

Environmental Assessment and Review Framework

June 2020

Uzbekistan: COVID-19 Emergency Response Project

Prepared by the Ministry of Health of Uzbekistan for the Asian Development Bank (ADB) and the Ministry of Health, Uzbekistan.

CURRENCY EQUIVALENTS

(as of 8 July 2020)

Currency unit	–	sum (SUM)
SUM1.00	=	\$0.000098
\$1.00	=	SUM10,182.11

ABBREVIATIONS

ADB	–	Asian Development Bank
AIB	–	Asian Infrastructure Investment Bank
EARF	–	environmental assessment and review framework
EIA	–	environmental impact assessment
EMP	–	environmental management plan
IEE	–	initial environmental examination
MOF	–	Ministry of Finance
MOH	–	Ministry of Health of the Republic of Uzbekistan
NGO	–	non-government organization
WHO	–	World Health Organization
SanPin	–	Sanitary Norms and Rules
SPS	–	Safeguard Policy Statement
URM	–	Uzbekistan Resident Mission

WEIGHTS AND MEASURES

km (kilometer) — 1000 meters m (meter) — 0.001 kilometer

NOTE

In this report, "\$" refers to United States dollars.

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I. INTRODUCTION

1. The proposed COVID-19 Emergency Response Project is an emergency assistance loan (EAL) that responds to the government's formal request to Asian Development Bank (ADB) made on 26 April 2020 for emergency response and resilience building for COVID-19 in the Republic of Uzbekistan. In line with the National Emergency Response Plan for Coronavirus 2020, the Emergency Assistance will support the Government in its response to COVID-19 Pandemic. The loan will have the following three Outputs:

- (i) Output 1 –National laboratory system strengthened;
- (ii) Output 2 – National surveillance and response system established for COVID-19 Treatment capacity expanded; and
- (iii) Output 3 – Treatment capacity expanded.

2. The executing agency (EA) of this project is the Ministry of Health of Uzbekistan (MOH) and its implementing agency (IA) is the existing PIU of the Primary Health Care Improvement Project and Agency for Sanitary & Epidemiological Well-being (ASEW). The objective of the project is to support MOH in refurbishment of existing laboratories and treatment centers, procurement of the urgent medical equipment, supplies, medicines, and strengthening of the national health system preparedness and capacity to respond to public health emergencies including COVID-19.

3. For emergency assistance loans, ADB Safeguard Policy Statement (SPS) 2019 requires that a safeguards framework is prepared commensurate to the potential environment and social impacts of the activities to be supported under the project. To adequately screen, assess, review, and monitor the environmental and social impacts from Outputs 1 and 3 (Refurbishment of existing laboratories and treatment centers), an Environmental Assessment and Review Framework (EARF) has been prepared. It includes assessment of legal framework and institutional capacity, anticipated environmental impacts, consultation, information disclosure, and grievance redress, institutional responsibilities, and monitoring and reporting.

II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

4. Any subproject selected for the COVID-19 Emergency Response Project will be screened, classified, and assessed based on ADB’s Safeguard Policy Statement (2009) as well as environmental legislation of the Republic of Uzbekistan. This also includes complying with international agreements which Uzbekistan is party to.

A. National Environmental Legislation

5. Uzbekistan has created a legal framework in the field of environmental protection and environmental management, which is designed to ensure the rights and obligations of citizens enshrined in Articles 50 and 55 of the Constitution of Uzbekistan. These are more than 100 laws, about 50 Decrees of the President and Decrees of the Cabinet of Ministers of the Republic of Uzbekistan and other by-laws and regulatory documents. A list of Uzbekistan’s main environmental legislation as it pertains to the proposed project is given in Table 1.

Table 1: List of environmental laws relevant to the project

Year	Law / Regulation	Last revision
08.12.1992	Constitution of Uzbekistan	16.04.2014
09.12.1992	Law “On nature protection”	18.04.2018
06.05.1993	Law “On water and water use”	23.07.2018
25.05.2000	Law “On Environmental Expertise”;	14.09.2017
03.12.2004	Law “On Specially Protected Areas”	14.09.2017
26.12.1997	Law “On protection and use of flora”	21.09.2016
26.12.1997	Law “On protection and use of fauna”	19.09.2016
27.12.1996	Law “On air safety”	14.09.2017
05.04.2002	Law “On wastes”	10.10.2018

6. Brief summaries of the listed documents are given below:

7. **Constitution of Uzbekistan.** In accordance with the Constitution of the Republic of Uzbekistan, land, subsoil, water, flora and fauna and other natural resources are national wealth, subject to rational use and protected by the state.

8. **Law on Environmental Expertise.** Environmental Impact Assessment in Uzbekistan is called State Environmental Expertise (SEE). SEE is regulated by the Decree of the Cabinet of Ministers of the Republic of Uzbekistan No. 949 dated 22 November 2018

9. **Law on Nature Protection** regulates the legal relationship between the bodies of the state authority and the physical persons or legal entities (without distinction-legal form) in the field of environmental protection and in the use of nature on all Uzbekistan’s territory including its territorial waters, airspace, continental shelf and special economic zone. The law defines the principles and norms of legal relations, rights and obligations and responsibilities, awareness raising, education and scientific research in the field of environment, key players and principles of environmental management; describes economical mechanisms and levers; ecological

insurance; basics of environmental audit; environmental requirements during privatization; justifies needs of environmental standards and limits (air, water, soil, noise, vibration, fields, radiation) and ecological requirements for production, transportation and storage of goods and food products; ecological requirements applicable to waste; states necessity of environmental impact assessment and related issues (strategic environmental protection and transboundary environment assessment) referring to Environmental Assessment Code; defines general principles of environmental protection; considers different aspects on protection of ecosystems, protected areas, issues of global and regional management, protection of ozone layer, biodiversity and international cooperation aspects. As stated in the law, in order to protect the climate against the global changes, the subject of the business activity is obliged to observe the limits to greenhouse gas emissions as well as to take measures for mitigating this emission.

10. **Law on Water and Water Use** regulates water use, defines rights and obligations of water users, sets out the types of licenses for the use of water, the rules and conditions of their issuance, considers conditions of suspension, withdrawal and deprivation of license, regulates water flows. The law states liability of all natural and legal persons to prevent pollution of catchment basins, water reservoirs, snow and ice covers, glaciers, permanent snow cover with industrial, household and other wastes and emissions which may cause deterioration of the underground water quality; prohibits piling of industrial and household wastes near the public water headwork's and in their sanitation protection zones, bans construction of facilities and implementation of any other activity which may cause water pollution; sets requirements for forest use within water protection zones. The state management of water protection and use is exercised through accounting, monitoring, licensing, control and supervision.

11. **Law on Air Safety.** The law regulates protection of atmospheric air from man-caused impact. Pollution of atmospheric air is emission of hazardous substances originating from activities which are able to have negative impact on human health and environment. Maximum permitted limits for concentration of hazardous substances into the atmospheric air are defined for each contaminant and represent maximum concentration of hazardous pollutants, in averaged time span, recurring action of which has not have negative impact on human health and environment.

12. **Law “On State Sanitary Supervision”** - №657-XII of 07/03/1992 (as amended on 03.09.2010). It regulates social relations in the field of sanitary-epidemiological well-being and radiation safety, the right of people to a healthy environment and other related rights, guarantees and guarantees for their realization.

13. **Law on Waste** provides the legal conditions for implementation of measures aiming at prevention of generation of waste and increased re-use, environmentally sound treatment of waste (including recycling and extraction of secondary raw materials, as well as safe disposal). The Law on Waste No.362-II of April 5, 2002 (modified January 4, 2011) states that citizens have the right to a safe and healthy environment, to participate in the discussion of projects, and compensation for damage to their life, health or property.

14. **Medical Waste Management.** Medical waste management should be carried out in accordance with the Law of the Republic of Uzbekistan “On Waste” (2002) and the Sanitary Norms and Rules.in accordance with national Sanitarian norms, medical wastes are divided on 4 categories (A,B,C,D). Categorization I, II, III, and IV applies for industrial wastes. COVID-19

wastes will be categorized as V (C) extremely dangerous - materials in contact with patients with a particularly (extremely) dangerous infection.

15. According to the Law, to ensure the efficient management of medical waste, the following requirements must be observed:

- **Separation of waste:** In order to comply with the developed guidelines and to ensure an environmental approach to waste management, it is necessary to provide separate storage of waste: for household and medical.
- Medical waste generated in hospitals must be divided into pricking (needles, systems) and not pricking. Pricking waste should be removed during or immediately after procedures. Each room should be provided with special puncture-resistant containers, where the objects will be stored after medical manipulations. After the containers are filled on two-third, the inlet is tightly closed and either transported to the place of their burning in the incinerator, or after disinfection, it is poured with cement, alabaster or clay until it is filled in the sanitary room and then dumped into the garbage container. In the same way, systems and syringes should be disposed of but it (system) should be cut before into 5-7 parts.
- A new method for processing needles can be proposed: the needles can be separated from the syringe immediately after use by a manual needle cutter, which cuts off the needle and the base of the syringe (see equipment). After disinfection, the syringe can be placed in the household waste bin. Needle cutter technology is currently being researched by WHO.
- Infectious waste can be disinfected or autoclaved and then placed in a household waste container or sent for recycling.
- Medical waste collection is conducted by junior medical staff. Monitoring compliance with measures for the treatment of medical waste lies with the hospital's senior nurse.

16. **Law on Protection and Use of Flora** regulates protection and usage of flora growing in natural condition, as well as in cultivation and its reproduction and conservation of gene pool of wild plants. The Cabinet of Ministries, local government bodies and special authorized agencies implement the law. State Committee of Nature Protection (SCNP) and Head Department of Forestry under the Ministry of Agricultural and Water Resources are the special authorized agencies in flora protection and its usage. The Cabinet of Ministries, SCNP, local government bodies and Head Department of Forestry are responsible for implementing on the national level the administration of the law.

17. **Law on Protection and Use of Fauna.** This Law regulates relations in the field of protection **and** use of wild animals living in a state of natural freedom on land, water, atmosphere and soil, constantly or temporarily inhabiting the territory of the Republic of Uzbekistan, as well as contained in semi-free conditions or artificially created habitat for scientific or nature protection goals.

18. A list of Uzbekistan's social legislation as it pertains to the proposed project is given in Table 2.

Table 2: List of social and land ownership related laws relevant to the project

Year	Law / Regulation	Last revision
29.08.1996	Civil code of Uzbekistan	18.04.2018
21.12.1995	Labor code	16.10.2018
30.04.1998	Land Code	24.07.2018
13.01.1992	Law on employment	03.01.2018
30.08.2001	Law on cultural heritage	18.04.2018
29.08.1996	Law on Public Health	13.06.2017
01.08.2018	Decree of the President of the Republic of Uzbekistan No5495 on measures on cardinal improvement of investment climate in the republic of Uzbekistan.	01.08.2018
16.11.2019	The Resolution of the Cabinet Ministers of the Republic of Uzbekistan No 911 "About Additional Measures to Guarantee Property Rights of Individual Persons and legal Entities and to Improve Procedures of Land Acquisition and Compensations".	N/A
25.05.2011	Resolution of Cabinet of Ministers No146 on improve the procedure of granting land plots, protect the rights of legal entities and individuals on land and improve the architecture of settlements and the efficient use of their settlements land for construction.	25.05.2011
16.06.2018	Resolution of Cabinet Ministers No3857 on measures to improve the effectiveness of training and realizing projects with participation of international financial institutions and foreign government financial organizations.	16.06.2018

19. Brief summaries of the listed documents are given below.

20. **Civil Code** defines the legal status of participants of civil relations, the grounds and procedure of implementation of property rights and other proprietary rights, rights on intellectual property, regulates the contractual and other obligations, as well as other property and related personal non-property relations. The Civil Code defines general rules of property seizure, determination of property cost and rights for compensation, terms of rights termination.

21. **Labor code and Law on employment.** These two documents are main legislations regulating **labor** relations of individuals employed with labor contract by enterprises, institutions, organizations of all type ownership forms, including contracted by individuals. These legislations are considering interests of employees and employers provide efficient function of labor market, just and secure labor conditions, protection of labor rights and employees health, promote to growth of labor productivity, increase of work quality, raising on this matter welfare and social livelihood level of the population.

22. **Land Code.** The Land Code is the main regulatory framework for land related matters in Uzbekistan. The land code regulates allocation, transfer and sale of land plots, defines ownership and rights on land. It describes responsibilities of different state authorities (Cabinet of Ministers, region, district and city hokimiyats) in land management; rights and obligations of land possessor, user, tenant and owner; land category types, land acquisition and compensation issues, resolution of land disputes and land protection. The land code also defines the terms of rights termination on land plot, seizure and land acquisition of land plot for state and public needs, and terms of seizure of land plot in violation of land legislation.

23. **Law on Public Health.** The main objectives of legislation on the protection of public health are: guaranteeing the rights of citizens to health care from the state; the formation of a healthy lifestyle of citizens; legal regulation of the activities of state bodies, enterprises, institutions, organizations, public associations in the field of public health.

24. **Resolution of Cabinet Ministers No. 3857.** The resolution "On measures to improve the effectiveness of training and realizing projects with participation of international financial institutions and foreign government financial organizations" partly provides that payment of compensation for the land acquisition, demolition of houses, other structures, plantings within the framework of projects with the participation of International Financial Institutions (IFIs), if it is agreed and stated in agreements, then will be carried out by authorized bodies in accordance with the requirements of IFIs or Foreign Governmental Finance Organizations.

25. **Law on cultural heritage** sets out procedures for protection of cultural heritage and permitting arrangements for archaeological investigations. The purpose of this Law is to regulate relations in the field of protection and use of cultural heritage objects, which are the national property of the people of Uzbekistan.

B. National Environmental Impact Assessment (EIA) Legislation

26. The national EIA procedure is regulated by the Law "On the Environmental Examination" and the Regulations "On the State Environmental Expertise" (SEE), approved by DCM # 949 On approval of the Regulation of the State Ecological Expertise (22.11.2018). The Resolution specifies the legal requirements for EIA in Uzbekistan. According to the Resolution, SEE is a type of environmental examination carried out by specialized expert divisions to set up the compliance of the planned activities with the environmental requirements and determination of the permissibility of the environmental examination object implementation.

27. The special authorized state body in the field of SEE is the SCNP. SEE is carried out by the three specialized expert divisions of the SCNP:

28. According to local legislation, rehabilitation work within the existing borders without allocation of new territories for construction does not require a local environmental assessment. However, according to Appendix No. 1 of PKM No. 949, the installation of new incinerators, and work with biomaterial (hazardous class 2) requires the development and submission of the materials of the project (according to the procedure described in the same decree) for consideration and approval by the Glavgoseekoexpertiza under the Republican Nature Protection Committee. Taking into account above mentioned, the local environmental assessment will be conducted based on confirmation from the State Committee on Ecology and Environment Protection (SCEEP).

C. Environmental Regulations, Standards and Guidelines

29. Uzbekistan has a large set of specific standards that refer to emissions, effluent discharge, and noise standards, as well as standard to handle and dispose specific wastes ranging from sewage to hazardous wastes. The following summarizes these laws and standards along with other international best practice standards.

C.1. Air Quality and Emissions

30. National Standards – Air quality in Uzbekistan is measured against Maximum Permissible Concentrations (MPC) and Maximum Permissible Emissions (MPE).

31. Ambient Air Quality Standards, or MPCs, are established by SanPiN 0293-11 (May 16, 2011). According to the United Nations Environment Program (UNEP), Uzbek national ambient air quality standards meet World Health Organization (WHO) standards.¹ The MPCs relevant to the Project are shown in Table 3.

Table 3: National Air Quality MPCs

Parameter	Uzbekistan MPC (mg/m ³)			
	30 min	24 Hour	Monthly	Annually
Nitrogen Dioxide (NO ₂)	0.085	0.06	0.05	0.05
Nitrogen Oxide (NO)	0.6	0.25	0.12	0.06
Sulphur Dioxide (SO ₂)	0.5	0.2	0.1	0.05
Dust	0.15	0.1	0.08	0.05
Carbon Monoxide (CO)	5.0	4.0	3.5	3.0

32. Emission standards are stipulated by The Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 14 of January 21, 2014 “On Approval of the Regulation on the Procedure for Developing and Coordinating Environmental Draft Projects”. It states that the main criterion for establishing MPE are quotas for pollutants.

33. IFC Standards – The IFC, part of the World Bank Group (WBG), have established ambient air quality standards based on World Health Organization (WHO) guidelines. WBG guideline limits will be followed during the construction and operational phase of the Project. The following table illustrates the guidelines.

Table 4: WBG Ambient Air Quality Guidelines ²

Parameter	Averaging Period	Guideline Value (µg/m)
Sulphur Dioxide (SO ₂)	10 minute	20
	24 Hour	500
Nitrogen Dioxide (NO ₂)	1 Hour	40
	1 Year	200
Particulate Matter PM ₁₀	24 Hour	20
	1 Year	50
Particulate Matter PM _{2.5}	24 Hour	10
	1 Year	25

Project Air Quality Standards

34. Any air quality monitoring during the rehabilitation phase will be undertaken against national standards. This is based on the criteria adopted by the WBG which state that:

¹ <https://wedocs.unep.org/bitstream/handle/20.500.11822/17141/Uzbekistan.pdf?sequence=1&isAllowed=y>

² Not including interim targets.

*'Emissions do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards by applying national legislated standards, or in their absence, the current WHO Air Quality Guidelines.'*³

35. As noted above, Uzbekistan have their own national legislated standards and as such they will be applied to the Project.

C.2. Water quality

36. National Standards - Ambient river water quality standard is given as Maximum permissible concentration (MPCs) established by "SanPiN №0172-06. MPC has two categories. First category is for centralized or non-centralized drinking water supply. The second category is for cultural and everyday purposes of the population, recreation, and sports.

37. In addition to the above, the WBG provides guidelines values for treated sanitary sewage discharges. The following table provides these values with which the Project shall also comply, for example relating to any waste water discharge from construction camps.

Table 5: WBG Indicative Values for Treated Sanitary Sewage Discharges

Pollutant	Unit	Guideline Value
pH	pH	6-9
Biological Oxygen Demand (BOD)	Mg/l	30
Chemical Oxygen Demand (COD)	Mg/l	125
Total Nitrogen	Mg/l	10
Total Phosphorus	Mg/l	2
Oil and Grease	Mg/l	10
Total Suspended Solids	Mg/l	50
Total Coliform Bacteria	MPN ^A / 100 ml	400

Water Quality Project Standards

38. Baseline water quality monitoring will be assessed against national MPCs.

Water Discharge Project Standards

39. Waste water discharge from construction sites and camps shall be assessed against WBG values (for any treated sanitary sewage discharge) and against national MPDs which will be set by SCNP.

³ Environmental, Health and Safety Guidelines. Air Emissions and Ambient Air Quality. WBG. 2007

C.3. Noise

40. National Standards - SanPiN No. 0267-09 is used to ensure the rules of acceptable noise levels for residential areas in Uzbekistan. These rules and regulations establish permissible noise parameters in residential, public buildings and residential buildings of populated areas created by external and internal sources, as well as general requirements for measurements, measurement methods and hygienic noise assessment at research sites. Evaluation of the sound level at the calculation point is performed for the day and night period of the day (from 7 to 23 hours and from 23 to 7 hours) and takes into account the maximum intensity of the sound source level during the half-hour period. Table 6 presents the permissible noise levels in the territories that are most significant for the project. The levels are almost identical to IFC standards shown below, with the exception of the periods where IFC are slightly more stringent. As such IFC guideline limits will be used for the Project.

Table 6: Noise limits from SanPiN No. 0267-09

Purpose of premises or territories	Time	SanPiN No. 0267-09
Territories adjacent to homes, clinics, dispensaries, rest homes, boarding houses, nursing homes, child care facilities, schools and other educational institutions, libraries.	From 7 am to 11 pm	55 dB(D)
	From 11 pm to 7 am	45 dB(A)

41. WBG Standards – To meet WBG guideline requirements noise impacts should not exceed the levels presented in Table 10 or result in a maximum increase in background levels of 3 dB at the nearest receptor location off site.

Table 7: WBG Noise Level Guidelines

Receptor	One-hour L_{aeq} (dBA)	
	Daytime 07.00-22.00	Night-time 22.00 – 07.00
Residential; institutional; educational	55	45
Industrial; commercial	70	70

42. Workplace Noise - In order to protect the health of staff in the workplace Uzbekistan, utilizes the law (SanPiN) No. 0120-01 - “Sanitary norms and rules to ensure acceptable noise levels in the workplace”. This document provides acceptable noise levels for various types of work, the most significant of which are listed below in **Table 8**. In addition, the IFC provides noise limits for various working environments, which are also illustrated in **Table 8**.

Table 8: Working environment Noise Limits

Type of work, workplace	SanPiN No. 0120-01	General EHS Guidelines of IFC
Performance of all types of work at permanent workplaces in industrial premises and at enterprises operated since March 12, 1985	80 dB (A)	
Heavy industry		85 Equivalent Level Laeq, 8h
Light industry		50-65 Equivalent Level Laeq, 8h

* Laeq- equivalent average sound pressure level

Project Noise Standards

43. For construction phase monitoring, WBG guideline limits will be followed as the nighttime period is slightly longer than Uzbek standards. For workplace noise, national guidelines shall be followed.

C.4. Vibration

44. International Standards – The German Standard DIN 4150-3 – Vibration in Buildings – Part 3: Effects on structures provides short term and long-term limits⁴ for vibration at the foundation for various structures. This standard is considered international best practice and will be followed as part of the Project.

Table 9: Guideline Values for Vibration Velocity to be Used When Evaluating the Effects of Short-term and Long-term Vibration on Structures

Group	Type of structure	Guideline Values for Velocity (mm/s)				
		Short-term			Long-term	
		At foundation			Uppermost Floor	Uppermost Floor
		Less than 10 Hz	10 Hz to 50 Hz	50 to 100 Hz	All frequencies	All frequencies
1	Buildings used for commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40	10
2	Residential dwellings and buildings of similar design and/or use	5 (105 dB)	5 to 15	15 to 20	15	5 (105 dB)
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Lines 1 or 2 and have intrinsic value (e.g. buildings that are under a preservation order)	3 (100.5 dB)	2 to 8	8 to 10	8	2.5 (99.0 dB)

Source: DIN 4150-3, Structural Vibration, Part 3: Effect of vibration on structures

45. DIN 4150-3 notes that “experience has shown that if these values are complied with, damage that reduces the serviceability of the building will not occur. If damage nevertheless

⁴ Short-term vibrations are defined as those that do not occur often enough to cause structural fatigue and do not produce resonance in the structure being evaluated and long-term vibrations are all the other types of vibration.

occurs, it is to be assumed that other causes are responsible. Exceeding the value in the table does not necessarily lead to damage”.

Project Vibration Standards

46. German Standard DIN 4150-3 will be followed during the rehabilitation phase.

C.5. Waste

47. National Standards - The Law on Waste No.362-II of April 5, 2002 (modified January 4, 2011) regulates solid waste treatment procedures and defines the authority of various institutions involved in solid waste management. The law also provides rules for the transport of solid waste. Hazardous wastes that are transported must undergo environmental certification and be transported by special vehicles.

48. The rules for management of medical waste and other waste generated in laboratories and medical institutions are set out in SanPiN No. 0317-15⁵. Sanitary rules and norms for the collection, storage and disposal of waste in medical institutions of the Republic of Uzbekistan.

C.6. Hazardous material

49. National Standards - The order to place hazardous chemicals and hazardous materials in special landfills, their protection and disposal, approved by the State Committee for Nature Protection, the Ministry of Emergency Situations, the Ministry of Finance, the Ministry of Health No. 2438 of March 20, 2013. The provision identifies hazardous chemicals, toxic materials, special landfills and special vehicles. The state organization “Kishlokkime” (Agricultural Chemicals) is responsible for the transportation and disposal of hazardous materials.

50. Transportation of such materials should be carried out in accordance with the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 35 dated February 16, 2011 “On rules of transportation of hazardous materials in the territory of Uzbekistan”. The Ministry of Health and the State Committee for Nature Protection approves proper performance of work.

C.7. World Bank / IFC EHS Guidelines for Health Care Facilities

51. The WB/IFC Environmental Health and Safety (EHS) Guidelines for Health Care Facilities include information relevant to the management of EHS issues associated with health care facilities (HCF) which includes a diverse range of facilities and activities involving general hospitals and small inpatient primary care hospitals, as well as outpatient, assisted living, and hospice facilities. Ancillary facilities may include medical laboratories and research facilities, mortuary centers, and blood banks and collection services. A description of activities in this sector are also provided in these guidelines.

⁵ <https://www.minzdrav.uz/documentation/detail.php?ID=46918>

C.8. Sanitary Protection Zones

52. According to sanitary and epidemiological rules and regulations (SanPiNs) Sanitary Protection Zones and Sanitary Classification of Facilities, Structures for the project are established⁶.

D. International Agreements and Conventions

53. The global agreements in which Uzbekistan is a Party are as follows:

- UN Framework Convention on Climate Change (06/20/1993).
- Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (05/26/1993).
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (12/22/1995).
- Paris Convention on Protection of the World Cultural and Natural Heritage (12.22.1995).
- UN (Rio) Convention on Biological Diversity (05.05.1995).
- United Nations Convention to Combat Desertification (08/31/1995).
- Convention on International Trade of Endangered Species of Wild Flora and Fauna (07/01/1997).
- Bonn Convention on the Conservation of Migratory Species of Wild Animals (05/01/1998);
- Ramsar Convention on Wetlands of International Importance Especially as Wildlife Habitat (30.08.2001), etc.
- UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention) (9.08.2007).
- Convention on the Law of the Non-Navigational Uses of International Watercourses (August 9, 2007).

54. As a member of the CIS countries, Uzbekistan is a member of the Interstate Environmental Council on the harmonization of environmental legislation, the development of the EA and the development of economic instruments for environmental protection, as well as a member of the Interstate Environmental Fund for financing environmental protection in interstate and regional programs.

E. Policies, Protocols & Programs Specific to COVID-19

55. In order to stimulate the employees of the SES services during the coronavirus pandemic, the following were approved: Decree of the President of the Republic of Uzbekistan dated March

⁶Applicable SanPiNs are listed in the website of the MoH:

http://minzdrav.uz/documentation/list.php?SECTION_ID=141

19, No. UP 5969, resolution of the President of the Republic of Uzbekistan dated April 24, 2020 No. PP 4695⁷.

56. The Ministry of Health of the Republic of Uzbekistan, together with WHO, developed the National COVID Guideline 19.⁸

57. Guidelines on labor protection and safety are reflected in SANPIN No.0372-20 “Temporary sanitary rules and standards for organizing the activities of government bodies and other organizations, as well as business entities in the context of the COVID 19 pandemic”.

58. In order to introduce and organize a system and a unified approach for the diagnosis and treatment of coronavirus infection (COVID 19) in pregnant women, by the MoH, with the technical support of USAID, developed and approved an interim clinical guideline.

F. Asian Development Bank Safeguard Policies 2009

59. ADB has three safeguard policies that seek to avoid, minimize or mitigate adverse environmental impacts and social costs to third parties, or vulnerable groups as a result of development projects. The Project requires the application of both environmental safeguard and social safeguard.

Safeguard Requirements 1: Environment

60. The objectives are to ensure the environmental soundness and sustainability of projects, and to support the integration of environmental considerations into the project decision-making process. Environmental safeguards are triggered if a project is likely to have potential environmental risks and impacts. Eleven ‘Policy Principles’ have been adopted as part of the ADBs Safeguard Policy Statement (SPS 2009). The principal objective is to conduct an environmental assessment for each proposed project to identify potential impacts, and then mitigate the negative impacts. The proposed mitigation measures, monitoring and reporting requirements, institutional arrangements, schedules, cost estimates, and performance indicators are documented in the environmental assessment report. The ADB requires environmental assessment of all project loans, program loans, sector loans, sector development program loans, financial intermediation loans, and private sector investment operations. Environmental assessment is a process rather than a one-time report, and includes necessary environmental analyses and environmental management planning that take place throughout the project cycle.

61. Each subproject is first categorized through ADB’s Rapid Environmental Assessment (REA) Checklists (Appendix 1)⁹ that enable to identify potential risk/impacts of the subprojects and determine the appropriate extent and type of environmental assessment an early stage of project cycle. According to the findings of the REA checklist, the project will be categorized as A, B, or C. The definitions and reporting requirements of the environmental categories are summarized below.

⁷ <https://lex.uz/docs/4798007>

⁸ http://minzdrav.uz/openData/csv/nation_rukovodstvo_COVID-19.pdf

⁹ Appendix 1 includes REAs for buildings.

Table 10: ADB Environmental Categories

Category	Project Impact	Reporting Requirement
A	A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works.	Environmental impact assessment (EIA)
B	A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects.	initial environmental examination (IEE)
C	A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts.	No environmental assessment is required although environmental implications need to be reviewed.

Source: Asian Development Bank.

62. The proposed loan is categorized as 'B' for environmental safeguards. Hence, in accordance with SPS-2009, an EARF has been prepared for this emergency loan. In addition to the EARF, a consolidated IEE study (covering all of the facilities) will also be prepared during implementation phase. Moreover, an Environmental Management Plan (EMP) will also be prepared as part of the IEE study.

63. **Public consultations.** The requirement of the SPS is to carry out meaningful consultation with affected people and facilitating their informed participation. It is necessary to ensure women's participation in consultation, and involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood and taken into account. It is also required to establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.

64. **Methodology and approach.** Identification of Stakeholders is important part in public consultation. Stakeholders are considered to be primary if they will be directly affected or likely to be affected directly or indirectly (i.e., beneficial or adversely) by the project. Secondary stakeholders are individuals or groups whose interests may be affected by the project, and who may have the potential to influence project outcomes, if any.

65. The **executing** agency will adopt the following principles of consultation based on SPS 2009:

- (i) holistic and project cycle approach (atmosphere free of intimidation or coercion, conducted from project preparation to completion),
- (ii) informed participation and feedback (provides opportunities for suggestions/comments, adequate and understandable information), and
- (iii) gender sensitive and inclusive (equal access to information, tailored to the needs of disadvantaged and vulnerable groups).

66. To have more effective and fruitful consultations, the executing agency will divide the stakeholders into three main groups (affected parties, interested parties and

vulnerable/disadvantage groups). However, the three main groups may be changed during project implementation.

67. However, due to the COVID-19 pandemic, some restrictions may be in place during project implementation for direct communication and on the number of people in a meeting or public gathering in a confined place etc. In this case, the executing agency may carry out consultations in smaller group (in case smaller group meetings are allowed) to observe social distancing required by the WHO (at least 1 meter apart) during the pandemic, emphasizing that participants are free to use mask or face shield and different means of communication:

68. The executing agency may use of various channel of communication and undertaking the following steps:

- (i) coordinate with local radio stations (AM/FM) to disseminate information about the project,
- (ii) use local newspaper to post information such as project brief or FAQ,
- (iii) designate a 24/7 hotline to respond to people's concern or issues about the project (the 24/7 hotline number will be also posted on the websites of the executing agency); and
- (iv) coordinate with religious leaders to allocate some time to broadcast about the project.

69. The executing agency will document the consultation by listing the participants of the consultation process, including a summary of the concerns/issues they raised and suggestions on project design, mitigation measures and monitoring, and other relevant issues on implementation. Participation of women will be highlighted as well as the date and location of consultations.

70. ADB is drafting guidance with regards to consultation in emergency situations. These will also be used while carrying out consultations.

71. Additional ADB guidelines are relevant for the subprojects are:

- (i) Operations Manual (OM) with relevant Bank Policies (BP), March 2010;
- (ii) Access to Information Policy, 2019.
- (iii) Guidance note on management of Infectious Medical Waste during the COVID-19 Pandemic.

Safeguard Requirements 2: Involuntary Resettlement.

72. The objectives of ADB involuntary resettlement safeguards are to avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups. The safeguard requirements underscore the requirements for undertaking the social impact assessment and resettlement planning process, preparing social impact assessment reports and resettlement planning documents, exploring negotiated land acquisition, disclosing information and engaging in consultations, establishing a grievance mechanism, and resettlement monitoring and reporting.

73. The project is categorized as C for involuntary resettlement (IR) since the physical activities are limited to refurbishing of existing 38 laboratories and 16 treatment centers within the existing compounds of these facilities. No land acquisition or resettlement activities is anticipated. However, this will need to be reconfirmed following the detailed design. A screening checklist for IR has been prepared under this EARF to reassess the proposed physical activities under Outputs 1 and 3 prior to contract award.

Safeguard Requirements 3: Indigenous Peoples.

74. The project is categorized as C for indigenous peoples (IP) safeguards. There is no community or group in the location of the laboratories and treatment facilities which may be considered as IP as defined under ADB SPS (2009). The Project does not involve impacts to Indigenous Peoples and therefore no further action relating to this safeguard is required.

F.1. Gap analysis

75. The environmental assessment of the Project will need to satisfy, the national requirements of **Uzbekistan** as well as those of ADB. A harmonized safeguard framework is developed for conducting the IEE. The framework is given below.

Table 11: Comparison of ADB and Uzbekistan Legislation Requirements

Aspect	ADB	Uzbekistan	Harmonized Framework
Environmental Policy and Regulations	ADB's SPS (2009) sets out the policy objectives, scope and triggers, and principles for three key safeguard areas: -Environmental safeguards, -Involuntary resettlement safeguards, and -Indigenous peoples safeguards	EIA is called State Environmental Expertise (SEE) in Uzbekistan. SEE is stipulated in the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 491 dated December 31, 2001.	The Project follows ADB's SPS (2009) and National Resolution No.491, December 2001.
Screening	This Project is Category B.	This Project falls into Category II of the environmental impact with medium risk.	All the requirement of ADB will cover the requirement of Uzbekistan requirement. Then the project will follow the Category B of ADB.
Alternatives	Examination of financially and technically feasible alternatives to the project location, design, technology and components, their potential	Alternative assessments are to be carried as per request of the Center for State Ecological Expertise.	Assessment of alternatives will be included.

Aspect	ADB	Uzbekistan	Harmonized Framework
	environmental and social impacts.		
Reporting	Guidelines and Table of Contents are provided for IEE report in SPS (2009). EMP will include proposed mitigation measures, monitoring and reporting requirements, institutional arrangements, schedules and cost estimates. The report should be in English.	Draft of Concept Statement on Environmental Impact (national acronym PZVOS) requires, Baseline, analysis of alternatives, Pollution prevention plan, Waste storage, and other mitigation. The report should be in Russian.	The Project prepared IEE report in English following the form of ADB. After that IEE report is translated in Russian or Uzbek and change the format in Uzbekistan style. The contents of two reports are same but layout and language is different.
Public Consultations	“Meaningful” consultation with affected people are required for the project.	Public consultation is not required in the process of Draft of Concept Statement (PZVOS).	Public consultations will be undertaken with various stakeholders, directly and in-directly affected people, NGOs throughout the project cycle and consider their views in project design and safeguard plan. Questions and concerns raised during public consultations held will be considered and addressed in the IEE study.
Public Disclosure	Draft IEE will be published in ADB website before Project approval by the Board.	If the report has secrets of official or private organization, it should not be disclosed.	Draft IEE report (English and Russian or Uzbek) will be published in ADB Client’s Website. The copies of the Russian version of Draft of Concept Statement on Environmental Impact will be made available at the affected villages.

III. DESCRIPTION OF THE PROJECT

76. In accordance with the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. UP-4947, an action strategy was approved, covering five priority areas of the development of the Republic of Uzbekistan during 2017 - 2021. One of the main directions is the development of the social sphere, that aimed at improving the system of social protection and protection of the public health. To achieve the objectives in Uzbekistan, a number of decrees and resolutions of the President of the Republic of Uzbekistan, resolutions of the Cabinet of Ministers and orders of the Ministry of Health of the Republic of Uzbekistan were adopted. In recent years the country has taken a number of measures aimed to maintain sanitary and epidemiological welfare, to ensure a safe environment and protection of human health, improving the system of sanitary and epidemiological surveillance services, and training of qualified specialists in the field.

77. The modernization of the sanitary-epidemiological service should ensure the monitoring of the state public health for the implementation of disease prevention programs, influencing the risk factors for their development.

78. The complex nature of the sanitary-epidemiological service laboratories activities is based on the use of theoretical and analytical capabilities of individual sub-disciplines of laboratory medicine: clinical biochemistry, hematology, cytology, molecular biology, immunology, bacteriology, virology, mycology, parasitology and toxicology.

79. Currently, the technical conditions of many laboratories do not meet modern requirements. The research methods that are used to a large extent are complex and time-consuming. There is a significant lag in the field of computerization of laboratories and the introduction of laboratory software and hardware systems.

80. The quality of laboratory research in all laboratories is not up to standard, and requires the introduction into the practice of new effective laboratory research technologies, along with the preservation of existing technologies. It is also necessary to note the absence of a clear laboratory quality management system that is based on an external assessment of research quality and that covers all laboratories, regardless of its subordination.

81. It is necessary to establish quality control at all stages of the laboratory processes in order to achieve the highest quality, accuracy and reliability of the laboratory services and that could be achieved through the creation of National Reference Laboratories.

82. Over the past few years, with the assistance of international partners such as the World Bank, the Islamic Development Bank and the German State Bank (KfW), certain activities and work have been done to improve the functioning of the public health laboratory system in the Republic of Uzbekistan in the following areas: reconstruction of selected laboratories, providing modern laboratory equipment and training of laboratory personnel to strengthen surveillance of infectious diseases.

83. The project is aligned with the (i) ^[100]concept for the development of the health system of the Republic of Uzbekistan for 2019–2025, and (ii) COVID-19 Strategic Preparedness and Response Plan (COVID-19 SPRP) of the Government of the Republic of Uzbekistan. The project

will have the following outcome: diagnostic testing, disease surveillance and treatment capacity enhanced¹⁰. The three outputs of the project are:

84. **Output 1: National laboratory system strengthened.** The project will help mitigate the surge in COVID-19 cases by supporting 38 laboratories, out of a total of 671 laboratories, to increase COVID-19 and related testing capacity as per the national COVID-19 SPRP. The 38 laboratories consist of 14 regional laboratories of the ASEW and the 14 laboratories of the AIDS Centers where testing takes place and their republican laboratories, 3 regional laboratories of the Center for the Prevention of Plague, Quarantine and Especially Dangerous Infections and their republican level laboratory, as well as 4 scientific and republican laboratories (the Scientific Research Institute of Virology, the Scientific Research Institute of Epidemiology, Microbiology and Infectious Diseases, the Institute of Sanitary and professional diseases, and the Institute of Medical Parasitology named L.M. Isaeva). The output will support ASEW for the assessment of laboratories, minor refurbishment to ensure working place quality and safety standards to biosafety level 2, and female and male staff convenience, procurement of laboratory equipment, PPE, test kits, reagents, and other supplies to increase testing capacity, and a laboratory networking and information system. Health workers and facility staff who are more exposed to COVID-19 will be prioritized for diagnostic services.

85. **Output 2: National surveillance and response system established for COVID-19.** The project will help mitigate the surge in COVID-19 cases by increasing the surveillance capacity to identify potentially infected people and improve contact tracing including screening, testing, isolation, and referral for treatment of cases, nation-wide. The output will assist ASEW to (i) develop and disseminate on-line protocols and training of primary health care workers and institutional caretakers to identify potential COVID-19 cases and contacts, provide appropriate advice, and use a real-time digital reporting system to report these potential cases and contact to ASEW; (ii) develop and test this digital real time monitoring system including a web-based dashboard, which is secure, standards-based and ensures protection of patient privacy; and (iii) strengthen surveillance, screening, and collection and transportation of respiratory samples to a laboratory. The project will support the procurement of consulting services for the development of a real-time monitoring system including training, vehicles for surveillance, and other supplies to increase the surveillance capacity of ASEW nationwide.

86. **Output 3: COVID-19 treatment capacity expanded.** This output aims at providing improved clinical care of COVID-19 and avoiding disruption of essential services. The project will finance refurbishment of 16 treatment centers, which consist of 14 regional hospitals for infectious diseases and 2 hospitals at the republic level of the Scientific Research Institute of Virology and the Scientific Research Institute of Epidemiology, Microbiology and Infectious Diseases that are the designated COVID-19 treatment centers. The project will assist these hospitals to function as specialized COVID-19 treatment centers including staff support, quarantine, infection prevention control, and expansion of ICUs. The project will support (i) providing medical supplies and equipment; (ii) training staff in safety and quality of care for COVID-19 patients, and technical agencies providing clinical and services guidelines; and (iii) providing ambulances as required.

87. Outputs 1 and 3 will also include rehabilitation of existing laboratories and treatment centers within existing buildings on land owned by MOH. The government has formulated a list of the high priority provinces and areas to be targeted. **The list (see Table 12) consists of 38 Laboratories and 16 Treatment Centers, 54 in total.** Out of this number, the total 38 laboratories

¹⁰ The design and monitoring framework is in the Project Administration Manual in Appendix 6.

are involved in testing and diagnosing COVID-19 and 16 hospitals that are engaged in the treatment and rehabilitation of COVID-19 patients.

Table 12. List of existing laboratories and treatment centers to be rehabilitated

No.	Regions	Number of Laboratories involved in the project	Number of hospitals involved in the project
1.	Republic of Karakalpakstan	3	1
2.	Andijan region	2	1
3.	Bukhara region	3	1
4.	Jizzakh region	2	1
5.	Kashkadarya region	2	1
6.	Navoi region	3	1
7.	Namangan region	2	1
8.	Samarkand region	2	1
9.	Syrdarya region	2	1
10.	Surkhandarya region	2	1
11.	Tashkent region	2	1
12.	Fergana region	2	1
13.	Khorezm region	2	1
14.	Tashkent	2	1
15.	Republican institutions	7	2
	TOTAL	38	16

88. As part of the project in the abovementioned laboratories and hospitals rehabilitation works will be **conducted** and laboratory and medical equipment will be provided.

89. The volume of rehabilitation work for each facility will be considered separately, but all works are planned to be conducted in existing territories without the allocation of new lands and without an increase in the number of patients served. The project will also support the purchase of equipment for the disposal of medical waste, strengthening the capacity of ASEW employees in occupational safety practices, managing waste from health services from its initial phase to disposal, and the use and maintenance of equipment.

90. The following construction and rehabilitation activities are proposed under the Project:

- Reconstruction and re-equipment of existing buildings based on modern requirements.
- Modernization of communications and infrastructure network (electricity, gas, water, sewage, heating and ventilation system).
- Connection / updating of modern engineering communications and connection to the Internet.
- To ensure security, installation/updating of CCTV cameras and fire safety systems in the institutions.
- Since in a remote area there is no centralized sewage system, it is possible to update/upgrade the wastewater treatment facilities (cesspool) at these entities.
- also updating hard and soft appliances.
- Installation of autoclaves with shredder function for proper disposal of medical waste generated from the facilities.

IV. ANTICIPATED ENVIRONMENTAL IMPACTS

91. It is anticipated that the project will have environmental impacts characteristic of small-scale considering construction and rehabilitation works will be carried out within existing laboratories and treatment centers on land owned by MOH. However, a consolidated IEE study (covering all of the facilities) will be prepared during implementation phase.

92. The potential environmental impacts include:

93. **Physical environment.** The main potential impacts during construction or rehabilitation are air quality due to fugitive dust generation in and around rehabilitation activities. Impacts during operation are expected from the storage and disposal of medical waste. Fuel and lubricants can contaminate groundwater and surface water if they are not properly stored and disposed. Potential impacts are generation of solid waste, sewage waste, medical waste and occupational and community health risks. Potential noise and vibration impacts during the rehabilitation activities of the project are also envisaged. During rehabilitation work, it is possible to work with asbestos, as a material that was previously widely used for the manufacture of roofs. When carrying out rehabilitation work (during construction), asbestos will not be used. This will be indicated in the tender documents for the Contractor.

94. **Biological resources.** Potential impacts related to biological resources include a risk of habitat loss (small mammal breeding place, damage burrows, removal of trees in or along the laboratories and treatment centers, etc.).

95. **Socio-economic and cultural/historical environment.** It is anticipated that potential impacts to the socioeconomic environment will be mostly positive and on income and unemployment trends. However, potential impacts in terms of spreading and transmitting of COVID-19 in employee of MOH and workers during rehabilitation and operation is anticipated. Mitigation measures like social distancing, use of PPE (face mask, hand gloves, etc.), wash of hands with soap and hot water, and use of sanitizer in regular interval, reduce movement and avoid visiting crowded areas and public places, participating in and gathering etc. Potential impacts on archaeological, historical and cultural assets are not anticipated.

96. **Solid waste management.** Solid waste will be generated in the form of dismantled concrete, brick and other building materials. The solid waste generated in the form of debris (dismantled concrete, brick and other building materials) should be stored in the hospital in specially designated places, covered with material, and should be regularly taken out in agreement with local khokimiyats for disposal in regional landfills. Used cement blocks can be crushed and used as gravel.

97. **Medical waste management.** Medical waste will also be generated from existing laboratories and treatment centers during the operation phase. This will include the usual medical waste as well as the waste contaminated with COVID-19. This may comprise of used PPE's, testing kits, syringes, infected human tissues, etc. Hence the same would need to be properly handled, stored and disposed of in accordance with various national and International guidelines and best practices. ADB has recently developed a guidance note on Managing Infectious Waste during COVID-19 Pandemic. The guidance note (**Appendix 5**) provides suitable consideration and recommendations to enable DMC's deal with such waste types. Some of the medical waste storage and disposal options as provided in the guidance note are provided below:

- (i) **Onsite storage/disposal.** This may include refrigerated storage which can last up to 90 days. Modern disposal systems such as infrared, autoclave and radiation-based systems can be installed for on-site disposal. These units are capable of processing infectious medical waste but have a limited design capacity. The existing capacity of any system is unlikely to be sufficient to manage the sudden increases of medical waste observed during the COVID-19 pandemic.
On site incineration will not be considered as an option for medical waste disposal as it has the main disadvantage related with excessive emissions especially if older or poorly designed systems is used. This may trigger Category 'A' for environmental safeguards which would require preparation of an Environmental Impact Assessment (EIA) study. Hence, such development will not be allowed under the current loan which is categorized as 'B' for environmental safeguards
- (ii) **Offsite disposal option.** Off-site disposal increases the logistics challenge to safely transport infectious medical waste away from the hospital for proper disposal. Transport can be controlled by the use of "duty of care" ¹¹systems for the recording and tracking of material from source to disposal and the correct selection of transport vehicles and routes. Identifying temporary storage sites with adequate security may be challenging in urban areas. Consideration should be given to co-locating temporary facilities with temporary morgues. It is critical to secure and prevent all access to the waste. This will protect informal waste pickers from potential infection and avoid dispersal by scavenging animals.
- (iii) **Cement kilns.** The location of cement kilns is often within transport reach of hospitals. A standard cement kiln with a capacity of 3 million tons per year could process up to 100 tons of infectious medical waste per day through co-firing. Other industrial furnaces can similarly be used for the emergency disposal of waste. However, there may be modifications required to the fuel feed-in systems or additional plant to microwave/infrared pre- treat waste. Some cement kilns may have been modified to receive refuse derived fuel. Other kilns may require physical modification to receive medical infectious waste.

98. As per the discussion with MoH, autoclaves will be the preferred option for proper disposal of medical waste. Hence, these will need to be installed and operated as per the recommendations provided in ADB's guidance note on management of infectious waste (Appendix-6).

99. Moreover, a waste management plan will need to be prepared / modified by MOH for each of the laboratories and treatment centers in accordance with the above-mentioned considerations as well as with national medical waste management regulations. Moreover, training programs at laboratories and treatment centers that specifically deal with medical and domestic waste management will also be carried out to raise awareness and develop the capacity of MOH including hospitals, health centers, and district administrations. Lastly, the waste management plan will be regularly monitored to ensure proper implementation and to recommend any improvement and modification in the same.

100. Table 12 provides the anticipated impacts during various project phases and the mitigation measures.

¹¹ World Health Organizations (WHO). Transport, Storage and Record Keeping – Medical Waste.

Table 12: Summary of Potential Environmental Impacts

Phase	Potential Environmental Impact	Possible Mitigation Measure
Design/Pre-construction		
Community health, safety and security	<ul style="list-style-type: none"> • Inadequate design, construction, and maintenance of facilities to assure life and fire safety in health care facilities to which the public has access • Drawing and planning the construction of buildings by adapting to adjoining physical landscape and minimizing possible environmental issues. • Lack of emergency potable water reserves for the community • Air emissions, odors and mists/fumes from improper air handling leading to cross contamination and pathogen transmission • Safe disposal of sewer water from toilets • Drainage congestion and/water logging that may cause spread of vector-borne diseases • Increase water and energy requirements due to upgrading of facilities. 	<ul style="list-style-type: none"> • Design of upgrading works will refer to the IFC EHS Guidelines for Healthcare Facilities (2007), IFC EHS General Guidelines (2007) and compliance to relevant national regulations • Consider the drainage system in upgrading design. • Prevent all solid and liquid wastes entering waterways by proper stormwater drainage design • Drainage facilities will be integrated with water supply options and sanitary latrine • Review of water supply capacity and incorporate in design • Include provision of alternate power supply from generators
Demolition of derelict building within the existing health facilities	<ul style="list-style-type: none"> • Potential presence of asbestos and asbestos-containing material (ACM) • Increased dust and noise levels, and generation of demolition wastes posing occupational and community safety risks. 	<ul style="list-style-type: none"> • Before any demolition works, a rapid assessment study will be done by MOH (or through a qualified 3rd party expert) to determine the presence of ACMs and to prepare a demolition plan for approval of MOH. Demolition plan will cover issues like waste management (both solid medical waste), occupational health and safety, community health and safety, ambient air quality and noise, water quality, and potential traffic congestion. • Removal of hazardous wastes, if any, will comply with the requirements of the government, the IFC-WB EHS General

Phase	Potential Environmental Impact	Possible Mitigation Measure
		Guidelines 2007, and WHO on waste management. <ul style="list-style-type: none"> Workers during demolition will be provided with personal protective equipment.
Construction		
Ambient air quality and noise	<ul style="list-style-type: none"> Potential increase in dust and noise levels with intermittent vibration causing nuisance to patients, healthcare staff, and local residents Increased vehicular emissions due to delivery of construction materials 	<ul style="list-style-type: none"> Require contractors to spray water at least twice a day during dry season to exposed soil areas to reduce dust Contractors to prepare a COVID-19 emergency plan for approval by MOH Provide temporary enclosures and noise barriers to work areas generating dust and noise Impose speed limits to construction vehicles and require proper maintenance Prohibit the use of horns, megaphone or whistle at the work sites Use of prefab construction materials Consider work scheduling of noise-generating activities and monitoring of dust and noise levels during construction.
Occupational health and safety	<ul style="list-style-type: none"> Accident risks to patients, visitors and health facility workers Potential infection of workers from COVID-19 	<ul style="list-style-type: none"> Workers will be screened for their health condition prior to hiring to ensure that COVID-19 infection (or any communicable diseases) in the workplace is avoided Provide handwashing stations with enough soap and water at strategic locations within the work sites, or hand sanitizers Display posters promoting handwashing in the workplace (i.e., use WHO posters) Include information on how to stay safe from COVID-19 during daily toolbox meeting Display posters/signs

Phase	Potential Environmental Impact	Possible Mitigation Measure
		<ul style="list-style-type: none"> • Brief your employees, contractors, and customers that if COVID-19 starts spreading in your community anyone with even a mild cough or low-grade fever (37.3 C or more) needs to stay at home. • Contractor will be required to put visible and clear signs including billboards on schedule and activities of civil works • Contractors will also need to implement and adhere with all national requirements put in place by the government to stop possible spread of COVID-19.
Water quality	Impairment of water quality from activities of construction workers	<ul style="list-style-type: none"> • Prohibit direct disposal of solid and liquid wastage into nearby water body • Observe good housekeeping at all times in work areas
Waste management	<ul style="list-style-type: none"> • Safety and health risks from improper collection and disposal of construction debris • Poor aesthetic due to accumulation of waste 	<ul style="list-style-type: none"> • Contractor to prepare waste management plan for approval and compliance monitoring by MOH
Operation and Maintenance		
Community health, safety, and security	<ul style="list-style-type: none"> • Increased vehicle traffic around health care facilities from patients, employees and visitors leading to congestion and risk of accidents • Increased emergency vehicle traffic and associated noise 	<ul style="list-style-type: none"> • Traffic Management Plan will be prepared to avoid traffic congestions and accidents. • Provide clear and visible traffic signs within the facilities • Provide adequate space for emergency vehicles

Phase	Potential Environmental Impact	Possible Mitigation Measure
Occupational health and safety (OHS)	<ul style="list-style-type: none"> • Nosocomial (hospital acquired) infections among patients and staff • Needle-sticks, surgical cuts, and other injuries posing transmission risk of blood-borne diseases such as Hepatitis C, HIV-AIDS, etc. • Environmental services (sanitation) workers' exposure to infectious and communicable diseases • Occupational dermatitis and allergic reactions due to workplace exposures (e.g. disinfectants and cleaning agents or latex) • Negative impacts on mental health to health workers due to high levels of stress • High rates of fatigue, gastrointestinal, psychological and cardiovascular conditions, and increased injury rates due to long working hours and shift work • Injuries from repetitive manual work (e.g. improper patient movement or cleaning activities) • Exposure to violence, including verbal or physical assaults, from patients and their attendants 	<ul style="list-style-type: none"> • Implement suitable safety standards for all workers and facility visitors • Provision of first aid facility and mandatory use of personal protective equipment and safety gears, where required • Arrangements for safe drinking water and sanitation facilities for health • Provide regular OHS training to healthcare workers • Provide incentives to staff and create a work-life balance in work schedule • Refer to IFC EHS Guidelines for Healthcare Facilities (2007), IFC EHS General Guidelines (2007), and relevant WHO Guidelines and Protocols • Exposure to hazardous substances such as cytotoxic drugs, anesthetic gases, and substances used for sterilization (e.g. ethylene oxide, formaldehyde, and glutaraldehyde)
Medical Waste management	<ul style="list-style-type: none"> • Generation of significant volumes of medical waste • Generation and inadequate management of hazardous medical and laboratory waste that require special handling and treatment • Spreading of waste, bad odor, deterioration of aesthetics • Used batteries, laboratory chemicals, and other waste poorly disposed • Increased volume of water, sanitation and related effluent discharges in the health care facilities, medical colleges, hospitals and research centers 	<ul style="list-style-type: none"> • Prepare and implement a Medical Waste Management Plan that will cover the waste generated from the response to the new COVID-19 infection. The plan will follow ADB's guidance note on managing medical waste during Covid-19 Pandemic (Appendix-6) as well as any other government regulations. The same will include (but not limited to) • Safe storage, transportation and proper disposal of medical waste.

Phase	Potential Environmental Impact	Possible Mitigation Measure
	<ul style="list-style-type: none"> • Inadequate wastewater treatment and disinfection prior to discharge, leading to surface or ground water contamination 	<ul style="list-style-type: none"> • Awareness raising on medical waste management with waste minimization, recovery and recycling • Training program for relevant healthcare workers, staff and maintenance and housekeeping • Implement safe solid waste management system and implement awareness raising on solid waste management with waste minimization, recovery and recycling. • Discourage and/or ban use of plastic products in health facilities • Safe disposal of hazardous waste at designated disposal sites (,off site incineration facility or land fill site)
Ambient air quality	Exhaust air from infectious disease wards and other health care facilities potentially contaminated with biological agents, pathogens, or other hazardous materials.	<ul style="list-style-type: none"> • Provide adequate and appropriate ventilation • Regular maintenance of HVAC system
Disaster and emergency preparedness	<ul style="list-style-type: none"> • Extreme weather conditions, fire, explosion, attacks from terrorists, etc. • Leakages and spills from storage tanks for compressed gases and other materials stored in bulk (e.g., fuel) 	<ul style="list-style-type: none"> • Implement disaster and emergency response procedures • Conduct regular training and mock drills on emergency preparedness • Provide appropriate equipment for emergency response • Provide shelter or evacuation center as temporary measure for emergency • Create awareness about natural calamities and extreme climate to doctors, nurse, and other clinic staff • Fire safety management and mock drill; ensure emergency equipment and facilities like fire extinguisher/water hose, first aid boxes, whistle, torch lights, etc. are available.

101. Absence of any adverse LAR impact on the selected project sites will be confirmed following the detailed design and finalization of the scope of work for all the 54 facilities through social safeguards due diligence in accordance with screening checklist (Provided in Part C of Appendix 1) and ADB Safeguard Policy Statement 2009 (SPS). Results of such due diligence, including screening actions will be summarized in a social safeguards due diligence report (SDDR) to be prepared by the environment and social safeguard consultants to be engaged by the PIU. Issuance of contract award for the refurbishment of the 54 facilities will be conditional to the submission and approval by ADB of the SDDR. An outline of the SDDR is shown in Appendix 6. Similarly, social safeguards monitoring will be conducted along with environmental safeguards monitoring during implementation of the project. Results of such monitoring will be summarized in social safeguards section of semi-annual and annual safeguards monitoring reports.

V. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS

102. The following general criteria will be adopted for selection of the subprojects:
- (i) The subprojects should only be selected from the MOH's priority list prepared in coordination with ADB;
 - (ii) The subprojects will not include those with significant impacts to the environment (ADB's Environmental Category A);
 - (iii) The subprojects will not include those with involuntary resettlement;
 - (iv) The subprojects should only involve activities that follow all the government regulations; and
 - (v) Types of projects listed in ADB SPS's Appendix 5 (ADB Prohibited Investment Activities List) do not qualify for ADB's financing.
103. A final check on conformity with the selection criteria will be the submission of selected subprojects for ADB clearance. Any subproject, which does not meet the general criteria listed above may be rejected.
104. All selected subprojects will be further screened and categorized for likely environmental impacts screening checklist (Provided in Appendix- 1). In general, the subprojects should:
- (i) not disturb any cultural heritage areas designated by the government or international agencies, such as UNESCO, and shall avoid any monuments of cultural or historical importance;
 - (ii) not be located within or near the biodiversity core zone of any protected areas such as national parks, nature reserves, or wildlife sanctuaries;
 - (iii) avoid clearing of any existing forest resources, and if unavoidable, clearing will be minimized and compensatory planting included in the environmental management plan and budget for each subproject;
 - (iv) only involve activities that follow the government's laws and regulations, and will not involve ADB's list of prohibited activities; and
 - (v) not use Polychlorinated biphenyl (PCB)-based oils in any activity, or otherwise, appropriate disposal plans will be made following national legal requirements.
105. A consolidated IEE study (covering all the facilities) will be prepared during implementation phase prior to start of any rehabilitation works. The IEE shall include the following sections:
- (i) Executive Summary;
 - (ii) Introduction;
 - (iii) Legislative Framework,
 - (iv) Project description providing details of all the rehabilitation works to be carried out at all facilities;
 - (v) Review of alternatives (mainly related with equipment options like autoclaves vs Incinerators etc.);
 - (vi) Stakeholder Consultations;
 - (vii) Impact assessment during rehabilitation works as well as those related with medical waste management and disposal;
 - (viii) Environmental management plan (EMP) describing the mitigation measures for each environmental impact identified as well as the monitoring, documentation training requirements;

- (ix) Recommendation / Conclusion; and
- (x) Appendices providing details of supporting documents (filled REA checklists etc.)

106. Appendix 3 provides an IEE template.

107. The IEE study will be reviewed by the PIU and, if considered satisfactory will be submitted to ADB for final review and clearance. Once cleared by ADB, the IEE study will be publicly disclosed on the respective websites.

VI. CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM

A. Public Consultations

108. MOH will organize consultations with project affected people (beneficial or adversely), individuals or groups whose interests may be affected by the project, and who may have the potential to influence project outcomes. Consultation will be based on the following principles:

- (i) Early start in the project preparation stage and continuation throughout the project cycle;
- (ii) Timely disclosure of relevant information in a comprehensible and readily accessible to affected people format;
- (iii) Ensuring the absence of intimidation or coercion during public consultation;
- (iv) Gender inclusive and responsive with focus on disadvantaged and vulnerable groups, and
- (v) Enabling the integration of all relevant views of affected people and stakeholders into decision-making.

109. MOH will adopt the following principles of consultation based on SPS 2009:

- (i) holistic and project cycle approach (atmosphere free of intimidation or coercion, conducted from project preparation to completion),
- (ii) informed participation and feedback (provides opportunities for suggestions/comments, adequate and understandable information), and
- (iii) gender sensitive and inclusive (equal access to information, tailored to the needs of disadvantaged and vulnerable groups).

110. To have more effective and fruitful consultations, the executing agency will divide the stakeholders into three main groups (affected parties, interested parties and vulnerable/disadvantage groups). However, the three main groups may be changed during project implementation.

111. However, due to the COVID-19 pandemic, some restrictions may be in place during project implementation for direct communication and on the number of people in a meeting or public gathering in a confined place, etc. In this case, the executing agency may carry out consultations in smaller group (in case smaller group meetings are allowed) to observe social distancing required by the WHO (at least 1 meter apart) during the pandemic, emphasizing that participants are free to use mask or face shield and different means of communication:

112. MOH may use of various channel of communication and undertaking the following steps:

- (i) coordinate with local radio stations (UM/FM) to disseminate information about the project,
- (ii) use local newspaper to post information such as project brief or FAQ,
- (iii) designate a 24/7 hotline to respond to people's concern or issues about the project (the 24/7 hotline number will be also posted on the websites of the executing agency); and
- (iv) coordinate with religious leaders to allocate some time to broadcast about the project.

113. MOH will document the consultation by listing the participants of the consultation process, including a summary of the concerns/issues they raised and suggestions on project design, mitigation measures and monitoring, and other relevant issues on implementation. Participation of women will be highlighted as well as the date and location of consultations.
114. During the development and implementation of the project, it is planned to develop a consultation plan to include local communities and Non-Governmental Organizations (NGOs) in the development of the project. Site-specific EMPs will be distributed to NGOs and local communities. Conducting such consultations and preparing reports on them will be the responsibility of the Environmental and Social Specialists from the project implementation unit. The consultation activities will also include the participation of NGOs and communities in the development of buildings, scheduling construction work hours, traffic management, the efforts of local business entrepreneurs and the creation of a system for public registration of complaints related to project activities. This plan should include an approach to public relations in such a way that NGOs and communities are involved in structures during their operational existence. The plan will be prepared as part of the IEE study.

B. Information Disclosure

115. MOH and ADB agree that in disclosing environmental information for the Project to the public:
 - (i) The executing agency is responsible for ensuring that all environmental assessment documentation, including the environmental screening reports are properly and systematically kept as part of an executing agency project-specific record;
 - (ii) All environmental documents are subject to public disclosure, and therefore be made available to public;
 - (iii) MOH will ensure that meaningful public consultations are undertaken during IEE preparation.
 - (iv) The IEE study will be provided for disclosure on the ADB and MOH's Website (in local language).
 - (v) With regards to information disclosure, ADB is committed to working with MOH to ensure that relevant information (whether positive or negative) about social and environmental safeguard issues is made available in a timely manner, in an accessible place, and in a form and language(s) understandable to affected people and to other stakeholders, including the general public, so they can provide meaningful inputs into project design and implementation.

C. Grievance Redress Mechanism

General

116. Grievance Redress Mechanisms (GRMs) are locally based, formalized way to accept, assess, and resolve community feedback or complaints. They provide predictable, transparent, and credible processes to all parties, resulting in outcomes that are relatively low cost, fair, and effective. They build on trust as an integral component and facilitate corrective action and pre-emptive engagement. GRMs also set out a timeframe in the

resolution of complaints.¹² The Project GRM will serve as a venue for receiving and addressing project-affected peoples' concerns and grievances about environment, socio-economic, and land acquisition related impacts. It will address concerns promptly through an understandable and transparent process that is accessible to all members of the community, gender responsive and culturally appropriate. The overall approach of the GRM is to deal with grievances at a local level first in an efficient manner and escalate to the next level or higher level of authority if grievance cannot be resolved.

117. The ADB Accountability Mechanism (AM) provides an independent forum and process for people to voice and seek solutions to their problem as well as alleged non-compliance by ADB with its operational policies and procedures. As ADB adheres to early problem prevention and problem-solving, Project complaints and concerns should first be addressed promptly and effectively at the Project, through the GRM, and operational levels. The AM is the "last resort" process for dealing with problems and compliance issues that were not prevented or solved at GRM and operational levels.
118. The GRM should be established and operated in compliance with the Uzbek Regulations as well as with ADB Policy requirements.
119. The ADB's 2009 Safeguards Policy Statement¹³ requires the borrower/client to establish a mechanism that will receive and facilitate the resolution of affected persons' concerns and grievances about physical and economic displacement and other Project impacts, paying particular attention to vulnerable groups.
120. Along with the ADB requirements on development of a grievance redress mechanism by the EA, as indicated above, grievance redress procedure in Uzbekistan is also regulated by the national legislation of Republic of Uzbekistan, in particular by the "Law on the order of submission of appeals of physical and legal entities" (#378, 03 December 2014). According to this regulation, the application or complaint shall be considered within fifteen days from the date of receipt in the state authority, which is obliged to resolve the issue on the merits. If an additional study, set of additional/supporting documents or check procedure is needed, the term of complaint's resolving may be extended for up to one month.
121. In order to receive and facilitate the resolution of affected peoples' concerns, complaints, and grievances about the project's environmental performance an Environmental Grievance Redress Mechanism will be established for each of subprojects. The grievance mechanism should be scaled to the risks and adverse impacts of the project. It should address affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people at no costs and without retribution. The mechanism should not impede access to the Uzbekistan's judicial or administrative remedies. The executing agency will appropriately inform the affected people about the mechanism.

¹² World Bank. 2014. Global Review of Grievance Redress Mechanisms in World Bank Projects. Washington, DC. © World Bank.

¹³ ADB. 2009. *Safeguards Policy Statement*. Manila.

D. Grievance Focal Points, Complaints Reporting, Recording and Monitoring

122. Environment complaints can be received through Grievance Focal Points (GFPs), these will be designated personnel at various levels who would be responsible for receiving the Environmental complaint, resolving it or ensuring that it reaches the right quarters where it may be resolved. Affected people may lodge their complaint for registration through a personal visit, call or letter to any of the GFPs.
123. Each focal Point will maintain a record of the complaints received and will follow up on their rapid resolution. The executing agency will enter and maintain a complete record of all Environmental complaints received alongside the record-book that serves as the social complaints register. The executing agency will also keep track of their status and will ensure that they are resolved.

D.1. Existing complaint handling mechanism in Uzbekistan

124. The existing complaints handling mechanism in the country is governed by the relevant law, according to which complaints can be submitted to makhalla, village assembly of citizens and farmer councils.
125. The National law on the appeals of individuals and legal entities³ obliges state authorities to deal with requests and provides a clear framework to handle the case. This law has recently replaced previous law on the requests of citizens and gives the right for individuals and legal entities to file requests. The requests can be in the form of applications, proposals and complaints and submitted in three ways: oral, written and digital format.
126. Any citizen in Uzbekistan has several channels to air his/ her complaints.

- **Village (or Makhalla) level:**

- Physical visit to Makhalla Citizens' Assembly Office to meet with Chair;
- Call to President's Virtual reception (tel. number is 1000 or 0-800-210-00-00) or send message to President's Virtual reception online (www.pm.gov.uz);
- Call to hotlines established at each district or regional Hokimiyats;
- Send written complaint (letter) to district/regional Hokim/ line Ministry/President;
- Attend meetings with district/regional Heads of Sectors on integrated socio-economic development of regions (4 sectors established in each district);
- Attend meetings with the leadership of line ministries and agencies that have to regularly meet with citizens in rural areas.
- If a citizen is not satisfied with the reply provided by Makhalla Chair, or he has received an incomplete response, the citizen can apply to the upper level, specifically to District Hokimiyats.

- **District level:**

- Physical visit to Hokimiyats on citizens reception days to meet with district Hokim or deputy Hokims.
- Call to hotlines established in each Hokimiyats.
- Physical visit to Public reception offices under President's Virtual reception and established in each district nationwide.
- Call to President's Virtual reception (tel. number is 1000 or 0-800-210-00-00) or send message to President's Virtual reception online (www.pm.gov.uz).

- Send written complaint (letter) to district Hokim/ line Ministry/President.
 - Attend meetings with district/regional Heads of Sectors on integrated socio-economic development of regions (4 sectors established in each district).
 - Attend meetings with the leadership of line ministries and agencies that have to regularly meet with citizens in rural areas.
 - If a citizen is not satisfied with the reply provided at the district level, or he has received an incomplete response, the citizen can apply to the upper level, specifically to Regional Hokimiyats.
- **Regional level:**
 - Physical visit to Hokimiyats on citizens reception days to meet with regional Hokim or deputy Hokims
 - Call to hotlines established in each Hokimiyats
 - Physical visit to Public reception offices under President's Virtual reception and established in each regional center nationwide
 - Call to President's Virtual reception (tel. number is 1000 or 0-800-210-00-00) or send message to President's Virtual reception online (www.pm.gov.uz)
 - Send written complaint to a portal of the Ministry of Energy (<http://cabinetpm2.gov.uz/>)
 - Send written complaint (letter) to regional Hokim/ line Ministry/President
 - Attend meetings with regional Heads of Sectors on integrated socio-economic development of regions (4 sectors established in each district)
 - Attend meetings with the leadership of line ministries and agencies that have to regularly meet with citizens in rural areas.

VII. INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES

127. To prepare the subprojects and to comply with ADB's Safeguard Policy Statement (2009), the executing agency and ADB agreed on the following:

(i) MOH, as the executing agency, will be responsible to:

- Prepare environmental screening checklists and classify potential subprojects;
- Submit the environmental screening checklist to ADB for approval and clearance.
- Based on the environmental classification of the subprojects, prepare the terms of reference to conduct an IEE study;
- Ensure that all regulatory clearances are obtained before starting civil works for the sub-project.
- Submit to ADB all the required clearances/certificates obtained from the relevant Government authorities
- Require the contractor to prepare Site-Specific EMPs (SSEMPs) before commencement of construction activities. The same needs to be approved by MOH before commencement of construction works.
- Prepare and implement medical waste management / disposal plan for each hospital and laboratory facility. The same needs to be approved by ADB as well.
- Conduct IR Safeguards screening and **prepare SDDR report** to confirm no LAR impacts.
-

(ii) ADB will take the following responsibilities:

- Review the IEE report;
- Review the SSEMPs
- Review the medical waste management / disposal plan;
- Disclose the EARF, before project appraisal, and a consolidated IEE during project implementation, , as well as environmental monitoring reports on their respective websites;
- Monitor the implementation of the EMP and due diligence as part of overall project review mission
- Assist the executing agency, if required, in carrying out its responsibilities and safeguard capacity building

(iii) The construction contractor will take the following responsibilities:

- Prepare the SSEMPs and have it approved by MOH before commencement of construction activities;
- Monitor implementation of mitigation measures as provided in the SSEMP and provide the details in the monthly monitoring reports submitted to MOH.

(iv) Construction supervision consultant (CSC) will take the following responsibilities:

- Assist MOH in preparation of the consolidated IEE study;
- Monitor implementation of mitigation measures as provide in the SSEMP and provide the details in the monthly monitoring reports submitted to MOPH;

- Assist the MOH in preparation / revision of Medical Waste Management Plan as well as providing trainings to the relevant staff for effective implementation of this plan.

A. Staffing Requirements and Budget

128. MOH, through its PIU, will appoint or recruit an environmental and social safeguard specialist as part of engineering design team to provide guidance on preparation IEE study. The environment and social safeguard specialist will also be responsible to oversee and monitor the implementation of the SEMP and help address emerging environmental and social issues during construction that have not been considered in the IEE and SDDR. Moreover, environmental and social safeguard consultants (comprising of one international and one national consultant) will be hired to prepare the IEE study, SDDR and semi-annual monitoring reports for the entire duration of the project. TORs are provided in **Appendix 4**.
129. The subprojects' environmental costs need to incorporate a budget and resources to (i) implement the environmental review and screening procedure, (ii) undertake the IEE study for the project, (iii) conduct stakeholder's consultations, (iv) monitor the implementation of SSEMPs, and (v) undertake environmental mitigation measures as required.
130. The costs of conducting training, undertaking monitoring, procuring laboratory equipment for instrumental monitoring, hiring environmental consultants, implementing the SEMP and preparation of semi-annual safeguards monitoring reports (SMRs) also needs to be incorporated in the Project budget.

VIII. MONITORING AND REPORTING

131. The extent of monitoring activities, including their scope and periodicity, will be commensurate with the project's risks and impacts. The executing agency is required to implement safeguard measures and relevant safeguard plans, as provided in the legal agreements, and to submit periodic monitoring reports on their implementation performance. ADB will require the MOH, through its PIU, to:

- (i) Establish and maintain procedures to monitor the progress of implementation of SSEMPs/EMP;
- (ii) Verify the compliance with environmental measures and their progress toward intended outcomes;
- (iii) Document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic (semi-annual) monitoring reports;
- (iv) Follow up on these actions to ensure progress toward the desired outcomes,
- (v) Monitor, propose mitigation measures on social safeguards related grievances, issues and reflect them in separate social safeguards section
- (vi) Submit semi-annual monitoring reports on safeguard measures, emerging issues during implementation and corrective actions as agreed with ADB, and
- (vii) Monitoring of medical waste management / disposal plan to ensure proper implementation.

132. ADB will carry out the following monitoring actions to supervise subprojects implementation:

- (i) Conduct supervision missions with detailed review by the PIU's safeguard specialists/officers or consultants for sub-projects with significant adverse social or environmental impacts;
- (ii) Review the periodic monitoring reports submitted by the executing agency to ensure that adverse impacts and risks are mitigated as planned and as agreed with ADB;
- (iii) Work with the executing agency to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the legal agreements, and exercise remedies to reestablish compliance as appropriate; and
- (iv) Prepare project completion reports that assesses whether the objective and desired outcomes of the SSEMPs/EMP have been achieved, considering the baseline conditions and the results of monitoring.

Appendixes

Appendix 1: Environmental and Social Safeguard Screening Checklist

Screening Date:

Name of facility:

Location:

Part A: General Information (Name/location/description of the proposed activities and brief description of the specific site):

Name of the Intervention/Activities	Brief Description of the Design (including any information related to quality or quantity)	Brief Description of Physical Environment of the Site
I. Isolation Ward		
II. Intensive care unit		
III. Other		

Part B: Environmental Screening Checklist:

I. Isolation Wards

Environmental Problems/Issues	No	Yes	If Yes, please quantify/explain if possible
1. Possibility of water stagnation/drainage congestion /waterlogging for implementing interventions?	<input type="checkbox"/>	<input type="checkbox"/>	
2. Involves earthwork or land filling	<input type="checkbox"/>	<input type="checkbox"/>	
3. Involve demolition of existing building	<input type="checkbox"/>	<input type="checkbox"/>	
4. Damage of cultivable land (area)	<input type="checkbox"/>	<input type="checkbox"/>	
5. Run-off/waste-water flow to/from water sources	<input type="checkbox"/>	<input type="checkbox"/>	
6. Involves latrines, septic or sewage systems	<input type="checkbox"/>	<input type="checkbox"/>	
7. Generation of construction waste	<input type="checkbox"/>	<input type="checkbox"/>	
8. Generation of noise	<input type="checkbox"/>	<input type="checkbox"/>	

9. Generation of dust			
10. Open waste dumping site around	<input type="checkbox"/>	<input type="checkbox"/>	
11. Require to tree cutting	<input type="checkbox"/>	<input type="checkbox"/>	
12. Poor quality of drinking water (e.g., arsenic)	<input type="checkbox"/>	<input type="checkbox"/>	
13. May affect quality of groundwater	<input type="checkbox"/>	<input type="checkbox"/>	
14. May affect quality of surface water	<input type="checkbox"/>	<input type="checkbox"/>	
15. Unsafe disposal of PPEs/medical supplies	<input type="checkbox"/>	<input type="checkbox"/>	

II. For Intensive Care Unit

Environmental Problems/Issues	No	Yes	If Yes, please quantify/explain if possible
1. Involve demolition of existing building	<input type="checkbox"/>	<input type="checkbox"/>	
2. Damage to cultivable land (area)	<input type="checkbox"/>	<input type="checkbox"/>	
3. Generation of construction waste	<input type="checkbox"/>	<input type="checkbox"/>	
4. May generate noise during construction (if any)	<input type="checkbox"/>	<input type="checkbox"/>	
5. May generate dust during construction (if any)	<input type="checkbox"/>	<input type="checkbox"/>	
6. May generate vibration during construction (if any), endangering the structural integrity of the premises	<input type="checkbox"/>	<input type="checkbox"/>	
7. Civil works might affect in-house medical professionals or patients due to noise, dust, vibration, waste, etc.	<input type="checkbox"/>	<input type="checkbox"/>	

8. Workers/labors are exposed to infectious disease (COVID-19)	<input type="checkbox"/>	<input type="checkbox"/>	
9. Unsafe disposal of PPEs/medical supplies (operation)	<input type="checkbox"/>	<input type="checkbox"/>	
10. In-house medical waste management facility and processes non-existent/poor	<input type="checkbox"/>	<input type="checkbox"/>	
11. Inappropriate use of PPE on site and or personnel is not sufficiently trained on use of PPE and prevention measures for COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	
12. Risks of community contamination (e.g., If no separate access planned for patients and visitors coming for other health issues and patients to be treated in the isolation rooms/critical care units)	<input type="checkbox"/>	<input type="checkbox"/>	
Explain the type of waste generated on site, quantities of waste generated under general operating conditions (before the pandemic); explain the existing medical waste management facilities and processes (capacity, separation, handling, storage, transport, treatment):			

Part C: Involuntary Resettlement Screening (to be attached and summarized in a social safeguards due diligence report:

Name and Location of Facility, sub-project number:
Describe land needs associated with the sub-project construction (including, access roads, communications, storage/disposal area, buffer zone area, and other technical requirements that may impose any adverse LAR impact)
Describe physical characteristics of the land (type, area, coordinates, including photos and google earth image, if available)
Describe ownership status of the land (project (full or partial), government (full or partial) local government/municipality (full or partial); physical/legal person (full or partial)). Indicate the starting month/year of land tenure.
Take note of any contested titles or existing encumbrances associated with the parcel (e.g., acquisition by government agency was initiated but not completed; existence of claims by any other parties).
Describe current usage of land, including users of land with informal or semi-formal rights to land:

Describe land usage within the past 2 years			
	Yes	No	Comment/ Clarification
Are there any formal or informal leaseholders on the land?			
Are there any non-registered users on the land?			
Will there be permanent and/or temporary physical displacement, for example, relocation, loss of residential land, or loss of shelter?			
Will there be permanent and/or temporary economic displacement, for example, loss of land, assets, access to assets, income sources or means of livelihood (agricultural, businesses)?			
Will there be any person affected by permanent and/or temporary restriction of access to any economic activity earlier performed on the parcel?			
Will there be any person affected by permanent and/or temporary restriction of access to any natural resource as a result of the project construction/enclosure of the parcel?			
Will there be loss of crops, trees, structures fences and other fixed assets due to project construction?			
Will there be restriction of access to assets, access to natural resources, communal facilities and services?			
If the land use is changed, will it have adverse impact on social and economic activities (for example, of nearby communities, groups etc.)			
Will the project facility have a buffer zone which is outside of the government's ROW? If yes, please describe any adverse impacts on social or economic activities (for example, of nearby communities, groups etc.)			

Appendix 2: Filled Rapid Environmental Assessment (REA) Checklist for the proposed Loan

Screening Questions	Yes	No	Remarks
A. PROJECT SITING IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING AREAS:			
▪ UNDERGROUND UTILITIES	Yes		Underground utilities may be present within the rehabilitation sites. However, information on these will be gathered beforehand to minimize any damage to such facilities during the rehabilitation phase.
▪ CULTURAL HERITAGE SITE		No	
▪ PROTECTED AREA		No	The rehabilitation / construction works will be carried out on government owned land within existing laboratories and medical treatment facilities. These are located within an urban setting and away from any protected area or area of high ecological value.
▪ WETLAND		No	
▪ MANGROVE		No	
▪ ESTUARINE		No	
▪ BUFFER ZONE OF PROTECTED AREA		No	
▪ SPECIAL AREA FOR PROTECTING BIODIVERSITY		No	
▪ BAY		No	
B. POTENTIAL ENVIRONMENTAL IMPACTS WILL THE PROJECT CAUSE...			
▪ Encroachment on historical/cultural areas?		No	No cultural heritage site is present at or near the project site.

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> Encroachment on precious ecology (e.g. sensitive or protected areas)? 		No	
<ul style="list-style-type: none"> Impacts on the sustainability of associated sanitation and solid waste disposal systems? 	Yes		<p>Solid waste generated during the construction activities will be managed daily by contractor and handed over to municipality for final disposal. Also, minimum number of workers will be involved and they will use the existing govt. facility for sanitation.</p> <p>Autoclaves will be installed for disposal of infectious medical waste during operation phase. Hence, a waste management plan will be prepared and implemented during the operation phase to properly manage such wastes.</p>
<ul style="list-style-type: none"> Dislocation or involuntary resettlement of people? 		No	No such impacts are anticipated as the rehabilitation will be carried within existing facilities
<ul style="list-style-type: none"> Disproportionate impacts on the poor, women and children, Indigenous Peoples, or other vulnerable groups? 		No	No such impacts are anticipated as the rehabilitation will be carried within existing facilities
<ul style="list-style-type: none"> Accident risks associated with increased vehicular traffic, leading to loss of life? 	Yes		This impact will be minimized by implementation of a traffic management plan during rehabilitation works.

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ Increased noise and air pollution resulting from increased traffic volume? 	Yes		<p>Increased noise levels and air pollution are expected during the rehabilitation works. However, these impacts can be mitigated by using noise barriers around construction machinery, use of PPE's etc.</p>
<ul style="list-style-type: none"> ▪ Occupational and community health and safety risks? 	Yes		<p>Health-related impacts may be expected from the temporary camp sites of workers if not properly mitigated. A health and safety plan will be prepared as part Environmental Management Plan (EMP) to be prepared by the construction contractor.</p>
<ul style="list-style-type: none"> ▪ Generation of dust in sensitive areas during construction? 	Yes		<p>During rehabilitation works, dust will be generated, especially during demolition of existing infrastructure (like sanitary fittings etc.). Proper mitigation measures (like use of dust masks, covering any stockpiles) will be provided to minimize the adversity of this impact.</p>
<ul style="list-style-type: none"> ▪ Requirements for disposal of fill, excavation, and/or spoil materials? 		No	

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> Noise and vibration due to blasting and other civil works? 	Yes		Increased noise levels are expected during the rehabilitation works due to use of construction equipment and machinery. However, this impact can be controlled by using noise barriers around construction machinery, equipment and vehicles maintenance after regular intervals etc.
<ul style="list-style-type: none"> Long-term impacts on groundwater flows as result of needing to drain the project site prior to construction? 		No	No such impacts are anticipated as the rehabilitation works will be carried out within the existing facilities.
<ul style="list-style-type: none"> Long-term impacts on local hydrology as a result of building hard surfaces in or near the building? 		No	No such impacts are anticipated as the rehabilitation works will be carried out within the existing facilities.
<ul style="list-style-type: none"> Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)? 		No	Small number of workers will be involved in the rehabilitation works. Most of them will be hired locally, therefore increased burden on existing social infrastructure and services is not expected

Screening Questions	Yes	No	Remarks
<ul style="list-style-type: none"> ▪ Social conflicts if workers from other regions or countries are hired? 		No	The project sites are located in an urban settings where mostly all communities are living together. Therefore, social conflicts are not expected. Moreover, staff from other regions (if any) will be sensitized with local cultural norms.
<ul style="list-style-type: none"> ▪ Risks to community safety caused by fire, electric shock, or failure of the buildings safety features during operation? 	Yes		Any such impact will be avoided by using proper control measures such as insulation in electric wires, fire safety alarm system etc.
<ul style="list-style-type: none"> ▪ Risks to community health and safety caused by management and disposal of waste? 	Yes		A waste management plan will be prepared and implemented during operation of facilities.
<ul style="list-style-type: none"> ▪ Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning? 	Yes		This impact will be avoided through implementation of health and safety plan, proper fencing of work sites with ongoing rehabilitation works. Other measures such as warning signs, use of Personal Protective Equipment's etc. will also be in place.

Appendix 3: Outline of an Initial Environmental Examination

This outline is part of the Safeguard Requirements 1. An environmental assessment report is required for all environment category A and B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks. A typical EIA report contains the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental impact assessment reports, although not necessarily in the order shown.

A. Executive Summary

This section describes concisely the critical facts, significant findings, and recommended actions.

B. Policy, Legal, and Administrative Framework

This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

C. Description of the Project

This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

E. Anticipated Environmental Impacts and Mitigation Measures

This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media), and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

F. Analysis of Alternatives

This section examines alternatives to the proposed project site, technology, design, and operation - including the no project alternative - in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

G. Information Disclosure, Consultation, and Participation

This section:

- (i) describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;

- (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
- (iii) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

H. Grievance Redress Mechanism

This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

I. Environmental Management Plan

This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

(i) Mitigation:

- (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
- (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
- (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.

(ii) Monitoring:

- (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.

(iii) Implementation arrangements:

- (a) specifies the implementation schedule showing phasing and coordination with overall project implementation;
- (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and

(c) estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.

(iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

J. Conclusion and Recommendation

This section provides the conclusions drawn from the assessment and provides recommendations.

Appendix 4: Outline Terms of Reference for Consulting Services for Environmental Assessment, SDDR Preparation and Safeguards Monitoring

A. Objectives

The objective of the consulting services is to ensure the environmental soundness and sustainability of the project and to support the integration of environmental and social safeguard considerations into the project-preparation and implementation process. This will be achieved by conducting an initial environmental examination (IEE) and social due diligence of the proposed refurbishment activities under Output 1 and 3 of the Project to identify potential environmental impacts on physical, ecological, socioeconomic, and physical cultural resources, preparing IEE report with environmental management plan and social due diligence report in accordance with the ADB's Safeguard Policy Statement (2009) and preparing semi-annual safeguards monitoring reports (SMRs) on the SSEMP implementation, emerging environmental and social safeguards issues arising during construction and preparation of appropriate corrective actions.

B. Scope of Work

The consultant's scope of work will include the following tasks:

- Analysis of the background materials. Background materials of the earlier studies including, geotechnical, hydrogeological, and other relevant studies for each sub-project will be collected from the relevant organizations and analyzed;
- Assessment of Environmental Impacts and Development of Mitigation Measures. An IEE study to assess potential direct, indirect, cumulative, induced, as well as transboundary and global impacts of the project to physical, biological, socioeconomic, and physical cultural resources during design, construction and operation stages will be conducted. Adverse environmental impacts will be avoided, or where it is not possible
- Examination of Alternatives. Alternatives to the project's location, design, technology, as well as "no project" alternative will be assessed;
- Public consultations. Meaningful public consultations with affected people (at least one round of consultation for IEE) ensuring participation of all stakeholders including non-governmental organizations, women will be conducted. The list of people attended the consultation, time and locations, subjects discussed during consultation will be recorded in systematic manner and attached in the EIA/IEE report as an appendix;
- Grievance Redress Mechanism will be established;
- Preparation of IEE report. An IEE report including executive summary, policy, legal, and environmental framework, description of the project, baseline data, expected environmental impacts and mitigation measures, analysis of alternatives, information disclosure, consultation and participation, grievance redress mechanism, in accordance with ADB's Safeguard Policy Statement (2009);
- Preparation of EMP. Site-specific environmental management plan will be prepared within the framework of this activity.

C. Team Composition and Organization

The consulting assignment will be for a team comprising of one (1) international and one (1) national environmental and social safeguard specialist who will work on an intermittent basis for the entire duration of the project. The indicative duration for the IEE study and SDDR preparation

is 1.5 – 3 months. Safeguards monitoring will be done for the entire duration of the project implementation.

The assignment will be based on the following requirements:

- Both international and national environmental/social safeguard specialists will be involved in preparing the IEE study, SDDR and semi-annual safeguard monitoring reports;
- the Team Leader (International Environmental Specialist) will have 10-15 years of experience in environmental assessment, environmental management and monitoring, construction supervision of projects including medical facilities, team management skills, experience working in teams of multi-discipline experts and leading a national team of consultants, understanding of administrative, procedural, and technical requirements of environmental assessment. Moreover he / she should also be experienced in preparation and implementation of medical waste management plans;
- National Specialists will be graduates in environmental science, environmental engineering, geological science, engineering hydrology, biology or related discipline with significant experience in environmental management and monitoring of similar projects, environmental assessment and/or design and implementation of environmental mitigation measures.
- The following reports/documents will be expected from the consulting team:
 - (i) IEE study for all the refurbishing works and EMP
 - (ii) SDDR with the attached IR screening checklists for all 54 facilities to be refurbished
 - (iii) Semi-annual safeguards monitoring reports (first report to be submitted within 3 months from mobilization of the works contractors)

D. Required Input and Budget

The total estimated input for the consulting team is as follows: (i) 2.5 PM, intermittent for the international consultant and (ii) 6.0 PM, intermittent for the national consultant.

**Appendix 5: ADB's Guidance note on Managing Infectious Medical Waste during the COVID-19 Pandemic
(Separate file)**

Appendix 6: Outline of an IR Due Diligence Report

1. Project description, project objective(s)
2. Proposed subproject or component description
 - a. How the proposed subproject fits into the project objectives
 - b. Current land use
 - c. Status of land lease ownership/tenure
3. Subproject screening exercise
 - a. Filling of the IR screening checklist and results thereof
 - b. Public land or privately used land to be affected, if any
 - c. Land acquisition requirement – quantum
 - d. Consultations result with the stakeholders
 - e. IR safeguard issues, if any
 - f. Subproject prioritization result based on the screening exercise
4. Supporting documents for land lease ownership of proposed affected persons (attachment)