



MINISTERUL SĂNĂTĂȚII
AL REPUBLICII MOLDOVA



COUNCIL OF EUROPE DEVELOPMENT BANK
BANQUE DE DEVELOPPEMENT DU CONSEIL DE L'EUROPE

TECHNICAL ASSISTANCE TO SUPPORT THE CEB IN ITS TECHNICAL APPRAISAL AND MONITORING OF OPERATIONS

**Environmental and Social Assessment Report
for the Construction a New Greenfield Regional Hospital in
Bălți - Moldova**

August 2023

GOPA
WORLDWIDE CONSULTANTS

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ABBREVIATIONS

ACM	Asbestos-Containing Materials
AMP	Asbestos Management Plan
AoI	Area of Influence
C&D	Construction and demolition
CBD	Convention on Biological Diversity
CEB	Council of Europe Development Bank
CESMP	Construction Environmental and Social Management Plan
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO ₂	carbon dioxide
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EL	Excursion Limit
ERP	Emergency Response Plan
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESSMP	Environmental and Social Safeguards Management Plan
ESSP	Environmental and Social Safeguards Policy
ESSSs	Environmental and Social Safe-guards Standards
EU	European Union
FEZ	Free Economic Zone
FIs	financial intermediaries
GFDRR	Global Facility for Disaster Reduction and Recovery
GRM	Grievance Redress Mechanism
IC	Implementation Consultant
ICTPs	International Conventions/Treaties/Protocols
IPPC	International Plant Protection Convention
KWh	Kilowatt hours
LPG	Liquefied Petroleum Gas
MoAFI	Ministry of Agriculture and Food Industry ()
MoAFI	Ministry of Agriculture and Food Industry

MoC	Ministry of Culture
MoC	Ministry of Culture
MoE	Ministry of Environment
MoH	Ministry of Health
MoIRD	Ministry of Infrastructure and Regional Development ()
MoIRD	Ministry of Infrastructure and Regional Development
MoLSP	Ministry of Labor and Social Protection
MoLSP	Ministry of Labor and Social Protection
MSW	Municipal Solid Waste
NARNRA	Moldova National Agency for Regulation of Nuclear and Radio-logical Activity
NO	Nitrogen Oxide
OSHA	Occupational Safety and Health Administration
PA	Protected Area
PEL	Permissible Exposure Limit
PI	Public Institution
SEP	Stakeholder Engagement Plan
SO ₂	Sulfur Dioxide
TMP	Traffic Management Plan
ToR	Terms of Reference Report
TWA	Time-weighted Average
UDHR	Universal Declaration of Human Rights
UNCCD	United Nations Convention to Combat Desertification
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change

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EXECUTIVE SUMMARY

INTRODUCTION

BACKGROUND

The existing municipal hospital in Balti, Moldova faces significant challenges in meeting the growing healthcare needs of the Northern region. The population growth strains the available resources, causing difficulties in accessing timely and specialized healthcare. The hospital's limited capacity and outdated infrastructure hinder the delivery of advanced medical services on par with European standards.

To address these deficiencies, the Ministry of Health proposed constructing a new greenfield regional hospital in Balti. This hospital aims to decentralize tertiary healthcare services and provide high-quality, safe, and modern medical care. The project intends to reduce the need for patients to seek treatment abroad and create a conducive environment for healthcare professionals and medical students.

The Council of Europe Development Bank (CEB) is considering providing financial support for the project but requires an Environmental and Social Impact Assessment (ESIA) to manage potential environmental and social impacts effectively. The ESIA will follow the CEB's Environmental and Social Safeguards Policy and the EU Directive on Environmental Impact Assessment.

In summary, the need for a new greenfield regional hospital in Balti, Moldova arises from the inadequacy of the current hospital to meet healthcare demands. The proposed hospital aims to improve healthcare services and outcomes in the region and requires an ESIA to address potential environmental and social impacts.

PROJECT PROPONENT AND FUNDING

The Council of Europe Development Bank (CEB) is considering funding the project, and the Project owner is to be the Ministry of Health (MoH).

PROJECT DESCRIPTION

A new greenfield regional hospital is proposed to be built in Balti, Moldova, covering an area of approximately 38,000 m². It will accommodate 340 inpatient beds and 78 outpatient beds, aiming to decentralize tertiary health care services and extend them to the North and South regions of Moldova. The existing municipal hospital in Balti is outdated and cannot meet modern quality and safety standards, leading to an increased demand for healthcare services in North Moldova. The new hospital aims to provide state-of-the-art facilities, advanced technology, and high-quality tertiary-level care comparable to European standards. It also seeks to reduce the number of patients seeking treatment abroad and improve the working environment for medical staff while serving as a valuable learning environment for healthcare students.

The new greenfield regional hospital will be constructed near the city of Balti, in the Northern region of Moldova, at coordinates 566985.46 meters East and 5290924.75 meters North.

ALTERNATIVES

The analysis compares the "Project" and "No Project" alternatives. The "No Project" assumes no development, resulting in rapid deterioration of local environmental conditions due to pollution and sandstorms. The "Project" alternative will cause temporary disruptions to air quality, noise levels, health and safety during construction and decommissioning. Improper management during operation could lead to adverse impacts related to medical and hazardous waste, but it will also have positive impacts on public health through improved access to healthcare services. Proceeding with the project will require mitigation measures, but overall, the positive benefits will outweigh the negative impacts in the study area.

LEGAL ASPECTS AND COMPLIANCE

There are a variety of national laws, regulations, standards, and instructions as well as international guidelines that must be followed to ensure that the project is implemented in a responsible and sustainable manner. Table S 1 sets out the aforementioned legislations and guidelines.

Table S 1: Relevant national legislations and international guidelines

NATIONAL LAWS	NATIONAL DECREES AND REGULATIONS	NATIONAL ORDERS AND DECISIONS	INTERNATIONAL GUIDELINES
<ul style="list-style-type: none"> - Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV. - Law on Environmental Impact Assessment NO. 86 of 2014 (Amending Law on Ecological Expertise and Environmental Impact Assessment, no. 851-XIII of 1996) - The Law on Ecological Expertise and Environmental Impact Assessment, no. 851-XIII dated 29 May, 1996 - Law on Natural Resources (No. 1102-XIII). - Law No. 1422-XIII on protection of the atmospheric air - Law No. 98 of 14 April 2022 on atmospheric air quality - Law No. 151 "On ecological requirements for projecting of ecofriendly energy-consuming edifices - Law No. 92 "On thermal energy and promotion of cogeneration" - Law No. 10 "On promotion of use of renewable energy". - Law No. 209 on waste of 2016 and as amended on 21-07-2022 - Law No. 787-XII on utility waste - Law No. 1513-XII on sanitary and epidemiological provision of population - Government Decree No. 373 validating the Regulation on the National Register of emissions and pollutants. - Governmental Decree No. HG505/2020 validating the Regulation on export and import of hazardous chemicals. - Government Decree No. 501 validating the Regulation on registration, data reporting and supply of information on waste and waste management. - Ministerial Decree No. 637 on transboundary movement of hazardous waste. 	<ul style="list-style-type: none"> - Regulation on Consultation with Population in the Process of Development and Adoption of Documents on Territorial Development and Urban Construction (no. 951, October 1997) - Regulation on Ecological Audit of Enterprises (no. 395, April 1998) - Regulation on Public Participation in Elaboration and Decision-Making in Environment Protection Areas (no. 72, 25 January 2000) - Decree No. 381 of the Ministry of Ecology and Natural Resources validating the Regulation on evaluation of environmental damage. - Regulation No. 381 of the Ministry of Ecology and Natural Resources on calculation of atmospheric pollution. - Ministerial Decree No. 703 validating the Regulation on the Ministry of Ecology, Construction and Land Use Planning. - Ministerial Decree No. 656 Validating Model Regulation on use of water supply and sewerage systems. 	<ul style="list-style-type: none"> - Order No. 20 of the Ministry of Ecology and Natural Resources regarding the issuance of permits in the sphere of nature management and prevention of environmental pollution. - Decision No. HG696/2018 of 2018 for the approval of the Sanitary Regulation on the management of waste resulting from medical activity - Government Decision No.589 "On the Approval of the Road Transport Regulation of Dangerous Goods" of 24 July 2017 - Government Decision No. HG 541 / 2014 of 2014-07-07 regarding the approval of the list of works with heavy, harmful and/or dangerous working conditions, which is forbidden for persons aged up to 18 years and of the maximum allowable applicable standards for persons in up to 18 years of age when lifting and manually transporting weights. - Order of the Government of Moldova of May 12, 2016 No. 589 About the Minimum requirements on health protection and labor safety of the workers who are put 	<ul style="list-style-type: none"> - CEB Environmental and Social Safeguards Policy (ESSP) - CEB Environmental and Social Safeguards Standards (ESSSs) - EU Directives

NATIONAL LAWS	NATIONAL DECREES AND REGULATIONS	NATIONAL ORDERS AND DECISIONS	INTERNATIONAL GUIDELINES
<ul style="list-style-type: none"> - Ministerial Decree No. 45 validating the Regulation on transportation of hazardous waste and mitigation of consequences of possible incidents - Government Decree No. 99 validating the classification listing of waste (implements Commission Decision 2000/532/EC) - Law No.1163 "On Export Control, Reexport, Import, and Transit of Strategic Goods" of 26 July 2000 - Law No. LP132/2012 "On safe nuclear and radiological activities" - Law No. 272 On water and its amendment Law No. 162 of 2014 - Law No. 303 "On public service of water supply and sewerage - Law No. 182 "On quality of potable water." - Law No. 1402-XV on public municipal services. - Law No. 440-XIII on water conservation zones and water belts of rivers and waterbodies - Land Code of the Republic of Moldova of 1991 and its amendments - Law on the People's Advocate (Ombudsman) NO. 52 of 2014 - Moldova Civil Code of 2002 and its amendments of 2003 and 2005 - Law No. 488-XIV on expropriation for public needs. - Law No. 1538-XIII on fund of protected areas. - Wildlife Law (No.439) and its amendments Law No. 439-XIII of 1995, and Law No. 1257-XV of 2002 - Labour Code of the Republic of Moldova No. 154-XV from 28.03.2003 - Law No. 5 of 2006 regarding ensuring equal opportunities between women and men. - Law No. 186-XVI of 10 July 2008 on Occupational Health and Safety. - Penal Code NO. 985-XV of 18 April 2002. - Law No. 140-XV of 10.05.2001 on Labour Inspection. 		<ul style="list-style-type: none"> risks caused by mechanical vibrations. - Decision No. 108 of 23 February 2022 approving the Technical Regulation on personal protective equipment. - Order No. 314 of 25 March 2020 on the approval of the list of occupations requiring compulsory hygiene training and hygiene training programs. - Decision No. 388 of 2009 for the Approval of the Regulations on the Management of Radioactive Waste. 	

NATIONAL LAWS	NATIONAL DECREES AND REGULATIONS	NATIONAL ORDERS AND DECISIONS	INTERNATIONAL GUIDELINES
<ul style="list-style-type: none"> - Republic of Moldova Parliament Law NO. LP277/2018 on chemical substances - Act of the Republic of Moldova on Fire Safety, No. 267-XIII of November 9, 1994. - Law No. 116 of 18.05.2012 regarding the industrial safety of hazardous industrial equipment. - Law No. LP108/2020 "On control of the risk of major accidents caused by hazardous substances - Law No. 10 of 2009 regarding state supervision of public health and its amendment Law No. 33 of 2021. - Law of Historical Monument Protection (1993) - Law No. 413-XIV on culture - Parliament Law No. 218 of 2010 regarding the protection of the archaeological heritage - Law on Public Forum Monuments (2011) - Law on Protection of the National Mobile Cultural Heritage (2011) - Law on Protection of Intangible Cultural Heritage (2012). - Road Transport Code, No. 150 of 2014 - Law No. 60 of 2012 on social inclusion of persons with disabilities - Parliament Law No. 121 of 2012 regarding ensuring equality - Constitution of the Republic of Moldova 			

EXISTING ENVIRONMENT

The environmental and social conditions within this area of influence is described below.

- **Climate:** Balti is known for relatively warm summers, and cold, snowy, and windy winters, and it is partly cloudy year-round.

The highest average temperatures are experienced during July and August, reaching 28°C. Conversely, the lowest temperatures occur in January and February, dropping to as low as -4°C. The average annual precipitation ranges from 30 mm in February to 64 mm in June.

- **Geology and Geomorphology:** Neogene and Quaternary-age layers are found in the contemporary erosional section. The region has middle Sarmatian gravelly-sandy deposits on river slopes and a macroptictic horizon of chalky greenish clay. The upper Sarmatian deposits consist of continental sandy clay. The floodplains have alluvial deposits of sandy and loamy clay.

- **Topography:** the topography of Balti is characterized by a relatively flat landscape with gentle slopes and low-lying areas. With regards to the proposed project site, it can be characterized as being dominantly of fairly flat surfaces with an elevation between 158 – 173 m above sea level with no sudden changes in topography.

Balti is located in a hilly plain with shallow dissection. The region experiences landslides, with steeper northern slopes. The prevailing landslide types are plastic blocks, cascades, and slides.

- **Hydrology and Hydrogeology:** The Project area is situated in the Dniester River basin, spanning three countries - the Republic of Moldova, Poland, and Ukraine. The Dniester River is 1,362 km long, with the majority (59%) of its basin falling within Moldova. This river basin is vital for providing drinking water to Moldova. It contains 65 water reservoirs and 3,447 ponds. The Răut River is the largest tributary of the Dniester, flowing entirely within Moldova. The Răut River sub-basin has a pear-shaped form, covering approximately 190 km in length and averaging 41 km in width. It is characterized by hilly terrain with elevations ranging from 230 to 388 meters, featuring deep valleys and ravines. The lower part of the sub-basin consists of sandy rocks, chalk, and Cretaceous marble, covered by Tortonian calcareous and clayey rocks. The Răut river basin has few natural lakes, with accumulation lakes occupying only 0.2% of its total area.

Urban flood hazard is classified as medium, this means that there is a chance of more than 20% that potentially damaging and life-threatening urban floods occur in the coming 10 years.

In the Dniester River floodplain, the groundwater table is often close to the surface, ranging from up to 5 meters in valley slopes to 20 meters or deeper in water divide areas. In the northern part of the Dniester Basin, groundwater is found in karst voids, visible in the river valleys.

The groundwater chemistry shows significant variation across the Basin. Subsurface aquifers receive pollution from surface runoff, leading to potential migration of contaminants to deeper aquifers due to hydraulic continuity.

In some southern areas of the Republic of Moldova, groundwater has elevated concentrations of pollutants like nitrates (up to 462 mg/l in Anenii Noi) and chlorine (up to 902 mg/l in Stefan Voda). Many groundwater sources throughout the Dniester Basin also have high levels of ammonium (up to 49.3 mg/l).

- **Landscape and land use:** the Project area in general can be characterized as being dominantly of fairly flat surfaces with an elevation between 158 – 173 m above sea level with no sudden changes in topography.

The site is owned by MoAFI and managed by "Selectia". It serves as a central hub for cultivating crops, with a focus on barley. It also facilitates experiments and studies related to these crops. Additionally, the site includes a structure owned by the Field Crops Research Institute.

- **Soils:** Balti and its surrounding areas have chernozem soil, a fertile black soil type found in the region. It develops on aeolian and carbonaceous sediments, mostly loess. The texture is silty to loamy, with a high water-holding capacity of over 150 mm. These soils are rich in potassium and phosphates, which depend on the degree of decalcification. Unlike Phaeozems, chernozems have incomplete decalcification, with some carbonates redistributed in the lower soil, forming secondary carbonate precipitates at mineral surfaces or within soil pores. The very surface soil is free of lime and slightly acidic in pH.

Chernozems form due to specific climatic conditions in the steppe, with cold winters and hot summers, promoting plant growth in moist spring. This leads larger soil animals to retreat into deeper soil during unfavorable conditions in the surface soil, becoming active during humid times, resulting in a high degree of biological soil mixing, known as bioturbation.

- **Air quality and Noise:** around 1,312 tons of pollutants were released into the atmosphere from stationary economic sources in 2021. These pollutants were categorized as 115.5 tons of solid pollutants and 1,197 tons of gaseous and liquid pollutants. The emissions of sulfur dioxide (SO₂), carbon monoxide (CO), and nitrogen oxide (NO) were 7.8 tons, 698.6 tons, and 58.6 tons, respectively.
- **Seismic conditions:** Earthquake hazard in Balti is classified as medium according to the information that is currently available, this means that there is a 10% chance of potentially-damaging earthquake shaking in the project area in the next 50 years.
- **Biological Environment:** the project area is situated in the forest steppe zone, occupying the northern and central parts of the country. This zone features alternating plains and plateaus with a rich variety of flora, including forest, steppe, and meadow formations. The forest steppe zone can be further divided into three landscape regions:
 - Region of plateaus and forest steppe plateaus in the North of the country.
 - The region of plateaus and plains with grasslands of the Baltic Steppe (where the project area is located). This region is known for vast, open landscapes with rolling plains, grasslands, and meadows, characterized by relatively flat terrain, a moderate climate, and fertile soils.
 - The plateaus of the Codri forests in the central part of Moldova.

In addition to the above, the project site is not located within any protected areas, rangeland reserves, or important bird areas.

- **Demography:** the city of Balti boasts a vibrant population of 151,800 residents, making it a significant hub of activity and diversity. This thriving community encompasses people from various backgrounds and cultures, contributing to a rich tapestry of traditions and ideas. With an average age of 38.4 years. The municipality of Balti has one of the most pronounced gender disparities in favor of women, with only 86 men for every 100 women.

According to the national statistics of 2014, a share of 60.6% of the population of Balti Municipality were Moldovans, 2.9% Romanians, 18.5% - Ukrainians, 16% - Russians, 0.1% - Gagauz, 0.2% Bulgarians, 0.2% - Roma, and 1.5% - Other ethnicities.

- **Land ownership and tenure:** the land, registered as State property, is currently used by the Field Crops Research Institute "Selecția." The administration right belongs to the Public Property Agency under Government Decision no. 161/2019. The Ministry of Health has requested the transfer of this 5-ha land from State ownership to MoH ownership.
- **Health services:** there is a single hospital, accompanied by 47 primary and specialized healthcare institutions, as well as 44 individual medical care enterprises. The medical workforce comprises a total of 388 doctors and 1046 medical staff members. With these numbers, there are approximately 106.6 medical staff per 10,000 inhabitants, ensuring adequate healthcare services for the population.
- **Gender Issues:** Moldova has made significant progress in promoting gender equality, ranking 28th out of 156 countries on the World Economic Forum Global Gender Gap Index in 2021 with a score of 0.77, a notable improvement from 2006. Women's representation in leadership roles and decision-making processes has gradually increased, including milestones such as electing its first female President in 2020 and 40.6% of women MPs in 2021. The country has also ratified the Council of Europe Convention to combat violence against women and domestic violence. Despite these advancements, gender inequality persists due to societal norms and stereotypes. Women, especially from vulnerable groups, still face discrimination and underrepresentation in the workforce, with patriarchal attitudes and obstacles hindering their full participation.

- **Infrastructure and Utilities:**

- Transportation System: Balti has a well-developed road network connecting it to other major cities in Moldova. The city has a public transportation system consisting of buses, minibuses (marshrutkas), and taxis, providing convenient intra-city transportation.
 - Water Supply System:

The city has a centralized water supply system managed by the municipality. In 2021, the total water supply was 14,217.9 m³, with 2,531.1 m³ supplied to the population. The per capita water consumption in Balti is around 75 liters per day, and households receive an average of 10 hours of uninterrupted water supply daily, as per the Green Action Plan for Moldova in 2019.
 - Wastewater System: The project area is connected to an old wastewater collection network, built between 1973-1976, with 80% of it now obsolete due to deterioration and fragility. The existing pipelines suffer from a high wear degree (55-60%), resulting in quality issues and significant leaks. The wastewater treatment plant in Balti can handle 60,000 m³ per day and performs mechanical and biological treatment. However, heavy rainfall leads to rainwater infiltration into the network, causing increased influent volumes on rainy days, rising from around 18,000 m³ on dry days to approximately 32,000 m³ during rainy periods.
 - Electricity System: Balti obtains its electricity from the state-owned company "Moldenergo" through the national power grid. Additionally, during the colder months, Balti benefits from a district heating system that provides centralized heating to both residential and public buildings
 - Gas Distribution System: The Republic of Moldova plays a vital role in international gas transmission, with pipelines serving as transit routes from Russia and Ukraine to Romania, Bulgaria, Turkey, Greece, and Macedonia. The national gas transmission system consists of trunk and branch pipelines spanning over 1.9 thousand km, along with gas measuring and compressor stations, and gas distribution stations. "Moldovagaz" includes two gas transmission companies: "Moldovatrangaz" LLC (Right Bank) and "Tiraspoltrangaz" LLC (Left Bank). "Moldovatrangaz" manages gas distribution in the city of Balti, where natural gas consumption accounts for 8.2% of the country's total consumption, as stated in the Security of Supply Statement for 2020-2021.
 - Solid Waste Management Facilities: The main landfill used by Bălți municipality is located around 7km from the city, within the administrative boundaries of Țambula and Bilicenii Noi settlements. It covers approximately 25 hectares.
- **Vulnerable Groups :** Vulnerable groups in Moldova, like in many societies, include the following: Persons with disabilities, local women groups, elderly people, children and youth, ethnic minorities, and unemployed and low-income individuals.
 - **Archaeology and Cultural Heritage:** Based on the review of National Geospatial Data Fund, no archaeological and/or cultural heritage sites were recorded within the project site.

SIGNIFICANT ENVIRONMENTAL AND SOCIAL IMPACTS

The following tables present the environmental and social impacts that are anticipated to occur throughout the Planning and Construction phase, Operation phase, and Decommissioning phase of the project.

Table S 2: Anticipated E&S Impacts during the Planning and Construction Phase

E&S COMPONENT	POTENTIAL IMPACT	TYPE
Physical Environment		
Climate	The construction phase involves energy-intensive activities, and if sourced from fossil fuels, adds to the carbon footprint. Moreover, the new hospital will primarily use concrete, made from cement that releases significant CO ₂ during production, contributing to about 8% of global carbon emissions.	Negative
Air Quality	The primary air quality concern during demolition is asbestos, which, when disturbed, releases inhalable fibers that may lead to asbestos-related illnesses.	Negative
	Other anticipated impacts during the construction phase include dust generation.	Negative
Noise and Vibration	Similarly, noise or vibration are anticipated to be generated due to construction works such as movement of vehicles to haul project materials, machinery and generators operations, excavation, works, etc.	Negative
Soil	The main issue of concern during the demolition of the existing building includes potential release of asbestos to the soil, which can harm its quality, making it toxic for plants and affecting growth.	Negative
	Other impact during the construction period includes accidental leakage of oils/chemicals. However, given the limited number of vehicles and with spill response measures, the impact is considered to be of medium consequence.	Negative
Hydrology and Hydrogeology	Accidental oil/chemical spills may pose a threat to the groundwater quality. Accordingly, proper handling of any chemicals/oils during construction works is needed along with having spill response measures in place.	Negative
Solid and Liquid Wastes	<p>Solid waste is expected to be generated from demolition and construction activities. Solid waste generated will likely include construction waste (concrete, bricks, wood, roofing shingles, metal, debris, etc) and municipal solid waste (during construction and operation such as cardboard, plastic, food waste, etc.).</p> <p>It is important to note that existing building contain asbestos. Therefore, asbestos containing waste is expected to be generated throughout the demolition of the existing building.</p> <p>Other types of hazardous waste that could be generated during the construction activities include consumed oil, chemicals, paint cans, etc. Hazardous waste generated will likely be collected and stored onsite and then disposed of at designated hazardous waste treatment facilities.</p> <p>With respect to wastewater, it is expected to include black water (sewage water from toilets and sanitation facilities), as well as grey water (from sinks, showers, etc.) generated from workers during the construction phase.</p>	Negative
Aesthetics and Landscape	Some visual disturbance will occur due to construction works. However, these are temporary visual intrusions limited to construction phase.	Negative
Biological Environment		

E&S COMPONENT	POTENTIAL IMPACT	TYPE
Biodiversity	<p>In the construction stage, modifications related to ecosystem are anticipated to be made as the construction of the new hospital may necessitate the removal of a number of trees on the site.</p> <p>Another concern is potential soil pollution from the demolition of asbestos-containing structures and improper and unsafe disposal, which could directly affect animals and insects in the soil.</p>	Negative
Socio-economic and Cultural Environment		
Local economy	During the construction phase, labour will be skilled workers available on site. Positive economic impacts are anticipated to local shops close to the project site.	Positive
Infrastructure and Utilities	Traffic jams are anticipated due vehicles that will be moving to and from the project site.	Negative
	There exists a possibility of harm to the electrical poles, gas distribution network, and water pipelines in the vicinity, which could lead to a subsequent impact on the provision of power and water to the neighborhood	Negative
Public Health and Safety	During construction phase, the potential sources of impact to public health and safety are traffic accidents due to moving vehicles to and within the project site as well as public access to construction locations. These risks requires that the vehicle drivers abide by speed limits and that construction locations be closed to public access.	Negative
Occupational Health and Safety and Labour conditions	<p>The main impact during the demolition of the existing building includes direct exposure to asbestos, which can lead to several serious lung diseases, such as lung cancer, asbestosis, etc.</p> <p>Alongside these, the construction site presents occupational health and safety hazards: trips, falls, work injuries, and fire risks from welding and smoking.</p>	Negative
Working Conditions	Potential of violation of workers' rights (late payment of wages, wages below minimum wages, lack of sanitary facilities etc.	Negative
Cultural Heritage and Archaeology	No heritage sites are within the project area. However, there's a possibility of unearthing buried artifacts during construction, necessitating a chance find procedure to protect and manage any important discoveries.	Negative

Table S 3: Anticipated E&S Impacts during the Operation Phase

E&S COMPONENT	POTENTIAL IMPACT	TYPE
Physical Environment		
Climate	Hospitals are energy-intensive facilities. The energy often comes from fossil fuels, which release greenhouse gases such as carbon dioxide (CO2) when burned, contributing to climate change.	Negative
	Climate change has the potential to result in water scarcity, intense heatwaves, severe cold spells, and flooding.	Negative

E&S COMPONENT	POTENTIAL IMPACT	TYPE
Noise and Vibration	Noise may be generated from the hospital and from the increased traffic commuting to and from the hospital and ambulance sounds.	Negative
Soil	Accidental or unsafe disposal of waste constitutes a source of soil pollution.	Negative
Hydrology and Hydro-geology	Any accidental or unsafe disposal of oils/chemicals, and unsafe disposal of different waste streams during the operation phase constitute a source of pollution to any underlying groundwater resources.	Negative
Solid and Liquid Wastes	<p>The solid and liquid wastes anticipated from project operation and maintenance include infectious waste, pathological waste, sharps waste, chemical waste, radioactive waste, domestic solid waste, and wastewater.</p> <p>Improper handling of hazardous and medical waste will have adverse impacts on both the environment and human health.</p>	Negative
Socio-economic and Cultural Environment		
Local economy	The project can serve as a catalyst for economic development by attracting other businesses and professionals to the area, also, the project is expected to create job opportunities during the operation phase.	Positive
Infrastructure and Utilities	The new hospital will likely raise utility demand (electricity, water, etc.), straining existing infrastructure. It's also expected to create sewage and waste, stressing current management systems.	Negative
Traffic	The project will result in increased traffic during peak hours, as patients and staff come and go from the hospital which could cause congestion on nearby roads and highways.	Negative
Public Health and Safety	The project is anticipated to have a positive effect on public health because community members can experience better health outcomes with access to better healthcare.	Positive
	Transferring patients from the old to the new hospital can disrupt medical care, especially for those with severe conditions or ongoing treatments. Changes in facilities, providers, records, and approaches might lead to miscommunication and care gaps if not managed well.	Negative
	There is a chance of 10% potentially-damaging earthquake shaking in the project area in the next 50 years.	Negative
	Power cuts or failures pose a significant threat to patients, especially those who depend on electric medical equipment	Negative
Occupational Health and Safety and Labour conditions	Working in a hospital can have a number of impacts on the occupational health and safety. Key concerns encompass physical risks like patient handling injuries and equipment use, along with biological risks such as infectious diseases from patients.	Negative
Gender	<p>Moldova, like many countries, faces issues related to gender discrimination and inequality in the workplace. Some of the specific problems that have been reported include:</p> <ul style="list-style-type: none"> Limited opportunities for women Unequal payments 	Negative

E&S COMPONENT	POTENTIAL IMPACT	TYPE
	<ul style="list-style-type: none"> Harassment and violence 	

During decommissioning, similar environmental and social impacts as observed during initial construction are expected if the hospital or part of it is demolished. These include habitat disruption, soil erosion, air and noise pollution, and potential disturbances to nearby communities. Additionally, unique decommissioning-related impacts are presented in the following table.

Table S 4: Anticipated E&S Impacts during the Decommissioning Phase

E&S COMPONENT	POTENTIAL IMPACT	TYPE
Physical Environment		
Solid and Liquid Wastes	Demolition generates diverse waste like construction materials, debris, electronics, radioactive waste, and possibly hazardous and medical waste. As structures are dismantled, a significant volume of discarded items emerges, with potential environmental risks if not managed properly.	Negative
Socio-economic and Cultural Environment		
Local economy	Hospital decommissioning impacts employees, risking job losses for various healthcare professionals, causing economic hardships and lowered quality of life in the local community.	Negative
	Hospital decommissioning affects local businesses reliant on it - suppliers, retailers, and service providers nearby will be impacted	Negative
	Decommissioning of the hospital will result in potential declines in property values.	Negative
Public Health and Safety	Hospital decommissioning reduces local healthcare access, potentially causing treatment delays and worse health outcomes for residents.	Negative

SIGNIFICANT ISSUES OR OPPORTUNITIES

The primary significance issues that arise during the construction phase are related to the demolition of the existing building, which contains asbestos. When disturbed, asbestos releases tiny fibers into the air, posing a risk to workers' health and air quality. These fibers can be inhaled and may remain in the lungs, leading to potential asbestos-related diseases.

Furthermore, there are additional significant impacts to consider during construction. One such impact involves public health and safety, particularly concerning traffic accidents caused by vehicles moving to and within the project site. Ensuring that drivers adhere to speed limits and restricting public access to construction areas are crucial measures to address these risks.

Occupational health and safety risks are also a concern during construction. These include potential accidents such as trips, falls, work-related injuries, lifting heavy equipment, heat stress, working at heights, and accidental electric shocks.

Moving to the operational phase, the project activities will generate various types of solid and liquid wastes, such as infectious waste, pathological waste, sharps waste, chemical waste, and radioactive waste. If these wastes are not appropriately disposed of, they could have detrimental effects on the environment and people's health, leading to the spread of infectious diseases and exposure to harmful toxins.

In addition to waste management concerns, the relocation of patients from the old hospital to the new one during this phase might cause disruptions in medical care, particularly for those with severe medical conditions requiring continuous treatment.

Moreover, there are significant concerns regarding the potential impact on the occupational health of hospital staff handling hazardous and medical wastes during this phase. Working in a hospital setting under these circumstances poses various health and safety risks

Lastly, it is important to mention the positive impact that this project will have on public health. Its potential to bring about transformative changes in the well-being of the community cannot be understated, primarily through the increase in the availability and accessibility of vital healthcare services to the public.

SUMMARY OF KEY ASPECTS OF THE ESSMP

The key aspects of the ESSMP are included in Table S 5 below.

Table S 5: key aspects of the ESSMP

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
Planning & Construction and Demolition Phase						
Climate	Excessive machinery, electricity, and energy-intensive tasks amplify carbon footprint and worsen climate change with fossil fuel use	<ul style="list-style-type: none"> - Adopt energy-efficient practices & tech to minimize wastage during construction. - 	Contractor	Monitor energy-efficient practices and emissions from machinery during construction.	Weekly	MoH/Project Consultant
Air Quality	Release of asbestos fibers to the air during the demolition of the existing building.	An Asbestos Management plan should be developed to ensure proper and safe handling of asbestos containing materials.	Contractor	Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant
				Monitor the Implementation the Asbestos Management Plan	Daily during demolition activities	MoH/ Project Consultant
	Generation of dust and exhaust emissions due to excavation, grading, and movement of heavy equipment and vehicles.	<ul style="list-style-type: none"> - Use equipment and vehicles in appropriate technical conditions. - Suppress the scattering of dust by sprinkling of water. - Ensure appropriate stockpile management to minimize dust. 		<ul style="list-style-type: none"> - Carry out site inspection for dust and gases. - Review complaints records. 	Daily	MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		<ul style="list-style-type: none"> - Cover truck loads with canvas to avoid dust blow. - Ensure that vehicles adhere to a speed limit of 15km/h. 				
Noise and Vibration	Construction noise may disturb nearby settlements due to equipment, machinery, and worker activities	<ul style="list-style-type: none"> - Ensure vehicles and equipment are switched off when not in use. 	Contractor	<ul style="list-style-type: none"> - Observe and carry out site inspection for noise. - Review complaints records for number of complaints recorded. - Conduct a noise monitoring program to ensure that Ensure noise levels are within the national allowable limits 	Weekly	MoH/ Project Consultant
Soil Pollution	Potential release of asbestos to the soil	An asbestos management plan must be developed to ensure safe removal of asbestos-containing material.	Contractor	Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant
				Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	Project Consultant
Hydrology and Hydrogeology	Accidental oil/chemical spills may pose a	<ul style="list-style-type: none"> - In case of having temporary fuel tanks onsite, use secondary containment tanks. 	Contractor	<ul style="list-style-type: none"> - Check for oil leakage from 	Weekly	MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
	threat to the ground-water quality.	<ul style="list-style-type: none"> - Maintain proper housekeeping. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Clean spills and remediate contaminated areas - Provide a spill kit for containment and clean-up of accidental spills. 		<ul style="list-style-type: none"> construction machinery. - Review solid waste and wastewater manifests to ensure disposal at approved locations. - Monitor the records for any spillage. 		
Solid and Liquid Waste	Potential impacts from im-proper management of waste streams during the demolition and construction phase	An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.	Contractor	Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant
				Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	MoH/ Project Consultant
		<ul style="list-style-type: none"> - Ensure appropriate disposal of solid waste at approved sites - Ensure proper collection and disposal of domestic wastewater. Proper storage of domestic wastewater is in septic tanks and disposal should be at a designated 	Contractor	<ul style="list-style-type: none"> - Carry out site inspections. - Monitor the records for reporting of spillage. - Check for oil leakage from machinery and vehicles. - Check on status of repairs condition of 	Weekly	Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		WWTP in line with national requirements. - Provide a spill kit for containment and clean-up of any accidental spills. - In case of having temporary fuel tanks onsite, use secondary containment tanks. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements.		locations where soil is affected by oil leakage. - Review waste manifests to ensure disposal at approved locations. -		
		- Develop a waste management plan (WMP) - Develop a spill response plan, to control any inadvertent leakage or spill. - Provide workers with proper spill response training		- Check availability of the WMP - Check the availability of spill response plan. - Check training records on the spill response plan.		
				- Review the implementation of the WMP		

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
				- Review records of the Spill Response Plan		
Public Health and Safety	<ul style="list-style-type: none"> - Risk of exposure of the public to construction-related health risks such as falls and equipment-related incidents. - Movement of heavy machinery and vehicles to and from the site may affect passing public. 	<ul style="list-style-type: none"> - Control public access to the site. - Ensure all vehicles are operated by licensed operators. - Ensure adequate maintenance and inspection of vehicles. - Presence of flagman at the entrance and exit of the site. - Ensure that traffic signs are placed. - Prohibit vehicle transit across restricted areas. - Develop security measures to prevent unauthorized access to the construction site. - Implement a GRM. 	Contractor	<ul style="list-style-type: none"> - Check that site entrance is controlled and site is secure. - Monitor the behavior of drivers. - Monitor grievance log and ensure all complaints are addressed. - Observe that traffic signs are in place. - Review drivers' licenses 	Weekly	MoH/ Project Consultant
Biodiversity	Demolition of asbestos-containing structures and improper and unsafe disposal, could directly affect animals and insects in the soil.	An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.	Contractor	Review the Asbestos Management Plan Monitor the implementation of the Asbestos Management Plan	Once before demolition and construction commences Daily during demolition activities	MoH/ Project Consultant MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
	The construction activities may require the removal of trees	Include efforts to relocate or transplant valuable trees to other suitable locations	Contractor	Monitor the removal and relocation of trees	Before construction and demolition activities commence	MoH/ Project Consultant
Infrastructure and Utilities	Possible harm to nearby electrical poles, gas network, and water pipelines may impact power and water supply to the neighborhood.	Obtain gas and water network locations from authorities. If unavailable, conduct a utility survey	Contractor	Review of the layout/ the utility survey	Once before construction and demolition commences	MoH/ Project Consultant
Occupational Health and Safety	The main impact during the demolition of the existing building includes construction site risks, such as ripping, falling, work injuries, etc. as well as fire accidents	An asbestos Management Plan should be developed.	Contractor	Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant
				Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	MoH/ Project Consultant
		Provide induction and training and awareness to all employees regarding risks associated with exposure to asbestos	Contractor	Review of induction and training attendance sheet	Once before demolition and construction commences	MoH/ Project Consultant
		<ul style="list-style-type: none"> - Develop an Occupational Health and Safety (OHS) Plan - Provide adequate training of all workers on the OHS procedures. 	Contractor	<ul style="list-style-type: none"> - Check the contractor has an OHS plan. - Check OHS training records - Check the availability of the GRM 	Once before construction commences	MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		<ul style="list-style-type: none"> - Establish a grievance mechanism - Emergency and evacuation plan shall be prepared. 		<ul style="list-style-type: none"> - Ensure that emergency and evacuation plan has been developed 		
		Ensure all workers are equipped with proper Personal Protective Equipment	Contractor	Conduct regular site inspections	Daily	MoH/ Project Consultant
		<ul style="list-style-type: none"> - Provide a storage area for hazardous materials. - Ensure clear signage is in place. - Ensure that all machineries are turned off and properly stored when not in use. - Prohibit smoking in areas identified as a fire hazard. - Formally alert the Civil Protection and Emergency Situations Service prior to commencement of activities with potential fire hazards. - Ensure that all grievances are recorded and responded to - Fire extinguishers should be available. - Ensure all machines and vehicles are regularly maintained. 	Contractor	<ul style="list-style-type: none"> - Inspect records on injuries or accidents to personnel and the corrective action taken - Inspect records on trainings conducted. - Inspect records of mock up drills on site. - Ensure project area is secure and access is well monitored. - Monitor GRM log and ensure all complaints are addressed. 	Monthly	MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		- First aid kit shall be made available by the contractor on site.				
		Provide all workers with mock-up drills on emergency and evacuation response	Contractor	Review the records of the emergency and evacuation response mock-up drills.	Quarterly	MoH/ Project Consultant
		All workers must be subject to a preliminary medical examination.	Contractor	Review of preliminary medical examination records	Once before construction and demolition commences	MoH/ Project Consultant
		All workers must be subject to a periodic medical examination.	Contractor	Review of periodic medical examination records	Bi-annually	MoH/ Project Consultant
		Develop and implement GRM and encourage open communication and provide a safe and confidential way for workers to report violations.	Contractor	Review of GRM	Once before demolition and construction commences	MoH/ Project Consultant
				Regular reporting of GRM records and actions taken	Monthly	MoH/ Project Consultant
Working Conditions	Possible worker rights violations (late payment, low wages, poor facilities).	Establish clear policies on workers' rights and reporting violations. Provide training on rights and workplace safety.	Contractor	Review of induction and training attendance sheet	Once before construction and demolition commences	MoH/ Project Consultant
			Contractor	Review of GRM	Once before demolition and	MoH/ Project Consultant

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		Develop and implement a GRM and encourage open communication. Conduct regular audits to identify any potential violations.			construction commences	
				Regular reporting of GRM records and actions taken	Monthly	MoH/ Project Consultant
Operation Phase						
Climate	Hospitals heavily depend on electricity, often sourced from fossil fuels, emitting CO2, contributing to climate change	Design hospital with natural lighting and ventilation, use passive heating and cooling principles, integrate renewable energy sources, and include green spaces and gardens.	Design consultant	- Ensure that the final design of hospital incorporates green building principles.	During the planning phase	MoH
		Use energy-efficient practices and technologies to minimize wastage.	Hospital management	Perform regular energy audits for improvements.	Quarterly	MoH
Noise and Vibration	Noise may be generated from the hospital and from the increased traffic commuting to and from the hospital and ambulance sounds	Encourage staff to use low-noise equipment and minimize procedure noise. Provide training on noise reduction	Hospital management	- Observe and carry out regular inspections for noise. - Review complaints records.	Weekly	MoH
		Install sound-absorbing materials and necessary signs.	Hospital management	- Install sound-absorbing materials, noise restriction signs, and "No Bumping Signs."	Once before operation commences	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
Soil Pollution	Accidental or unsafe disposal of waste constitutes a source of soil pollution.	Create a Medical and Hazardous Waste Management Plan for medical and hazardous wastes in line with national laws.	Hospital management	- Review the Medical and Hazardous Waste Management Plan	Once before operation commences	MoH
				- Monitor the implementation of the Waste Management Plan	Weekly	MoH
		Hire a contractor for hospital waste collection and disposal.	Hospital management	- Review contract with contractor	Once before operation commences	MoH
		Maintain records of waste generation, collection, and disposal to prevent illegal dumping.	Hospital management	- Review waste manifests	Weekly	MoH
		Implement proper housekeeping practices at all times Distribute litter bins and containers marked for different waste streams	Hospital management	- Conduct regular inspections	Weekly	MoH
		Train employees on proper chemical and oil handling, storage, and emergency response procedures.	Hospital management	- Review training attendance sheet	Once before operation commences	MoH
		General purpose spill absorbent must be available at hazardous material storage areas	Hospital management	- Conduct regular inspections	Weekly	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		Contain, clean, and dispose of spilled soil as hazardous waste	Hospital management	- Monitor the records for any reporting of spillage.	Weekly	MoH
Hydrology and Hydro-geology	Refer to the mitigation measures and monitoring requirements identified for soil pollution					
Solid and Liquid Waste	Improper management of different waste streams could have adverse environmental impacts	Medical and Hazardous Waste Management Plan must be developed to ensure having a proper storage, transport and disposal of these wastes.	Hospital management	- Review the Medical and Hazardous Waste Management Plan	Once before operation commences	MoH
				- Monitor the implementation of the Waste Management Plan	Weekly	MoH
				- Ensure internal medical waste treatment methods (autoclave, irradiation, microwave) are in place	Once before operation commences	MoH
				- If internal treatment is impractical, hire an authorized contractor for infectious and sharp waste disposal.	Review contract with contractor	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
				- Verify and collaborate with authorities for pathological waste disposal.	Review contract with contractor	MoH
		Coordinate transboundary waste transportation with competent authorities	Hospital management	- Review coordination with authorities	Once before operation commences	MoH
		Develop a Hazardous Waste Transport Plan for transboundary waste transportation, adhering to Moldova and receiving country's regulations	Hospital management	Review the Hazardous Waste Transport Plan	Once before operation commences	MoH
				Monitor the Hazardous Waste Transport Plan implementation.	As needed during operation	MoH
		Distribute marked litter bins and containers for waste streams, and implement proper house-keeping practices.	Hospital management	Conduct regular inspections	Daily	MoH
		Coordinate with authorities or hire a competent contractor for waste collection to approved landfills.	Hospital management	Review contract with contractor	Once before operation	MoH
		Maintain records of on-site waste to prevent illegal dumping.	Hospital management	Review waste manifests	Weekly	MoH
Infrastructure and Utilities	The new hospital will increase utility demands, potentially	Coordinate with relevant authorities for securing additional	Hospital management	Review proof for coordination with authorities	Once before operation commences	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
	straining existing infrastructure	water and power requirements of the Project.				
		Document water and power consumption of the Project	Hospital management	Review water and power consumption reports	Monthly	MoH
	The project's waste might strain existing disposal infrastructure.	Coordinate with authorities for wastewater and solid waste disposal at designated sites	Hospital management	Review proof for coordination with authorities	Once before operation commences	MoH
Traffic	Traffic jams are anticipated due vehicles that will be moving to and from the project site.	Develop a Traffic Management Plan	Hospital management	Review the Traffic Management Plan	Once before operation commences	MoH
			Hospital management	Monitor the implementation of the Traffic Management Plan	Monthly	MoH
Public Health and Safety	Patient transfers can disrupt medical care, especially for those with serious conditions or ongoing treatments. Changes in facilities, providers, and medical records can lead to miscommunication and lapses in care if not managed appropriately.	Develop detailed patient transfer plans for smooth medical care and treatment continuity.	Hospital management	Review of Patient Transfer Plan	Once before transfer of patients commences	MoH
				Monitor the implementation of the Transfer Plan	Daily during the transfer process	MoH
		Train healthcare providers in effective patient transition management to address potential issues promptly.	Hospital management	Review of training attendance sheet	Once before transfer of patients commences	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		Implement a secure electronic medical record system for seamless patient data transfer between hospitals.	Hospital management	Ensure that an electronic medical record system is in place	Once before transfer of patients commences	MoH
	There is a chance of 10% potentially-damaging earthquake shaking in the project area in the next 50 years.	Ensure that the design of the hospital incorporates robust seismic mitigation measures to safeguard the well-being of patients and staff from potential earthquake hazards. Adhere to the national seismic building codes.	Design consultant	Review the final design of hospital and ensure it incorporates seismic mitigation measures	During the planning phase	MoH
	Power cuts or failures pose a significant threat to patients, especially those who depend on electric medical equipment	The hospital should be equipped with an automatic backup power system, such as generators or uninterruptible power supplies (UPS)	Design consultant	Review the final design of hospital and ensure it incorporates an automatic backup power system.	During the design phase	MoH
			Hospital Management	Ensure that an automatic generator or UPS is in place.	Once before operation	MoH
			Hospital Management through a Maintenance Contractor	Examine records of routine maintenance activities	Monthly	MoH
Occupational Health and Safety	The project can impact occupational health and safety with	Develop and implement an Occupational Health and Safety (OHS)	Hospital management	Ensure that the OHS Plan is in place	Once before operation commences	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
	physical and biological hazards.					
Decommissioning Phase						
Solid and Liquid Waste	Demolition generates various waste types with potential environmental consequences if not managed properly.	Refer to the mitigation measures and monitoring requirements identified for the construction and demolition, and the operation phases				
Local economy	Hospital decommissioning can lead to job losses for healthcare professionals, causing economic hardships in the local community.	Provide job placement assistance to displaced healthcare professionals, collaborating with healthcare facilities for smooth transitions.	The Hospital Management	Monitor job placements of affected healthcare professionals through the assistance program.	Six months before decommissioning commences	MoH
	Hospital decommissioning will impact nearby businesses, suppliers, retailers, and service providers.	Establish a transition assistance program for affected businesses, providing financial support, training, and resources to adapt to the hospital's closure.	The Hospital Management	Track and monitor the transition assistance program	Six months before decommissioning commences	MoH
	Decommissioning of the hospital will result in potential declines in property values.	Explore options for repurposing the hospital building or the site itself to maintain its value and relevance to the community.	MoH	Conduct a community survey to assess feedback on repurposing efforts.	Quarterly during the last year of operation	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
Public Health and Safety	The closure of a hospital can deeply and extensively affect the nearby community, causing decreased availability of crucial healthcare services. As a result, residents may experience delays in receiving necessary treatment, potentially resulting in inferior health outcomes for them.	Establish alternative healthcare facilities or clinics in the vicinity. These facilities should offer essential medical services and treatments that are readily accessible to residents	MoH	Regularly monitor and track the progress of the establishment of new healthcare facilities or clinics	One year before de-commissioning commences	MoH
Gender	Moldova experiences gender discrimination and workplace inequality, with limited opportunities, unequal pay, and harassment.	Develop and implement an equal pay policy	Hospital management	Ensure fair and equal compensation for all employees.	Monthly	MoH
		Implement measures to promote and support women's leadership positions	Hospital management	Ensure that positions are awarded based on qualifications.	During recruitment process	MoH
		Develop a GRM to receive and facilitate resolution of workers.	Hospital management	Review GRM	Once before operation commences	MoH
			Hospital management	Monitor GRM log and ensure all complaints are resolved.	Monthly	MoH

ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY
		Conduct workshops or training sessions to sensitize employees about gender-related issues	Hospital management	Check training records for training of workers on gender issues.	Once before operation commences	MoH

RESIDUAL IMPACTS

The identified environmental and social impacts of the project can largely be controlled through appropriate environmental management practices. However, there are still concerns during the construction phase, particularly regarding occupational health and safety especially when dealing with asbestos removal.

In the operational phase, there are enduring impacts to consider, such as occupational health and safety particularly due to handling of medical and hazardous waste and materials, and the disruptions in medical services during the transition of patients to the new hospital.

During the decommissioning phase, the main residual impact includes limited access to healthcare services, resulting in delays in essential treatment and potentially leading to poorer health outcomes for the community. This situation becomes particularly critical if there are no other healthcare facilities in the area with comparable qualifications and standards.

APPROACH FOR MANAGING THE ENVIRONMENTAL AND SOCIAL ASPECTS INCLUDING MONITORING ACTIVITIES

The approach for managing the environmental and social aspects of the project began with a comprehensive assessment of the project area's environmental and social baseline. This involved identifying and defining the importance and sensitivity of various environmental and social resources and receptors that could potentially be impacted.

The next step was to assess all environmental and social impacts using a detailed matrix that took into consideration impact magnitude, reversibility, duration, extent, and the sensitivity of the receiving receptors.

Once the significance of the anticipated impacts was determined, a set of mitigation measures was developed to address and minimize these impacts to the maximum extent possible. These measures were carefully designed to mitigate and eliminate adverse impacts on the environment and society, ensuring responsible and sustainable project implementation.

To ensure the effective and successful implementation of the designated mitigation measures, a number of monitoring requirements has been diligently put in place. These monitoring requirements have been carefully tailored to encompass every crucial aspect of the project, ensuring that all identified mitigation measures are effectively and proactively executed by the diverse set of project parties involved throughout the various phases of the project's life cycle.

CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

The need to construct a new greenfield regional hospital in Balti, Moldova, arises from the current situation that necessitates a significant upgrade in healthcare infrastructure. The existing municipal hospital in Balti faces several critical challenges, rendering it inadequate to meet the evolving demands for modern and quality healthcare services in the Northern region of Moldova.

The shortcomings of the existing hospital facility have become evident as the region's population continues to grow, putting additional strain on the available healthcare resources. As a result, patients often face challenges in accessing timely and specialized healthcare services, leading to a potential decrease in the success rates of medical treatments.

Furthermore, the current hospital's limited capacity and outdated infrastructure present a barrier to providing advanced healthcare technologies and modern organizational care delivery models. This situation hinders the hospital's ability to offer medical services that are on par with European standards, which is a crucial objective for enhancing healthcare outcomes in the region.

Recognizing the pressing need to address these deficiencies and meet the healthcare requirements of the Northern region, the Ministry of Health has proposed the development of a new greenfield regional hospital in Balti. This new facility is intended to serve as a vital component of the broader program aiming to decentralize tertiary health care services and extend them to both the North and South regions of Moldova.

The proposed Balti regional hospital envisions providing high-quality and safe acute tertiary-level hospital services comparable to European standards. With state-of-the-art architectural design, advanced health technology, and modern care delivery models, the hospital aims to significantly improve the efficiency and effectiveness of healthcare services provided to the region's population.

By upgrading healthcare facilities, optimizing resource utilization, and incorporating advanced technologies, the new Balti regional hospital aims to reduce the number of patients seeking medical treatment abroad. This project also seeks to create a conducive working environment for healthcare professionals and a valuable learning environment for students pursuing medical education.

In light of this project's critical importance in addressing the current healthcare challenges in the Northern region of Moldova, the Council of Europe Development Bank (CEB) is considering providing financial support to develop the new regional hospital. However, recognizing the potential for adverse environmental and social impacts associated with greenfield projects, the CEB prioritizes undertaking an Environmental and Social Impact Assessment (ESIA) to ensure that appropriate measures are in place to manage and mitigate these potential impacts effectively. This ESIA will be conducted in accordance with the CEB's Environmental and Social Safeguards Policy (ESSP) and the EU Directive on Environmental Impact Assessment (EIA) as amended..

1.2 E&S ASSESSMENT OBJECTIVES

The objective of this assignment is to conduct a simplified environmental and social impact assessment to identify and evaluate any potential significant future adverse environmental and social impacts associated with the proposed Project. The assessment aims to determine the measures required to prevent, minimize, mitigate, and compensate for adverse impacts and identify environmental and social opportunities that enhance the sustainability of the Project.

2 PROJECT DESCRIPTION

2.1 OVERVIEW OF THE PROPOSED PROJECT

The proposed project entails the construction of a new greenfield regional hospital in Balti, Moldova, with a substantial gross area of approximately 38,000 m². The hospital aims to accommodate 340 inpatient beds and 78 outpatient beds as part of a broader initiative to decentralize tertiary health care services and extend them to Moldova's North and South regions.

The new regional hospital is part of a larger initiative to decentralize tertiary healthcare services, making them more accessible to people in different parts of Moldova. The current municipal hospital in Balti is outdated and oversized, falling short of contemporary standards for quality and safety. Consequently, it struggles to adequately meet the growing demand for tertiary healthcare services in North Moldova.

Given these circumstances, there is a clear need for a modern facility that adheres to advanced architectural and functional standards while incorporating cutting-edge health technology. The new regional hospital in Balti is designed to fulfill this need. Its purpose is to provide the population of the Northern Region with top-quality and safe acute tertiary-level hospital services comparable to the standards found in European healthcare systems. The hospital will adopt modern organizational care delivery models and integrate the latest diagnostic and therapeutic technologies to achieve this.

One key project objective is to reduce the number of patients seeking medical treatment abroad by implementing advanced technologies and raising healthcare capabilities within the country. This new hospital aims to enhance the overall healthcare landscape of Moldova by improving access to high-quality medical care.

Beyond its medical services, the project aims to create a more conducive and improved working environment for all medical staff involved. Also, it seeks to establish a valuable learning environment for students pursuing healthcare education.

2.2 PROJECT LOCATION AND AREA OF INFLUENCE

The selected site for the construction of the new greenfield regional hospital is geographically situated at coordinates 566985.46 meters East and 5290924.75 meters North. The location lies in Balti, in the Northern region of Moldova.

The area identified for the proposed regional hospital is characterized by its topographical features and geographical positioning. The site is bordered by natural landscapes, including gentle undulating terrain and abundant vegetation (See Figure 2-1).



Figure 2-1: Proposed Location for the New Balti Hospital

The city of Balti serves as a significant urban center in the Northern region of Moldova. With its well-established infrastructure, the city plays a crucial role in regional economic activities and offers various cultural and educational amenities. The area surrounding the project location consists of smaller communities, villages, and towns, each with distinct socio-economic characteristics. These communities rely on Balti as a primary center for healthcare, making establishing a new regional hospital essential to cater to the medical needs of the approximately 900,000 inhabitants in the Northern region.

The project site's accessibility is noteworthy, as it benefits from its proximity to major transportation routes, facilitating the efficient movement of patients, medical personnel, and medical supplies. The hospital's strategic positioning ensures seamless access to healthcare services for the entire Northern region, including the Municipality of Balti.

A field visit was conducted to the project site in order to gather first-hand information and insights. The team diligently documented the visit, capturing several photos to record the current conditions of the project site. See Figure 2-2 below.



Figure 2-2: Photos Captured during the Field Visit

2.3 PROJECT OBJECTIVES AND COMPONENTS

As mentioned previously, the primary objective of the Ministry of Health's project is to construct a new tertiary regional hospital that will serve the healthcare needs of the entire Northern region of Moldova. The key components of the project include:

Module 1: The Ambulatory Care Centre (Construction & Equipment):

The Ambulatory Care Centre will function as a hospital with exclusive outpatient beds. It will encompass a comprehensive range of diagnostic and therapeutic services, including a one-day-surgery ward and two fully

equipped laparoscopic operating rooms, along with necessary support services. Notably, this center will focus on facilitating minimally invasive surgeries that require hospitalization of fewer than 24 hours. The center is expected to handle a substantial number of patients, including approximately 60,000 emergency visits, 5,000 one-day-surgery visits, 12,500 haemodialysis sessions, and 199,750 outpatient consultations.

Module 2: Inpatient Wards, Hospital Support Services, and Operating Theatre Equipment (Construction and Equipment):

The second phase of the project involves the construction of a new tower to accommodate nursing care units, admission facilities, reception areas, a lobby, an amphitheatre, kitchen/cafeteria, and laundry/linen services. Additionally, the installation of fully operational operating theaters will be completed, allowing the hospital to conduct approximately 7,400 surgeries and 5,000 deliveries in obstetrics. Once this phase is finished, the hospital will have the capacity for 19,485 admissions and 97,452 hospitalization days per year.

Module 3: Cancer Centre (Construction & Equipment):

The final phase of the project comprises the construction of a cancer center, which will mark a significant improvement in the treatment of cancer patients in the Northern region. This center will establish a vital partnership between the Oncology Institute and Balti Regional Hospital, enhancing cancer care for patients suffering from this disease in the region.

3 ANALYSIS OF ALTERNATIVES

The analysis for this Project addresses the “Project” versus “No Project” alternatives. The “No Project” alternative assumes that the Project will not be developed and, hence, the environmental and social aspects will not vary from prevailing conditions. While, with the accumulative impact of pollution and sandstorms the local environmental conditions will deteriorate rapidly.

With respect to the “Project” alternative, the construction and decommissioning phases of the proposed Project will include disruptions to air quality, noise levels, health and safety, and utilities within the proposed Project site. However, these impacts are manageable, temporary, and limited to the construction and decommissioning phases of the Project.

The operation of the project can include adverse impacts if improperly managed, those impacts are mainly associated with the handling and disposal of medical and hazardous waste. However, the operation of the proposed Project will result in positive potential impacts on public health due to the improved access to healthcare services. Thus, if the project does not proceed, the positive benefits associated with the operation phase of the “Project” alternative will not materialize.

Therefore, although going through with the proposed Project could lead to certain impacts on the environment and the social aspects within the study area, those impacts can be mitigated, and their significance will be minimized.

4 REGULATORY FRAMEWORK

This chapter focuses on the regulatory framework that pertains directly to environmental and social compliance. It outlines the obligations that all parties engaged in the Project must uphold during the construction and operational stages. The chapter also provides a concise overview of the pertinent international agreements and conventions the Republic of Moldova ratifies.

Furthermore, considering that the Project is in the process of securing funding from the CEB, the chapter underscores the environmental and social standards and prerequisites set forth by the CEB and the European Union (EU) Directives that the Project must also abide by.

4.1 RELEVANT NATIONAL INSTITUTIONS

The national and provincial institutional frameworks for environmental and conservation decision making and policy formation are briefly discussed under Table 4-2 below.

Table 4-1: National Environmental Institutions in the Republic of Moldova

INSTITUTE	DESCRIPTION
Ministry of Health (MoH)	The project owner. The central authority responsible for population health protection, and sanitary and epidemiological supervision.
National Public Health Agency	Plays an essential role in safeguarding and improving the public's health through policy formulation, surveillance, health promotion, and coordination of healthcare activities.
Ministry of Environment (MoE)	The official governmental entity responsible for the protection of the environment in the Republic of Moldova. The Ministry is responsible for the approval of the ESIA Study and making sure it complies with the national requirements.
Environmental Agency	Responsible for formulating and implementing environmental policies, monitoring the state of the environment, enforcing regulations, and promoting public awareness about environmental protection.
Ministry of Labor and Social Protection (MoLSP)	The official body responsible for the labor sector in the Republic of Moldova mandated to achieve the objectives related to employers and workers in the country including but not limited to overseeing the affairs of employers and workers, contribute to the organization of the labor market, etc.
Ministry of Culture (MoC)	The official national body responsible for the listing, preservation and evaluation of monuments in the country.
Ministry of Agriculture and Food Industry (MoAFI)	The official body responsible for the development and implementation of agricultural policies and programs in the country. Its primary objective is to support and promote sustainable agricultural practices, ensure food security.
Ministry of Infrastructure and Regional Development (MoIRD)	The central specialized body which promotes state policy in the field of infrastructure and regional development.

INSTITUTE	DESCRIPTION
Moldova National Agency for Regulation of Nuclear and Radiological Activity (NARNRA)	Responsible for regulating and overseeing all nuclear and radiological activities within the Republic of Moldova.
Civil Protection and Emergency Situations Service	In charge of coordinating and responding to various emergencies, including fires, natural disasters, and other incidents that threaten public safety.
Local Governments	National bodies responsible for delivering a range of key public services. The mandates mainly include territorial development and town planning; providing utility services; construction and maintenance of roads, streets, bridges; providing social services to the population; construction and maintenance of social housing; etc.

4.2 RELEVANT NATIONAL LEGISLATIONS

This section lists those legislations that are directly related to the national environmental and social compliance that must be adhered to by all parties involved in the Project throughout the construction and operation phases. These legislations include: (i) those issued by MoE (laws, regulations, decrees, and decisions), and (ii) the relevant national legislations issued by other line ministries.

The table below lists the key legislation and regulator/entity relevant to each of the environmental and social parameter being studied and assessed within this ESIA. Throughout the following chapters, reference to the requirements set out within legislation is provided under each relevant parameter

Table 4-2. Relevant Project's Environmental and Social Laws applied in the Republic of Moldova

LEGISLATION	DESCRIPTION
Environmental Assessment and Management	
Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV.	Provides the basic legal framework for environmental protection, covering the principal environmental media (soil, inland waters, underground areas, atmosphere, natural heritage) as well as biological diversity, waste, toxic substances and plant protection
Law on Environmental Impact Assessment NO. 86 of 2014 (Amending Law on Ecological Expertise and Environmental Impact Assessment, no. 851-XIII of 1996)	Establishes the legal framework for environmental impact assessment, aiming to prevent negative environmental impacts and safeguard public health during the early stages of project execution.
The Law on Ecological Expertise and Environmental Impact Assessment, no. 851-XIII dated 29 May, 1996	Determines targets, tasks and principles of environmental audit, environmental impact assessment, and also the basic rules for organization and application thereof.
Regulation on Consultation with Population in the Process of Development and Adoption of Documents on Territorial Development and Urban Construction (no. 951, October 1997)	Promotes transparent, inclusive, and accountable decision-making for urban development, involving and empowering communities in shaping their future.
Regulation on Ecological Audit of Enterprises (no. 395, April 1998)	Establishes the basis for carrying out environmental audit at operating plant, sets requirements for the documentation thereon and the modalities of coordination and validation thereof.

LEGISLATION	DESCRIPTION
Regulation on Public Participation in Elaboration and Decision-Making in Environment Protection Areas (no. 72, 25 January 2000)	Sets guidelines and procedures to ensure that the public has a voice and can actively contribute to the development and implementation of environmental decisions.
Order No. 20 of the Ministry of Ecology and Natural Resources regarding the issuance of permits in the sphere of nature management and prevention of environmental pollution.	Establishes terms and conditions for industrial fisheries permits, ozone-depleting substances trade, snail/snake/frog catch, medicinal plant collection, and waste management.
Decree No. 381 of the Ministry of Ecology and Natural Resources validating the Regulation on evaluation of environmental damage.	Establishes the modalities of evaluation of environmental damage, including damage to the atmospheric air, resulting from economic activity and calculation of compensation therefore. It establishes calculation formula and order for damage to soil caused by erosion, flooding and pollution by chemicals. The Ministerial Decree establishes also maximum residue limits of pollutants in soil and in the atmospheric air and contains the form of official statement on soil degradation and soil pollution.
Law on Natural Resources (No. 1102-XIII).	Regulates the use, management and protection of natural resources in the interest of ecological safety and economic development
Air Quality	
Law No. 1422-XIII on protection of the atmospheric air	Aims at preservation of the purity of the atmospheric air, improvement of air quality, prevent and reduction of negative atmospheric impact
Regulation No. 381 of the Ministry of Ecology and Natural Resources on calculation of atmospheric pollution.	Outlines guidelines and procedures for determining and assessing the levels of pollutants present in the air.
Law No. 98 of 14 April 2022 on atmospheric air quality.	This law partially shifts the Directive 2008/50/EU of the European Parliament and Council of May 21, 2008 about quality of atmospheric air and measures of its cleaning in Europe
Noise and Vibration	
Health Regulation on Emission Standards for Noise and Vibration during Indoor Commercial Activities	Provides allowable noise levels for indoor commercial activities in different areas including areas with hospitals and health facilities.
NCM E.04.02:2014 (MCH 22.05-2014) Protection against noise	Aims at increasing the protection of buildings, constructions and rooms against noise, as well as at harmonizing with European, national and international standards.
Climate Change	
Law No. 151 "On ecological requirements for projecting of ecofriendly energy-consuming edifices	Establishes legal basis of requirements for eco-design of ecofriendly energy consumption edifices with a view of promotion of sustainable development, energy efficiency and energy saving
Law No. 92 "On thermal energy and promotion of cogeneration"	This Law regulates specific activity of centralized thermal energy supply with a view of improving energy efficiency in economy as a whole and reducing negative environmental impact of energy sector, also due to promotion of cogenerating technologies

LEGISLATION	DESCRIPTION
Law No. 10 "On promotion of use of renewable energy".	Aims at creating a legal framework for the promotion and use of energy from renewable sources. It sets mandatory national targets for the share of energy from renewable sources in gross final energy consumption, as well as the share of energy from renewable sources in the final energy consumption in transport.
Law No. 128 on energy efficiency of buildings	Promotes the improvement of the energy efficiency of buildings, taking into account climatic conditions, requirements related to the internal climate and economic efficiency
Waste Management – Solid, Liquid and Hazardous Waste	
Law No. 209 on waste of 2016 and as amended on 21-07-2022	Establishes legal framework, policy, and measures to protect the environment, public health, and minimize negative impact from waste generation and management. Aims to reduce resource use, enhance efficiency, and mitigate overall environmental impact.
Law No. 787-XII on utility waste	Establishes legal, economic and organizational conditions in the sphere of recycling of utility waste and has as its purpose rational use of natural resources. It regulates the issues of collection, procurement, processing, storage, transportation and use of recyclable domestic and non-domestic waste.
Law No. 1513-XII on sanitary and epidemiological provision of population	aims to establish laws and policies that will ensure the population's health and welfare. It aims to safeguard public health from harmful environmental factors, stop the spread of communicable diseases, and maintain sanitary and hygienic standards in a variety of settings.
Government Decree No. 373 validating the Regulation on the National Register of emissions and pollutants.	A systematized register of data on emissions of pollutants into the air, water, soil and diffused sources, as well as on the transfer of waste and pollutants from waste water outside area.
Governmental Decree No. HG505/2020 validating the Regulation on export and import of hazardous chemicals.	This Regulation aims to: (a) Implement the Rotterdam Convention, ensuring prior informed consent for hazardous chemicals and pesticides in international trade; (b) Establish an export notification procedure and obtain consent for exporting prohibited or strictly restricted hazardous chemical products; (c) Foster collective responsibility and cooperation in international trade to protect human health and the environment; and (d) Promote environmentally sound use of hazardous chemicals.
Government Decree No. 501 validating the Regulation on registration, data reporting and supply of information on waste and waste management.	Regulates waste registration, reporting, and information supply. Imposes responsibility on waste owners for providing data on waste and waste management. Includes data classification, administration, monitoring, and compliance measures.
Ministerial Decree No. 637 on transboundary movement of hazardous waste.	Classifies hazardous substances, validates the Regulation on transboundary waste movement inspection, and implements the Basel Convention on Hazardous Wastes Control.
Ministerial Decree No. 45 validating the Regulation on transportation of hazardous waste and mitigation of consequences of possible incidents	Establishes requirements for the transportation of hazardous substances by all means of transport on the national territory and sets basic provisions for organization, technical support and safety in the process of cargo-handling operations and transportation of hazardous substances.

LEGISLATION	DESCRIPTION
Government Decree No. 99 validating the classification listing of waste (implements Commission Decision 2000/532/EC)	Implements Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to article 1(4) of Council Directive 91/689/EEC on hazardous waste. It validates Classifier of waste, including hazardous waste.
Decision No. HG696/2018 of 2018 for the approval of the Sanitary Regulation on the management of waste resulting from medical activity	Regulates the method of separate collection by waste types, packaging, labeling, temporary storage, transportation within producing institutions, treatment, delivery, disposal and record keeping of waste resulting from medical activities.
Government Decision No.589 "On the Approval of the Road Transport Regulation of Dangerous Goods" of 24 July 2017	Provides the national regulations on the safe and secure transport of dangerous goods including infectious substances
Law No.1163 "On Export Control, Reexport, Import, and Transit of Strategic Goods" of 26 July 2000	Regulates the conditions under which the export, reexport, import and transit of strategic goods may be conducted
Law No. LP132/2012 "On safe nuclear and radiological activities"	The scope of this Law is the safe implementation of nuclear and radiological activities exclusively for peaceful purposes, in compliance with the obligations arising from international treaties to which the Republic of Moldova is a party.
National Policy and Principles for Radioactive Waste Management	Provides principles aimed at ensuring the safe and secure handling, storage, transportation, and disposal of radioactive materials to protect public health and the environment.
Decision No. 388 of 2009 for the Approval of the Regulations on the Management of Radioactive Waste	Establishes a comprehensive framework for the safe and proper management of radioactive waste in the country.
Water Resources and Water Supply	
Law No. 272 On water and its amendment Law No. 162 of 2014	This Law aims at: (a) setting up legal basis for efficient management, protection and conservation of surface water and groundwater; (b) prevention of deterioration of state of water; (c) establishment of water rights; and (d) sufficient water supply of qualitative surface water and groundwater for sustainable, balanced and fair water management.
Law No. 303 "On public service of water supply and sewerage	The scope of this Law is to set legal basis for setting up, organization, management, regulation and monitoring of the functioning of public service of potable water supply, technological water supply, sewerage, effluent waste water discharge and treatment under conditions of continuing and uninterrupted service, accessibility, competitiveness and transparency, with the observance of water quality standards, water safety and environmental protection.
Law No. 182 "On quality of potable water."	Establishes the legal basis for the quality of potable water, as well as measures by the responsible authorities to ensure compliance with the quality of potable water.
Law No. 1402-XV on public municipal services.	Regulates the activity of public municipal services, including water abstraction and supply of potable water, sewage and thermal energy supply.
Law No. 440-XIII on water conservation zones and water belts of rivers and waterbodies	Regulates creation of water conservation zones and littoral water belts of rivers and waterbodies, the modalities of management and protection thereof.

LEGISLATION	DESCRIPTION
Ministerial Decree No. 656 Validating Model Regulation on use of water supply and sewerage systems.	Regulates relations between supplier of water and sewerage services and the consumers. It establishes terms and conditions for communal water supply and sewerage, calculation of the amount of distributed water and the amount of effluent waste water discharge, calculation of water charges and rights and duties of the parties. Dispute settlement between supplier and consumer shall be regulated in accordance with the legislation currently in force
Land Use and Acquisition	
Ministerial Decree No. 703 validating the Regulation on the Ministry of Ecology, Construction and Land Use Planning.	Establishes that the Ministry of Ecology, Construction and Land Use Planning shall be authorized state institution in the sphere of environmental protection, rational management of natural resources, conservation of biological diversity, land use planning and municipal services
Land Code of the Republic of Moldova of 1991 and its amendments	Embraces an extremely comprehensive range of issues relating to land use and management.
Law on the People's Advocate (Ombudsman) NO. 52 of 2014	Ensures the protection of all human rights and freedoms by the public authorities, by the organizations and companies, no matter of the type of property and the legal organizational form.
Moldova Civil Code of 2002 and its amendments of 2003 and 2005	Governs civil matters within the Republic of Moldova. It provides a framework for various aspects of civil law, including contracts, property rights, family law, and obligations.
Law No. 488-XIV on expropriation for public needs.	This Law regulates the issues of expropriation regarded as transfer of property and the right of ownership from private ownership to public ownership, or concession of ownership rights to municipal unit or to the state for the purpose of execution of public works after equitable compensation
Biodiversity	
Law No. 1538-XIII on fund of protected areas.	Establishes legal grounds for setting up and functioning of reserve of protected areas, principles, mechanism of conservation thereof, and also competence and plenary powers of central and local authority, non-governmental organizations and citizens in the aforesaid sphere
Wildlife Law (No.439) and its amendments Law No. 439-XIII of 1995, and Law No. 1257-XV of 2002	Lays down legal grounds for ensuring efficient protection and rational management of wild fauna. It shall not be applicable to domestic animals and captive breeding. Wildlife shall be public property
Labour and Working Conditions	
Labour Code of the Republic of Moldova No. 154-XV from 28.03.2003	This Code regulates labor and subsequent relations. Its objective is to protect the rights and freedoms of parties to labor relations, and identify minimum guarantees of rights and freedoms in the area of labor.
Government Decision No. HG 541 / 2014 of 2014-07-07 regarding the approval of the list of works with heavy, harmful and/or dangerous working conditions, which is forbidden for persons aged up to 18 years and of the maximum allowable	Specifies and approves a list of works with heavy, harmful, and/or dangerous working conditions. This law prohibits individuals under the age of 18 from engaging in these types of work. Additionally, it sets maximum allowable standards for individuals under the age of 18 when it comes to lifting and manually transporting weights. The

LEGISLATION	DESCRIPTION
applicable standards for persons in up to 18 years of age when lifting and manually transporting weights	law aims to protect young workers from potential harm and ensure their safety in the workplace.
LAW No. 5 of 2006 regarding ensuring equal opportunities between women and men	Ensures equal opportunities for both men and women while vehemently prohibiting all forms of discrimination based on gender.
Occupational and Community/Public Health & Safety	
Law No. 186-XVI of 10 July 2008 on Occupational Health and Safety.	Provides regulations and guidelines to ensure the health, safety, and well-being of workers in various industries and workplaces. It establishes the rights and responsibilities of employers, employees, and relevant authorities in maintaining a safe and healthy work environment.
Penal Code NO. 985-XV of 18 April 2002.	Provides a comprehensive set of provisions regarding criminal offenses, their definitions, and the corresponding penalties. The law outlines the rights and responsibilities of individuals involved in criminal proceedings, including suspects, defendants, victims, and witnesses.
Law No. 140-XV of 10.05.2001 on Labour Inspection.	Provides the legal framework for conducting inspections and enforcing compliance with labor laws and regulations in workplaces.
Republic of Moldova Parliament Law NO. LP277/2018 on chemical substances	Governs the obligations of individuals and entities involved in the manufacturing or sale of chemicals. It also includes provisions for banning and restricting the production, sale, import, export, and use of hazardous chemicals. The regulation addresses the classification, labeling, and packaging requirements for chemicals, as well as the establishment and upkeep of a chemical product register. Additionally, it outlines reporting procedures, authorization processes for hazardous chemicals, responsibilities for reporting, and control measures concerning chemicals and mixtures.
Act of the Republic of Moldova on Fire Safety, No. 267-XIII of November 9, 1994	Determines legal, economic and social basis of ensuring fire safety and fire protection in the republic and governs the relations in the field of fire-fighting.
Order of the Government of Moldova of May 12, 2016 No. 589 About the Minimum requirements on health protection and labor safety of the workers who are put risks caused by mechanical vibrations	Transposes the Directive 89/656/EEC of Council of November 30, 1989 about the Minimum requirements on health protection and labor safety when using by workers of individual protection equipment on workplace.
Decision No. 108 of 23 February 2022 approving the Technical Regulation on personal protective equipment.	Provides specific requirements and standards for the design, manufacturing, labeling, and distribution of PPE.
Order No. 314 of 25 March 2020 on the approval of the list of occupations requiring compulsory hygiene training and hygiene training programs	Identifies critical sectors (healthcare, food handling, hospitality, beauty and wellness, childcare, etc.) where hygiene training is mandatory for worker and public safety.

LEGISLATION	DESCRIPTION
Law No. 116 of 18.05.2012 regarding the industrial safety of hazardous industrial equipment.	Establishes the foundations for safe operations at hazardous production facilities, preventing accidents, enabling prompt response and recovery, and safeguarding the population and environment.
Law No. LP108/2020 "On control of the risk of major accidents caused by hazardous substances"	Regulates prevention measures for major accidents involving hazardous substances, ensuring high-level protection for human health and the environment.
Law No. 10 of 2009 regarding state supervision of public health and its amendment Law No. 33 of 2021	Regulates the organization of state supervision of public health, establishing general public health requirements
Archaeology and Cultural Heritage	
Law of Historical Monument Protection (1993)	Aims at preserving and safeguarding the country's historical monuments. The law recognizes the cultural and historical value of these monuments and establishes measures for their protection, conservation, and restoration.
Law No. 413-XIV on culture	Ensures constitutional right of the Moldova nationals to cultural activity and protection of cultural heritage. It regulates the issues of protection and management of cultural heritage
Parliament Law No. 218 of 2010 regarding the protection of the archaeological heritage	archaeological sites, artifacts, and historical remains, recognizing their cultural and scientific significance.
Law on Public Forum Monuments (2011)	Pertains to the establishment, maintenance, and management of public monuments that commemorate significant historical events, figures, or ideas. The law aims to regulate the process of creating and preserving these monuments as public forums for dialogue, discussion, and reflection.
Law on Protection of the National Mobile Cultural Heritage (2011)	Aims to protect and conserve movable cultural assets of national importance, such as artworks, artifacts, historical objects, and collections.
Law on Protection of Intangible Cultural Heritage (2012)	Recognizes the significance of intangible cultural practices, traditions, expressions, and knowledge as important elements of the country's cultural identity.
Traffic	
Road Transport Code, No. 150 of 2014	Sets the legal framework for road transport of goods and people in Moldova, ensuring safety, quality, and environmental protection, while promoting free competition and safeguarding the rights of individuals and entities.
Others	
Law No. 60 of 2012 on social inclusion of persons with disabilities	Ensures the rights of persons with disabilities
Parliament Law No. 121 of 2012 regarding ensuring equality	Prohibits all forms of discrimination and aims for equality among all individuals under Moldova's jurisdiction, regardless of various criteria such as race, nationality, religion, gender, disability, and more.
Constitution of the Republic of Moldova	Outlines several requirements and instructions to protect human rights.

4.3 CEB ENVIRONMENTAL AND SOCIAL REQUIREMENTS

4.3.1 CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP)

The Environmental and Social Safeguard Policy (ESSP) was implemented by the Bank in recognition of the importance of environmental and social factors in sustainable development. The ESSP acts as a thorough framework to make sure that the bank's financing activities adhere to specific standards for safeguarding the environment, promoting social equality, and upholding human rights. The main objectives of the Policy include:

- Support decision-making by the Bank.
- Provide for environmental and social screening and categorisation of Projects.
- Evaluate potential environmental and social risks and adverse impacts to Projects.
- Identify actions to avoid, minimise, mitigate, offset or compensate for adverse environmental and social impacts.
- Provide a mechanism for managing environmental and social risks and adverse impacts throughout the Project cycle.
- Support clients in identifying and managing environmental and social risks and adverse impacts.
- Provide a robust framework for managing the Bank's operational and reputational risks related to environmental and social safeguard matters.
- Facilitate cooperation on environmental and social safeguard matters with joint-financing partners.

4.3.2 CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS

The Bank considers it important that all borrowers have a systematic approach to the management of environmental and social risks and adverse impacts related to the projects receiving CEB financing. The application of appropriate project management mechanisms is essential for ensuring the project's environmental and social sustainability and in contributing to minimising the risk of adverse effects on project implementation, including budget overruns, litigation and reputational risks. To this extent, the Bank introduced two crucial Environmental and Social Safeguard Standards as discussed below.

ESSS 1 – Environmental and Social Safeguard Assessment and Management: this ESSS was established to ensure that projects and activities funded by CEB do not harm the environment and communities, and instead, contribute positively to social well-being. The key objectives of ESSS1 include:

- Identify and assess environmental and social risks and adverse impacts associated with the project;
- Propose and adopt measures to avoid these risks or, where avoidance is not possible, minimize, mitigate, or offset/compensate for adverse impacts on project-affected persons, workers and the environment;
- Support the integration of environmental and social safeguard considerations into the project decision-making process and implementation; and
- Ascertain and foster the project's design compliance with appropriate environmental and social safeguard standards during its operation.

- **ESSS 2 – Land acquisition, economic displacement and involuntary resettlement:** this ESSS provides guidelines for managing involuntary resettlement resulting from project-induced land acquisition and/or restrictions on land-use to include physical and economic displacement. The objectives of ESSS2 include:

- Avoid or, when unavoidable, minimize, involuntary resettlement by exploring alternative project options;
- Mitigate adverse social and economic impacts from project induced land acquisition or restrictions on affected persons' use of, and access to, assets and land;

- Restore or, where possible, improve the livelihoods and standards of living of displaced persons to pre-displacement levels;
- Improve living conditions among physically displaced persons through the provision of adequate housing.

4.3.3 CEB PROJECTS AND LOANS POLICIES AND GUIDELINES

The Bank has established Projects and Loans Policies and Guidelines to provide a framework for managing projects and loans. These policies include the following:

- **Loan and Project Financing Policy (November 2022):** The goal of the policy is to support initiatives that advance sustainability, good governance, and social development. Initiatives in the fields of healthcare, education, housing, infrastructure, and environmental sustainability are given top priority. The CEB encourages project financing that takes into account inclusivity, social cohesiveness, and environmental factors. It provides financial instruments to support these projects, including loans, guarantees, and equity investments.
- **CEB Handbook for the Preparation and Implementation of Projects (March 2023):** Operational manual intended for CEB services and accessible to the Bank's borrowers. It provides, from an operational perspective, the necessary information regarding preparation, financing, implementation and monitoring of CEB loans.
- **CEB Loan Regulations (November 2016):** These regulations outlines the general conditions governing loans granted by the Bank and guarantees thereof.
- **Procurement guidelines (September 2011):** The guidelines outline how contracts for CEB-funded projects should be awarded. Following these guidelines helps the CEB fulfill its financial duties by ensuring that loan funds are used appropriately and that projects are implemented efficiently. Fairness and transparency in public spending are crucial for good governance and project sustainability.

4.4 EU DIRECTIVES

EU directives are legal instruments that the European Union (EU) issues to give instructions and establish shared goals for member states in particular policy areas. EU Directives set objectives that members must meet by passing national legislation or taking the necessary steps. The main EU environmental and social directives relevant to the project include the following:

- **Environmental Impact Assessment (EIA) Directive, 2011/92/EU as amended by 2014/52/EU:** aims to ensure that projects that are likely to have a significant impact on the environment are identified and assessed, within an appraisal process, before these projects proceed to development
- **Habitats Directive, 92/43/EEC:** focuses on the preservation of natural habitats and the safeguarding of wildlife and plant species. It provides a structure for recognizing, conserving, and reviving significant European habitats and species.
- **Water Framework Directive, 2000/60/EC and its amendments:** promotes the sustainable use of water resources, protection of aquatic ecosystems, and improvement of water quality.
- **Groundwater Directive, 2006/118/EC, and its amendment Commission Directive 2014/80/EU:** aims at safeguarding and overseeing groundwater resources in member states. It outlines strategies to hinder and manage groundwater contamination while establishing a structure to monitor and evaluate the quality of groundwater.

- **Air Quality Directive, 2008/50/EC and its amendments 2011/850/EU, and Commission Directive (EU) 2015/1480:** safeguarding and improving air quality across member states. The directive sets standards and objectives for various air pollutants, including particulate matter, nitrogen dioxide, sulfur dioxide, lead, benzene, and carbon monoxide.
- **Environmental Noise Directive, 2002/49/EC, and its amendment Commission Directive EU 2020/367:** aim at safeguarding human well-being and enhancing the quality of life by diminishing exposure to high noise levels in the surroundings. It necessitates member states to evaluate and chart noise levels in significant urban regions, transportation facilities, and other specified locations.
- **Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste:** The objective of this directive is to safeguard the environment, human well-being, and valuable resources. Its aim is to bring the EU closer to its objective of becoming a recycling society by boosting the amount of waste that is collected separately and recycled.
- **Decision 2000/532/EC establishing a list of wastes:** provides a systematic classification and categorization of different types of wastes. The list includes specific codes and descriptions for various types of waste materials, allowing for consistent identification and management of wastes across the European Union
- **Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the Conservation of Wild Birds:** provides a legal framework for the protection of all wild birds in the EU, including their eggs, nests and habitats. It also prohibits the sale, transport for sale, keeping for sale and the offering for sale of live or dead birds and of any readily recognizable parts or derivatives of such birds.
- **EU Council Directive 91/271/EEC - Directive on Urban Wastewater Treatment, and its amendment Commission Directive 98/15/EC:** concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.
- **Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources:** established a common framework for the promotion of energy from renewable sources in the EU and set a binding target of 32 % for the overall share of energy from renewable sources in the EU's gross final consumption of energy in 2030. It also established sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels and lays down rules on financial support to enhance the use of renewable energy usage.
- **Working Time Directive, 2003/88/EC:** lays down minimum safety and health requirements for the organisation of working time.
- **Equality Directive, 2006/54/EC:** aims to guarantee the application of the principle of equal opportunities and fair treatment for both men and women regarding employment and work-related matters.
- **Occupational Health and Safety Framework Directive, 89/391/EEC:** aims to ensure that workplace health and safety are protected. It creates a thorough framework for employers to evaluate and manage occupational risks, put preventive measures in place, and give staff members the necessary training and information.
- **Posted Workers Directive, 96/71/EC and its amendment Directive 2018/957/EU:** aims to prevent social dumping by establishing a list of employment rights for posted workers in the host country.
- **European Works Council Directive, 2009/38/EC:** aims to encourage management and employee transnational dialogue and cooperation within multinational companies operating in the European Union.

- **Directive on the Right to Information and Consultation of Workers, 2002/14/EC and its amendment Directive 2015/1794/EU:** aims to increase employee participation in decision-making within their organizations. The directive establishes the right of employees to information and consultation on significant employment-related issues, including business restructuring, collective layoffs, and work organization. It specifies that employers must create procedures for communication and consultation with employee representatives or, in the absence of such representatives, with the workers themselves.
- **Directive on public procurement, 2014/24/EU:** sets out the guidelines for public procurement processes, including those pertaining to hospital building, equipment, and services. It seeks to guarantee impartial competition and openness in the public procurement procedures.
- **Directive 2000/78/EC – Equal treatment:** general framework for equal treatment in employment and occupation, empowering it to combat discrimination based on religion or belief, age, disability and sexual orientation on the labour market.
- **Directive 90/269/EC – Manual handling of loads:** lays down minimum health and safety requirements for the manual handling of loads where there is a risk particularly of back injury to workers. Definition of the term “manual handling of loads”.
- **Directive 2012/18/EU – Major-accident hazards:** lays down rules for the prevention of major accidents involving dangerous substances, as well as the limitation of their effects on human health and the environment, in order to ensure a high level of protection throughout the Union in a consistent and effective manner.
- **Directive 2009/104/EC – Use of work equipment:** concerns the minimum health and safety requirements for the use of work equipment by workers at work. It places obligations on businesses and employers to take into account potential dangers to operators and other persons using or affected by machines and equipment.
- **Directive 92/58/EEC – Safety and/or health signs:** lays down the requirements for safety and health signs at work that employers must provide where workers are still at risk despite other preventive measures.
- **Directive 89/656/EEC – Use of personal protective equipment:** lays down minimum requirements for the use of personal protective equipment used by workers at work, which are necessary when risks cannot be sufficiently controlled by technical and organizational measures.
- **Directive 89/654/EEC – Workplace requirements:** establishes minimum standards for workplaces that address things like traffic patterns, workroom size, and indoor air quality.
- **Directive 2009/161/EU – Occupational exposure limit values:** establishes limit values for specific substances to ensure that workers' health and safety are safeguarded.
- **Directive 2003/04/EC – Access to Environmental Information:** grants individuals the right to access environmental information held by public authorities. The directive aims to promote transparency and public participation in environmental decision-making processes. It requires public authorities to provide information on a wide range of environmental matters, such as pollution levels, waste management, and biodiversity.

- **Directive 2003/35/EC – Providing for Public Participation:** requires member states to provide opportunities for the public to participate in the development of plans, programs, and policies that may significantly affect the environment.

4.5 INTERNATIONAL AND REGIONAL CONVENTIONS AND TREATIES

Below is a compilation of the International Conventions/Treaties/Protocols (ICTPs) in the field of the environment to which Moldova is a Party.

- United Nations Framework Convention on Climate Change (UNFCCC), 1994.
- Kyoto Protocol, 1997.
- Convention on Biological Diversity (CBD), 1993.
- Convention on the Conservation of Migratory Species of Wild Animals, 1979.
- Agreement on the Conservation of Populations of European Bats, 2001.
- UN Convention to Combat Desertification (UNCCD), 1996.
- The Paris Agreement on Climate Change, 2016.
- Montreal Protocol for the Protection of the Ozone Layer, 1989.
- RAMSAR Convention on Wetlands, 1975.
- UNESCO World Heritage Convention, 1975.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975.
- International Plant Protection Convention (IPPC), 1952.
- Universal Declaration of Human Rights (UDHR), 1948.
- Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), 1992.

4.6 RELEVANT NATIONAL STRATEGIES AND POLICIES

Relevant strategies include **Moldova's National Health Strategy for 2022-2031**, which aims to enhance primary healthcare services, give priority to health promotion and disease prevention, ensure fair access to healthcare, utilize digital health technologies, and prioritize workforce development. The strategy seeks to establish a healthcare system that is resilient and sustainable, addressing the evolving needs of the population while promoting a healthier nation.

The Strategy specifically identifies the construction of the new regional hospitals in the cities of Cahul and Balti as the country's priority projects and key to the sustainable development of the national health system. Through its targeted interventions and comprehensive approach, the Project is poised to play a pivotal role in advancing and attaining the goals set forth in this Strategy, as it will contribute significantly to building a resilient and sustainable healthcare system that addresses the evolving needs of the population and promotes a healthier nation.

4.7 GAP ANALYSIS

The project must be planned and developed to comply with the national laws, but where there are gaps, it must also adhere to stricter standards. The gaps between national legislations and the CEB Environmental and Social Safeguards Policy (ESSP) and Environmental and Social Safeguards Standards (ESSSs) are thoroughly analyzed in Table 4-3.

Table 4-3: Gap identification for National Relevant legislation and CEB ESSP & ESSSs

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
Environmental and Social Impact Assessment	<u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> identify projects requiring an EIA study.	The CEB process for categorising environmental risks is based on the methodology of the EU Directive 2014/52/EU on Environmental Impact Assessment (EIA). In addition, the Bank has distinguished 5 levels of project categorisation according to severity of impacts and magnitude and indicates the level of ESIA study.	No gaps identified
Content of the EIA Study	<u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> outlines the attributes that need to be assessed throughout the EIA study	ESSS1 compiles a list of attributes that should be considered in the assessment, alongside an examination of alternative options and a hierarchy of mitigation measures.	No gaps identified.
Environmental and Social Monitoring and Reporting	There are currently no national laws mandating the development of an environmental and social management plan	The Bank requires the Borrower to monitor and report on the management of environmental and social safeguard issues, through developing an Environmental and Social Safeguards Management Plan (ESSMP)	An ESSMP should be developed for the project.
Climate Change	<u>Law No. 151 "On ecological requirements for projecting of ecofriendly energy-consuming edifices</u> establishes legal basis of requirements for eco-design of ecofriendly energy consumption edifices with a view of promotion of sustainable development, energy efficiency and energy saving. However, there is currently no national legislation in place that mandates the screening of projects to identify potential risks related to climate change	The Bank recognizes the UN Intergovernmental Panel on Climate Change (IPCC) conclusions on climate change and the impact of anthropogenic GHG emissions. The Bank carries out screening of proposed Projects to identify potential climate change risks and impacts as well as opportunities for climate change mitigation and adaptation.	Ensure the project is designed and implemented the project so as to minimise Green House Gas (GHG) emissions, and develop mitigation or adaptation measures to reduce risk of climate change.
Nature and Biodiversity	<u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> requires the evaluation of biodiversity and natural	The Bank recognises the social value of ecosystems and the services they provide to humanity.	No gaps identified. Implement both the

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	<p>habitats impacts to be conducted as an integral part of the EIA.</p> <p><u>Wildlife Law (No.439) and its amendments Law No. 439-XIII of 1995, and Law No. 1257-XV of 2002</u> provide several requirements and instructions for the protection of wild life.</p> <p><u>Law No. 1538 of 1998 on the Fund of State Protected Natural Areas</u>, states that all projects and programs of ecological restoration and planning, administrative and social building, construction of communication networks and other economic objectives in protected natural areas shall be subject by the central authority for environment to state ecological expertise.</p>	<p>The Bank requires assessment of direct and indirect impacts on biodiversity, including habitat loss, degradation and fragmentation, invasive species, overexploitation, hydrological changes, nutrient loading, pollution and incidental take, as well as projected climate change impacts.</p> <p>The Bank prohibits activities in areas of critical habitats are prohibited, unless: (a) there are no predicted measurable adverse impacts; (b) there is no predicted reduction in the population of any recognised endangered or critically endangered species; and (c) any impacts are mitigated</p>	<p>national legislation and the CEB requirements.</p>
Disclosure of E&S safeguards information and public consultation	<p>The <u>Law on Access to Information No. 982-XIV of 2000</u> recognizes the right of individuals and legal entities to request and receive information from public authorities and public institutions.</p> <p>The <u>Regulation on public participation in the development and adoption of environmental decisions, No. 72 of 2000</u> stipulates that Public involvement in the development and adoption of environmental decisions is the social act which guarantees the right to participate in the process of decisionmaking, expressing opinions on the adoption and implementation of the legislative projects and project documentation on planned economic objects and activities that affect or may affect the environment .</p> <p>However, there are no laws in place that specifically mandates public consultation in disclosure of project-related E&S information.</p>	<ul style="list-style-type: none"> ▪ The Bank requires that the Borrower facilitates the availability of environmental information to concerned stakeholders when the Bank deems it appropriate ▪ The Bank requires Borrower to make social impact information accessible to affected stakeholders for their input in Project design, especially for Projects involving land acquisition, economic displacement, or involuntary resettlement. ▪ The Bank will disclose Project-related environmental and social safeguard information. Category "A" and category "B" Projects with an EIA or ESIA will have a non-technical summary available on the Bank's website at least 30 days before the CEB Administrative Council decision. 	<p>Apply the CEB requirements regarding disclosure of E&S safeguards information and public consultation.</p>

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
Sustainability of Land and Water Use	<u>Law No. 272 On water and its amendment Law No. 162 of 2014</u> emphasizes the importance of sustainable water usage in the sense that the needs of present and future generations must be taken into account when using and protecting water. However, there are no laws that address sustainability of land use.	As per the Bank's guidelines, sustainability of land and water use in the project area of the project and in the immediately adjacent areas should be assessed.	Apply the CEB requirements in terms of land use sustainability.
Grievance Mechanism	Moldova does not have specific laws addressing grievance mechanisms for projects. However, <u>Law on the People's Advocate (Ombudsman) NO. 52 of 2014</u> establishes the institution of the People's Advocate in the country. The People's Advocate is an ombudsman-like institution responsible for protecting and promoting human rights and solving complaints, the law also outlines the process for filing complaints and grievances.	As part of the project implementation arrangements, a procedure which foresees the reporting and handling of concerns or complaints of persons who are adversely affected by direct environmental and/or social impacts related to the project's implementation should be established.	No major gaps identified. However, it is important to ensure compliance with the CEB requirements and establish a dedicated grievance system tailored to the project's needs. This mechanism should effectively handle and resolve complaints and issues raised by the local community and workers.
Energy Efficiency (Energy, water, and raw materials)	Addressed under <u>Law No. 151 "On ecological requirements for projecting of ecofriendly energy-consuming edifices</u> , and <u>Law No. 10 "On promotion of use of renewable energy"</u> .	Implement measures for improving efficiency in the consumption of energy and water, as well as other resources and material inputs should be implemented. Moreover, the Bank mandates the integration of the principles of cleaner production into product design and production processes with the objective of conserving raw materials, energy and water, and to include measures to minimise and recycle domestic waste, and to make use of recycled construction waste and other alternatives to new materials where feasible under the project.	No gaps identified. Implement both the national legislation and the CEB requirements.

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
Pollution Prevention	<p>Numerous national regulations govern pollution prevention, encompassing the following laws:</p> <p>Soil:</p> <ul style="list-style-type: none"> ▪ <u>Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV</u> ▪ <u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> ▪ <u>Decree No. 381 of the Ministry of Ecology and Natural Resources validating the Regulation on evaluation of environmental damage</u> <p>Air Quality:</p> <ul style="list-style-type: none"> ▪ <u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> ▪ <u>Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV</u> ▪ <u>Law No. 1422-XIII on protection of the atmospheric air</u> ▪ <u>Regulation No. 381 of the Ministry of Ecology and Natural Resources on calculation of atmospheric pollution</u> ▪ <u>Law No. 98 of 14 April 2022 on atmospheric air quality</u> <p>Waste Management:</p> <ul style="list-style-type: none"> ▪ <u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> ▪ <u>Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV</u> 	<p>The Bank requires the implementation of pollution prevention and control technologies and practices under the project consistent with the environmental principles, substantive standards and practices foreseen in EU Directives on industrial emissions, water and waste management, air and soil pollution, occupational health and safety, and the protection of nature as they can be applied to specific projects.</p> <hr/> <p>The Bank mandates the avoidance of pollution, or, when avoidance is not possible it is essential to minimise or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gas emissions, and minimising and managing waste generation and release of hazardous materials from production, transportation, handling and storage.</p>	<p>No major gaps identified. To effectively manage pollution, adhere to national legislation and CEB requirements, including relevant EU directives.</p>

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	<ul style="list-style-type: none"> ▪ <u>Law No. 209 on waste of 2016 and as amended on 21-07-2022</u> ▪ <u>Law No. 787-XII on utility waste</u> ▪ <u>Law No. 1513-XII on sanitary and epidemiological provision of population</u> ▪ <u>Government Decree No. 373 validating the Regulation on the National Register of emissions and pollutants.</u> ▪ <u>Governmental Decree No. HG505/2020 validating the Regulation on export and import of hazardous chemicals</u> ▪ <u>Government Decree No. 501 validating the Regulation on registration, data reporting and supply of information on waste and waste management.</u> ▪ <u>Ministerial Decree No. 637 on transboundary movement of hazardous waste.</u> ▪ <u>Ministerial Decree No. 45 validating the Regulation on transportation of hazardous waste and mitigation of consequences of possible incidents</u> ▪ <u>Government Decree No. 99 validating the classification listing of waste (implements Commission Decision 2000/532/EC)</u> ▪ <u>Decision No. HG696/2018 of 2018 for the approval of the Sanitary Regulation on the management of waste resulting from medical activity</u> ▪ <u>Government Decision No.589 "On the Approval of the Road Transport Regulation of Dangerous Goods" of 24 July 2017</u> 		

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
	<ul style="list-style-type: none"> ▪ <u>Law No. 1163 "On Export Control, Reexport, Import, and Transit of Strategic Goods" of 26 July 2000</u> ▪ <u>Law No. LP132/2012 "On safe nuclear and radiological activities"</u> <p>Water Management:</p> <ul style="list-style-type: none"> ▪ <u>Law on Environmental Impact Assessment (EIA) No. 86 of 2014</u> ▪ <u>Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV</u> ▪ <u>Law No. 272 On water and its amendment Law No. 162 of 2014</u> ▪ <u>Law No. 1402-XV on public municipal services.</u> ▪ <u>Law No. 1402-XV on public municipal services.</u> 		
Human Rights	<p><u>Constitution of the Republic of Moldova</u> outlines several requirements and instructions to protect human rights.</p> <p><u>Parliament Law No. 121 of 2012 regarding ensuring equality</u> prohibits all kinds of discrimination, and aims to ensure the equality of all persons under the jurisdiction of the Republic of Moldova.</p> <p><u>Law No. 5 of 2006 regarding ensuring equal opportunities between women and men</u>, mandates providing equal opportunities for both men and women.</p>	<p>The CEB requires that all Projects be designed and implemented in a manner to ensure that they are in line with the relevant principles of the Council of Europe Convention for the Protection of Human Rights¹ and Fundamental Freedoms and the European Social Charter².</p>	No gaps identified.

¹ The European Convention on Human Rights was established in 1950 with the primary goal of protecting people's civil and political rights.

² The European Social Charter (known as "the Charter" in its revised form) was established in 1961 with the primary goal of guaranteeing people's social and economic rights.

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	<p><u>Law No. 60 of 2012 on social inclusion of persons with disabilities</u> regulates the rights of disabled people for their social inclusion.</p> <p><u>Law on the People's Advocate (Ombudsman) NO. 52 of 2014</u> guarantees the safeguarding of every individual's human rights and liberties, irrespective of property type or legal organizational structure, through the involvement of public authorities, organizations, and companies.</p> <p><u>Moldova Civil Code of 2002 and its amendments of 2003 and 2005</u>, provides a comprehensive set of instructions that aim at the protection of human rights.</p>		
Conditions and Rights of workers	Addressed under the <u>Labour Code of the Republic of Moldova No. 154-XV of 2003</u>	The assessment should include an overview of the full range of social risks and impacts including conditions and rights of workers, in accordance to the principles of the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms.	No gaps identified.
Protection of vulnerable groups	<p>While there are no specific laws addressing vulnerable groups in the Republic of Moldova, several legislations provide protection for all types of groups within the country. These laws include the following:</p> <p><u>Law No. 5 of 2006 regarding ensuring equal opportunities between women and men</u>, mandates providing equal opportunities for both men and women and prohibits any kind of gender-based discrimination.</p> <p><u>Law No. 60 of 2012 on social inclusion of persons with disabilities</u> regulates the rights of disabled people for their social inclusion, ensuring the possibility of their participation in all areas of life without discrimination, at</p>	The assessment should include an overview of the full range of social risks and impacts including protecting the vulnerable groups.	No major gaps identified. Apply both, the national and CEB requirements to ensure proper protection of vulnerable groups.

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
	<p>the same level with other members of society, having as basic rights and fundamental freedoms</p> <p><u>Parliament Law No. 121 of 2012 regarding ensuring equality</u> prohibits all kinds of discrimination, and aims to ensure the equality of all persons under the jurisdiction of the Republic of Moldova in the political, economic, social, cultural and other spheres of life, regardless of race, color, national origin, ethnic and social status, citizenship, language, religion or belief, age, sex, gender identity, marital status, sexual orientation, disability, health status, HIV status, opinion, political affiliation, wealth, birth or any other criteria.</p>		
Forced labour	Forced labor is prohibited as per provisions of the Labour Code.	The Bank refers to the principles of the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms and the European Social Charter, which prohibit forced labour.	No gaps identified. Ensure the project commits to not employing forced labor in any aspect of its implementation.
Child labour	<u>Labour Code of the Republic of Moldova No. 154-XV of 2003</u> stipulates that the minimum working age is 15.	In order to protect children from harm to their health, safety or morals, ensure that children under the age of 18 are not employed for work under the project. In addition to the above, the Bank refers to the Council of Europe Social Charter, which states that children at least 15 years of age may be employed for light work on condition that their health, safety and morals are fully protected and that they have received adequate specific instruction or vocational training in the relevant sector of activity.	Follow the CEB requirements since the minimum age for employment is 18 years.
Gender equality and non-discrimination	<u>Law No. 5 of 2006 regarding ensuring equal opportunities between women and men</u> , mandates providing equal	The Bank refers to the principles of the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms and the European Social Charter,	No gaps identified. Ensure that the project encourages equal

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
	<p>opportunities for both men and women and strongly forbids any kind of gender-based discrimination.</p> <p><u>Parliament Law No. 121 of 2012 regarding ensuring equality</u> prohibits all kinds of discrimination</p>	<p>which promotes gender equality and prohibit discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status</p>	<p>opportunity for women employment and prohibits any form of discrimination.</p>
Involuntary Resettlement	<p><u>According to the Constitution of the Republic of Moldova</u>, no one's property can be taken unless it is needed for public purposes in situations described in the law and for which prior fair compensation is paid.</p> <p><u>According to Moldova Civil Code of 2002 and its amendments of 2003 and 2005</u> no one shall be forced to surrender one's property other than in a situation of public need and subject to prior fair compensation.</p> <p><u>Land Code of the Republic of Moldova of 1991 and its amendments</u> state that local government shall have the right to purchase land at market price through a voluntary transaction with natural persons and legal entities. Land acquired on the basis of provisions of part one of the present article shall be included in reserve fund for the appropriate purpose. Payment for acquired land shall be made at the expense of the special fund of the mayor's office. The mayor's office shall have the right to sell the land of the reserve fund, grant on lease or allot to peasant farms, associations, cooperatives and other economic entities engaged in agricultural activities.</p> <p><u>Law No. 488-XIV on expropriation for public needs</u> governs expropriation, which involves transferring private property to public ownership or granting ownership rights to</p>	<p>As per ESSS 2, Resettlement becomes involuntary when affected individuals are deprived of the right to decline land acquisition or face limitations on land use, leading to their displacement without consent.</p> <p>The borrower is required to proactively manage project-related land acquisition, economic displacement and involuntary resettlement and to ensure that the actions indicated below are undertaken and documented:</p> <ul style="list-style-type: none"> Consider feasible alternative project options to avoid or at least minimise physical and/or economic displacement, while balancing environmental, social, and economic costs and benefits. Assess the necessary scope of Involuntary Resettlement planning through surveys of land, assets, and affected individuals, evaluating socio-economic conditions related to risks and impacts. Ensure that the resettlement planning process and documentation is proportional to the extent and degree of the impacts. Review the host country's legal framework applicable to project-related land acquisition. 	<p>While no land acquisition is expected, if temporary resettlement becomes necessary, a Resettlement plan/ Livelihood Restoration Plan should be developed.</p>

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
	municipalities or the state for public works, while ensuring fair compensation	<ul style="list-style-type: none"> ▪ Prepare a Resettlement Plan for physical displacement and a Livelihood Restoration Plan for economic displacement. ▪ Disclose the draft Resettlement Plan, or Livelihood Restoration Plan including documentation of the consultation process, in the project area, in a timely manner. ▪ Offer compensation and resettlement entitlements prior to any physical or economic displacement of affected persons in the project. ▪ For projects subject to a Resettlement Plan, monitor and assess resettlement results and their impacts on the standards of living of displaced persons ▪ Incorporate a procedure to address concerns and complaints from involuntarily resettled individuals in the Resettlement Plan/Framework or Livelihood Restoration Plan/Framework. 	
Establishment of Organizations and Association	<u>Labour Code of the Republic of Moldova No. 154-XV of 2003</u> allows workers to join or form trade unions to protect their rights.	The Bank refers to the principles of the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms and the European Social Charter, which state that everyone has the right to freedom of peaceful assembly and to freedom of association with others, including the right to form and to join trade unions for the protection of his interests	No gaps identified.

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSSS)	RECOMMENDED ACTIONS
Community Health and Safety	<p>According to the <u>Parliament Law No. 86 of 2014 concerning environmental impact assessment</u>, the assessment must include consideration of public health aspects.</p> <p>In addition to the above, several national laws outline requirements for the protection of community health. These laws include:</p> <ul style="list-style-type: none"> ▪ <u>Law No. 1515 of 16 June 1993 on Environmental Protection and its amendment Law No. 409-XV</u> ▪ <u>Law No. 131 of 2007 regarding road traffic safety</u> ▪ <u>Law No. 10 of 2009 regarding state supervision of public health and its amendment Law No. 33 of 2021</u> ▪ <u>Law No. 1513-XII on sanitary and epidemiological provision of population</u> 	The Bank requires the Borrower to address Project-related Community Health and Safety matters in accordance with the ESSP and the applicable Safeguard Standards indicated in the Handbook for the Preparation and Implementation of Projects.	No gaps identified.
Building Safety	Included in the national Building Codes	Where the project includes new buildings and structures that will be accessed by members of the public, the Bank requires to consider the incremental risks of the public's potential exposure to operational accidents or natural hazards, including extreme weather events. Where technically and financially feasible, apply the principles of universal access to the design and construction of these new buildings and structures.	Adhere to both, the CEB guidelines and the national building codes, and embrace the principles of universal accessibility when designing and constructing the new hospital.
Traffic and Road Safety	<u>Law No. 131 of 2007 regarding road traffic safety</u> establishes the legal framework for the organization and performance of road transport of goods and people, as well as activities related to road transport on the territory of the Republic of Moldova, in safe and quality conditions,	The bank requires the borrower to identify, evaluate and monitor traffic and road safety risks to project workers and affected communities throughout the project life-cycle, develop measures and plans to address them, and incorporate technically and financially feasible road safety	No gaps identified.

ITEM	NATIONAL LEGISLATIVE REQUIREMENTS	CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP) AND ENVIRONMENTAL AND SOCIAL SAFEGUARDS STANDARDS (ESSS)	RECOMMENDED ACTIONS
	with respect for the principles of free competition and measures to protect the environment, the rights and legitimate interests of natural and legal persons.	components into project design, where applicable, to prevent and mitigate potential incidents on the affected communities.	
Security Personnel	Not found in national laws	When project workers are assigned to provide security to safeguard the borrower's personnel and property (project security workers), the bank requires a comprehensive assessment of the risks posed by these security arrangements to individuals within and outside the project site.	Adhere to the CEB requirements with regards to safety personnel.
Cultural Resources	<p>The country possesses multiple laws that comprehensively govern and safeguard its cultural resources. Such legislation encompasses:</p> <ul style="list-style-type: none"> ▪ <u>Law of Historical Monument Protection (1993)</u> ▪ <u>Law No. 413-XIV on culture</u> ▪ <u>Parliament Law No. 218 of 2010 regarding the protection of the archaeological heritage</u> ▪ <u>Law on Public Forum Monuments (2011)</u> ▪ <u>Law on Protection of the National Mobile Cultural Heritage (2011)</u> ▪ <u>Law on Protection of Intangible Cultural Heritage (2012)</u> 	The Bank mandates projects to preserve cultural resources and refrain from causing any destruction or harm to them. Furthermore, ESSS1 identifies various types of cultural resources.	No gaps identified.

5 PROJECT E&S CATEGORIZATION

This chapter presents the project E&S categorization as per national legislation and CEB Environmental and Social Safeguards Policy. It discusses the categorization outcome as per each to conclude the overall categorization outcome for the project.

5.1 ENVIRONMENTAL SCREENING AS PER NATIONAL LEGISLATIONS

The process for environmental clearance and obtaining the environmental permit for this Project as required by the MoE is stipulated by the Law on Environmental Impact Assessment (EIA) No. 86 of 2014. However, the EIA Law does not identify individual hospitals as requiring an environmental impact assessment study.

5.2 PROJECT CATEGORIZATION AS PER CEB ENVIRONMENTAL AND SOCIAL SAFEGUARDS POLICY (ESSP)

Given that the project will be seeking financing from CEB. Therefore, the MoH wishes to design and manage the project in accordance with good international industry practice to include CEB Environmental and Social Safeguards Policy (ESSP) and Standards, as well as relevant EU Directives.

The CEB process for categorising environmental risks is based on the methodology of the EU Directive 2014/52/EU on Environmental Impact Assessment (EIA). However, based on the EIA Directive, Projects that necessitate environmental impact assessments do not explicitly include hospitals and healthcare establishments. For internal reference the Bank distinguishes five levels of project categorisation as discussed below:

- **Category A:** the Project is likely to cause significant adverse environmental and/or social impacts which may be irreversible, cumulative, diverse or unprecedented, such projects require an ESIA study.
- **Category B:** the Project is considered to have a limited adverse environmental and social impacts, which are generally site-specific, largely reversible, and readily addressed through mitigation measures. Such Projects may be subject to a full ESIA or to an abbreviated assessment focussed on specific environmental and/or social risks and adverse impacts.
- **Category C:** the Project is likely to have minimal adverse environmental and social impacts. Projects that fall under this category do not require an ESIA. However, standard environmental and health and safety precautions may apply to such Projects, e.g., those involving small construction sites.
- **Category FI:** refers to lending operations through financial intermediaries (FIs) which allocate the Bank's loan proceeds to sub-Projects, or to end beneficiaries. For FI loan operations the Bank requires that the financial intermediary have appropriate due-diligence systems in place to ensure that sub-Projects are in line with the ESSP and respect national environmental and social law. To each loan operation categorised as FI, the Bank assigns a risk classification ranging from 1 to 3 (1 being the highest, 3 the lowest) to reflect the estimated degree of environmental and social risk. The risk classification is based on the investment characteristics, the host country's systems and on the Bank's due-diligence of the financial intermediary.
- **Category PI:** refers to programme lending operations administered by a Public Institution (PI) for the financing of sub-Projects within national, regional or municipal investment programmes. Such

programmes are generally implemented within the EU policy framework, and are subject to EU environmental and social requirements including Strategic Environmental Assessment. For PI loan operations the Bank relies upon the implementing institution to ensure that sub-Projects respect the applicable environmental and social law. To each loan operation categorised as PI, the Bank assigns a risk classification ranging from 1 to 3 (1 being the highest, 3 the lowest) to reflect the estimated degree of environmental and social risk. The risk classification is based on the type and scale of the targeted investments and the host country's systems. PI loan operations targeting sub-Projects that are likely to be subject to EIA are categorised as PI-1.

Based on the information available during appraisal by CEB team, the project was categorised as 'Category B' as per the CEB's Environmental and Social Policy (2016). As mentioned earlier, such projects are considered to have a limited number of potentially adverse environmental and social impacts, and may be subject to a full ESIA or to an abbreviated assessment.

Nevertheless, taking into account the potential environmental and social risks associated with the projects, the decision was made to develop a simplified ESIA.

6 SCOPING OF VALUED ENVIRONMENTAL AND SOCIAL COMPONENTS

6.1 SCOPING OF VALUED ENVIRONMENTAL AND SOCIAL COMPONENTS DURING THE CONSTRUCTION AND OPERATION PHASES

A draft register of identified interactions of project aspects (i.e., activities that interact with the environment and constitute the source of impact), potential impacts, and receptors (i.e., environmental and social receivers of the influence of the aspects) has been developed for the planning & construction, as well as the operation phase and is presented in Table 6-1. Moreover, the table specifies the potential environmental and social impacts during both the construction and operational phases of the project that have either been scoped in for further detailed assessment or out and the relevant justification. This scoping of valued E&S components has been carried based on project description, available information and field visits as well as consultant previous experience with similar projects.

Table 6-1: Scoping of Potential Interaction of E&S Receptors with Project Aspects during the Planning & Construction, and Operation Phases

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
Planning and Construction Phase					
Air Quality and Noise	The main impacts on air quality result from construction activities, which release dust and exhaust emissions, and from the demolition of the existing building of the Field Crops Research Institute "Selecția," which may release asbestos fibers.	Planned	Direct	In	Increased level of dust and the release of asbestos fibers will impact the on-site workers, as well as nearby local communities and facilities around the project site.
Climate	During the construction phase, energy-intensive activities involving heavy machinery and electricity consumption contribute to the carbon footprint.	Planned	Indirect	In	A rise in the carbon footprint will contribute to the progression of climate change.
Noise and Vibration	Noise and vibration from machinery and from on-site works and workers.	Planned	Direct	In	Elevated noise levels will impact the patients and staff of the hospital, on-site workers, as well as local communities around the project site.
Topography, Geology, and Geomorphology	Modifications related to topographical features or subsidence will be made due to the demolition of the existing building and construction of the new hospital.	Planned	Direct	Out	Topographical modifications are not anticipated to result in changes to natural surface water flow as the whole area is an urban area with land plots already built-up.
Soil	Risk of soil pollution due to the release of asbestos to the soil.	Unplanned	Direct	In	Asbestos fibers can have negative impacts on soil if the fibers are present in the soil in large enough quantities.

³ Types of impacts include:

1. Direct impacts, which are impacts caused by the action and occur at the same time and place); and
2. Indirect impacts, which are impacts caused by the action and occur later in time or farther removed in the distance, but are still reasonably foreseeable.

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
	Risk of soil pollution due to leakage of oils/chemicals	Unplanned	Direct	In	Any accidental spills of fuel and oil may result in soil pollution.
Hydrology and Hydrogeology	Potential risk of modifications related to hydrology	Planned	Direct	Out	The demolition and construction activities will not include any modifications related to hydrology
	Potential risk of surface water pollution from spill of chemicals or liquid fuels	Unplanned	Direct	Out	There are no surface water bodies close to the project sites
	Risk of pollution of groundwater (if any) due to spilled fuel/oils, wastes – solid, liquid including wastewater generation associated with workforce.	Unplanned	Indirect	In	Release of asbestos fibers to the soil in case of improper disposal, improper handling of waste and wastewater, as well as accidental oil/chemical spills may pose a threat to the groundwater quality especially that the groundwater table is relatively high.
	There is a chance that potentially damaging urban floods may occur in the coming 10 years.	Unplanned	Direct	In	Assessing the potential impacts of floods is crucial, and appropriate mitigation measures should be implemented to safeguard against their adverse effects
Solid and Liquid Wastes	Generation of solid waste and wastewater could entail constraints on the existing disposal utilities.	Planned	Indirect	In	The project is expected to generate a considerable amount of solid waste and wastewater, which could entail constraints on the existing utilities. Accordingly, it is important to ensure that existing utilities would be able to handle the amount of waste generated from the project during the construction phase.
	Improper handling and disposal of asbestos-containing materials could have severe adverse impacts on the environment.	Planned	Direct	In	It is important to ensure the safe removal and disposal of asbestos-containing materials.
Landscape and Land Use	Visual intrusion due to the presence of machinery and/or material lay down areas.	Planned	Direct	In	Disturbance of landscape due to the presence of machinery and/or material lay down areas.
	Project could conflict with formal land use set at the planning level for the area	Planned	Direct	In	The land is currently used by the Field Crops Research Institute "Selectia" for cultivating crops.

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
	and affect land use activities undertaken onsite				Therefore, the development of the project will affect the land use of the site.
Biodiversity	Construction activities could require the removal of trees within the project site	Planned	Direct	In	Construction of the new hospital will most likely require cutting existing trees and disturb existing habitats
	Potential soil pollution from demolition of asbestos-containing structures could affect biodiversity	Unplanned	Direct	In	Soil pollution from demolition of asbestos-containing structure could directly affect animals and insects that live in the soil
Local economy	Temporary generation of work opportunities during construction phase, and temporary economic benefit to local commercial establishments.	Planned	Direct	In	No negative impacts are anticipated. Positive impacts should also be considered as part of the assessment process.
Water Use	Water requirements of the project could entail constraints on the local community.	Planned	Indirect	Out	Water use for construction phase is expected to be limited to workers domestic needs and will be supplied by water tankers. Accordingly, no impacts on water use within the project site are anticipated
Infrastructure and Utilities	Potential damage to electrical poles, gas distribution network, as well as water pipelines and consequently affecting power and water supply to the neighbourhood.	Unplanned	Direct	In	There is a need to address potential impact on infrastructure that might present within the project site.
Traffic	Traffic jams are anticipated due vehicles that will be moving to and from the project site	Planned	Direct	In	There will be a need to use heavy vehicles and machinery during the construction phase that may impact the traffic within the road network of a residential area.
	Risk of traffic accidents due to the movement of vehicles	Unplanned	Direct	In	Traffic accidents may occur due to the movement of vehicles within the road network of a residential area
Land Acquisition and Resettlement	The land required for the construction of the hospital could result in acquisition and resettlement activities	Planned	Direct	Out	No land acquisition or resettlement will take place as part of this project given that the land is registered as state property, and the MoAFI is responsible for providing another land for the Field Crops Research Institute "Selectia".

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
Public Health and Safety	Potential traffic accidents due to movement of vehicles to and within the project site as well as risks on public health and safety due to access to construction locations.	Unplanned	Direct	In	Traffic accidents and access of local community members to the construction site could result in major health and safety consequences
Occupational Health and Safety	Several occupational health and safety risks would arise on the construction site especially in case of unsafe working conditions	Planned	Direct	In	Occupational health and safety issues are of concern and require assessment during any construction works.
Gender	Potential impacts with regards to gender include unequal pay for equal work, and harassment or discrimination in the workplace	Unplanned	Direct	Out	No negative impact on gender is expected given that the majority of workers during the construction phase are anticipated to be male workers.
Child Rights	Child labor is a serious issue that can have negative impacts on the physical and mental well-being of children, as well as on their education and future opportunities. Children who work in hazardous conditions may be at risk for injury or illness, and may miss out on the opportunity to attend school and receive an education	Unplanned	Direct	Out	No child employment is anticipated and no negative impact on the rights of the child is expected.
Working Conditions	Potential of violation of workers' rights	Unplanned	Direct	In	These violations can have serious consequences for workers, including lost wages, lost benefits, and physical or emotional harm. Employers have a legal responsibility to provide a safe and fair working environment, and to comply with all applicable laws and regulations related to workers' rights.
Archaeology and Cultural Heritage	Risk to archaeological or cultural heritage sites (if any).	Unplanned	Direct	In	Construction activities could damage/disturb potential archaeological remains buried in the ground.
Operation Phase					

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
Climate	Hospitals are power-demanding establishments that rely on electricity to operate crucial functions.	Planned	Indirect	In	The energy often comes from fossil fuels, which release greenhouse gases such as CO ₂ when burned, contributing to global warming.
	Climate change has the potential to result in water scarcity, intense heatwaves, severe cold spells, and flooding	Unplanned	Direct	In	Impacts related from climate change on the hospital must be assessed and mitigation measures should be identified.
Air Quality	Impacts on air quality due to dust sources or components that produce air emissions	-	-	Out	The operation of the project will not involve any activities leading to air emissions and impacting quality.
Noise and Vibration	Elevated noise levels may be generated from the new hospital	Planned	Direct	In	The new hospital is expected to increase the noise levels.
Topography, Geology, and Geomorphology	Modifications related to topographical features or subsidence	-	-	Out	Modifications related to topographical features or subsidence will not be carried out during operation phase and consequently no impacts are anticipated on this parameter.
Soil	Accidental or unsafe disposal of waste constitutes a source of soil pollution	Unplanned	Direct	In	Proper handling and disposal of works is needed
Solid and Liquid Wastes	The project is expected to generate large amounts of different waste streams. Improper handling and disposal of such wastes could entail constraints on waste disposal utilities.	Planned	Direct	In	it is important to ensure safe waste collection, transport, and disposal.
Hydrology and Hydrogeology	Potential modifications related to hydrology	-	-	Out	There are no impacts with regards to hydrology during the operation phase
	Accidental or unsafe disposal of waste constitutes a source of pollution to any water bodies	Planned	Direct	Out	There are no surface water bodies close to the project sites
	Accidental or unsafe disposal of waste constitutes a source of pollution to any underlying groundwater resources.	Planned	Direct	In	Proper handling and disposal of wastes is needed

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
Landscape and Land Use	Project could conflict with formal land use set at the planning level for the area and affect land use activities undertaken onsite	Planned	Direct	Out	There will be no impacts on land use during the operation phase, as the Field Crops Research Institute's activities and building will be relocated to a different area.
Biodiversity	General impacts from operational activities on biodiversity	-	-	Out	Hospital operations are not known to have any negative effects on biodiversity.
Local economy	The project can serve as a catalyst for economic development by attracting other businesses and professionals to the area, also, the project is expected to create job opportunities during the operation phase.	Planned	Direct	In	There are no adverse impacts on local community during the operation phase. However, positive impacts should also be considered as part of the assessment process.
Existing utilities and infrastructure	Electricity, and water requirements, as well as waste disposal can put a strain on the existing infrastructure.	Planned	Direct	In	Additional measures and requirements to be applied during the operation phase to prevent strain on the existing infrastructure.
Traffic	The project is expected to increase the traffic jam	Planned	Direct	In	Additional measures to be applied during the operation phase to decrease traffic to the greatest extent possible
Public Health and Safety	The project is anticipated to have a positive effect on public health because community members can experience better health outcomes with access to better healthcare.	Planned	Direct	Out	There are no adverse impacts on public health and safety during the operation phase
	The transfer of patients from the old hospital to the new hospital can cause a disruption in the smooth continuity of medical care.	Planned	Direct	In	Impacts from the transfer process should be assessed to prevent any medical care disruption.
	The accessibility of patients could be influenced by the placement of the new hospital.	Unplanned	Direct	Out	The new hospital's convenient location near the old hospital ensures easy access for the local community, and its proximity to public transport further enhances accessibility for patients and visitors.

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT ³	SCOPED IN/OUT	JUSTIFICATION
	Power cuts or failures pose a significant threat to patients, especially those who depend on electric medical equipment.	Unplanned	Direct	In	Impacts from unplanned events such as power cuts, must be further assessed.
	There is a chance of potentially-damaging earthquake shaking in the project area in the next 50 years.	Unplanned	Direct	In	Evaluating the potential impacts of earthquakes and assessing appropriate measures is essential for ensuring the safety and resilience of the project
Occupational Health and Safety and Labour conditions	Working in a hospital can have a number of impacts on the occupational health and safety	Planned/Unplanned	Direct	In	Additional measures to be applied during the operation phase to minimize these risks and protect staff.
Child Rights	Child labor is a serious issue that can have negative impacts on the physical and mental well-being of children, as well as on their education and future opportunities. Children who work in hazardous conditions may be at risk for injury or illness, and may miss out on the opportunity to attend school and receive an education	Unplanned	Direct	Out	No child employment is anticipated and no negative impact on the rights of the child is expected.
Gender	Potential impacts with regards to gender include unequal pay for equal work, and harassment or discrimination in the workplace	Unplanned	Direct	In	Additional requirements should be in place to prevent inequality, harassment or discrimination
Cultural Heritage and Archaeology	General impacts from hospital operations on Cultural Heritage and Archaeology.	-	-	Out	Operations of hospitals are not known to affect cultural heritage and archaeology

6.2 SCOPING OF VALUED ENVIRONMENTAL AND SOCIAL COMPONENTS DURING THE DECOMMISSIONING PHASE

The decommissioning phase occurs when the hospital reaches the end of its useful life or is no longer operational. During this phase, the focus is on safely shutting down the facility and managing the resulting impacts. At this point, the available options for the decommissioning phase of the hospital are not yet clearly defined. Decommissioning options include the following:

- Repurposing: Instead of complete demolition, the hospital facility or certain parts can be repurposed for other uses.
- Demolition and Site Reclamation: If the hospital is beyond repair or repurposing, it may need to be demolished. In this case, proper demolition practices and waste management should be employed. After demolition, the site can undergo reclamation, where efforts are made to restore the land to its natural state or prepare it for redevelopment.

If the decision is made to demolish the hospital or a portion of it during the decommissioning phase, it is expected that the environmental and social impacts would resemble those experienced during the initial construction phase. These impacts may include habitat disruption, soil erosion, air and noise pollution, as well as potential disturbances to nearby communities due to demolition activities.

However, it's important to recognize that the decommissioning process itself introduces additional impacts that are distinct from the construction phase. The valued environmental and social components are presented in Table 6-2 below.

Table 6-2: Scoping of Potential Interaction of E&S Receptors with Project Aspects during the Decommissioning Phase

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT	SCOPED IN/OUT	JUSTIFICATION
Solid and Liquid Wastes	Demolition generates a considerable amount of waste, including construction materials, debris, electronic waste, radioactive waste, and potentially hazardous and medical waste and materials.	Planned	Direct	In	Proper waste management and disposal procedures must be employed to minimize environmental and health risks.
Local Economy	Decommissioning will adversely affect local employment.	Planned	Direct	In	Job loss due to decommissioning can lead to economic hardships, reduced quality of life, and increased social challenges within the community.
	Decommissioning may have economic repercussions for the local economy.	Planned	Direct	In	Decommissioning will affect businesses that rely on the hospital's presence, such as suppliers, nearby retailers, and service providers

RECEPTOR	POTENTIAL IMPACTS	TYPE OF ACTIVITY	TYPE OF IMPACT	SCOPED IN/OUT	JUSTIFICATION
Public Health and Safety	Decommissioning will impact healthcare access for residents.	Planned	Direct	In	Impacts on healthcare access should be addressed especially if there are limited alternative healthcare facilities in the area.

7 ESIA METHODOLOGY

This chapter describes the approach and methodology used to assess the environmental and social impacts of the Project. The chapter describes the ESIA assessment methodology, including:

- Methodology for assessment of the baseline environmental conditions; and
- Methodology used to assess the potential environmental impacts of the Project - including the approach to determining significance, development of mitigation measures and the assessment of residual effects;

7.1 PROJECT DESCRIPTION AND ANALYSIS

The Project description was developed to identify the relevant associated activities and operations including any Project alternatives.

The objective of the Project analysis is to highlight the activities and infrastructures related to the Project that shall be sources of impact during the implementation and ensure that the impact assessment focused on those issues that are most important for design, decision-making and stakeholder interest.

Sources of impact are activities, products, infrastructures, or services related to the Project that can interact with the receptors in the Project area and generate impacts.

The interest of identifying Sources of Impact is to define avoidance, reduction or compensatory measures intervening as close as possible to the source to reduce the intensity of the impact or to eliminate impacts or compensate impacted stakeholders.

7.2 ANALYSIS OF ALTERNATIVES

This section describes the analysis of alternatives related to the Project implementation. For the purpose of this project, alternatives considered was the "Project" versus "No Project Alternative".

7.3 IDENTIFYING THE REGULATORY FRAMEWORK

The ESIA addressed the legislative aspects of the proposed Project and a review of national and international guidelines relevant to this Project was carried out. Moreover, a gap analysis was carried out to identify any existing gaps and deficiencies between the national legislation and CEB Environmental and Social Safeguards Policy. The followings were addressed specifically:

- Review of the national environmental and social regulations and requirements including relevant strategies and policies, as well as relevant international and regional conventions and treaties signed and ratified by the Republic of Moldova.
- Outline the regulations relevant to protecting the human and natural environment.
- Review of the CEB Environmental and Social Requirements, and EU Directives.
- Preparation of a gap analysis of the CEB environmental and social requirements in a tabular format.

7.4 BASELINE DATA COLLECTION METHODS

As part of the ESIA process, the baseline environmental and social conditions of the Study Area were established. Describing the baseline includes identifying and defining the importance and sensitivity of the various environmental and social resources and receptors likely to be impacted, i.e., within the Study Area. Understanding the value or sensitivity of the resources and receptors to impacts and changes is an important consideration when determining the significance of effects, and allows for better identification of the most appropriate measures that could be employed to avoid impacts, and to mitigate any adverse impacts.

The description of environmental baseline conditions has considered a wide range of data and information gathered from various sources, including:

- Desk-based studies and literature reviews;
- Data from statutory and non-statutory stakeholders; and
- Field surveys and site investigations.

These studies have covered all the environmental aspects related to the Project as defined within the Terms of Reference Report (ToR). The baseline conditions are treated as those conditions which would prevail in the absence of the Project.

Studies of the environment baseline are described in Chapter 4 to include the following: Physical Environment (climate and meteorology, geology and geomorphology, topography, hydrology and hydrogeology, landscape and land use, soil, air quality and noise, and seismic conditions), Biological Environment (biological zones, flora and fauna, and protected areas), and Socio-economic and cultural environment (demography, social composition, land ownership and tenure, economic activities, health and education services, gender issues, infrastructure and utilities, vulnerable groups, touristic areas, and archaeology and cultural heritage).

7.5 IMPACTS EVALUATION APPROACH

The impact assessment process took into consideration direct, indirect, planned, or unplanned (accidental) impacts during the Project's construction and operation phases.

The ESIA, where appropriate, considered the impact of the proposed Project infrastructures and activities, but also included an assessment of the impacts linked to associated facilities such as access roads, networks, control / process stations, workers housing etc. An assessment of potential cumulative impacts linked to known, likely or foreseen developments within the Area of Influence was also conducted.

A preliminary identification of impacts has been conducted at the scoping stage. Based on the additional information obtained, the impact evaluation was furthered, and the experts conducted an evaluation and identified adapted mitigation measures. The key steps of the impact assessment phase are summarized below in Figure 7-1.

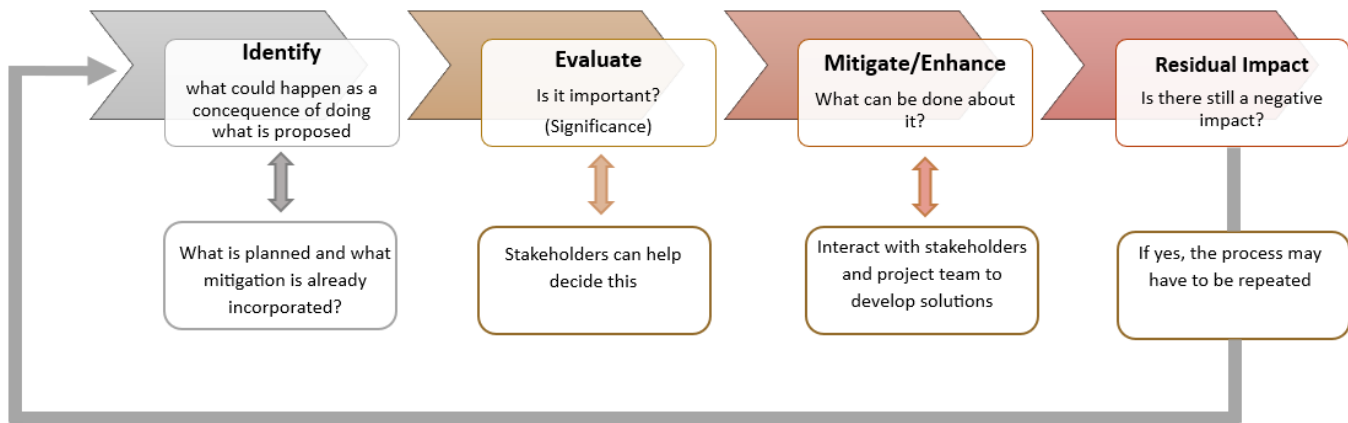


Figure 7-1: Impact Identification & Evaluation Process

The overall impact assessment methodology ensured that all potentially significant impacts presented are assessed in a concise, coherent, and consistent manner and the impact assessment methodologies adopted for each specialist discipline assessed within the scope of the ESIA. The team used a standardized approach to reach an accurate identification and assessment of potential impacts. The assessment considered both the construction and operational phases of the development, over the short, medium, and long term.

It is important to note that impact prediction considered any mitigation or control measures that are initially part of the Project design (e.g., acoustic enclosures for major equipment). Additional mitigation measures aimed at further reducing predicted impacts will then be proposed where necessary or appropriate.

The evaluation of the level of impact based on the magnitude of the change to the environment or social components, the geographical extent of the change, the duration, the sensitivity of the receptor and the likelihood of the impact.

Impact intensity or magnitude:

Defines the strength of the Project impact. It reflects the importance of the changes that will potentially be generated by the Project on a given component. The intensity value can be:

- **Strong:** the impact leads to significant changes in the component;
- **Moderate:** the impact generates perceptible changes but not in such a way as to completely and irreversibly reduce or damage the characteristics of the component;
- **Weak:** the impact causes only slight changes for the impacted component, not modifying its characteristics or use.

(Geographical) Extent of impact:

Extent of impact measures the area or space potentially affected by the impact. It varies from:

- **Regional:** total change and felt by 100% of the population of the study area,
- **Local:** partial change felt by the surrounding population,
- **Point:** very localized modification perceived by a small portion of the population.

The duration of the impact:

- **Long Term:** continuous or regular change that is characterized by a notion of irreversibility or very long term after the project.
- **Temporary:** change over a few hours, days, or weeks during a phase of the project.

The sensitivity of the environmental or social component concerned by the impact:

- **Low:** A low-sensitivity, or low intrinsic value component that is resilient to change or of limited interest.
- **Medium:** Medium-sensitive, change-resilient component.
- **High:** Component of major interest for the Area of Intervention, or already strongly subject to external pressures.

The reversibility of the impact

- **Reversible:** applies to impacts whose significance will be reduced and disappeared over time (either naturally or artificially), once the impacting activity ceases; and
- **Irreversible:** applies to impacts whose significance will not be reduced nor disappeared over time (either naturally or artificially), once the impacting activity ceases.

The Significance level of the impact is the result expressed by the combination of the previous criteria. It can be either:

- **Severe:** the impact goes beyond accepted limits or standards, leading to significant and harmful consequences
- **High:** an accepted limit or standard may be exceeded because of the project, or highly valued or sensitive resource/receptors are affected.
- **Medium:** the impact magnitude is within applicable standards but falls somewhere in the range from a threshold below which the impact is minor, up to a level that might be just short of breaching a legal limit.
- **Minor:** the resource/receptor will experience a noticeable impact, but the impact magnitude is sufficiently small and/or the resource/receptor is of low sensitivity/vulnerability/importance. In either case, the magnitude of the impact should be well within applicable standards.
- **Negligible:** the resource/receptor (including people) will not be impacted by the project, or the predicted impact is imperceptible.

Beyond the impacts identified for the proposed project, cumulative impacts have also been considered into the impact analysis and considered in a separate chapter. The cumulative impacts consider all the infrastructure of the sanitation Project, but also, and to the extent possible, other ongoing or planned projects or activities, which can cause impacts in addition to those of this Project.

Eroare! Fără sursă de referință. below presents the impact assessment grid, according to the intensity, extent, and duration of the impact, crossed with the value of the environmental or social component concerned.

Table 7-1: Impact Assessment Matrix to determine Impact significance

Impact level (negative)	Severe	High	Medium	Minor	Negligible
Impact level (positive)	Severe	High	Medium	Minor	Negligible

			Value/Sensitivity of the impacted component					
Intensity / Magnitude	Extent	Duration	Positive Impact			Negative Impact		
			Low	Medium	High	Low	Medium	High
Severe	Regional	Long Term						
		Temporary						
	Local	Long Term						
		Temporary						
	Point	Long Term						
		Temporary						
Strong	Regional	Long Term						
		Temporary						
	Local	Long Term						
		Temporary						
	Point	Long Term						
		Temporary						
Moderate	Regional	Long Term						
		Temporary						
	Local	Long Term						
		Temporary						
	Point	Long Term						
		Temporary						
Weak	Regional	Long Term						
		Temporary						
	Local	Long Term						
		Temporary						
	Point	Long Term						
		Temporary						

Depending on the nature of the impact assessed, the evaluation will be qualitative or quantitative. The impacts evaluation will also consider the outputs of stakeholder consultations.

Following the impact assessment, mitigation, and management measures to address any impacts that have potentially significant impacts were developed, to determine if there is the risk that residual impacts are still likely to occur. Accordingly, any impacts that remain after mitigation measures have been applied (including mitigations incorporated into the Project's basic design and those developed in addition to the basic design) were identified as "Residual Impacts" and their significance were also assessed.

Moreover, and as part of the impact analysis, potential cumulative impacts arising during the Project implementation were identified. The cumulative impact analysis was conducted based on the identified current and future planned activities within the Project area, their influence on each environmental aspect, and derivations from the direct and indirect impact analysis.

8 ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS

The aim of describing the baseline conditions is to assess the current environmental and social (E&S) status (baseline) of the planned Project area and its surroundings, including E&S any previous use of the areas planned to be occupied by the Project.

This chapter describes the E&S baseline conditions characterized based on a field visit and review of secondary resources (i.e., existing literature/documentation). Accordingly, the chapter first identifies the study area and delineates the Area of Influence (Aol) where E&S impacts are anticipated was delineated. It then presents the documented physical, biodiversity, socio-economic, and archaeological baseline conditions.

8.1 AREA OF INFLUENCE

The Aol is considered to represent the area affected by the Project implementation and where E&S impacts may arise. The Aol extends beyond the Project's footprint and is delineated by a buffer of 500 meters around the Project site as presented in Figure 8-1. This area is considered to cover the extent of potential E&S impacts to be caused by the construction and operation of the Project on the physical, biological, and socio-economic parameters of as well on cultural/archaeological resources.



Figure 8-1: Area of Influence (Aoi)

8.2 PHYSICAL ENVIRONMENT

8.2.1 CLIMATE AND METEOROLOGY

Balti is known for relatively warm summers, and cold, snowy, and windy winters, and it is partly cloudy year-round. Table 8-1 below displays the recorded levels of precipitation, temperature, and wind speed in Balti, based on 30 years of hourly weather model simulations.

Table 8-1: Climate data for Balti (Meteoblue, 2023)

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Mean Daily Maximum Temperature (°C)	1	3	9	16	22	25	28	28	22	16	9	3
Mean Daily Minimum Temperature (°C)	-4	-4	0	5	11	14	16	15	11	6	1	-3
Rainfall (mm)	33	30	33	39	47	64	45	38	42	27	32	33

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Average Wind Speed (Km/hr)	20	22	20	15	13	13	12	12	13	14	17	19

The average annual precipitation varies between 307 mm – 960 mm per year. The majority of precipitation occurs in the form of rainfall and snow accounts for as little as 10%.

As depicted in the accompanying figure, it becomes apparent that the wind direction in Balti exhibits a high degree of variability. The visual representation vividly illustrates the ever-shifting nature of the wind patterns within the region. Instead of following a consistent path, the wind in Balti meanders in various directions, displaying a lack of a predominant or predictable pattern.

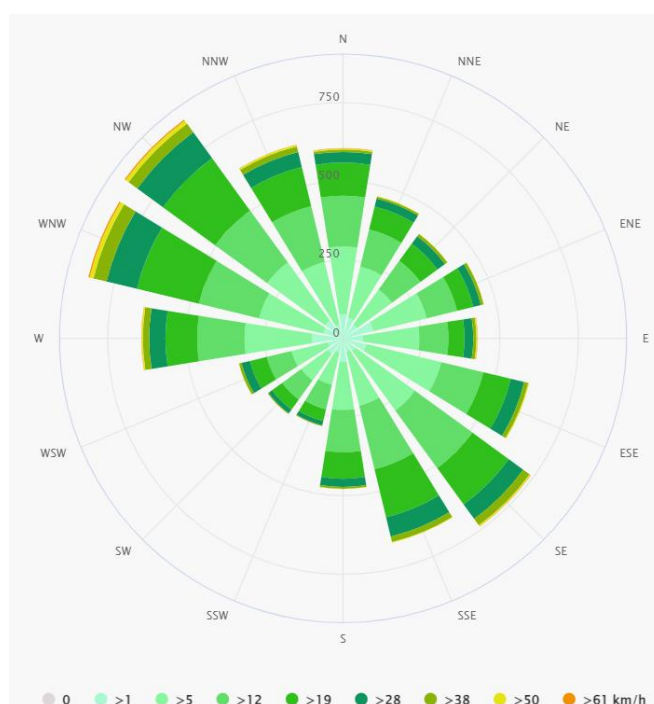


Figure 8-2: Wind Rose for Balti

Figure 8-3 and Figure 8-4 below depict the yearly temperature change and precipitation change, both of which provide valuable insights into the impact of climate change. The Yearly Temperature Change graph illustrates the consistent upward trend in average temperatures over the years, showcasing the warming effect caused by climate change. Similarly, the precipitation change graph demonstrates the alterations in rainfall patterns, including shifts in intensity, frequency, and distribution. These changes can lead to more frequent and severe weather events such as droughts, floods, and storms, directly affecting ecosystems, agriculture, and human livelihoods.

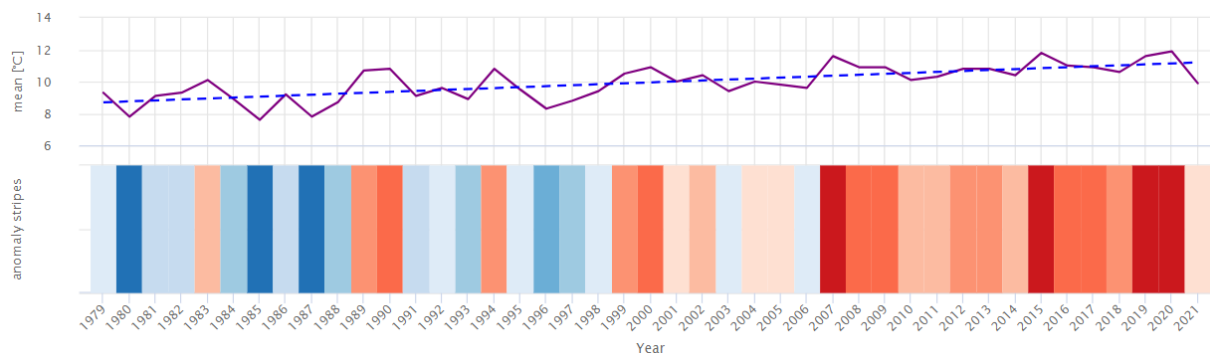


Figure 8-3: Yearly Temperature Change 1979 - 2021 (Meteoblue 2023)

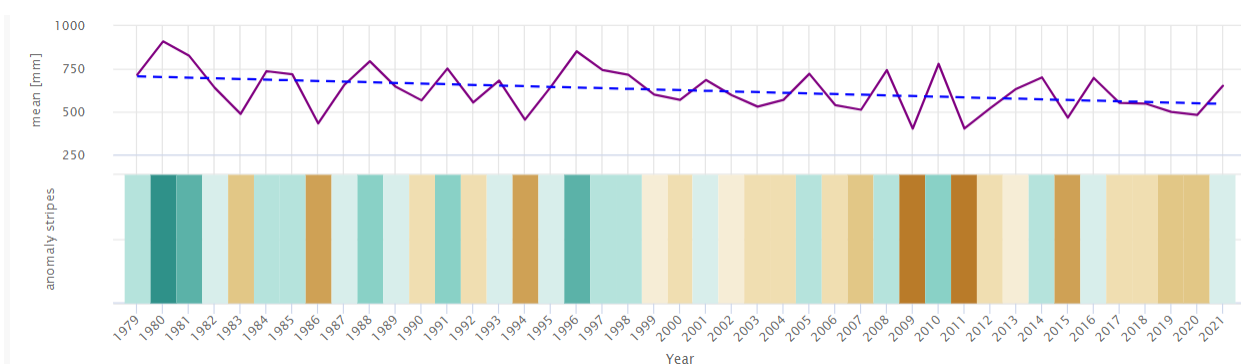


Figure 8-4: Yearly Precipitation Change 1979 - 2021 (Meteoblue 2023)

8.2.2 GEOLOGY AND GEOMORPHOLOGY

The Neogene and Quaternary-age layers are uncovered in the contemporary erosional section's depths. Within the middle Sarmatian geological substage, which forms the foundation of the middle Sarmatian substage, the macrocryptic horizon takes shape. This horizon consists of delicate layers of chalky greenish clay interspersed with fine-grained sand and bentonite clay.

This macrocryptic horizon contains stratified clay infused with gypsum in varying shades of pale green and pale yellow. It also features occasional thin intermediate layers of low-capacity yellowish and pale-yellow sands, along with intermittent layers of bentonite clay.

Moving upward, the upper Sarmatian deposits are situated in the narrow water parting zones. These deposits manifest as continental sandy clay primarily comprised of fine-grained sand. Occasionally, slight intermediary layers of silt and pale green or pale blue clay are observed.

Transitioning to the floodplains, alluvial deposits dominate the landscape, presenting sandy and loamy clay compositions. These sedimentary deposits are chiefly composed of clay. Along the Răut River, the alluvial deposits reach a thickness of 7.0-8.0 meters. These deposits are heavily saturated with water and contain abundant additives, leading to diminished resistance capacity.

The upper terraces of the floodplain exhibit a combination of alluvial and deluvial rocks. These terraces feature sandy-loamy soil, pale yellow sandy clay, brown clay, and clay compositions.

Studies revealed that soil deposits are ranging from 0.4 to 4.0 meters in thickness throughout the area. Additionally, the Quaternary formations may encompass landslide accumulations. Notably, a well-developed complex of

genetically original rocks is present. These rocks boast significant capacity, unique texture, and distinctive structural characteristics, albeit with reduced resistance quality.

With regards to geomorphology, the city of Balti is located in the region of hilly plain in Northern Moldova, characterized by intense but not very deep dissection. The valleys of rivers and brooks are characterized by a symmetrical structure in the north-south direction. In valleys with an east-west direction, clear asymmetry is expressed – the northern exposed slopes are much steeper.

For the territory situated within the limits of the hilly plain in Northern Moldova, the coastlines are characterized by processes of landslides in their middle and lower parts. Slopes with landslides have the steepest surfaces with a gradient ranging from 8° to 20°. Considerable surfaces are occupied by smooth deluvial slopes (ranging from 3° to 6°). The floodplains of the valleys and steep brooks are smooth, swampy, and characterized by a close proximity to the groundwater level. Among the types of landslides, the prevailing ones are: plastic blocks, cascades, and slides.

8.2.3 TOPOGRAPHY

The topography of Balti is characterized by a relatively flat landscape with gentle slopes and low-lying areas. With regards to the proposed project site, it can be characterized as being dominantly of fairly flat surfaces with an elevation between 158 – 173 m above sea level with no sudden changes in topography. The elevation profile of the project site from northwest to southeast is depicted in Figure 8-5 below.

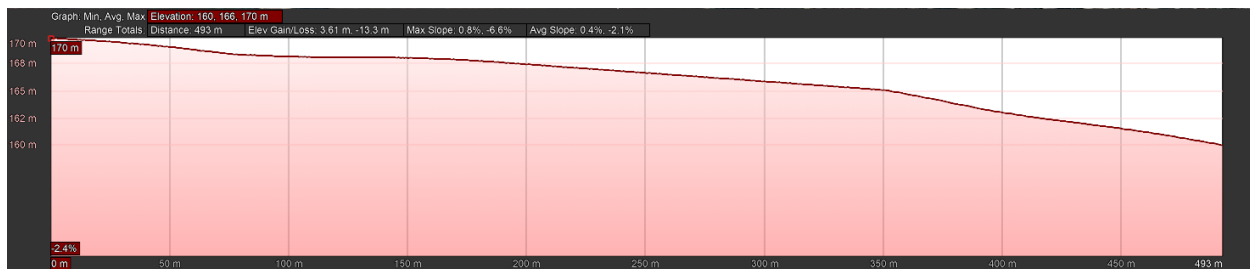


Figure 8-5. Elevation Profile of the Project Site (Google Earth 2020)

8.2.4 HYDROLOGY AND HYDROGEOLOGY

The Project area is located within Dniester River basin. The Dniester basin is located in the territory of three countries – the Republic of Moldova, Poland, and Ukraine. The total length of the Dniester is 1,362 km. The upper and mouth reaches of the Dniester River flow within Ukraine over the total length of 705 km, a 220 km river section is shared between Ukraine and Moldova, and 437 km of its length lie within the borders of Moldova. Within Moldova, the Dniester Basin covers the major part of country's area (59%), with its 19 districts and Transnistria region drained by the Dniester River, fully or partially, and is considered the main source of drinking water in Moldova.

There are 65 water reservoirs in the Dniester basin (with a total water surface area of 24,350 hectares and net storage capacity of 2,156 million m³) and 3,447 ponds (with water surface area of 20,800 hectares and capacity of 244.4 million m³).

The Dniester River has several tributaries, including the Răut River, also referred to as Reut, where the city of Balti is located. The Reut River is the largest tributary of the Dniester River and, at the same time, the largest river that springs and flows entirely on the territory of Moldova. The Reut River sub-basin encompasses a significant portion

of the Dniester Plateau and the Central Moldavian Plateau. It has a distinctive pear-shaped form, stretching approximately 190 km in length and averaging 41 km in width, reaching a maximum of 65 km in the central region. The well-defined water basins flow across the hilly terrain at elevations ranging from 230 to 388 meters. The sub-basin's surface is mostly flat but extensively carved by deep valleys and ravines, often resembling canyons.

The lower part of the sub-basin consists of sandy rocks, chalk, and Cretaceous marble, which are overlaid by a layer of Tortonian calcareous and clayey rocks. The Tortonian cover primarily consists of loess-like clays and clay deposits. In the Reut river basin there are practically no natural lakes, and the accumulation lakes occupy only 0.2% of its total area. Table 8-2 below presents the main hydrological characteristics of the Reut River.

Table 8-2: Hydrological Characteristics of the Reut River

Total Length (Km)	286
Surface of the basin (km ²)	7760
Annual Average flow (Million m ³)	313
Average flow (m ³ /s)	9,9

According to the Global Facility for Disaster Reduction and Recovery (GFDRR), urban flood hazard is classified as medium, this means that there is a chance of more than 20% that potentially damaging and life-threatening urban floods occur in the coming 10 years. With regards to river flood hazard in the Project area, it is classified as high based on modeled flood information. This means that potentially damaging and life-threatening river floods are expected to occur at least once in the next 10 years.

According to the Green Action Plan for the City of Balti that was developed by EBRD in 2019, no dwellings were damaged by the most intense flooding in the last 10 years.

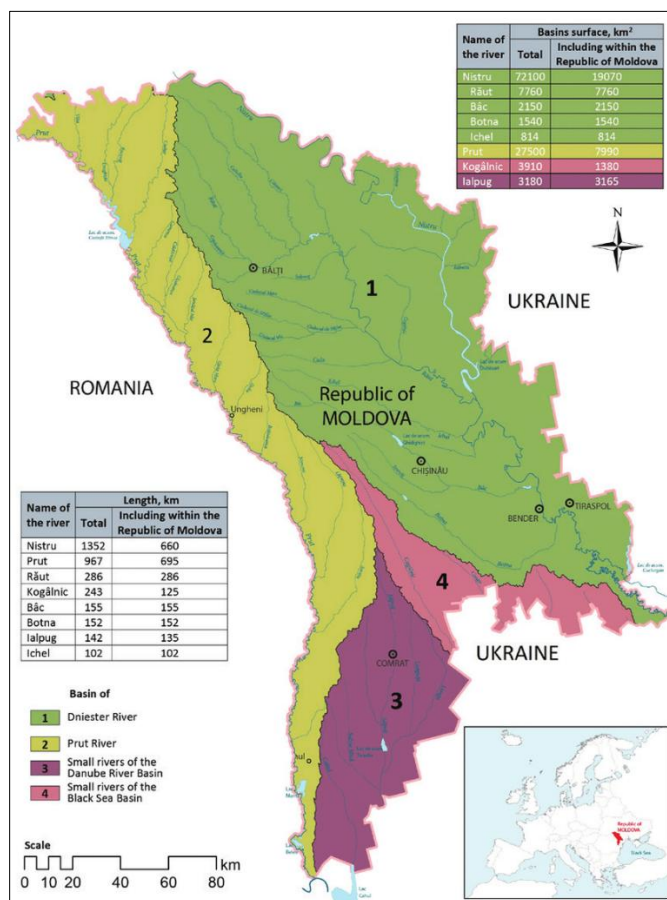


Figure 8-6. Surface Water Basins of the Republic of Moldova

With regards to hydrogeology, the groundwater table within the Dniester River floodplain is often at or near the land surface, lying at depths of up to 5 m in the areas of valley slopes, being present at 20 m and deeper in the areas of water divides. In the northern part of the Dniester Basin, groundwater is contained in the karst voids, outcropping in the river valleys.

The groundwater chemistry varies considerably across the Basin. Subsurface aquifers receive a major proportion of pollution load carried with surface runoff. Given that there is a degree of hydraulic continuity between the groundwater aquifers, there is significant potential for migration of contaminants to the deeper aquifers.

In some locations in the southern parts of the Republic of Moldova, the groundwater is characterized by elevated concentrations of certain pollutants, such as nitrates (up to 462 mg/l in the area of Anenii Noi), and chlorine (up to 902 mg/l in the area of Stefan Voda). Elevated concentrations of ammonium (up to 49.3 mg/l) have been recorded in many groundwater sources throughout the Dniester Basin.

8.2.5 LANDSCAPE AND LAND USE

The Project area in general can be characterized as being dominantly of fairly flat surfaces with an elevation between 158 – 173 m above sea level with no sudden changes in topography as presented in the following figures.



Figure 8-7: Selected Photos from the Project Site

The site is under the ownership of the Ministry of Agriculture and Food Industry (MoAFI) and is currently used and managed by the Field Crops Research Institute "Selecția". The site acts as a central hub for the cultivation of crops, particularly emphasizing the growth of barley. It also serves as a venue for conducting experiments and carrying out studies specifically related to these crops.

In addition to the above, the project site includes a structure that is owned by the Field Crops Research Institute as presented in Figure 8-8 below. The existing structure will be demolished to make way for the development of the new hospital.



Figure 8-8: Field Crops Research Institute's to be Demolished

8.2.6 SOILS

The soil in Balti and its surrounding areas is primarily classified as chernozem soil, which is a fertile black soil type commonly found in the region. The chernozem is commonly equated with black earth soils, and is considered among the most fertile soils used in current agricultural production. They usually developed on aeolian and carbonaceous sediments, mostly loess. The texture is silty to loamy, the base saturation ranges between 70% and 100%. The water-holding capacity is high due to the silty texture, frequently exceeding 150 mm. Besides, the soils usually contain high inherent amounts of potassium and phosphates, the availability of which depending on the degree of decalcification. In contrast to the so-called Phaeozems, the decalcification of the Chernozems is incomplete, and some of the dissolved carbonates are antecedently reallocated within the lower surface soil or subsoil, therewith forming secondary carbonate precipitates at mineral surfaces ('soft powdery lime') or within soil pores ('loess kind!'). The very surface soil, however, is free of lime, and pH values are slightly acidic.

The formation of the Chernozems has been favored by a climatic constellation specific for the steppe, that is, cold winters and hot summers, with the majority of plant growth occurring in moist spring. These specific constellations force larger soil animals like earthworms, mice, and ground squirrels to draw back into the deeper soil when living conditions are unfavorable in the surface soil, for example, during hot dry summer months. During humid times of the year, these animals are very active in the surface soil. As a result, these soils are characterized by a high degree of biological soil mixing, a process called bioturbation.

8.2.7 AIR QUALITY

According to the National Bureau of Statistics 2022, approximately 1,312 tons of pollutant substances were released into the atmosphere from stationary sources of economic activities in the year 2021. This discharge was divided into two categories: 115.5 tons of solid pollutants and 1,197 tons of gaseous and liquid pollutants. These emissions from stationary sources have contributed to environmental concerns and have raised awareness about the importance of controlling and reducing pollution for a sustainable future.

The recorded quantities of three major air pollutants, namely sulfur dioxide (SO₂), carbon monoxide (CO), and nitrogen oxide (NO), were as follows: SO₂ accounted for 7.8 tones, CO reached a notable 698.6 tones, and NO was measured at 58.6 tones.

The data provided below depicts the yearly average levels of NO₂ and SO₂, along with the number of days where the maximum permissible concentrations were exceeded between 2005 and 2014 (Ministry of Environment - Ambient Air Quality in Urban Areas).

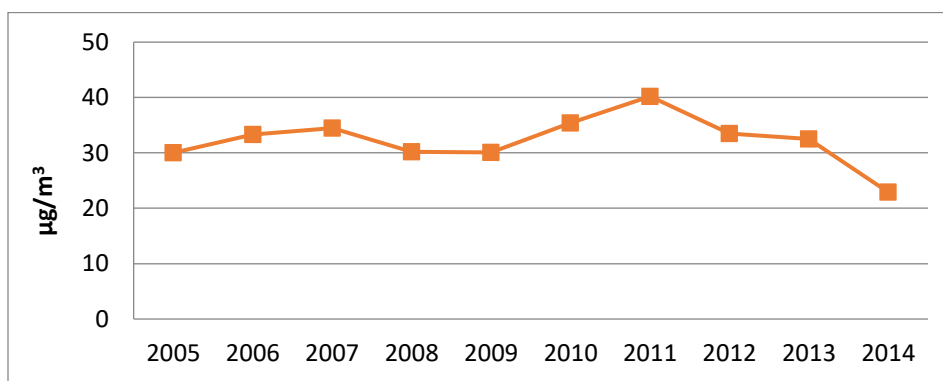


Figure 8-9: NO₂ Annual Average Concentration in Balti

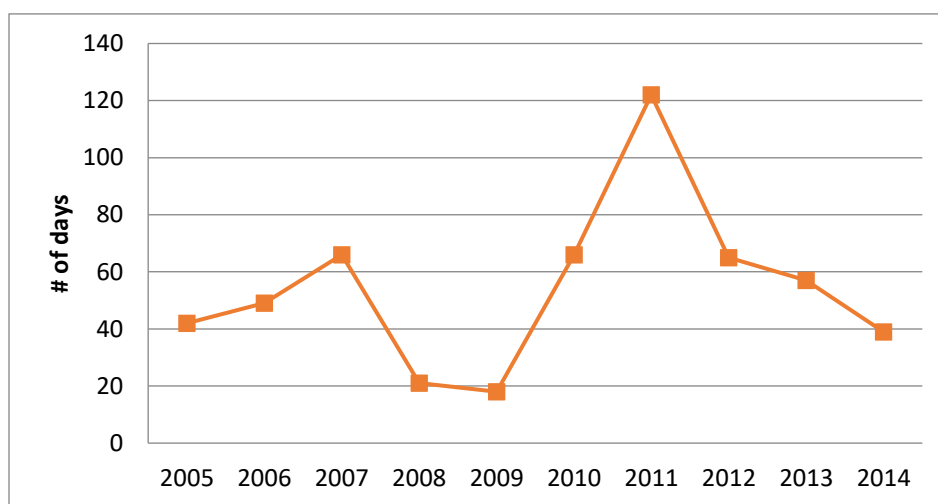


Figure 8-10: Number of days with Exceedance of Maximum Allowable Concentration of NO₂

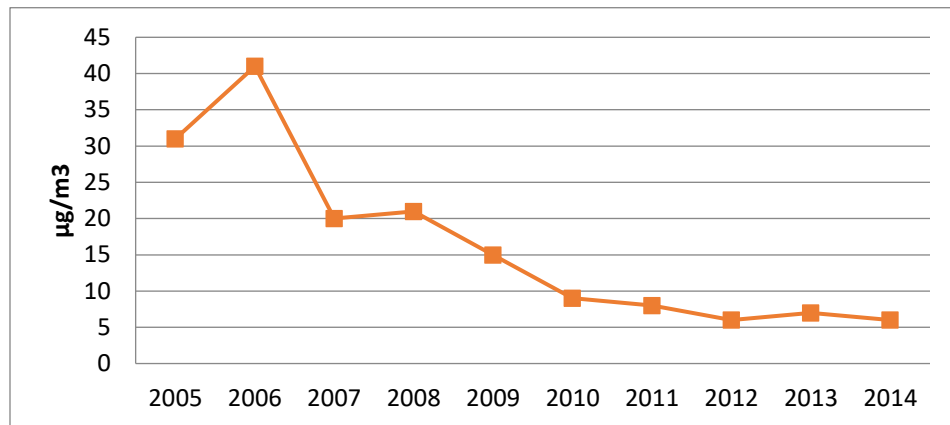


Figure 8-11: SO₂ Annual Average Concentration in Balti

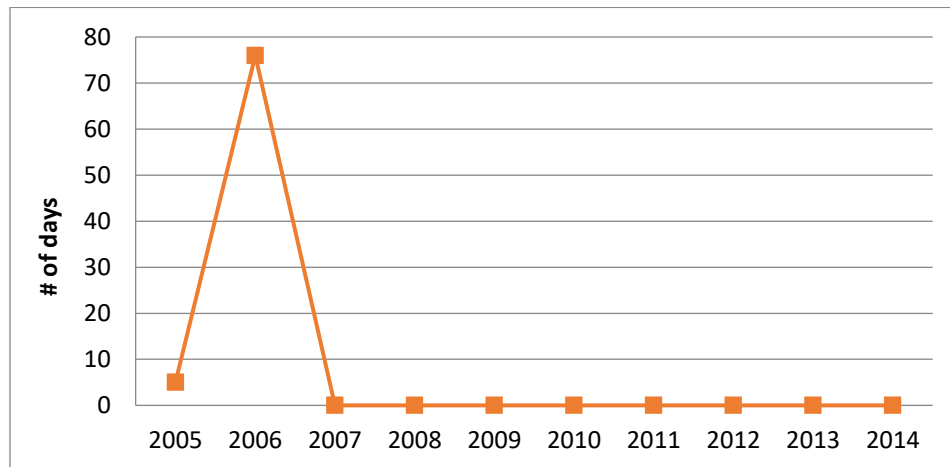


Figure 8-12: Number of Days with Exceedance of Maximum Allowable Concentration of SO₂ in Balti

8.2.8 SEISMIC CONDITIONS

Earthquake hazard in Balti is classified as medium according to the information that is currently available, this means that there is a 10% chance of potentially-damaging earthquake shaking in the project area in the next 50 years.

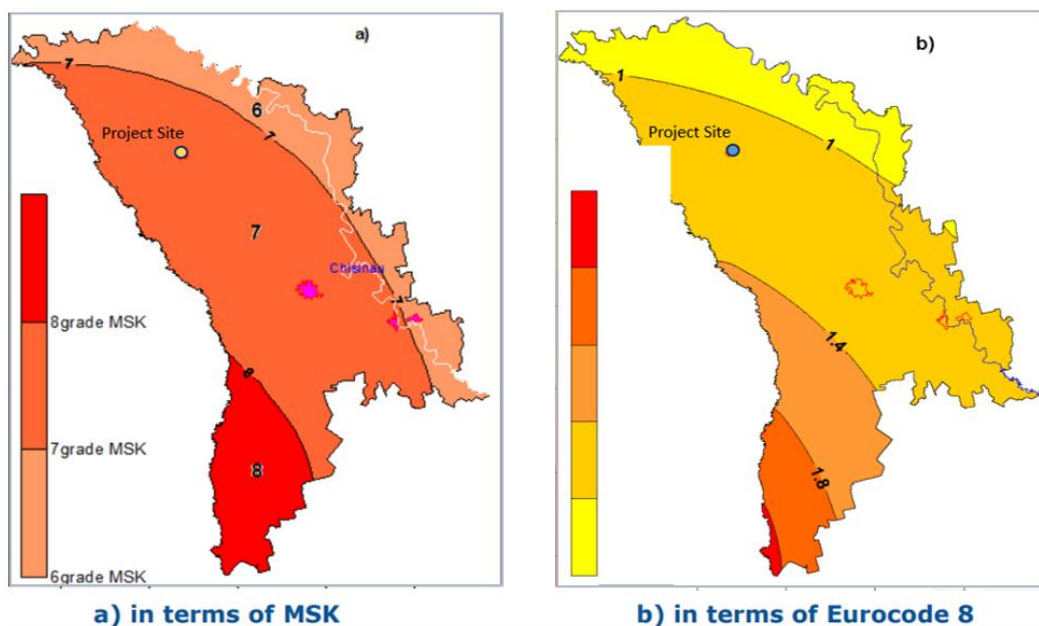


Figure 8-13: Seismic Zones of Moldova

8.3 BIOLOGICAL ENVIRONMENT

8.3.1 BIOLOGICAL ZONES

The territory of the Republic of Moldova can be distinguished into two natural vegetation zones, forest steppe and steppe (See Figure 8-14). The Project area is located within the forest steppe zone which occupies the northern and central parts of the country and is characterized by alternating plains and plateaus. The flora of this zone is rich with characteristic forest, steppe and meadows formations. Soils are mainly composed of normal and leached chernozems, as well as dark chestnut and brown soils in the oak and beech forests and under the meadows. According to the physico-geographical conditions the forest steppe zone can be distinguished into three landscape regions:

- Region of plateaus and forest steppe plateaus in the North of the country;
- The region of plateaus and plains with grasslands of the Baltic Steppe; and
- The plateaus of the Codri forests in the central part of Moldova.

More specifically, the project area is located within the region of plateaus and plains with grasslands of the Baltic Steppe which is characterized by vast, open landscapes consisting of rolling plains, grasslands, and meadows. These areas are known for their relatively flat terrain, moderate climate, and fertile soils.

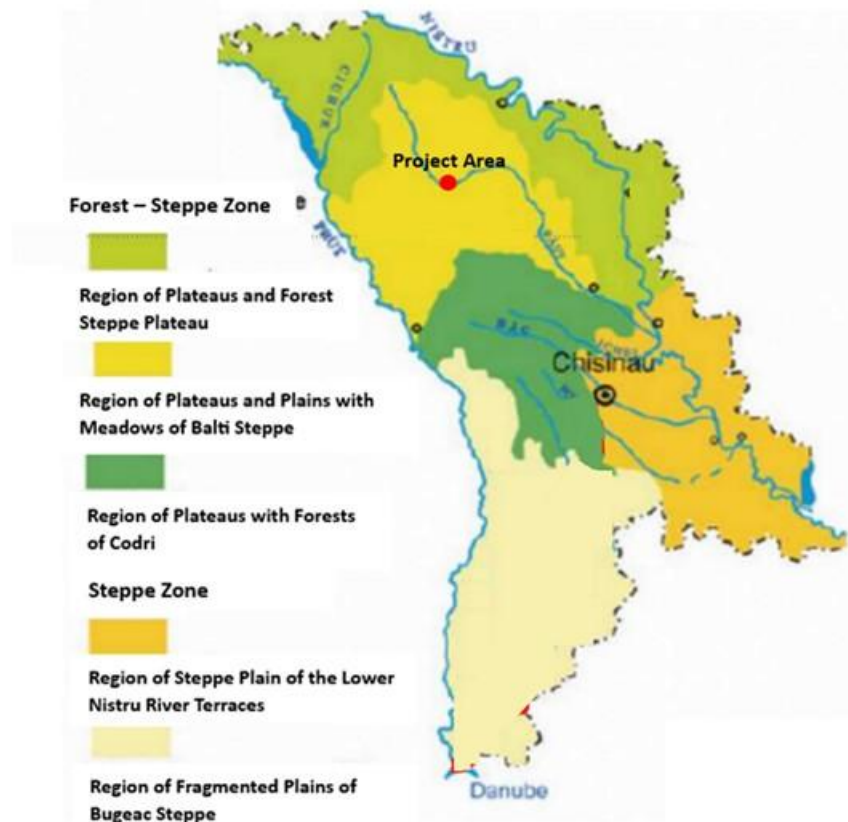


Figure 8-14: Biological zones of the Republic of Moldova (Third National Report on the implementation of the Convention on Biological Diversity)

8.3.2 FLORA

As mentioned earlier, the project area is located within the Forest Steppe Zone - Plateaus and Plains with Meadows of Balti Steppe. This zone basically covers around 20% of the country, and is characterized by alternating plains and plateaus.

The flora of this zone is rich with characteristic forest, steppe and meadows formations. The forest vegetation is represented by *Quercus* sp. formations with *Prunus cerasus*; the meadow vegetation is represented by steppe and river meadow communities (*Stipa*, *Festuca*, *Deschampsia*).

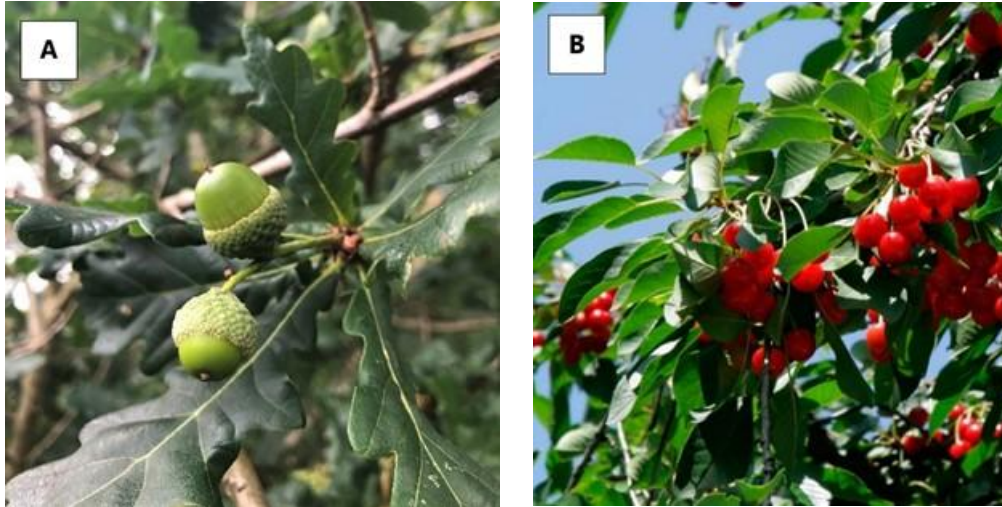


Figure 8-15: Forest Vegetation within the Project Area (A: *Quercus* sp, B: *Prunus cerasus*)



Figure 8-16: Meadow Vegetation within the Project Area (A: *Stipa*, B: *Festuca*, C: *Deschampsia*)

8.3.3 PROTECTED AREAS

There are more than 300 Protected Areas (PAs) in Moldova, distributed into 11 categories as follows:

- Scientific reserve
- Nature monument
- Natural reserve
- Landscape reserve
- Resources reserve
- Area with multifunctional management
- Botanical garden
- Dendrological garden
- Zoological garden
- Landscape architecture monument
- Wetland of international importance

In addition to the above listed types of PA's, The Moldovan Law on Protected Areas comprises two other categories: National Park, and Biosphere reserve.

With regards to Balti City, there are no protected areas located within the city. However, there are two close protected areas (areas of multifunctional use, and resources reserve) as presented in Figure 8-17 below.



Figure 8-17: Protected Areas within the Republic

8.4 SOCIOECONOMIC AND CULTURAL ENVIRONMENT

8.4.1 DEMOGRAPHY

The table below presents the results of the socio-economic conditions in relation to population and demographics, age structure, international and internal migration, and gender distribution.

Table 8-3. Socio-economic Conditions for Balti Municipality

INDICATOR	RESULT
Population (Statistical databank, 2019)	151,800
The average age of the population (National Bureau of Statistics 2022)	38,4
Total fertility rate (National Bureau of Statistics, 2021)	1,49
The natural movement of the population (National Bureau of Statistics, 2022)	49,4
Number of Births per 1000 inhabitants (National Bureau of Statistics, 2021)	1,104
The natural growth per 1000 inhabitants (National Bureau of Statistics, 2021)	-7,9
Marriage per 1000 inhabitants (National Bureau of Statistics, 2021)	9
Divorce per 1000 inhabitants (National Bureau of Statistics, 2021)	5
Net International Migration (National Bureau of Statistics, 2021)	-324
Net Internal Migration (National Bureau of Statistics, 2021)	739
Number of employees by gender (National Bureau of Statistics, 2022)	Females: 25,700 Males: 21,800
Demographic Processes (National Bureau of Statistics, 2022)	The demographic processes during 2014-2021, influenced to a lesser extent the population decrease, namely by 2,9% in Balti municipality.
Age Structure	The age breakdown in Balti is as follows: <ul style="list-style-type: none"> - 0 - 14: 21,774 - 15 - 29: 24,320 - 30 - 44: 38,318 - 45 - 59: 27,256 - 60 - 74: 23,180 - 75 - 89: 5,490 - Above 90: 360
Gender Profile (2022)	The municipality of Balti has one of the most pronounced gender disparities in favor of women, with only 86 men for every 100 women.

INDICATOR	RESULT
Number of persons with disabilities (Data only available for the Republic of Moldova)	According to the National Social Insurance House, the estimated number of people with disabilities in the Republic of Moldova accounted for 168,000 people, including 10,6 thousand children aged 0-17 years. People with disabilities represented 6,5% out of the total number of population with usual residence, and children with disabilities accounted for 1,9% out of the total number of children with usual residence in the Republic of Moldova.

8.4.2 SOCIAL COMPOSITION

According to the national statistics of 2014, a share of 60.6% of the population of Balti Municipality were Moldovans, 2.9% Romanians, 18.5% - Ukrainians, 16% - Russians, 0.1% - Gagauz, 0.2% Bulgarians, 0.2% - Roma, and 1.5% - Other ethnicities.

Nevertheless, it is worth mentioning that the ethnic makeup of the city, as reported in 2014 statistics, may not accurately reflect the current situation. The population of the city has undergone significant changes since 2014, which could lead to a different ethnic composition in the present time.

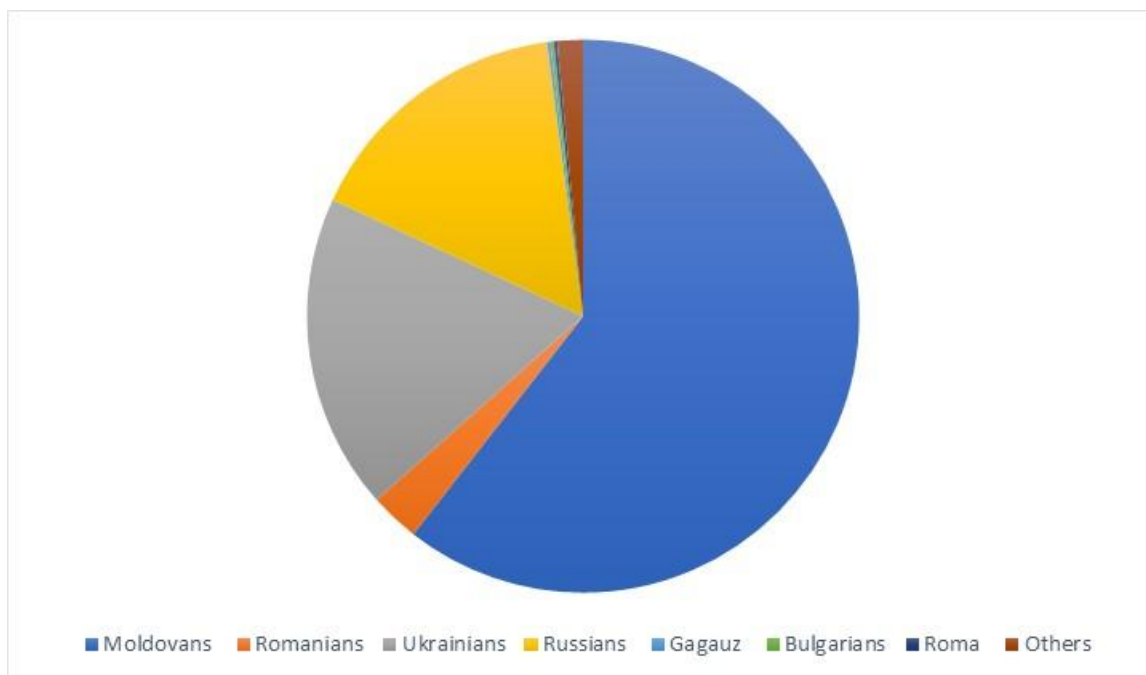


Figure 8-18. Ethnic Composition of Balti (National Statistics of 2014)

8.4.3 GOVERNANCE ISSUES, POTENTIAL CONFLICT AND SOCIAL TENSION

While specific details about Balti's governance issues, potential conflicts, and social tensions are scarce, broader observations provide insight into the challenges that Moldova, as a whole, has encountered.

Corruption is one of the main issues with governance in the Republic of Moldova. High levels of corruption within its government institutions have long been a problem for the nation, undermining public confidence and impeding its development. In addition to endangering the efficient operation of democratic institutions, corruption also poses a serious risk to social stability and economic growth. According to the Corruption Perceptions Index (CPI)⁴ which ranks countries and territories around the world by their perceived levels of public sector corruption, scoring on a scale of 0 (highly corrupt) to 100 (very clean), the Republic of Moldova was ranked 39 in the year 2022.

Another issue of concern is the existence of ethnic tensions in the Republic of Moldova. Given its diverse population, consisting of various ethnic groups, occasional tensions have emerged among them. Balti, being the second-largest city and a crucial economic and cultural center in the country, has also been affected by these issues.

Ethnic tension in Balti is mainly a result of the coexistence of various ethnic groups, including Moldovans, Romanians, Ukrainians, Russians, Gagauz, and others. The differences in their cultural backgrounds, languages, and historical connections can sometimes lead to misunderstandings or disagreements.

In addition to the above, Transnistria remains a contentious and complex matter since 1990, and it has had significant impacts on the country. The most prominent consequences of the Transnistrian issue encompass various aspects such as political instability, threats to territorial integrity, security concerns, economic disruptions, trade barriers, and social and cultural divisions.

8.4.4 LAND OWNERSHIP AND TENURE

According to the data from the immovable property cadastre, the land is registered as State property, and as previously mentioned, it is currently used by the Field Crops Research Institute "Selecția". The right to administer the land is registered under the Public Property Agency, according to Government Decision no. 161/2019 "Regarding the approval of the list of publicly owned lands of the state under the administration of the Public Property Agency". In this context, the Ministry of Health requested the Public Property Agency to proceed with the transfer procedure of the land with a total area of 5 ha from State ownership to MoH ownership⁵.

8.4.5 ECONOMIC ACTIVITIES

Balti Municipality is the second largest City by economic importance in the Republic of Moldova. The municipality is an important economic industrial center. Balti is the center for manufacturing of electric and electronic equipment and components, agricultural machines, construction materials, machine building, apparel and furniture industries.

The number of employees in Balti Municipality at the end of 2021, by economic activities and average gross monthly salary is presented in Table 8-4 below.

⁴ The Corruption Perceptions Index (CPI) is the most widely used global corruption ranking in the world. It measures how corrupt each country's public sector is perceived to be, according to experts and businesspeople.

⁵ According to the provisions of the Land Code of the Republic of Moldova, land withdrawal from the agricultural circuit for state and public needs is done by decision of the Government, with the prior coordination of the Ministry of Agriculture and Food Industry. The issue is raised at the level of Prime-minister and the coordination process is being conducted in a priority way. The draft of the Government Decision is being consulted according to the Governmental procedure

Table 8-4: Number of Employees by economic activities and average monthly salary (National Bureau of Statistics, 2021)

	TOTAL	AGRICULTURE, FORESTRY AND FISHING	INDUSTRY AND CONSTRUCTIONS	PUBLIC ADMINISTRATION AND DEFENSE; COMPULSORY SOCIAL INSURANCE	EDUCATION	OTHER SECTORS
Number of Employees	47,500	300	17,900	2,200	4,500	22,500
The average monthly salary (Moldovan lei)	8363.4	5543.2	8918.3	9501.6	8151.5	7847.7

In addition to the above, there is a large economic zone in Balti Municipality called the Free Economic Zone (FEZ), located at around 4km from the project site as presented in Figure 8-19 below. The FEZ was established in 2010 for a period of 25 years, and it administrates 11 subzones with an area of 245 hectares, of which 3 subzones with a total area of 148.4 ha are located in Balti Municipality.

The main activities within the FEZ are the production of electrical wiring modules for the automotive industry and the medium and low voltage insulated wiring harness, the production of control equipment for led bulb lighting systems, construction services, customs brokerage, public catering, and so on.



Figure 8-19: Location of Balti FEZ in relation to the Project Site

8.4.6 HEALTH SERVICES

Medical facilities at primary and secondary levels provide services to the community and belong to local public authorities. Within the administrative authority of Balti municipality, there are special subdivisions responsible for the administration of subordinated health services.

Balti Municipality has local health authority responsible for local regulatory aspects, but it does not finance health services and the service providers are not directly subordinated to it.

Table 8-5: Main Information on the Health Sector in Balti Municipality

INDICATOR	RESULT
Number of Hospitals	1
Primary and specialized healthcare institutions	47
Individual medical care enterprises	44
Total number of doctors	388
Total medical staff	1046
Medical staff per 10,000 inhabitants	106.6

Table 8-6: Mortality Rates by Main Causes of Death (National Bureau of Statistics, 2021)

TOTAL	CONDITIONS OF THE CIRCULATORY SYSTEM	CANCER	DISEASES OF THE DIGESTIVE SYSTEM	ACCIDENTS, INTOXICATIONS, AND TRAUMAS	DISEASES OF THE RESPIRATORY SYSTEM
1,912.8	859.3	288.8	101.7	65.1	86.4

In addition to the above, communicable diseases are a significant concern in Moldova, with tuberculosis (TB) and HIV/AIDS being prominent among them. Incidence of TB has been rising since 1990, reaching 84 cases per 100,000 people in 2021, the most dramatic increase being registered in children. In terms of HIV, the Republic of Moldova's HIV prevalence in 2021 was 0.8%. The Republic of Moldova's HIV prevalence increased from 0.3% in 2002 to 0.8% in 2021, growing at a 5.75% annual rate.

8.4.7 EDUCATION SERVICES

Balti is the most important educational centre in the northern region and the second in the Republic of Moldova, entailing a high human and intellectual potential. Public education is structured on multiple levels: preschool education, primary, secondary and high school education. The following table outlines the key information on the education sector in Balti.

Table 8-7: Main Information on the Educational Sector in Balti Municipality

The number of institutions	35
Number of children per 100 seats	96
The number of children per teaching staff in early education institutions	11.4
Teaching staff from primary and general secondary education institutions	999
The number of vocational institutions	5
Number of students in vocational institutions	2,301

8.4.8 GENDER ISSUES

Moldova has made significant strides in promoting gender equality in recent years. The World Economic Forum Global Gender Gap Index of 2021 ranked Moldova at 28th place out of 156 countries, with a score of 0.77. This represents an improvement of 0.55 points compared to 2006.

Over time, there has been a gradual and consistent rise in the participation of women in leadership roles and decision-making processes, including those from marginalized and vulnerable groups, in Moldova. A significant milestone was achieved in 2020 when Moldova elected its first female President. Additionally, in 2021, the country witnessed the highest number of women Members of Parliament being elected, accounting for 40.6% of the total. The representation of women in local government reached 22% in 2019. Furthermore, the Republic of Moldova has ratified the Council of Europe Convention, which focuses on preventing and combating violence against women and domestic violence. In parallel, laws and policies are being progressively modified to eliminate major obstacles hindering women's participation in the labor force.

Despite this progress, gender inequality still exists, and gender stereotypes and norms still dominate society. Smear campaigns, hate speech, and sexist remarks are common during election campaigns against female politicians and candidates. Due to the persistence of patriarchal attitudes and ingrained stereotypes, women continue to be underrepresented in the workforce. Due to numerous and interrelated forms of discrimination and exclusion, the market employment rates for women from vulnerable groups (Roma women, women with disabilities, rural women) are even lower.

In Balti Municipality, one of the main gender inequalities observed is the gender wage gap, which accounted for 5.7% in the year 2021 (National Bureau of Statistics, 2021). This wage gap signifies a significant disparity in earnings between men and women in the city. Despite efforts to address gender equality in various sectors, this persistent wage gap remains a concerning issue, reflecting unequal opportunities and discriminatory practices in the labor market.

8.4.9 INFRASTRUCTURE AND UTILITIES

8.4.9.1 4.4.9.1 TRANSPORTATION SYSTEM

Balti has a well-developed road network connecting it to other major cities in Moldova. The city has a public transportation system consisting of buses, minibuses (marshrutkas), and taxis, providing convenient intra-city transportation. The main highways connecting the city of Balti to other cities include the following:

- Highway R13 (Bălți – Florești – Rîbnița)
- Highway R14 (Bălți – Sîngerei – Sărătenii Vechi)
- Highway R15 (Bălți – Glodeni)
- Highway E583 (Sculeni – Bălți – Edineț – Otaci)
- M14 (Chișinău, Bălți and Tiraspol)



Figure 8-20: Main Roads Connecting Balti to other Cities

Table 8-8 below provides key information on the public transportation system in Balti City

Table 8-8: Key Information on the Public Transportation System in Balti (EBRD - Green City Action Plan for the City of Balti)

INDICATOR	RESULT
Number of vehicles per capita	0.21
Fuel standards for vehicles	EURO 5
Share of passenger car fleet run by alternative fuel (hybrid, electric, CNG, LPG, etc.)	3%
Transport modal share in commuting	40%

INDICATOR	RESULT
Average number of vehicles, cars and motorbikes per household	0.6
Share of population having access to public transport within 15 min by foot	80%
Frequency of bus service – average number of passage at station per hour, in total bus network	8
Average travel speed on primary thoroughfares during peak hour	18 km/h
Daily average travel speed of bus fares on major thoroughfares	20 km/h
Interruption of public transport systems in case of disaster	Reduced efficiency
Efficiency of transport emergency systems in case of disaster	Limited efficiency
Average age of car fleet	15 years
Percentage of diesel cars in total vehicle fleet	97%
Transport modal share in total trips	70%

In addition to the above, Balti is connected to the national railway network, allowing for train travel to various destinations within Moldova and beyond. See Figure 8-21 below.



Figure 8-21: Railway Network in the Republic of Moldova

8.4.9.2 WATER SUPPLY SYSTEM

The city has a centralized water supply system that provides potable water to residents and businesses. The system is managed by the municipality. In 2021, the total water supply was 14,217.9 m³, and the volume of water supplied to the population was 2,531.1 m³. According to the Green Action Plan for Moldova in 2019, it was indicated that the per capita water consumption in Balti is approximately 75 liters per day, and the annual average of the daily number of hours of uninterrupted water supply per household amounts to 10 hours per day.

It is important to note that the project site is integrated into the existing water system and network, ensuring efficient connectivity and access to water resources. Table 8-9 below presents the status of public water supply system in the city of Balti.

Table 8-9: Status and access of Public Water Supply System (Petru Bacal et al, 2020)

INDICATOR	RESULT		
	Total	Urban	Rural
Number of systems	2	1	1
Length of public aqueducts (km)	258	244	14.3

INDICATOR	RESULT		
	Total	Urban	Rural
Number of connected population (thousand)	105	104	1.0
Access of the population to public aqueducts	82%	85%	20%

8.4.9.3 WASTEWATER SYSTEM

The project area in general is connected to wastewater system and network. According to the Green Action Plan for the City of Balti, the existing wastewater collection network is very old. It was built between 1973–1976 and 80% of it is obsolete. It was made with reinforced concrete (bigger diameter) and ceramics (smaller diameters), but it is so deteriorated and fragile now that it is effectively crumbled in some places. The wear degree of existing pipelines is very high (55–60%), causing quality issues and large leaks in sewerage systems.

The existing wastewater treatment plant in Balti performs both mechanical and biological treatment and has an installed capacity of 60,000 m³ per day. Despite the existence of separate systems for stormwater and wastewater, the condition of the wastewater collection network has deteriorated. As a result, heavy rainfall is causing significant infiltration of rainwater into the network, leading to increased volumes of influent on rainy days. On dry days, the network typically receives around 18,000 m³, but during rainy periods, the influx of influent rises to approximately 32,000 m³.

8.4.9.4 ELECTRICITY SYSTEM

Balti obtains its electricity from the state-owned company "Moldenergo" through the national power grid. Additionally, during the colder months, Balti benefits from a district heating system that provides centralized heating to both residential and public buildings.

Table 8-10 below outlines the key information regarding the electricity sector in Balti city.

Table 8-10: Key Information on the Electricity Situation in Balti (EBRD - Green City Action Plan for the City of Balti)

INDICATOR	RESULT
Electricity consumption in buildings (general)	61.16 kWh/m ²
Electricity consumption in buildings (non-residential)	192 kWh/m ²
Electricity consumption in buildings (residential)	27.97 kWh/m ²
Heating/cooling consumption in residential buildings, fossil fuels	100.89 kWh/m ²
Heating/cooling consumption in non-residential buildings, fossil fuels	198 kWh/m ²

8.4.9.5 GAS DISTRIBUTION SYSTEM

Republic of Moldova is an important transit country in the international gas transmission system. Pipelines are on the transit route of Russia and Ukraine, they pass through Moldova to Romania, and then to Bulgaria, Turkey, Greece and Macedonia.

National gas transmission system comprises a network of trunk pipelines and branch pipelines with a total length over 1.9 thousand km, one gas measuring station, 5 compressor stations, and 95 gas distribution stations.

Currently the system of JSC "Moldovagaz" includes two gas transmission companies: "Moldovatransgaz" LLC (Right Bank) and "Tiraspoltransgaz" LLC (Left Bank). Moldovatransgaz holds the crucial responsibility of efficiently managing and overseeing the distribution of natural gas throughout the vibrant city of Balti.

According to the Security of Supply Statement - Ministry of Infrastructure and Regional Development of the Republic of Moldova for the period 2020-2021, the natural gas consumption in Balti Municipality accounted for 8.2% of the total consumption in the Republic of Moldova.

8.4.9.6 SOLID WASTE MANAGEMENT FACILITIES

The primary landfill utilized by the Balti municipality is situated within the administrative boundaries of the Țambula and Bilicenii Noi settlements, at around 7km from the city. The landfill covers an estimated area of 25 hectares.

The solid waste management situation in Balti City is plagued by several challenges. One major issue is the insufficient collection coverage, which is not only evident in the suburbs but also in parts of the city. The city also lacks specially arranged spaces for waste collection, except for those placed near residential multi-story buildings. Recycling and composting rates are disappointingly low, and there is a lack of cooperation between authorized waste collection companies and local authorities, with no data being reported or kept at the municipality level regarding the type, quantity, and methods of waste recycling.

Another pressing problem is the absence of a sanitary landfill in the region, resulting in annual negotiations and issues with villages where two functional but non-compliant landfills are located. Without a weighbridge, there is no data available on the quantity and type of waste being disposed of.

Lastly, there is no effective solution for the treatment of special waste streams such as hazardous waste, medical waste, bulky waste, electrical and electronic equipment, used oils, batteries, accumulators, end-of-life vehicles, as well as construction and demolition waste.

Table 8-11: Key Information on Solid Waste Management (EBRD - Green City Action Plan for the City of Balti)

INDICATOR	RESULT
Total solid waste generation per capita (may include industrial, Construction and demolition (C&D) waste etc., data unclear) - rural	340.2 kg/year
Share of population with weekly MSW collection (urban)	85%
Total solid waste generation per capita (may include industrial, C&D waste etc., data unclear) - urban	72 – 1344 kg/year/capita
Share of population with weekly MSW collection (rural)	18%

INDICATOR	RESULT
Proportion of municipal solid waste that is sorted and recycled	0%
Percentage of municipal solid waste which is disposed of in open dumps, controlled dumps or bodies of water or is burnt	100%
Percentage of municipal solid waste disposed of in sanitary landfills	0%
Percentage of MSW composted 0%	0%

8.4.10 VULNERABLE GROUPS

Vulnerable groups in Moldova, like in many societies, include the following.

- Persons with disabilities: Considered vulnerable groups due to their susceptibility to mistreatment and exploitation stemming from their physical, cognitive, and emotional difficulties, and in certain instances, their reliance on others for essential necessities.
- Local women groups: Considered vulnerable groups due to higher rates of gender-based violence and societal power imbalances.
- Elderly people: Considered vulnerable groups mainly due to factors such as limited access to healthcare, social isolation, and potential financial difficulties
- Children and Youth: Children and young may be particularly vulnerable due to issues such as poverty, lack of access to education and healthcare, child labor, domestic violence, and involvement in criminal activities.
- Ethnic Minorities: Moldova is a multi-ethnic country, and certain minority groups may face discrimination, limited access to resources, and unequal treatment. Roma communities, for example, often experience social and economic marginalization.
- Unemployed and Low-Income Individuals: Economic vulnerability is a significant issue, particularly for those who are unemployed or living in poverty.

8.4.11 TOURISTIC AREAS

There are still some tourist attractions in Balti, even though it may not have the same level of tourism infrastructure as other cities in Moldova. The table below lists the main tourist destinations and their distances from the project area.

9 POTENTIAL E&S IMPACTS AND MITIGATION MEASURES

This chapter identifies the anticipated positive and adverse impacts on the various environmental and social attributes from the project activities during the planning & construction, operation, and decommissioning phases. Moreover, for each impact a set of mitigation measures were identified.

9.1 POSITIVE EFFECTS

The development of the new hospital in Balti promises many positive effects that will significantly enhance the community's well-being and the north region at large. During construction, the project is expected to boost local businesses and shops near the site, thereby bolstering the local economy. As the hospital becomes operational, it will likely attract additional businesses and professionals to the area.

In terms of healthcare sector, the new hospital is a crucial step in alleviating the overcrowding issue that has plagued existing healthcare facilities. It will significantly enhance the community's access to quality healthcare services, leading to shorter wait times, improved patient care, and a healthier population.

Furthermore, the new hospital is expected to attract medical professionals, researchers, and educators, potentially leading to advancements in medical science and healthcare education within the community.

9.2 POTENTIAL E&S IMPACTS AND MITIGATION MEASURES

- The E&S aspects of concern and mitigation measures during the construction, operation, and decommissioning phases are presented in Table 9-1, Table 9-2, and

Table 9-3 below.

Table 9-1: Potential E&S Impacts and Mitigation Measures during the Planning and Construction Phase

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Physical Environment				
Climate	<p>The construction phase involves heavy machinery, electricity usage, and other energy-intensive activities. If this energy comes from fossil fuel-based sources, it adds to the carbon footprint and exacerbates climate change.</p> <p>In addition to the above, the new hospital will be built using concrete as the primary construction material. Cement is a crucial component of concrete, and is produced by subjecting limestone and other materials to high temperatures, resulting in the release of substantial amounts of carbon dioxide (CO₂) into the atmosphere. Regrettably, cement production alone accounts for approximately 8% of the world's carbon emissions, making it a notable contributor to global greenhouse gas emissions.</p>	Type	Medium	<ul style="list-style-type: none"> - Implement energy-efficient practices and technologies to minimize energy wastage during construction activities. This includes using energy-efficient equipment, LED lighting, and optimizing the scheduling of energy-intensive tasks. - Implement a system to monitor emissions from machinery and equipment during construction
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Regional		
		Duration		
Air Quality	<p>The main impact on air quality during the demolition of the existing building includes the presence of asbestos. When asbestos-containing materials are disturbed or damaged, tiny fibers are released into the air. These fibers can be inhaled, and once they are in the lungs, they can remain there for a long time, potentially leading to the development of asbestos-related diseases.</p>	Long-term	High	<p>An Asbestos Management plan should be developed during the planning phase to ensure proper and safe handling of asbestos containing materials. The plan must identify appropriate measures to eliminate the risk of asbestos release into the air. Such mitigation measures include but not limited to the following:</p> <ul style="list-style-type: none"> - Properly identifying and locating all asbestos-containing materials - Wetting materials before and during demolition to reduce the release of asbestos fibers - Using barriers and negative air pressure to contain and capture any released fibers - Only trained and certified professionals should handle and remove asbestos materials
		Sensitivity of the Receptor		
		Low		
		Type		
		Negative		
		Magnitude		
		Severe		
		Extent	High	
		Local		
		Duration		
		Temporary		
		Sensitivity of the Receptor		
		High		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
				<ul style="list-style-type: none"> - Cleaning of the demolition site and all equipment used is also necessary to prevent the spread of asbestos fibers
	Other anticipated impacts during the construction phase include dust that will be generated by movement of vehicles to haul project materials, machinery and generators operations, materials lay-down area, excavation works, demolition works, trenching and backfilling.	Type Negative Magnitude Weak Extent Local Duration Temporary Sensitivity of the Receptor Medium	Minor	<ul style="list-style-type: none"> - Use equipment and vehicles in appropriate technical conditions. - Suppress the scattering of dust by sprinkling of water on an "as-needed basis". - Ensure appropriate stockpile management (friable materials) to minimize dust. - Cover truck loads with canvas to avoid dust blow. - Ensure that vehicles adhere to a speed limit of 15km/h within the construction site.
Noise and Vibration	Similarly, noise or vibration are anticipated to be generated due to construction works such as movement of vehicles to haul project materials, machinery and generators operations, excavation, works, demolition works, trenching, etc. such activities will negatively affect hospital staff, patients, as well as nearby residents. Though these activities are certain to occur, they are temporary and short-term making them of low consequence.	Type Negative Magnitude Moderate Extent Local Duration Temporary Sensitivity of the Receptor Medium	Minor	<ul style="list-style-type: none"> - Ensure vehicles and equipment are switched off when not in use.

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Soil	<p>The main issue of concern during the demolition of the existing building includes potential release of asbestos to the soil.</p> <p>Asbestos fibers can have negative impacts on soil if the fibers are present in the soil in large enough quantities. Asbestos fibers can make the soil toxic, and can also make it difficult for plants to grow. Additionally, asbestos fibers can be harmful to animals and insects that live in the soil, and can also make the soil less fertile.</p> <p>Accordingly, an asbestos management procedure must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.</p>	Type	Medium	An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.
		Negative		
		Magnitude		
		Strong		
		Extent		
		Point		
		Duration		
		Long-term		
	<p>Other impact during the construction period includes accidental leakage of oils/chemicals. However, given the limited number of vehicles and with spill response measures, the impact is considered to be of medium consequence.</p>	Sensitivity of the Receptor	Medium	<ul style="list-style-type: none"> - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Provide a spill kit for containment and clean-up of any accidental spills.
		High		
		Type		
		Negative		
		Magnitude		
		Moderate		
Hydrology and Hydrogeology	Accidental oil/chemical spills may pose a threat to the groundwater quality. Accordingly, proper	Extent	Medium	
		Point		
		Duration		
		Long-term		
		Sensitivity of the Receptor	Medium	
		High		
		Type		
		Negative		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	handling of any chemicals/oils during construction works is needed along with having spill response measures in place. Though such accidents may occur, with proper spill response measures they are considered to be of medium consequence.	Magnitude Strong Extent Local Duration Temporary Sensitivity of the Receptor High		<ul style="list-style-type: none"> - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Ensure immediate cleaning of any spills and remediation of contaminated areas - Provide a spill kit for containment and clean-up of any accidental spills.
Solid and Liquid Wastes	<p>Solid waste is expected to be generated from demolition and construction activities. Solid waste generated will likely include construction waste (concrete, bricks, wood, roofing shingles, metal, debris, etc) and municipal solid waste (during construction and operation such as cardboard, plastic, food waste, etc.).</p> <p>It is important to note that existing building contain asbestos. Therefore, asbestos containing waste is expected to be generated throughout the demolition of the existing building. Asbestos is heavily regulated and has been banned in many countries and regulations are in place to limit human exposure to asbestos fibers and ensure the safe removal and disposal of asbestos-containing materials. When asbestos-containing materials are found in a building, it is typically removed by trained and licensed professionals who use special equipment and procedures. This process is known as asbestos abatement. Disposal of asbestos waste typically takes place at specially-licensed landfill sites.</p>	Type Negative Magnitude Severe Extent	High	<ul style="list-style-type: none"> - An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination - Ensure appropriate disposal of solid waste at approved disposal sites - Ensure proper collection and disposal of domestic wastewater generated from workers. Proper storage of domestic wastewater is in septic tanks and disposal should be at a designated WWTP in line with national requirements. - Provide a spill kit for containment and clean-up of any accidental spills. - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Maintain proper housekeeping on site.

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	<p>Given all of the above, an Asbestos Management plan must be developed before commencement of demolition activities.</p> <p>Other types of hazardous waste that could be generated during the construction activities include consumed oil, chemicals, paint cans, etc. Hazardous waste generated will likely be collected and stored onsite and then disposed of at designated hazardous waste treatment facilities.</p> <p>With respect to wastewater, it is expected to include black water (sewage water from toilets and sanitation facilities), as well as grey water (from sinks, showers, etc.) generated from workers during the construction phase. Wastewater quantities are expected to be minimal due to the limited number of workers. It is expected that wastewater will be connected to temporary holding tanks whose septage is emptied and disposed of at an approved wastewater treatment plant.</p>	<p>Local</p> <p>Duration</p> <p>Temporary</p> <p>Sensitivity of the Receptor</p> <p>High</p>		<ul style="list-style-type: none"> - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Develop a waste management plan - Develop a spill response plan, to control any inadvertent leakage or spill. - Provide workers with proper spill response training
Aesthetics and Landscape	Some visual disturbance will occur due to construction works. However, these are temporary visual intrusions limited to construction phase. Moreover, construction sites for residential building were observed to be prevalent within the neighbourhood. Hence, visual intrusion is considered to be of negligible consequence.	<p>Type</p> <p>Negative</p> <p>Magnitude</p> <p>Weak</p> <p>Extent</p> <p>Local</p> <p>Duration</p> <p>Temporary</p>	Minor	<p>Ensure proper general housekeeping and personnel management measures are implemented which could include:</p> <p>Ensure the construction site is left in an orderly state at the end of each work day.</p> <p>To the greatest extent possible construction machinery, equipment, and vehicles not in use should be removed in a timely manner</p> <p>Proper handling of waste streams, etc.</p>

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Sensitivity of the Receptor		
		Low		
Biological Environment				
Biodiversity	In the construction stage, modifications related to ecosystem are anticipated to be made as the construction of the new hospital may necessitate the removal of a number of trees on the site. Another concern is potential soil pollution from the demolition of asbestos-containing structures and improper and unsafe disposal, which could directly affect animals and insects in the soil.	Type	Medium	An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination. Include efforts to relocate or transplant valuable trees to other suitable locations on the site or in the vicinity
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		High		
Socio-economic and Cultural Environment				
Local economy	During the construction phase, labour will be skilled workers available on site. Positive economic impacts are anticipated to local shops close to the project site.	Type	Minor	Ensure to hire labour from host communities if their qualifications meet the work requirements.
		Positive		
		Magnitude		
		Weak		
		Extent		
		Local		
		Duration		
		Temporary		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Sensitivity of the Receptor		
		Medium		
Infrastructure and Utilities	Traffic jams are anticipated due vehicles that will be moving to and from the project site.	Type	Minor	Develop a Traffic Management Plan
		Negative		
		Magnitude		
		Weak		
		Extent		
		Local		
		Duration		
		Temporary		
	There exists a possibility of harm to the electrical poles, gas distribution network, and water pipelines in the vicinity, which could lead to a subsequent impact on the provision of power and water to the neighborhood	Sensitivity of the Receptor	Medium	Location of the gas network, as well as water distribution network must be obtained from relevant authorities. If the networks layout couldn't be obtained, a utility survey must be undertaken to determine the layout of such networks.
		Medium		
		Type		
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Temporary		
		Sensitivity of the Receptor		
		High		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Public Health and Safety	<p>During construction phase, the potential sources of impact to public health and safety are traffic accidents due to moving vehicles to and within the project site as well as public access to construction locations. These risks requires that the vehicle drivers abide by speed limits and that construction locations be closed to public access.</p> <p>Moreover, as residential buildings are available close to the site, precautionary measures need to be taken to protect the residents from construction site accidents including injuries, tripping and falling, exposure to airphone asbestos, chemicals, hazards from machinery used, etc.</p>	Type	Severe	<ul style="list-style-type: none"> - Ensure licensed operators are operating all vehicles accessing the facility. - Maintain and inspect vehicles adequately. - Use a flagman to control vehicle and truck movement at the entrance and exit of the project site. - Prohibit vehicle transit across any restricted area and ensure they are limited to working activities. - Number of traffic signs, their characteristics and distance among them will be placed according to local legal requirements. - Control public access to the construction site to reduce public safety concern. - Ensure that all trucks and vehicles accessing the facility are operated by licensed operators. - Ensure adequate maintenance and inspection of vehicles. - Presence of flagman at the entrance and exit of the project site in order to control vehicles and truck movement. - Every employee working at the project site shall make sure that all needed signs and preventive measures are implemented when starting any activity. - Ensure that the number of traffic signs, their characteristics and distance among them is placed according to local legal requirements. - Prohibit vehicle transit across any restricted area. - Develop security measures to prevent unauthorized access to the construction site. Such measures could include installing a fence around the construction site. - Implement a GRM to receive and facilitate resolution of affected communities' concerns and grievances.
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Long-Term		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Sensitivity of the Receptor		
		High		
Occupational Health and Safety and Labour conditions	<p>The main impact during the demolition of the existing building includes direct exposure to asbestos. One of the main health risks associated with asbestos exposure is lung cancer. Asbestos fibers, when inhaled, can become lodged in the lung tissue, which can lead to inflammation and the development of mutations in the cells lining the lungs. Over time, these mutations can lead to the development of lung cancer. Asbestos exposure has also been linked to other types of cancer, such as mesothelioma, a rare cancer of the lining of the chest and abdominal cavities that is almost always caused by asbestos exposure.</p> <p>Asbestos exposure can also lead to other lung diseases, such as asbestosis, a chronic condition characterized by inflammation and scarring of lung tissue, which can make breathing difficult. Asbestosis can also increase the risk of other lung problems, such as lung infections, heart failure, and lung cancer.</p> <p>In addition to the above, several occupational health and safety risks would arise on the construction site including:</p> <p>Safety risks such as tripping, falling, work injuries, lifting of heavy equipment, exposure to heat stress, working at heights, and accidental electric shocks are possible to occur.</p> <p>There could also be a risk of fire accidents on site during construction works due to welding activities, workers smoking on site, etc.</p>	Type	Severe	<ul style="list-style-type: none"> - An asbestos Management Plan should be developed. - Provide induction and training and awareness to all employees regarding risks associated with exposure to asbestos - Develop an Occupational Health and Safety (OHS) Plan prior to commencement of work. - Allocate specific personnel responsible for health & Safety management on site. - Provide adequate and appropriate training of all workers on the contractor's OHS policies and procedures. - Establish a grievance mechanism to receive and facilitate resolution of workers concerns and grievances. - Emergency and evacuation plan shall be prepared by the contractor and relevant staff shall be trained through mock-up drills. - Ensure all workers are equipped with proper Personal Protective Equipment (e.g., masks, eye goggles, breathing equipment, etc.). - All construction equipment used for the execution of the project works shall be fit for purpose and carry valid inspection certificates and insurance requirements.

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Negative		<ul style="list-style-type: none"> - Provide a storage area for hazardous materials. The hazardous materials must be labelled with proper identification of its hazardous properties. Storage of chemicals shall be performed in accordance with MSDS's. - Ensure clear signage is in place, such as warning of speed limits, obstructions, allowable widths/heights...etc.
		Magnitude		<ul style="list-style-type: none"> - Ensure that all equipment and machinery are turned off, unplugged, and properly stored when not in use. - Prohibit smoking in areas identified as a fire hazard. - Formally alert civil defence prior to commencement of activities with potential fire hazards. - Ensure that all grievances are recorded and responded to - Fire extinguishers should be located at identified fire points around the site. The extinguishers shall be appropriate to the nature of the potential fire.
		Severe		<ul style="list-style-type: none"> - Ensure all plant machines and vehicles are regularly inspected, serviced and maintained; ensure all staff assigned is trained and competent to operate plant machines and vehicles. - Ensure all equipment are suitable for jobs (safety, size, power, efficiency, ergonomics, cost, user acceptability etc), provide the lowest vibration tools that are suitable and can do the works.
		Extent		<ul style="list-style-type: none"> - Only competent authorised persons to carry out maintenance on electrical equipment, adequate Personal Protective Equipment (PPE) for electrical works must be provided to all personnel involved in the tasks.

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Local		<ul style="list-style-type: none">- Ensure that all trucks and vehicles accessing the facility are operated by licensed operators.- First aid kit with adhesive bandages, antibiotic ointment, antiseptic wipes, aspirin, non-latex gloves, scissors, thermometer, etc. shall be made available by the contractor on site.- Provide all workers with mock-up drills on emergency and evacuation response- All workers must be subject to a preliminary medical examination before commencement of any job tasks.- All workers must be subject to a periodic medical examination.
		Duration		
		Long-Term		
		Sensitivity of the Receptor		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		High		
Working Con- ditions	Potential of violation of workers' rights (late pay- ment of wages, wages below minimum wages, lack of sanitary facilities etc.	Type	Minor	<ul style="list-style-type: none"> - Clear policies and procedures should be established that outline what constitutes a violation of workers' rights and how to report such violations. - Training and education should be provided to all employees and workers on workers' rights, including the rights of workers to a safe and discrimination-free workplace. - Develop and implement a grievance mechanism (GRM) and encourage open communication and provide a safe and confidential way for workers to report violations without fear of retaliation. - Regular audits should be carried out to identify and address any potential violations of workers' rights.
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		
		Duration		
Cultural Herit- age and Archaeology	<p>There are no archaeological or cultural heritage sites within the project site, therefore, there are no anticipated impacts from the project on surface archaeological remains within the project site.</p> <p>However, there is a chance that throughout such construction activities, archaeological remains buried in the ground are discovered. Improper management (if such sites are discovered) could</p>	Type	Negligible	<ul style="list-style-type: none"> - Have a chance find procedure is in place in case of coming across any cultural heritage or artefacts (e.g., graves, old ceramic, old building fragments) during excavation works. These procedures should require that excavation works are stopped, Contractor to report those immediately to Ministry of Culture and await instructions from the Ministry.
		Negative		
		Magnitude		
		Weak		
		Extent		
		Point		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	potentially disturb or damage such sites which could potentially be of importance. Accordingly, implementation of a chance find procedure in case of the discovery of buried archaeology must be considered.	Duration Long-Term Sensitivity of the Receptor Low		- Provide training to employees on the chance find procedure and importance of protecting cultural heritage and artifacts.

Table 9-2: E&S Aspects of Concern during the Operation Phase

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Physical Environment				
Climate	Hospitals are energy-intensive facilities that require electricity for lighting, heating, ventilation, air conditioning, medical equipment, and other essential operations. The energy often comes from fossil fuels, which release greenhouse gases such as carbon dioxide (CO ₂) when burned, contributing to climate change.	Type	Minor	<ul style="list-style-type: none"> - Design the hospital to take advantage of natural lighting and ventilation. - Use passive design principles such as orienting the building to maximize natural heating and cooling. - Incorporate renewable energy sources like solar panels or geothermal systems to generate clean energy. - Include green spaces and gardens around the hospital - Implement energy-efficient practices and technologies to minimize energy wastage. This includes using energy-efficient heating and cooling systems, LED lighting, and optimizing medical equipment to minimize energy usage
		Negative		
		Magnitude		
		Weak		
		Extent		
		Regional		
		Duration		
		Long-Term		
	Water scarcity due to climate change is classified as medium in Balti. This means that there is up to 20% chance droughts will occur in the coming 10 years, potentially impacting the hospital's ability to meet its daily water requirements.	Sensitivity of the Receptor	Minor	<ul style="list-style-type: none"> - Ensure that the design incorporates water harvesting options to conserve and store rainwater. This could include underground water harvesting tanks or rainwater cisterns
		Low		
		Type		
		Negative		
		Magnitude		
		Weak		
		Extent		
		Regional		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Low		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	<p>Climate change has been linked to an increase in both the occurrence and severity of heat waves. Extreme heat hazard is classified as medium in Balti, which means that there is more than a 25% chance that at least one period of prolonged exposure to extreme heat, resulting in heat stress, will occur in the next five years.</p> <p>Although global warming typically results in higher average temperatures and more frequent and severe heatwaves, it can also cause disturbances in atmospheric circulation, such as the jet stream. These disruptions may lead to instances of extreme cold in specific regions during winter.</p>	Type	Minor	<ul style="list-style-type: none"> - Enhance hospital infrastructure with efficient cooling and heating systems, such as air conditioning, to maintain a comfortable and safe environment for patients, staff, and medical equipment during heat waves
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Regional		
		Duration		
		Long-Term		
	<p>Climate change can have significant impacts on precipitation patterns, leading to changes in rainfall distribution and increasing the risk of floods. Urban flood hazard is classified as medium in Balti city, this means that there is a chance of more than 20% that potentially damaging and life-threatening urban floods occur in the coming 10 years.</p>	Sensitivity of the Receptor	Minor	<ul style="list-style-type: none"> - The hospital's design should include precise flood safety measures, including the installation of flood barriers and levees, the use of flood-resistant materials and features, and the implementation of other flood mitigation strategies to ensure its ability to withstand flood events.
		Low		
		Type		
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		
Noise and Vibration		Duration	Minor	<ul style="list-style-type: none"> - Encouraging staff to use low-noise equipment and to keep noise levels to a minimum during procedures and treatments.
		Long-Term		
		Sensitivity of the Receptor		
		Low		
		Type		
		Negative		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	Noise may be generated from the hospital and from the increased traffic commuting to and from the hospital and ambulance sounds.	Magnitude Weak Extent Local Duration Long-Term Sensitivity of the Receptor Low		<ul style="list-style-type: none"> - Train staff on the importance of noise reduction, and how to implement it in their daily work routine. - Installing sound-absorbing materials in patient rooms, hallways, and other common areas. - Installing noise restriction signs in different locations within the buildings to remind visitors to keep noise levels down in order to create a quiet and peaceful environment for patients. - Installing "No Bumping Signs" to indicate that vehicles should not drive over a specific area, such as a driveway or parking lot entrance, at a high speed or with a lot of force.
Soil	Accidental or unsafe disposal of waste constitutes a source of soil pollution.	Type Negative Magnitude Moderate Extent Point Duration	Medium	<ul style="list-style-type: none"> - Medical and Hazardous Waste Management Plan must be developed to ensure having a proper storage, transport and disposal of these wastes in line with national legislations - Coordinate with relevant authorities or hire a competent private contractor for the collection of solid waste from the hospital to the treatment facilities or disposal sites - Maintain records and manifests that indicate volume of solid waste and wastewater generated onsite, collected by contractor, and disposed of at the designated locations. The numbers within the records are to be consistent to ensure no illegal dumping at the site or other areas - Implement proper housekeeping practices at all times - Distribute appropriate number of properly contained litter bins and containers properly marked for different waste streams

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Long-Term		<ul style="list-style-type: none"> - Employees should be trained on proper handling and storage of chemicals and oil, as well as on emergency response procedures. - General purpose spill absorbent must be available at hazardous material storage areas - If spillage on soil occurs, spill must be immediately contained, cleaned-up, and contaminated soil disposed as hazardous waste
		Sensitivity of the Receptor		
		Medium		
Hydrology and Hydrogeology	Any accidental or unsafe disposal of oils/chemicals, and unsafe disposal of different waste streams during the operation phase constitute a source of pollution to any underlying groundwater resources.	Type	Medium	<ul style="list-style-type: none"> - Refer to the mitigation measures and monitoring requirements identified for soil pollution
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Low		
Solid and Liquid Wastes	<p>The solid and liquid wastes anticipated from project operation and maintenance include:</p> <ul style="list-style-type: none"> ▪ <u>Infectious waste</u>: Also known as biomedical waste, which includes materials contaminated with blood, body fluids, used gloves, bandages, swabs, cultures, 	Type	High	<p>Medical and Hazardous Waste Management Plan must be developed before operation commences to ensure having a proper storage, transport and disposal of these wastes.</p>

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	<p>and discarded sharps like needles and scalpels, or other potentially infectious materials.</p> <ul style="list-style-type: none"> ▪ <u>Pathological waste</u>: This includes human tissues, organs, and anatomical parts from surgeries, biopsies, or autopsies. ▪ <u>Sharps waste</u>: includes needles, syringes, lancets, and other sharp objects. ▪ <u>Chemical waste</u>: includes various chemicals for cleaning, disinfection, unused medications, drugs, and pharmaceutical products. ▪ <u>Radioactive waste</u>: involves all wastes that include radioactive materials. ▪ <u>Domestic solid waste</u>: includes regular non-infectious waste, such as paper towels, food wrappers, and other general trash. <p>Since there are no centralized healthcare waste management facilities or sanitary/secured landfills in Moldova, improper disposal of hazardous and medical waste will negatively affect human health. Such dangers include transmission of infectious diseases or bacterial infections and exposure to toxins. Furthermore, medical waste may contaminate water resources and soil, and get into wildlife ecosystems.</p> <p>Accordingly, a Medical Waste Management Plan must be developed to ensure having a proper storage, transport and disposal of these wastes in line with national legislations as well as international legislation.</p> <p>In addition to the above, municipal wastewater is expected to be generated. This will include black water (sewage water from toilets and sanitation facilities), as</p>	<p>Negative</p> <p>Magnitude</p> <p>High</p> <p>Extent</p> <p>Local</p>		<p>The management plan should include certain guidelines to be followed. These include:</p> <ul style="list-style-type: none"> - Infectious and sharp waste must be treated within the hospital premises using appropriate methods to minimize potential risks. This includes autoclaving, micro-wave treatment, or irradiation with waste shredding before final disposal in municipal waste landfills. An alternative option involves engaging an authorized contractor to collect waste and subsequently autoclaving it outside the hospital premises. However, the preferred and recommended method is to carry out treatment within the hospital to maintain optimal safety and control. - Pathological waste should be carefully disinfected and then buried in designated areas like cemeteries after obtaining permits from relevant authorities - With regards to chemical, pharmaceutical, and radioactive waste, it is prudent to explore international collaborations. Such wastes should be exported to countries with established facilities for proper treatment and disposal. - With regards to wastewater management, it is advisable to establish a specific system for collecting wastewater. Within this system, an initial treatment, possibly involving chemical disinfection, should be undertaken to minimize the introduction of potentially hazardous pollutants prior to releasing the

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	<p>well as grey water (from sinks, showers, etc.) generated from patients, staff, and visitors during the operation phase.</p> <p>However, unlike conventional domestic sources, hospital-generated wastewater tends to encompass a broader spectrum of potentially hazardous materials, including medical waste and other substances that can exert a lasting influence on wastewater quality even post-treatment. This challenge arises due to the limitations inherent in municipal wastewater treatment plants, which may lack the specialized capacity to effectively neutralize certain infectious agents and pharmaceutical residues present in medical effluents.</p>	<p>Duration</p> <p>Long-Term</p> <p>Sensitivity of the Receptor</p> <p>High</p>		<p>wastewater into the sewer network. This should also be applied for liquid infectious waste (blood, urine, fecal and vomit masses, etc.)</p> <ul style="list-style-type: none"> - Coordinate with the competent authorities for the transboundary transportation of chemical, pharmaceutical, and radioactive waste. - Develop a Hazardous Waste Transport Plan for proper transportation of chemical, pharmaceutical, and radioactive waste to other countries, in line with the laws and regulations of both the Republic of Moldova and the receiving country. - Distribute appropriate number of properly contained litter bins and containers properly marked for different waste streams - Implement proper housekeeping practices at all times - Coordinate with relevant authorities or hire a competent private contractor for the collection of municipal solid waste and treated medical waste from the site to the approved landfills - Maintain records and manifests that indicate volume of municipal solid waste, and treated medical waste, generated onsite, collected by contractor, and disposed of at the designated locations. The numbers within the records are to be consistent to ensure no illegal dumping at the site or other areas
- Socio-economic and Cultural Environment				
Local economy	The project can serve as a catalyst for economic development by attracting other businesses and professionals to the area, also, the project is expected to create job opportunities during the operation phase.	Type	Minor	<ul style="list-style-type: none"> - Ensure that any needed qualifications available within host community will be hired in the project should the qualifications match. - Provide training and development opportunities for local workers to enhance their skills and
		Positive		
		Magnitude		
		Low		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Extent		qualifications, in order to increase their chances of being hired at the hospital.
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Medium		
Infrastructure and Utilities	<p>The new hospital is anticipated to cause an increased demand for utilities as it will require electricity, water, and other utilities to operate. This can put a strain on the existing infrastructure.</p> <p>In addition, the project is expected to generate a considerable amount of sewage and waste, which will need to be properly treated and disposed of. This can put a strain on the existing sewage and waste management infrastructure.</p> <p>Given all of the above, it is important to manage the impacts of the new building on infrastructure and utilities.</p>	Type	Minor	<ul style="list-style-type: none"> - Coordinate with relevant authorities for securing additional water and power requirements of the Project. - Coordinate with the relevant authorities for disposal of wastewater and solid waste at the designated disposal sites. - Document water and power consumption of the Project
		Negative		
		Magnitude		
		Weak		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Low		
Traffic	The project will result in increased traffic during peak hours, as patients and staff come and go from the hospital which could cause congestion on nearby roads and highways.	Type	Minor	- Develop a Traffic Management Plan
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Public Health and Safety		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Low		
	The project is anticipated to have a positive effect on public health because community members can experience better health outcomes with access to better healthcare.	Type	High	-
		Positive		
		Magnitude		
		Strong		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		High		
	The transfer of patients from the old hospital to the new hospital can cause a disruption in the smooth continuity of medical care, particularly for those dealing with serious medical conditions or continuous treatments. The shift between healthcare facilities, alteration in healthcare providers, medical records, and treatment approaches can result in miscommunication and lapses in proper care if not properly handled.	Type	High	<ul style="list-style-type: none"> - Develop a detailed plan for each patient's transfer, outlining the steps required to ensure the continuity of their medical care and treatment. - Train healthcare providers involved in the transfer process to effectively manage patient transitions and address potential issues promptly. - Implement an electronic medical record system that can be accessed by both hospitals to facilitate the transfer of patient data securely.
		Negative		
		Magnitude		
		Strong		
		Extent		
		Local		
		Long-Term		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	There is a chance of 10% potentially-damaging earthquake shaking in the project area in the next 50 years.	High	Severe	<p>Ensure that the design of the hospital incorporates robust seismic mitigation measures to safeguard the well-being of patients and staff from potential earthquake hazards.</p> <p>Adhere to the latest seismic building codes. These codes are designed to</p>
		Type		
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Long-Term		
	Power cuts or failures pose a significant threat to patients, especially those who depend on electric medical equipment. Uninterrupted power supply is essential for devices like ventilators and monitors, which are indispensable for critical care	Sensitivity of the Receptor	Severe	<ul style="list-style-type: none"> - The hospital should be equipped with an automatic backup power system, such as generators or uninterruptible power supplies (UPS). Regular maintenance should be performed on these backup power systems to ensure their effectiveness. - Carry out regular maintenance for backup power systems to ensure their effectiveness. - Develop a Contingency Plan including Emergency Response Procedures
		high		
		Type		
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		High		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Occupational Health and Safety and Labour conditions	<p>Working in a hospital can have a number of impacts on the occupational health and safety. Some of the main concerns include:</p> <ul style="list-style-type: none"> Physical hazards: Hospital staff, particularly nurses and other healthcare workers, are at risk of injuries from lifting and moving patients, handling equipment, and exposure to hazardous materials. Biological hazards: Staff can be exposed to infectious diseases from patients, which can be transmitted through blood, bodily fluids, and other contact routes. <p>Given the above, it is important to have effective safety and health programs in place to minimize these risks and protect staff. This may include things like ergonomic assessments to reduce the risk of injury, and infection control measures to minimize the spread of diseases.</p>	Type	Severe	<p>Develop and implement an Occupational Health and Safety (OHS) Plan prior to commencement of work. The plan should include but not limited to the following:</p> <ul style="list-style-type: none"> Risk assessment: Identifying potential hazards and assessing the level of risk associated with them. Education and training: Providing staff with education and training on the transmission and symptoms of TB, as well as proper infection control procedures to prevent its spread. Control measures: Implementing measures to control identified hazards, such as chemical exposure, and physical injuries Communication: Having a clear and effective system in place for communicating safety information to employees and other relevant parties. Emergency response: Developing and practicing emergency response plans to address potential hazards such as fire, biological hazards, and natural disasters. Monitoring and review: Regularly monitoring and reviewing the effectiveness of the safety plan, and making adjustments as needed. Compliance: Ensure compliance with all relevant laws, regulations and guidelines.
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Long-Term		
Gender	<p>Moldova, like many countries, faces issues related to gender discrimination and inequality in the workplace. Some of the specific problems that have been reported include:</p> <ul style="list-style-type: none"> Limited opportunities for women Unequal payments Harassment and violence 	Type	Minor	<ul style="list-style-type: none"> Develop and implement an equal pay policy Implement measures to promote and support women's leadership positions Develop a GRM to receive and facilitate resolution of workers.
		Negative		
		Magnitude		
		Weak		
		Extent		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
		Local		- Conduct workshops or training sessions to sensitize employees about gender-related issues
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		Medium		

Table 9-3: E&S Impacts during the Decommissioning Phase

E&S COMPONENT			POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Physical Environmen						
Solid and Liquid Wastes	Demolition activities lead to the production of a substantial quantity of various types of waste such as construction materials, debris, electronic waste, radioactive waste, as well as potentially hazardous and medical waste and materials. As structures are dismantled and taken apart, a significant volume of discarded items arises, comprising diverse categories of unwanted and discarded materials that can have adverse environmental implications if not managed properly.	Type	Medium	Refer to the mitigation measures and monitoring requirements identified for the construction and demolition, and the operation phases		
		Negative				
		Magnitude				
		Strong				
		Extent				
		Local				
		Duration				
		Temporary				
Sensitivity of the Receptor	high					
Socio-economic and Cultural Environment						
Local economy	Decommissioning of the hospital will directly affect the employees working there, leading to potential job losses for doctors, nurses, administrative staff, janitorial workers, and other healthcare professionals. The decommissioning-induced loss of jobs can result in economic hardships, diminished quality of	Type	Medium	Implement a job placement assistance program to actively help the affected healthcare professionals find new employment opportunities. This program could include collaborating with other healthcare facilities, local clinics, and medical centers to identify job openings and facilitate smooth transitions for the displaced workers.		
		Negative				
		Magnitude				
		Strong				
		Extent				
		Local				
Duration						

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
	life, and heightened social difficulties among the local community.	Long-Term		
		Sensitivity of the Receptor		
		high		
	The decommissioning of the hospital will have far-reaching impacts on businesses that have come to depend on the hospital's presence. Suppliers, retailers situated in the vicinity, and service providers will certainly be impacted by the closure of the hospital.	Type	Medium	Establish a transition assistance pro-gram for affected businesses. This program could provide financial support, training, and resources to help them adapt to the changes caused by the hospital's closure.
		Negative		
		Magnitude		
		Strong		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		high		
	Decommissioning of the hospital will result in potential declines in property values.	Type	Minor	Explore options for repurposing the hospital building or the site itself to maintain its value and relevance to the community.
		Negative		
		Magnitude		
		Moderate		
		Extent		
		Local		
		Duration		
		Long-Term		

E&S COMPONENT	POTENTIAL IMPACT	IMPACT EVALUATION	SIGNIFICANCE	MITIGATION MEASURES
Public Health and Safety	The decommissioning of a hospital can have profound and far-reaching impacts on the local community, including reduced access to essential healthcare services, leading to potential delays in treatment and poorer health outcomes for residents	Sensitivity of the Receptor		Establish alternative healthcare facilities or clinics in the vicinity. These facilities should offer essential medical services and treatments that are readily accessible to residents
		Low		
		Type	Severe	
		Negative		
		Magnitude		
		Severe		
		Extent		
		Local		
		Duration		
		Long-Term		
		Sensitivity of the Receptor		
		high		

9.3 RESIDUAL E&S IMPACTS

Residual impacts are those environmental and social impacts that remain following the implementation of the required mitigation measures. Most of the identified environmental and social impacts can be controlled by implementing appropriate environmental management practices. However, the construction phase still poses some potential concerns, particularly regarding occupational health and safety, especially when dealing with the removal of asbestos-containing materials.

In the operational phase, residual impacts include those related to occupational health and safety, particularly due to the handling of medical and hazardous waste and materials, as well as the transition of patients from the old hospital to the new one, and potential disruptions in medical services that could occur during this process.

During the decommissioning phase, the enduring effects bear similarities to the occupational health and safety impacts identified in both the construction and operation phases of the project. However, it is important to note that certain environmental and social consequences may persist despite the implementation of various mitigation measures as the project reaches its decommissioning stage. A notable lasting effect is the limited access to crucial healthcare services, which may result in delays in receiving essential treatment and ultimately lead to poorer health outcomes for the community, particularly if there are no other healthcare facilities in the area with comparable qualifications and standards.

9.4 CUMULATIVE IMPACTS

At this stage, no final decision has been reached regarding the future utilization of the existing hospital. While preliminary discussions in 2017 had mentioned that the city of Balti would still need a municipal hospital offering care services of secondary level, it was verified that the proposed option is not viable in the long term. The existing hospital is inadequate to support modern medical service delivery and may only be suitable for serving as a long-term/palliative care facility or a geriatric center.

Assuming that the current hospital will continue its operations, it is expected that the establishment of the new hospital will not result in any significant environmental or social cumulative impacts. This is because the new hospital will alleviate the load on the existing hospital, and the overall impact on the environment and society will remain minimal.

As a result, both healthcare institutions can work in tandem to cater to the medical needs of the community without posing any additional adverse impacts on the surrounding environment or the local population if properly managed.

In fact, the ESIA indicates that the establishment of the new hospital, will bring about positive and sustainable impacts on the local society, guaranteeing a more promising and healthier future for the community as a whole.

9.5 TRANS-BOUNDARY IMPACTS

Transboundary impacts are the results and outcomes that can occur beyond the confines of a particular geographical region, usually arising from environmental or social activities in a nearby country or area. These impacts can extend across national borders and influence the environment, ecosystems, and communities in locations outside of the initial source.

While hospital projects are likely to have a smaller overall footprint and lesser environmental impacts compared to large-scale industrial or infrastructure projects, they can still have environmental trans-boundary impacts.

As mentioned in section 9 above, the transboundary impacts during the construction phase of the project are found to be relatively limited, primarily centered around the potential contribution of greenhouse gas emissions. While construction activities can lead to some level of emissions due to the use of machinery, transportation, energy consumption, as well as the production of concrete, effective mitigation measures and sustainable practices could be implemented to minimize the overall impacts.

During the operation phase, the export of hazardous waste can give rise to potential transboundary impacts if improperly managed, posing a significant risk to the environment. When hazardous waste is exported without appropriate control and mitigation measures, it can lead to adverse consequences for ecosystems and communities in the receiving countries.

To mitigate the negative impacts of transboundary hazardous waste transport, it is critical to develop and implement a comprehensive hazardous waste transport plan.

The Transport Plan should include thorough details such as description of the waste, the proposed transport route, appropriate packaging and labeling requirements, as well as the identification of authorized waste transporters. It should also encompass safety measures, documentation protocols, and emergency response plans.

Besides the impacts mentioned earlier, the proposed project is not foreseen to cause any further transboundary impacts due to the following:

- The project site is situated far from the country's border or sensitive ecological zones, reducing the risk of negative impacts beyond its boundaries.
- The project site is located away from any rivers or water surfaces that cross regional borders. The absence of such water bodies near the hospital ensures that there will be no direct or indirect environmental implications extending beyond the project site.
- The hospital will primarily serve the local community of the northern region, and its operations are not anticipated to generate substantial cross-border traffic or emissions, as the majority of visitors and staff will be from the surrounding areas, resulting in minimal additional burden on regional transportation networks.

10 ENVIRONMENTAL AND SOCIAL SAFEGUARDS MANAGEMENT PLAN (ESSMP)

The Environmental and Social Safeguards Management Plan (ESSMP) is an essential framework aimed at protecting the environment and local communities throughout the various phases of the project. This comprehensive plan involves a detailed examination and assessment of anticipated environmental and social impacts, identifying appropriate measures to mitigate such impacts, and setting up monitoring requirements that different project parties must adhere to within a specified timeframe.

10.1 ROLES AND RESPONSIBILITIES

This section outlines the main roles and responsibilities during the project implementation to be followed as part of the project ESSMP needed to ensure that all relevant stages of the project are covered to meet the applicable requirements.

10.1.1 CEB

CEB is providing the funding to implement this project through the agreement with Government of Moldova. CEB will follow-up with the MoH in terms of progress, budget expenditure, and compliance with CEB Environmental and Social Safeguards Policy and Environmental and Social Safeguard Standards.

10.1.2 MINISTRY OF HEALTH

The MoH will be responsible for managing, overseeing, and implementing the project funded by the CEB, which includes the proposed project. The MoH will act as the Government of Moldova's permitted designee in implementing the project and perform the Government's rights and responsibilities to oversee and manage the project and the entities involved in implementation, including the project Consultant and assigned contractors.

The key roles and responsibilities of MoH include the following:

- Ensure that the implementation of construction activities is conducted in a manner that protects the environmental and social components;
- Ensure compliance with all relevant national and international legislation and requirements;
- Formally review and approve the Construction Environmental and Social Management Plan (CESMP) that will be prepared by the contractor prior to commencement of the construction activities;
- Ensure compliance with project ESIA/ESSMP during the construction period and maintain close coordination with the site engineers and the Environmental, Social, Health and Safety (ESHS) focal point of the contractor;
- Conduct periodic site ESHS supervision. The purpose of the supervision is to verify that the ESIA/ESSMP is being effectively implemented;

- Ensure that the ESMP for the operation phase of the project is implemented; and
- Report on community engagement and grievance aspects as well as ESHS monitoring results to CEB on regular basis during the construction phase.

10.1.3 HOSPITAL MANAGEMENT

The Hospital Management will be responsible for the operation and maintenance of the new hospital during the operation phase. Accordingly, the Hospital Management will also be responsible for implementing the ESHS monitoring measures proposed during operation phase and report on the E&S performance during operation phase to the MoH.

10.1.4 THE PROJECT CONSULTANT

The project Consultant will be an entity approved and assigned by MoH. The Consultant will be responsible for managing and supervise the works and activities of the contractors, ensuring that construction activities are carried out in compliance with the project's requirements, bid documents and the requirements and procedures set forth in the project ESIA/ESSMP. The Consultant will ensure that any potential health, safety, environmental hazards, and social concerns related to the project are controlled and properly addressed. In addition, the Consultant will assist and regularly report to the MoH on progress and achieved milestones

Basically, the main tasks of the Consultant will include but not limited to the following:

- Review and revise the project's ESIA/ESMP during the detailed design phase to identify and assess any emerging environmental and social risks;
- Ensure that all relevant ESHS aspects are duly covered in the Contractor Contract;
- Ensure that the construction methods proposed by the contractors for carrying out the works are satisfactory;
- Ensure that contractor are familiar with the mitigation measures and applicable environmental and social requirements applicable to the project in order to assess the extent of their conformity to the project ESSMP;
- Inspection of contractor's construction equipment, safety of works and personnel;
- Establish efficient procedures for verifying contractor performance and reporting progress and problems in a timely manner;
- Undertake project performance monitoring and evaluation in accordance with the projects ESIA/ESSMP requirements;
- Ensure that contractors are not involved in actions opposing national legislation and CEB Environmental and Social Safeguards Policy; and
- Assign a full-time engineering representative (i.e., Resident Engineer) in the project area to supervise/oversight the contractors work on the ground, and performs all required tasks as per the contractor documents with the MoH.

10.1.5 THE CONTRACTOR

The Contractor will be managed and supervised by the Consultant and shall be responsible/ but not limited to the following:

- Developing the Construction Environmental and Social Management Plan (CESMP), based on the requirements and procedures set forth by the project ESIA/ESSMP and specific to his activities prior to the construction works on the project site;
- Being fully responsible for the adaptation and implementation of the CESMP with reference to the project ESIA/ESSMP;

- Being committed to continuous improvement of the project environmental and social performance. In order to achieve this, internal audits and reviews shall be performed in order to confirm that the ESIA/ESSMP is being actively implemented. The contractor shall be responsible to forward the internal audit report to the Consultant which will review the report outcomes and inspect and verify the effectiveness of the Contractor practices and procedures and consequently report the findings to the MoH and CEB; and
- Ensure that all involved sub-contractors comply with the provisions of project ESIA/ESSMP and CESMP. This will be achieved by monitoring and reviewing their environmental performance and carrying out regular environmental awareness sessions, audits and inspections and reporting all site activities on regular basis to the Consultant.

10.2 MONITORING AND REPORTING PROGRAMME

The responsible person for the ESSMP implementation will do at least one site visit per month to the construction site with the ESSMP commitments at hand. After each site visit the status of compliance with the ESSMP commitments shall be noted down in a report along with the required corrective actions, if any.

During the implementation of the project and as part of project reporting requirements, progress reporting input on E&S safeguards will take place at two main levels:

- Reporting by MoH to CEB: The MoH shall provide as part of the project progress report, information on environmental and social risks and safeguards implementation.
- Reporting by Contractor to the MoH: The Contractors shall submit monthly progress reports to detailing E&S, health and safety performance. The monthly report shall include provisions for ESHS performance management on sites including training, incident investigation, inspection and audit findings.

Should any environmental or Health and Safety incidents be observed or reported by the workers, this shall be reported by MoH to CEB immediately.

10.3 ESHS TRAINING AND CAPACITY BUILDING REQUIREMENTS

The current capacity of the MoH / the hospital (management and staff) to understand and implement ESHS requirements is minimal and needs substantial improvements. The project ESHS provisions will not be effectively implemented unless the MoH/ the future Hospital (Management and staff) are aware of their specific responsibilities, especially during the operation phase. Therefore, a specific ESHS capacity building interventions should be established for the MoH/ the Hospital staff throughout the project phases (planning, construction, and operation). The capacity building interventions should focus, at a minimum, on the following aspects:

- Understanding of the project ESHS requirements.
- ESSMP objectives, responsibilities, and required management measures to be implemented.
- Project environmental and social monitoring, incident reporting and corrective actions.
- Medical Waste management.
- Infection Control.
- Emergency Preparedness and Response.

The ESHS capacity building interventions shall be carried out by the Consultant assigned for the project during the project implementation.

During the Construction stage, the contractor shall prepare a detailed training plan for all construction workers and this plan needs to be approved by the MoH/Consultant. The ESHS manager shall provide an overview level of training to all staff. The objective will be to highlight the environmental sensitivity of the working area and

ensure that all staff are aware of environmental and social mitigation commitments. The training will be based on project environmental and social standards / requirements, the environmental and social management commitments and procedures. It will include:

- Occupational Health and Safety rules at the construction site.
- Dust control efforts.
- Spill prevention and response.
- Project's Grievance Mechanism and the basic worker's rights.
- Chance Find Procedures for artifacts.
- Interaction rules with the local communities and how to deal with unauthorized visitors to the site.

In addition to all staff, all temporary visitors to the site will be required to undergo an abbreviated version of environmental awareness training/induction to ensure they too are aware of environmental requirements.

10.4 ADDITIONAL PLANS AND PROCEDURES NEEDED

Considering the project's activities and potential impacts, there is a need to develop more specific operational E&S plans to ensure better control of environmental risks and impacts anticipated from the project. These plans should be developed maintained during the project implementation phases. Table 10-1 below presents a description of the expected content of these plans and procedures as well as the timeframe and responsibilities for their development.

Table 10-1: List of additional Plans and procedures Needed

PLAN, POLICY, OR PROCEDURE	OBJECTIVE / EXPECTED CONTENT	TIMEFRAME	RESPONSIBILITY
Asbestos Management Plan (AMP)	The plan should clearly identify the locations where the ACM is present, its condition (e.g., whether it is in friable form with the potential to release fibers), procedures for monitoring its condition, procedures to access the locations where ACM is present to avoid damage, and training of staff who can potentially come into contact with the material to avoid damage and prevent exposure. The plan should be made available to all persons involved in operations and maintenance activities. Repair or removal and disposal of existing ACM in buildings should only be performed by specially trained personnel following the internationally recognized procedures.	Prior to construction (demolition of the existing building)	The Contractor, and to be reviewed and approved by the MoH/ Project Consultant
Stakeholder Engagement Plan (SEP) including the project complaints Mechanism	The main purpose of the Stakeholder Engagement Plan (SEP) is to provide a tool to the MoH to communicate with stakeholders during the implementation of the project including but not limited to: potentially affected communities, employees, suppliers and customers during the project implementation and how it will be effectively managed, without negatively impacting the project. The	During the planning phase, and to be updated throughout the construction and operation phases	The MoH through the project Consultant

PLAN, POLICY, OR PROCEDURE	OBJECTIVE / EXPECTED CONTENT	TIMEFRAME	RESPONSIBILITY
	SEP will ensure that stakeholders are engaged throughout the project lifecycle.		
Emergency Response Plan (ERP)	The Emergency Response Plan (ERP) aims to describe the resources, organization and actions required in response to emergency situations during the construction phase. The main components to be included in the ERP are communication procedure, organization and responsibilities, resources in place, plans for all credible scenarios, training and competency requirements, recordkeeping, and reporting.	Prior to construction	The Contractor, and to be reviewed and approved by the MoH/ Project Consultant
Contingency Plan	This plan outlines comprehensive approaches to ensure uninterrupted medical services and operations during emergencies such as power cuts, natural disaster..etc. The main components to be included in the plan include risk assessment, emergency response procedures, communication procedure, patients care continuity, roles and responsibilities, and recovery and post-emergency evaluation.	Prior to operation	Hospital Management and to be reviewed and approved by the MoH.
Spill Response Plan	Aims to manage and address accidental spills of hazardous substances, and chemicals during construction, as well as medical and hazardous waste and materials during operation.	Prior to construction	The contractor, and to be reviewed and approved by the MoH/ Project Consultant
		Prior to operation	Hospital Management, and to be reviewed and approved by the MoH
Waste Management Plan (WMP)	The plan aims at handling and disposing different waste streams during the construction phase in an environmentally responsible and efficient manner.	Prior to construction	The Contractor, and to be reviewed and approved by the MoH/ Project Consultant
Medical and Hazardous Waste Management Plan	The plan aims to prevent and/or mitigate the negative ESHS effects of medical waste. Medical Waste must be managed in a safe manner to prevent the spread of infection and reduce the exposure of health workers, patients and the public to the risks from medical waste. The plan should include advocacy for good practices in medical waste management and is to be used by health, sanitary and cleaning workers who manage medical waste	Prior to operation	The hospital management and to be reviewed and approved by the MoH
Construction Environmental and	The CESMP outlines the strategies and measures to address environmental and social impacts during the construction phase of	Prior to construction	The Contractor, and to be reviewed and approved

PLAN, POLICY, OR PROCEDURE	OBJECTIVE / EXPECTED CONTENT	TIMEFRAME	RESPONSIBILITY
Social Management Plan (CESMP)	a project. It focuses on minimizing the project's ecological footprint and promoting social responsibility. The CESMP typically includes guidelines for waste management, water and energy conservation, air quality control, biodiversity protection, and community engagement, etc.		by the MoH/ Project Consultant
Traffic Management Plan (TMP)	<p>The Traffic Management Plan aims to provide practical guidance on the planning of these issues, the control measures that will be implemented, and highlights the site-specific points for consideration and necessary action. Avoiding hazards and controlling the risk arising from the movement of vehicles in and around the hospital during construction and operation phases. Therefore, it's expected that the contractor and the hospital management prepare two separate a Traffic Management Plans for the construction and operation phases that include, but not limited to:</p> <p><u>Construction Traffic Management Plan</u></p> <ul style="list-style-type: none"> - Planning and managing both vehicles and pedestrian routes within the site - Safe driving and working practice within the site - Protection of the public - Provisions of signs, barriers and adequate vision of lines and sights - Adequate parking and offloading/storage area. <p><u>Operation Traffic Management Plan</u></p> <ul style="list-style-type: none"> - Traffic flow design - Protection of the public - Emergency access - Parking management - Safe driving - Provisions of signs, barriers and adequate vision of lines and sights 	Prior to construction	The Contractor, and to be reviewed and approved by the MoH/CONSULTANT
		Prior to operation	The hospital management, and be reviewed and approved by the MoH
Hazardous Waste Transport Plan	<p>In the event that the choice to transport chemical, pharmaceutical, and radioactive waste, which cannot be adequately disposed of within the Republic of Moldova, to other countries is considered, it is essential to create a Hazardous Waste Transport Plan.</p> <p>The Transport Plan should encompass vital details such as a thorough description of the waste, the proposed transport route,</p>	Prior to operation	The hospital management and to be reviewed and approved by the MoH

PLAN, POLICY, OR PROCEDURE	OBJECTIVE / EXPECTED CONTENT	TIMEFRAME	RESPONSIBILITY
	appropriate packaging, and labeling requirements, as well as the identification of authorized waste transporters. It should also encompass safety measures, documentation protocols, and emergency response plans. Ensuring compliance with relevant international treaties and obtaining necessary notifications and consents from both the exporting and importing countries are vital elements of the plan		
Patients Transfer Plan	The Patients Transfer Plan is a structured approach used when transferring patients from the old hospital to new hospital. The goal of this plan is to ensure the safe and smooth transfer of a patient's care and medical information.	Prior to operation	The hospital management and be reviewed and approved by the MoH

10.5 E&S COMMITMENTS AND MONITORING MEASURES

The E&S commitments and monitoring required for the project implementation during the Project planning & construction, operation, and decommissioning phases are presented Table 10-2, Table 10-3, and

Table 10-4 below.

Table 10-2: ESSMP for the Planning and Construction Phase

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
Climate	The construction phase involves heavy machinery, electricity usage, and other energy-intensive activities. If this energy comes from fossil fuel-based sources, it adds to the carbon footprint and exacerbates climate change.	Medium	<ul style="list-style-type: none"> - Implement energy-efficient practices and technologies to minimize energy wastage during construction activities. This includes using energy-efficient equipment, LED lighting, and optimizing the scheduling of energy-intensive tasks. - Implement a system to monitor emissions from machinery and equipment during construction 	Contractor	- Monitor energy-efficient practices and emissions from machinery during construction.	Weekly	MoH/Project Consultant	Minor
Air Quality	Release of asbestos fibers to the air during the demolition of the existing building.	High	<p>An Asbestos Management plan should be developed during the planning phase to ensure proper and safe handling of asbestos containing materials. The procedure must identify appropriate measures to eliminate the risk of asbestos release into the air. Such mitigation measures include but not limited to the following:</p> <ul style="list-style-type: none"> - Properly identifying and locating all asbestos-containing materials - Wetting materials before and during demolition to reduce the release of asbestos fibers - Using barriers and negative air pressure to contain and capture any released fibers 	Contractor	<ul style="list-style-type: none"> - Review the Asbestos Management Plan <hr/> <ul style="list-style-type: none"> - Monitor the implementation of the Asbestos Management Plan 	<p>Once before demolition and construction commences</p> <hr/> <p>Daily during demolition activities</p>	<p>MoH/ Project Consultant</p> <hr/> <p>MoH/ Project Consultant</p>	Medium

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<ul style="list-style-type: none"> - Only trained and certified professionals should handle and remove asbestos materials - Cleaning of the demolition site and all equipment used is also necessary to prevent the spread of asbestos fibers 					
	Generation of dust and exhaust emissions due to excavation, grading, and movement of heavy equipment and vehicles.	Minor	<ul style="list-style-type: none"> - Use equipment and vehicles in appropriate technical conditions. - Suppress the scattering of dust by sprinkling of water on an "as-needed basis". - Ensure appropriate stockpile management (friable materials) to minimize dust. - Cover truck loads with canvas to avoid dust blow. - Ensure that vehicles adhere to a speed limit of 15km/h within the construction site. 	Contractor	<ul style="list-style-type: none"> - Observe and carry out site inspection for dust and gases. - Review complaints records for number of complaints recorded. 	Daily	MoH/ Project Consultant	Negligible
Noise and Vibration	Noise due to movement and operation of construction equipment and machinery, as well as workers may cause disruptions and disturbances for nearby settlements.	Minor	<ul style="list-style-type: none"> - Ensure vehicles and equipment are switched off when not in use. 	Contractor	<ul style="list-style-type: none"> - Observe and carry out site inspection for noise. - Review complaints records for number of complaints recorded. - Conduct a noise monitoring program to ensure that noise 	Weekly	MoH/ Project Consultant	Negligible

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
					levels are within the limits identified under the national Laws (Protection against noise NCM E.04.02:2014)			
Soil Pollution	Potential release of asbestos to the soil	Medium	- An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.	Contractor	- Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant	Minor
					- Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	Project Consultant	
	Soil pollution may occur due to accidental leakage of oil/fuel or chemicals.	Medium	<ul style="list-style-type: none"> - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Provide a spill kit for containment and clean-up of any accidental spills. 	Contractor	<ul style="list-style-type: none"> - Check for oil leakage from construction machinery and vehicles. - Check on status of repairs condition of locations where soil is affected by oil leakage. - Review solid waste and wastewater 	Weekly	MoH/ Project Consultant	Minor

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
					manifests to ensure disposal at approved locations. - Monitor the records for any reporting of spillage.			
Hydrology and Hydrogeology	Accidental oil/chemical spills may pose a threat to the groundwater quality.	Medium	<ul style="list-style-type: none"> - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Provide a spill kit for containment and clean-up of any accidental spills. 	Contractor	<ul style="list-style-type: none"> - Check for oil leakage from construction machinery and vehicles. - Check on status of repairs condition of locations where soil is affected by oil leakage. - Review solid waste and wastewater manifests to ensure disposal at approved locations. - Monitor the records for any reporting of spillage. 	Weekly	MoH/ Project Consultant	Minor
Solid and Liquid Waste	Potential impacts from im-proper management of	Medium	<ul style="list-style-type: none"> - An asbestos management plan must be developed before commencement of demolition 	Contractor	<ul style="list-style-type: none"> - Review the Asbestos 	Once before demolition and	MoH/ Project Consultant	Minor

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	waste streams during the demolition and construction phase		activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.		Management Plan	construction commences		
					- Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	MoH/ Project Consultant	
			<ul style="list-style-type: none"> - Ensure appropriate disposal of solid waste at approved disposal sites - Ensure proper collection and disposal of domestic wastewater generated from workers. Proper storage of domestic wastewater is in septic tanks and disposal should be at a designated WWTP in line with national requirements. - Provide a spill kit for containment and clean-up of any accidental spills. - In case of having temporary fuel tanks onsite, use secondary containment tanks to control accidental leakages. - Ensure immediate cleaning of any spills and remediation of contaminated areas. - Maintain proper housekeeping on site. - Collect and segregate wastes and ensure safe storage and in line with legal requirements. 	Contractor	<ul style="list-style-type: none"> - Carry out site inspections to ensure proper housekeeping practices are implemented - Monitor the records for any reporting of spillage. - Check for oil leakage from construction machinery and vehicles. - Check on status of repairs condition of locations where soil is affected by oil leakage. - Review solid waste and wastewater manifests to ensure disposal 	Weekly	Project Consultant	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
					at approved locations.			
					- Carry out site inspections to ensure that solid waste containers are emptied and collected at appropriate intervals to prevent overflowing.			
			<ul style="list-style-type: none"> - Develop a waste management plan - Develop a spill response plan, to control any inadvertent leakage or spill. - Provide workers with proper spill response training 	Contractor	<ul style="list-style-type: none"> - Check availability of the waste management plan - Check the availability of spill response plan. - Check training records for training of workers on the spill response plan. 	Once before construction and demolition commences	MoH/ Project Consultant	
					- Review the implementation of the waste management plan	Weekly during construction	MoH/ Project Consultant	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
					- Review records of the spill response plan			
Aesthetics	Some visual disturbance will occur due to construction works.	Minor	<p>Ensure proper general housekeeping and personnel management measures are implemented which could include:</p> <ul style="list-style-type: none"> - Ensure the construction site is left in an orderly state at the end of each work day. - To the greatest extent possible construction machinery, equipment, and vehicles not in use should be removed in a timely manner - Proper handling of waste streams, etc. 	Contractor	- Conduct regular inspections	Daily	MoH/ Project Consultant	Negligible
Biodiversity	Potential soil pollution from the demolition of asbestos-containing structures and improper and unsafe disposal, which could directly affect animals and insects in the soil.	Medium	- An asbestos management plan must be developed before commencement of demolition activities to ensure safe removal of asbestos-containing waste to protect soil from contamination.	Contractor	- Review the Asbestos Management Plan	Once before demolition and construction commences	MoH/ Project Consultant	Minor
					- Monitor the implementation of the Asbestos Management Plan	Daily during demolition activities	MoH/ Project Consultant	
	Modifications related to ecosystem are anticipated to be made as the construction of the new hospital may		Include efforts to relocate or transplant valuable trees to other suitable locations on the site or in the vicinity	Contractor	- Monitor the removal and relocation of trees	Before construction and demolition activities commence	MoH/ Project Consultant	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	necessitate the removal of a number of trees on the site							
Local Economy	The construction of the hospital can create job opportunities for members of the host community, which is a positive impact, but with limited number of job opportunities and of short-term duration.	Minor	- Ensure to hire labour from host communities if their qualifications meet the work requirements.	Contractor	- Review employment records	em- Before Project commencement and during construction	MoH/ Project Consultant	Negligible
Infrastructure and Utilities	Traffic jams are anticipated due vehicles that will be moving to and from the project site.	Minor	- Develop a Traffic Management Plan	Contractor	Review the Traffic Management Plan	Before Project commencement and during construction	MoH/ Project Consultant	Negligible
	There exists a possibility of harm to the electrical poles, gas distribution network, and water pipelines in the vicinity, which could lead to a subsequent impact on the provision of power	Medium	- Location of the gas network, as well as water distribution network must be obtained from relevant authorities. If the networks layout couldn't be obtained, a utility survey must be undertaken to determine the layout of such networks.	Contractor	Review of the layout/ the utility survey	Once before construction and demolition commences	MoH/ Project Consultant	Minor

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	and water to the neighborhood							
Public Health and Safety	Risks may occur during the construction phase due to traffic accidents resulting from movement of vehicles and machinery to and from the project site or within the project site.	Severe	<ul style="list-style-type: none"> - Ensure licensed operators are operating all vehicles accessing the facility. - Maintain and inspect vehicles adequately. - Use a flagman to control vehicle and truck movement at the entrance and exit of the project site. - Prohibit vehicle transit across any restricted area and ensure they are limited to working activities. - Number of traffic signs, their characteristics and distance among them will be placed according to local legal requirements. 	Contractor	<ul style="list-style-type: none"> - Check records that regular inspections of vehicles and documentation of their maintenance. - Check for availability of a flagman stationed at the entrance and exit of the project site to control traffic. 	Weekly	MoH/ Project Consultant	Minor
	<ul style="list-style-type: none"> - Risk of exposure of the public to construction-related health risks such as dust, noise, 	Severe	<ul style="list-style-type: none"> - Control public access to the construction site to reduce public safety concern. - Ensure that all trucks and vehicles accessing the facility are operated by licensed operators. 	Contractor	<ul style="list-style-type: none"> - Check that site entrance is controlled and site is secure. - Monitor the behaviour of drivers and 	Weekly	MoH/ Project Consultant	Minor

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	<p>falls and equipment-related incidents which could lead to injury or death.</p> <ul style="list-style-type: none"> - Movement of heavy machinery and vehicles to and from the site and the risk of traffic accidents that may affect passing public. 		<ul style="list-style-type: none"> - Ensure adequate maintenance and inspection of vehicles. - Presence of flagman at the entrance and exit of the project site in order to control vehicles and truck movement. - Every employee working at the project site shall make sure that all needed signs and preventive measures are implemented when starting any activity. - Ensure that the number of traffic signs, their characteristics and distance among them is placed according to local legal requirements. - Prohibit vehicle transit across any restricted area. - Develop security measures to prevent unauthorized access to the construction site. Such measures could include installing a fence around the construction site. - Implement a GRM to receive and facilitate resolution of affected communities' concerns and grievances. 		<p>ensure they adhere to speed limits.</p> <ul style="list-style-type: none"> - Monitor grievance log and ensure all complaints are addressed. - Observe that traffic signs are in place and in good condition. - Review drivers' licenses 			
Occupational Health and Safety	The main impact during the demolition of the existing building includes	Severe	<ul style="list-style-type: none"> - An asbestos Management Plan should be developed. 	Contractor	<ul style="list-style-type: none"> - Review the Asbestos Management Plan 	Once before demolition and construction commences	MoH/ Project Consultant	Medium

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	direct exposure to asbestos. Moreover, several occupational health and safety risks would arise on the construction site such as tripping, falling, work injuries, lifting of heavy equipment, exposure to heat stress, working at heights, and accidental electric shocks. There could also be a risk of fire accidents on site during construction works due to welding activities, workers smoking on site, etc		<div>- Monitor the implementation of the Asbestos Management Plan</div> <div>- Provide induction and training and awareness to all employees regarding risks associated with exposure to asbestos</div> <div>- Develop an Occupational Health and Safety (OHS) Plan prior to commencement of work.</div> <div>- Allocate specific personnel responsible for health & Safety management on site.</div> <div>- Provide adequate and appropriate training of all workers on the contractor's OHS policies and procedures.</div> <div>- Establish a grievance mechanism to receive and facilitate resolution of workers concerns and grievances.</div> <div>- Emergency and evacuation plan shall be prepared by the contractor and relevant staff shall be trained through mock-up drills.</div> <div>- Ensure all workers are equipped with proper Personal Protective Equipment (e.g., masks, eye goggles, breathing equipment, etc.).</div>	<div>Contractor</div> <div>Contractor</div> <div>Contractor</div>	<div>- Monitor the implementation of the Asbestos Management Plan</div> <div>- Review of induction and training attendance sheet</div> <div>- Check the contractor has an occupational health and Safety Plan.</div> <div>- Check OHS training records</div> <div>- Check the availability of the grievance mechanism</div> <div>- Ensure that emergency and evacuation plan has been developed</div> <div>- Conduct regular site inspections</div>	<div>Daily during demolition activities</div> <div>Once before demolition and construction commences</div> <div>Once before construction commences</div> <div>Daily</div>	<div>MoH/ Project Consultant</div> <div>MoH/ Project Consultant</div> <div>MoH/ Project Consultant</div> <div>MoH/ Project Consultant</div>	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<ul style="list-style-type: none"> - All construction equipment used for the execution of the project works shall be fit for purpose and carry valid inspection certificates and insurance requirements. - Provide a storage area for hazardous materials. The hazardous materials must be labelled with proper identification of its hazardous properties. Storage of chemicals shall be performed in accordance with MSDS's. - Ensure clear signage is in place, such as warning of speed limits, obstructions, allowable widths/heights...etc. - Ensure that all equipment and machinery are turned off, unplugged, and properly stored when not in use. - Prohibit smoking in areas identified as a fire hazard. - Formally alert civil defence prior to commencement of activities with potential fire hazards. - Ensure that all grievances are recorded and responded to - Fire extinguishers should be located at identified fire points around the site. The extinguishers shall be appropriate to the nature of the potential fire. - Ensure all plant machines and vehicles are regularly inspected, 	Contractor	<ul style="list-style-type: none"> - Inspect records on injuries or accidents to personnel and the corrective action taken to ensure compliance with the health and safety procedures. - Inspect records on trainings conducted to contractor personnel documented and maintained. - Inspect records of mock up drills on site. - Ensure project area is secure and access is well monitored and controlled through cameras where applicable and visual monitoring. - Monitor GRM log and ensure all complaints 	Monthly	MoH/ Project Consultant	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<p>served and maintained; ensure all staff assigned is trained and competent to operate plant machines and vehicles.</p> <ul style="list-style-type: none"> - Ensure all equipment are suitable for jobs (safety, size, power, efficiency, ergonomics, cost, user acceptability etc), provide the lowest vibration tools that are suitable and can do the works. - Only competent authorised persons to carry out maintenance on electrical equipment, adequate Personal Protective Equipment (PPE) for electrical works must be provided to all personnel involved in the tasks. - Ensure that all trucks and vehicles accessing the facility are operated by licensed operators. - First aid kit with adhesive bandages, antibiotic ointment, antiseptic wipes, aspirin, non-latex gloves, scissors, thermometer, etc. shall be made available by the contractor on site. 		are addressed in accordance with the worker grievance mechanism.			
			<ul style="list-style-type: none"> - Provide all workers with mock-up drills on emergency and evacuation response 	Contractor	<ul style="list-style-type: none"> - Review the records of the emergency and evacuation response mock-up drills. 	Quarterly	MoH/ Project Consultant	
			<ul style="list-style-type: none"> - All workers must be subject to a preliminary medical examination 	Contractor	<ul style="list-style-type: none"> - Review of preliminary 	Once before construction	MoH/ Project Consultant	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			before commencement of any job tasks.		medical examination records	and demolition commences		
			- All workers must be subject to a periodic medical examination.	Contractor	- Review of periodic medical examination records	Bi-annually	MoH/ Project Consultant	
Working Conditions	Potential of violation of workers' rights (late payment of wages, wages below minimum wages, lack of sanitary facilities etc.	Minor	- Clear policies and procedures should be established that outline what constitutes a violation of workers' rights and how to report such violations. - Training and education should be provided to all employees and workers on workers' rights, including the rights of workers to a safe and discrimination-free workplace.	Contractor	- Review of induction and training attendance sheet	Once before construction and demolition commences	MoH/ Project Consultant	Negligible
			- Develop and implement a grievance mechanism (GRM) and encourage open communication and provide a safe and confidential way for workers to report violations without fear of retaliation. - Regular audits should be carried out to identify and address any potential violations of workers' rights.	Contractor	Review of GRM	Once before demolition and construction commences	MoH/ Project Consultant	
					- Regular reporting of GRM records and actions taken	Monthly	MoH/ Project Consultant	
Archaeological and Cultural Heritage	There are no archaeological and/or cultural heritage sites recorded within the Project site.	Negligible	- Have a chance find procedure is in place in case of coming across any cultural heritage or artefacts (e.g., graves, old ceramic, old building fragments) during excavation works. These procedures should	Contractor	- Check that a chance find procedure is in place and that workers have been trained	Before construction commences	MoH/ Project Consultant	No risk

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<p>require that excavation works are stopped, Contractor to report those immediately to Ministry of Culture and await instructions from the Ministry.</p> <ul style="list-style-type: none"> - Provide training to employees on the chance find procedure and importance of protecting cultural heritage and artifacts. 		on the chance find procedure and the importance of protecting cultural heritage and artifacts.			

Table 10-3: ESSMP for the Operation Phase

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
Climate	Climate change can lead to water scarcity, extreme heatwaves, extreme cold, and floods	Minor	- Ensure that the design incorporates water harvesting options to conserve and store rainwater. This could include underground water harvesting tanks or rainwater cisterns	Design Consultant	- Review the design and ensure it includes rainwater harvesting technologies	During the planning phase	MoH	Negligible
			- The hospital's design should include precise flood safety measures, including the installation of flood barriers and levees, the use of flood-resistant materials and features, and the implementation of other flood mitigation strategies to ensure its ability to withstand flood events.	Design consultant	- Review the final design of hospital and ensure it incorporates flood control measures.	During the planning phase	MoH	Minor
			- Enhance hospital infrastructure with efficient cooling and heating systems, such as air conditioning, to maintain a comfortable and safe environment for patients, staff, and medical equipment during heat waves	Design consultant	- Review the final design of hospital and ensure it incorporates flood control measures.	During the planning phase	MoH	Negligible
	Hospitals are energy-intensive buildings that rely on electricity for various essential functions. This energy is often derived from fossil fuels, leading to the emission of	Minor	- Design the hospital to take advantage of natural lighting and ventilation. - Use passive design principles such as orienting the building to maximize natural heating and cooling. - Incorporate renewable energy sources like solar panels or geothermal systems to generate clean energy.	Design consultant	- Ensure that the final design of hospital incorporates green building principles.	During the planning phase	MoH	Negligible

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	greenhouse gases like CO ₂ , contributing to climate change.		<ul style="list-style-type: none"> - Include green spaces and gardens around the hospital 					
			<ul style="list-style-type: none"> - Implement energy-efficient practices and technologies to minimize energy wastage. This includes using energy-efficient heating and cooling systems, LED lighting, and optimizing medical equipment to minimize energy usage 	Contractor	<ul style="list-style-type: none"> - Ensure that energy-efficient technologies are in place 	Once before operation	Hospital Management	Negligible
					<ul style="list-style-type: none"> - Conduct regular energy audits to identify areas of high energy consumption and inefficiencies, and make targeted improvements and optimize their energy usage. 	Quarterly	Hospital Management	Negligible
Noise and Vibration	Noise may be generated from the hospital and from the increased traffic commuting to and from the hospital and ambulance sounds	Minor	<ul style="list-style-type: none"> - Encouraging staff to use low-noise equipment and to keep noise levels to a minimum during procedures and treatments. - Train staff on the importance of noise reduction, and how to implement it in their daily work routine 	Hospital Management	<ul style="list-style-type: none"> - Observe and carry out regular inspections for noise. - Review complaints records for number of complaints recorded. 	Weekly	MoH	Negligible
			<ul style="list-style-type: none"> - Installing sound-absorbing materials in patient rooms, hallways, and other common areas. 	Contractor	<ul style="list-style-type: none"> - Ensure that sound absorbing materials, 	Once before operation commences	Hospital Management/MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<ul style="list-style-type: none"> - Installing noise restriction signs in different locations within the buildings to remind visitors to keep noise levels down in order to create a quiet and peaceful environment for patients. - Installing “No Bumping Signs” to indicate that vehicles should not drive over a specific area, such as a driveway or parking lot entrance, at a high speed or with a lot of force. 		noise restriction signs, and “No Bumping Signs” are in place			
Soil Pollution	Accidental or unsafe disposal of waste constitutes a source of soil pollution.	Medium	- Medical and Hazardous Waste Management Plan must be developed to ensure having a proper storage, transport and disposal of these wastes in line with national legislations	Hospital Management	- Review the Medical and Hazardous Waste Management Plan	Once before operation commences	MoH	Minor
					- Monitor the implementation of the Waste Management Plan	Weekly	MoH	
				Hospital Management	- Review contract with contractor	Once before operation commences	MoH	
				Hospital Management	- Review waste manifests	Weekly	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<ul style="list-style-type: none"> - Implement proper housekeeping practices at all times - Distribute appropriate number of properly contained litter bins and containers properly marked for different waste streams 	Hospital Management	- Conduct regular inspections	Weekly	MoH	
			- Employees should be trained on proper handling and storage of chemicals and oil, as well as on emergency response procedures.	Hospital Management	- Review training attendance sheet	Once before operation commences	MoH	
			- General purpose spill absorbent must be available at hazardous material storage areas	Hospital Management	- Conduct regular inspections	Weekly	MoH	
			- If spillage on soil occurs, spill must be immediately contained, cleaned-up, and contaminated soil disposed as hazardous waste.	Hospital management	- Monitor the records for any reporting of spillage.	Weekly	MoH	
Hydrology and Hydro-geology	Refer to the mitigation measures and monitoring requirements identified for soil pollution							
Solid and Liquid Waste	Improper management of different waste streams could have adverse environmental impacts.	High	Medical and Hazardous Waste Management Plan must be developed before operation commences to ensure having a proper storage, transport and disposal of these wastes. The management plan should include certain guidelines to be followed. These include:	Hospital Management	<ul style="list-style-type: none"> - Review the Medical and Hazardous Waste Management Plan - Monitor the implementation of the Waste Management Plan - Ensure that internal medical waste treatment 	Once before operation commences Weekly Once before operation commences	MoH MoH MoH	Medium

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	including medical waste, that can persistently affect wastewater quality after treatment. This is due to the constraints of municipal treatment plants, which may lack the ability to fully neutralize infectious agents and pharmaceutical residues in medical effluents.		<p>treatment, or irradiation with waste shredding before final disposal in municipal waste landfills. An alternative option involves engaging an authorized contractor to collect waste and subsequently autoclaving it outside the hospital premises.</p> <ul style="list-style-type: none"> - Pathological waste should be carefully disinfected and then buried in designated areas like cemeteries after obtaining permits from relevant authorities - With regards to chemical, pharmaceutical, and radioactive waste, it is prudent to explore international collaborations. Such wastes should be exported to countries with established facilities for proper treatment and disposal. 		<p>methods, such as auto-clave, irradiation, and micro-wave technologies are in place.</p> <hr/> <ul style="list-style-type: none"> - Should internal treatment of infectious and sharp waste prove impractical, coordinate with relevant authorities to engage an authorized contractor responsible for the collection and proper treatment of these wastes. <hr/> <ul style="list-style-type: none"> - Verify that pathological waste has undergone chemical disinfection, and collaborate with relevant authorities to assign a contractor for the 	<p>Review contract with contractor</p> <hr/> <p>Review contract with contractor</p>	<p>MoH</p> <hr/> <p>MoH/Health Protection Agency</p>	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
					collection and disposal of such wastes in burial areas.			
			- With regards to wastewater management, it is advisable to establish a specific system for collecting wastewater. Within this system, an initial treatment, possibly involving chemical disinfection, should be undertaken to minimize the introduction of potentially hazardous pollutants prior to releasing the wastewater into the sewer network. This should also be applied for liquid infectious waste (blood, urine, fecal and vomit masses, etc.)	Design Consultant	- Ensure that the detailed design takes into account the system for collecting and treating wastewater.	During the planning phase	MoH	
				Hospital Management	- Monitor the flow rate of wastewater entering the system - Monitor the flow rate of wastewater discharged into the sewer system - Monitor the dosage of chemicals (such as disinfectants) added during the treatment process.	Weekly	MoH	
			- Coordinate with the competent authorities for the transboundary	Hospital Management	- Review coordination with authorities	Once before operation commences	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			transportation of chemical, pharmaceutical, and radioactive waste.		including acquisition of necessary permits			
			- Develop a Hazardous Waste Transport Plan for proper transportation of chemical, pharmaceutical, and radioactive waste to other countries, in line with the laws and regulations of both the Republic of Moldova and the receiving country.		- Review the Hazardous Waste Transport Plan	Once before operation commences	MoH	
					- Monitor the implementation of the Hazardous Waste Transport Plan	As needed during operation	MoH	
			- Distribute appropriate number of properly contained litter bins and containers properly marked for different waste streams	Hospital management	- Conduct regular inspections	Daily	MoH	
			- Implement proper housekeeping practices at all times					
			- Coordinate with relevant authorities or hire a competent private contractor for the collection of municipal solid waste and treated medical waste from the site to the approved landfills	Hospital Management	- Review contract with contractor	Once before operation	MoH	
			- Maintain records and manifests that indicate volume of municipal solid waste, and treated medical waste, generated onsite, collected by contractor, and disposed of at the designated locations. The numbers within the records are to	Hospital Management	- Review waste manifests	Weekly	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			be consistent to ensure no illegal dumping at the site or other areas					
Local Economy	The project is expected to create job opportunities during the operation phase	Minor (Positive Impact)	<ul style="list-style-type: none"> - Ensure that any needed qualifications available within host community will be hired in the project should the qualifications match. - Provide training and development opportunities for local workers to enhance their skills and qualifications, in order to increase their chances of being hired at the hospital. 	Hospital Management	- Check the records of the recruitment process and the proportion of local workers hired, to monitor progress towards the goal of hiring from the host community.	Before operation commences	MoH	-
Infrastructure and Utilities	The new hospital is anticipated to cause an increased demand for utilities as it will require electricity, water, and other utilities to operate. This can put a strain on the existing infrastructure.	Minor	- Coordinate with relevant authorities for securing additional water and power requirements of the Project.	Hospital Management	- Review proof for coordination with authorities	Once before operation commences	MoH	Negligible
			- Document water and power consumption of the Project	Hospital Management	- Review water and power consumption reports	Monthly	MoH	
	The project is expected to generate a considerable amount of sewage and waste, which will need to be properly treated	Minor	- Coordinate with the relevant authorities for disposal of wastewater and solid waste at the designated disposal sites.	Hospital management	- Review proof for coordination with authorities	Once before operation commences	MoH	Negligible

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	and disposed of. This can put a strain on the existing sewage and waste management infrastructure.							
Traffic	Traffic jams are anticipated due to vehicles that will be moving to and from the project site.	Minor	- Develop a Traffic Management Plan	Hospital management	- Review the Traffic Management Plan	Once before operation commences	MoH	Negligible
				Hospital management	- Monitor the implementation of the Traffic Management Plan	Monthly	MoH	
Public Health and Safety	The project is anticipated to have a positive effect on public health because community members can experience better health outcomes with access to better healthcare.	High	-	-	-	-	-	
	Transferring patients from the old hospital to the new hospital can lead to disruptions in medical care, especially for those with serious conditions or ongoing treatments.	High	- Develop a detailed plan for each patient's transfer, outlining the steps required to ensure the continuity of their medical care and treatment.	Hospital management	- Review of Patient Transfer Plan	Once before transfer of patients commences	MoH	Medium
					- Monitor the implementation of the Transfer Plan	Daily during the transfer process	MoH	
				Hospital management	- Review of training	Once before transfer of	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	Changes in healthcare facilities, providers, medical records, and treatment approaches can cause miscommunication and lapses in care if not managed appropriately.		effectively manage patient transitions and address potential issues promptly.		attendance sheet	patients commences		
			- Implement an electronic medical record system that can be accessed by both hospitals to facilitate the transfer of patient data securely.	Hospital management	- Ensure that an electronic medical record system is in place	Once before transfer of patients commences	MoH	
	There is a chance of 10% potentially-damaging earthquake shaking in the project area in the next 50 years.	Severe	Ensure that the design of the hospital incorporates robust seismic mitigation measures to safeguard the well-being of patients and staff from potential earthquake hazards. Adhere to the latest seismic building codes. These codes are designed to provide guidelines for designing earthquake-resistant structures.	Design consultant	- Review the final design of hospital and ensure it incorporates seismic mitigation measures	During the design phase	MoH	Medium
			The hospital should be equipped with an automatic backup power system, such as generators or uninterruptible power supplies (UPS). Regular maintenance should be performed on these backup power systems to ensure their effectiveness.	Design consultant	- Review the final design of hospital and ensure it incorporates an automatic backup power system.	During the design phase	MoH	Minor
	Power outages are a major risk to patients, especially those reliant on electric medical	Severe		Hospital Management	- Ensure that an automatic generator or UPS is in place.	Once before operation	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			Carry out regular maintenance for backup power systems to ensure their effectiveness.	Hospital Management through a Maintenance Contractor	- Examine records of routine maintenance activities	Monthly	MoH	
			Develop a Contingency Plan including Emergency Response Procedures	Hospital Management	- Ensure that a Contingency Plan is in place	Once before operation commences	MoH	
Occupational Health and Safety	The project can have a number of impacts on the occupational health and safety to include physical and biological hazards.	Severe	<p>Develop and implement an Occupational Health and Safety (OHS) Plan prior to commencement of work. The plan should include but not limited to the following:</p> <ul style="list-style-type: none"> - Risk assessment: Identifying potential hazards and assessing the level of risk associated with them. - Education and training: Providing staff with education and training on the transmission and symptoms of TB, as well as proper infection control procedures to prevent its spread. - Control measures: Implementing measures to control identified hazards, such as chemical exposure, and physical injuries - Communication: Having a clear and effective system in place for communicating safety information to employees and other relevant parties. - Emergency response: Developing and practicing emergency response plans to address potential 	Hospital management	- Ensure that the OHS Plan is in place	Once before operation commences	MoH	Medium

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			hazards such as fire, biological hazards, and natural disasters. - Monitoring and review: Regularly monitoring and reviewing the effectiveness of the safety plan, and making adjustments as needed. - Compliance: Ensure compliance with all relevant laws, regulations and guidelines.					
Gender	Moldova, like many countries, faces issues related to gender discrimination and inequality in the workplace. Some of the specific problems that have been reported include: - Limited opportunities for women - Unequal payments - Harassment and violence	Minor	- Develop and implement an equal pay policy	Hospital management	- Guarantee that all employees receive fair and equal compensation for their work.	Monthly	MoH	Negligible
			- Implement measures to promote and support women's leadership positions	Hospital management	- Ensure that positions are awarded solely based on qualifications, without any regard to gender	During recruitment process	MoH	
			- Develop a GRM to receive and facilitate resolution of workers.	Hospital management	- Review GRM	Once before operation commences	MoH	
				Hospital management	- Monitor GRM log and ensure all complaints are addressed in accordance	Monthly	MoH	

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
			<ul style="list-style-type: none"> - Conduct workshops or training sessions to sensitize employees about gender-related issues 	Hospital management	<ul style="list-style-type: none"> - Check training records for training of workers on gender issues. 	Once before operation commences	MoH	

Table 10-4: ESSMP for the Decommissioning Phase

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
Solid and Liquid Waste	Demolition activities generate a large amount of waste, including construction materials, debris, electronic waste, radioactive waste, and potentially hazardous and medical waste. As buildings are dismantled, a significant volume of discarded items is produced, encompassing various categories of unwanted materials that can have negative environmental consequences if not properly managed.	Medium	Refer to the mitigation measures and monitoring requirements identified for the construction and demolition, and the operation phases					
Local economy	The decommissioning of the hospital will have a significant impact on its employees,	Medium	Implement a job placement assistance program to actively help the affected healthcare professionals find new employment opportunities. This program could include collaborating with other healthcare facilities, local clinics, and	Project Consultant	Track and monitor the number of affected healthcare professionals who successfully	Six months before decommissioning commences	MoH	Minor

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	potentially leading to job losses for various healthcare professionals. This, in turn, could cause economic hardships, lower quality of life, and increased social difficulties for the local community.		medical centers to identify job openings and facilitate smooth transitions for the displaced workers.		found new employment through the assistance program			
	The decommissioning of the hospital will have far-reaching impacts on businesses that have come to depend on the hospital's presence. Suppliers, retailers situated in the vicinity, and service providers will certainly be impacted by the closure of the hospital	Medium	Establish a transition assistance program for affected businesses. This program could provide financial support, training, and resources to help them adapt to the changes caused by the hospital's closure.	Project Consultant	Track and monitor the transition assistance program	Six months before decommissioning commences	MoH	Minor
	Decommissioning of the hospital will result in potential	Minor	Explore options for repurposing the hospital building or the site itself to maintain its value and relevance to the community.	Project Consultant	Conduct a community engagement survey to assess the satisfaction and	Quarterly during the last year of operation	MoH	Negligible

ASPECT	POTENTIAL IMPACT	IMPACT SIGNIFICANCE	MITIGATION MEASURE(S)	MITIGATION RESPONSIBILITY	MONITORING MEASURE	FREQUENCY	MONITORING RESPONSIBILITY	RESIDUAL SIGNIFICANCE
	declines in property values.				feedback of local residents and stakeholders regarding the ongoing repurposing efforts			
Public Health and Safety	The closure of a hospital can deeply and extensively affect the nearby community, causing decreased availability of crucial healthcare services. As a result, residents may experience delays in receiving necessary treatment, potentially resulting in inferior health outcomes for them.	Severe	Establish alternative healthcare facilities or clinics in the vicinity. These facilities should offer essential medical services and treatments that are readily accessible to residents	Project Consultant	Regularly monitor and track the progress of the establishment of new healthcare facilities or clinics	One year before decommissioning commences	MoH	High

11 WASTE MANAGEMENT GUIDELINES

The purpose of this Waste Management Guidelines is to ensure proper and safe handling, storage, treatment, and disposal of waste generated in the new hospital. Medical or healthcare waste, can pose significant environmental and health risks if not managed appropriately. Therefore, comprehensive waste management guidelines are crucial to protect the environment, healthcare workers, patients, and the community.

11.1 WASTE STREAM IDENTIFICATION

According to the Law on Waste no. 209 of 2016, medical waste is classified as hazardous and non-hazardous for the environment and public health and handling taking into account national regulations and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes to which the Republic of Moldova acceded through Parliament Decision no. 1599-XIII of 1998, as well as Decision No. 696 for the approval of the sanitary regulation regarding the management of waste resulting from medical activity . The medical waste categories under these guidelines are presented in Table 11-1 below.

Table 11-1: Definitions of the Categories of Medical Waste Streams

WASTE CATEGORY	DEFINITION
Infectious waste	Also known as biomedical waste, which includes materials contaminated with blood, body fluids, used gloves, bandages, swabs, cultures, and discarded sharps like needles and scalpels, or other potentially infectious materials, which have the potential to spread infectious diseases to humans. These wastes may contain harmful microorganisms, including bacteria, viruses, parasites, or other pathogens
Pathological waste	Also known as anatomical or biohazardous waste, is a form of medical waste that arises within hospitals and healthcare facilities. It encompasses tissues, organs, body parts, or fluids that are extracted from the human body during surgical operations, autopsies, or medical investigations.
Sharps waste	Medical sharps are devices or objects with sharp edges or points that are used in healthcare settings for a variety of purposes including injections, blood sampling, and surgeries. Examples of medical sharps include needles, syringes, lancets, and scalpel blades.
Chemical waste	Refers to any discarded materials that contain hazardous chemicals. These chemicals can be harmful to human health and the environment. Hospital chemical wastes can originate from various sources, including medical procedures, laboratory tests, cleaning agents, disinfection, unused medications, drugs, mercury-containing devices, and pharmaceutical products.
Radioactive waste	Includes byproducts containing radioactive elements produced during medical procedures and treatments utilizing radioactive isotopes. These isotopes find widespread application in diagnostic imaging, radiotherapy, and various other medical practices.
Non-hazardous waste	Refers to the general non-hazardous waste generated within the hospital premises. This waste includes materials commonly found in households, such as food waste, paper, cardboard, plastic, glass, and other non-medical related items

11.2 APPLICABLE LEGISLATIONS

Below are the Laws and Decisions that must be adhered to concerning the storage, transportation, and proper disposal of hazardous and medical waste.

- Law on Waste no. 209 of 2016, medical waste
- Parliament Decision no. 1599-XIII of 1998
- Decision No. 696 for the approval of the sanitary regulation regarding the management of waste resulting from medical activity
- Government Decision No.589 "On the Approval of the Road Transport Regulation of Dangerous Goods" of 24 July 2017
- Law No.1163 "On Export Control, Reexport, Import, and Transit of Strategic Goods" of 26 July 2000
- National Policy and Principles for Radioactive Waste Management.
- Law No. LP132/2012 "On safe nuclear and radiological activities".
- Ministerial Decree No. 637 on transboundary movement of hazardous waste.
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes.
- Decision No. 388 of 2009 for the Approval of the Regulations on the Management of Radioactive Waste.

11.3 WASTE MANAGEMENT PROCEDURES

11.3.1 SEGREGATION

Waste must be identified and separated right from the moment it is generated, and this practice of segregation should be maintained throughout all the following stages of collection, transportation, storage, treatment, and disposal.

Non-hazardous waste, such as paper and cardboard, glass, aluminium and plastic are to be collected separately. Infectious and / or hazardous medical waste is to be identified and segregated according to its category using a color-coded system as per Decision No. 696 for the approval of the sanitary regulation regarding the management of waste resulting from medical activity.

Table 11-2: Color Coding by Type of Waste in accordance with Decision No. 696 of 2018

COLOR OF CONTAINER USED	TYPE OF WASTE
Yellow	for sharp and pointed waste, anatomical and pathological waste, and infectious waste.
Brown	For chemical waste, pharmaceutical waste, including cytotoxic/cytostatic waste.
Green	For recyclable non-hazardous waste
Black	For non-hazardous waste

In national legislations concerning radioactive waste management, there is no standardized color code specified for the packaging of radioactive waste. To ensure effective and secure handling of radioactive materials, it is imperative to establish a recognized and distinct color code for radioactive waste packaging. This color code should be different from those assigned to other waste categories to prevent any cross-contamination or mishandling of radioactive materials.

11.3.2 COLLECTION AND PACKAGING

Specific measures and guidelines need to be implemented while storing medical and hazardous waste. These measures are designed to ensure the safe and responsible handling of such waste to minimize potential risks to both public health and the environment.

As per Decision No. 696 for the approval of the sanitary regulation regarding the management of waste resulting from medical activity, specific guidelines must be followed during the collection and packaging process. These guidelines encompass the following:

- Waste should be separated at the source, and each type of waste should be sorted to enable tailored treatment and disposal methods for each category.
- The containers for sharps, anatomical/pathological, and infectious waste must be labelled with the "Biological Hazard" symbol.
- For the separate collection of infectious waste, which are not sharp objects, cardboard boxes equipped with yellow polyethylene bags or yellow-marked polyethylene bags should be used.
- Both the cardboard boxes with polyethylene bags and the bags themselves should be marked and labelled in Romanian with the following information: the waste category being collected, the "Biological Hazard" pictogram, the container's capacity (in liters or kilograms), instructions for use, a marked line indicating the maximum filling level, the date of starting to use the container in the section/subdivision, the name of the institution and section/subdivision that used the container, the person responsible for handling them, and the date of final filling.
- The cardboard boxes should be temporarily stored on dry surfaces, protected from rainwater
- The bags for storing hazardous/infectious waste should be made from high-density plastic, providing high mechanical strength. The plastic thickness of the bags should be between 50-70 µm, and the heat-seals must be continuous, strong, and prevent any liquid leakage.
- The bag should have an easy and secure closure mechanism.
- When the bag is not placed in a cardboard box to ensure mechanical strength, for the storage of hazardous/infectious waste, the bag must be placed in a bin equipped with a lid and pedal or in a portable sack with a lid.
- The height of the bag for storing hazardous/infectious waste must exceed the height of the bin, so that the bag hangs over its upper edge, and the surplus allows for safe closure of the bag for transportation.
- The filling level of the bag for storing hazardous/infectious waste should not exceed three-quarters of its volume.
- Sharp waste should be collected in containers made of impermeable material, rigid plastic resistant to mechanical actions, or in cardboard boxes that provide the following characteristics:
 1. The storage capacity of the containers should be one of the following: 1.25; 2.5; 5; 10; 15; and 20 liters.
 2. They must be equipped with an opening capable of receiving syringes assembled with needles of all standard sizes up to 20 ml.
 3. The opening should be securely closed to prevent any leakage.
 4. Should contain a handle positioned above the fill line, allowing the box to be transported with one hand while providing unobstructed access to the opening for receiving waste.
 5. Should be marked in black or red, with the "Biohazard" pictogram and the international biohazard symbol on each of the front and back faces, with a diameter of not less than 50 mm. On all sides, vertically, the recommended maximum fill line is indicated.
 6. Includes pictorial instructions on the exterior of both sides of the box regarding assembly, usage, the direction for syringe collection (needle downwards), and how to close the opening for waste reception.
 7. Penetration-resistant: the average force required to penetrate from each position is not less than 15 N, with a minimum force of 12.5 N.
 8. Resistant to damage during a minimum of 100 drops from a specified height, with no syringe falling out of the box, and at most, one needle may penetrate the box walls.
 9. Remains stable when placed on a non-slip surface at an angle of 15 degrees.

10. Filled to its maximum capacity and remains resistant for a minimum of 48 hours at a temperature of 43°C and 90% relative humidity, without any part of the content spilling.
 11. The lower edge of the opening must be at least 50 mm above the recommended maximum fill line.
- The recipient made of impermeable, rigid plastic mentioned for the sharp waste must possess the following characteristics:
 1. The upper part of the recipient must have a special lid with openings for detaching syringe needles and scalpel blades, allowing the introduction of waste and preventing their removal after filling the container. It should be equipped with a temporary and final closing system for secure containment.
 2. The container should be equipped with a sturdy handle to enable easy transportation to the intermediate storage location and subsequently to the treatment/elimination site.
 3. The container, including the imported ones, must be labelled in Romanian with the following information: the category of collected waste, the "Biological Hazard" pictogram, the capacity of the container (in liters or kilograms), instructions for use, the maximum fill level marking line, the date of the container's first use in the section/subdivision, the name of the institution and section/subdivision that used the container, the person responsible for handling them, and the date of final filling.
 4. The container must undergo specific testing procedures to assess the material's resistance to mechanical actions.
 - When only syringe needles are collected in the container, the syringe needles are collected according to the requirements of the infectious waste flow that are not sharp
 - For infectious waste, originating from laboratories, rigid cardboard boxes of yellow color with an interior polyethylene bag can be used instead of plastic bags. These boxes should be labelled with the following information: the category of waste collected, the "Biological Hazard" pictogram, the capacity of the container (in liters or kilograms), instructions for use, the maximum fill line, the date of first use in the laboratory, the name of the institution and laboratory that used the container, the person responsible for handling them, and the date of final filling.
 - Pathological waste must be collected in rigid cardboard boxes, lined with high-density polyethylene bags or yellow polyethylene bags specifically designed for this waste category.
 - The container for anatomical waste should be labelled with the following information: the category of waste collected, the "Biological Hazard" pictogram, the capacity of the container (in liters or kilograms), instructions for use, the maximum fill line, the date of first use in the section/subdivision, the name of the institution and section/subdivision that used the container, the person responsible for handling them, and the date of final filling.
 - The second packaging for infectious, sharp, and anatomical waste shall consist of mobile containers with rigid walls, located in the temporary storage space.
 - The mobile containers must be:
 1. Marked with yellow color, imprinted with the "Biological Hazard" pictogram, and labelled as "Anatomical Waste".
 2. Made of materials resistant to mechanical actions, easy to wash, and capable of withstanding the effects of disinfectant solutions.
 3. Securely closed and equipped with a fastening system suitable for the automated collection from the transport vehicle or for emptying in the waste treatment facility.
 4. The size of the containers shall ensure the collection of the entire quantity of waste generated between two successive removals. These containers should not be used for unboxed (bulk) hazardous waste or waste similar to municipal waste.
 - With regards to chemical waste the following should be applied:
 - Chemical waste shall be collected in their original packaging (where relevant) or in special containers with appropriate markings for the hazards.

- The capacities of the containers for chemical waste shall not exceed 5 liters for liquid substances and 5 kilograms for solid substances (excluding the original packaging), which are placed in an outer packaging with a capacity not exceeding 30 kilograms in weight.
- Hazardous chemical waste shall be collected separately, based on their risks, and returned to the supplier with their explicit agreement.
- The containers used for collecting chemical waste shall be designed and constructed to prevent any loss of content, following the conditions outlined below:
 1. The materials used for manufacturing the containers and their closing systems are robust and stable, do not interact with the content, and do not form hazardous compounds.
 2. All parts of the containers and their closing systems are solid and strong, ensuring the exclusion of any malfunction and guaranteeing safety against mechanical pressure.
 3. The containers equipped with a closing system are designed to be repeatedly opened and closed without any loss of content.
- Liquid hazardous chemical waste, shall be collected in special impermeable containers, and their disposal shall be carried out by an authorized economic operator.
- Waste of cytotoxic and cytostatic shall be returned to the institution that concluded the procurement contracts for proper disposal.
- Non-hazardous chemical waste shall be collected separately in their original packaging and either recycled or disposed of as non-hazardous waste.
- In the case of waste generated from medical devices containing residues of hazardous chemicals, specific instructions provided by the respective equipment manufacturer must be followed.

11.3.3 TEMPORARY STORAGE

A central area shall be established for temporary storage of waste resulting from medical activities. The following should be followed during the storage of medical and other hazardous waste:

- Duration of temporary storage of hazardous waste shall be kept as short as possible, and during temporary storage, hygiene standards should be continuously observed.
- For sharps, anatomical-pathological, and infectious, the duration of temporary storage shall not exceed 48 hours, except for situations where the waste is stored in a location equipped with a cooling system that maintains a constant temperature of +4°C to +8°C, in such a case the storage duration can be a maximum of 7 days.
- The central temporary storage space for medical waste should include the following rooms/areas:
 - Non-hazardous waste
 - Waste intended for recycling
 - Sharp, infectious, and pathological waste
 - Chemical waste and pharmaceutical waste.
 - Treatment of infectious and sharp waste (if possible)
 - Operator's office (if possible).
- The requirements for the hazardous and medical waste storage area shall include:
 - Flooring with a mechanically resistant, waterproof, smooth, and intact surface that is easy to sanitize.
 - Adequate drainage system/floor trap to discharge wastewater resulting from sanitation into the sewer network. In the absence of a floor trap, sanitation should be carried out with minimal water usage.
 - Restrictions that impede the entry of insects, rodents, animals, and birds.
 - Screens to protect against sun.
 - Water supply source.
 - Proper lighting and ventilation to ensure optimal temperatures (preventing the decomposition of organic material and incidents and accidents caused by other hazardous waste).
 - Controlled access for authorized personnel.
 - Access for units/vehicles responsible for collection of the waste.

- Spill clean-up kits.
 - Sufficient quantities of disinfection products.
 - Fire alarm and extinguishing systems.
 - The room should be marked with warning signs about the nature of the chemicals.
 - For the temporary storage of hazardous liquid chemical waste, an impermeable and chemically resistant tray should be provided to contain the stored substances.
 - The rooms should include several sections for different chemical waste streams.
 - Disinfection should be carried out to prevent the appearance of disease vectors in the medical waste storage area.
- With regards to radioactive waste, the following should be applied:
 - Radioactive waste must be stored separately from other waste streams.
 - Radioactive waste must be stored in containers made of cast iron or steel, or by placing it in a matrix composed of concrete or, where appropriate, bitumen. Alternatively, other internationally accepted methods may also be employed for storage purposes.
 - The radioactive waste storage container should be labelled with the "Radiological hazard" symbol.
 - Storage of radioactive waste containers must not exceed an ambient dose rate of 2 mSv/h.

11.3.4 TRANSPORTATION

The transportation of medical and hazardous waste from the hospital to treatment facilities or final disposal sites is of utmost importance to ensure public safety and environmental protection. Proper management of this waste is crucial to prevent any potential risks associated with its handling and disposal. The requirements for medical and hazardous waste transportation during the operation phase include the following:

- Hazardous and non-hazardous waste shall be transported separately.
- The transportation of hazardous waste within medical institutions shall be carried out on a separate circuit from that of patients and visitors.
- Waste resulting from medical activities shall be transported within the hospital using special trolleys and mobile containers.
- The trolleys and mobile containers used in the new hospital shall be cleaned and disinfected after each use.
- For the transportation of medical waste, it is necessary to enter into an agreement with a transportation contractor, which should encompass the following aspects:
 - The quantity of each type of waste transported.
 - The schedule and route for transporting the waste.
 - The definition of responsibility for each party in case of any adverse consequences arising from the presentation of inaccurate information, incorrect handling of waste, accidents, or exceptional situations.
 - The responsibility of each party in the event of unfavourable outcomes resulting from inaccurate information, improper waste handling, accidents, or exceptional circumstances.
 - For types of waste that require treatment prior to disposal, the method of treatment, location of facilities, and the validity period of the authorization for their operation are specified.
 - The person responsible for waste disposal must confirm the receipt of the waste within three working days.
 - The authorized economic operator, who has been contracted for waste treatment, is required to confirm the completion of waste treatment operations within a period of 180 days from the date of receiving the waste.
- For the transportation of radioactive waste, it is essential to place the waste securely within a container that has a minimum wall thickness of 200 mm. The container must be labelled as a "Radiological hazard".

If it has been decided to transport hazardous waste, such as pharmaceutical, radioactive, and chemical waste, to another country for proper treatment and disposal, it is imperative to develop a comprehensive Hazardous Waste Transportation Plan. The plan should conform to the national laws and regulations of the exporting country, incorporating Ministerial Decree No. 637 concerning the transboundary movement of hazardous waste, as well as the Basel Convention on Hazardous Wastes Control. Additionally, it must comply with the applicable legislation of the receiving country after a formal agreement has been established with them.

Below is a concise overview outlining the primary guidelines that must be followed for the transboundary transportation of hazardous waste:

- The contract between the exporter and the person responsible for the disposal of the waste contains the necessary obligations of the parties and meets the requirements for environmentally sound waste management.
- Each State of transit which is a party shall promptly acknowledge to the notifier receipt of the notification.
- The transboundary movement must be secured by a financial guarantee.
- The exporter must obtain written consent for the transboundary movement from the competent authorities
- The Ministry of Environment shall be notified in writing, of any possible transboundary movements of waste through the territory of the Republic of Moldova. The notification shall contain the following particulars:
 - The origin, composition, and quantity of the waste.
 - The starting and ending points of the transport of waste.
 - The agreed day of transit and a description of the route of transportation of waste through the territory of the Republic of Moldova.
 - Proof that the country of import will accept the waste and that the exporter, carrier, and disposal person are authorized to carry out operations related to the transport and processing of the waste.
 - Preparation of written instructions in the event of unforeseen circumstances for the crew of a vehicle that has been approved to drive after completing a course in the transport of goods and dangerous substances and the provision of protective equipment.
 - Guarantee of full compensation for any damage that may be caused to the environment and human health during the transport of waste through the territory of the Republic of Moldova.
- The Hazardous Waste Transport Plan should be developed including the following:
 - Detailed review of the relevant national and international regulations and requirements governing the transboundary movement of hazardous waste.
 - Accurate classification and characterization of the hazardous waste
 - Description of proper packaging and labelling requirements. The packaging used, their marking and certification must comply with international ISO standards, and specialized and marked vehicles must comply with the requirements of the European Agreement concerning the Transport of Dangerous Goods by International Road Transport.
 - Selection of the appropriate transportation mode
 - Identification of the optimal transportation route, taking into consideration safety, proximity to populated areas, and potential environmental impacts.
 - Responsibilities of the transporter.
 - A comprehensive emergency response plan in case of accidents, spills, or other incidents during transportation.
 - Training programs for personnel involved in the transport operation
 - Environmental protection measures

11.3.5 TREATMENT

The processes and methods used for the treatment and disposal of medical waste must not pose any dangers public health and the environment and must comply with the following requirements:

- The treatment of sharps and infectious waste identified shall be carried out through thermal treatment at low temperatures that ensure disinfection/sterilization with waste shredding.
- The hospital can treat sharps and infectious waste in their own thermal decontamination facilities at low temperatures, equipped with waste shredding equipment.
- For the treatment of sharp and infectious waste, autoclaves, irradiation, or microwave are used.
- Hazardous and medical waste treatment can be outsourced by entrusting it to authorized economic operators through a service contract.
- Pharmaceutical waste is treated through one of the following methods:
 - Incineration at temperatures of +1200 °C and above in facilities equipped with pollution control system.
 - Chemical degradation in accordance with the manufacturer's recommendations if the necessary materials are available and laboratory testing is conducted.
 - In the absence of the availability of the first 2 methods, the encapsulation⁶ method can be used.
 - In the event that the above-mentioned options are deemed unfeasible, it is imperative to explore the responsible option of exporting these wastes to countries equipped with proper treatment and disposal practices
- With regards to wastewater management, it is advisable to establish a specific system for collecting wastewater. Within this system, an initial treatment, possibly involving chemical disinfection, should be undertaken to minimize the introduction of potentially hazardous pollutants prior to releasing the wastewater into the sewer network. This should also be applied for liquid infectious waste (blood, urine, fecal and vomit masses, etc.)
- In a similar manner as wastewater, liquid infectious waste (comprising blood, urine, fecal matter, vomit, etc.) ought to undergo chemical disinfection prior to being introduced into the sewer network.

11.3.6 FINAL DISPOSAL

Proper disposal of waste is crucial, and for final disposal, the following requirements should be adhered to:

- Infectious and sharp waste shall be disposed of in municipal waste landfills following treatment via autoclaves, microwaves, or irradiation.
- Anatomical/pathological waste is eliminated through burial in designated locations.
- The requirements for pits intended for composting anatomical and pathological waste are as follows:
 - They can be located in the domestic area of medical-sanitary institutions, isolated from the curative functional zones and auxiliary services with hygienic requirements through a green steam or shrub corridor, at a distance of at least 30 meters from them.
 - Placing them within the territory of sanitary protection zones and/or areas traversed by engineering mainlines (water supply, sewage, thermal, power lines, oil, and gas pipelines) is not allowed.
 - They do not pollute groundwater.
 - They are constructed with concrete to ensure the pit's impermeability.
 - The top part is closed with a lockable lid to ensure authorized access.
 - After filling each 0.5 meters, a layer of at least 15 centimetres thick of soil is poured, which prevents the formation of gases and/or odors.
 - After the final filling, the pit is walled up and documentation regarding the location and capacity is archived, ensuring that the burial site is cleaned for future use.
- Anatomical and pathological waste shall undergo chemical disinfection before disposal in burial areas.

⁶ Packing waste in containers made of an impervious and non-reactive material before disposal.

- With regards to wastewater resulting from medical activities, it should undergo chemical disinfection prior to being introduced into the sewer network.

11.4 WASTE MINIMIZATION

Reduction of the waste generated at the hospital is encouraged by the implementation of certain policies and practices, including the following:

- **Source reduction measures** such as purchasing restrictions to ensure the selection of methods or supplies that are less wasteful or generate less hazardous waste. This might be done through considering options for products/materials substitution to avoid products containing hazardous materials that require the product to be disposed as hazardous or special waste.
- **Use of recyclable products**, such as paper and cardboard, glass, aluminum and plastic. These wastes should be collected separately and recycled.
- **Good management and control practices**, which may include:
 - Preferring products with less packaging to minimize the waste generation.
 - Small / frequent orders for products that spoil quickly and strict monitoring of expiry dates.
 - Reuse of equipment following sterilization and disinfection.
- **Waste segregation** to be done through careful segregation of waste matter into different categories helps to minimize the quantities of hazardous waste.

11.5 HEALTH AND SAFETY PRACTICES

This relates to the health and safety measures that should be implemented as part of the waste management guidelines to ensure proper handling during segregation, storage, collection, transportation, treatment and disposal of medical wastes generated at the hospital. Essential occupational health and safety measures include the following:

- **Provision of Personal Protective Equipment (PPE):** at a minimum, the following PPE should be made available to all personnel who collect or handle wastes generated at the hospital:
 - Overalls or plastic aprons with long sleeve shirts
 - Face Masks
 - Gloves (disposable and heavy-duty gloves)
 - Tall industrial boots
- **Provisions of Personal hygiene:** basic personal hygiene is important for reducing the risks from handling waste generated at the hospital, and convenient washing facilities (with warm water and soap) should be available for personnel handling the wastes.
- **Special precautions for clearing up spillages of potentially hazardous substances:** for clearing up spillages of body fluids or other potentially hazardous substances, particularly if there is any risk of splashing, eye protectors and masks should be worn, in addition to gloves and overalls or plastic aprons with long sleeve shirts. Residues should be recovered as completely as possible using hand tools (e.g., a shovel), and then packed safely. It is especially important to recover spilled droplets of metallic mercury. If a leakage or spillage involves infectious material, the floor should be cleaned and disinfected after most of the waste has been recovered.

- **Training of workers on infection transmission:** All staff who will deal or handle wastes should be trained to deal with injuries and exposures during waste collection and handling. The programme should include the following elements:
 - immediate first-aid measures, such as cleansing of wounds and skin, and splashing of eyes with clean water;
 - how report of the incident to a designated responsible person;
 - recording of the incident; and
 - investigation of the incident, and identification and implementation of remedial action to prevent similar incidents in the future.

11.6 IMPLEMENTATION STRATEGY

It is important to manage all the waste produced at the hospital in a safe way for the environment and human health. In practice this will be ensured by undertaking the following measures by the waste management team:

- Allow only trained individuals to keep, store, dispose or remove the generated waste.
- Ensure all discarded materials are adequately packaged for transport and that all waste containers are properly labeled when stored or transported.

The hospital will have a temporary storage area on each floor, where the waste containers will be located temporarily. The waste containers from each floor will be emptied at the end of each working shift to the main storage area before being transported.

Waste collection shall be done in containers that are suitable from the point of view of volume, composition, and shape. There shall be used only containers that have no corrosion, wear and/ or any damage that may lead to spills and/ or leakages. All containers shall be securely covered.

The waste management team is required to conduct inspections/audits weekly. The inspection will cover waste production, segregation, collection, packaging, and transportation activities to ensure proper waste management practices.

11.7 EMPLOYEE TRAINING PROGRAM

Training of staff members is very important to achieve successful waste management procedures. The aim of training programs is to spread awareness of health, safety, and environmental issues relating to medical waste. The training program should include the following:

- All information and aspects of medical waste management (i.e., segregation, collection, transportation, disposal, personnel hygiene, first aid & emergency response);
- Roles and responsibilities of each staff member in the department; and
- Technical instructions for the waste management procedures.

Training to all healthcare personnel at the hospital should be conducted and separate training activities could be designed for all categories of personnel. These training and awareness sessions should be conducted in an appropriate language and in an acceptable manner.

The waste management Team members should consist of those individuals who have been trained in the proper disposal techniques and the appropriate use of personal protective equipment (PPE).

11.8 PERFORMANCE MONITORING AND REPORTING

Monitoring is required to follow-up on decisions made to intervene in various activities of medical waste management in order to protect human health and the environment. This can be achieved through periodic internal and external processes of monitoring and evaluation on a continuous basis, at all institutional levels.

The Public Health Controller shall collect and record all available information concerning the quantities generated and transported from the hospital. This information will be reviewed by Services Supervision Controller and compiled under the form of a Monitoring Report on a monthly basis.

11.9 PLAN REVIEW CYCLE

This waste management plan is a living document and shall be reviewed annually. Furthermore, the plan shall be updated at least in the following circumstances:

- When any of the national relevant legislation is amended.
- When the hospital's policies and procedures change, and these changes might impact the waste management activities.
- When waste management deficiencies or improvement opportunities are identified.

12 ASBESTOS HANDLING AND DISPOSAL GUIDELINES

12.1 INTRODUCTION

Asbestos is a hazardous material as it can degrade into microscopically thin fibers. These fibers are so small, and they can remain airborne for days after being disturbed. Asbestos fibers can penetrate deep into the lungs and become lodged in lung tissue if inhaled. Once lodged in the lung tissue, these fibers can cause a variety of serious diseases, including lung cancer, asbestosis (lung scarring), and mesothelioma (cancer of the lining of the lung cavity).

This guidance was developed in part to provide advice on asbestos handling and disposal, in order to ensure that asbestos and synthetic mineral fibers are controlled and managed during the demolition of Asbestos-Containing Materials (ACM) to prevent harmful impacts on personnel ranging from short-term irritation to long-term health impacts.

12.2 ASBESTOS HANDLING AND DISPOSAL PROCESS

The process of asbestos removal involves several steps, which should only be carried out by licensed and trained professionals. The approach for removal, transportation, and final disposal of ACM is illustrated in Figure 12-1 and outlined below.

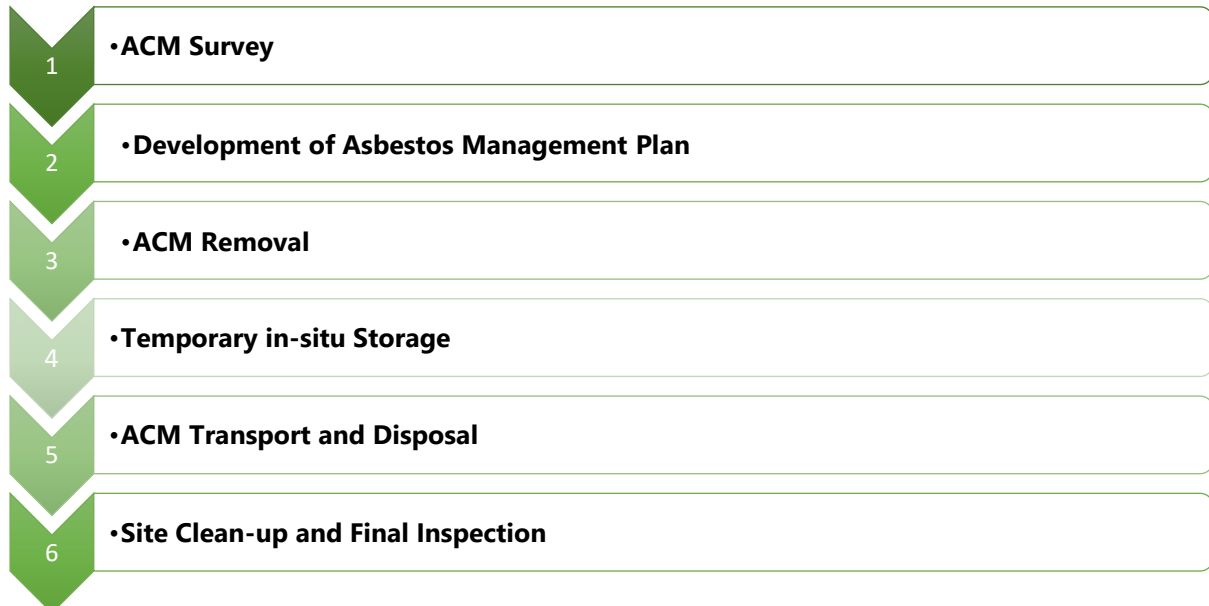


Figure 12-1: Asbestos Handling and Disposal Process

12.2.1 ACM SURVEY

Before any demolition work begins, a comprehensive ACM Survey should be carried out by certified asbestos inspectors/removalist to determine the presence, location, and condition of any ACMs.

12.2.2 ASBESTOS MANAGEMENT PLAN (AMP)

Based on the ACM Survey, a comprehensive Asbestos Management Plan (AMP) should be developed to include full details of the potential impacts and control measures to minimize the release of asbestos fibers into the air.

This plan can should also describe the steps that everyone involved in the management and disposal of asbestos-containing materials follow. The document should define who will be responsible for each stage of the collection, transportation, storage and disposal of materials and the standards to which they will work. The AMP should mainly include the following:

- Risk Management
- Reporting
- Training
- Emergency Contacts and Response
- Incident and Injury Management
- Risk Assessment
- Hazard Reporting
- Site security
- Asbestos Site Safety Rules
- Asbestos Warning Signs and Labels
- Personal Protective Equipment (PPE)
- Safe Work Method Statements (SWMS)
- Asbestos Management Schedules
- Monitoring Work Areas
- Corrective Action

12.2.3 ACM REMOVAL

The ACMs must be removed by trained and licensed contractors using specialized equipment and protective clothing. The workers must follow strict safety procedures, including using respirators and disposable coveralls, to minimize their exposure to asbestos fibers. During removal of ACM, it is important to monitor the implementation of the AMP.

In addition to the above, air quality monitoring during asbestos demolition is essential to protect workers and nearby residents from exposure to asbestos fibers. Air quality monitoring during asbestos demolition typically involves the use of specialized equipment to measure the concentration of asbestos fibers in the air. This equipment can include personal air monitors, ambient air monitors, and real-time monitors. These monitors can provide continuous or periodic readings of the airborne asbestos fiber concentration to ensure that exposure levels remain within safe limits.

12.2.4 TEMPORARY IN-SITU STORAGE

Asbestos waste that has been removed, or any other material which was contaminated with asbestos should be classified as asbestos waste, and should be stored separately in secure, covered, labelled, containers until transportation to an appropriate disposal site, in order to reduce, as far as is reasonably practical, the likelihood of people coming into direct contact with asbestos materials, or asbestos fibers becoming airborne, presenting the risk of fiber inhalation. Any temporary storage should therefore aim to eliminate, as far as possible, any opportunity for asbestos fiber release into the air. The following procedure must be followed for asbestos storage:

- Ensure that the asbestos-containing material is properly contained and sealed in airtight containers or double-bagged heavy-duty plastic bags. See Figure 12-2 and Figure 12-3 below.
- Label the containers or bags with warning signs that clearly indicate that they contain asbestos.

- Store the ACM in a designated area that is secure and inaccessible to the public and workers.
- Ensure that the ACM is properly contained and sealed in airtight containers or heavy-duty plastic bags.
- Label the containers or bags with warning signs that clearly indicate that they contain asbestos.
- Ensure everyone working with or near the waste is using appropriate PPE



Figure 12-2: Asbestos Storage Container



Figure 12-3: Heavy-duty plastic bags

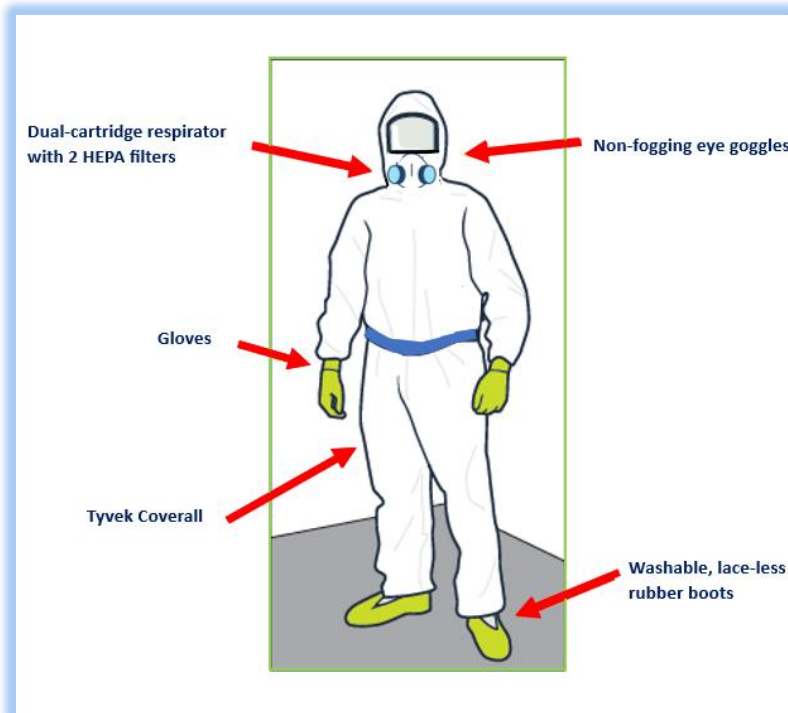


Figure 12-4: PPEs required for asbestos handling

12.2.5 ACM TRANSPORTATION AND DISPOSAL

Once the ACMs have been removed, they must be disposed of in accordance with best practices. This may involve transporting the materials to a specialized disposal facility that is licensed to handle asbestos. However, if there are no landfills or dumpsites designated for handling asbestos, it can be disposed of in

appropriate landfill facilities designated as non-hazardous waste such as municipal or construction waste landfills. In this case, asbestos waste should only be disposed of in cells that are specifically dedicated for the disposal of asbestos waste.

Disposal of asbestos waste should be carried out in accordance with the following:

1. Coordinate with the Environmental Protection Committee to determine the appropriate final disposal sites and to obtain a disposal permit.
2. Transport the asbestos containers or bags to the approved disposal site in a sealed and labeled vehicle. Vehicles must be easy cleanable and lockable.
3. Vehicles must be operated by trained personnel
4. Avoid breaking or damaging the packaging during transportation to prevent the release of asbestos fibers.
5. Any cells in non-hazardous waste landfills used to dispose of asbestos must have clear signs at all access points, and any interaction between asbestos waste and biodegradable waste should be prevented
6. The location of the facility should be either naturally or should be engineered to prevent any unacceptable discharges to ground and surface water and emissions over the entire life of the facility.
7. Asbestos handling facilities or landfills should be fenced or surrounded by trenches or other barriers to prevent unauthorized access.
8. After the disposal of asbestos waste, make sure no visible emissions occur and cover waste with at least 15cm of compacted non-asbestos-containing material within 24 hours of disposal.
9. Ensure everyone working with or near the waste is using appropriate PPE

12.2.6 SITE CLEAN-UP AND FINAL INSPECTION

After the removal is complete, the site should be thoroughly cleaned and decontaminated using specialized equipment and procedures.

Air samples must also be collected to determine the presence and concentration of asbestos fibers in the air. This is typically done by trained professionals who follow strict guidelines and use specialized equipment.



The air sampling process typically involves the following steps:

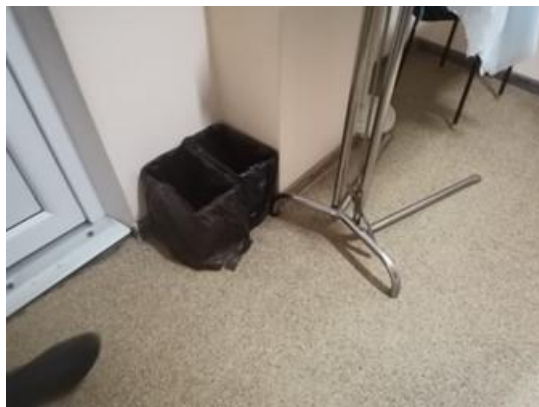
- Selection of appropriate sampling locations based on the potential sources of asbestos
- Preparation of the sampling equipment, which typically includes a filter cassette, a sampling pump, and tubing.
- Collection of air samples over a specified period of time, typically between 30 minutes and 8 hours.
- Analysis of the samples by a laboratory to determine the concentration of asbestos fibers in the air.
- Interpretation of the results to determine if the concentration of asbestos in the air exceeds the recommended exposure limits. With reference to OSHA Asbestos Fact Sheet, Permissible Exposure Limit (PEL) for asbestos is 0.1 fibers/cm³ of air as an eight-hour time-weighted average (TWA), with an excursion limit (EL) of 1.0 asbestos fibers/cm³ over a 30-minute period.

13 APPENDICES

13.1 CONSULTATIONS ACTIVITIES AND MEETINGS

Below is a compilation of activities and meetings conducted during the ESIA development process.

Activity No. 1	Balti Municipal Clinical Hospital	
Date and Time	11 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>
	Mr. Gheorghe Brînză	Director of the hospital
Points discussed during the meeting	<ul style="list-style-type: none">- The hospital currently manages waste in two primary streams: medical and non-medical (non-hazardous). Medical waste is segregated into yellow bags. Non-medical waste is placed in black bags.- An approved contractor is responsible for handling and transporting medical waste for treatment. The hospital maintains an annual contract with this contractor, valued at 1 million Mondovi Lie.- Pathological waste, including blood and organ remains, is interred in the cemetery.- Currently, there is no established tracking system for monitoring the hospital's waste quantities, types, and disposal methods. It's important to note that all quantities provided in the report to the public health agency are approximate.- The hospital director confirmed the presence of an emergency plan and the existence of a specialized team responsible for implementing and overseeing emergency plan and procedures, including practice evacuations as part of the plan.	
Picture Taken during the tour in the Hospital		
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Activity No. 2	Telenești Rayonal Hospital	
Date and Time	11 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>
	Alexei Bivol	Director of the hospital
Points discussed during the meeting	<ul style="list-style-type: none"> - The hospital introduced an advanced medical waste treatment system in Moldova, utilizing autoclave technology in 2014. - The system treats medical waste generated within the hospital and extends its services to process medical waste from other regional public hospitals and clinics. - The hospital treats approximately 30 kilograms of waste internally and receives around 200 kilograms from external hospitals. Fees are charged for the treatment of medical waste from other healthcare facilities. - An annual maintenance contract is in place with the supplier company. - Concerns about the system's effectiveness and efficiency have been raised due to the absence of specific mechanisms and periodic maintenance procedures. - Maintenance is carried out consistently to ensure the system's functionality and reliability. Efforts are ongoing to address these concerns and strengthen the system's role in responsible medical waste management. 	

Picture Taken during the tour in the Hospital





Activity No. 3	Meeting with the Public Health Department	
Date and Time	12 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>
	Mariana Gâncu	Head of Department of Public Health Policies and Public Health Emergencies
	Alexandru Dascalov	Consultant, Department of Public Health Policies and Public Health Emergencies
	Luminița Guțu	Professor, Department of Epidemiology, State Medical University of Moldova
Points discussed during the meeting	<ul style="list-style-type: none"> - The responsibility for monitoring hospitals and the management of medical waste during hospital operations rests jointly with the Ministry of Health and the Ministry of Environment. - Moldova has established a comprehensive strategy for the management of medical waste. This strategy is governed by Laws No. 209 of 2016 and decree No. 696 of 2018, which delineate the specific responsibilities of medical authorities in the proper handling of medical waste. These laws explicitly require medical authorities to furnish data pertaining to the quantities and types of hazardous medical waste generated. - The medical waste management strategy mandates the systematic reporting of medical waste-related information. - Close coordination exists between the Ministry of Health and the Ministry of Environment with regard to the management of medical waste. - Every healthcare facility is obligated to develop and submit a detailed medical waste handling plan to the Public Health Agency under the purview of the Ministry of Environment. Approval from both the Public Health Agency and the Ministry of Environment is a prerequisite for these plans. - Some hospitals and clinics in Moldova have established internal facilities for the treatment of medical waste. Following treatment, the waste is subsequently dispatched to domestic waste landfills. - There are contractors entrusted with the responsibility of treating medical waste in Moldova. these contractors have an accreditation for a five-year term. - Currently, there is no structured program of site inspections conducted by the agency to ensure the efficacy of the medical waste treatment system. Monitoring primarily relies on reports submitted by the medical facilities themselves. 	

Activity No. 4	Meetings in the Ministry of Environment	
Date and Time	12 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>
	Aliona Rusnac	Secretary of State
	Maria Nagornii	Head of Pollution Prevention Policy Department
	Stela Drucioc	Head of Air and Climate Change Policy Department
	Ionel Balan	Director, National Agency for Regulation of Nuclear and Radiological Activities (regulation of radioactive waste)
	Gavriil Gilca	Director, Environmental Agency (responsible for environmental impact assessment and issuance of environmental permits)
	Svetlana Bolocan	Head of Waste Management Policy Department
Points discussed during the meeting	<ul style="list-style-type: none"> - All new greenfield projects must comply with Law No. 216 of 2014, Annex 2, which cover hospital construction permits and environmental requirements. - The Ministry of Environment and the Environmental agency is responsible for enforcing and implementing environmental laws and instructions. - Hospitals utilizing radioactive materials must adhere to specific regulations governing the import and use of radioactive materials in Moldova, as outlined in Law No. LP132/2012, titled 'On Safe Nuclear and Radiological Activities,' and Decision No. 388 of 2009, which approves the Regulations on the Management of Radioactive Waste. It's important to note that Moldova does not have a designated landfill for the disposal of radioactive waste. Therefore, all remaining radioactive materials must be exported from the country. - The handling of medical waste is governed by Law No. 696 of 2019. All healthcare facilities are obligated to ensure the correct disposal or treatment of medical waste in compliance with this law. - The Ministry of Environment is actively engaged in the process of incorporating European Union environmental requirements and standards into Moldovan legislation. - Moldova has ratified the Paris Agreement and aims to reduce emissions by 70% as part of its climate strategy. - Project performance in terms of environmental impact relies on reports and occasional field visits. - Climate change information is available on the Ministry of Environment's website. - The project must evaluate its potential impact on groundwater, especially in regions with elevated groundwater levels, in order to mitigate any adverse environmental effects on water resources. 	

Activity No. 5	Institute of Emergency Medicine	
Date and Time	13 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>

	Mr. Mihai Ceban	Hospital Director
Points discussed during the meeting	<ul style="list-style-type: none"> - The Hospital has a Waste Management Plan updated every three years. - The hospital utilizes the decentralized approach, with each department responsible for its waste. - Waste is sorted at its source before being collected centrally, medical waste is placed in designated yellow containers; sharp waste is collected in specialized boxes. - Frequent waste disposal (2-3 times daily) through special passages. - Waste disposal services contracted out: general waste and hazardous waste handled separately. - All hospital employees receive medical waste management training. - The Hospital plans to invest in technology for treating the medical waste in-house. Proposal to install an in-house waste treatment unit in partnership with the private sector. 	

Pictures Taken during the tour in the Hospital



Activity No. 6	Republican Clinical Hospital "Timofei Moşneaga"	
Date and Time	13 July 2023	
Person(s) Met	<u>Name</u>	<u>Position</u>
	Alexandru Ferdohleb	Hospital Vice Director
Points discussed during the meeting	<ul style="list-style-type: none"> - The hospital has an updated waste management plan. - Waste is retained for a maximum of 24 hours before disposal. - Hospital staff and nurses receive periodic training on waste management every two years. - Waste disposal is outsourced to a contractor. 	

- The hospital has been pursuing funding for an internal medical waste treatment facility in the past two years, aiming to save costs and provide services to other facilities.
- Ongoing inspections ensure hospital departments comply with the waste management plan.

Pictures Taken during the tour in the Hospital

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