental category B following the World Bank OP/BP 4.01 Environmental Assessment. The AEIP will finance similar types of construction and rehabilitation works in multiple locations over the country. Even though the sub-projects are not known in detail at the stage of the project preparation and detailed designs for works are not available at this point, the types of works to be undertaken and their environmental impacts are generally known upfront. Therefore, environmental due diligence in the course of AEIP preparation implied development of the present Environmental and Social Management Framework (ESMF). The ESMF provides general guidelines for applying environmentally sound practices to school infrastructure rehabilitation. According to the ESMF for low-risk construction / rehabilitation activities the checklist-type Environmental Management Plans (EMPs) will be developed to ensure that basic good practice measures are recognized and implemented, while designed to be both user friendly and compatible with the WB safeguards requirements. Also, the school buildings selected for rehabilitation under the AEIP shall be checked for possibly belonging to the formal list of Armenia's cultural heritage, so that in case any of them carries special historic value the rehabilitation works are designed and conducted in the way respective of a building's conservation needs as required by OP/BP 4.11.

The EMPs will be developed for all schools to be rehabilitated under AEIP, and will be included in the tender documents to ensure proper implementation and monitoring of the proposed mitigation measures. Adherence to the EMPs in the course of civil works will allow preventing or minimizing possible adverse impacts and will be sufficient for keeping environmental impacts of the Project at the acceptable minimum level.

2. PROJECT DESCRIPTION

The proposed project aims at supporting the Government of Armenia in two main endeavors: enhancing the quality of pre-primary and general education, and fostering the relevance of tertiary education through mainstreaming the Competitive Innovation Fund, or expanding it from a pilot program to one with full implementation.

Component 1. Enhancing the Quality of General Education.

Subcomponent 1.1. Promoting School Readiness and equal opportunities at the start of General Education. The objective of this subcomponent is twofold: first, it would support the Government's efforts to increase preschool enrollment, focusing on vulnerable populations, as a means of improving the school readiness of five and six-year-old children entering primary education. Second, this component would finance activities aimed at improving the quality of preschool education offered by community-based initiatives. By the end of 2017, it is expected that 90 percent of five and six-year-olds would be enrolled in preschool institutions.

This subcomponent would support the establishment of sustainable, community-based preschool education units under a competitive grant financing scheme. First, a study would be undertaken to identify communities with disadvantaged populations and organizations potentially able to provide preschool education. The study would also identify main shortcomings and issues in the implementation of pre-school education micro-projects undertaken under the ongoing project. Based on the results of this study, the project's competitive grant scheme would be adjusted to serve the needs of the poorest communities. Community leaders, members, parents of students and representatives of potential service providers would be encouraged to participate in the grant-financing mechanism. They would be trained to prepare competitive proposals with the aim of establishing low-cost and sustainable preschool education institutions. The best proposals prepared by communities would be selected based on criteria to be defined under the competitive grant scheme. Priority would be given to communities that either do not have preschools or whose preschool facilities do not meet the demands of their communities. It is expected that about 120 of these institutions would be established with project funds.

Subcomponent 1.2. Enrichment of Upper Secondary Schools. The objective of this subcomponent is to strengthen the recently established network of high schools by supporting the rehabilitation of selected facilities in poor physical condition and improvements in all high schools in teaching and learning conditions, including the provision of contextualized digital learning materials in classrooms and modern equipment.

This subcomponent would support the rehabilitation and refurbishment of a limited number of high schools recently designated by the Government. These schools were built during the Soviet period and present many infrastructure deficiencies, including lack of appropriate heating systems, potential seismic safety issues and humidity problems. It is expected that at least 17 out of a total of 107 high schools in Armenia would benefit from this subcomponent. Given that Armenia is a high risk country in terms of potential earthquakes, the feasibility study for each of the 17 schools will include an expert assessment of their seismic conditions. The rehabilitation works supported by the project will ensure compliance to seismic resistance standards and where needed, strengthening works will be carried out. To ensure that the newly upgraded school infrastructure is maintained, the component will also support the development and adoption of a school maintenance manual and training in the use of that manual to upgrade the capacity of school managers and administrators in this area. The targeted schools would thus be able to provide improved and safer teaching and learning environments.

Since improving upper secondary education in Armenia requires much more than infrastructure, this subcomponent would also finance activities aimed at improving the teaching and learning conditions of the 107 High Schools. It would finance the purchase of modern information and communication technologies (ICT) equipment and the development of contextualized digital learning materials to be used in classrooms in all upper secondary schools in Armenia. This subcomponent would also support training teachers to use of these materials for the benefit of their students. The focus of these training activities would be on using modern teaching methodologies and digital learning materials in the classrooms. To monitor the changes and improvements, the subcomponent would finance classroom observations and other studies. By the end of the project, it is expected that an increased percentage of high school teachers would be competently using computer-assisted teaching methodologies in classrooms.

As part of the Monitoring & Evaluation framework, it is envisioned that focus groups with key stakeholders (parents and other members of the communities affected) will be held on a yearly basis. The purpose of these meetings is to bolster the social accountability of the high school reforms and of the investments made under the project. This endeavor will ensure the education ministry will receive feedback from parents and members of the community.

Subcomponent 1.3. Strengthening key institutions for monitoring educational outcomes and monitoring student learning in Armenia. This component will improve the National Center of Education Technology's (NACET) capacity to monitor Armenian schools and provide them with adequate ICT coverage. This sub-component will also provide the financing for the participation of the country in large-scale international student assessment studies.

Starting in 2013, NACET's ICT services have been covering all educational institutions in Armenia, including Vocational Education and Training (VET) and Higher Education Institutions (HEIs). NACET is tasked with managing data from all educational institutions in Armenia and making educational statistics available both to the public and the authorities in a systematic and organized fashion. By the end of the project, it is expected that NACET would be playing the role of national center for educational statistics and providing decision-makers and key stakeholders with timely and relevant education information on the whole spectrum of Armenia's education system. To this end, this subcomponent would support the development of an ICT education strategy for NACET as the current absence of this strategy makes it more difficult to implement ICT-related activities, which includes the integration of information systems and the production of key educational statistics per school and per province. Second, it will support the rehabilitation and refurbishment of NACET facilities, as this Center is outgrowing its current location and its responsibilities are broadening. Third, as NACET will be responsible for the operation of Education Management Information System covering all levels of Armenia's education system except for pre-primary education, the subcomponent would finance the purchase of state-of-the-art hardware and software platforms to run such information systems in an integrated fashion for general schools, vocational and technical schools, and tertiary education institutions. Fourth, it would finance the establishment of technical service mechanisms for the maintenance of hardware and software in Armenian schools. Fifth, it will finance the training of NACET staff on management, planning, monitoring and evaluation. Sixth, to better monitor learning outcomes, the subcomponent will cover the participation fees for Trends in Mathematics and Science Studies (TIMSS) in 2015.

On the user front, this subcomponent will finance: (i) training for teachers and non-teaching staff of schools, HEIs and VET institutions on the integration of ICT into teaching and learning processes; and (ii) training for users of NACET's EMIS at the level of provinces and schools on the use of educational statistics produced by these systems. It is expected that

about 3,900 representatives of preschools, schools, HEIs and VET institutions would benefit from these training activities. As the integration of ICT into teaching and learning processes is even more critical in rural areas due to the shortage of educational resources there, this subcomponent would finance the development of a methodology to foster the use of computers in these classrooms. By the end of the proposed project, it is expected that NACET's education management and information system will produce quality educational statistics for policy making and planning at all levels of the education system of Armenia.

Subcomponent 1.4. Supporting further improvements in the quality of education through curriculum revisions. The objective of this subcomponent is to bring the National Curriculum Framework for grades 1-12 into conformity with the requirements of the General Education and State General Education Curriculum law approved by the Government Decree No. 1088, dated July 28, 2011. The proposed curriculum revisions would be outcome-oriented and prioritize identifying the key competencies that students should have acquired by the end of each level of education. The proposed project would finance technical assistance and consultative workshops to align with the law the National Curriculum Framework, the State Standards for Education, the subject standards and syllabi as well as classroom assessment and student scoring methods.

Component 2. Mainstreaming of the Competitive Innovation Fund (CIF) for Higher Education Institutions (HEI) into full implementation.

The objective of this component is to support the roll-out of the competitive grant program for HEIs that was developed and piloted under the ongoing project (APL2). The fund was designed to support the best proposals prepared by HEIs with the aim of improving the quality, modernization and particularly the labor-market relevance of the academic programs and increasing efficiency, equity and the development of new academic programs of HEIs. This component would support the assessment of the piloting of the CIF implemented under APL2 and reviewing the grant-financing scheme based on the findings of this assessment. Under this subcomponent, representatives of HEIs would be encouraged to participate in the CIF program and would be trained on proposals preparation, project and financial management, procurement, monitoring and evaluation.

The selection of proposals prepared by HEIs would follow the procedures established in the CIF Operations Manual designed under the APL2 Project, which also defines the set of eligible activities, grant ceiling and transfers mechanism. The establishment of partnerships between HEIs and the private sector aimed at developing and modernizing the higher education sector in Armenia (e.g. by developing academic curricula aimed at to produce graduates with the relevant skills and competences for a full integration into the labor market) would be incentivized through the provision of grants.

Component 3. Project Management, Monitoring and Evaluation.

The key objective of this component is to provide continued support for the management and monitoring of project implementation activities and outcomes. This component would provide funds for monitoring and evaluation studies and for audits of project financial statements and grants implementation. The education ministry's Center for Education Project (CEP), as the project implementation unit, would manage procurement, disbursements and financial arrangements, monitor the project and report on its progress.

Specific activities to be supported by the Component are the following:

- Financing a Project Implementation Unit with core staff hired as consultants.

- Implementation and management of the procurement processes, disbursements, and financial management, project monitoring, and reporting.
- Acquisition of minor additions/replacements of office furniture and equipment.
- Financing of local travel, utilities and publications, translations, small office repair, office supplies, fuel, Internet service, bank commission charges and vehicle maintenance and repair.
- Financing of implementation and management of special studies planned.
- Facilitate coordination, communication flows and dissemination of information with participating institutions.
- Facilitate working group arrangements and the organization of seminars and workshops.
- Provide training to CEP staff in procurement, disbursements, information technology, project management and other areas identified and proposed in the course of project implementation.

3. LEGAL AND REGULATORY FRAMEWORK

3.1. Legal Framework

The Article 10 of the Constitution of the Republic of Armenia (adopted in 1995 and amended in 2005) stipulates that the State is responsible for environmental protection, reproduction and wise use of natural resources. Since 1991 more than 25 codes and laws as well as numerous by-laws and regulations have been adopted to protect the environment. The list of key environmental laws regulating the field of nature protection of the RA is presented below:

- Law on Ensuring Sanitary-epidemiological Security of the RA Population (1992);
- Law on Atmospheric Air Protection (1994);
- Law on Environmental Impact Assessment (1995);
- Law on the Protection and Use of Fixed Cultural and Historic Monuments and Historic Environment (1998);
- Law on Environmental and Nature Use Charges (1998);
- Land Code (2001);
- Water Code (2002);
- Law on Wastes (2004);
- Law on Environmental Monitoring (2005);
- Law on Environmental Oversight (2005);
- Law on Rates of Environmental Charges (2006);
- Law on Inspection of Use and Protection of Land (2008);
- Code on Underground (2011);
- Order N2-III-11.3 on establishing sanitary norms for “Noise in workplaces, residential and public buildings, and residential development areas” in force 13.04.2002.

Summaries of several laws from the list, which are most relevant to the AEIP are presented below:

Law on Environmental Impact Assessment (1995)

The Law on Environmental Impact Assessment (EIA), adopted in 1995, provides legal basis for implementation and introduction of state expertise of planned activities and concept frameworks as well as presents the standard steps of the EIA process for various projects and activities in Armenia. It establishes in Articles 2-5, the general legal, economic, and organizational principles for conducting mandatory state EIA of various types of projects and “concepts” of sectoral development (e.g., energy, mining, chemical industry, municipal construction, metallurgy, pulp and paper, agriculture, food and fishery, water, electronics, infrastructure, services, tourism and recreation, etc.). The Law also stipulates provisions directly related to municipal construction sector, particularly in the Article 4 “Intended Activities Subject to Expertise” the Law enumerates the types of planned activities subject to environmental impact assessment, which includes buildings, facilities, complexes and other intended infrastructure. In fact, only activities exceeding the respective thresholds are subject of environmental impact assessment (“thresholds” were set by the Governmental Decree N193 issued on March 30, 1999). The Law forbids any economic unit to operate or any concept, program and plan to be implemented without a positive conclusion of an EIA (if deemed necessary by provisions of this law). In addition, an EIA may be also initiated for projects that do not meet the “threshold” requirements. According to the Article 4, the right to request conducting of EIA was given to local authorities, ministries, local communities and

NGOs. Other national legislation that determines the “special status” of a particular territory may also trigger a review of environmental impact. The Ministry of Nature Protection can initiate a review of environmental impact when it deems it to be necessary. The EIA Law specifies notification, documentation, public consultations, and appeal procedures and requirements. The Law on EIA law also provides for public involvement and participation. The Law demands that for the operation of any economic unit, or implementation of a plan or programs, a positive conclusion on an environmental impact assessment must be obtained from the State Environmental Expertise State Non Commercial Organization (SNCO) of the RA Ministry of Nature Protection.

The Law on EIA is generally consistent with the EIA approaches followed by international conventions and development assistance agencies (e.g., WB, USAID, EU, and MCC). The law is applicable for the following activities: construction, replacement, expansion, technical re-equipment and closure. In such cases, for implementation of a plan or programs, a positive conclusion of an environmental impact assessment must be obtained from the State Environmental Expertise SNCO of the Ministry of Nature Protection. The Law on EIA law also provides for public involvement and participation at all stages of the EIA.

According to the Law on Environmental Impact Assessment, activities to be financed from the AEIP are not subject to Environmental Impact Assessment, since the project only covers renovation works (new construction, reconstruction, expansion, technical re-equipment and liquidation activities are not planned to be implemented as a part of AEIP). However, in case the designs include construction of new heating units (the whole structure, not only boiler equipment), the EIA may be required depending on heating unit parameters (this should be clarified during design stage based on specific design solutions).

Law on the Protection and Use of Fixed Cultural and Historic Monuments and Historic Environment (1998)

The Law provides the legal and policy basis for the protection and use of such monuments in Armenia and regulates the relations among protection and use activities. Article 15 of the Law describes procedures for - amongst other things - the discovery and state registration of monuments, the assessment of protection zones around them and the creation of historic-cultural reserves. Article 22 requires the approval of the authorized body (Department of Historic and Cultural Monuments Preservation) before land can be allocated for construction, agricultural and other types of activities in areas containing monuments.

According to the Law on Protection and Use of Fixed Cultural and Historic Monuments and Historic Environment, if a school building selected for rehabilitation under the Project is on the formal list of Fixed Cultural and Historic Monuments approved by the Ministry of Culture, special permit should be obtained from Ministry of Culture in case the works will be implemented in the building exterior (external walls); in case the works are implemented inside the school and will not impact columns and other elements considered to be cultural and historical value – no permit is required to carry out renovation activities.

Law on Atmospheric Air Protection (1994 and last amended in 2007)

This Law regulates the emission licenses and provides maximum allowed loads/concentrations for atmospheric air pollution, etc.

With respect to the renovation activities envisaged under AEIP, operation of heating unit / boiler should be carried out in compliance with requirements of the Law on Atmospheric Air Protection.

Land Code (2001)

The Land Code defines the main directives for management use of the state lands, included those allocated for various purposes, such as agriculture, urban construction, industry and mining, energy production, transmission and communication lines, transport and other purposes. The Code defines the lands under the specially protected areas as well as forested, watered and reserved lands. It also establishes the measures aimed to the lands protection, as well as the rights of state bodies, local authorities and citizens towards the land.

Land code envisages that agricultural lands should be used only for agricultural purposes, and since some of the project schools can be located in rural communities that do not possess dump sites, attention should be paid to avoid allocation of agricultural lands for waste disposal purposes.

Code on Underground Resources (2002)

This Code contains the main directives for use and protection of mineral resources and underground water, including the sanitary protection zones for the underground water resources.

According to the Code on Underground Resources, natural construction materials required for the rehabilitation of schools must be purchased from licensed vendors, or works providers contracted under the project must hold or obtain relevant licenses for the extraction of construction materials if they choose to obtain materials on their own.

Water Code (2002)

The main purpose of the Water Code is to provide the legal basis for the protection of the country's water resources, the satisfaction of water needs of citizens and economic sectors through effective management of water resources and safeguarding the protection of water resources for future generations.

According to the Water Code and related legislation, the schools have to possess contracts with water supply and wastewater specialized company (AWS CJSC or other company operating in specific location) to arrange for water supply and wastewater discharge services.

Law on Wastes (2004)

The law regulates legal and economic relations connected to the collection, transfer, maintenance, development, reduction of volumes, prevention of negative impact on human health and environment. The law defines objects of waste usage, the main principles and directions of state policy, the principles of state standardization, inventory, and introduction of statistical data, the implementation of their requirements and mechanisms, the principles of wastes processing, the requirements for presenting wastes for the state monitoring, activities to decrease the amount of the wastes, including nature utilization payments, as well as the compensation for the damages caused to the human health and environment by the legal entities and individuals, using the wastes, as well as requirements for state monitoring and legal violations. The law defines the rights and obligations of the state governmental and local governmental bodies, as legal entities and individuals.

Legislation on waste pertains to management and disposal of construction waste to be generated during renovation activities. Such waste should be collected and transported to the approved waste disposal sites in accordance with agreement / contract with local regional authorities or organizations specialized in waste transportation and disposal.

Law on Environmental Oversight (2005)

The Law regulates the issues of organization and enforcement of oversight over the implementation of environmental legislation of the Republic of Armenia, and defines the legal and economic bases underlying the specifics of oversight, the relevant procedures, conditions and relations, as well as environmental oversight in the Republic of Armenia.

Law on Environmental Oversight specifies the roles of the state entities involved in monitoring of environmental state during implementation of construction activities, such as renovation activities envisaged as a part of AEIP.

3.2. Regulatory Framework

This section briefly presents the roles of entities that may have involvement in the AEIP, primarily but not exclusively from an environment perspective.

Ministry of Nature Protection

The Ministry of Nature Protection (MNP) is responsible for the protection, sustainable use, and regeneration of natural resources as well as the improvement of the environment in the Republic of Armenia. In those areas, the MNP authority includes overseeing national policy development, developing environmental standards and guidelines, and enforcement. The MNP implements those functions through the following structural departments:

- Department on monitoring of environmental strategic program;
- Foreign Relations Department;
- Biodiversity Policy Division;
- Water Resources Policy Division;
- Atmospheric Air Policy Division;
- Hazardous Substances and Waste Policy Division;
- Department of underground resources and land protection policy.

The MNP also undertakes several functions through the following bodies:

- *Water Resources Management Agency* with its five Basin Management Organizations is the key institution responsible for the water resources management including, but not limited to, the development and implementation of the National Water Policy, National Water Program and basin Management Plans; regulation of water use by issuance of permits for use of surface and ground water resources; assessment and classification of water resources by their use; participation in development of water standards and control of application, etc.;
- *State Environmental Expertise SNCO* conducts environmental assessments of designs for construction, reconstruction, rehabilitation and maintenance of water infrastructures according to the requirements of the Armenian legislation and ratified International Agreements and issues experts' conclusions;
- *State Environmental Inspectorate* with its 11 regional offices oversees the implementation of legislative and regulatory standards in natural resources protection, use and renewal;
- *Environmental Impact Monitoring Centre* monitors water and air quality of Armenia through its network of observation points;
- *Bio-resources Management Agency* participates in the environmental impact assessment of designs for construction, reconstruction, rehabilitation and maintenance of infrastructure;
- *Information Analytical Center*;
- *Center for Waste Investigation SNCO*; and

- *Center for Hydro-geological Monitoring SNCO, etc.*

Ministry of Energy and Natural Resources

The Ministry of Energy and Natural Resources is a republican body of executive authority, which elaborates and implements the policies of the Republic of Armenia Government in the energy sector. The ministry is also responsible for the protection, sustainable use, and regeneration of natural resources, and implements its functions through the following bodies:

- Agency of Mineral Resources;
- Subsoil Concession Agency.

Ministry of Emergency Situations

The Ministry of Emergency Situations elaborates and implements the policies of the Republic of Armenia Government in the area of civil defense and protection of population in emergency situations. *Armenian State Hydro-meteorological and Monitoring Service SNCO* is among the structural entities acting within the Ministry of Emergency Situations and conducts regular monitoring of meteorological and hydrological conditions of Armenia through its network of meteorological and hydrological stations and posts.

Ministry of Territorial Administration

Marzpetarans (regional administration bodies) are responsible for administration of public infrastructure falling under the regional jurisdiction. Bodies of local self-government (communities) are responsible for administration of public infrastructure of local significance registered as ownership of communities.

Ministry of Health. Within the structure of the Ministry of Health the *State Hygienic and Anti-epidemiological Survey* is responsible for coordination of all issues related to health (including those on noise and vibration) and for supervision over implementation of sanitary norms, hygienic and anti-epidemiological measures implementation by organizations and citizens.

The Ministry of Labor and Social Affairs among other things is responsible for development and implementation of the state policy, legislation and programs in the following areas: social security, labor and employment, social assistance, social assistance to disabled and aged people, social protection of families, women and children, etc.

The Ministry of Culture is a republican body of executive authority, which elaborates and implements the policies of the Republic of Armenia Government in the culture sector. It comprises two agencies:

- *Agency for Protection of Cultural Heritage* provides services in the field of protection of cultural property - illegally exported cultural property, illegal imports and illegal transfer of ownership of cultural property, prevention and prevention and promote the development of international cultural cooperation and exchange;
- *Historical and Cultural Heritage Protection Agency* provides services in the field of historical and cultural monuments preservation, use of historical and cultural monuments and specially protected areas, state registration, examination, preservation, repair, restoration, use, etc.

4. TECHNICAL AND ENVIRONMENTAL STANDARDS AND REGULATIONS

4.1. World Bank Safeguard Policies

WB OP 4.01 Environmental Assessment is considered to be the umbrella policy for the Bank's environmental safeguard policies. These policies are critical for ensuring that potentially adverse environmental and social consequences are identified, minimized, and properly mitigated. These policies receive particular attention during the project preparation and approval process. The World Bank carries out screening of each proposed project to determine the appropriate extent and type of EA to be undertaken and whether or not the project may trigger other safeguard policies. The Borrower is responsible for any assessment required by the Safeguard Policies, with general advice provided by the World Bank staff. The safeguard policies and triggers for each policy are presented in the table below:

Operational Policy	Triggers
Environmental Assessment (OP 4.01)	If a project is likely to have potential (adverse) environmental risks and impacts in its area of influence.
Forests (OP 4.36)	Forest sector activities and other Bank sponsored interventions which have potential to impact significantly upon forested areas.
Involuntary Resettlement (OP 4.12)	Physical relocation and land loss resulting in: (i) relocation or loss of shelter; (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected people must move to another location.
Indigenous Peoples (OP 4.10)	If there are indigenous peoples in the project area, and potential adverse impacts on indigenous peoples are anticipated, and indigenous peoples are among the intended beneficiaries.
Safety of Dams (OP 4.37)	If a project involves construction of a large dam (15 m or higher) or a high hazard dam; If a project is dependent upon an existing dam, or dam under construction.
Pest Management (OP 4.09)	If procurement of pesticides is envisaged; If the project may affect pest management in the way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk, (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and/or pose significant health or environmental risks.
Physical Cultural Resources (OP 4.11)	The policy is triggered by projects, which, prima facie, entail the risk of damaging cultural property (e.g. any project that includes large scale excavations, movement of earth, surface environmental changes or demolition).
Natural Habitats (OP 4.04)	The policy is triggered by any project with the potential to cause significant conversion (loss) or degradation of natural habitats whether directly (through construction) or indirectly (through human activities induced by the project).
Projects in Disputed Areas (OP 7.60)	The policy is triggered if the proposed project will be in a "disputed area".
Projects on International Waterways (OP 7.50)	If the project is on international waterway such as: any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states (or any tributary or other body of surface water that is a component of this waterway); any bay, gulf, strait, or channel bounded by two or more states or, if within one state, re-cognized as a necessary channel of communication between the open sea and other states-and any river flowing into such waters.

The requirements of RA environmental legislation, as it pertains to the procedures required for the AEIP implementation, are in general comparable to WB policy approaches. However,

there are also several differences between local legislation and WB policy requirements, most tangibles of which are summarized below. Armenian EIA terminology considers “environmental assessment” as the review process carried out by the Environmental Expertise of the Ministry of Nature Protection performed on the application of a project proponent for obtaining of the expert conclusion clearing the proposed activities, while the WB OP/BP 4.01 uses this term to describe the environmental impact study carried out by the project proponent. Armenian EIA legislation does not require classification of activities into environmental categories A, B, and C as it is established in OP/BP 4.01, though it distinguishes between activities that require an EIA and those that do not. The national legislation does not provide definition of the EMP and envisage its development, but it does require that the EIA document carries a list of environmental mitigation measures and describes procedures of their implementation. The national legislation is mostly similar to WB requirements with respect to public disclosure of the EIA documents, however does not include the requirement of at least 2 public consultations for Category A projects, which is the case with WB OP. Nonetheless, RA is a party to Aarhus convention, thus the public consultation process in carried out in line with the guiding principles of the Aarhus convention. In the meantime, is should be emphasized that the activities to be implemented with the framework of AEIP are not subject to EIA, thus the abovementioned differences will not impact the Project implementation.

AEIP also triggers World Bank safeguard policy OP/BP 4.11 Physical Cultural Resources. According to the guiding principles of the OP/BP 4.01, the Project is classified as environmental Category B. Civil works to be undertaken under the project will require (i) environmental screening to ensure that each individual investment also falls under category B, and (ii) site-specific environmental management planning for the provision of mitigation measures against potential negative impacts and for the establishment of mechanism for monitoring application of these measures.¹ Also, the school buildings selected for rehabilitation under the Education Improvement Project shall be checked for possible belonging to the formal list of Armenia’s cultural heritage, so that in case any of them carries special historic value the rehabilitation works are designed and conducted in the way respective of a building’s conservation needs as required by OP/BP 4.11.

4.2. Permitting

Various permits necessary for accomplishing the works envisaged by the AEIP, including data on issuing authorities and tentative timing of obtaining the permit, are summarized in the below table:

Name of permit	Issuing authority	Permit obtaining stage
Technical Expertise	State Expertise	After design stage, prior to bidding
Environmental Expertise	Ministry of Nature Protection	After design stage, prior to bidding
Construction license	Ministry of Urban Development	After design stage, prior to bidding <i>(to be possessed by construction contractors submitting their bids)</i>
Construction permit	Head of the appropriate community	Prior to construction
Lease agreement or	Property owner	Before establishment of the

¹ The project can’t finance any rehabilitation/construction that would trigger Category A.

Name of permit	Issuing authority	Permit obtaining stage
ownership documents for construction site		construction site
Mining license *	Ministry of Economy	During construction stage
Purchase documents for purchased crushed stone	Authorized seller	During construction stage - purchase of the materials
Maximum permissible discharge permit	Ministry of Nature Protection	During construction stage
Agreement for disposal of construction waste	Head of the appropriate community	Before disposal of the waste off-site, at least 3 months prior to issuance of the final certificate

** If construction materials are purchased, owner of the quarry must have a valid permit from the MNP*

All of the above permits are relevant for the AEIP implementation; however some of them might not be necessary depending on the nature of works and their organization (e.g. contractor is not requested to have a mining license in case the crushed stone is purchased, however the company producing the crashed stone should possess a valid mining license).

5. ENVIRONMENTAL SCREENING

The main purpose of environmental screening is to ensure that all environmental issues are properly assessed and adequate solutions to those issues have been provided. Part of the works envisaged by the proposed Project is of construction nature, while the other part of proposed improvements is of rehabilitation nature and will be implemented on existing infrastructure.

The AEIP will finance rehabilitation works on the school facilities and will have certain social and environmental impacts. The project, therefore, triggers World Bank OP/BP 4.01 Environmental Assessment. Based on review of available project documents and discussions with CEP, works associated with rehabilitation of school buildings are not expected to have significant and irreversible negative impact on the environment. Rehabilitation works are expected to have minor environmental and social impacts, thus development of site-specific EMPs should be sufficient (no need for the full scale EIA and permitting).

Overall, the long term social and environmental impacts of the AEIP are expected to be positive, while negative impacts will be limited to the construction phase, and be of the limited scope. Based on the nature and scope of the proposed activities, the Project is classified through environmental screening as environmental Category B. All of the possible negative impacts may be effectively mitigated through application of standard good environmental practices. Site-specific EMPs will be prepared for all school rehabilitation activities included in the Project. EMPs will specify environmental risks associated with construction and rehabilitation works to be carried out at the respective project sites, recommend respective mitigation measures, and provide monitoring schemes for tracking adherence to the mitigation plans. Adherence to the EMPs in the course of civil works will be sufficient for keeping environmental impacts of the project at the acceptable minimum level.

WB OP/BP 4.11 Physical Culture Resources is triggered, since some of the facilities proposed for improvement within the AEIP framework can be considered as cultural heritage. While there is no need of developing a specific report addressing this issue, appropriate provision will be embedded in EMPs to ensure that the potential risks are identified and specific mitigation measures are suggested. EMP will also include details on all permits required with respect to implementing works in the buildings considered as cultural heritage.

6. SENSITIVE RECEPTORS AND POTENTIAL IMPACTS

AEIP activities will be carried out on the existing infrastructure countywide.

Rehabilitation and improvement of school buildings will bring positive changes to delivery of education services. In addition, there will be significant cost savings from reduction of operation and maintenance expenses. The expected overall positive environmental and social impacts from the AEIP will be long-term and cumulative in nature, ultimately contributing to the increased social and economic benefits of the communities affected.

The potential adverse environmental and social impacts are described below for the construction and operation phases of AEIP. In general, the potential adverse environmental impacts associated with rehabilitation works carried out on school buildings and associated infrastructure are expected to be construction-associated, short-term and localized. The vast majority of the potential adverse impacts will be observed during the construction / rehabilitation period only and will mainly occur within the site of works implementation.

Construction phase impacts

Degradation of landscapes and soil erosion. Some of the areas are sensitive to soil erosion; therefore, when undertaking earth works and leveling the area anti-erosive measures will be implemented during the re-cultivation period.

Pollution by construction run-offs. As a result of oil leakage from machinery and stock piled construction materials, oil products and chemicals can penetrate to the ground water or run off to water recipients.

Impacts on biodiversity. No impacts on biodiversity are expected due to school buildings' rehabilitation, because these are the existing buildings situated within settlements where the ecosystems are significantly transformed and already carry significant anthropogenic footprint. The only possible impact on biodiversity may come from mining for aggregates required as a construction material.

Noise, vibration, and emissions. Noise, vibration, and emissions will be generated in the course of the transportation of construction materials and truck traffic. Emission of inorganic dust from digging-loading works and emission of harmful substances and dust from combustion of diesel used by transportation means and machinery occur during the construction works. Welding works cause welding aerosol and manganese monoxide emissions. Concrete mixers work result in concrete dust emissions.

Dust arising from construction works will have negative impact on the ambient air quality, and it is necessary to take effective protective measures to minimize the negative impact, especially in settlements and protected areas. The Law on Atmospheric Air pollution (adopted 1994 and revised 08.05.2001, 01.01.2006 and 05.05 2007) and RA Government Resolution No 192 concerning emission licenses, norms of maximum permitted hazardous atmospheric air pollution emissions from 30.03.1999 deal with these issues.

Generation of excavated materials and construction waste. Demolition debris will be generated during rehabilitation works, including the possibility of asbestos containing roofing material heavily used in construction till recent time. These effects will be localized, and will be minimized by means of appropriate removal and disposal procedures, which may include but not be limited to careful selection of waste temporary accumulation sites, clear delineation of these sites to exclude their expansion, prevention of washout of such sites, obtaining written agreement on permanent disposal site with local authorities and timely transportation of waste to the designated dump site.

Safety hazards from construction activities. Safety hazards can occur due to violation of proper health and safety practices and may lead to injuries and accidents. Additional hazards can occur if school renovation works are implemented during teaching process or at a time when schoolchildren can access the school building and premises.

Impacts on historic-cultural and archaeological monuments. Some damage can be caused due to improper implementation of renovation activities if a school building selected for rehabilitation is listed as a cultural and/or historic monument.

Operation phase impacts

Safety hazards from operation activities. No major hazards are expected during operation of rehabilitated schools as long as proper operation practices and safety procedures are applied. During the operation period proper operation and maintenance activities have to be ensured.

Impacts on population. Impacts on population and occupation are expected to be generally positive. Rehabilitation of schools will have certain impacts on demographic structure of labor force in the areas affected by the proposed project improvements. The project will create temporary and some permanent job opportunities for the local population (both men and women), as they could be employed during rehabilitation and maintenance. The project would be able to monitor these impacts by applying gender-disaggregated indicators. Availability of modern school in the community will allow more people (especially those having school age children) to stay in the village.

Impact on provision of educational services. Rehabilitation of the school infrastructure will result in significant improvement of conditions of the building where the schoolchildren are studying; overall improvement will also be supported by capacity and curricula building related activities. Rehabilitation of schools will allow to provide educational services without interruptions possible due to the dilapidated state of the existing structures (e.g. during malfunction of heating system, etc.).

Generation of household waste and wastewater. Operation of the school will result in generation of waste and wastewater. Improper and non-timely collection, removal and disposal of waste can lead of odor and aesthetics impacts in the school building and nearby area. Other adverse consequences may constitute worsening of sanitary-hygienic conditions in school area due to accumulation of waste and clogging of sewerage system.

Operation of heating systems. Malfunction of heating system can result on interruption of provision of teaching services during the cold season of the year. Improper operation of heating systems may impact the air quality and lead to pollution of atmospheric air.

7. IMPACT MITIGATION

Mitigation measures that could be used where appropriate (depending on type of infrastructure, volume and type of works, surrounding area, etc.) are separately defined for the design, construction and operation phases. Appropriate measures will be included in the EMPs.

Design phase

Environmental and social mitigation requirements will be incorporated in the final designs, technical specifications, and bidding documents to be implemented by the construction contractor(s) and the maintaining entity to avoid, prevent, minimize the potential impacts. The final design documents package will include a list suggesting approved borrow pits and agreed spoil disposal sites; permits and agreements to be obtained from the relevant state and local authorities for use of water resources, borrow pits, and sites for disposal of excavated spoils as appropriate; suggested list of construction preparation temporary sites such as access roads, construction camps, transport and machinery sites, storage facilities, etc. The final design documents will provide such technical solutions that will have minimum impact on the natural resources. It will be ensured that the temporary impacts from noise of operating machinery and civil works do not cause direct adverse impacts on nearby residents. Attention will be paid to buildings with structural damages and/or seismic instability and specific measures to strengthen such building will be envisaged by the proposed design solutions. Special attention will be paid to the buildings that represent cultural heritage and the final designs will include all relevant agreements and permits (relevant permits are discussed and presented in section 4.3 of this document).

Construction phase

Preserving landscapes and minimizing soil erosion. To minimize degradation of landscapes and soil erosion the Contractor(s) will use, where possible, existing quarries for required additional materials. Suitable excavated and dredged soils will be preferably used, thus limiting the need for old and new quarries. The permits from the Ministry of Energy and Natural Resources and, as needed, from the local regional authorities will be obtained if the opening and/or use of quarries are required. Access roads will be carefully chosen to minimize impacts on landscape and soil erosion, and will be closely monitored to eliminate their unduly expansion during renovation works.

Managing construction run-offs. Existing access roads will be used where possible, thus minimizing the need for establishing the new ones. The top surface of access roads and work areas will be compacted to facilitate water runoff and avoid flooding the area. This may require digging drainage ditches and connecting them to natural drainage axes / rainwater discharge system (e.g. if available along the nearby road). Sites for storage of oil and lubricants will be properly equipped to minimize the risks of polluting soil and water. The septic tanks to be placed in the construction camp(s) must be made of impermeable material and will be emptied in accordance with applicable rules. The wastewater will be transported by a special truck to a centralized wastewater collector, based on the agreement obtained from the local authorities during the design phase.

Preserving biodiversity. The impact on biodiversity will be minimal, as the works cover renovation of existing facilities. As mentioned above, sourcing construction materials from already operated quarries will be encouraged to minimize negative impacts of new quarries on the landscapes and biodiversity.

Managing noise, vibration, and emissions. Dust-depressing measures aimed at prevention of air pollution through watering of access roads and construction sites will be implemented. During construction, air pollution levels will be increased and the main pollutants caused by these operations will include exhaust gases emitted by machines and dust caused by the earthwork and stonework. Water sprinkling during construction will alleviate dust impacts. Dust and noise from the construction site will be minimized by using closed/covered trucks for transportation of construction materials and debris. To minimize impacts on nearby residents the vehicles will be equipped with exhaust mufflers and regularly inspected to ensure their proper technical condition. In addition, implementation of renovation works will be carried out only during daytime hours.

Waste management. If the vegetated area is used for establishment of construction site, the topsoil will be scraped and stored in piles not exceeding one meter and will be used afterwards for site restoration. Construction concrete rubbles, debris and spoils will be transported and disposed in approved disposal sites. Permits from the local regional authorities or contracts with specialized entities will be signed to carry out transportation and disposal of excavated materials and construction waste. Restoration to quasi-original conditions of landscape will be carried out after completion of renovation works and after use of quarries.

Managing safety hazards. No major hazards are expected during the renovation works, as long as proper construction practices and safety procedures are applied. School rehabilitation activities will be undertaken preferably during summer months (non-operation period for school) to minimize hindering the teaching process and to eliminate the risk of accidents involving children. In case renovation activities have to be undertaken in parallel with teaching process, an option of temporary moving the teaching process to a nearby school will be considered. If the latter is impossible, the renovation activities will be limited to a part of the school building that is made inaccessible to schoolchildren (e.g. renovation in carried out on one floor of the building while teaching is carried out on another only). Personal protective equipment will be applied during implementation of works. In case the works include removal of roof tiles made of asbestos-containing material, the works will be implemented by trained personal using specialized personal protective equipment.

Preserving historic and/or cultural monuments. If a school building selected for rehabilitation under the project is on the formal list of Fixed Cultural and Historic Monuments approved by the Ministry of Culture, special permit should be obtained from Ministry of Culture in case the works will be implemented in the building exterior (external walls); in case the works are implemented inside the school and will not impact columns and other elements considered to be cultural and historical value – no permit is required to carry out renovation activities.

Managing household waste and wastewater. Waste container will be placed near the school area to collect the household waste generated during school renovation. Agreement / contract will be signed with appropriate authority / entity to ensure timely transportation and disposal of waste. Wastewater will be discharged into the centralized sewerage system. If centralized sewerage system is not available in the community, wastewater will be collected in a tank and then periodically removed, transported by specialized organization to a nearby area with centralized sewerage system and discharged into that system.

Rehabilitation works will be carried out in consultation with school administration and representatives of relevant authorities to minimize the adverse impacts.

Operation phase

During operation it is essential that the school structures and associated facilities will be regularly inspected by the Ministry of Education and Science / local regional authorities and be periodically maintained to ensure proper technical state and prevent damages. Periodical maintenance of school structures and associated infrastructure will be cared timely and in due manner. Proper operation of utilities will be carried out to ensure availability of appropriate conditions for schoolchildren.

Household waste management. Waste container will be placed near each school area to collect the waste generated during school operation. Agreement / contract will be signed with appropriate authority / entity to ensure timely transportation and disposal of waste at approved disposal site.

Waste water management. Some school buildings are already connected to the municipal sewage systems. If a building is not connected, but a municipal collection system exists, the project will explore possibility of connecting a school building as part of its renovation activities. Towards this end, the project will facilitate contracting Armenia Water and Sewerage CJSC, or another organization operating sewage collection system in a community. If centralized sewerage system is not available in a settlement where the school is located, wastewater will be collected in a septic tank and then periodically removed, transported by specialized organization to a nearby area with centralized sewerage collection and discharged into the system.

Operation of heating systems. Proper operation and maintenance of heating systems, including regular inspection and service of the systems, will be carried out to ensure uninterrupted operation during heating season, proper implementation of teaching process, as well as for minimizing air pollution.

Maintenance of roofs and utilities. Proper maintenance of roofs and other utilities will be carried out during operation of the renovated school buildings, including regular inspections and repairs as needed. Roofs will be cleaned during winter season after the snowfall to eliminate safety hazard for passing by schoolchildren, parents and school staff.

Maintenance of school yard and access areas. Regular maintenance of school yard and premises will be ensured by school administrations, so that good sanitary conditions and pleasant environment are maintained. Access areas will be kept free of elements hindering the access to the school building.

8. STAKEHOLDER CONSULTATION

The RA environmental legislation and international agreements regulating public consultation and coordination, as well as information availability to public are listed below:

- The Law on the Environmental Impact Assessment (1995) ensures citizen's right to obtain information concerning the activities that may cause environmental impacts;
- UN/ECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus, 1998; the Republic of Armenia has joined to the Convention on the 14-th of May, 2001).

The present draft ESMF was publicly disclosed and the consultation meeting with stakeholders was carried out on December 10, 2013. Participants from the beneficiary state agencies, local authorities, organizations involved in environmental sector and other stakeholders were invited to attend the public consultation meeting. The comments and suggestions made during the consultation meeting were taken into account in the final version of the ESMF. Minutes of stakeholder consultation meeting were developed (including questions raised and responses provided) and included in the final version of ESMF as an Attachment III. In further stages of AEIP implementation, the site-specific EMPs will be publicly disclosed, and beneficiary schools / communities will be consulted on the environmental and social implications of the individual project activities prior to tendering of works.

9. SITE-SPECIFIC ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT PLANNING

For construction and rehabilitation activities associated with risks not triggering detailed environmental analysis in accordance with the local legislation and WB policies (e.g. rehabilitation of school structures, etc.), the site-specific EMPs will be developed using the checklist format provided in the below Attachment I of the present ESMF. The final EMPs will be included in the tender documents and will later be made part of works contracts.

Responsibilities of various organizations with respect to EMP implementation and monitoring are briefly summarized below:

Design Consultants will be responsible for taking into account environmental and social aspects in the process of their work and strive for minimizing negative impacts through the design solutions. If development of EMPs is made part of the design consultant tasks, the consultant will also be responsible for conducting this part of work in a participatory manner in consultation with local stakeholders, and for incorporation of stakeholder comments as well as the feedback from the client (CEP) and the World Bank into the final versions of EMPs.

Environmental Consultants may be hired by CEP for developing EMPs, if these functions are not integrated into the terms of reference of design consultants.

Works Contractor(s) will be responsible for due incorporation of works and related costs of EMPs implementation into their bids and adherence to all requirements of EMPs throughout the contract term. Contractors shall possess all relevant licenses and permits.

Technical Supervisor(s) will be responsible for oversight over the proper implementation of civil works, including adherence to the measures provided in the EMPs. Technical supervisor will be responsible for identifying any issues, which may arise from inadequate application of mitigation measures provided in EMPs, and recommending corrective actions. Technical Supervisors shall verify that the Contractors possess all relevant licenses and permits. To adequately perform these duties Technical Supervisors must include relevant expertise and skill mix in their team.

CEP will organize development of EMPs and to ensure their compliance with the requirements of local legislation and relevant WB OPs, share draft EMPs with the WB, and conduct public consultation meetings. EMPs will be developed and disclosed in the Armenian and English languages, disclosed in sub-project area, and made available for local stakeholders in a convenient format. CEP will also ensure that EMPs are included into the tender documents for civil works, so that potential bidder are able to incorporate costs related to EMP implementation into their bids. EMPs will be integrated into the works contracts and be mandatory for implementation like any other clause of works contracts. CEP also be responsible for monitoring EMP implementation. Monthly field monitoring checklists will be used for regular environmental supervision of works. Progress reports on the outcomes of environmental supervision will be developed by CEP and submitted to the WB as part of the regular project progress reporting.

Ministry of Nature Protection is responsible for the protection, sustainable use, and regeneration of natural resources in the RA. MNP's authority includes participation in the national policy making in the respective field, development of environmental standards and guidelines, and enforcement. MNP, through the State Environmental Inspectorate (which includes Regional Environmental Inspectorates) will exercise the authority of conducting

environmental inspections at worksites to oversee compliance with the terms of environmental permits as well as other formal permissions and licenses.

Regional and local authorities approve the technical proposal for construction and issue construction permits. They also regulate transportation, disposal, or recycling of construction waste.

ATTACHMENTS

Attachment I: Environmental Management Checklist for Small Construction and Rehabilitation Activities

General Guidelines for use of EMP checklist:

For low-risk topologies, such as school and hospital rehabilitation activities, the ECA safeguards team developed an alternative to the current EMP format to provide an opportunity for a more streamlined approach to preparing EMPs for minor rehabilitation or small-scale works in building construction, in the health, education and public services sectors. The checklist-type format has been developed to provide “example good practices” and designed to be user friendly and compatible with safeguard requirements.

The EMP checklist-type format attempts to cover typical core mitigation approaches to civil works contracts with small, localized impacts. It is accepted that this format provides the key elements of an Environmental Management Plan (EMP) or Environmental Management Framework (EMF) to meet World Bank Environmental Assessment requirements under OP 4.01. The intention of this checklist is that it would be applicable as guidelines for the small works contractors and constitute an integral part of bidding documents for contractors carrying out small civil works under Bank-financed projects.

The checklist has three sections:

Part 1 includes a descriptive part that characterizes the project and specifies in terms the institutional and legislative aspects, the technical project content, the potential need for capacity building program and description of the public consultation process. This section could be up to two pages long. Attachments for additional information can be supplemented when needed.

Part 2 includes an environmental and social screening checklist, where activities and potential environmental issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking “yes”, a reference is made to the appropriate section in the following table, which contains clearly formulated management and mitigation measures.

Part 3 represents the monitoring plan for activities during project construction and implementation. It retains the same format required for EMPs proposed under normal Bank requirements for Category B projects. It is the intent of this checklist that Part 2 and Part 3 be included into the bidding documents for contractors, priced during the bidding process and diligent implementation supervised during works execution.

Contents:

- General Project and Site Information
- Safeguards Information
- Mitigation Measures
- Monitoring Plan

PART A: General Project and Site Information

INSTITUTIONAL & ADMINISTRATIVE			
Country			
Project title			
Scope of site-specific activity			
Institutional arrangements (WB)	Task Team Leader Cristian Aedo	Safeguards Specialist Darejan Kapanadze	
Implementation arrangements (RoA)	Implementing entity CEP	Works supervisor (tbd)	Works contractor (tbd)
SITE DESCRIPTION			
Name of School			
Address and site location of a school			
Who owns the land? Who uses the land (formal/informal)?			
Description of physical and natural environment around the site; Social and demographic context (enrollment, attendance, occupancy, etc. of school)			
Locations and distance for material sourcing, especially aggregates, water, stones?			
LEGISLATION			
National & local legislation & permits that apply to project activity			
PUBLIC CONSULTATION			
When / where the public consultation process will take /took place			
ATTACHEMENTS			
	Site map/photo Construction permit (as required) Environmental permit (as required) Waste disposal agreement Other (as required)		

PART B: safeguards information

ENVIRONMENTAL /SOCIAL SCREENING			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following?	A. Building rehabilitation	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section A below
	B. New construction	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section A below
	C. Individual wastewater treatment system	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section B below
	D. Historic building(s) and districts	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section C below
	E. Acquisition of land ²	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section D below
	F. Hazardous or toxic materials ³	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section E below
	G. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section F below
	H. Handling / management of medical waste	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section G below
	I. Traffic and Pedestrian Safety	<input type="checkbox"/> Yes <input type="checkbox"/> No	See Section H below

² Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

³ Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

PART C: Mitigation measures

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> (a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits have been acquired for construction and/or rehabilitation (d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (a) During interior demolition debris-chutes shall be used above the first floor (b) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust (c) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site (d) The surrounding environment (sidewalks, roads) shall be kept free of debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) There will be no excessive idling of construction vehicles at sites
	Noise	<ul style="list-style-type: none"> (a) Construction noise will be limited to restricted times agreed to in the permit (b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible
	Water Quality	<ul style="list-style-type: none"> (a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.
	Waste management	<ul style="list-style-type: none"> (a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. (b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Construction waste will be collected and disposed properly by licensed collectors (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
B. Individual wastewater treatment system	Water Quality	<ul style="list-style-type: none"> (a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities (b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Monitoring of new wastewater systems (before/after) will be carried out (d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.
C. Historic building(s)	Cultural Heritage	<ul style="list-style-type: none"> (a) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notification shall be made and approvals/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national legislation. (b) It shall be ensured that provisions are put in place so that artifacts or other possible “chance finds” encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified to account for such finds.
D. Acquisition of land	Land Acquisition Plan/Framework	<ul style="list-style-type: none"> (a) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank’s Task Team Leader shall be immediately consulted. (b) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented
E. Toxic Materials	Asbestos management	<ul style="list-style-type: none"> (a) If asbestos is located on the project site, it shall be marked clearly as hazardous material (b) When possible the asbestos will be appropriately contained and sealed to minimize exposure (c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust (d) Asbestos will be handled and disposed by skilled & experienced professionals (e) If asbestos material is stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately. Security measures will be taken against unauthorized removal from the site. (f) The removed asbestos will not be reused
	Toxic / hazardous waste management	<ul style="list-style-type: none"> (a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information (b) The containers of hazardous substances shall be placed in an leak-proof container to prevent spillage and leaching (c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility. (d) Paints with toxic ingredients or solvents or lead-based paints will not be used

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
F. Affected forests, wetlands and/or protected areas	Protection	<p>(a) All recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.</p> <p>(b) A survey and an inventory shall be made of large trees in the vicinity of the construction activity, large trees shall be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided</p> <p>(c) Adjacent wetlands and streams shall be protected from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences</p> <p>(d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.</p>
G. Disposal of medical waste	Infrastructure for medical waste management	<p>(a) In compliance with national regulations the contractor will insure that newly constructed and/or rehabilitated health care facilities include sufficient infrastructure for medical waste handling and disposal; this includes and not limited to:</p> <ul style="list-style-type: none"> ▪ Special facilities for segregated healthcare waste (including soiled instruments “sharps”, and human tissue or fluids) from other waste disposal; and ▪ Appropriate storage facilities for medical waste are in place; and ▪ If the activity includes facility-based treatment, appropriate disposal options are in place and operational
H Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>(a) In compliance with national regulations the contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to</p> <ul style="list-style-type: none"> ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement ▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. ▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.

PART D: MONITORING PLAN

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
CONSTRUCTION PHASE (use field monitoring checklist attached below to fill out this section)						
1.						
2.						
n.						
OPERATION PHASE						
1.						
2.						
n.						

Attachment II: Monthly Field Environmental Monitoring Checklist

Site location					
Name of contractor					
Name of supervisor					
Date of site visit					
Status of civil works					
Documents and activities to be examined	Status				Comments
	Yes	Partially	No	N/A	
Contractor holds license for extraction of natural resources					
Contractor holds permit for operating concrete/asphalt plant					
Contractor holds agreement for final disposal of waste					
Contractor holds agreement with service provider for removal of household waste from site					
Work site is fenced and warning signs installed					
Works do not impede pedestrian access and motor traffic, or temporary alternative access is provided					
Working hours are observed					
Construction machinery and equipment is in standard technical condition (no excessive exhaust and noise, no leakage of fuels and lubricants)					
Construction materials and waste are transported under the covered hood					
Construction site is watered in case of excessively dusty works					
Contractor's camp or work base is fenced; sites for temporary storage of waste and for vehicle/equipment servicing are designated					

Contractor's camp is supplied with water and sanitation is provided					
Contractor's camp or work base is equipped with first medical aid and fire fighting kits					
Workers wear uniforms and protective gear adequate for technological processes (gloves, helmets, respirators, eye-glasses, etc.)					
Servicing and fuelling of vehicles and machinery is undertaken on an impermeable surface in a confined space which can contain operational and emergency spills					
Vehicles and machinery are washed away from natural water bodies in the way preventing direct discharge of runoff into the water bodies					
No excessive amount of construction waste accumulated on site and temporary storage organized in allocated locations					
Construction waste is being disposed exclusively in the designated locations					
Extraction of natural construction material takes place strictly under conditions specified in the license					
Excess material and topsoil generated from soil excavation are stored separately and used for backfilling / site reinstatement as required					
Works taken on hold if chance find encountered and communication made to the State agencies responsible for cultural heritage preservation					
Upon completion of physical activity on site, the site and contractor's camp/base cleared of any remaining left-over from works and harmonized with surrounding landscape					

Attachment III: Minutes of Public Consultation

Minutes of Public Consultation Meeting

Public Consultation Meeting on Armenia Education Improvement Project Environmental and Social Management Framework

Date: December 10, 2013

Venue: Meeting hall of the Ministry of Education and Science

The meeting was summoned at 15:00.

In total, 15 participants attended the meeting, including representatives of the state agencies, CEP, local authorities, organizations involved in environmental sector, etc. Participants of the public consultation have registered in the List of Participants and provided their contact details (Appendix I). Photographs made during public consultation are presented in the Appendix II.

Mrs. H. Ghazaryan, representative of CEP opened the meeting, presented the purpose of public consultation and briefly provided details on Education Improvement Project (AEIP) preparation and implementation. Mrs. Ghazaryan emphasized the importance of environmental and social analyses conducted during the preparatory phase of the project. She noted that the documents to be discussed were posted at the web-site and can be also requested from CEP in electronic and/or printed copy whenever needed. Mrs. Ghazaryan welcomed participants and briefly presented the key information regarding the AEIP, including works planned under the various components of the proposed project.

Following opening remarks, environmental expert presented the Environmental and Social Management Framework developed for AEIP. Presentation on Environmental and Social Management Framework (ESMF) covered the purpose of ESMF development, its objectives and issues addressed in the document. Information was also provided on World Bank's Safeguard Policies and triggers for each policy, relevant legislation of the Republic of Armenia and institutions that may be involved in the current project. The potential environmental impacts associated with construction and rehabilitation works, as well as major mitigation measures that could be used to prevent or minimize the impacts were presented. At the end of presentation the information was provided on Environmental Management Plan format to be applied for the rehabilitation of the existing school facilities.

Afterwards, the participants were invited for a question-and-answer session. The main questions raised during the consultation and responses provided are briefly summarized below.

Question 1: When the rehabilitation works of the schools will be commenced as a part of the proposed project?

Answer: Rehabilitation works envisaged by the Project will commence in 2015, and before that the list of schools to be involved in the project will be clarified.

Question 2: Whether it is expected to carry out environmental education activities as a part of the proposed Project?

Answer: Environmental education activities are not envisaged by the proposed Project.

Question 3: Please clarify if the project includes rehabilitation of pre-school education facilities?

Answer: Rehabilitation of pre-school facilities is not covered by the Project. However, establishment of pre-school education facilities will be continued to be funded by this project, with preference given to the pre-school facilities located in the regions located nearby the borderline, high mountainous areas, poor communities.

Question 4: Please clarify, if presented Environmental and Social Management Framework is the final version and will serve as a tool for to oversee environmental and social issues, or it can be revised later on based on peculiarities of project implementation?

Answer: This document is presented as a general guidance tool to be applied to identify and mitigate the environmental and social impacts that may occur during implementation of the proposed project. This document also provides the set of best environmental practices to be carried out during design, consultation and operation phases. The final version of the framework document will include the information on this public consultation. The site-specific Environmental Management Plans will be developed for each school included in the project and will be attached to the contracts for civil works.

Questions 5: How the schools will be prioritized during implementation of the Project?

Answer: The preference will be given to rehabilitation of high schools.

The meeting was closed at 16:30.

Appendix I. List of Participants

GENERAL EDUCATION IMPROVEMENT PROJECT
PUBLIC HEARING ON
ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

ՀԱՆՐԱԿՐԹՈՒԹՅԱՆ ԲԱՐԵԼԱՎՄԱՆ ԾՐԱԳԻՐ
ԲՆԱՊԱՀՊԱՆԱԿԱՆ ԵՎ ՍՈՑԻԱԼԱԿԱՆ ԿԱՌԱՎԱՐՄԱՆ ՇՐՋԱՆԱԿԱՅԻՆ ՓԱՍՏԱԹՂԹԻ ՀԱՆՐԱՅԻՆ ԼՍՈՒՄ

Yerevan, 10 December 2013

Երևան, 10 Դեկտեմբերի 2013թ.

NN Հ/Հ	Name, Surname Անուն, ազգանուն	Occupation / position Զբաղվածություն / պաշտոն	Contact details Կոնտակտային տվյալներ	Signature ստորագրություն
1	ՀՀ Աղյուզաձամբուխի Շարք Առաւելեան Օլիգարխան	ՀՀ Աղյուզաձամբուխի Շարքի աշխատ. կազմի վարչության կրթության փոխն. պետ.	094-33 22-35	
2.	Բախչաթյան Լիլիթ	Բախչաթյան կոնսուլտ. Տնօրէն	091-01-13-04	
3.	Արեւան Ապրապյան Նարեկ Բաղդասարյան	Բախչաթյան կոնսուլտ. Ընթացիկ ԿԻ Տրանսպորտ Նախ.	055-62-55-92 093.34.74.50	
4.	Շուշանիկ Կարապետյան	ԿԻ Կրթական Գրասենյակ	094/2/969	
5	Գարիկ Առաքելյան	ՀՀ ըստմ. Տարածաշրջանի Կրթության փոխն. պետ.	093-92-12-06	
6.	Ներսիս Կարապետյան	ՀՀ Աղյուզաձամբուխի Շարքի աշխատ. կազմի վարչության աշխատ. կազմի վարչության աշխատ. կազմի վարչության	091-991-806	
7.	Թովմասյան Արմենակ	ԿԻ ԱԿՍ Տնօրէն Կրթության Քառասնիկ պետ.	093/83841	

NN Հ/Հ	Name, Surname Անուն, ազգանուն	Occupation / position Զբաղվածություն / պաշտոն	Contact details Կոնտակտային տվյալներ	Signature ստորագրություն
8	Զախիկյան? Անդրեյ	ՀՀ Վերականգնողական Երկրագործական Կոմիտեի Կ. Երևանի մարզի կրթության կենտրոնի ղեկավար	094349788	Ա. Զախիկյան
9	Ասիկյան Կարո	ՀՀ Գեղարքունիքի մարզպետարանի արհեստագործական կրթության կենտրոնի ղեկավար	094044890	Ա. Կարոյան
10	Բաբայան Դերբեն	ՀՀ ԿԶԵ արհեստագործական կրթության կենտրոնի ղեկավար	091414544	Դ. Բաբայան
11	Դիմիտրի Անանյան	RBC P.M / B.M.	091328584/87	Դ. Անանյան
12	Տիգրան Օգանեզյան	RBC Expert	091002011	Տ. Օգանեզյան
13	Գրիգորյան Զարգար	ՀԾԳ ԾԻԳ Գրադե	093140303	Զ. Գրիգորյան
14	Վահագն Բաբայան	ՀԾԳ ԾԻԳ Գրադե Կոմիտեի ղեկավար	091320720	Վ. Բաբայան

Appendix II. Photographs made during public consultation

