Environmental Assessment and Review Framework (Draft)

Project Number: 54173-001
April 2020

The People's Republic of Bangladesh: COVID-19 Response Emergency Assistance

Prepared by the Health Services Division (HSD) of the Ministry of Health and Family Welfare for the Asian Development Bank.

CURRENCY EQUIVALENTS
(as of 4 April 2020)

Currency unit	–	Taka (TK)
Tk1.00	=	$0.0118
$1.00	=	Tk84.95

ABBREVIATIONS

ADB	–	Asian Development Bank
DOE	–	Department of Environment
ECA	–	Environment Conservation Act
ECC	–	environmental clearance certificate
ECR	–	Environment Conservation Rules
EIA	–	environmental impact assessment
EMP	–	environmental management plan
EMOP	–	environmental monitoring plan
IEE	–	initial environmental examination
MOEFCC	–	Ministry of Environment, Forests, and Climate Change
PIU	–	project implementing unit
SPS	–	Safeguard Policy Statement

WEIGHTS AND MEASURES

^{o}C	–	degree Celsius
dB(A)	–	A-weighted decibel
ha	–	hectare
mg/L	–	milligram per liter
m^2	–	square meter
µg/m^3	–	microgram per cubic meter
ppm	–	parts per million

NOTE

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

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
	A. Description of the Emergency Assistance	1
	B. Implementation Arrangements	2
II.	ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY	2
	A. Applicable National and Local Law, Regulations, and Other Requirements	2
	B. Applicable environmental standards	7
	C. Relevant International Environmental Agreements	8
	D. Environmental Requirements of ADB	9
	E. Institutional Capacity	11
III.	ANTICIPATED ENVIRONMENTAL IMPACTS	11
IV.	ENVIRONMENTAL MANAGEMENT PROCEDURE	16
	A. Impact Identification and Screening	16
	B. Review of Environmental Assessment	20
V.	CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM	21
	A. Consultation and Participation	21
	B. Arrangements for Information Disclosure	23
	C. Grievance Redress Mechanism	23
VI.	INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES	27
	A. Roles and Responsibilities	27
	B. Capacity Development	28
	C. Staffing Requirements and Budgets	28
VII.	MONITORING AND REPORTING	29

List of Tables

Table 1 - Details of Project Outputs
Table 2 - Relevant Environmental Regulations and Policies
Table 3 - Relevant National Environmental Standards
Table 4 - Relevant Environmental Standards from IFC-WB EHS Guidelines 2007
Table 5 - Bangladesh Relevant International Environmental Agreements
Table 6 - Environmental Classification According to SPS 2009
Table 7 - Summary of Potential Environmental Impacts
Table 8 - Summary of Potential Environmental Impacts
Table 9 - EA Categorization Process
Table 10 - Stakeholder Groups
Table 11 - Capacity Development Program
Table 12 - Tentative Costs for Environmental Assessment and Review of Activities

List of Figures

Figure 1 - DOE Process for Obtaining the ECC
Figure 2 - Grievance Redress Mechanism

List of Appendixes

Appendix 1 ADB's Prohibited Investment Activities List
Appendix 2 Activities selection criteria
Appendix 3 Environmental Code of Practices
Appendix 4 Environmental Screening Checklist
Appendix 5 Proposed Checklist for Environmental Audit of Existing Health Facility
Appendix 6 Outline of an Initial Environmental Examination Report
Appendix 7 Sample EMP for Small-Scale Infrastructure Works
Appendix 8 Contractor Guidelines on COVID-19 Preparedness
Appendix 9 Proposed Environmental Site Inspection and Monitoring Checklist
Appendix 10 Proposed Format of Environmental Monitoring Report

EXECUTIVE SUMMARY

A. Introduction

1. The Coronavirus Disease 2019 (COVID-19) Response Emergency Assistance Project will support the Government of Bangladesh in addressing the immediate and urgent needs for financial, logistical and systemic support to deal with the COVID-19 outbreak. The project will support the procurement of equipment and supplies, the upgrading of health and testing facilities, and build system and community capacities for surveillance, prevention and response to COVID-19.

2. The project will have three outputs: (i) Output 1: Immediate and urgent needs are met in prevention and control of COVID-19; (ii) Output 2: Infrastructure and related equipment are delivered to support and sustain prevention and management of COVID-19; and (iii) Output 3: Health system and community capacities in combatting COVID-19 are strengthened. In particular, the project will involve civil works supporting the upgrade/extension of existing facilities for the establishment of (i) screening and quarantine areas at points of entry; (ii) critical care and isolation units in existing healthcare facilities; (iii) microbiological diagnostics facilities in existing medical colleges and hospitals across the country.

B. Project Categorization and Potential Impacts

3. The project is rated category B for environmental safeguards. Most civil and structural works will consist of rehabilitation or minor extensions to buildings within existing premises therefore potential direct, indirect, cumulative and induced impacts of the project are anticipated to be site-specific and minor, few if any of them being irreversible in nature. The main impacts and risks are related to (i) medical waste management, requiring environmentally sound and safe handling, storage, transport and disposal;[1] (ii) occupational and community health and safety risks[2] associated with both the construction and operation of project-supported facilities, but also the high contagiousness of COVID-19; and (iii) construction related pollution, disruption and disturbance, including dust, noise, and traffic generation, temporary drainage congestion, and the presence of construction workers requiring sanitation and welfare facilities. An Environmental Assessment and Review Framework (EARF) was prepared to address these impacts and risks. Impacts will be mitigated through the development of guidelines for waste management, health and safety risk assessment and management plans, Environmental Code of Practices, provision of PPE, and trainings with mitigation measures included in Environmental Management Plans, implementation of which shall be closely supervised and monitored.

C. Rationale and Objective

4. In the context of the fast-evolving nature of the COVID-19 pandemic, this project has been designed as an Emergency Assistance Loans (EAL), and as such, the safeguards requirements for EAL set out in SPS 2009 have been followed. These are meant to allow for faster processing while ensuring that safeguards requirements are followed: environmental due diligences will be undertaken during project implementation in accordance with the present Framework (EARF).

[1] Existing medical waste management processes at existing facilities will be strengthened to cope with the rise in patient numbers and hazardous waste, as well as the need to disinfect / sterilize medical equipment.
[2] For health workers, lab technicians, medical waste handlers, contractor and construction workers, patients and visitors to existing facilities, as well as the wider local communities in the event of inadequate waste management processes.

This document has been designed to provide guidance on activities screening and assessment, meaningful consultation, information disclosure, and grievance redress and kept broad enough to address any impacts and risks identified at later stage, during detailed due diligence or arising from any change of scope that may arise due to the rapidly evolving situation on the ground, whilst ensuring continued SPS compliance. This framework also addresses the unprecedented challenges that COVID-19 may impose on safeguards work during project implementation, such as, undertaking site visits or meaningful consultation with mobility restrictions and limitations on public gatherings in place; the use of modern technologies for meaningful consultations and information disclosure, and closer collaboration with on-site personnel to assist with audits, supervision and monitoring are examples of approaches taken to respond to the challenges of the situation.

D. Screening and Mitigation Measures

5. The project will ensure the following procedures in the planning, implementation, and operational phases for environmental sustainability of project interventions:

Step 1: Review the interventions against selection criteria and against ADB's prohibited list, as presented in Appendix 1 and 2.

Step 2: Determine EA categorization of proposed interventions: (i) for repair, maintenance, very minor construction, capacity building program and operation research, no environmental assessment is required, while for support in strengthening the microbiological laboratories, requiring mainly installation of equipment and minor repair or maintenance work, an Environmental Code of Practices will be sufficient to minimize potential minor impacts; (iii) for activities that may have some minor environmental impacts due to minor construction work, a simple Environmental Screening will be required, to identify impacts, as well as an Environmental Code of Practices to manage them; (iv) for activities located within or outside the existing facility requiring minor to moderate civil work where impacts are minor to moderate or unknown, an Initial Environmental Examination (IEE) will be required and impacts will be addressed through well-developed Environmental Management Plan (EMP).

Step 3: Conduct safeguard audit of existing facilities: Only operations falling under (ii) and (iii) above will be audited. In the interest of time and in view of travel constraints, a sample of sites will be selected to understand current health care practices, facilities for waste/medical waste management, potential environmental risks, and issues of non-compliance (if any).

Step 4: Conduct environmental screening and develop Environmental Code of Practices for operations falling under (ii) above.

Step 5: Conduct IEE and prepare Environmental Managemental Plan (EMPs) for operations falling under (iii) above.

Step 6: Implement the EMPs, ECOPs; the latter will be included in the bidding documents and conditions for environmental management will be included in the contractors' contracts.

Step 7: Monitor the implementation performance of EMPs, ECOPs

E. Consultation, Participation, Disclosure and Grievance Redress Mechanism

6. MOHFW and DGHS will engage stakeholders during the environmental risk assessment of project interventions and the process of consultations will continue, as appropriate, during project implementation. A stakeholder engagement plan will be finalized during implementation, as per the guidance of this framework. Due to the COVID-19 pandemic, some restrictions may be in place during project implementation for face-to-face communication and on the number of people in a meeting or public gathering in a confined place, which this framework addresses.

7. MOHFW will ensure that affected persons will have the chance to express their legitimate grievances or to file a complaint about the project by setting up a Grievance Redress Mechanism (GRM) as soon as the loan becomes effective. The GRM shall resolve complaints in a time-bound and transparent manner. The GRM process will be aligned with the process adopted by MOHFW, while ensuring compliance with the policy principles of ADB SPS 2009. Grievances filed and resolved will be thoroughly documented and included in the monitoring reports submitted to ADB.

F. Institutional Arrangements

8. MOHFW will be the sponsoring ministry for the project and responsible for planning and management of curative, preventive as well as promotive health services for the population. DGHS will be the implementing agency. A project implementation unit (PIU) with key experts and staff will be established within the DGHS to provide the technical, administrative, and logistical support required for implementation. For technical oversight and hands-on support to the PIU for ensuring environmental safeguards, an intermittent environmental specialist will be appointed throughout project implementation up to completion.

G. Monitoring and Reporting

9. The PIU of the project, under DGHS, will monitor the progress of EMPs implementation and the compliance performance of their contractors, through site inspections and document review. The PIU will prepare and submit environmental monitoring reports to ADB, semi-annually during construction activities and annually during operation. If any non-compliance is identified, ADB will work with MOHFW and DGHS to rectify, to the extent possible, any failure to comply with their environmental commitments in the Loan Agreement, and exercise remedies to re-establish compliance.

I. INTRODUCTION

1. COVID-19 is a new disease with similar symptoms as influenza but different in terms of severity and community transmission.[1] The World Health Organization (WHO) declared the COVID-19 as a Public Health Emergency of International Concern on 30 January 2020 under the International Health Regulations (IHR) 2005 and recognized it as a pandemic on 11 March 2020.[2]

2. The IHR Emergency Committee for the COVID-19 of WHO, which convened on 22-23 January 2020, emphasized that further exportation of cases may appear in any country and, thus, they should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of COVID-19 infection, and to share full data with WHO.

3. Given the situation, the Government of Bangladesh (the government), through the Ministry of Health and Family Welfare (MOHFW) requested the Asian Development Bank (ADB) on 23 March 2020 to provide financial, logistics and systems support for preparedness and response to the COVID-19 outbreak.

4. The Safeguard Policy Statement (SPS) 2009 of ADB sets out the requirements for environmental safeguard that applies to all ADB-financed projects and grants. To meet the requirements of SPS 2009, an environmental assessment and review framework (EARF) was prepared by MOHFW. The EARF was prepared consistent to the applicable national laws, polices and regulations. This EARF will guide in the preparation of environmental assessments and environmental management plans for the components that will incur potential environmental impacts during implementation. This EARF was endorsed by the government and disclosed in the website of ADB as required by SPS 2009 and Access to Information Policy 2018.[3] In addition, this EARF will be disclosed in the websites of MOHFW and the Directorate General of Health Services (DGHS): the DGHS is one of the agencies of MOHFW responsible for the implementation of the different health programs, health management, planning and execution of different policies through administration.

A. Description of the Emergency Assistance

5. The following outputs are in response to the COVID-19 outbreak and to immediately implement critical measures needed to reduce the transmission and its associated economic and social impacts (Table 1).

Table 1: Details of Project Outputs

Output	Description
Output 1: Immediate and medium-term equipment needs for testing and managing COVID-19 met	Output 1 will fulfil Bangladesh's immediate and medium term need to prevent infection spread, by supporting emergency procurement and provision of the most crucial medical equipment and supplies. The supplies will enable (i) health care workers to protect themselves and others from infection, and (ii) selected health facilities to be equipped with essential infection prevention and control supplies. The equipment and supplies will include material such as PPE, biohazard bags, disinfecting materials, ventilators, and oxygen meters.

[1] WHO. Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. https://www.who.int/health-topics/coronavirus#tab=tab_1.
[2] WHO. International Health Regulations (2005). 3rd Ed. https://www.who.int/ihr/publications/9789241580496/en.
[3] ADB. Access to Information Policy. https://www.adb.org/documents/access-information-policy

Output	Description
Output 2: Infrastructure and related equipment for supporting and sustaining prevention and management of COVID-19 delivered.	Output 2 will provide support for modification and rehabilitation of infrastructure to support critical needs of care, such as: (i) health facilities at points of entry screening passengers coming into the country via land, (ii) critical care units and isolation units to reduce secondary infections among contacts and health care workers; and (iii) microbiological diagnostic facilities (with capability to apply real-time and advanced diagnostics); as well as other emergency response infrastructure as needed.
Output 3: Health system and community capacities in combatting COVID-19 strengthened.	Output 3 will support measures to strengthen the health system's response capacities and its short to medium-term capacity development. Relevant health and other technical staff will be recruited, incentivized and trained to optimize the use of the new or upgraded facilities. Additionally, the Project will provide support to: (i) develop capacity for preparedness and response for incidence management; and (ii) operational research to inform policy briefs and decisions. Finally, Output 3 will support the development of a COVID-19 communication strategy and its implementation. Using a variety of channels, Output 3 will communicate critical risk information and engage communities in promoting hygiene and safe practices, and countering misinformation.

B. Implementation Arrangements

6. MOHFW will be the executing agency (EA) while DGHS will be the implementation agency (IA). The project is expected to be completed by April 2023. A project implementation unit (PIU) will be set up in DGHS to provide the technical, administrative, and logistical support necessary for implementation.

7. An inter-ministerial Project Steering Committee is to be constituted under the project of DGHS under the chairmanship of the Secretary, MOHFW, will provide guidance on policy directions and oversee the overall project implementation. The PIU will work directly with the government entity involved in each activity, such as but not limited to: (i) the COVID-19 Emergency Operation Center (EOC) in preparedness and response; (ii) the various coordination committees at Divisional, District, City Corporation and *Upazila* levels for civil works activities; and (iii) the Institute of Epidemiology, Disease Control and Research (IEDCR) and other relevant institutes under DGHS in contact tracing support and surveillance strengthening activities. The PIU will conduct regular monitoring and evaluation activities and hold quarterly reviews of progress against the indicators.

II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

8. The project will comply with the environmental laws, standards, rules, and requirements of the government. These requirements set forth restrictions on project activities to avoid, minimize or mitigate the likely impact on the environment. MOHFW and DGHS will be responsible for ensuring that all activities under the project comply with these requirements from design, construction, and in the operation and maintenance of the facilities.

A. Applicable National and Local Law, Regulations, and Other Requirements

9. The following presents the regulatory agency, process, regulations and international environmental agreements relevant to the project.

10. **Environmental agency**. The Ministry of Environment, Forests, and Climate Change (MOEFCC) is responsible for planning, promotion, coordination and overseeing the implementation of environmental and forestry programs. MOEFCC manages all national environmental matters and is responsible for activities such as prevention and control of pollution, forestation and regeneration of degraded areas and protection of the environment, and in the framework of legislations. MOEFCC also conducts surveys, impact assessment, control of pollution, research, and collection and dissemination of environmental information and creation of environmental awareness among all sectors in Bangladesh.

11. Created in 1989, the Department of Environment (DOE) performs the regulatory functions under the MOEFCC. DOE is the main government agency responsible for implementing and enforcing environmental management regulations, policies, and strategies to ensure sustainable development, and to conserve and manage the environment. The DOE ensures that environmental rules and regulations are applied consistently, and provides guidance, training and promotional campaign on improving the awareness of environmental issues.

12. **Environmental regulations** The Bangladesh *Environment Conservation Act* (ECA) of 1995 (amended in 2000, 2002, and 2010) provides for the protection of the environment, improvement of environmental standards, and the control and abatement of environmental pollution. This Act authorizes the DOE to undertake any activity needed to conserve and enhance quality of environment and to control, prevent and mitigate pollution. The *Environment Conservation Rules (ECR)* of 1997 (adopted under the provision of ECA 1995 and was amended in February and August 2002, 2005, February 2010, and February 2017) provides rules related to the declaration of ecologically-critical areas, obtaining environmental clearance certificate (ECC), environmental quality standards, acceptable limits for discharges of waste, and environmental guidelines on pollution prevention. ECA 1995 and ECR 1997 outline the regulatory mechanism to protect the environment in Bangladesh. Aside from ECA 1995 and ECR 1997, Table 2 presents a summary of relevant environmental regulations.

13. **Overview of the environmental approval process.** Under the ECA 1995, Section 12 provides that no industrial unit or project can be established or undertaken without securing an ECC from the DOE. Following the requirements of ECR 1997, the DOE has classified various development interventions according to the potential adverse environmental impacts for the purpose of issuing the ECC. This classification includes: (i) green; (ii) orange-A; (iii) orange-B; and (iv) red. Green category refers to industries or projects considered to be relatively pollution-free, thus, no environmental study will be required while the Red category refers to industries/projects which may cause significant adverse environmental impacts and therefore, require an EIA.

14. For projects and industrial units classified as Orange-A, Orange-B, and Red (those that may have potential adverse environmental impacts), securing the ECC involves two steps: (i) issuance of site clearance certificate (SCC), and then (ii) the ECC.

15. SCC will be issued by the DOE upon approval of the initial environmental examination (IEE), receipt of the No Objection Certificate (NOC), which a “proof of authorization” to initiate a project, and the ECC will be issued upon the approval of the EIA. The project proponent cannot open line of credit in favor of importable machineries and cannot start any physical activities for the project without the EIA approved by the DOE. Figure 1 shows the process of securing the ECC from the DOE including the documents required.

16. The project will not involve construction of new multi-storied building. Upgrading and construction of additional structures will be within the existing physical footprints of the health facilities, medical colleges, IEDCR and the BITID. As such, no environmental clearance will be required. In the event, construction of new health facility will be involved relevant national environmental requirements will be referred to.

Figure 1: DOE Process for Obtaining the ECC

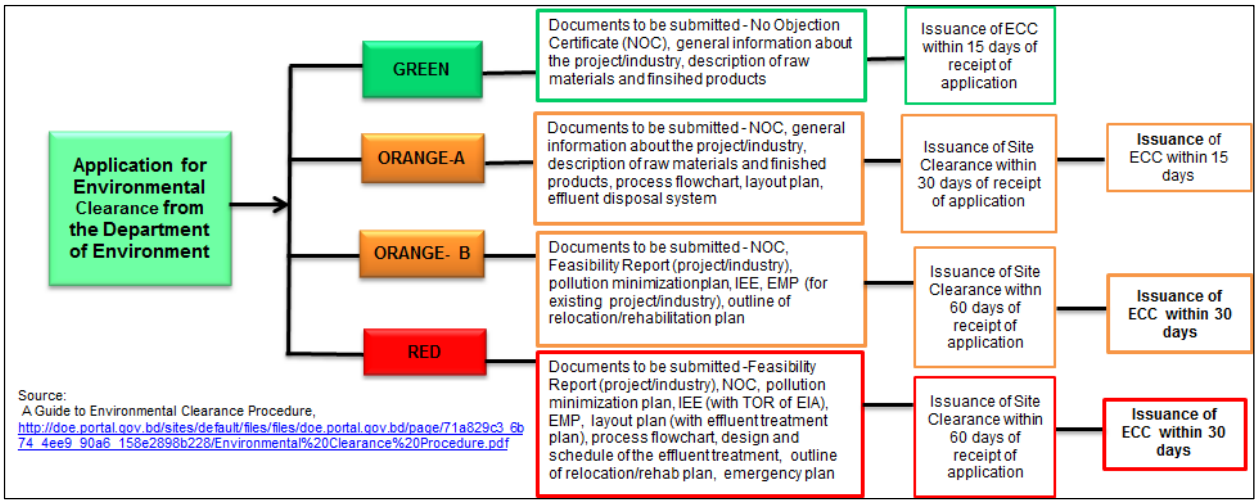


Table 2: Relevant Environmental Regulations and Policies

Regulation	Brief Description	Implications to the Project	Responsible Agency
Infectious Diseases (Prevention, Control and Elimination) Act 2018	• This Act provides to "keep or quarantine any suspected person infected with an infectious disease, at a specific hospital, temporary hospital, establishment or home". This law empowers government in notification, isolation, quarantine, sample collection and testing in emerging diseases. • Under section 26, if false or incorrect information is being spread or given by any person who is aware of the correct information, he or she can potentially be found guilty.	Design of project components will comply with the provisions under the Act	MOHFW
Medical Waste Management Rules 2008	• Any solid, liquid, gaseous, and radioactive waste material generated during the diagnosis, treatment, preventive and curative measure, or in research activities pertaining to disease diagnosis when it is released, discharged, or disposed causing detrimental effect on human health and environment is considered medical waste	Management of medical wastes generated from the 525 health facilities, 37 medical colleges, IEDCR, and BITID will comply with these rules	Department of Environment

Regulation	Brief Description	Implications to the Project	Responsible Agency
	• Main existing complete code to be followed by all concerned agencies for proper disposal of medical waste to safeguard the environment		
Public Health (Emergency Provisions) Ordinance, 1994	Calls for special provisions in case of emergency to prevent the spread of human disease, safeguarding public health and providing them adequate medical service and other services essential to the health of respective community and workers in particular during the construction related work	Design, construction, and operation and maintenance of project components will comply with the special provisions of this Ordinance	Local Government Division
National Disaster Management Act 2012	This Act provides for activities on disaster management coordinated, object oriented and strengthened; and to formulate rules that will build up infrastructures of effective disaster management in fighting all types of disaster.	Setting-up emergency response procedures	Ministry of Disaster and Relief
Environment Court Act 2000 (amended in 2002 and 2010)	This Act ensures the resolution of disputes on environmental and social damages resulting from any development activities. This also allows for the completion of environment-related legal proceedings effectively.	Mechanism for affected persons to file grievances/complaints related to environment safeguard	MOEFCC
Vehicle Act 1927, the Motor Vehicles Ordinance 1983, and Bengal Motor Vehicle Rules 1940	These regulations control vehicular emissions and noise including road safety	Vehicles used during upgrading works in the facilities will comply with relevant requirements of the Act	Bangladesh Road and Transport Authority
National Environmental Policy, 1992	Policy that ensures development components do not pollute the environment or degrade resources and sets out the basic framework for environmental action together with a set of broad sectoral action guidelines.	• Regulation on vehicles emitting smoke which is harmful to the environment • Follow standards on quality of air, water, noise and soil • Sets limits for discharging waste	MOEFCC
Bangladesh Water Act 2013	Makes provisions for integrated development, management, abstraction, distribution, use, protection and conservation of water resources. Ensures water sources are free from any type of pollution.	Construction works will not cause water pollution	Ministry of Water Resources
National Safe Drinking Water Supply and Sanitation Policy of 1998	Ensures access to safe water and sanitation services at an affordable cost	Construction and operation of project components will adhere to the relevant provisions	Ministry of Local Government, Rural Development,

Regulation	Brief Description	Implications to the Project	Responsible Agency
			and Cooperatives
Bangladesh Labour Act 2006 (amended 2013)	These regulations aim to protect the interests and rights of the workers, in provision of comfortable working environment, reasonable working conditions, and to ensure workers' safety. This also provides for the prohibition of employment of children and adolescent.	• Compliance to provisions on employment standards, occupational health and safety, welfare and social protection, labor relations and social dialogue, and enforcement. • Prohibition of employment of children and adolescents (below 14 years old)	Ministry of Labour and Employment
Bangladesh Labour Rules 2015	Provides for the rules on registration of laborers, misconduct rules, income and benefits, health and fire safety, factory plan	Contractors need to implement occupational health and safety measures and will be liable for compensation for work-related injuries.	Department of Labor
Bangladesh National Building Code 2006	Sets minimum standards for design, construction, quality of materials, use and occupancy, location and maintenance of all buildings to safeguard, within achievable limits, life, limb, health, property and public welfare	Design of upgrading the existing health facilities, medical colleges, IEDCR, and BITID needs to comply with relevant requirements and specifications	Ministry of Housing and Public Works (MHPW)
Bangladesh Building Construction Rules 2008	• These rules seek to control development plot-by-plot and case-by-case. It controls development by imposing conditions on set-backs, site coverage, construction of garages, access to plot, provision of lift, land use of that particular plot and height of building. • Regulates technical details of building construction and to maintain standards of building construction	Construction works to comply with relevant provisions, standards, and specifications to ensure structural integrity of existing facilities with upgrading	MHPW and its relevant agencies
Bangladesh Factory Act 2006	The Act requires every workplace including small- or large-scale construction where women are employed to have an arrangement of childcare services. Based on this Act and Labor Laws - medical facilities, first aid and accident and emergency arrangements are to be provided by	Contractors to provide first aid and emergency arrangements for the workers during construction works	Ministry of Labor

Regulation	Brief Description	Implications to the Project	Responsible Agency
	the authority to the workers at workplaces.		
Local Government (*Pourashava*) Act 2009 and the Local Government (City Corporation) Act 2009	• Provides guidance for integrated community and workers health and hygiene at the construction, and operation and maintenance stages of the project • *Pourashava* wide responsibilities in town planning and development, public health and sanitation, water supply and sewage disposal, maintenance of public infrastructure and amenities.	Coordinate with *pourashava* committees on disaster management measures, water and sanitation, and waste management.	Local Government Division

B. Applicable environmental standards

17. Table 3 lists the applicable standards to meet national regulations. SPS 2009 provides that during construction, the government will apply pollution prevention and practices that are in line with international good practice as given by international standards such as the IFC-WB EHS General Guidelines 2007. In addition, should the regulations of the Government differ from the levels and measures set by the IFC-WB EHS General Guidelines 2007, the Government will achieve whichever is more stringent. The relevant standards from IFC-WB EHS General Guidelines 2007 are given in Table 4.

Table 3: Relevant National Environmental Standards

AIR[a]		
Pollutant	Standards	Averaging Period
NO_x	100 µg/m^3 (0.053 ppm)	Annual
PM_{10}	50 µg/m^3	Annual
	150 µg/m^3	24-hour
$PM_{2.5}$	15 µg/m^3	1-hour
	65 µg/m^3	24-hour
NOISE[b]		
Zone Class	Limits in dB(A)	
	Daytime	Nighttime
	(6 am – 9 pm)	(9 pm-6 am)
i) A sensitive area where quietness is of primary importance such as schools, hospitals, mosques etc.	50	40
ii) Residential zone	55	45
iii) Mixed areas, which are, used as residential areas as well as commercial and industrial purposes	60	50
iv) Commercial areas	70	60
v) Industrial areas	75	70
Day time shall mean from 6:00 am to 9:00 pm Night time shall mean from 10pm to 6:00 am Leq - energy mean of the noise level over a specific period		

AIR[a]		
Pollutant	Standards	Averaging Period
[a] Ambient Air Quality Standards 2005 [b] Noise Pollution (Control) Rules 2006		

Table 4: Relevant Environmental Standards from IFC-WB EHS Guidelines 2007

Table 1.1.1: WHO Ambient Air Quality Guidelines[7,8]

	Averaging Period	Guideline value in µg/m³
Sulfur dioxide (SO_2)	24-hour	125 (Interim target-1) 50 (Interim target-2) 20 (guideline)
	10 minute	500 (guideline)
Nitrogen dioxide (NO_2)	1-year	40 (guideline)
	1-hour	200 (guideline)
Particulate Matter PM_{10}	1-year	70 (Interim target-1) 50 (Interim target-2) 30 (Interim target-3) 20 (guideline)
	24-hour	150 (Interim target-1) 100 (Interim target-2) 75 (Interim target-3) 50 (guideline)
Particulate Matter $PM_{2.5}$	1-year	35 (Interim target-1) 25 (Interim target-2) 15 (Interim target-3) 10 (guideline)
	24-hour	75 (Interim target-1) 50 (Interim target-2) 37.5 (Interim target-3) 25 (guideline)
Ozone	8-hour daily maximum	160 (Interim target-1) 100 (guideline)

Table 1.7.1- Noise Level Guidelines[54]

Receptor	One Hour L_{Aeq} (dBA)	
	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00
Residential; institutional; educational[55]	55	45
Industrial; commercial	70	70

Source: World Bank Group-International Finance Corporation EHS General Guidelines 2007

C. Relevant International Environmental Agreements

18. Aside from the national environmental regulations, international environmental agreements where Bangladesh is a party will be referred to in the design and implementation of the project. Table 5 lists the applicable international environmental agreements that can provide guidance during project implementation.

Table 5: Bangladesh Relevant International Environmental Agreements

International Environmental Agreement	Date Ratified	Description	Remarks
Stockholm Convention on Persistent Organic Pollutants (POPs) 2001	3 December 2007	A global treaty to protect human health and the environment from POPs which are chemicals that: (i) remain intact in the environment for long periods, (ii) become widely distributed geographically, (iii) accumulate in the fatty tissue of living organisms, and (iv) are toxic to humans and wildlife.	Upgrading and operation of existing healthcare facilities, medical colleges, IEDCR, and BITID will minimize generation and or unintentional release of POPs in managing its medical waste.

International Environmental Agreement	Date Ratified	Description	Remarks
Vienna Convention for the Protection of the Ozone Layer 22 March 1985	2 August 1990	A framework for efforts to protect the globe's ozone layer by means of systematic observations, research and information exchange on the effects of human activities on the ozone layer and to adopt legislative or administrative measures against activities likely to have adverse effects on the ozone layer.	Upgrading and operation of existing healthcare facilities, medical colleges, IEDCR, and BITID will not use chemicals that can affect the ozone layer such as methyl chloroform, a solvent generally used for industrial processes.
Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer)	2 August 1990	This international treaty was entered into force on 1 January 1989 and is designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for ozone depletion. This treaty also requires controlling emissions of substances that deplete ozone.	Upgrading and operation of existing healthcare facilities, medical colleges, IEDCR, and BITID will not use chemicals that can cause harm to the ozone layer.
UNFCCC (1992)	15 April 1994	This framework came into force on 21 March 1994 and aims to achieve stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level low enough to prevent dangerous anthropogenic interference with the climate system.	Upgrading of health care facilities, medical colleges, IEDCR and BITID will explore ways to reduce GHG from direct energy use through insulation, heating and lighting, by switching computers and monitors off when not in use, and other energy conservation measures.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)	1 April 1993	This convention came into force on 5 May 1992 which aims to reduce the amount of waste produced by signatories and regulates the international traffic in hazardous wastes.	Medical wastes will comply with this convention and disposal of chemicals used will follow the instructions in the material data safety sheet.

D. Environmental Requirements of ADB

19. SPS 2009 provides for the environmental requirements and review procedures of ADB and applies to all projects and grants they finance. SPS 2009 comprises three key safeguard areas: environment, involuntary resettlement, and indigenous peoples; and aims to avoid adverse project impacts to both the environment and the affected people; minimize, mitigate and/or compensate for adverse project impacts; and help Borrowers to strengthen their safeguard systems and to develop their capacity in managing the environmental and social risks.

20. At the project identification phase, ADB uses a categorization system to indicate the significance of potential environmental impacts and is determined by the category of its most environmentally-sensitive component, including direct, indirect, cumulative, and induced impacts within the project's area of influence. The project categorization system is described in Table 6.

Table 6: Environmental Classification According to SPS 2009

Category	Definition	Assessment Requirement
A	Likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented, and may affect an area larger than the sites or facilities subject to physical works.	Environmental impact assessment (EIA)
B	Likely to have adverse environmental impacts that are less adverse than those of Category A. Impacts are site-specific, few if any of them irreversible, and in most cases mitigation measures can be designed more readily than Category A.	Initial Environmental Examination (IEE)
C	Likely to have minimal or no adverse environmental impacts.	No environmental assessment is required but the environmental implications of the project will be reviewed.
FI	Project involves investment of ADB funds to or through a financial intermediary (FI).	FIs will be required to establish an environmental and social management commensurate with the nature and risks of the FI's likely future portfolio to be maintained as part of the FI's overall management system.

Source: ADB. Safeguard Policy Statement 2009, p. 19. http://www.adb.org/sites/default/files/institutional-document/32056/safeguard-policy-statement-june2009.pdf.

1. Disclosure requirements

21. Aside from the SPS 2009 requirements, the Access to Information Policy 2018 provides for the requirements of disclosure for project information of projects and grants funded by ADB.[4] Consistent with SPS 2009, this requires the disclosure of documents submitted by the borrower and/or client:

(i) a draft EIA report for category A project, at least 120 days before Board consideration;
(ii) a draft environmental assessment review framework (EARF), where applicable, before appraisal;[5]
(iii) the final EIA or IEE, upon receipt by ADB;

[4] Access to Information Policy 2019 replaces Public Communication Policy 2011.
[5] If no further mission for appraisal is required, the document will be posted before the management review meeting or the first staff review meeting for sovereign projects, or before the final investment committee meeting for nonsovereign projects, as applicable (ADB procedures).

(iv) a new or updated EIA or IEE, and a corrective action plan, if any, prepared during project implementation, upon receipt by ADB; and
(v) the environmental monitoring reports, upon receipt by ADB.

E. Institutional Capacity

22. MOHFW assumes the leadership of the health sector, provides most of the Health, Nutrition and Population services and manages and coordinates services of government, non-government and the private sector. Aside from basic health care, MOHFW approves research strategies, policies and plans, and provides administrative approval for conducting international collaborative research.

23. Under the MOHFW, the role of the DGHS is to implement the health programs and services for the MOHFW, and provide technical assistance to the Ministry when new programs and interventions are needed to improve the existing programs. As of 2018, DGHS has more than one hundred thousand officers and staff members. The six tiers of healthcare infrastructure under the DGHS consist of national, divisional, district, *upazila* (subdistrict), union and ward.

24. There is no institutional setup in MOHFW and DGHS in implementing projects required to comply with SPS 2009 but both have extensive experience implementing health sector projects funded by the World Bank, such as the Health Sector Support Project ($550 million credit and $140 million grant) currently under implementation. Thus, MOHFW is familiar with safeguard policies, and environmental and social frameworks, yet there is a need for capacity building in the implementation of projects in compliance to SPS 2009. Immediate support will be provided by engaging an environmental safeguards consultant which will assist the PIU for this emergency assistance project.

III. ANTICIPATED ENVIRONMENTAL IMPACTS

25. Some activities under ADB financing, in particular under Output 2 (see Table 7), are expected to involve minor to moderate civil works in existing facilities within existing physical footprints and may cause potential environmental impacts. Any activity that has been screened for potential environmental impacts risks will not be implemented without the updated environmental assessment, consultations, and public disclosure.

Table 7: Details of Output 2

Output 2: Infrastructure and related equipment for supporting and sustaining prevention and management of COVID-19 delivered.	Will in particular provide the infrastructure, supply and equipment support to upgrade the following facilities: (i) points of entry facilities to screen passengers coming into the country via land port, (ii) critical care units and isolation units to reduce secondary infections among close contacts and health care workers; (iii) microbiological diagnostics facilities (with capability to apply real-time polymerase chain reaction (PCR) techniques and other advanced diagnostics).

26. Main environmental risks include: (i) the occupational health and safety issues related to testing and handling of supplies with potential to improper use by laboratory technicians and medical crews and unsafe disposal of hazardous medical waste and PPEs from the existing health facilities, medical colleges; (ii) and community health and safety concerns due to poor handling and transportation of medical waste and breaking the protocol of social distancing and

hygiene practice at the premises; and (iii) potential impacts to air, water, noise and vibration due to small civil works.

27. Volume of waste generated from upgrading of existing health facilities, medical colleges, IEDCR, BITID, POE facilities may significantly increase. These waste may include liquid contaminated waste (e.g. blood, other body fluids and contaminated fluid) and infected materials (water used; lab solutions and reagents, syringes, bed sheets, majority of waste from labs and quarantine and isolation centers, etc.) which require special handling and awareness, as it may pose an infectious risk to healthcare workers who come in contact with or handle the waste.

Table 8: Summary of Potential Environmental Impacts

Phase	Potential Environmental Impact	Possible Mitigation Measure
Design/Pre-construction		
Community health, safety and security	• 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	• 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 such as Bangladesh Building Codes, ASME specifications on HVAC, etc. • 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	• 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.	• Before any demolition works, a rapid assessment study will be done by MOHFW (or through a qualified 3rd party expert) to determine the presence of ACMs and to prepare a demolition plan for approval of MOHFW and DGHS. 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.

Phase	Potential Environmental Impact	Possible Mitigation Measure
		• Environmental audit of existing facilities will include assessment of building(s) for demolition. • Removal of hazardous wastes, if any, will comply with the requirements of the government, the IFC-WB EHS General Guidelines 2007, and WHO on waste management. • Workers during demolition will be provided with personal protective equipment.
Construction		
Ambient air quality and noise	• 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	• 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 MOHFW • 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 pre-fab construction materials • Consider work scheduling of noise-generating activities and monitoring of dust and noise levels during construction
Occupational health and safety	• Accident risks to patients, visitors and health facility workers • Potential infection of workers from COVID-19	• 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 • 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.

Phase	Potential Environmental Impact	Possible Mitigation Measure
		• Contractor will be required to put visible and clear signs including billboards on schedule and activities of civil works
Water quality	Impairment of water quality from activities of construction workers	• Prohibit direct disposal of solid and liquid wastage into nearby water body • Observe good housekeeping at all times in work areas • Contractor to implement construction management plan with approval from DHS
Waste management	• Safety and health risks from improper collection and disposal of construction debris • Poor aesthetic due to accumulation of waste	• Contractor to prepare waste management plan for approval and compliance monitoring by DGHS
Operation and Maintenance		
Community health, safety and security	• 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	• DGHS will require health facilities, medical colleges, IEDCR, and BITID to prepare traffic management plan to prevent accidents • Provide clear and visible traffic signs within the facilities • Provide adequate space for emergency vehicles
Occupational health and safety (OHS)	• 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	• 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

Phase	Potential Environmental Impact	Possible Mitigation Measure
	• 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	• 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 • Inadequate wastewater treatment and disinfection prior to discharge, leading to surface or ground water contamination	• Prepare and implement a Medical Waste Management Plan that will cover the waste generated from the response to the new COVID-19 infection, including: • Safe storage, transportation and proper disposal of medical waste • 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
Ambient air quality	• Exhaust air from infectious disease wards and other health care facilities potentially contaminated with biological agents, pathogens, or other hazardous materials	• Provide adequate and appropriate ventilation • Regular maintenance of HVAC system
Disaster and emergency preparedness	• 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)	• 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.

IV. ENVIRONMENTAL MANAGEMENT PROCEDURE

28. Based on SPS 2009, the project is rated category B for environmental safeguards as the potential impacts are considered to be site-specific, temporary, with few if any of them irreversible, and in most cases mitigation measures can be designed readily. MOHFW has identified at least 37 existing health facilities and medical colleges/hospital located within the eight divisions: (i) Barishal, (ii) Chittagong, (iii) Dhaka, (iv) Mymensingh, (v) Khulna, (vi) Rajshahi, (vii) Rangpur, and (viii) Sylhet including Institute for Epidemiology, Disease Control and Research (IEDCR) and Bangladesh Institute of Tropical and Infectious Diseases (BITID) for support, yet this scope may be subject to change during implementation. This may also include health facilities and passenger screening at entry points coming in by air, water, and/or land.

29. This section explains overall environmental management process for the COVID-19 Response Emergency Assistance Project. Following an emergency-focused approach, a simplified process has been adopted for impact identification and mitigation. Table 9 includes examples of project activities with proposed EA categorization.

A. Impact Identification and Screening

30. The COVID-19 Response Emergency Assistance Project will ensure the following procedures in the planning, implementation, and operational phases for environmental sustainability of project interventions:

Step 1: Review the interventions against selection criteria and ADB's prohibited list
Step 2: Determine EA categorization of proposed interventions
Step 3: Conduct safeguard audit of existing facilities
Step 4: Conduct environmental screening and develop Environmental Code of Practices
Step 5: Conduct IEE and prepare Environmental Managemental Plan (EMPs)
Step 6: Implement the EMPs, ECOPs
Step 7: Monitor the implementation performance of EMPs, ECOPs

Step 1: Review the selection criteria or negative list of attributes

31. The first step of the environmental safeguard and management procedure is to review the list of interventions proposed against the selection criteria. Within the government's National Preparedness and Response Plan for COVID-19 framework and DPP, ADB will prioritize activities for development and implementation to optimize the available resources in close coordination with the government and development partners. Activities will conform with ADB's Safeguards Policy Statement, 2009 (SPS) with respect to environmental considerations. Proposed activities will consult ADB's Prohibited Investment Activities List (Appendix 1) and a set of selection criteria as stated in Appendix 2.

Step 2: Determine EA categorization of proposed activities

32. Although, the specific design and location of sites are yet to be identified, an indicative list of activities including soft and hard interventions under the three components has been identified. It is also expected that some of the interventions will not have any negative impacts but nevertheless present opportunities for enhancing environmental and social benefits. The proposed civil works are expected to be small in size and local in nature inducing minor to moderate impacts. These interventions do not require an Environmental Clearance from the Competent Authority.

33. Following an emergency focused approach, a simplified process has been adopted for impact identification and mitigation. Proposed activities will be categorized in the following manner:

- **Category 1 (No EA Required):** Repair, maintenance, very minor construction and capacity building program (e.g., trainings, awareness), studies, and operation research are categorically excluded from the requirements for an environmental assessment (EA). These activities do not lead to any adverse environmental impacts, but instead provide positive environmental and social benefits. Support in strengthening the microbiological laboratory will require mainly installation of equipment including minor repair or maintenance work where potential minor impacts associated with civil works can be minimized by - Environmental Code of Practices (ECOPs) (Appendix 3).

- **Category 2 (Activities Requiring Environmental Screening):** Proposed activities that may have some minor environmental impacts due to minor construction work are grouped under category 2. Impacts of these activities can be identified through a simple Environmental Screening and managed by appropriate Environmental Code of Practices (ECOPs). An environmental screening checklist and a list of ECOPs for Category 2 interventions are provided in Appendix 3 and 4.

- **Category 3 (Activities Requiring IEE):** Proposed activities located within existing premise and or outside the existing facility requiring minor to moderate civil work where impacts are minor to moderate or unknown are grouped into category 3 and will require an Initial Environmental Examination (IEE). Impacts of these activities will be addressed through well-developed Environmental Management Plan (EMP) (Appendix 6 for IEE format and Appendix 7 for sample EMP).

Table 9: EA Categorization Process

Activities	EA Procedure, Special Conditions
Category 1: No Assessment	
Capacity building training, workshop	Excluded from EA[6]
Personal Protective Equipment	
Risk communication activities to communicate critical risk and event information to all communities	
Development/ updating of appropriate guidelines and protocols/Operation research	
Developing and maintain stockpiling of critical medical supplies	
Embellishment of Modern Microbiology Laboratory with PCR	Excluded from EA (sample ECOPs for safe disposal of medical supplies and waste)
Category 2: Limited Assessment	

[6] Follow Social Code of Practices, such as social distancing

Activities	EA Procedure, Special Conditions
Strengthening Land Port for passenger screening	Environmental Screening and ECOPs
Critical Care Unit: with 10 Beds in each MCH	
Category 3: Detailed Assessment	
Isolation unit with 50 beds	IEE including EMP
Any interventions outside hospital premise, impacts unknown	

Step 3: Conduct Safeguard Audit of Existing Healthcare Facility

34. Response and preparedness for COVID-19 will involve upgrading of existing facilities. Following the requirements of SPS 2009, an environmental audit will be required for proposed activities in existing health facilities, medical colleges, research centres and ports of entry (land). The proposed activities concerning civil works are subject to safeguard due diligence. However, all facilities requiring civil works shall not be subject to audit due to time constraint and travel constraint for contagious disease; a sample of sites will be selected to understand current health care practices, facilities for waste/medical waste management, potential environmental risks, and issues of non-compliance (if any).

35. Considering the levels of health care services provided by MOHFW in various administrative units[7], and category of health care facilities[8], a sub-set of at least 5 facilities from each category in each administrative unit will be audited. A quick review of the activities to be carried out jointly with HSD for selecting the sample of activities for safeguard audit. A simplified environmental audit format will be used by the PIU (Appendix 5). Category 1 activities (Table 9) will not require any audit. If there will be no major expansion, the environmental audits of those existing facilities may be considered environmental screening.

MOHFW, through its HSD, will be supported by qualified experts, in particular the environmental safeguards specialist within PIU, to do the environmental audits to determine the type of construction or upgrading needed, current medical waste management procedure, and existence of any areas where associated upgrading works may cause potential environmental risks or impacts and issues of non-compliance (if any).

36. A comprehensive audit report compiling the findings of all audits will be prepared and shared with ADB. The content of the report will include: (i) executive summary; (ii) description of the facility including past and current activities; (iii) summary of national, local and any other applicable environmental laws, regulations and standards; (iv) audit and site investigation procedure; (v) findings and areas of concern; and, (vi) corrective action plan providing for appropriate action(s) for each area of concern with cost estimates and schedule.

Step 4: Conduct Environmental Screening

[7] Metropolitan town, divisional towns, districts, upazila, and union
[8] Medical college and hospital, hospital, upazila health complex, community clinic, etc.

37. Proposed activities involving upgrading or construction works within the existing premises, such as vertical extension, horizontal expansion, or related work will require an environmental screening (Category 2 of Table 4.1). For example, development of facilities for passenger screening at the land ports will require minor civil works, installation of equipment and disposal of waste and used medical supplies may generate minor impacts if not managed properly. Setting of Critical Care Unit at the medical colleges with require minor repair or Potential minor impacts due to civil works and disposal of waste and used medical supplies will be managed through Environmental Code of Practices (ECOPs). A rapid simplified screening checklist is attached to identify the risks and prepare the ECOPs for managing the risks (Appendix 4).

Step 5: Conduct Initial Environmental Examination

38. Activities related to building Isolation Unit with at least 50 beds or more within the hospital premise or activities outside the existing facilities or for which impacts are unknown are subject to detailed assessment. Impacts of those activities will be assessed through an IEE and a well-developed EMP will be required for impact minimization (cf. Annex 5 for an IEE template).

39. The IEE shall include (i) the environmental management plan (EMP), describing the mitigation measures for each environmental impact identified; (ii) monitoring required, location and frequency of monitoring; (iii) responsibility for implementation and monitoring; and (iv) resources required for implementation. A sample EMP table for small-scale infrastructure works is given in Appendix 7.

40. Public consultation of persons that will be affected by the activity will be required during the preparation of the IEE. The results of public consultations will be thoroughly documented (i.e., concerns, attendance, location, date of consultation, response to concerns raised) and incorporated in the IEE.

Step 6: Implement the Environmental Management Plan

41. Potential impact of the proposed activities will be managed through the implementation of Environmental Management Plan (EMP) and Environmental Code of Practice (ECOP). Bidding documents will include the ECOP and EMP that incorporate the required resources to the Bill of Quantities (BOQ). Construction contracts will incorporate the general and specific conditions for environmental protection as indicated in the IEE and the EMP. The EMP will form part of the contract document, and if required, will be further updated during the construction phase. For temporary damages to land and structures incurred by the Contractor(s) as a result of the movement of machineries and construction materials, the PIU will ensure that the obligation to pay for the associated damages to assets is an integral part of the Contractor(s)' contract. Contractor guidelines for implementation of ECOPs and EMPs are in Appendix 8.

42. In case unanticipated environmental impacts occur during implementation, the PIU will conduct further assessment on the significance of the environmental impact, prepare an IEE, or reflect in the environmental monitoring report the assessment and needed mitigation measures, and will mobilize the resources needed to implement required mitigation measures including their monitoring. Any revision or update of the IEE will be subject to the review of ADB and disclosure on ADB’s website.

Step 7: Monitor the implementation performance

43. The PIU will monitor the implementation progress and performance of EMPs and ECOPs. Section 7 provides a discussion on the monitoring.

B. Review of Environmental Assessment

44. The IEEs including EMPs, and sample Environmental Screening Reports will be reviewed by the PIU and, if considered satisfactory based on the requirements of SPS 2009, the latter will submit them to ADB for final review and clearance. Once cleared by ADB, the IEEs will be publicly disclosed on the ADB and government websites.

V. CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM

A. Consultation and Participation

45. MOHFW and DGHS will engage stakeholders during the environmental risk assessment of project interventions and the process of consultations will continue, as appropriate, during project implementation. A stakeholder engagement plan will be finalized during implementation, which will be consistent with government procedure and development partners[9] involved with implementation of COVID-19 project.

1. Methodology

46. *Identification of Stakeholders.* 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.

47. *Approach.* Based on SPS 2009, the following principles of consultation will be applied: (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). To be more effective in consultations, MOFHW and DGHS will divide the stakeholders into three core groups as shown in Table 10. The three core groups may be changed during project implementation.

Table 10: Stakeholder Groups

Stakeholders	Description
Affected parties	• Individuals, households, and communities identified as vulnerable to COVID-19 • Individuals, households, and communities considered to be disadvantaged or vulnerable due to social or economic status • Individuals infected by COVID-19, their families and communities • Workers coming back to Bangladesh from neighboring countries (e.g., India) • Health workers at all levels particularly those in the frontlines • Workers supporting the renovation and rehabilitation of the existing health care facilities, medical colleges, IEDCR and BITID • Businesses and individual business owners supporting the supply of key goods and services in response to COVID-19 (e.g., masks, ventilators, face shields, etc.)
Interested parties	• Household and village population interested to know the government's response to prevent and contain COV-19 • People living near the borders and in the areas with dense population like Dhaka who are of particular risk from any person infected with COVID-19 that may be returning from abroad

[9] World Bank is providing support in addressing pandemic COVID-19.

Stakeholders	Description
	• Government officials; permitting and regulatory agencies at all levels of government, community levels including environmental, technical, social protection and labour authorities • Community-based organizations, NGOs at all levels • Business owners and providers of services, goods and materials who may have a role to play in the supply chain • Mass media in all levels (national, division, district, etc. and the associated interest groups
Vulnerable/disadvantage groups	• Elderly people/seniors (60 years old and above) • Children, particularly those with poor health (e.g., malnourished) • People with underlying health conditions (e.g., cancer, diabetes, hypertension, COPD, asthma, emphysema, etc.) • Persons with disabilities (i.e., physical and mental) • Single parent- headed households (male and female) • Indigenous peoples

48. Due to the COVID-19 pandemic, some restrictions may be in place during project implementation for face-to-face communication and on the number of people in a meeting or public gathering in a confined place; in this case, alternatives may be sought, in particular MOHFW together with DGHS may carry out consultations mainly through interactive information dissemination as described in the next paragraphs. The following approach will be considered:

(i) If smaller meetings are allowed, conduct consultations in small-group sessions (maximum of 10 people) 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 if they prefer while those with colds, cough or fever will not be allowed to join.

(ii) Diversify means of communication by using social media and online channels.

DGHS has a dedicated section on COVD-19 in their website, which can be used to disseminate information about the project.

49. MOHFW and DGHS will undertake the following:

- Coordinate with local radio stations (AM/FM) to disseminate information about the project;
- Use local newspaper to post information such as project brief or FAQ;
- 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 DGHS and MOHFW); and
- Coordinate with religious leaders to allocate some time to broadcast about the project.

50. The PIU 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, if any, will be highlighted as well as the date and location of consultations.

B. Arrangements for Information Disclosure

51. Public disclosure of relevant information about the project is required from project identification stage until completion, as per SPS 2009 and Access to Information 2018, to ensure that partnership with stakeholders is transparent. MOHFW and DGHS will ensure that key information on the components will be disclosed at the early stage of project activities identification through their websites both in Bengali and English version. The following documents will be submitted to ADB for disclosure on their website:

(i) IEEs (including site-specific EMPs);
(ii) Updated IEEs (including EMPs) and corrective action plan prepared during project implementation, if any, the environmental audit; and,
(iii) Environmental monitoring reports.

52. MOHFW and DGHS will send a written endorsement to ADB to disclose these documents to the ADB website. The PIU and DGHS will provide relevant environmental information in a timely manner, in an accessible place and in a form and language understandable to affected people and other stakeholders.

C. Grievance Redress Mechanism

53. The grievance redress mechanism (GRM) is a process of handling complaints that is understandable, transparent, gender-responsive, culturally-appropriate, and easily accessible to affected persons without cost and retribution. MOHFW will ensure that affected persons will have the chance to express their legitimate grievances or to file a complaint about the project by setting up a GRM as soon as the loan becomes effective. The GRM process will be aligned with the process adopted by MOHFW; however, compliance with the policy principles of ADB SPS 2009 will be ensured. The GRM will be reviewed in consultation with MOHFW and DGHS and finalized before the effectiveness. As guided by ADB SPS, following are the key aspects of GRM:

54. **Objectives**. The GRM aims to resolve complaints in a time-bound and transparent manner. MOHFW will ensure that: (i) all complaints are registered, investigated and resolved in a manner consistent with the requirements of SPS 2009 and the government; (ii) the complainants are kept informed on the status of their concerns and the resolutions available to them; and (iii) adequate staff and resources will be made available to implement the GRM.

55. **Filing a complaint.** Affected persons can submit a complaint either verbally or in written form. Verbal complaints can be submitted through a phone call, walk-in or in person while written complaints can be posted through mail/letter, comments/suggestions drop-box, MOHFW website, email, or fax. However, due to the restrictions of face-to-face communication as a result of the COVID-19 outbreak, complaint submission in written format or through phone calls will be recommended.

56. DGHS has a web-based, text message-based, and phone-based platform for citizen engagement that can be used as a complementary way of submitting a complaint; its link is http://app.dghs.gov.bd/complaintbox/?actn=adsrch. MOHFW will designate a staff as the GRM Focal Person.

57. **Structure.** The grievance redress mechanism will be under the responsibility of the Project Implementation Committee (PIC) under the chairmanship of DG, DGHS. MOHFW and DGHS will ensure the representation of women in the committee.

58. The committee will be responsible for resolving complaint(s) and will convene GRM-specific meetings once a month to review the complaint(s) received, if any. The committee will resolve complaint(s) within 15 days from the date of receipt and will keep a record indicating the name of complainant and nature of complaint, status of resolving the complaint, decisions or actions undertaken, and the date the decision was rendered effective. DGHS and the PIU will review the implementation of the GRM regularly to assess the effectiveness of the process and to examine their ability to address grievances. Any cost related to the implementation of the GRM will be part of the administration cost borne by MOHFW.

59. **Information disclosure.** DGHS will disclose details of the GRM through their website as well as in the billboards at the civil work sites. Details will include the contact person, a hotline phone number, and a simplified flowchart on how to file a complaint. Procedures to file a complaint and the details of the GRM Focal Person will be disclosed by the PIU to the affected communities prior to the start of civil works. More detailed information on the GRM will be posted on billboards at the work sites, a flyer in Bengali will be made available at the work site office and at the MOHFW offices. Aside from the details of the GRM Focal Person, a hotline phone number that will work 24/7 and a simplified flowchart on how to file a complaint will be disclosed to the affected communities.

60. **Record-keeping.** The GRM Focal Person will receive record and sort complaints, forward the complaints to the relevant person able to address each complaint, and monitor the status of the complaints. A logbook complaint registration and monitoring database will be created to ensure that complaints are resolved and acted on in a timely manner. A complaint record will include: (i) contact details of the complainant, (ii) date the complaint was received, (iii) nature and type of complaint, (iv) decisions or actions taken, and (v) date the complainant was informed of the decision.

61. Grievances filed and resolved will be summarized and included in the semi-annual monitoring reports submitted to ADB during construction stage and annually during post-construction/operation stage. Status of GRM implementation that will be included in the environmental monitoring report will include: (i) number of complaints registered with the GRC, (ii) level of grievance redress (first, second, and third levels), (iii) number of hearings held, decisions made, and the status of pending cases; and, (iv) lists of cases in process and already decided upon with details such as affected person, date of notice, date of application, date of hearing, decisions, remarks, actions taken to resolve issues, and status of grievance (i.e. open, closed, pending).

62. **Levels of grievance redress.** The complainant is not restricted to seek redress through the legal system at any point in the GRM process. Complainants or affected persons can seek redress to their complaints in three levels (see Figure 2):

(i) Level 1 – Activity/Intervention level

63. The complaint will be resolved at the activity level through the Site Engineer or Representative by the Contractor within one to two working days and advise the Complainant accordingly. The GRM Focal Person will record the resolution of the grievance. If the Complainant is not satisfied with the resolution, the grievance will be elevated to Level 2.

(ii) Level 2 – PIU level through the PIC

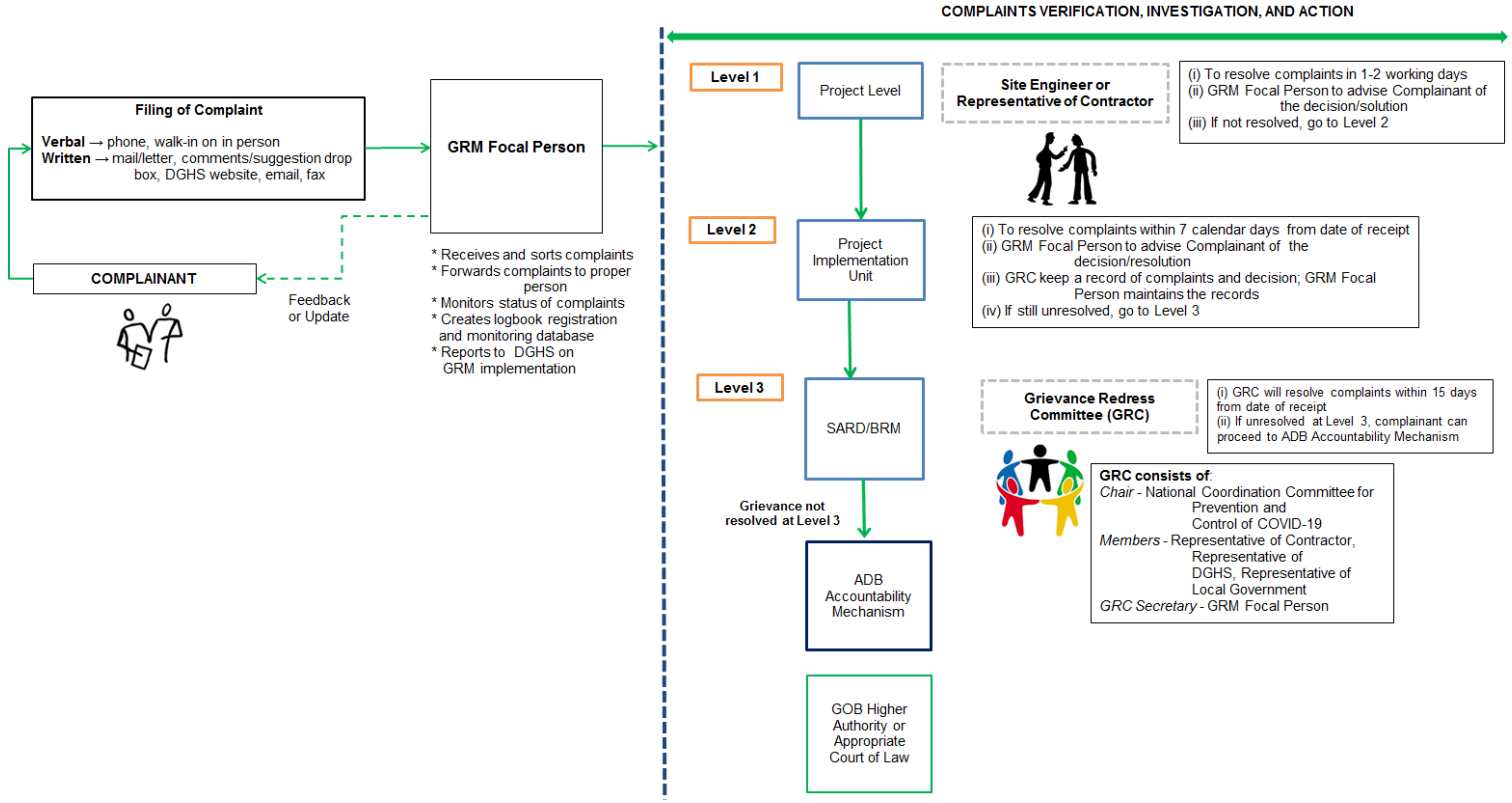
64. The GRM Focal Person will assist the complainant in elevating the complaint to the PIU. The PIU will address the grievance within 7 days through continuous interactions with the complainant to answer queries and resolve the complaint. If the complainant is not satisfied with the resolution, the grievance will be elevated to Level 3.

(iii) Level 3 –ADB

65. In the event the complainant is not satisfied with the decision after the GRM, the Complainant can access the ADB's Accountability Mechanism (ADB's Office of Special Project Facility or Office of Compliance Review).[10] ADB's Accountability Mechanism, including information on how to file a complaint, will be explained to the affected persons during consultations.

[10] Contact information on ADB's Bangladesh Mission is in https://www.adb.org/countries/bangladesh/main. Information on ADB's Accountability Mechanism is in www.adb.org/site/accountability-mechanism/main.

Figure 2: Grievance Redress Mechanism



VI. INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES

66. In response to the COVID-19 outbreak, the government has developed the National Preparedness and Response Plan for COVID-19 (Version 5, March 2020) and has strengthened their capacity by setting up a national preparedness and response coordination mechanism through the COVID-19 Emergency Operation Center (EOC) located at the IEDCR under the DGHS.

67. MOHFW will be the sponsoring ministry for the project and responsible for planning and management of curative, preventive as well as promotive health services for the population. DGHS will be the implementing agency. A project implementation unit (PIU) with key experts and staff will be established within the DGHS to provide the technical, administrative, and logistical support required for implementation.

68. The PIU will implement the project, conduct regular monitoring and evaluation activities and hold quarterly reviews of progress against the indicators. The PIU will have a full-time Project Director (PD) at the central level, full-time deputy PD(s), project coordinator, and other personnel with the required specialization posted from within the MOHFW/DGHS as well as technical experts or consultants with relevant qualification and experience engaged by MOHFW.

69. For technical oversight and hands-on support to the PIU for ensuring environmental safeguards, an intermittent environmental specialist will be appointed throughout project implementation up to completion. The project is expected to be completed by April 2023.

A. Roles and Responsibilities

70. **Project Implementation Unit (PIU).** DGHS will set up a PIU who will be responsible for managing the project components. The PIU will ensure (i) that the recommendations in the corrective action plan (CAP) from the environmental audits of the existing facilities, and the EMP and ECOP from the IEE of new construction, and are properly implemented; (ii) timely submission to MOHFW of the environmental monitoring report required by ADB (see Appendix 10 for proposed format); (ii) undertaking public consultations and information dissemination (as appropriate), and (iv) handling of complaints according to the GRM. Key responsibilities of the PIU will include the following:

- Designate a staff/expert to oversee implementation of the CAP, EMP and ECOP;
- Ensure compliance of contractor to CAP, EMP and ECOP;
- Engage stakeholders, as appropriate;
- Conduct onsite spot-checks to monitor compliance of contractor (see Appendix 9 for sample Environmental Inspection and Monitoring Checklist);
- In the event of non-compliance by Contractor or any unanticipated environmental impacts resulting from new construction, coordinate with DGHS and HSD of MOHFW in preparing a CAP to address the issue with time-bound actions; CAP will be submitted to ADB for review and will be disclosed to ADB website;
- Ensure that any grievance/complaint received are addressed in a timely manner;
- Maintain a record of grievance/complaint received, resolution or action taken, and include the details in the environmental monitoring report;
- Keep a list of relevant permits issued by the government for the project, if any; and,
- Prepare the respective environmental monitoring report and submit to MOHFW for consolidation and finalization by the environmental safeguard consultant.

71. **Contractor of civil works.** The CAP from the environmental audits of the existing facilities and the EMP which includes the ECOP will be an integral part of the Bid and Contract documents. This will be verified by the PIU. The contractor will designate their environmental staff who will be responsible in overseeing the implementation and compliance to the CAP, EMP and ECOP during construction phase and maintain a record of complaint/grievance submitted at the project level through the contractor including any actions taken to address the issue. Contractors will also follow the guidelines for COVID-19 preparedness provided in Annex 8.

72. The designated environmental staff of the contractor will submit a monthly compliance and monitoring report to the PIU-designated environmental staff. The compliance and monitoring report will cover the CAP, EMP, ECOP, and the specific environmental clause(s) in their contract.

73. **ADB.** ADB will review and timely approve the screening checklists submitted by MOHFW for new construction in sites outside the existing premises of the health facilities and medical colleges, IEDCR, and BITID. ADB will ensure that the CAP and the IEEs are disclosed on MOHFW and ADB websites prior to approval of the activity as required by SPS 2009 and Access to Information Policy 2018. The ADB can provide technical guidance to MOHFW and PIU during the preparation of environmental assessment, if needed.

B. Capacity Development

74. Capacity building of the PIU for implementation of environmental safeguard and management needs to be strengthened at all levels of the EA including DGHS, MOHFW and health care facilities and hospitals to ensure compliance with ADB SPS 2009. The environmental safeguards specialist will support capacity building through basic training and online meeting on regulatory requirements, safe handling and management of medical waste, environmental impacts, and environmental screening and management. The suggested capacity building program for the PIU is as follows:

Table 11: Capacity Development Program

Capacity Building Programs	Target audience
Training on EARF, MWMF for PIU, health care facilities, hospitals	PIU team, Medical professionals
Training on safe disposal of medical waste	PIU team, Medical professionals
Training on construction management	Contractor, labor

C. Staffing Requirements and Budgets

75. Environmental assessment and related monitoring/supervision tasks will be carried out by one environmental consultant. It is expected that the environmental consultant of the project will work in close collaboration with the PIU, ADB, and Department of Environment to remain up to date on all environmental assessment requirements and comply with all rules and regulations, as well as with the health care professionals and contractors at each site. The cost estimates for environmental assessment/monitoring/supervision under the project will be worked out in detail by the PMO.

Table 12: Tentative Costs for Environmental Assessment and Review of Activities(s)

Sl.	Items	Budget ($)
1	Environmental Consultant	60,000
2	Environmental monitoring	included
3	Training Programs	included
	Total	60,000

VII. MONITORING AND REPORTING

76. The PIU of the project, under DGHS, will monitor the progress of EMPs implementation and the compliance performance of their contractors. The PIU will undertake site inspections and document review to verify compliance with the EMPs and progress toward the final outcome (cf. Appendix 9 for simple monitoring checklist).

77. The PIU will be responsible in preparing the environmental monitoring reports to be submitted to ADB semi-annually during project implementation. The recommended format of the environmental monitoring report is presented in Appendix 10. An environmental consultant will be provided by the ADB to provide technical support to the PIU of the Project in ensuring compliance to ADB requirements and in preparing the environmental monitoring reports.

78. ADB will review the project performance based on the commitments by HSD, MOHFW as agreed in the legal documents. Monitoring and supervising of environmental safeguards will be integrated into the project performance management system of ADB. The review of project performance will be conducted by ADB until the project completion report is completed. ADB will carry out the following monitoring actions to supervise project implementation:

(i) conduct periodic site visits for projects with adverse environmental impacts;
(ii) review the environmental monitoring reports submitted by MOHFW to ensure that adverse impacts and risks are mitigated as planned and as agreed with ADB;
(iii) work with MOHFW and DGHS to rectify, to the extent possible, any failure to comply with their environmental commitments in the Loan Agreement, and exercise remedies to re-establish compliance as appropriate; and,
(iv) prepare a project completion report that assesses whether the objective and desired outcomes of the project have been achieved.

Appendix 1
ADB Prohibited Investment Activities List

The following do not qualify for Asian Development Bank financing:

(i) production or activities involving harmful or exploitative forms of forced labor[1] or child labor;[2]
(ii) production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phase-out or bans, such as (a) pharmaceuticals,[3] pesticides, and herbicides,[4] (b) ozone-depleting substances,[5] (c) polychlorinated biphenyls[6] and other hazardous chemicals,[7] (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora,[8] and (e) transboundary trade in waste or waste products;[9]
(iii) production of or trade in weapons and munitions, including paramilitary materials;
(iv) production of or trade in alcoholic beverages, excluding beer and wine;[10]
(v) production of or trade in tobacco;[10]
(vi) gambling, casinos, and equivalent enterprises;[10]
(vii) production of or trade in radioactive materials,[11] including nuclear reactors and components thereof;
(viii) production of, trade in, or use of unbonded asbestos fibers;[12]
(ix) commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and
(x) marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.

---

1 Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.
2 Child labor means the employment of children whose age is below the host country's statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" (www.ilo.org).
3 A list of pharmaceutical products subject to phaseouts or bans is available at http://www.who.int.
4 A list of pesticides and herbicides subject to phase-out or bans is available at http://www.pic.int.
5 A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at http://www.unep.org/ozone/montreal.shtml.
6 A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.
7 A list of hazardous chemicals is available at http://www.pic.int.
8 A list is available at http://www.cites.org.
9 As defined by the Basel Convention; see http://www.basel.int.
10 This does not apply to project sponsors who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to a project sponsor's primary operations.
11 This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.
12 This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

Appendix 2
Activities Selection Criteria

Within the government's National Preparedness and Response Plan for COVID-19 framework, ADB will prioritize activities for development and implementation to optimize the available resources in close coordination with the government and development partners. Each activity will be subject to the following selection criteria:

(i) direct impact on the lives of the people,
(ii) no duplication of activities funded by other donors,
(iii) compliance with ADB's SPS 2009 safeguards requirements for the environment, involuntary resettlement and indigenous people as detailed below
(iv) sustainability,
(v) inclusion of feedback from the beneficiary with consultation process, and
(vi) implementation period not extending beyond the project closing date.

A. Safeguards Criteria

Activities will conform with ADB's Safeguards Policy Statement, 2009 (SPS) with respect to social and environment considerations. Activities rating category A on environmental safeguards,[1] will be excluded. Activities described in ADB's Prohibited Investment Activities List will also be excluded (Appendix 1). Activities selection will consider the following:

(i) Activities that result in the significant conversion or degradation of natural habitat, are in critical habitat[2], or encroach on environmentally sensitive areas including legally protected areas or those officially proposed for protection, such as, National Parks, Ramsar sites, important bird areas, protected forests, wetlands etc. will not be eligible;
(ii) Activities which would result in significant damage to physical cultural resources or require physical cultural resources to be removed from their current location must be excluded;
(iii) Activities will not encroach on historical/cultural areas including World Heritage Sites, physical cultural resources covered by the Bangladesh Environmental Conservation Act of 1995, archeological sites and their buffer zones, etc.;
(iv) Activities involving major earthworks, hill cutting or large-scale cutting of trees will not be eligible;
(v) In particular, construction of large-scale waste management plants or facilities falling under category A will be not eligible; only small-scale waste management plants or facilities with no potential for significant impacts on the air or water environment may be considered if (i) no other alternative options are available, (ii)

[1] Activities likely to have significant impacts that are irreversible, diverse, or unprecedented.
[2] Critical habitat is a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value, including habitat required for the survival of critically endangered or endangered species; areas having special significance for endemic or restricted-range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers of individuals of congregatory species; areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and areas having biodiversity of significant social, economic, or cultural importance to local communities. Critical habitats include those areas either legally protected or officially proposed for protection, such as areas that meet the criteria of the Word Conservation Union classification, the Ramsar List of Wetlands of International Importance, and the United Nations Educational, Scientific, and Cultural Organization's world natural heritage sites.

they abide by all category B criteria of the SPS 2009 and (iii) compliance with the EARF and SPS 2009 is strictly followed; purchase of incinerators can be eligible under strict compliance to specific conditions outlined in the EARF[3]; and

(vi) Eligible activities must be environmentally and socially sound, subject to environmental and social screening and assessment in accordance with the EARF and SPS 2009, and include measures to avoid, minimize, mitigate or compensate for any potential environment and social impacts and risks. Activities not prepared in accordance with the EARF and SPS 2009 will be excluded.

[3] Incinerators will only be eligible if (i) no environmentally sound, non-incineration options are available to treat the anticipated volume of clinical waste, (ii) they are purchased as a self-contained, off-the shelf unit, (iii) their capacity per day is less than 1 ton, (iv) they comply with applicable emission standards to air, (v) they are sited more than 500m from residential or other sensitive properties, and (vi) there are suitable facilities available for the disposal of ash residues.

Appendix 3
Environmental Codes of Practice (ECOP)

These Environmental Codes of Practice (ECOP) aim to guide Contractors on environmental management during construction.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
ECOP 1: Waste Management		
General Waste	Soil, water and air pollution from the improper management of wastes and excess materials from the construction sites.	The Contractor shall • Adopt 3R process • Ensure proper collection and disposal of solid wastes within the construction camps • Insist waste separation by source means organic wastes in one bin/pot and inorganic wastes in another bin/pot at household level. • Store inorganic wastes in one chamber and inorganic waste in other chamber of the covered three chambered small concrete pit in the suitable location of the construction camp. When fill the chamber, inorganic wastes can be sold to the vender and organic wastes can be covered with earth for converting fertilizer. The local farmers can use fertilizer for their agricultural lands free of cost. • Do not burn/throw in to the waterbodies any general wastes.
Construction Wastes	Construction waste and environmental impacts due to improper waste management practices	The Contractor shall: • Collect construction wastes (such as piece of rod, wood, bamboo, tin sheet, brick etc.) separately from the sources and store in a designated area in the construction camp for re-use and to avoid potential environmental pollution. • Collect and store all hazardous wastes appropriately in container/bunded area and make available Material Safety Data Sheets (MSDS) for hazardous materials on-site during construction. Do not dispose hazardous liquid waste on soils. • Do not burn/throw in to the waterbodies any construction wastes.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
Hazardous waste code practice	Hazardous waste may impact on surrounding environment, land and occupational health of staff and workers	The Contractor shall • Store chemical wastes in a sealed container • Label all chemical containers for easy recognition. • Store, transport and handle all chemicals avoiding potential environmental pollution • Store all hazardous wastes/ chemicals appropriately in bunded areas away from water sources • Maintain and document Material Safety Data Sheets (MSDS) for all hazardous materials/ chemicals on-site during construction period. • Construct concrete or other impermeable hard-stand to prevent • Use special PPE for staff handling any hazardous materials seepage of hazardous chemicals in case of any accidental spills • Keep sufficient stock of absorbents for generally used chemicals, laboratory chemicals or for petrochemicals (e.g., dirt, sawdust, etc.) within the storage area to contain accidental spills. • Compliance to WHO certified biological waste management, handling and disposal process to be ensured for COVID-19 contamination with staff and surrounding communities • Bangladesh Medical Waste Management Rules 2008 will be strictly enforced.
ECoP 3: Surface/Ground/Drinking Water Management		
Drinking/Ground Water	• Ground/Drinking water at shallow depths may be contaminated with arsenic and other parameters and hence not suitable for drinking purposes. • Pollution of ground/drinking water resources.	The Contractor Shall • Select aquifers for drinking water free from arsenic and other contaminants. • Tube wells will be installed with due regard for surface environment, protection of groundwater from surface contaminants, and protection of aquifer cross contamination. • According to BNBC, toilets should be a minimum of 10m distance from the tube wells.
Discharge from construction sites	During construction both surface and ground water quality may be deteriorated due to construction activities, disposal of wastes into the nearby waterbodies (if any), connection of toilets with the water bodies and accidental spillage of liquid waste.	The Contractor shall • Install temporary drainage works (drains) in areas required for around storage areas for construction materials. • Divert runoff from undisturbed areas around the construction site. • Stockpile materials away from drainage lines. • Prevent disposal of all solid and liquid wastes into the nearby waterbodies and on the areas other than designated waste dumping sites.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
ECoP 3: Drainage Management		
Excavation and earth works, and construction yards	Lack of proper drainage for rainwater/liquid waste or wastewater owing to the construction activities harms environment in terms of water and soil contamination, and mosquito growth.	The Contractor shall • Prepare a program to prevent/avoid standing waters • Rehabilitate internal road-side drains immediately if damaged by any construction activities. • Construct wide drains instead of deep drains to avoid earth deposition in the drains that require frequent cleaning. • Protect natural slopes of drainage channels to ensure adequate storm water drains. • Regularly inspect and maintain all drains to assess and alleviate any drainage congestion problem.
Ponding of water	Health hazards due to mosquito breeding	• Do not allow ponding of water especially in the drains and in the construction camps. • Discard all the storage containers that are capable of storing of water, after use or store them in inverted position.
EcoP 4: Topsoil Management		
Land clearing and earth works	Loss of topsoil from excavation activities	The Contractor shall • Strip the top soil to a depth of min 0.50m and stock piles of height not exceeding 2m. • Remove unwanted materials from top soil like grass, roots of trees and similar others. • Locate topsoil stockpiles in areas outside drainage lines and protect from erosion. • Construct silt fences around the topsoil stockpiles to prevent loss of topsoil. • Spread the topsoil to maintain the physico-chemical and biological activity of the soil. The stored top soil will be utilized for covering all disturbed area and along the proposed plantation sites. • Prior to the re-spreading of topsoil over the site's filling areas, the ground surface will be ripped to assist the bonding of the soil layers, water penetration and re-vegetation.
EcoP 5: Dust/Air Quality Management		
Construction vehicles	Air quality can be affected by dust, generated due to movement of vehicles and combustion of fuels.	The Contractor shall • Fit vehicles with appropriate exhaust systems and emission control devices. • Operate the vehicles in a fuel-efficient manner. • Cover haul vehicles carrying dusty materials moving outside the construction site. • Impose speed limits on all vehicle movement at the worksite to reduce dust emissions. • Control the movement of construction traffic. • Service all vehicles regularly to minimize emissions.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
		• Watering filling sandy earth surface and cover asap by top soils.
Construction equipment	Air quality can be affected by emissions from equipment and combustion of fuels.	The Contractor shall • Fit machinery with appropriate exhaust systems and emission control devices. Maintain these devices in good working condition in accordance with the specifications defined by their manufacturers to maximize combustion efficiency and minimize the contaminant emissions. Proof or maintenance register shall be required by the equipment suppliers and contractors/subcontractors. • Machinery causing excess pollution (e.g. visible smoke) will be banned immediately from construction sites. • Service all equipment regularly to minimize emissions.
Construction activities	Dust generation from construction sites, material stockpiles specially dredged material stockpiles and access roads is a nuisance in the environment and can be a health hazard.	• Water the material stockpiles, access roads and bare soils on an as required basis to minimize the potential for environmental nuisance due to dust. Increase the watering frequency during periods of high risk (e.g., dry period and high winds). Stored materials such as sand shall be covered by vegetation/grass-turfing. • Establish adequate locations for storage, mixing and loading of construction materials, in a way that dust dispersion is prevented because of such operations.
ECoP 6: Traffic Management		
Road traffic during construction	Unmanaged traffic may create jam on the road and accidents	The Contractor shall • Prepare a traffic management plan and implement them strictly. • Ensure uninterrupted traffic movement during construction and shall include in the traffic plan: detailed drawings of traffic arrangements showing all detours, temporary road, temporary bridges, temporary diversions, necessary barricades, warning signs / lights, road signs, construction schedule etc. • Provide signs at strategic locations of the roads complying with national requirements
ECoP 6: Noise Management		
Construction vehicles	Increased noise levels due to vehicular traffic	The Contractor shall • Prepare a noise and vibration management plan (under the Pollution Prevention Plan) and submit the plan to project proponent for approval.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
		• Maintain all vehicles in order to keep it in good working order in accordance with manufactures maintenance procedures. • Make sure all drivers comply with the traffic codes concerning maximum speed limit, driving hours, use of cell phone during driving, etc. • Organize the loading and unloading of trucks, and handling operations for the purpose of minimizing construction noise on the work site.
Construction Equipment	Noise may have an impact on workers, local residents, wildlife, livestock etc.	The Contractor shall • Appropriately site all noise generating activities to avoid noise pollution to local residents. • Use the quietest available plant and equipment. • Maintain all equipment in order to keep it in good working order in accordance with manufactures maintenance procedures. Equipment suppliers and contractors shall present proof of maintenance register of their equipment. • Install temporary noise barriers by screen, tin, wood around generators to reduce noise levels. • The operator should be educated about the construction equipment and technique to reduce noise level. • Avoid the unnecessary use of alarms, horns and sirens. • Use ear plugs in noisy areas of the construction activities.
Construction activities	Noise and vibration may have an impact on workers, local residents, wildlife, livestock	The Contractor shall • Train the operators of construction equipment on potential noise problems. • Employ best available work practices on-site to minimize occupational noise levels. • Install temporary noise control barriers by tin sheets, screen etc. where appropriate. • Notify affected people if major noisy activities planned to be undertaken • Plan activities on site and deliveries to and from site to minimize impact. • Avoid undertaking the noisiest activities, where possible, when working at night near the residential areas.
ECoP 7: Topography		
Earthworks	Change in topography and local landscape and disturbance to the natural rainwater/flood water drainage	The Contractor shall • Ensure the topography of the final surface of all raised land areas are conducive to enhance natural draining of rainwater/flood water.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
		• Keep the finished surface of all the raised lands free from any kind of depression that insists water logging. • Undertake mitigation measures for prevention by grass-turfing and tree plantation, where there is a possibility of rain-cut that will change the shape of topography. • Cover immediately the uncovered open surface that has no use of construction activities with grass cover and tree plantation to prevent soil erosion and bring improved landscaping.
ECoP 8: Protection of Flora		
Vegetation clearance	Increase in deforestation caused by land clearing for the construction of new facilities	The Contractor shall • Reduce disturbance to vegetation. • Use appropriate and minimum size of machine to avoid disturbance to adjacent vegetation's. • Clear only the vegetation that needs to be cleared in accordance with the plans. These measures are applicable to both the construction areas as well as to any associated activities such as sites for stockpiles, disposal of fill etc. • Do not burn off cleared vegetation — where feasible, chip or mulch and reuse it for the rehabilitation of affected areas, temporary access tracks or landscaping. • Return topsoil and mulched vegetation (in areas of native vegetation) to approximately the same area of the roadside it came from. • Ensure excavation works occur progressively and re—vegetation done at the earliest. • Provide adequate knowledge to the workers regarding nature protection and the need of avoid felling trees during construction.
ECoP 9: Construction Camp Management		
Siting and Location of construction camps	Campsites for construction workers are the important locations that have significant impacts such as health and safety hazards on local resources and infrastructure of nearby communities.	The Contractor shall • Locate the construction camp at areas which are acceptable from environmental, cultural or social point of view. • Consider the location of construction camps away from communities in order to avoid social conflict in using the natural resources such as water or to avoid the possible adverse impacts of the construction camps on the surrounding communities. • Local authorities responsible for health, religious and security shall be duly informed on the set up of camp facilities so as to maintain effective surveillance over public health, social and security matters.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
Construction Camp Facilities	Lack of proper infrastructure facilities such as housing, water supply and sanitation facilities will increase pressure on the local services and generate substandard living standards and health hazards.	Contractor shall provide the following facilities in the camp sites. • Adequate accommodation for all workers. • Safe and reliable water supply. Water supply from tube wells that meets the national standards. • Hygienic sanitary facilities for all labors. According to Bangladesh National Building Code, the minimum number of toilet facilities required is one toilet for every ten persons.
Disposal of wastes (Municipal waste)	Management of wastes is crucial to minimize impacts on the environment	The Contractor should • Ensure proper collection and disposal of solid wastes within the construction camps • Insist waste separation by source; organic wastes in one bin/pot and inorganic wastes in another bin/pot at household level. • Store inorganic wastes in one chamber and inorganic waste in other chamber of the covered three chambered small concrete pit in the suitable location of the construction camp. When fill the chamber, inorganic wastes can be sold to the vender and organic wastes can be covered with earth for converting fertilizer. The local can use fertilizer for their agricultural lands free of cost.
Health, hygiene and safety	Potential for diseases to be transmitted including COVID-19, measles, diphtheria, HIV/AIDS, exacerbated by inadequate health and safety practices.	The Contractor shall • Provide first aid facility round the clock. Maintain stock of medicines in the facility and appoint designated first aider or nurse. • Conduct health screening of the laborers coming from outside areas for COVID-19, HIV, etc. • Train all construction workers about COVID-19 contamination and spreading process through contact, gathering, sanitary wastes of diseased person, etc and basic sanitation and health care issues• Provide awareness on sexually transmitted diseases, such as HIV/AIDS to all workers on a regular basis. • Workers involved for any short renovation activities at isolation area for COVID-19 will have WHO certified PPE and subsequently dispose the PPE in designated areas • Maintain a registry of the person present during the toolbox meeting. Anyone not participating in the tool box meeting will not be allowed to work • Provide certified PPE for workers based on specific activities, • Provide adequate drainage facilities throughout the camps to ensure that disease vectors such as stagnant water bodies.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
		• Regular spraying of mosquito repellant during monsoon. • Carryout short training sessions on best hygiene practices to be mandatorily participated by all workers.
ECoP 10: Sensitive/Cultural Issues		
Construction activities near sensitive/cultural sites (such as mosque, mandir, pagoda, madrasha, permanent water body, eidgah, garden, etc.)	Disturbance from construction works to the sensitive/cultural sites, and contractors lack of knowledge on cultural issues cause social disturbances.	The Contractor shall • Communicate to the public through community consultation and announcement regarding the scope and schedule of construction, as well as certain construction activities causing disruptions. • Do not block access to sensitive/cultural sites, wherever possible. • Stop construction works that produce noise (particularly during prayer time) should there be any mosque/religious institute close to the construction sites and users make objections. • Take special care when working next to a sensitive/cultural institution. • Show appropriate behavior with all construction workers especially women and elderly people. • Resolve cultural issues in consultation with local leaders and DPE/LGED/DPHE • Establish a mechanism that allows local people to raise grievances arising from the construction process.
ECoP 11: Occupational Health and Safety (OHS)		
Best practices	• Construction works may pose health and safety risks to construction workers that may cause severe injuries and deaths. • Population in the proximity of the construction site and the construction workers will be exposed to several (i) biophysical health risk factors, (e.g. noise, dust, chemicals, construction material, solid waste, vector transmitted diseases etc.), (ii) risk factors resulting from human behaviour and (iii) road accidents from construction traffic.	The Contractor shall • Implement suitable safety standards for all workers and site visitors based on international standards (e.g, ILO Guidelines on Safety and Health in Construction; IFC-WB EHS General Guidelines 2007, etc.) and relevant national requirements • Provide the workers with a safe and healthy work environment, considering inherent risks in its particular construction activity and specific classes of hazards in the work areas. • Provide PPE to workers such as safety shoes, safety helmets, face masks, hand gloves, protective clothing, goggles, full face eye shields, and ear plugs. • Maintain the PPE properly by cleaning dirty ones and replacing them with the damaged ones. • Safety procedures include provision of information, training on use of hazardous materials etc.

Project Activity/Impact Source	Environmental Impacts	Mitigation Measures/Management Guidelines
		• Inform the local authorities responsible for health, religious and security prior to start of civil works and establishment of construction camps to maintain effective surveillance over public health, social and security matters.
OHS	Child and pregnant women	The Contractor shall • Not hire children, and less than 14 years old, and pregnant women
Accidents	Lack of first aid and health care facilities in the immediate vicinity	• Provide health care facilities and first aid facilities • Document and report occupational accidents, diseases, and incidents to local authorities • Prevent accidents, injury, and disease by providing safe work environment • Require construction drivers to comply with driving rules • Provide adequate lighting in the construction areas.
Construction Camps	Lack of housing, water supply and sanitation facilities will increase pressure on local services that may cause substandard living and health hazards.	The Contractor shall provide the following facilities in the campsites • Adequate ventilation facilities. • Safe and reliable water supply. Water supply from tube wells that meets the national standards. • Hygienic sanitary facilities and sewerage system. • Storm water drainage facilities. • Safe storage facilities for chemicals. • Solid waste collection and disposal system. • Arrangement for trainings. • Security fence at least 2 m height. • Sick bay and first aid facilities.
Water and sanitation facilities at the construction sites	Lack of water sanitation facilities at construction sites may pose health hazards	Contractor will follow ECoP 2 to ECoP 9.
Trainings	Lack of awareness and basic knowledge in health care among workers	The Contractor shall • Train all construction workers in basic sanitation and health care issues (e.g., how to avoid malaria and sexually transmitted infections) • Train construction workers on general safety matters, and on the specific hazards of their work. Training will consist of basic hazard awareness, site specific hazards, safe work practices, and emergency procedures for fire, evacuation, and natural disaster

Appendix 4
Environmental Screening Checklist

A Site-Specific Environmental Code of Practices must be prepared

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. Land port		
II. Critical care unit		
III. Other		

Part B: Environmental Screening Checklist:

I. For Land Port

Environmental Problems/Issues	**No**	**Yes**	**If Yes, please quantify/explain if possible**
1. Possibility of water stagnation/drainage congestion /waterlogging for implementing interventions?	[ ]	[ ]	
2. Involves earthwork or land filling	[ ]	[ ]	
3. Involve demolition of existing building	[ ]	[ ]	
4. Damage of cultivable land (area)	[ ]	[ ]	
5. Run-off/waste-water flow to/from water sources	[ ]	[ ]	
6. Involves latrines, septic or sewage systems	[ ]	[ ]	

Environmental Problems/Issues	No	Yes	If Yes, please quantify/explain if possible
7. Generation of construction waste	[ ]	[ ]	
8. Generation of noise	[ ]	[ ]	
9. Generation of dust	[ ]	[ ]	
10. Open waste dumping site around	[ ]	[ ]	
11. Require to tree cutting	[ ]	[ ]	
12. Poor quality of drinking water (e.g., arsenic)	[ ]	[ ]	
13. May affect quality of groundwater	[ ]	[ ]	
14. May affect quality of surface water	[ ]	[ ]	
15. Unsafe disposal of PPEs/medical supplies	[ ]	[ ]	

II. For Critical Care Unit

Environmental Problems/Issues	No	Yes	If Yes, Please quantify if possible
1. Involve demolition of existing building	[ ]	[ ]	
2. Damage to cultivable land (area)	[ ]	[ ]	
3. Generation of construction waste	[ ]	[ ]	
4. May generate noise during construction (if any)	[ ]	[ ]	
5. May generate dust during construction (if any)	[ ]	[ ]	
6. May generate vibration during construction (if any), endangering the structural integrity of the premises	[ ]	[ ]	
7. Civil works might affect in-house medical professionals or patients due to noise, dust, vibration, waste, etc.	[ ]	[ ]	
8. Workers/labors are exposed to infectious disease (COVID-19)	[ ]	[ ]	
9. Unsafe disposal of PPEs/medical supplies (operation)	[ ]	[ ]	
10. In-house medical waste management facility and processes non-existent/poor	[ ]	[ ]	
11. Inappropriate use of PPE on site and or personnel is not sufficiently trained on use of PPE and prevention measures for COVID-19	[ ]	[ ]	
12. Risks of community contamination (eg. 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)	[ ]	[ ]	

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: Environmental Code of Practices (ECOPs) (Please identify ECOPs from Annex 3 for the answers "Yes" in Part B, and additionally identify some measures for overall enhancement of the local environment at the project site).

a. Suggested Environmental Code of Practices (ECOPs)

Environmental Issues/ Problems	Environmental Impacts	Environmental Code of Practices* /Enhancement Measures	Cost
1.			
2.			
3.			

b. Environmental Monitoring Plan

Environmental Issues/ Problems	Monitoring period/ Frequency	Person responsible
1.		
2.		
3.		

Prepared by (Name & Designation): …….....
Signature: ……..... **Date:** ……..……..…….

Reviewed & Approved by (Name & Designation): …….....
Signature: ……..... **Date:** ……..……..…..….

Appendix 5
Proposed Checklist for Environmental Audit of Existing Health Facility

Items		Description
Name and Address of the Facility		
Type of Healthcare Centre		
Population of City/Town		
Number of beds	Occupancy rate	
	Number of patients on average in the out-patient department	
Type of care primarily provided – e.g., immunization, deliveries, HIV, TB, Minor Surgeries, OPD etc.		
Medical waste management (MWM)	Available MWM concept and the policy	
	Compliance to policy	
	Relevant clearance obtained to implement policy	
	Steps undertaken to improve MWM in the facility	
	Improvement from MWM due to government initiative in the health sector	
	Quantity and mode of disposal of different types of wastes from the facility	

Generation of Waste

Nature of waste	Quantity Generated per day	Method of Treatment and Disposal
Outdated Drugs, Chemicals and disinfectants used in Labs & for Decontamination of Needles etc.		
Syringes, Conules, Catheters, (Infectious Plastics)		
Pathological and anatomical Waste, Infectious Waste, Infected Blood, Cytotoxic waste, etc.		
Glass Waste (both broken and non-broken)		
Needles, Blades and Scalpels		

Use reusable syringes	
Available sterilization equipment in place	
Mode of collection and transportation of different types of waste from the facility	
Any color-coding used for collection of different types of wastes	

Type of Waste	Color of Container and markings	Type of Container
Highly Infectious Waste	Red	Strong Leak-proof plastic bag or container capable of being autoclaved
Other infection waste, pathological and anatomical waste	Yellow	Leak-proof plastic bag or container
Sharps	Yellow, marked “SHARPS”	Puncture-proof container
Chemical and Pharmaceutical waste	Brown	Plastic bag or container

Radioactive Waste	-	Lead box, labeled with the radioactive symbol
General Healthcare waste	Black	Plastic bag
Any in-house facility to treat infectious waste and other waste (details)		
Any deep burial pits for final disposal		
If there is deep burial pit, state monitoring activities (i) any groundwater around the burial pits (ii) type of construction of burial pits to ensure non-permeable (iii) appropriate safety precautionary signage with the burial pits		
Any recycling system for plastic and glass		
If no in-house facility to treat infectious waste, any external facility such as common waste treatment facility for treatment and disposal		
Mode of transport of medical waste to external treatment facility		
Average quantity of medical waste transported		
Level of awareness and training at different levels of staff to improve MWM		
Responsibility for monitoring the facility		
Any MWM team		
Relevant government clearances for MWM – up to date		
Any coordination with the Ministry of Public Health		
Any guidelines on MWM provided by government		
Perceptions of community, NGO, and people to MWM of facility		
Awareness of healthcare workers on the environmental and health implications of MWM		
Any constraints in implementing MWM in the facility		
Actions taken to improve MWM		
Any NGO or external agency working with the facility to improve MWM		
Any support from different agencies like DGHS, DOE, etc. on MWM		
Occupational health and safety		
Any industry accreditation (e.g., ISO 900, ISO 14000, OSHA, etc)		
Any OHS plan and procedures		
Any OHS training and safety drills		
Available and appropriate PPEs and safety gears		
Emergency preparedness and response procedures and equipment		
Provision of adequate space or lounge, lockers, etc. for health workers		
Provision of safe drinking water		
Provision of sanitary facilities (lavatories and showers) separate from patients and health workers (also separate male and female)		
Condition of entry and exit (safe access)		
Adequate ventilation and lighting		
Provision of confined space for special tasks (state condition)		
Community health and safety		
Any community consultations on emergency response and preparedness		
Any community health and safety plan and procedures		
Compliance to national requirements		
Any non-compliance to national requirements		
If so, provide details		

Appendix 6
Outline of an Initial Environmental Examination Report[1]

A. Executive Summary

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

B. Policy, Legal, and Administrative Framework

2. 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 Proposed Project

3. 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.

D. Description of the Environment (Baseline Data)

4. This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

E. Anticipated Environmental Impacts and Mitigation Measures

5. 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 [Appendix 2, para. 6]), 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. Information Disclosure, Consultation, and Participation

6. 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

[1]Based on ADB SPS 2009, Annex to Appendix 2, p51.

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.

G. Grievance Redress Mechanism

7. 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.

H. Environmental Management Plan

8. 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.

I. Conclusion and Recommendation

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

Appendix 7
Environmental Management Plan (EMP)
Sample EMP for Small-Scale Construction Project

A sample EMP is provided and should be adjusted based on specific activity and can be considered as environmental specifications for construction.

Small-scale construction activities may cause impacts and nuisance to nearby surroundings, and these need to be avoided or mitigated through application of good engineering practices and strict environmental safeguard measures including use of environment-friendly construction materials and equipment, waste management techniques, contain dust generation, noise control, site management, safety controls, and provision of safe water and sanitation facilities.

This sample EMP covers potential adverse environmental impacts and corresponding mitigation measures. It is expected that Contractors for small-scale construction works under Output 1 will adhere to these measures as part of bidding specifications and Contractors' Work Plan.

Sample Format for Environmental Management Plan for Small-Scale Civil Works

Phase	Impact/Issue	Mitigation Measure
Design	Drawing and planning the construction of buildings by adapting to adjoining physical landscape and minimizing possible environmental issues.	Minimization measures for adverse environmental impacts should be introduced in the construction design.
	Barrier-free will be integrated in the design to the extent possible.	Care will be taken in the design to provide easy access to persons with mobility challenges in all public areas of the building.
	Safe disposal of sewer water from toilets	To the extent possible, sewer will be treated in appropriate septic tank for anaerobic treatment with retention of at least 48 hours and be disposed of in town sewer if existing. Where town sewer is not available, an aerobic treatment will be provided in the form of a soak away pit. The pit will be located at least 40 meters away from any water wells.
	Increased volume of water, sanitation and related effluent discharges in the existing 525 health care facilities	Increased volume of water requirement, sanitary facilities and related effluent discharges at all 525 health care facilities will be reviewed at the design phase and facilities to be increased and issues will be addressed as safe management practice.
Construction	Dispersion of dust, debris, and suspended particulates from construction sites to surrounding structures may cause nuisance to surrounding families and businesses, especially vulnerable persons (children, elders, etc.).	Contractors to spray water to exposed areas, excavated materials, adjacent vegetation to reduce dust during the dry season and regularly clean debris to contain dust generation

Phase	Impact/Issue	Mitigation Measure
	Increase in dust levels from construction vehicles and traffic volume	• Impose speed limits for construction vehicles • Proper maintenance of service vehicle • Implement site-specific EHS Plan and subsequent monitoring will reduce air emission at acceptable air emission standards (IFC-WB EHS General Guidelines 2007 and ECR 2005).
	Increase noise level and intermittent vibration from construction machinery, equipment and vehicles will cause disruption to patients in the facilities, nearby residents, and other institutions	• Civil works will generate noise and low vibration (i.e. given the scale of upgrading activities). Compliance to the limits set by the Noise Pollution Control Rules 2006 will be strictly enforced. • Measures such as work scheduling of noise-generating activities, use of temporary enclosures, enforcing of speed limits for construction vehicles, use of horns by vehicles will be prohibited. • Keep loading and staging areas onsite within the perimeter protected by the recommended temporary noise barrier and at least 50 m away from the noise-sensitive properties offsite. • Stop the construction work during prayer time and night time (6pm-7am) • Noise level at the boundary of the construction sites will be monitored to ensure compliance to Noise Pollution Control Rules 2006 and IFC-WB EHS General Guidelines 2007
	Impact to surface water quality due to silt runoff, hazardous liquid wastes, and chemicals that may be used in construction	• Construction run off will be required to have internal drainage system to collect construction runoff into a temporary pit. • Hazardous liquid waste, hazardous materials and other liquid waste will be stored in impermeable bunded area with 110% volume for temporary period before treating to a treatment plant and subsequently discharge in a designated disposal site. • Implement appropriate Environmental Codes of Practice to prevent runoff and manage waste at work sites

Phase	Impact/Issue	Mitigation Measure
		• Good housekeeping at construction sites will be observed at all times to maintain IFC-WB EHS General Guidelines 2007
	Poor sanitation and solid waste disposal in construction work sites that may cause possible transmission of communicable diseases (such as STI's and HIV/AIDS) from workers to local populations	• Good housekeeping will be observed in all work sites at all times. Contractors will be required to provide workers with sanitary facilities and safe drinking water supply separately from the existing health facilities and medical colleges. • Prior to any civil works, orientations/briefing on communicable diseases and good sanitation will be conducted by the contractors under the supervision of MOHFW • WHO (Interim Guidance, 19 March 2020) on water, sanitation, hygiene, and waste management for the COVID-19 virus will be referred to. • Workers will be locals and worker-based camps will be to provide a temporary safe place during breaks from daily work. Vacuum truck will be involved in case of excessive sewage water at camp site to suck sewage liquid and treat in a treatment plant before discharging in the designated disposal site.
	• Creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents • Possibility of temporary waterlogging if civil works will be done during the rainy season	• Review of the drainage system of the existing health facilities and medical colleges will be conducted by the Contractors to assess if improvement will be needed • Good housekeeping in all work sites will be enforced at all times. • Regular inspection of work sites to check for presence of potential temporary breeding habitats will be conducted.
	Potential social conflicts if workers from other regions or countries are hired	• Civil works are expected to be minor. Only locally unavailable skilled labour will be hired from other regions and most of others works will be carried out by the local workforce to avoid any such conflicts.
	Large population influx during project construction that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)	• Civil works are considered to be minor. Local workforce will be given preference. • Sufficient separate sanitary facilities and water shall be provided to the labor force to avoid any such conflict or contact with the local people.

Phase	Impact/Issue	Mitigation Measure
	Community safety risks due to both accidental and natural causes, 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 during construction period	• Appropriate design features to meet national and international standards will be included, and measures/plans and procedures will be implemented to minimize risks. • Unauthorized public access to the construction sites and laboratories will be prohibited. • Environmental audit and risk assessment will be conducted during implementation
	Generation of wastes and other construction debris	• Contractor will be required to reduce waste generation, whenever feasible. General municipal waste and hazardous wastes to be screened at source, separated and disposed temporarily in the bin at two different designated locations as non-hazardous designated place and hazardous materials designated places for time-bound disposals. • Accordingly, non-hazardous will be disposed to designated municipality owned disposal site. • Generation of solid waste will comply with relevant provisions in the City Corporation Act 2009 on waste removal, collection and management and maintain 3R. • Hazardous wastes will be disposed of at designated disposal sites following the requirements of Basel Convention. • Construction area will be separated with temporary barriers to avoid potential infection from the hospital premises to the construction workers
	Wastewater discharges during renovation of existing facilities and potential for contamination of drinking water pipeline system of adjacent neighbors	Sewage water runoff will be collected through separate internal drainage system to a temporary impermeable pit for temporary storage and will be collected through vacuum truck into the sewage treatment plant prior to discharge
	During renovation of existing facilities health facilities, construction workers may be infected by COVID-19 from patients	• Renovation works to be completed before placement of COVID-19 infected patients in the facility. • Construction areas to be separated completely from other areas of the hospital or HCF under construction/renovation. • In case renovation works continue during presence of COVID-19 infected patients, all workers will

Phase	Impact/Issue	Mitigation Measure
		have three days prior training, awareness about community transmission, social distancing, WHO certified PPE for each workers for each day, PPE discarding separate areas, separate washing areas and subsequent designated disposal sites for PPE for incineration.
	Pedestrian safety and security risks particularly for the children, elderly, and persons with disability, and traffic congestion	• Contractor to provide temporary fence enclosing work sites • Speed limits will be impose and to designate a traffic signal person • Provide temporary crosswalk for mobility challenges
	Interruption of public services such as water, electricity, telephone, and transport routes.	Contractor to coordinate with local authorities and notify them if there is a need to interrupt services
	Inform local government units on the schedule of civil works, possible interruption of services, etc.	Contractor to provide clear and visible signs on the schedule of construction activities
Post-Construction/Operation	Health hazards arising from inadequate design of facilities for receiving, storing, and handling of chemicals, medical/clinical wastes and other hazardous wastes	Qualified design team will evaluate existing facilities and will address probable volumes, sorting areas of hazardous and non-hazardous, medical/clinical wastes at sources and subsequent disposal under site-specific EHS plan
	Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project operation	• Implement site-specific EHS plan • Use of WHO-certified PPE for protection from COVID-19 infection • prior health safety training to workers • Segregation of wastes at sources in specific bins • Time-bound transfer of wastes to designated waste disposal sites • Routine health checkup of health workers and staff • Compliance to WHO certified biological waste management, handling and disposal process of waste from COVID-19 infection • Compliance to Bangladesh Medical Waste Management Rules 2008
	Risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during operation	• No explosives will be used • Mandatory use of appropriate PPE, Reagents and chemicals used in testing protocols, while complex, are in pure solution following the guidelines and requirements of WHO

Phase	Impact/Issue	Mitigation Measure
		• Temporary storage will refer to WHO specific guidelines • Fuel and other chemicals will be kept appropriately designed storage area
	Community safety risks due to both accidental and natural causes, 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 operation and decommissioning	• Appropriate design features to meet national and international standards will be included, and measures/plans and procedures will be implemented to minimize risks. • Unauthorized public access to the construction sites and laboratories will be prohibited. • Environmental audit and risk assessment will be conducted during implementation. • Regular monitoring will be done under direct management of a professional Occupational Health & Safety Officer.
	Community health and safety risks due to generation of solid and hazardous waste, and its transportation to designated disposal site	• Trained and qualified waste transport company will be employed and the same will be required to comply with WHO certified COVID-19 contamination control guidelines for handling waste including hazardous waste • General municipal waste and hazardous wastes to be screened at source, separated and disposed temporarily in the bin at two different designated locations as non-hazardous designated place, and hazardous materials designated places for time-bound disposals • Non-hazardous will be disposed to municipality owned disposal site. • Generation of solid waste will comply with relevant provisions in the City Corporation Act 2009 on waste removal, collection and management • Medical waste management will comply with the requirements of WHO proposed guidelines for COVID-19 and Medical Waste Management Rules 2008. • Hazardous wastes will be disposed of at designated disposal sites following the requirements of Basel Convention. • All generated wastes will be managed based on site-specific waste management plan under strict supervision of an EHS Officer of the existing medical facilities.

Appendix 8
Contractor Guidelines on COVID-19 Preparedness

1. These guidelines aim to assist contractors during construction works in response to the COVID-19 outbreak.

2. The Contractor will be required to comply with the requirements and recommendations from the Bangladesh Labor Bangladesh Labour Act 2006 (amended 2013), Bangladesh Labour Rules 2015, the IFC-WB Environmental, Health, and Safety (EHS) General Guidelines (April 2007), the WHO guidance[29], and the ILO Workplace Response to the Coronavirus Disease outbreak.[30]

3. The Contractor will employ an Occupational Health and Safety (OHS) Engineer/Officer who shall oversee compliance to the OSH requirements particularly on prevention of COVID-19 transmission in the workplace. This shall include but not limited to the following:

(i) Orientation of workers on OHS, disaster and emergency response procedures, and COVID-19;
(ii) Provision and use of personal protective equipment (PPE), fire suppression system and appropriate medical emergency response logistics;
(iii) Placement of safety signs, posters (e.g., WHO posters on COVID-19), information and warning signs within the worksite and adjacent areas;
(iv) Implementation and maintenance of good housekeeping;
(v) Monitoring of occupational health and environmental controls (e.g., airborne contaminants, noise, illumination, ventilation, temperature and humidity); and
(vi) Conduct of regular safety inspection and incident reporting/ recording.

4. The Contractors will provide all subcontractors with compulsory site induction on COVID-19 response prior to start of any works. The OHS Engineer/Officer will keep a record of the contact details of all worker and staff: mobile telephone number, alternate telephone, email, and address where they are staying.

5. The Contractor to maintain regular housekeeping practices, including routine cleaning and disinfecting of surfaces, equipment, and other elements of the work environment. Make sure workplaces are clean and hygienic –Surfaces (e.g. desks and tables) and objects (e.g. telephones, keyboards) need to be wiped with disinfectant regularly.

6. The Contractor will ensure that all persons report to work health and in a fit state. Any person showing signs of cough and colds will not be allowed to enter the work sites and will be advised to stay at home and isolate.

7. The Contractor will ensure that staff, subcontractors, and workers have access to places where they can wash their hands with soap and water. Wash stations at strategic locations within the work areas that are equip with adequate soap and water will be provided for workers to wash their hands. Put sanitizing hand rub dispensers in prominent places around the workplace. Make

---

[29] WHO. Coronavirus disease (COVID-19) technical guidance: Guidance for schools, workplaces & institutions. 19 March 2020. https://www.who.int/docs/default-source/coronaviruse/advice-for-workplace-clean-19-03-2020.pdf

[30] ILO. ILO Standards and COVID-19 (coronavirus)23 March 2020 - Version 1.2 https://www.ilo.org/global/topics/safety-and-health-at-work/areasofwork/occupational-health/WCMS_738178/lang--en/index.htm.

sure these dispensers are regularly refilled. All workers will be required to practice basic hygiene such as hand washing before eating, drinking, and after using the toilet.

8. The Contractor will display posters promoting hand-washing, and social distancing – ask local public health authority for these or consult www.WHO.int. Combine posters with other communication measures like offering guidance from OHS Officers, briefings at meetings, and information on intranet sites to promote hand-washing.

9. The Contractor will not allow any person on medication for a specific medical condition that will impair their performance to work at the sites.

10. The Contractors and all subcontractors will provide the appropriate PPE (Personal Protective Equipment) for all their workers. All tools and PPE must be in good condition, fit for purpose, and receive all the mandatory and statutory inspections, checks and calibrations, as and when required. Proof that they are in good condition may be require, if needed. Workers will be responsible to wear PPE appropriately, take good care of equipment and report any defects. Have surgical masks and disposable gloves available to provide anyone who develops respiratory symptoms.

11. The Contractor will actively monitor where COVID-19 is circulating. In the event COVID-19 is known in the community, the Contractor will brief and/or orient workers, staff and subcontractors that anyone with even a mild cough or low-grade fever (37.3^{o}C or more) will stay at home. A work from home arrangement, if possible can be arranged.

12. The Contractor will keep promoting the message that people need to stay at home even if they have only mild symptoms of COVID-19 by displaying posters with this message in the workplace combined with other channels of communications commonly used in the workplace.

13. The Contractor to develop a preparedness and response plan to prevent COVID-19 infection in the workplace. The preparedness plan will be submitted to OHFW and DGHS for approval.

Appendix 9
Proposed Environmental Site Inspection and Monitoring Checklist

Loan No.:

Health Facility or Laboratory		Location	
Inspection Date		Inspection Time	
Inspector		Weather at time of inspection:	

Items for Inspection	Y	N	NA	Remarks (i.e. problem observed, possible cause of non-compliance and/or proposed corrective action)
Site Office				
Site office established				
Contractor appointed an EHS supervisor				
EHS supervisor or designated person on-site				
Copies of EMP, contract document, and environmental clauses on-site				
Details of construction (i.e., name of contractor, duration of construction, emergency hotline, safety, etc.) disclosed on-site				
Details of grievance redress mechanism (i.e., contact person, complaints hotline, etc.) disclosed onsite				
Complete first aid kits on-site				
Photographs of before and after completion of work on board				
Incident register book on-site				
Complaint/visitor's comment book available				
Record of regular consultation of Contractor to University management and/or nearby residents to check if there are environmental concerns				
Any complaint filed with the contractor by staff and settlements				
Disturbed areas properly re-vegetated after completion of work				
Emergency Preparedness and Response				
Fire extinguishers/fire-fighting equipment properly maintained and not expired				
Fire escapes properly marked, clear, and not obstructed				
Emergency contacts available in case of any incident				
Accidents/incidents reported, reviewed, and corrective/preventive actions recorded				
Occupational Health and Safety				
Provision of labor and equipment shed				
Provision of sanitation facilities and safe drinking water				
Use of personal protective equipment (PPEs)				

Items for Inspection	Y	N	NA	Remarks (i.e. problem observed, possible cause of non-compliance and/or proposed corrective action)
Installation materials and equipment storage				
Separate storage of fuel and lubricant				
Training on OHS, use of PPE, etc. done before construction works				
Clear danger and warning signs on-site for students, faculty, and community				
Fencing of construction site and designation of security personnel				
Good housekeeping - site kept clean and tidy				
Containers properly labelled for easy recycling or waste segregation				
Special facilities for female workers				
Bin for collecting garbage and food waste				
Air Quality				
Opened land and construction sites sprayed with water to minimize generation of dust				
Any evidence of excessive dust generation				
Stockpiles of dusty materials and dust-generation activities like handling of cement done in enclosed areas or sprayed with water				
Vehicles carrying dusty loads/materials covered or watered over before leaving the site				
Construction equipment well maintained (any black smoke or smoke belching observed)				
Demolition work areas watered				
Speed control measures applied (e.g. speed limit sign)				
Noise				
Evidence of excessive noise				
Any noise mitigation measure adopted (e.g. use noise barrier/enclosure)?				
Prohibition of using megaphone or whistle on-site				
Use of well-maintained equipment and vehicles				
Water Quality				
Sanitary facilities for workers equipped with on-site treatment system				
Wastewater discharged to soil				
Evidence of oil spill				
Chemicals properly stored and labelled				
Spill kits/sand /saw dust used for absorbing chemical spillage readily accessible				
Special facilities for female labor				
Construction waste/recyclable materials and general refuse removed off-site regularly				
Water pipe leakage and wastage prevented				

Reviewed by:
Name and signature _____ Date _____
Designation in PIU _____

Appendix 10
Proposed Format of Environmental Monitoring Report

Environmental Monitoring Report

Reporting Period {From Month, Year to Month, Year}
Date {Month, Year}

BAN: COVID-19 Emergency Assistance Project

Prepared by the Health Services Division of the Ministry of Health and Family Welfare for the Asian Development Bank

TABLE OF CONTENTS

Page

Executive Summary

- Brief status of environmental compliance during the coverage period

1.0 Introduction

1.1 Brief Project Description
1.2 Project Progress Status and Implementation Schedule

2.0 Compliance to National Regulations

{These are just sample environmental regulations}

2.1 Environmental Conservation Rules 1997
2.2 Bangladesh Labour 2013

3.0 Compliance to Relevant Environmental Requirements from the ADB Loan Agreement

3.1 Schedule 5 {prepare a matrix to show how compliance was achieved}

4.0 Compliance to Environmental Management Plan

{Refer to the EMP of the Project}

5.0 Safeguards Monitoring Results and Unanticipated Impacts

{Refer to the Environmental Monitoring Plan and document any exceedence to environmental standards (if any), or any unanticipated impact not included in the EMP and any correction action/measures taken}

6.0 Implementation of Grievance Redress Mechanism and Complaints Received from Stakeholders

{Summary of any complaint/grievance and the status of action taken}

7.0 Conclusion and Recommendations

{Any follow-up action required to be monitored for the next submission}