

HEALTH PROJECT IMPLEMENTATION UNIT

Environmental and Social Management Framework

DISEASE PREVENTION AND CONTROL PROJECT

And

**ADDITIONAL FINANCING TO THE DISEASE
PREVENTION AND CONTROL PROJECT**

Yerevan, December 2012

Updated November 2020

List of Acronyms

ANC	Anti-Natal Care
AOC	Armenia Oncology Center
BOD	Biological Oxygen Demand
CJSC	Closed Joint Stock Company
EIA	Environmental Impact Assessment
ESMP	Environmental and Social Management Plan
GBV	Gender Based Violence
GRM	Grievance Redress Mechanism
HMIS	Health Management Information System
HPIU	Health Project Implementation Unit
ICU	Intensive Care Unit
MC	Medical Center
MCH	Maternal and Child Health
MoEnv	Ministry of Environment
MoH	Ministry of Health
MPD	Maximum Permissible Discharge
NCD	Non-Communicable Disease
NDPC	Non-communicable Disease Prevention and Control
PAD	Project Appraisal Document
PHC	Primary Health Care
PIP	Project Implementation Plan
PM	Particulate Matter
RA	Republic of Armenia
SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment
SHA	State Health Agency
SNCO	State Non-Commercial Organization
SPA	Specially Protected Areas
WB	World Bank

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1. INTRODUCTION

Armenia faced enormous difficulties after the collapse of the Soviet Union. It led to the crisis in the provision of public services, including health care system. Main issues accumulated in the health sector of Armenia since independence were considered to be the following: low access and use of health services; under-funded healthcare system with poorly and inequitably used resources; high out-of-pocket informal payments; low perceived quality of care, especially in regions; excess capacity of physical infrastructure of hospitals and polyclinics; and geographic mal-distribution of health workforce between Yerevan and the regions of the country.

Challenges of the health sector were ensuring equitable access to essential health services on a sustainable basis; managing public health threats and preventing avoidable mortality; reducing substantial overcapacity in the hospital sector while improving the role and quality of primary care and strengthening key functions of the State in health sector - particularly in the areas of governance and quality assurance.

The reform process, initiated in the mid-1990s, aimed at enhancing efficiency and ensuring accessibility and quality of essential health services, particularly for vulnerable groups. The Government of Armenia has undertaken changes in the health care sector in the following main directions:

- Improvement and strengthening of the primary health care system, emphasizing health promotion and disease prevention measures accompanied by introduction of family medicine, to increase accessibility and efficiency of the health care services.
- Optimization of oversized and overstaffed health care services aimed at meeting the health care needs of population and improving the quality and accessibility of services.
- Development of a health care financing model to address weaknesses in the financing of public-funded health care services, introduce and formalize alternative sources of funding to strengthen the official financing systems and eliminate informal payments.
- Strengthening government institutional capacity and improving governance and financial accountability arrangements of health facilities.

The first WB supported Armenia Health Finance and Primary Health Care Development Project was implemented in the years 1997-2003 and significantly contributed to the success of the country health reforms and developments. Afterwards, Armenia implemented the Health Systems Modernization Project (HSMP), a two-phase Adaptable Lending Program (APL) with a lifetime of approximately eight years. The rationale behind the HSMP was to support the reform of the health sector in Armenia in three main areas: (i) development of primary health care, (ii) hospital optimization and modernization, (iii) and strengthening of the government institutional capacities. The first phase of HSMP started in December 2004 and closed in June 2010. The second phase of the project started in June 2007 and ended in December 2012. Additional financing to APL2 activity started in 2011 and ended in December 2014. The aim of the additional financing was to (i) support quicker transition to family medicine based on PHC, (ii) complete the marz hospital modernization process, and (iii) facilitate the further institutional strengthening of the system.

Since 2004, the Government has successfully implemented a hospital optimization and modernization reform agenda with the support of the WB and other development partners. In most of the regions (marzes), notable efficiency and productivity gains were achieved through the consolidation of hospital infrastructure and services and reduction of duplications. The bed occupancy rate has increased in all marzes and in Yerevan and is now well over 60 percent. The hospital optimization program in Yerevan and the marzes was matched with large investments in infrastructure, equipment and staff training.

The Government of Armenia launched a new WB-financed Non-communicable Disease Prevention and Control (NDPC) Project on July 15, 2013. NDPC Project provides technical assistance and invests in the provision of adequate premises for several clinics.

It supports the national priorities in the health sector aimed at further modernization of the regional medical centers, prevention, early detection and control of Non-Communicable Diseases. Due to the worldwide pandemic and the increasing number of COVID 19 cases in Armenia, the component “Emergency Response to COVID-19” to the project is triggered in April 2020.

2. PROJECT DESCRIPTION

2.1. Project Development Objective

The NDPC Project Development Objective, revised as part of project restructuring in April 2020, is to:

- (i) increase the detection of selected NCDs at the PHC level and among pregnant mothers;
- (ii) improve the efficiency and quality of selected hospitals; and
- (iii) prevent, detect and respond to the threat posed by COVID-19.

2.2. Project Components

The Project comprises four components as follows:

Component 1: Performance-based incentives to improve Maternal and Child Health (MCH) and Non-Communicable Disease (NCD) services in primary care facilities

This component supports the strengthening of performance-based financing in primary health care in Armenia. This is done through: (i) adding performance indicators for screening of hypertension and diabetes in Anti-Natal Care (ANC) and for the adult population, and screening for cervical cancers; (ii) standardizing all the procedures for self-reporting, verifications, and counter-verifications of results with the development and use of instruments, protocols, and manuals, and (iii) strengthening the Health Management Information System (HMIS) to accommodate the reporting of the new indicators.

Component 2: Improving efficiency and quality of selected hospitals

Under this component, the project finances construction, refurbishment, and equipment of selected medical facilities across the country. Originally, the project intended to support the construction of Vanadzor Medical Center (MC) in Lori marz and provide it with modern medical equipment and furniture. Additionally, the Project intended to support the renovation of Hematology Center with the establishment of a new Bone Marrow Transplantation and High-dose Chemotherapy Department and to establish and provide with equipment a new Radiotherapy Center for the improvement of oncological services in Armenia.

After the first restructuring of the Project in 2015, the construction of Vanadzor MC was dropped from the Project and replaced with: (i) reconstruction of and provision of medical equipment, medical furniture, and supplies to Artashat MC in Ararat marz; (ii) construction and provision of medical equipment, medical furniture, and supplies to Sevan MC in Gegharkunik marz; (iii) provision of medical equipment, medical furniture and supplies to Meghri regional MC, and (iv) development of the architectural design for the construction and provision of medical equipment, medical furniture, and supplies to Vanadzor MC.

After the second restructuring in 2018 support to the Armenian Center of Oncology (ACO) was dropped from the project and replaced with: (i) development of the architectural design, construction and provision of medical equipment, furniture, and supplies to a new Vayots Dzor marz regional hospital; and (ii) development of the architectural design, construction and provision of medical equipment, furniture, and supplies to a new Martuni MC in Gegharkunik marz.

Another restructuring signed in March 2020 relates to the cancellation of Vayots Dzor marz regional hospital construction activities due to the high estimated cost of construction given the one-story module design.

Taking into consideration the pandemic situation resulting from COVID-19, the Government of Armenia

requested the WB to reallocate the amounts under this component towards an emergency COVID-19 response, to finance the provision of medical supplies and equipment, personal protective equipment to selected hospitals across the country for enforcement of COVID-19 diagnostic and treatment capacity in Armenia (see Component4).

Construction of a new building of Martuni MC was added to the project and construction works began in July 2020. The Project Additional Financing will support completion of Martuni MC, and the construction of the previously planned Vayots Dzor MC.

Component 3: Project Management

This component supports day-to-day project management, including fiduciary tasks, environmental and social safeguards tasks, and monitoring and evaluation. It will finance project operating costs, including translation, interpretation, equipment, supervision costs (transportation and per diem), salaries of the Health Project Implementation Unit (HPIU) staff, and incremental operating costs at the Ministry of Health (MoH).

Component 4: Emergency response to COVID-19

The new coronavirus disease (COVID-19) outbreak, initially identified in China, has continued to grow months after it was first detected in December. The World Health Organisation (WHO) officially declared COVID-19 a worldwide pandemic on March 11, 2020. Armenia reported the first coronavirus case on March 1, 2020. As COVID-19 cases increase, WHO continues to recommend that all countries make containment their highest priority. Given the growing number of coronavirus patients in Armenia, the capacities and resources available in the national health care system were assessed as insufficient.

Following a request from the Government for support, the Disease Prevention and Control Project (DPCP) was restructured to create a new component that would finance activities to detect and respond to the threat posed by COVID-19. The support would include the provision of medical equipment and supplies to hospitals countrywide as per identified priority needs. At the time of preparation of this component, ten hospitals in regions across Armenia are considered for such support (depending on the situation with the COVID-19 outbreak and priority needs, the list of facilities can be changed/expanded throughout the country).

The COVID-19 Component will support the procurement of the following equipment and supplies (depending on the situation with the COVID-19 outbreak and priority needs, the list of medical equipment and other goods can be changed/expanded throughout the country; after the COVID-19 outbreak is overcome, the equipment and goods can be redistributed to the state-owned health facilities).

Table 2.1. List of medical equipment needed for the ICU department

№	Type of equipment and supplies
1	Centralized medical gas system
2	Patient Monitor
3	Patient monitor with Capnograph
4	Ventilator (Intensive ventilation equipment)
5	Syringe pump
6	Oxygen Concentrator
7	Mobile X-Ray
8	Portable ultrasound (3 probes)
9	Electrocardiograph
10	Critical Care Analyser
11	Laryngoscope
12	Cleaner – Recirculators

13	Set for intubation
14	Oxygen flowmeter with humidifier
15	Finger pulse-oximeter

Table 2.2. List of medical equipment and supplies needed for
"National center of disease control and prevention" SNCO

№	Type of equipment and supplies
1	Safety Glasses with shields
2	Mask N 95, FFP 2/3
3	Long range handheld infrared thermometers
4	Special biological protection jumpsuit (high biohazard protective cover all Type 5/6)
5	Car 4 WD for rapid response teams
6	Ambulances for rapid response

2.3. *Infrastructural elements of the Project*

The Project finances investments into the improvement of health sector infrastructure and related technical assistance. The following civil works have been completed:

- Reconstruction of Artashat MC in Ararat marz - completed;
- Construction of a new building for Sevan MC in Gegharkunik marz - completed;
- Reconstruction of the Center of Hematology named after prof. R.H. Yeolyan in the city of Yerevan - completed.
- Construction of Martuni MC in Gegharkunik marz;
- Construction of Vayots Dzor MC in Yeghegnadzor, Vayots Dzor marz.

3. LEGAL AND POLICY FRAMEWORK

3.1. National Legislation

The 10th Article of the **Constitution** of the Republic of Armenia (adopted in 1995 and amended in 2005 and 2015) states the State responsibility for environmental protection, reproduction, and wise use of natural resources. Since its independence, the RoA has adopted a number of laws regulating environmental 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 other reserved lands. It also establishes the measures aimed to the land's protection, as well as the rights of state bodies, local authorities and citizens towards the land.

- 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 ensuring protection of water resources for future generations. The Water Code regulates the following aspects: the responsibilities of state/local authorities and the public; the development of the national water policy and national water programme; the water resources register and monitoring system; public access to the relevant information; water use and permitting systems; transboundary water resources use; water quality standards; and the protection and State supervision of water resources.

- Mining Code (2011)

The code defines principles and rules of mining in the RA, the relations related to preservation and use of the deposits, conditions and requirements of efficient use, complex use and preservation of deposits, security of mining and protecting the environment from its negative impacts, as well as protection of rights of the state, citizens and users of deposits. According to the Code, natural deposits areas under the exclusive ownership of the state. They may be given out for use for a certain period of time and cannot be privatized. The law also determines conditions, requirements and peculiarities of the natural resources and deposits. It also establishes payment principles, compensation, monitoring, and limitation for mining activities.

- RoA Law on Environmental Impact Assessment and Expertise (2014)

The Law provides legal basis for state environmental impact expertise of proposed activity or concept document as well as presents the standard steps of the Environmental Impact Assessment (EIA) process in Armenia. It establishes the general legal and organizational principles for conducting mandatory EIA of various types of activities and concept documents of sectoral development. The proposed activities are classified into three categories reflecting different levels of environmental impact assessment according to severity of possible environmental impacts. According to the list of activities provided in the Article 14 of this Law, the construction activities exceeding 1500 m² construction area are subject to expertise with simplified procedure.

- Law on Ensuring Sanitary-epidemiological Security of the RA Population (1992)

The Law "On Ensuring Sanitary-Epidemiological Security of the RA Population" was adopted in 1992, which sets legal, economic and institutional bases for ensured sanitary and epidemiological safety of the population, as well as other guarantees provided for by the State to exclude the influence of adverse and hazardous factors on the human organism and ensure favorable conditions for vital capacity of the present and future generations.

- Law on Atmospheric Air Protection (1994)

The objective of the Law is to provide the cleanness of the atmospheric air, elimination and prevention of the negative impact on the atmospheric air, as well as regulation of public relations in this field. The Law defines norms of the permissible amount of concentrations and physical negative impact as well as norms of permissible pollution from movable and unmovable sources.

- Law on Medical Care and Services to the Population (1996)

The Law on Medical Care and Services to the Population establishes the legal, economic and financial guidelines for medical care and service delivery, which ensures the realization of people's constitutional right to preserve their health.

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

This Law provides the legal and policy basis for the protection and use of such monuments in Armenia and regulates the relations between protection and use activities. Article 15 of the Law describes procedures for, among 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.

- Law on Rates of Nature Protection Payments (2006)

This Law sets rates for nature protection payments and the mechanism of their calculation. The law specifies the rates of the payments for the emission of harmful substances to the air from the cars, tracks used and owned by RA individuals and legal entities. Higher rates are set for Yerevan and specially protected areas. The law defines the rates of the payments for the emission of harmful substances and combinations to the water basin.

- Law on Flora (1999)

The law defines RA state policy in the field of maintenance, protection, usage and regeneration of flora. The law defines objectives of flora examination, state monitoring, state inventory, requirements and approaches of red book preparation on flora, conditions, peculiarities, limitations of allocation of flora objects for purposeful usage, basis of termination of the right to use, provisions on flora maintenance, and economic encouragement of usage and implementation of supervision.

- Law on Fauna (2000)

The law defines RA state policy in the field of maintenance, protection, usage and regeneration of fauna. The law defines the objectives of survey of the fauna, state monitoring, state inventory, requirements and approaches of red book preparation on fauna, conditions, peculiarities, limitations of allocation of fauna objects for purposeful usage, basis of termination of the right to use, provisions on fauna maintenance, and economic encouragement of usage and implementation of supervision.

- 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.

- Law on Environmental Oversight (2005)

This 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 Specially Protected Natural Areas (2006)

This Law defines legal basis and relations of state policy for development, restoration, maintenance, reproduction and use of natural complex and separate objects, as well as ecosystems of specially protected natural areas of the Republic. According to the law, specially protected natural areas are divided (i) into four categories: State Sanctuaries, National Parks, State Reserves and Natural Monuments; and (ii) into three separate types: areas of international, national and local significance.

- Law on Compensation Rates for Damage Caused as a Result of Environmental Infringements to flora and fauna (2005)

This Law defines the rates of damage compensation caused as a result of environmental infringements to flora and fauna, as well as the calculation and collection procedure of these tariffs.

- Labor Code of RA (2004)

This law regulates such matters as: the employment relationship; employers' and workers' organizations; collective contracts; strikes; the employment contract; occupational safety and health; working time and overtime; rests periods, public holidays and annual leave; maternity leave; wages; and disciplinary measures. The law establishes the employer's obligations relating to: safe working conditions; collective and personal preventative measures; the protection of workers from exposure to dangerous chemical substances; compulsory medical examinations; training on OHS issues; sanitation facilities; employee participation in the implementation of preventive measures; first aid; workers under the age of 18; maternity protection; disabled workers; and the notification of accidents at work and occupational diseases. According to Article 260 of the Labour Code, any employee who suffers an accident at work or develops an acute occupational disease, along with any witnesses, should immediately notify the head of their division, the employer and the department in charge of occupational safety and health. Occupational diseases and accidents are subject to mandatory registration by the employer.

3.2. Licenses and permits to be obtained by the project proponent and by works contractor

Design/Construction phase

- Civil license in the area of the capital construction, including the development of documents for urban development, engineering research and expertise to be held by the design company;
- Civil license in the area of capital construction to be held by the construction company providing works;
- Construction permit;
- Positive conclusion for construction of the medical facility issued by the MoEnv (if required). Such a conclusion is required in accordance with the Law on Environmental Impact Assessment and Expertise (2014);
- Agreements from the relevant municipality for disposal of excavated materials and construction wastes in the approved dump sites to be obtained by Construction Contractors prior to transportation and disposal of construction concrete rubbles, debris and spoils as well as excessive excavation materials in such dump sites;
- Certificate of State Registration of the User Rights of Real Estate.

Operation Phase

- Technical passports for hazardous medical wastes to be developed by medical facility and approved

by the MoEnv. A waste passport contains data on the composition, quantity, hazardousness, as well as information on its storage, transportation or neutralization methods. The List of wastes generated at medical facilities and their classification codes are presented in Annex 5;

- Agreement between a medical facility and especially licensed company for the hand-over and disposal of medical waste;
- Draft water consumption standards and MPD norms for the medical facilities to be submitted to the MoEnv for approval.

3.3. International Agreements

Out of the international agreements signed by the RoA, those most important for the purposes of DPCP are the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (RoA being a party since 1999), and the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (RoA being a party since 2001).

3.4. Institutional Framework

This section briefly presents the roles of entities that may be involved in DPCP primarily but not exclusively from an environmental perspective.

Health Project Implementation Unit

HPIU bears overall responsibility for oversight and monitoring of all activities under this ESMF. HPIU will guide, supervise and report on progress in the components, and will handle environmental and social issues requiring action and coordination at the central government level.

HPIU will carry out environmental screening of subproject proposals, will classify them by environmental categories, assess potential environmental and social impacts of subprojects and define adequacy of the proposed mitigation measures.

Ministry of Environment

The Ministry of Environment (MoEnv) elaborates and implements the policies of the RoA in the areas of environmental protection and sustainable use of natural resources and is represented by the Minister and the Staff of the Ministry. Within the system of the Ministry, there are also State Non-Commercial Organizations (SNCO) and Institutions.

Environmental Impact Expertise Centre SNCO of the MoEnv conducts environmental assessments of design documentation for construction, reconstruction, extension and maintenance of industry related production units, auxiliary facilities and infrastructure, including waste utilization sector, according to the requirements of national legislation and ratified international agreements and issues experts' conclusions.

Environmental Impact Monitoring and Information Center SNCO of the MoEnv monitors water and air quality in different areas of the country through its network of observation points.

Water Resources Management Agency. WRMA is the key institution responsible for water resources management: development of National Water Policy and National Water Plan; classification of water resources by their purpose usage; participation in water standards development and supervise their application, issue water use permits, etc. *Water Resources Management Agency sets water use and discharge limits for all organizations.*

Ministry of Health

The Ministry of Health (MoH) is a state body of executive authority, which elaborates and implements the policies of the RoA Government in the healthcare sector. The MoH implements the functions related to the development and organization of the implementation of healthcare management policy and state projects, development and approval and sanitary norms and rules, drafting as well as oversight over the implementation of laws and regulations related to the healthcare sector.

The MoH is designated by the Government as the implementing entity for the WB-financed DPCP. The Ministry is supported by the Health Projects Implementation Unit (HPIU). The HPIU will be responsible for environmental and social compliance of the Project.

Inspectorate for Nature Protection and Mineral Resources

Inspectorate for Nature Protection and Mineral Resources under the GoA includes 11 Regional Inspectorates and oversees the implementation of legislative and regulatory standards in natural resources protection, use and regeneration. It also conducts environmental inspections at worksites for control of environmental measures and valid permits.

4. TECHNICAL AND ENVIRONMENTAL STANDARDS AND REGULATIONS

4.1. National Technical Standards

- The RA Health Minister's N 138 order as of May 6, 2002 on approving N2 – III – 11.3 sanitary norms on *Noise at Workplaces, Public and Residential Buildings, and Residential Construction Areas*.
- The RA Health Minister's N 03-N order as of March 04, 2008, on *approving N 2.1.3-3 Sanitary Rules and Norms for Medical Waste Management*.
- The RA Health Minister's N 01-N order as of January 25, 2010, on *Approving Sanitary Rules and Norms of Soil Quality Hygiene Requirements N 2.1.7.003-10*.
- The RA Health Minister's N 533-N order as of May 17, 2006, on *Approving HN N 2.2.4- 009-06 Vibration Hygiene Norms at Workplaces, Residential and Public Buildings*.
- The RA Government Decision N 750-N as of May 29, 2006 on the *Establishment of Technical Regulations for Requirements on Re-cultivation and for Classification of Disturbed Lands Which Are Subject to Re-cultivation*.

4.2. World Bank Safeguard Policies

The World Bank OP/BP 4.01 Environmental Assessment is considered to be an umbrella policy for the Bank's environmental safeguard policies. There are also a number of social safeguards and other safeguard policies, which a WB-supported project may trigger. The safeguard policies and the triggers for them are provided 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 a 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, recognized as a necessary channel of communication between the open sea and other states-and any river flowing into such waters.

5. POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

5.1. *Applicable World Bank Safeguard Policies*

The project carries investment components in support to construction and refurbishment of, and provision of medical equipment and supplies to, medical facilities and therefore triggers OP/BP 4.01 Environmental Assessment. None of the project supported activities are expected to have significant, long term, or irreversible impacts on the natural environment, therefore the project is classified as environmental Category B.

The Project's EMF was originally prepared to guide the conduct of site-specific Environmental Impact Assessments (EIAs) of the construction works for the Vanadzor Medical Center and the Armenia Oncology Center. After the Project's Restructuring site-specific Environmental Management Plans (EMP) were developed for the reconstruction of the Artashat MC of Ararat marz, for the reconstruction of the Center of Hematology in Yerevan, as well as for the construction of Sevan MC of Gegharkunik marz. The EMPs were deemed sufficient for adequate mitigation of the environmental risks associated with these interventions, which are typical for reconstruction/construction of a medium-sized existing/newly constructed buildings in an urban setting. These EMPs / ESMP were guided by the project's EMF as approved and disclosed in December 2012, as they were developed prior to the current update of this ESMF document.

Environmental and social monitoring measures of the Project imply the integration of environmental and social supervision into the overall technical supervision of work, using field environmental and social monitoring checklists for tracking and recording status of compliance on regular basis.

None of the proposed Project sites are located within or in immediate proximity to the designated natural protected areas, wildlife habitats, or other sensitive natural receptors. Hence the OP 4.04 Natural Habitats is not triggered.

The land plots selected for the medical facilities are located in an urban setting. Encountering any unknown cultural property in the course of its construction is unlikely. Therefore, OP 4.11 Physical Cultural Heritage is not triggered. The chance find procedures are included in the present ESMF.

The Project does not trigger OP 4.12 Involuntary Resettlement, because its implementation will not require any land take or cause physical relocation. Land plots considered for the construction of the new buildings are state-owned and are not under any type of informal land use. At the time of project preparation, the locations of construction and rehabilitation activities were known and screened. No land acquisition or resettlement impacts were expected; therefore OP/BP 4.12 on Involuntary Resettlement was not triggered. Any activities that may cause resettlement impacts are deemed ineligible under the Project.

RA environmental legislation is mainly based on the international conventions and EU directives, including environmental policy provisions of the WB. In RA legislation there are no specific requirements regarding EIA for the construction of medical centers and hospitals, however, as their construction areas usually exceed 1500 m², EIA is required.

5.2. *Environmental Impacts*

Construction phase

In general, the potential adverse environmental impacts associated with construction and rehabilitation works carried out in the scope of the project are expected to be minor, short-term and localized. The vast majority of the potential adverse impacts are likely to occur during the construction period. Long term environmental impacts are expected to be generally neutral.

The main potential negative environmental impacts during project implementation are as follows:

Pollution with construction run-offs. As a result of fuel/lubricant leakage from machinery and stockpiled waste materials, oil products and chemicals may pollute soil, penetrate to the groundwater or run off to surface water bodies. Servicing and washing of vehicles and machinery in proximity to natural streams may also result in water pollution from construction run-offs. If construction camps are established on-site, environmental pollution may occur from sanitation facilities provided at these camps.

Impacts on biodiversity. During the construction period, earthworks may result in damage to the vegetative cover. Borrowing for construction materials, disposal of excess material and waste may also lead to disturbance of wildlife, including impacts on habitats. However, because all works will be undertaken mainly in the developed area, significant damages are unlikely, as well as impacts on critical or natural habitats.

Noise, vibration, and temporary air pollution. Dust will be generated due to earthworks, transportation of construction materials/waste and truck traffic. Dust and the bitumen smoke arising from road construction works will have localized and temporary negative impact on the air quality. A significant increase in noise levels is expected during demolition, construction and transportation activities, in particular, during the earthworks, pneumatic drilling, cranes operations, equipment dismantling or installation. Noise and vibration will cause a nuisance to local communities during works undertaken in the immediate proximity to settlements.

Generation of excavated material and construction waste. The following types of wastes will be generated during the construction phase: demolition debris, excess soil and rock; removed shrubs or branches; and household waste generated from the presence of construction workers on-site and from the operation of construction camps. Most of the old buildings in Armenia are covered with asbestos-containing roofing materials. Replacement of such roofs will cause health hazards to workers and in case of improper disposal may generate public health risks for a wider set of population. Old buildings may also have asbestos-containing pipes and lead-containing paints. Handling such types of hazardous waste would be a challenge, especially because the country lacks adequate infrastructure for waste disposal.

Safety hazards from construction activities. Direct impacts on health and safety during construction of the planned construction/rehabilitation works may result from various factors such as working at heights, crane/bulldozer operations, welding works, and sanitary situation during construction etc. A potential impact for the health and safety of workers could be further related to work accidents during construction (fall of structures) or due to contaminated drinking water or food.

Traffic. The negative interference to traffic could be expected to occur during the rehabilitation /construction activities. All efforts will be made to minimize the amount of time that construction machinery and trucks are on a roadway in order to avoid any accidents or damage to material assets. The construction contractor will station workers on highways to block traffic when necessary and to notify drivers to proceed with caution. They also will direct traffic when heavy equipment is crossing the road. Increased speed and expected higher traffic volumes can increase the number of traffic accidents. Proper traffic management will avoid negative impacts on traffic as far as possible.

Historic and Cultural Sites. There may be a potential of chance finds in case of new construction.

Operation phase

Commonly encountered risks related to the operation of public buildings include poorly organized collection and disposal of household waste; improper maintenance of land plot area around buildings; lack or malfunctioning of stormwater drainage systems; leaking roofs and water pipes due to no checks and timely repair; and irregular cleaning of snow from access roads and roofs of the buildings. Other impacts on the health of hospital patients and personnel at the operation phase may result from improper natural and artificial illumination and ventilation of the buildings, from the operation of power supply and heating systems, from the operation of specialized medical equipment (especially using radioactive technologies);

Health-related activities produce a considerable amount of waste on a daily basis as a result of preventive and curative service delivery. The composition of waste produced is in the form of sharps (needles, syringes), non-sharps, blood and other body fluids being infected and non-infected, chemicals, pharmaceuticals, and medical devices. The disposal of such waste requires special handling and awareness, as it may pose an infectious risk to healthcare workers in contact with the waste. Informal disposal may lead to contamination of soil and groundwater, but more importantly, to further spreading of the virus to nearby communities.

The utilization of medical equipment and supplies related to the emergency response to COVID-19 component, carries specific risks to the environment, communities, and project workers. Such risks may include insufficiency of the design and quality of safety arrangements to be put in place within hospitals, laboratories, and other related premises for avoiding internal spread of infection and its transmission to hospital personnel; or the inadequacy of medical waste management systems and facilities related to the handling, transportation and disposal of hazardous and infectious healthcare waste. Health workers, waste handlers, users of health facilities and the local communities along the transportation routes of medical wastes and around disposal facilities are all exposed to infection as a result of poor health care waste management.

5.3. Social Impacts

The project is not expected to cause adverse social impacts. Footprint of construction activities will be limited to the premises and grounds of existing medical facilities. Civil works may cause temporary disruptions to nearby communities such as increased levels of noise, dust, or temporary disruptions to traffic. These will be measured with mitigation measures included in ESMPs. Any accidental damages by contractors – in accordance with ESMP – will be fully restored or compensated by the contractor.

Land and resettlement impacts are not expected under the project. Lands to be used for purposes of project investments will be thoroughly screened to ensure that they are under public ownership, with adequate use rights as per national legislation, of the medical facility for which the investment is undertaken. Screening will also ensure that there is no informal use of the premises such that the project investments do not cause either resettlement or other negative impact on the property, assets, or livelihoods of affected persons. Sub-projects that entail such impacts for either owners or informal users of such property will be deemed ineligible for financing under the Project.

A potential social impact relates to the inclusive and equitable use and access to project-supported facilities for all citizens. Project investments will be designed in an inclusive manner ensuring universal access for persons with disabilities, and to the extent possible, sub-projects will be located in easy to access and well-connected areas to public transportation. The project will be implemented in strict adherence to the principles of equality and non-discrimination. Access to services and supplies, funded under the project, will be provided to all people, regardless of their social status, based on the urgency of the need.

The project will adopt differentiated measures to ensure the inclusion and equal participation of vulnerable groups, i.e., persons who may be disproportionately impacted or further disadvantaged by the project(s) as compared with any other groups due to their vulnerable status, or persons that may require special engagement efforts to ensure their equal representation in the consultation and decision-making process associated with the project. In the context of Armenia and the current project, such groups may include poor, unemployed, socially disadvantaged citizens, elderly, persons with disabilities or their caregivers, single parents, representatives of ethnic, religious, or language minorities, residents or remote rural locations, among others. To the extent possible, the project will make accommodations so that such groups may receive information, access services, access public consultations be able to provide their feedback to project activities, as well as access the grievance redress mechanism.

During Project preparation sexual exploitation and abuse and sexual harassment (SEA/SH risks) were assessed as low in the Project. HPIU has conducted a mapping of SEA/SH service providers in the country and in the project communities. Under the Additional Financing of the project, HPIU will further strengthen its efforts on SEA/SH awareness raising, prevention, and mitigation. Civil works contractors will be required to prepare a Code of Conduct, including the prohibition of SEA and SH. The GRM that will be in place for the Project will also be sensitized to be able to receive and address SEA/SH-related issues including mechanisms for confidential reporting with safe and ethical documenting of SEA/SH issues, and referral of survivors to relevant service providers. The GRM will also have in place processes to immediately notify both the HPIU and the World Bank of any SEA/SH complaints, with the consent of the survivor.

5.4. Labor, Working Conditions, and Occupational Health and Safety

Two types of workers will be hired under the Project: direct workers, which include people employed directly by the Health Project Implementing Unit (HPIU) as well as contracted workers: consultants and civil works contractors and their employees, hired by HPIU to work specifically in relation to the project. Given the medium scale of civil works, contracted workers are likely to be local or from other parts of Armenia. It is not expected that work camps will be established under the project. The risks associated with labor influx are low. Occupational health and safety (OHS) risks are those typical for small and medium construction and rehabilitation works. These will be mitigated by adhering to national legislation and good industry practices such as wearing appropriate Personal Protective Equipment (PPE), limiting the number of working hours, and especially hours after dark (if any), providing adequate training to workers on safety measures prior to their deployment on site.

The Labor Code of RA regulates labor relations including the rights, obligations and responsibilities of employers and employees. The Code deals with various aspects of collective and individual labor relations. The Code covers the following important issues: contracts of employment, hours of work, paid leave, maternity protection and maternity leave, minimum age and protection of young workers, equality, trade unions regulation, collective bargaining and collective agreements, labor dispute settlements, among others. Article 23 of the Labor Code is dedicated to occupational safety and health as well as working conditions. Article 3.1 of the Labor Code prohibits any kind of discrimination made on the basis of personal characteristics unrelated to inherent job requirements. The Labor Code of RA does not specify the need to establish a grievance mechanism for the workers to raise workplace concerns. Contractors will also be required to provide an acceptable means of grievance and redress mechanism (GRM) for their employees. Civil works contractors will be required to prepare a Code of Conduct, including the prohibition of child and forced labor, use of illicit drugs, and prohibition of sexual exploitation and abuse and sexual harassment (SEA/SH).

6. IMPACT MITIGATION

Below is a generic set of mitigation measures proposed for the construction and operation phases of the Project. Site-specific ESIA / ESMPs to be carried out for the respective investments are expected to adjust this menu of mitigation measures to the needs of individual investments.

6.1. Construction Phase: Short Term Impacts

Emissions, noise and vibration originate during construction works when drilling foundation, loading/unloading/transporting materials, operating construction equipment and vehicles, etc. For minimizing these negative impacts:

- keep construction equipment and machinery in an adequate technical condition;

- avoid idling of engines;
- do not use sub-standard fuel.

Excessive and unmanaged water use at the construction sites may result in waterlogging of the site, runoff from the site, pollution of the groundwater with oil and lubricants. For minimizing these negative impacts:

- do not allow leakages from the construction sites;
- any vehicle washing done on-site should be in a designated location with a mechanism to prevent oil from seeping into the ground.

Earth works, especially excavation of foundations may result in encountering chance finds or hazardous items and materials left over from the previous land use on the construction plots. In case of chance finds:

- immediately take all excavation activities on hold and communicate to the State Agency for Historical and Cultural Monuments Protection, and the local authorities;
- do not resume works until having received written permission from the above authorities.

In case of encountering any unidentified objects and/or substances beneath the soil:

- immediately take all construction activities on hold and communicate to the national authorities responsible for handling emergency situations;
- do not resume works until having received formal permission from the above authorities.

Construction works in old buildings may require the removal of asbestos-containing material. To avoid the health hazards of workers and environmental pollution with hazardous waste:

- ensure proper use of personal protective gear by all workers and personnel exposed to hazardous materials;
- avoid unnecessary fragmentation of asbestos-containing parts of the buildings while demounting and sprinkle them in advance;
- keep asbestos-containing construction waste in a separate and especially isolated location of the work site and timely remove it to the formally designated disposal site using covered vehicles.

Non-toxic construction waste, including excess excavated material may hinder works and pollute the environment if mismanaged. In order to minimize negative impacts from generated construction waste:

- organize temporary on-site storage of waste in especially designated locations and timely remove it to the location of permanent disposal;
- use covered vehicles for waste transportation;
- timely obtain written permission from municipal authorities for permanent disposal of waste and ensure that all waste is disposed of exclusively in such formally designated locations.

Accidents leading to health damage and even casualties may occur in the course of construction. To minimize the risk of negative health impact and accidents constructors should:

- ensure that workers and any visitors are provided and use personal protective gear;
- ensure that workers receive worksite safety training,
- ensure that workers operating large equipment are properly trained and licensed
- ensure that construction equipment is inspected and licensed
- ensure that construction equipment is used strictly following its operation instructions;
- keep first aid medical kits and fire-fighting equipment on site.

Construction works, especially the operation of machinery, may cause a nuisance to nearby residents caused by noise, dust, and vibration. To minimize this impact:

- keep construction equipment and machinery in an adequate technical condition; avoid idling of engines;
- water work sites in the course of dusty works or in case of especially hot and dry weather conditions;
- disallow on-site activities beyond the working hours.

6.2. Operation Phase: Long Term Impacts

Operation of hot water supply and heating systems, as well as running of emergency back-up systems of power generation, emit to the ambient air. In order to minimize the negative impacts of emission:

- install and operate high quality and energy efficient cooling/heating units;
- provide adequate insulation of buildings to decrease energy consumption;
- keep the boiler and other equipment in good working condition to avoid excessive fuel use and emissions.

Operation of clinic will generate variety of wastes, including medical, household, liquid, and hazardous wastes. Waste management system must include:

- separate wastes (medical, household, liquid);
- provide adequate containers for the separated collection of waste, provide safe on-site waste storage facilities, and convenient access to such facilities by waste transportation vehicles;
- conclude contractual arrangements with specialized companies licensed for the removal, deactivation, and disposal of medical and hazardous waste;
- connect the clinic to the municipal wastewater collection systems and provide adequate maintenance to ensure flawless operation of internal sewerage.

Special Measures Related to the Emergency COVID-19. As per World Bank guidelines, where the scope of financing includes medical supplies and equipment, the World Bank task team led by the environmental and social staff verifies the Borrower's systems to ensure that the supplies and equipment were provided to a facility or laboratory that functions in accordance with national laws (or accepted industry standard) for operational health and safety, waste management and Grievance Redress Mechanism (GRM). In doing so, the HPIU should verify and demonstrate that the following measures are in place: adequate waste management systems; functioning (GRM) including at the beneficiary facility or laboratory; and that staff at beneficiary facilities or laboratories have received adequate training on the use of the supplies and equipment.

The MoH medical facilities are utilizing services of the private sector in the collection and transportation of health care wastes to the licensed waste incinerators. It is mandatory that all medical facilities receiving project support use services of licensed medical waste disposal contractors existing in the country. These licensed contractors are also responsible for the transportation of medical wastes.

Identifying gaps and preparing Infection Control and Waste Management Plan (ICWMP) (Annex 6) will be important to address the risk of COVID-19. This goes along with the capacity building of healthcare staff and other stakeholders involved in the effective implementation of ICWMP. The medical facility will receive project support if no critical gaps are found.

In the event that screening or monitoring identifies gaps with the ICWMP hospital management will be alerted and remedial actions agreed. Remedial actions may involve, for example, strengthening of hospital practices and oversight regarding handling and disposal of medical waste, identification of alternative waste disposal sites and transportation measures to ensure that medical waste is safely transported to adequate waste disposal areas. Only when adequate measures are put in place and confirmed by HPIU, may project activities begin or resume.

Medical waste management and disposal. The project will mitigate these risks by adhering to WHO guidelines as well as Environmental Health and Safety (EHS) Guidelines of the World Bank Group and

other good international industry practice (GIIP). The HPIU and medical facility will ensure the following:

- Each medical facility is operated in accordance with the ICWMP;
- Waste segregation, packaging, collection, storage disposal, and transport is conducted in compliance with the ICWMP and WHO COVID-19 Guidelines;
- Onsite waste management and disposal will be reviewed regularly and training on protocols contained in the ICWMP conducted on a weekly basis;
- The HPIU will audit any off-site waste disposal required on a monthly basis and institute any remedial measures required to ensure compliance; and
- Waste generation, minimization, reuse, and recycling are practiced where practical in the COVID-19 context.

Protecting healthcare workers. The HPIU and medical facility will ensure the following:

- Regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;
- Ensure protocols for regular disinfection of public rooms, wards, ICUs, equipment, tools, and waste are in place and followed;
- Ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant;
- Ensure equipment such as autoclaves are in working order; and
- Provide regular testing to healthcare workers routinely in contact with COVID-19 patients.

Containment of COVID-19. The HPIU and medical facility will ensure the following:

- Quarantine procedures for COVID-19 patients are maintained;
- When practical, COVID-19 patients are given access to phone or other means of contact with family and friends to lessen the impact of isolation in quarantine;
- The public is regularly updated on the situation and reminded of protocols to prevent the spread of COVID-19; and
- Members of the general public (family and friends) who have been exposed to confirmed COVID-19 patients are tested when practical.

Sexual exploitation and abuse / sexual harassment (SEA/SH). HPIU will undertake the following measures for the prevention and mitigation of SEA/SH impacts:

- Designate SEA/SH focal point;
- Ensure that all HPIU employees, and civil works contractor employees adopt, acknowledge, and sign Code of Conduct;
- Prepare and deliver awareness sessions for all employees on SEA/SH prevention and mitigation;
- Sensitize project grievance mechanism to receiving and handling SEA/SH related complaints;
- Train health workers who are part of the outbreak response with the basic skills to respond to disclosures of SEA/SH that could be associated with or exacerbated by the epidemic, in a compassionate and non-judgmental manner and know to whom they can make referrals for further care or bring in to treatment centers to provide care on the spot;
- Conduct SEA/SH service mapping nationally and specific to the project areas;
- Establish SEA/SH referral pathway in line with healthcare structures of the country, with the objective that psychosocial support will be available for women and girls who may be affected by the outbreak and are also SEA/SH survivors.

7. STAKEHOLDER ENGAGEMENT, CONSULTATIONS, AND GRIEVANCE REDRESS MECHANISM

7.1. Stakeholder Engagement and Consultations

According to the law of Armenia on the Environmental Impact Assessment and Expertise, the design documents and the EIA reports for the proposed construction works shall be submitted to the Ministry of Environment of the RA (MoEnv). The design company, together with the MoEnv and respective municipalities will organize public hearings, notifying stakeholders in advance through the media. The EIA reports must be available for all interested parties and will, therefore, be posted on the websites of the MoEnv, MoH and hard copies will be provided to all interested parties by their request.

The speed and urgency with which the AF is being processed to meet the threat of COVID-19 and need for high-quality hospital care, may introduce risks in terms of inclusive stakeholder engagement during preparation of the AF. In organizing consultations during the COVID-19 pandemic, the HPIU will follow precautionary measures in line with national and international guidelines, such as minimizing face-to-face meetings, avoiding gatherings of more than ten persons, and utilizing digital and phone communications to the extent possible. Communication with beneficiary hospitals, local authorities, and other stakeholders will be maintained on a regular basis via phone, email, and where feasible in person, by HPIU. HPIU will also clearly indicate to key stakeholders the location of Project information on their website, as well as explain the content of Project environmental and social requirements and lead the screening and monitoring process. Venues of consultations will be fully accessible, consultations will be held at times convenient to the public, at venues at central and easily accessible by means of public transport venues – bearing in mind social distancing requirements.

The original EMF was disclosed at the time of preparation of the original project. Minutes of the stakeholder consultation over the EMF conducted when the project was originally prepared are attached. Site-specific ESMPs for each investment will be prepared by HPIU, have been approved by the World Bank, disclosed, consulted with stakeholders, and re-disclosed with attached minutes of public consultations.

The present updated version of the ESMF was disclosed on HPIU website on April 24, 2020 and opened for stakeholder feedback. In organizing future consultations the PIU will follow precautionary measures in line with national and international guidelines, such as minimizing face-to-face meetings, avoiding gatherings of more than ten persons, and utilizing digital and phone communications to the extent possible. Communication with beneficiary hospitals, local authorities, and other stakeholders will be maintained on a regular basis via phone, email, and where feasible in person, by HPIU. HPIU will also clearly indicate to key stakeholders the location of project information and documents on their website, as well as explain the content of project environmental and social requirements and lead the screening and monitoring process.

Public consultation on the construction of Martuni MC was conducted on July 18, 2019 with the participation of local NGOs, community members, media, architect-designer, representatives of local government, Municipality, local media, Martuni MC and HPIU. The meeting was announced on the community website and in national media. Its outcomes were covered by Gegharkunik marz local television, “Armenpress” and local newspaper “Geghama Ashxarh”. The consultations were attended by local NGOs and social service providers working with vulnerable groups. Minutes of the consultation are summarized in the disclosed ESMP. Similar procedure will be followed for the consultation on Vayots Dzor MC construction and ESMP.

HPIU will make all reasonable efforts to ensure an inclusive consultation process, including for persons who face greater barriers to participation (such as elderly, persons with disabilities, persons living in remote locations, etc.). To this end, venues of consultations will be fully accessible, consultations will be held at times convenient to the public, at venues at central and easily accessible by means of public transport venues. Information about the project and project consultations will be disseminated widely in

all communities to be served by the investment, at minimum ten days prior to the consultation meeting. Tailored consultations may be organized as needed, with specific stakeholder groups, for example, patients, caregivers, or medical personnel of investments that are of specific interest to them.

7.2. Grievance Redress Mechanism (GRM)

HPIU will establish and maintain a grievance redress mechanism (GRM) fit to receive and process all types of project-related feedback and grievances, including those related to COVID-19 activities from healthcare workers as well as from local communities. The GRM will be managed and reported on by the HPIU Environmental and Social Safeguards Specialist. A focal point or designated staff of hospitals or medical facilities where the project would be implemented will handle grievances at the facility level as the first tier of the GRM. Relevant questions or grievances will be directed to other staff of HPIU as per their competency. The E&S Specialist will ensure wide awareness on the GRM details by communities and all project stakeholders. The E&S Specialist will maintain a GRM log and report on it in every progress report to the World Bank.

The main objective of a Grievance Redress Mechanism (GRM) is to assist to resolve complaints and grievances in a timely, effective and efficient manner that satisfies all parties involved. Specifically, the GRM:

- Provides any project-affected party with avenues for making a complaint or resolving any dispute that may arise during the course of the implementation of projects;
- Ensures that appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants;
- Supports accessibility, anonymity, confidentiality and transparency in handling complaints and grievances;
- Avoids the need to resort to judicial proceedings (at least at first).

The GRM will include the following steps:

- **Step 1:** Submission of grievances either orally, in writing via suggestion/complaint box, through telephone hotline/mobile, mail, SMS, social media (whatsapp, Viber, FB etc.), email, website, and via community leaders, or any of the 3 tiers – tier 1: Local service provider (hospitals or medical facility designated staff / focal point); tier 2: Local governments (municipal offices); tier 3 (National, project-level: Health Project Implementation Unit. The GRM will also allow anonymous grievances to be raised and addressed.
- **Step 2:** Recording of grievance, classifying the grievances based on the typology of complaints and the complainants in order to provide more efficient response, and providing the initial response immediately as possible at the tier 1 level focal point (Designated Hospital Officer). The typology will be based on the characteristics of the complainant (e.g., vulnerable groups, persons with disabilities, people with language barriers, etc) and also the nature of the complaint.
- **Step 3:** Investigating the grievance and Communication of the Response within 15 days.
- **Step 4:** Complainant Response: either grievance closure or taking further steps if the grievance remains open. If grievance remains open, complainant will be given opportunity to appeal to the HPIU.

As per the of RA, project affected people may at any stage refer to court.

A GRM log (IT based or manual) will be maintained by the HPIU safeguards specialist. GRM status reports will be included in regular progress reporting to the World Bank in the form of summary of complaints, types, actions taken and progress made in terms of resolving of pending issues.

Handling of sexual exploitation and abuse and sexual harassment (SEA/SH) issues: The SEA/SH risk of the project activities has been screened and assessed as low. HPIU has conducted screening of SEA/SH service providers nationally and as relevant to the project areas. HPIU will prepare and adopt a protocol for handling of SEA/SH grievances, putting in place mechanisms for confidential reporting with safe and ethical documenting of GBV issues. Further, the GRM will also have in place processes to immediately notify both the HPIU and the World Bank of any GBV complaints, with the consent of the survivor. The protocol will be accompanied by training for all GRM focal points on using the protocol. HPIU will use the services of GBV (SEA/SH) expert in preparation of this protocol and in the preparation of awareness raising and training materials to GRM focal points.

8. SITE SPECIFIC ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT

Responsibilities of MoH

MoH, as an implementing entity of the NDPC Project and acting through the HPIU, will be responsible for carrying out site-specific EIAs of these investments, sharing draft EIA reports with the national stakeholders and the WB, conducting public consultation meetings, finalizing EIA reports, and re-disclosing them through the national media and the electronic database of the WB. EIA reports, including ESMPs, will be developed and disclosed in the Armenian and English languages, and will be made available for local stakeholders in a form suitable for these stakeholders, especially for local stakeholders. After allowing time sufficient for meaningful acquaintance with the reports and for meeting the requirements of the national legislation (usually one month), consultation meetings will be held to generate comments and answer questions of the affected population. EIA reports will be finalized and re-disclosed after incorporation of relevant comments. Final reports will carry minutes of public consultation meetings.

MoH, through HPIU, will ensure that ESMP is included into the tender documents for civil works, so that potential providers of works are able to incorporate costs related to ESMP implementation into their bids. ESMP will be integrated into the works contracts and be mandatory for implementation like any other clause of works contracts.

MoH, through HPIU will have overall responsibility for implementation of site-specific ESMP. Towards this end, directly, or acting through a hired technical supervisor, HPIU will carry out on-site environmental and social supervision of works, including monitoring of ESMP and GRM implementation. Technical supervisor will be responsible for identifying any issues which may arise from inadequate application of mitigation measures provided in ESMPs, and recommending corrective actions. HPIU must oversee timely and adequate conduct of such corrective actions. Failure of a works contractor to address identified issues in the established time and manner will lead to penalty sanctions as established in the contract terms.

Responsibilities of the Environmental Impact Expertise Center of the Ministry of Environment

According to the Law on Environmental Impact Assessment and Expertise (2014), the proposed construction of buildings exceeding the construction area of 1500 m² is subject to state environmental impact expertise.

Inspectorate for Nature Protection and Mineral Resources

Inspectorate for Nature Protection and Mineral Resources which includes 11 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.

Responsibilities of Municipality

Municipalities approve the technical proposal for construction and issue construction permits. Municipalities regulate transportation, disposal, and utilization of the household and construction waste as well.

Responsibilities of Works Contractors

Contractors will be responsible for due incorporation of works and related costs of ESMPs implementation into the BoQ and adherence to all requirements of ESMPs throughout the contract term. Contractors shall cooperate with technical supervisors through the furnishing of relevant documents (licenses and permits) and facilitating their on-site work.

Gaps and Weaknesses

Institutional capacity of the Inspectorate for Nature Protection and Mineral Resources is weak, mostly due to scarcity of funding, lack of staff and equipment, which does not allow the Inspectorate to carry out meaningful control over the construction activities. This adds to the responsibility of HPIU to carry out close technical supervision of works for ensuring acceptable end results.

Monitoring of ESMP implementation and reporting

HPIU carries overall responsibility for the implementation of ESMP and for organizing environmental and social monitoring of works. For this purpose, HPIU retains a qualified Environmental and Social Safeguards specialists. Environmental and social monitoring of works will be undertaken according to the Environmental and Social Monitoring Plan which developed as a part of the site-specific EIA work. Monthly monitoring of ESMP implementation will be followed using the field environmental monitoring checklist (Annex 3), which is a convenient tool of environmental supervision already tested and being used by HPIU for the purposes of the completed projects, as well as social monitoring will be carried out through the implementation of GRM. These reports will be supplemented with photo material.

Any occupational health and safety (OHS), community or other incidents that may occur at the Project sites must be immediately reported to the WB without postponing that till a regular progress report is due. Towards this end, HPIU must include the requirement to promptly report on incidents into the contracts signed with the contractors of works and work supervision consultants. Once a notice on an incident arrives to the HPIU, it must be instantly communicated to the World Bank with the inclusion of sufficient detail known at the moment of reporting.

HPIU's regular progress reporting on the implementation of the Project will include information on safeguards compliance. The special chapter dedicated to environmental and social performance will be part of each progress report submitted to the World Bank. It will contain analytical write-up on the overall status of ESMP's implementation, issues identified, and remedial action taken. Regular Project progress reports should include information on any incidents that have occurred in the reporting period, along with follow-up action undertaken. If no incidents have occurred, every progress report should state so.

Annex 1: Proposed Structure of a Site-Specific ESIA report

EXECUTIVE SUMMARY

Introduction

Technical and Environmental Standards and Regulations

Environmental Screening

Public Participation

Sensitive Environmental Receptors and Potential Impacts Project

Alternatives

Project Description

Environmental Impact Assessment Methodology

Environmental and Social Baseline

Expected Impacts and Mitigation

Environmental Management

Plan

(Not more than 10 pages)

CHAPTER 1.

Introduction

CHAPTER 2. Legal and Policy Framework

CHAPTER 3. Technical and Environmental Standards and Regulations

CHAPTER 3. Environmental Screening

CHAPTER 4. Physical and Natural Environment

CHAPTER 5. Sensitive Receptors and Potential Impacts

CHAPTER 6. Impact Mitigation

CHAPTER 7. Environmental Management Plan

Annex 1 Environmental Management Matrix

Annex 2. Public Consultation

Annex 3. References

Annex 4. Maps, Graphs, Pictures

Attachment I to EIA report. *Environmental Management Guidelines for Contractors*²

Roads and footpaths

In order to carry out the rehabilitation works, it may be necessary to close or divert certain motorways and/or footpaths, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport and/or pedestrians in the course of works.

After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that street or footpath during construction of the rehabilitation works as shall be reasonably practicable.

Wherever the rehabilitation works interfere with existing public or private roads or other ways over which there is a public or private right of way for any traffic, the Contractor shall construct diversion ways wherever possible. The standard of construction and lighting shall be suitable in all respects for any class of traffic using the existing ways, and the widths of the diversions shall not be less than that of the existing way wherever possible. Diversion ways shall be constructed in advance of any interference with the existing way and shall be maintained to provide adequately for the traffic flows.

The Contractor shall be responsible for supplying, erecting and maintaining for the requisite periods all statutory and public information notices.

Movement of trucks and construction machinery

The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris.

The Contractor shall also take all reasonable measures to avoid to the extent possible that delivery vehicles park on the highways prior to entering the construction site.

Traffic safety measures

The Contractor shall provide, erect and maintain such traffic signs, road markings, lamps, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the rehabilitation site. The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

Access across the construction site and to frontages

In carrying out the rehabilitation works, the Contractor shall take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of the adjacent properties, and to the public generally. The Contractor shall maintain any existing right of way across the whole or part of the rehabilitation site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the persons affected.

Protection of the existing installations

² Provided by the specialist of the WB

The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the concession period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers, railways and other apparatus during the concession period. In case of damage incurred in the course of works to the existing infrastructure, the Contractor must absorb responsibility for its restoration.

Use of existing structures

The Contractor shall not locate stockpiles for materials, stores, plant or temporary works upon or adjacent to or under existing structures such as bridges, viaducts, towpaths, walls and embankments in such a way as to endanger these structures.

Noise and dust control

The Contractor shall take all practicable measures to minimize nuisance from dust and noise from the rehabilitation sites. This includes:

- Respecting normal working hours in or close to residential areas;
- Maintaining equipment in a good working order to minimize extraneous noise from mechanical vibration, creaking and squeaking, as well as emissions or fumes from the machinery;
- Shutting down equipment when it is not directly in use.

Water supply conflicts

The Contractor must ensure that the workforce have adequate access to a safe water supply, which is not provided to the detriment of services to the local population. If there is a risk of competition for limited water resources, then the Contractor must ensure that the local supply is not affected, and that workforce is provided with an alternative source if necessary (e.g. tankered and stored water).

Waste disposal

The Contractor must agree with the Client municipality about arrangements for construction waste disposal. The municipality shall designate a dumping site or landfill for the disposal of solid waste. Should any hazardous waste be involved and unexpectedly encountered, the Contractor must inform the Client municipality on the above and strictly follow the Client's guidance for disposal of such waste.

Soil protection

The Contractor must take all practicable measures to avoid degradation and erosion of soil. The use of heavy machinery must be limited to the extent possible for avoiding land compaction. Soil erosion and slope instability should be addressed through hillside terracing, tree planting and construction of check dams.

Protection of trees and other vegetation

The Contractor shall avoid loss of trees and damage to other vegetation wherever possible. Adverse effects on green cover within or in the vicinity of the rehabilitation site shall be minimized by adequate selection of access routes, piling and storage locations for construction materials and parking lots for heavy machinery.

Emergency contacts and procedures

The Contractor shall prepare and maintain emergency contact information for each rehabilitation site which shall be displayed prominently and accessible for all personnel. Emergency contact information shall contain phone numbers and the method of notifying local authorities/services

for action in case of fire, health emergencies, disorder in communications, emergency release of hazardous materials, etc.

Clearance of rehabilitation site on completion

The Contractor shall clear up all working areas both within and outside the rehabilitation site and accesses as work proceeds and when no longer required for the carrying out of the Rehabilitation works. All surplus soil and materials, temporary roads, plant, sheds, offices and temporary fencing shall be removed, post holes filled and the surface of the ground restored as near to its original condition as conditions permitting.

Annex 2: Checklist Environmental and Social Management Plan

PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE			
Country			
Project title			
Subproject title			
Scope of site-specific activity			
Institutional arrangements (WB)	Task Team Leader: (insert)	Safeguards Specialists: (insert)	
Implementation arrangements (Borrower)	Implementing entity: (insert)	Works supervisor: (tbd)	Works contractor: (tbd)
SITE DESCRIPTION			
Name of institution whose premises are to be rehabilitated			
Address and site location of institution whose premises are to be rehabilitated			
Who owns the land? Who uses the land (formal/informal)?			
Description of physical and natural environment, and of the socio-economic context around the site			
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			
ATTACHMENTS			
Attachment 1: Site plan / photo Attachment 2: Construction permit (as required) Attachment 3: Agreement for construction waste disposal Other permits/agreements – as required			

PART B: SAFEGUARDS INFORMATION

ENVIRONMENTAL /SOCIAL SCREENING			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following?	1. Building rehabilitation	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A below
	2. Small-scale New construction	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section A below
	3. Individual wastewater treatment system	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section B below
	4. Historic building(s) and districts	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section C below
	5. Acquisition of land ¹	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section D below
	6. Hazardous or toxic materials ²	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section E below
	7. Traffic and Pedestrian Safety	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section F below
	8. Social Risk Management	<input type="checkbox"/> Yes <input type="checkbox"/> No	If “Yes”, see Section G below

¹ 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.

² 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) Notify local construction and environment inspectorates and communities on the upcoming activities (b) Notify public on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) Acquire all legally required permits for construction and/or rehabilitation (d) Formally agree with Employer that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Ensure that workers' PPE complies with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriately signpost construction site to inform workers on key rules and regulations.
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (a) Use debris-chutes during interior demolition above the first floor (b) Keep demolition debris in controlled area and sprayed with water mist to reduce debris dust (c) Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site (d) Keep the surrounding environment (sidewalks, roads) free of debris to minimize dust (e) Disallow open burning of construction / waste material at the site (f) Disallow excessive idling of construction vehicles at sites
	Noise	<ul style="list-style-type: none"> (a) Limit construction noise to daytime unless extreme urgency. Notify local communities on the works schedule if it deviates from standard working hours (b) Ensure that during operation, engine covers of generators, air compressors and other powered mechanical equipment are closed, and equipment placed as far away from residential areas as possible
	Water Quality	<ul style="list-style-type: none"> (a) 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) Identify waste collection and disposal pathways for all major waste types expected from demolition and construction activities (b) Separate mineral construction and demolition wastes from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Collect construction waste and dispose properly to the designated locations (d) Whenever feasible, reuse and recycle appropriate and viable materials (except asbestos)
B. Individual wastewater treatment system	Water Quality	<ul style="list-style-type: none"> (a) Ensure that the approach of handling sanitary wastes and wastewater and the design of the treatment system is approved by relevant authorities (b) Ensure that before discharging into receiving waters, effluents from individual wastewater systems are treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Undertake monitoring of newly established wastewater treatment systems and report to Employer on the monitoring outcome (d) Wash construction vehicles and machinery 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, do not commence works without receiving a notice that the design is agreed with the Ministry of Culture and Monument Protection, and all construction activities are planned and carried out in line with local and national legislation.

		(b) Acquaint personnel with the procedures for handling chance finds. Take all physical activity on hold if a change find is suspected or reported by staff and immediately notify Employer in writing. Do not resume work until formal notice from the Employer.
D. Acquisition of land	Land Acquisition Plan/Framework	(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, immediately consult the World Bank's Task Team Leader (b) Make sure not to enter a subproject site and not to start any physical activity in it prior to receiving formal notice on the completion of resettlement and full delivery of compensation to the affected people
E. Toxic Materials	Asbestos management	(a) If asbestos is located on the subproject site, mark it clearly as hazardous material (b) When possible, appropriately contain and seal asbestos to minimize exposure (c) Treat asbestos prior to removal (if removal is necessary) with a wetting agent to minimize asbestos dust (d) Handle and disposed asbestos using skilled & experienced professionals (e) If asbestos material is being stored temporarily, securely enclosed it inside closed containments and mark appropriately. Take security measures against unauthorized removal from the site (f) Do not reuse the removed asbestos
	Toxic / hazardous waste management	(a) Temporarily store all hazardous or toxic substances on site in safe containers labeled with details of composition, properties and handling information (b) Place containers of hazardous substances in leak-proof containers to prevent spillage and leaching (c) Transport waste to official landfills and dispose excess excavated material at sites agreed with the local authorities. (d) No not use paints with toxic ingredients or solvents, or lead-based paints
F. Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	(a) Signpost, place warning signs, arrange barriers and traffic diversions so that the work site is clearly visible, and the public is warned of all potential hazards (b) Establish traffic management system and conduct staff training, especially for site access and near-site heavy traffic. Provide safe passages and crossings for pedestrians where construction traffic interferes. (c) Adjust working hours to local traffic patterns, e.g. avoid major transport activities during rush hours or times of livestock movement (d) Actively manage traffic if required for safe and convenient passage for the public. (e) Ensure safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.
G. Social Risk Management	Public relationship management	(a) Assign local liaison person who is in charge of communication with and receiving requests/complaints from local population. (b) Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people. (c) Raise local community awareness about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities. (d) Scheduled works beyond irrigation season to the extent possible in order to avoid/minimize service disruption. Inform local population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate. (e) Limit construction activities at night. When necessary, carefully schedule night work and inform affected community beforehand. (f) Properly mark and fence work site (g) No temporary storage of construction materials and waste occurs within cultivated land plots or any type of private property

		(h) Allocate areas for temporary storage of construction materials and waste so that free movement of traffic and pedestrians is not hindered.
	Labor management	<ul style="list-style-type: none"> (i) To the extent possible, do not locate work camps in close proximity to local communities. (j) Locate and operate workers' camps in consultation with neighboring communities. (k) Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, worker skills training, should be provided to enhance participation of local people. (l) Provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. Establish a temporary septic tank system for any residential labor camp without causing pollution of nearby watercourses. (m) Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale.

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						
2.						
n.						
OPERATION PHASE						
1.						
2.						
n.						

Annex 3. 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					
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 the surrounding landscape					

Annex 4: Infection Prevention and Control Protocol

(adapted from the CDC Interim Infection Prevention and Control Recommendations for patients with confirmed COVID-19 or persons under investigation for COVID-19 in Healthcare Settings)

Health care settings

Minimize Chance of Exposure (to staff, other patients and visitors)

- Upon arrival, make sure patients with symptoms of any respiratory infection to a separate, isolated and well-ventilated section of the HCF to wait, and issue a facemask
- During the visit, make sure all patients adhere to respiratory hygiene, cough etiquette, hand hygiene, and isolation procedures. Provide oral instructions on registration and ongoing reminders with the use of simple signs with images in local languages
- Provide alcohol-based hand sanitizer (60-95% alcohol), tissues and facemasks in waiting rooms and patient rooms
- Isolate patients as much as possible. If separate rooms are not available, separate all patients by curtains. Only place together in the same room patients who are all definitively infected with COVID-19. No other patients can be placed in the same room.

Adhere to Standard Precautions

- Train all staff and volunteers to undertake standard precautions - assume everyone is potentially infected and behave accordingly
- Minimize contact between patients and other persons in the HCF: health care professionals should be the only persons having contact with patients and this should be restricted to essential personnel only
- A decision to stop isolation precautions should be made on a case-by-case basis, in conjunction with local health authorities.

Training of Personnel

- Train all staff and volunteers in the symptoms of COVID-19, how it is spread and how to protect themselves. Train on the correct use and disposal of personal protective equipment (PPE), including gloves, gowns, facemasks, eye protection and respirators (if available) and check that they understand
- Train cleaning staff on the most effective process for cleaning the HCF: use a high-alcohol based cleaner to wipe down all surfaces; wash instruments with soap and water and then wipe down with high-alcohol based cleaner; dispose of rubbish by burning etc.

Manage Visitor Access and Movement

- Establish procedures for managing, monitoring, and training visitors
- All visitors must follow respiratory hygiene precautions while in the common areas of the HCF, otherwise they should be removed
- Restrict visitors from entering rooms of known or suspected cases of COVID-19 patients. Alternative communications should be encouraged, for example by use of mobile phones. Exceptions only for end-of-life situations and children requiring emotional care. At these times, PPE should be used by visitors.
- All visitors should be scheduled and controlled, and once inside the HCF, instructed to limit their movement.
- Visitors should be asked to watch out for symptoms and report signs of acute illness for at least 14 days.

Annex 5: Expected Types of Waste at Medical Facilities

Codes	Name of wastes	Aggregate status and physical form	Origin
97010100 01 05 3	Medical waste risky for human health (infectious)	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
97010200 01 05 3	Disinfection waste		Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
97010400 01 05 3	Medical waste, which are risky in terms of injuries or infections	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
97010800 13 05 3	Used single-use syringes	Finished goods that have lost their properties	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701030 01 05 4	Human body and internal organs	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701050 01 99 4	Sharp objects (lancet, scalpel)	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701060 01 05 4	Medical waste formed due to health care services provision (diagnostics, prevention, treatment and child delivery)	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701070 01 05 4	Broken or used medical needles	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701080 13 00 4	Medical devices and instruments that do not meet certain requirements, for example, thermometers, diagnostic instruments, syringes	Finished goods that have lost their properties	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701090 01 05 4	Other wastes which collection and destruction is carried out in accordance with specific requirements, in order to prevent the spread of infections	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701190 01 00 4	Other wastes which collection and destruction is not carried out in accordance with specific requirements in order to prevent the appearance of infections	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)
9701390 01 00 4	Other medical waste for protection of human health	Solid	Health care (wide profile, specialized hospitals, maternity hospitals, polyclinics)

Annex 6. Infection Control and Waste Management Plan (ICWMP) Template

1. Introduction

1.1 Describe the project context and components;

1.2 Describe the targeted healthcare facility (HCF):

- Type: E.g. general hospital, clinics, inpatient/outpatient facility, medical laboratory;
- *Special type of HCF in response to COVID-19: E.g. existing assets may be acquired to hold yet-to-confirm cases for medical observation or isolation;*
- Functions and requirement for the level infection control, e.g. biosafety levels;
- Location and associated facilities, including access, water supply, power supply;
- Capacity: beds

1.3 Describe the design requirements of the HCF, which may include specifications for general design and safety, separation of wards, heating, ventilation and air conditioning (HVAC), autoclave, and waste management facilities.

2. Infection Control and Waste Management

2.1 Overview of infection control and waste management in the HCF

- Type, source, and volume of healthcare waste (HCW) generated in the HCF, including solid, liquid and air emissions (if significant);
- Classify and quantify the HCW (infectious waste, pathological waste, sharps, liquid and non-hazardous) following WGB EHS Guidelines for Healthcare Facilities and pertaining GIIP.
- *Given the infectious nature of the novel coronavirus, some wastes that are traditionally classified as non-hazardous may be considered hazardous. It's likely the volume of waste will increase considerably given the number of admitted patients during COVID-19 outbreak. Special attention should be given to the identification, classification, and quantification of healthcare wastes.*
- Describe the healthcare waste management system in the HCF, including material delivery, waste generation, handling, disinfection and sterilization, collection, storage, transport, and disposal and treatment works;
- Provide a flow chart of waste streams in the HCF if available;
- Describe applicable performance levels and/or standards;
- Describe institutional arrangement, roles, and responsibilities in the HCF for infection control and waste management.

2.2 Management Measures

- Waste minimization, reuse, and recycling: HCF should consider practices and procedures to minimize waste generation, without sacrificing patient hygiene and safety consideration.
- Delivery and storage of specimens, samples, reagents, pharmaceuticals, and medical supplies: HCF should adopt practice and procedures to minimize risks associated with delivering, receiving and storage of hazardous medical goods.

- Waste segregation, packaging, color coding and labeling: HCF should strictly conduct waste segregation at the point of generation. Internationally adopted methods for packaging, color coding and labeling the wastes should be followed.
- Onsite collection and transport: HCF should adopt practices and procedures to timely remove properly packaged and labeled wastes using designated trolleys/carts and routes. Disinfection of pertaining tools and spaces should be routinely conducted. Hygiene and safety of involved supporting medical workers such as cleaners should be ensured.
- Waste storage: A HCF should have multiple waste storage areas designed for different types of wastes. Their functions and sizes are determined at the design stage. Proper maintenance and disinfection of the storage areas should be carried out. Existing reports suggest that during the COVID-19 outbreak, infectious wastes should be removed from HCF's storage area for disposal within 24 hours.
- Transportation and disposal at offsite waste management facilities: Not all HCF has adequate or well-performed incinerator onsite. Not all healthcare wastes are suitable for incineration. An onsite incinerator produces residuals after incineration. Hence offsite waste disposal facilities provided by the local government or private sector are probably needed. These offsite waste management facilities may include incinerators, hazardous wastes landfill. In the same vein, due diligence of such external waste management facilities should be conducted to examine its technical adequacy, process capacity, performance record, and operator's capacity. In case any gaps are discovered, corrective measures should be recommended and agreed with the government or the private sector operators.
- Wastewater treatment: HCF wastewater is related to hazardous waste management practices. Proper waste segregation and handling as discussed above should be conducted to minimize entry of solid waste into the wastewater stream. In case wastewater is discharged into the municipal sewer sewerage system, the HCF should ensure that wastewater effluent complies with all applicable permits and standards, and the municipal wastewater treatment plant (WWTP) is capable of handling the type of effluent discharged. In cases where the municipal sewage system is not in place, HCF should build and properly operate onsite primary and secondary wastewater treatment works, including disinfection. Residuals of the onsite wastewater treatment works, such as sludge, should be properly disposed of as well. There're also cases HCF wastewater is transported by trucks to a municipal wastewater treatment plant for treatment. Requirements on safe transportation, due diligence of WWTP in terms of its capacity and performance should be conducted.

3. Emergency Preparedness and Response

Emergency incidents occurred in an HCF may include spillage, occupational exposure to infectious materials or radiation, accidental releases of infectious or hazardous substances to the environment, medical equipment failure, failure of solid waste and wastewater treatment facilities, and fire. These emergency events are likely to seriously affect medical workers, community, HCF's operation and the environment.

Thus, an Emergency Response Plan (ERP) that is commensurate with the risk levels is recommended to be developed.

4. Institutional Arrangement and Capacity Building

A clearly defined institutional arrangement, roles and responsibilities should be included. A training plan with recurring training programs should be developed. The following aspects are recommended:

- Define roles and responsibilities along each link of the chain along the cradle-to-grave infection control and waste management process;
- Ensure adequate and qualified staff are in place, including those in charge of infection control and biosafety and waste management facility operation.
- Stress the chief of an HCF takes overall responsibility for infection control and waste management;
- Involve all relevant departments in an HCF, and build an intra-departmental team to manage, coordinate and regularly review the issues and performance;
- Establish an information management system to track and record the waste streams in HCF; and
- Capacity building and training should involve medical workers, waste management workers and cleaners. Third-party waste management service providers should be provided with relevant training as well.

5. Monitoring and Reporting

Many HCFs in developing countries face the challenge of inadequate monitoring and records of healthcare waste streams. HCF should establish an information management system to track and record the waste streams from the point of generation, segregation, packaging, temporary storage, transport carts/vehicles, to treatment facilities. HCF is encouraged to develop an IT based information management system should their technical and financial capacity allow.

As discussed above, the HCF chief takes overall responsibility, leads an intra-departmental team and regularly reviews issues and performance of the infection control and waste management practices in the HCF. Internal reporting and filing system should be in place.

Externally, reporting should be conducted per government and World Bank requirements.

Annex 7. Minutes of the Public Consultation Meeting

*Public Consultation Meeting on NDPC Project
Environmental Management Framework and
Environmental Management Plan for the Reconstruction of the Center of Hematology*

Date 24 December, 2012

Place of Meeting National Institute of Health, Yerevan city

List of participants:

- | | |
|------------------------|---|
| 1. Vram Tevosyan | Local consultant, environmental management specialist |
| 2. Menum Brurtyan | Lori Marz Residents' Association, Charity NGO |
| 3. Khoren Vardanyan | Member, Vanadzor city community local Parliament |
| 4. Marta Simonyan | Regional Cooperation, NGO |
| 5. Melkon Garaseferyan | Head of Department, Hematology Center |
| 6. Eduard Kabasakalyan | Medical doctor, Hematology Center |
| 7. Karen Meliksetyan | Medical doctor, Hematology Center |
| 8. Hayrapet Galstyan | Director, National Oncology Center |
| 9. Armen Tananyan | Deputy Director, National Oncology Center |
| 10. Arthur Avetisyan | Oncologist, National Oncology Center |
| 11. Artak Edoyan | Deputy Director, Vanadzor MC |

HPIU

- | | |
|---------------------------|--|
| 12. Nelson Zuloyan | HPIU, Acting Director |
| 13. Davit Meli-Nubaryan | Coordinator, Hospital network optimization component |
| 14. Naira Kalantaryan | Specialist, Hospital network optimization component |
| 15. Ruzanna Astvatsatryan | Assistant Coordinator, Hospital network optimization component |

Summary

The public consultation was conducted On 24 December 2012 in the National Institute of Health regarding to the new WB- financed "Non-communicable diseases prevention and control" project EMF and EMP of the construction works of the Center of Hematology under the same Project, with participation of local NGOs, stakeholders, community members, representatives of local government, MoH and HPIU.

In the opening speech HPIU Director Nelson Zuloyan made a brief presentation on the main components and goals of "Non-communicable diseases prevention and control" project. He noted that the early detection of NCD will be implemented through mass screening program. Besides, a new building for Vanadzor MC of Lori marz will be constructed and modernization of the Center of Hematology with the establishment of BMT department will be implemented, as well as new Oncology center will be established with construction of new building.

Afterwards, ecologist Vram Tevosyan presented "Non-communicable diseases prevention and control" EMF and the EMP of the Hematology Center renovation works. He noted that these documents have been developed based on the requirements of the World Bank Operational Manual, which presents the WB environmental policy. Then Mr. Tevosyan noted that possible environmental impacts and risks for three projects were preliminary studied and assessed in the mentioned documents. The expert told that the expected environmental impact is predicted to be minimal.

- Director of National Oncology Center asked about the potential impacts of the ground water on the building of the new oncology center at the operation phase.

Ecologist Vram Tevosyan answered that the norms and environmental safeguard requirements must be taken into account, while design and construction of the radiotherapy center.

- There were no other questions concerning the environmental issues. The discussion was continued concerning mass screening activities, planned in the scope of the new project. Director of National Oncology Center Galstyan was concerned about the choice of selection of screenings. On his opinion the breast cancer screening is more important in Armenia, but it is not included in the list.

Coordinator Melik- Nubaryan answered that in the initial version of the new project breast cancer screening was included in the list of screenings, but due to financial restrictions this item was excluded from the list of screenings.

At the end HPIU Director Nelson Zuloyan thanked the participants for taking part in the discussion.

Scanned signatures of the participants:

Վոսան Թևոսյան

Մենուա Բրուսյան

Խորեն Վարդանյան

Սիմոնյան Մարթա

Մելքոն Գարասեֆերյան

Էդուարդ Կարասակչյան

Կարեն Մելիքսեբյան

Հայրապետ Գալստյան

Թանանյան Արմեն

Արթուր Ավետիսյան

Արտակ Եղոյան

Նելսոն Զուլոյան

Դավիթ Մելիք-Նուբարյան

Քալանթարյան Նաիրա

Ռուզաննա Աստվածատրյան