Environmental Assessment and Review Framework

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NEPAL: Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns

Financed by the Japan Fund for Poverty Reduction

Prepared by Ministry of Water Supply, Government of Nepal for the Asian Development Bank.

NOTE

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

CURRENCY EQUIVALENTS

(as of 11 March 2021)

Currency unit	-	Nepalese rupee (NRe)
$1.00	=	NRs109.821
NRe1.00	=	$0.009

ABBREVIATIONS

ADB	Asian Development Bank
COVID-19	Coronavirus disease
CoCP	Construction Code of Practice
DDR	Due Diligence Report
DWSSM	Department of Water Supply and Sewerage Management
EARF	Environmental Assessment and Review Framework
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMR	Environmental Monitoring Report
EPA	Environment Protection Act
EPR	Environmental Protection Rules
IEE	Initial Environmental Examination
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
MoWS	Ministry of Water Supply
NDWQS	National Drinking Water Quality Standards
O&M	Operation and Maintenance
PISU	Project Implementation Support Unit
PCCWHSST	Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns
PMO	Project Management Office
REA	Rapid environmental assessment
RPMO	Regional Project Management Office
SEMP	Site-specific Environmental Management Plan
SPS	Safeguard Policy Statement
TOR	Terms of Reference
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization
WUA	Water Users Association
WUSC	Water Users and Sanitation Committee

Table of Contents

APPENDIXES

I. INTRODUCTION

A. Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns (PCCWHSST) Project

1. Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns project (PCWHSST) is funded by Japan Fund for Poverty Reduction Project (JFPR) will support the Government of Nepal (the government) to improve selected local governments' capacity to better response to coronavirus diseases (COVID-19) pandemic through community-level interventions. The grant will have the following outputs: (a) Output I- essential public services and Water Sanitation and Hygiene (WASH) supplies to block interpersonal transmission of COVID-19 in public spaces, (b) Output II- behavior-centered community mitigation measures or campaigns to contain the pandemic and manage panic and misinformation, and (c) Output III- strengthened capacity of Department of Water Supply and Sewage Management (DWSSM), five (5) municipalities, and 10 small towns to timely respond to COVID-19 and other public health emergencies. The grant project area will be linked to the Asian Development Bank's (ADB) ongoing small towns projects and pipeline project on Integrated Wate[1 2]

2. Output I includes construction and operation of sanitation facilities with small scale civil works which may have limited, localized adverse environmental impacts. Hence, , the project is classified as Category B for environment safeguards per ADB Safeguard Policy Statement (SPS). Any subproject that will reclassify the project as environment Category A[3] per ADB SPS will not be financed under the project.

3. The project towns and municipalities have yet to allocate government land for the project facilities/components. Hence, information on the location and site specific aspects of the sanitation facilities are not known yet. Environmental assessments will be conducted and reports such as Initial Environmental Examination (IEE) or Due Diligence Reports (DDR) will be submitted for the subprojects after the approval of the grant and when the location of project components are determined. The environmental assessment will use ADB's rapid environmental assessment (REA) checklists (Appendixes 2) and a "no mitigation measures scenario" checklist developed for PCCWHSST (Appendix 3).

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[2] ADB. 2014. Report and Recommendation of the President to the Board of Directors: Proposed Loan to Nepal for the Third Small Towns Water Supply and Sanitation Sector Project. Manila; ADB. 2018. Report and Recommendation of the President to the Board of Directors: Proposed Loan to Nepal for the Urban Water Supply and Sanitation Sector Project. Manila. The pipeline is included in ADB's Nepal Country Operation Business Plan (2020-2022).

[3] A project's category is determined by the category of its most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence. Each proposed project is scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. Projects are assigned to one of the following four categories: (i) **Category A.** A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required. (ii) **Category B**. A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required. (iii) **Category C**. A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed. (iv) **Category FI**. A proposed project is classified as category FI if it involves investment of ADB funds to or through a financial intermediary.

B. Purpose of the Environmental Assessment and Review Framework

4. This Environmental Assessment and Review Framework (EARF) has been prepared in accordance with ADB SPS and Government of Nepal Environment Protection Act (EPA) 2019 and Environment Protection Rules (EPR) 2020. This EARF was prepared to provide guidance on subproject screening and categorization, environmental impact assessment, management, and monitoring, information disclosure and consultation, grievance redress, and institutional arrangement, for Output 1 components which will have potential environmental impacts during the construction and operation phases. This EARF:

(i) describes PCCWHSST and its components;
(ii) discusses the requirements of the ADB SPS, applicable national and local laws, regulations and standards on environmental assessment and management, including applicable international environmental agreements, the relevant principles governing subproject and/or component preparation and implementation;
(iii) explains the general anticipated environmental impacts of the project components to be financed under PCCWHSST;
(iv) specifies the requirements for subproject screening and categorization, environmental assessments, environmental management plan preparation and exclusions based on environmental selection criteria;
(v) provides arrangements for meaningful consultation with affected people and other stakeholders and information disclosure requirements; and
(vi) specifies implementation procedures, including the budget and institutional arrangements,
(vii) describes the responsibilities of the borrower/client and of ADB in relation to the preparation, submission, review and clearance of safeguard documents of subprojects, including monitoring and reporting requirements.

II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

A. ADB Safeguard Policy Statement

5. ADB SPS requires borrowers to meet a set of requirements (Safeguards Requirements 1) when delivering environmental safeguards for projects supported by ADB. The objectives are to ensure the environmental soundness and sustainability of projects, and to support the integration of environmental considerations into the project decision-making process. Hence, the project is required to comply with these requirements. Summary of the step-by-step process is discussed below in this section. Detailed discussions are provided in the ADB SPS[4].

6. **Screening and Categorization.** Subprojects are to be screened for their expected environmental impacts, and are assigned to a specific category (Footnote 2). Categorization is to be based on the most environmental sensitive component. However, for subproject(s) with component(s) that can trigger Category A or with potentially significant adverse impacts that are diverse, irreversible, or unprecedented, Project Management Office (PMO) shall examine alternatives to the subproject's location, design, technology, and components that would avoid, and, if avoidance is not possible, minimize adverse environmental impacts and risks, and to meet Category B categorization. For this grant, the most environmentally sensitive component is the multipurpose shelter. The indicative list of packages for the grant is provided in Appendix 1. Subprojects that will be categorized as Category A for the environment will be excluded.

[4] ADB. 2009. *Safeguard Policy Statement*. Manila.

7. **Environmental Assessment.** Environmental assessment shall include description of environmental and social baseline to provide an understanding of current conditions forming the benchmark against which subproject impacts are assessed. Environmental impacts and risks will be analyzed for all relevant stages of the project cycle, including design and planning stage, construction, operations, decommissioning, and post-closure activities such as rehabilitation or restoration. The environmental assessment, including the project environmental impacts and corresponding mitigation measures will be documented thru an IEE or DDR, depending on the category of the subproject. The structure and composition of a typical IEE report is provided in Appendix 5. IEEs or DDRs for the subprojects shall be prepared after the grant approval, once the locations of subprojects are determined.

8. **Environmental Planning and Management.** The EMP shall describe and address the potential impacts and risks identified by the environmental assessment. The level of detail and complexity of the EMP and the priority of the identified measures and actions will be commensurate with the subproject's impact and risks. The Environmental Management Plan (EMP) shall include the proposed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Environmental quality standards applicable to the grant activities are presented in Appendix 4. Appendix 9 provides a framework EMP/Construction Code of Practice (CoCP) which provides guidance in managing environmental impacts from project activities.

9. **Public Disclosure**. The Executing Agency (EA), through the PMO, shall submit the following documents to ADB for disclosure on ADB website. Relevant information from these documents will be provided in a timely manner, in accessible place, and in a form and language understandable to affected people and other stakeholders.[5]

(i) draft/final IEEs/DDRs upon receipt;
(ii) new or updated environmental impact assessment reports (IEEs/DDRs including EMPs); and
(iii) relevant monitoring results and corrective action plan prepared during subproject implementation, if any.

10. **Consultation and Participation.** The EA through the PMO and Regional PMOs (RPMO), and with assistance from project towns and municipalities grant coordinators, shall carry out meaningful consultation[6] with affected people and other concerned stakeholders, including civil society, and facilitate their informed participation. The consultation process and its results are to be documented and reflected in the environmental assessment report. Appendix 6 provides a template for documenting public consultation activities. The EA is required to comply with COVID-19 health protocols during the conduct of consultation activities.

[5] Per ADB SPS, 2009, prior to disclosure on ADB website, ADB reviews the "borrower's/client's social and environmental assessment and plans to ensure that safeguard measures are in place to avoid, wherever possible, and minimize, mitigate, and compensate for adverse social and environmental impacts in compliance with ADB's safeguard policy principles and Safeguard Requirements 1-4."

[6] Per ADB SPS, 2009, meaningful consultation means a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;1 (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

11. **Grievance Redress Mechanism.** The EA, through PMO, is required to establish a mechanism to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the subproject's environmental performance. The grievance mechanism shall be scaled to the risks and adverse impacts of the subproject. The Grievance Redress Mechanism (GRM) under UWSSP is functioning well, with regular reporting on and resolution of issues, concerns and grievances, and the same would be adopted for the grant. The GRM is discussed in detail in Section VI below. A sample grievance redress form is provided in Appendix 7.

12. **Monitoring and Reporting.** The EA through PMO shall monitor, measure and document the progress of implementation of the EMP. If necessary, PMO will identify the necessary corrective actions, and reflect them in a corrective action plan. PMO will prepare and submit to ADB environmental monitoring reports that describe progress with implementation of the EMP and compliance issues and corrective actions, if any, as part of quarterly progress reports that will be prepared for the project. The reporting on EMP implementation will continue until ADB issues a grant completion report. A template for the reporting environmental safeguards implementation is provided in Appendix 8.

13. **Unanticipated Environmental Impacts.** Where unanticipated environmental impacts become apparent during subproject implementation, the EA through the PMO shall update the environmental assessment and EMP or prepare a new environmental assessment and EMP to assess the potential impacts, evaluate the alternatives, and outline mitigation measures and resources to address those impacts.

14. **Pollution Prevention and Control Technologies**. During the design, construction, and operation of the subproject, the EA through the PMO and RPMOs shall apply pollution prevention and control technologies and practices consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines. These standards contain performance levels and measures that are normally acceptable and applicable to subprojects. When the Government of Nepal regulations differ from these levels and measures, the executing agency shall achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific subproject circumstances, the executing agency will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented in ADB SPS.

15. **Occupational Health and Safety.** The EA through PMO[7] shall ensure that workers[8] are provided with a safe and healthy working environment, considering risks inherent to the sector and specific classes of hazards in the subproject work areas, including physical, chemical, biological, and radiological hazards. PMO shall ensure to take steps to prevent accidents, injury, and disease arising from, associated with, or occurring during the course of work by (i) identifying and minimizing, so far as reasonably practicable, the causes of potential hazards to workers; (ii) providing preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (iii) providing appropriate equipment to minimize risks and requiring and enforcing its use; (iv) training workers and providing them with appropriate incentives to use and comply with health and safety procedures and protective equipment; (v) documenting and reporting occupational accidents, diseases, and incidents; and (vi) having

[7] In case where responsibility is delegated to subproject contractors during construction phase, PMO shall ensure that the responsibilities on occupational health and safety as described herein are included in the contract documents

[8] Including nonemployee workers engaged by the borrower/client through contractors or other intermediaries to work on project sites or perform work directly related to the project's core functions.

emergency prevention, preparedness, and response arrangements in place.

16. The EA through the PMO shall ensure to apply preventive and protective measures consistent with international good practice, as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines.[9]

17. **Community Health and Safety.** The EA through the PMO shall ensure to identify and assess the risks to, and potential impacts on, the safety of affected communities during the design, construction, operation, and decommissioning of the subproject, and will establish preventive measures and plans to address them in a manner commensurate with the identified risks and impacts.

18. **Physical Cultural Resources**. The EA through the PMO is responsible for siting and designing the subproject to avoid significant damage to physical cultural resources. Such resources likely to be affected by the subproject will be identified, and qualified and experienced experts will assess the subproject's potential impacts on these resources using field-based surveys as an integral part of the environmental assessment process. When the proposed location of a subproject component is in areas where physical cultural resources are expected to be found as determined during the environmental assessment process, chance finds procedures shall be included in the EMP.

19. **Environmental Audit.** When the subproject involves existing activities or facilities, the EA through the PMO shall ensure that environmental audits are conducted to determine the existence of any areas where the subproject may cause or is causing environmental risks or impacts. The audit shall form part of the the environmental assessment for the subproject.

20. **Bidding and Contract Documents.** Environmental assessment reports and EMPs are to be included in bidding and contract documents and verified by the PMO and the RPMOs. The PMO and RPMOs shall also ensure that bidding and contract documents include specific provisions requiring contractors to (i) comply with all other conditions required by ADB,[10] and (ii) to submit to RPMO and PMO, for review and approval, a site- specific environmental management plan (SEMP), including (i) proposed sites/locations for construction work camps, storage areas, hauling roads, lay down areas, disposal areas for solid and hazardous wastes; (ii) specific mitigation measures following the approved EMP; (iii) monitoring program as per site-specific environmental management plan (SEMP); and (iv) budget for SEMP implementation. No works can commence prior to approval of SEMP. A copy of the EMP or approved SEMP will be kept on site during the construction period at all times. Non-compliance with, or any deviation from, the conditions set out in the EMP or SEMP constitutes a failure in compliance and shall require corrective actions.

21. **Conditions for Award of Contract and Commencement of Work.** PMO shall not award any Works contract for a subproject until (i) relevant provisions from the EMP are incorporated into the Works contract; and (ii) the IEE is updated to reflect subproject's detailed design and PMO has obtained ADB's clearance of such IEE. For "design, build, and operate" type contracts, PMO shall ensure no works for a subproject which involves environmental impacts shall

[9] World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines.* Washington, DC.

[10] Contractors to comply with (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites

commence until (i) relevant provisions from the EMP are incorporated into the Works contract; and (ii) the IEE is updated to reflect subproject's detailed design and PMO has obtained ADB's clearance of such IEE.

B. Government Environmental Impact Assessment Law

22. **Environmental Protection Act (EPA), 2019** This Act requires a proponent to undertake Brief Environmental Study (BES), IEE or Environmental Impact Assessment (EIA) of the proposed project and have the BES/IEE or EIA Report approved by the concerned prior to implementation.

23. **Environmental Protection Rules (EPR), 2020**. The Rules defines implementing rule and regulations of the BES, IEE or EIA process, elaborating the provisions in the EPA. The preparation, review and approval of BES, IEE and EIA Reports pertain to article 2 of EPR 2020. Schedules 1, 2 and 3 list down the projects of activities that require BES, IEE and EIA respectively. Table 1 presents the required environmental assessment for activities/works under the multipurpose shelter/community hall applicable to the grant project.

Table 1: Required Environment Assessment for the project under Government of Nepal Environmental Protection Rules

S.N.	Schedule 1: Activities Requiring Brief Environmental Study	Schedule 2: Activities Requiring Initial Environmental Examination	Applicability to JFPR Subprojects
Multipurpose shelter (3000-5000 square feet)			
1	Cinema hall, Theater, community hall, stadium, concert hall, sports complex that will have arrival or departure of 500-1000 people at a time	Cinema hall, Theater, community hall, stadium, concert hall, sports complex that will have arrival or departure of 1000-2000 people at a time	BES or IEE (depending on subproject detailed design for each municipality)

C. Other Relevant National Laws, Policies and Guidelines

24. Table 2 below summarizes all other relevant national laws, policies and guidelines that will be complied with under the project. As the project will avoid projects with potential triggers for Category A classification per ADB SPS, all laws, policies and guidelines governing these types of projects are already excluded in the table.

Table 2: Other Relevant National Laws, Policies, and Guidelines of Nepal

Policy/Law/ Guideline	Year *	Relevant Provisions	Remarks
National Urban Policy	2007	The Policy gives importance to environment conservation while carrying out urban development works and natural resource use.	All subprojects will implement the objectives of the Policy.
Solid Waste Management Act	2011	The Act stipulates the responsibility of generators of hazardous, medical, chemical or industrial wastes in the management of such wastes. The Act also requires individuals and entities to reduce the amount of solid waste generated while carrying out their work or business.	All subprojects will implement the EMPs to ensure generated solid wastes are managed accordingly.

Labor Act	1992	The Act stipulates the need to provide workers with safe and clean environment at work places, including safety measures in place for workers and procedures established for emergency situations.	The Environmental Management Plans (EMPs) of subprojects will provide measures to mitigate workers' health and safety hazards.
The Building Act	1998	The act details the provisions for the regulation of building construction works in order to protect building against earthquake, fire and other natural calamities, to the extent possible	The subprojects will comply with the provisions mentioned in project component design
National Environmental Policy and Action Plan (NEPAP)	1993	The action plan aims to: (i) mitigate adverse environmental impacts of projects; and (ii) safeguard national and cultural heritage and preserve biodiversity, within and outside protected areas.	The subprojects will help achieve the action plan with the exclusion of triggers for Category A subproject classification.
Local Self-Governance Act	1999	The Act gives the Local Government the functions, duties and powers to, among others: (i) conserve and protect their local environment and natural resources; (ii) plan, implement and/or operate and maintain local water supply projects; (iii) implement or arrange for implementation local sanitation/sewerage and drainage projects; (iv) protect cultural heritage and religious sites; and/or (v) monitor project activities within their jurisdictions.	All subprojects will help local Governments fulfil their functions and duties under the Act.
Local Government Operation Act	2074	The legal mechanism was enacted as per the Article 296 (1) of the Nepal Constitution-2015 so as to leverage local leadership and governance system. The Act has stipulated several arrangements related to authorities, duties and responsibilities of local government, assembly meeting and working system, assembly management procedures, plan formulation and implementation, judicial works, financial jurisdictions, administrative structure and district assembly, among others. This act describes rights, duties and responsibilities in different development and conservation sectors. It clarifies the rights of municipalities/rural municipalities to form local laws, regulations and criteria for conservation of environment protected areas and species; for environmental pollution and hazard control; solid waste management; etc.	All subprojects will help local Governments fulfil their functions and duties under the Act.

* (Year) - Year last amended.

D. International Environmental Agreements.

25. Table 3 below lists the relevant international environmental agreements that Nepal is party to, and their relevance to various subprojects under PCCWHSST.

Table 3: International Environmental Agreements Relevant to the project

International Environmental Agreement	Year *	Relevant Provisions	Remarks
World Heritage Convention	1978	Parties to ensure the protection and conservation of the cultural and natural heritage situated on territory of, and primarily belonging to, the State	PCCWHSST project will not support subprojects that negatively impact cultural and natural heritage of the country.
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)	1987	Parties to conserve and wisely use wetlands (i.e., maintaining their ecological character) as a contribution towards achieving sustainable development locally and throughout the world	PCCWHSST Project will help the Government of Nepal comply with this agreement. Project PCCWHSST will not support subprojects that will locate in wetlands and other protected areas of the country.
Convention on Biodiversity	1992	Parties to require the environmental assessment of projects that are likely to have significant adverse effects on biological diversity with a view of avoiding or minimizing such effects	PCCWHSST will help the Government of Nepal comply with this agreement. The project will not support subprojects that impact biodiversity in the country.
UN Framework Convention on Climate Change	1992	Parties to take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.	PCCWHSST will help the Government of Nepal comply with this agreement. PCCWHSST will ensure implementation of EMPs as measure to minimize the causes of climate change.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	1996	Parties to, among others, minimize the amount and toxicity of hazardous waste generated, manage the hazardous and other wastes they generate in an environmentally sound manner and as close as possible to the source of generation.	PCCWHSST will help the Government of Nepal comply with this agreement. PCCWHSST will ensure implementation of EMPs as measure to avoid or minimize the generation and disposal of hazardous wastes.

* (Year) - Year last amended.

III. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS

A. Environmental Assessment Processes for Subprojects

26. Environmental assessment for subprojects must follow both the ADB SPS and Government EIA processes. Table 4 below shows the steps of complying with these processes in relation to the subproject processing stages.

Table 4: Environmental Assessment Processes for Subprojects

Project Stage	ADB Safeguard Policy Statement	Government of Nepal Environmental Protection Rules
Subproject Identification/ Categorization	Subproject selection in line with the EARF subproject selection criteria. PMO to complete rapid environmental assessment (REA) checklist and Project Categorization carried out at the earliest stage of project preparation when sufficient information is available for this purpose. REA checklists applicable to this project are attached in Appendix 2.	Categorization of subprojects is based on categories in Schedule 1, Schedule 2 and Schedule 3 of Environmental Protection Rules (EPR), 2020 1. For subprojects falling under Schedule 1 only brief environmental study (BES) is required. 2. For subprojects falling under Schedule 2, initial environmental examination is required. 3. For subprojects falling under Schedule 3, environmental impact assessment (EIA) is required.
Detailed Design	Draft IEE/DDR with EMP is in line with the EARF.	For subprojects requiring BES/IEE, PMO to: 1. Prepare draft BES/IEE pertaining to article 2 and schedule 1 and 2 of EPR 2020 2. Prepare draft work plan, public notice and IEE report following format in Schedule 7, 9 and 11 of EPR; 3. Submit draft IEE to concerned ministry for review and approval.
Public Consultation	Consultation will be carried out in a manner commensurate with the impacts on affected communities. The consultation process and its results are to be documented and reflected in the environmental assessment report. ADB requires meaningful consultation, which is defined as a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) undertaken in an atmosphere free of intimidation or coercion; (iv) gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making,	For subprojects requiring BES/IEEs, Article 6, EPR 2020, Requirement to conduct public hearing project proponent should conduct public hearing and collect opinion and suggestions on proposal in project affected area as a result of implementing of project (i) Project proponent should ensure participation of affected local community, representative of FUG in case of formed FUG and representative from local government. (ii) Project proponent should conduct public hearing in more than one location based on geographies covered by the project (iii) Project proponent should post notices along with date, time, venue should be posted in local newspaper, radio or other media, ward office of concerned local level and any public place of project area for dissemination of project (iv) Include attendance, received opinion and suggestion, photographs and audio-video material from public hearing conducted as per this rule in IEE report

	such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. This is required of all projects.	(iv) Schedule 9, EPR 2020. Rural/Urban municipalities, school, hospital, and health post and concerned person or organization are requested to provide/send their written opinions and suggestions on impact on physical system, biological system, social system, cultural system and economic system in mentioned address within seven (7) days from the date of posting.
Disclosure	Disclosure by ADB on its website the following: (i) EARF before project appraisal, and (ii) final IEE/DDR reports after securing government endorsement of the reports. Disclosure by government on its website or any accessible place all environmental information and documents such as IEE reports in a form or language understandable to affected people and other stakeholders. For illiterate people, other suitable communication methods will be used.	The EPR does not require to disclosure of BES and IEE but the project proponent should publish notice in national daily newspaper with a timeline of seven days to collect opinion and suggestions. EIA should be made public and available to download from the project proponent's website
Mitigation Measures	Mitigation measures specified in the IEE/DDR incorporated in project design.	The BES, IEE or EIA reports required under the EPR 2020 shall follow formats mentioned in schedule 10, 11 and 12 respectively that include mitigation measures for environmental impacts identified.
	EMP implementation and monitoring responsibilities incorporated in the bid and contract documents.	The EPR does not provide requirement for incorporating EMP implementation and monitoring in the bid and contract documents.
Approval	The executing agency after review of IEE/DDR will forward to ADB for review. Cleared IEE/DDR is sent back to executing agency for endorsement. Cleared and endorsed IEE/DDR is required prior to approval and issuance of tender documents and shall form part of the said tender documents.	For IEE reports, Concerned ministry will provide approval/decisions to PMO within 15 days from receipt of the reports. Provided that no substantial negative environmental impact is found in the proposal.
Procurement/ Contract Award	No contract award until: (i) Environmental clearances required by the Government have been obtained; (ii) IEE/DDR with EMP has been finalized, cleared by ADB, and disclosed to public; (iii)IEE/DDR and other safeguard requirements are included in bidding documents and civil works contracts; and (iv) EMP implementation is reflected in the Project Administration Manual (PAM).	There is no reference to procurement and contract in the EPR.
Implementation	ADB supervision missions shall review effective EMP implementation. EA will submit to ADB the following documents for disclosure on ADB's	For IEEs, concerned ministry to monitor the implementation of the EMP measures. If findings suggest that the impacts are higher than what was determined in the reports, PMO to adopt new measures to reduce these

	website: (i) updated/final IEE/DDR (if updated/finalized due to change in scope and/or detailed design); (ii) corrective action plan prepared during project implementation, if any; and (iii) reports that describe progress with implementation of the EMP and compliance issues and corrective actions, if any, as part of quarterly progress reports that will be prepared for the project.	impacts.

IV. THE PROJECT AND ITS SUBPROJECTS AND/OR COMPONENTS

27. Six (Bidur, Charali, Nirmalpokhari, Lalbandhi, Tikapur, and Mahendranagar) of 20 towns from the Third Small Towns Water Supply and Sanitation Sector Project, and four (Siddhanath Baijnath, Pragatinagar, Subaghat, and Dadhikot) out 20 project towns from the Urban Water Supply and Sanitation Sector Project, from different ecological region and provinces of Nepal will participate under PCCWHSST project. In addition, the EA and IA selected five (5) municipalities (Bharatpur, Butwal, Dhangadhi, Nepalgunj and Birgunj) using the following selection criteria, i.e., are likely to be supported under the proposed IWSSM, have high number of COVID-19 cases, are border towns, and are district/provincial headquarters.

28. The Project is to strengthen local government and communities' capacity to mitigate and contain the COVID-19 pandemic and similar health emergency in future in five secondary and 10 small towns. The project outputs are:

29. **Output 1: Essential WASH facilities and services for blocking interpersonal transmission in public spaces provided**. Output includes: (i) sex-segregated mobile handwashing stations operated, mobile toilets provisioned in marketplaces, and existing public toilets rehabilitated or refurbished with sufficient basic sanitation commodities; (ii) elderly, women, children, and physically impaired friendly multipurpose shelters built in project towns which could be used as quarantine centers for vulnerable groups when community transmission of COVID-19 happens and the evacuation is required; (iii) essential medical screening appliances and proper sized personal protective equipment to primary health care facilities provided; and (iv) health consultation desks in selected primary health care facilities of five secondary towns, and in selected water utility offices and poverty clusters of 10 small towns with gender sensitized team.

30. **Output 2: Behavior-centered community mitigation measures strengthened**. Output 2 includes: (i) gender sensitive behavior change campaigns conducted to vulnerable populations on good personal hand hygiene practice, environmental disinfection and affordable personal safety measures to help protect themselves from being infected; (ii) community support systems strengthened to better combat COVID-19 and similar pandemic associated social stigma and discrimination; (iii) basic health literacy increased through empowering and mobilizing women's group, youth organizations, community-based organizations, and or tole level organizations; (iv) home based soap and disinfectants making training conducted for women from vulnerable communities; and (v) female community health volunteers mobilized[1] to drive risk communication campaigns to disseminate correct information on COVID-19 to most vulnerable groups and provide teleconsultations and social support to individuals under quarantine.

31. **Output 3: Institutional capacity of selected local governments and communities to contain COVID-19 pandemic strengthened**. Output 3 includes: (i) five-year emergency and preparedness plan of five project secondary towns adopted for strengthening towns capacity to detect, prevent and control the communicable disease outbreak; (ii) health and safety protocols that is gender sensitive adopted for project towns to operate and maintain public facilities and services in a safe manner; (iii) staff of project towns and DWSSM report increased skill and knowledge on health and safety protocols; (vi) standard operating procedures developed and used to manage contaminated solid waste for project towns; (vii) frontline sanitation and waste workers' of project towns report increased capacity to disinfect public spaces in accordance with health and safety protocols; (viii) trainings and capacity building activities organized at the community level that support the operation and the maintenance (O&M) of services and facilities

on disinfection practices (handwashing stations and toilets), infectious prevention and control (multipurpose shelters) and health promotion (health consultation desks).

32. **Subproject Selection.** Table 5 summarizes the Output 1 project components and selection criteria. The indicative list of subprojects is summarized in Appendix 1.

Table 5: Output 1 Project Components and Selection Criteria

Component/ Subproject	Subcomponent	Subproject Selection Criteria
Essential public services for blocking interpersonal transmission in public spaces provided.	Sex-segregated mobile Toilets	• Located in, or adjacent to, a frequently used/core public area of the municipality (most densely populated) on the Water Users Sanitation Committee (WUSC) or municipality land with no or minimum involuntary resettlement/ social impacts (for example, space of public market, sports complex or if there would be exhibition or any municipal function • Should not be located near or adjacent to a river or pond • Should not be located inside a protected area or government forest land
		• Necessary agreement and approvals have been obtained in accordance with relevant laws and regulations
		• Ensure that each toilet unit will have adequate water and hand washing facilities in it.
		• An O&M plan is developed providing details on the frequency and responsibility for collection and disposal of septic waste at approved site, and commitment to provide minimum operational staff and operate the facilities in sustainable manner is given by Water Users Association (WUAs) or municipalities. • Identity roles and responsibilities for each of the tasks.
		• If the municipality does not have adequate capacity, the WUSC has agreed to manage the mobile toilet on behalf of the municipality until the municipality has adequate capacity
		• Hygiene promotion campaign and educational program is developed, and the WUSC or Municipality commits to implementing the same.
	Rehabilitation and refurbishment of existing public toilets	• Implementation will ensure that (i) septic tanks of the toilets will be sealed to make them water tight and emptied as per the design requirements and as per relevant municipal and environmental regulations; (ii) appropriate borehole case and screen are installed; and (iii) a test pit is established, and water quality monitoring is regularly conducted (at least once every quarter) and (iv) the septic tank will be enhanced to accommodate (for primary treatment) the sludge from mobile toilets.
		• Hygiene promotion campaign and educational program is developed, and the WUSC or Municipality commits to implementing the same.
	Sex-segregated mobile hand washing units	• Located in, or adjacent to, a frequently used/core public area (like weekly market) on the WUSC or municipality land with no or minimum involuntary resettlement/ social impacts • Should not be located near or adjacent to a river or pond • Should not be located inside a protected area or government forest land
		• Hygiene promotion campaign and educational program is developed, and the WUSC or

		Municipality commits to implementing the same.
	Health desks	• Located in premise of WUSC and ward office of each municipality.
		• Facility is designed in accordance with appropriate standards. In the absence of national standards, international standards, such as those prescribed by the Environmental Protection Agency of the United States of America, may be used.
	Multipurpose shelters with elderly, women, children, and physically impaired friendly built	• Located in, or adjacent to, a frequently used public area on the WUSC or municipality land with no or minimum involuntary resettlement/ social impacts • Should not be located near or adjacent to a river or pond • Should not be located inside a protected area or government forest land
		• Public or WUSC land with no or minimum involuntary resettlement impacts is available for construction.
		• Multipurpose Shelters will not be established in floodplains or flood prone areas.
		• Necessary agreement and approval have been obtained in accordance with relevant laws and regulations
		• Multipurpose shelters will be designed as per national standards and DWSS's design guidelines to allow for portable drinking water supply, other utilities and maximum retention of septic waste (minimum 3 years) and water sealing.
		• Detailed investigations are carried out to confirm adequate and sustainable utilities are available to maintain hygiene and cleanliness

33. **Specific Environment Safeguards Criteria.** In addition to the above general criteria, the subproject will be screened using the ADB REA checklist (Appendix 2) and selected based on the following specific environment safeguards criteria (Table 6). Any subproject, which does not meet the general criteria above and specific criteria listed below may be rejected.

Table 6: Environment Safeguards Criteria for Subproject Selection

Component/ Subproject	Subcomponent	Specific Criteria Related to Environment Safeguards	Remarks
General	All subprojects	will not have impacts that are irreversible, diverse and unprecedented (not Category A for environment)	
		not directly affect protected areas, core zones of biosphere reserves, highly valued cultural property	
		not be located in the following ecologically sensitive areas: wildlife/bird sanctuaries, national parks, tiger reserves, elephant reserves, conservation reserves, core zone of biosphere reserves, centrally protected monuments or critical habitat (as defined in ADB Safeguard Policy Statement, SPS)	
		not be deemed highly complex and sensitive in accordance with ADB SPS	
		Not cause damage/destruction, removal, alteration or defacement of adjacent or nearby structures/monuments and sites of international, national and local significance. Subprojects with component activities near (within 50 m from) such sites shall have prior coordination with the Department of Archaeology	If location is within 300 m of Nepal protected monuments/ sites and there is no alternative, permissions from the Department of Archaeology to be obtained prior to finalization of detailed engineering design
		Only involve activities that follow all applicable government laws, rules and regulations	Permits/clearances to be obtained prior to award of contract
		Not include and/or involve any activities listed in ADB's Prohibited Investment Activities List (Appendix 5 of ADB SPS). These activities do not qualify for ADB's financing	
		Reflect inputs from public consultations	Consultations shall be in accordance with ADB SPS requirement for meaningful consultations

		Corresponding IEEs)/DDRs prepared in accordance with this EARF and Safeguard Requirements 1 of ADB SPS; identified all the key potential environmental and social impacts and risks; and incorporated effective measures to avoid, minimize, mitigate or compensate for the adverse impacts into an EMP and project design.	IEE/DDR to be submitted to ADB for review and approval prior to bidding for civil works subprojects or prior to civil works for Design Build (DB) subprojects
	Mobile Public Toilets	Selected land with adequate buffer	In case of non-availability of suitable sites due to land and technical design constraints in already developed areas, where adequate buffer is not available, following procedures shall be adopted and documented in order to finalize sites for implementation of project: (i) conduct alternate site analysis, justify the selected site; (ii) develop odor mitigation measures to prevent and control odor/air emissions–design measures, and operational practices that are feasible and practical in local conditions and include in DPR; (iii) develop layout plan with maximum buffer to nearby houses (iv) public information – consult local community, inform about the need, process adopted to select sites, its suitability, and measures adopted for odor prevention and control
		Includes water source for maintaining cleanliness and hygiene	
		Design includes septic waste management plan/system:(i) promotes and facilitates correct septic tank design and maintenance. Septic tank design complies with effluent quality and maintenance	

		needs;[11] (ii) provided with appropriate, systematic, safe, and regular collection of fecal sludge and septic waste; (iii) uses appropriate collection vehicles.	
	Multipurpose Shelter	Not located in areas prone to landslides	
		Design includes septic waste management plan/system:(i) promotes and facilitates correct septic tank design and maintenance. Septic tank design complies with effluent quality and maintenance needs;[12] (ii) provided with appropriate, systematic, safe, and regular collection of fecal sludge and septic waste; (iii) uses appropriate collection vehicles.	
		Storm water drainage system is incorporated into design and requirements for drainage maintenance measures are incorporated into the operations and maintenance manual and suitable budget allowed for to ensure ongoing performance of measures	
		For projects that may affect natural streams or rivers, the project implementation support unit at WUSC/municipality shall ensure that comments and advice received from project management office (PMO), design engineers, and appropriate departments are incorporated into the planning, design and construction of the subprojects as far as practicable. If there is vegetation or landscaping features forming part of the mitigation requirements, the PMO and design engineers shall also identify the maintenance party during the design stage	

[11] Examples of key septic system design considerations are presented in the General EHS Guidelines. More complicated septic tank designs (e.g., three chambers, added sand filters, etc.) can improve effluent quality, but are usually more susceptible to clogging and other failures, especially if regular maintenance is not performed.

[12] Examples of key septic system design considerations are presented in the General EHS Guidelines. More complicated septic tank designs (e.g., three chambers, added sand filters, etc.) can improve effluent quality, but are usually more susceptible to clogging and other failures, especially if regular maintenance is not performed.

V. GENERAL ANTICIPATED ENVIRONMENTAL IMPACTS

34. The Output 1 subproject component's potential impacts, issues and concerns based on a "No Mitigation Measures Scenario" are presented in Tables 7 to 9 below.

Table 7: Mobile Toilets and Rehabilitation/Refurbishment of existing Toilets subproject Potential Environmental Impacts, Issues and Concerns (No Mitigation Measures Scenario)

Design	Construction	O&M
• social conflicts arising from location of mobile toilets • inadequate protection of rehabilitation work sites leading to disturbances to neighborhood • inadequate water supply to maintain cleanliness and foul smell • competing uses of water for supply in mobile and existing toilets • increase in production of fecal discharge beyond capabilities of community facilities due to increase in users • increased sewage flow due to increased discharge in sewer line • health hazards arising from inadequate design of facilities for discharging and managing fecal waste • pollution of land and water sources/canals/drainage from fecal discharge • Unavailability of land/space for storing, managing and disposing waste from mobile toilets • inadequate open space around mobile toilets • dislocation or involuntary resettlement of people disproportionate impacts on the poor, women and children, indigenous peoples or other vulnerable groups • permanent or temporary change in land use or topography including increases in intensity of land use	• noise • dust • traffic • impairments associated with access roads • health and safety hazards to workers • population influx that causes increased burden on social infrastructure and services (such as water supply and sanitation systems) • social conflicts if workers from other regions or countries are hired • risks to community health and safety due to transport, and use and/or disposal of materials such as fuel and other chemicals • community safety risks due to both accidental and natural hazards, especially where structural elements or components of the project are accessible to the members of the affected community or where failure could result in injury to the community • clearance of existing land, vegetation, market/vendors or building • cut and fill or excavations • use of resources (materials, water, energy, etc.) • changes in occurrence of disease or affect disease vectors (e.g. insect or water- borne disease) due to worker's camp • solid wastes such as spoils, overburden, etc. • solid wastes from worker's camp • emission from burning of waste in open air (e.g. worker's camp, slash materials,	• unsatisfactory fecal management • delivery of unsafe discharge from toilets to sewer system • excessive algal growth in in and around toilet premises • increase in production of sewage beyond capabilities of community facilities inadequate disposal of sludge from septic tanks • health and safety hazards to workers from handling and management of phenol used for disinfection, other contaminants, and biological and physical hazards • discharge of unsafe waste water due to poor operations and maintenance (O&M) treatment processes • inadequate disinfection due to lack of adequate monitoring of phenol (carbolic acid) and other acids/disinfectant supply • discharge of waste water contaminated with corrosive chemicals to sewer/drainage and canal system • accidental leakage/spillage of corrosive chemicals • increased volume of fecal waste • use of resources (materials, water, energy etc.) • positive impacts - employment to local people; safe and easy access to improved sanitation which will enhance people's health and safety • improved sanitation conditions of municipalities • transmission and spread of COVID-19 or other diseases from lack of frequent cleaning and

Design	Construction	O&M
	construction debris) • transmission and spread of COVID-19 among workers and the community"	sanitation

Table 8: Mobile Hand Washing Units and Health Desks Subproject Potential Environmental Impacts, Issues and Concerns (No Mitigation Measures Scenario)

Design	Construction	O&M
• waste water discharge and management • inadequate space • social conflicts arising from location of hand washing units and health desks • inadequate water supply to maintain cleanliness • health hazards arising from inadequate design of facilities for discharging and managing waste water • unavailability of land/space for storing, managing and disposing waste water • inadequate open space around the hand washing units and health desks • relocation of existing facilities • dislocation or involuntary resettlement of people • disproportionate impacts on the poor, women and children, indigenous peoples or other vulnerable groups	• interference with other utilities and blocking of access to buildings • dislocation or involuntary resettlement of people • disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups • risks and vulnerabilities related to occupational health and safety due to physical, and biological hazards • use of resources (materials, water, energy, etc.) • changes in occurrence of disease or affect disease vectors (e.g. insect or water- borne disease) due to worker's camp • transmission and spread of COVID-19 among workers and the community	• wastewater discharge • use of resources water • transmission and spread of COVID-19 among workers • positive impacts - easy access to improved sanitation which will enhance people's health and safety • improved sanitation conditions of municipalities • Prevention and control of spread of COVID-19

Table 9: Multipurpose shelter Subproject Potential Environmental Impacts, Issues and Concerns (No Mitigation Measures Scenario)

Design	Construction	O&M
• disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups • environmental pollution due to inadequate wastewater management system • discharge of hazardous materials into the drains • permanent or temporary change in land use or topography including increases in	• dislocation or involuntary resettlement of people • disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups • dust, noise and vibration due civil works • risks and vulnerabilities related to occupational health and safety due to physical, chemical, and biological hazards • traffic disturbances due to	• risks and vulnerabilities related to occupational health and safety due to physical, chemical, and biological hazards • discharge of hazardous materials into drains • transmission and spread of COVID-19 among workers

intensity of land use	construction material transport and wastes • social conflicts between construction workers from other areas and community workers • 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 • community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community • clearance of existing land, vegetation or building • pre-construction investigations (boreholes, soil testing, etc.) • demolition works • temporary sites used for construction works or housing of construction workers • cut and fill or excavations • use of resources (materials, water, energy, etc.) • changes in occurrence of disease or affect disease vectors (e.g. insect or water- borne disease) due to worker's camp • solid wastes such as spoils, overburden, etc. and from worker's camp • emission from burning of waste in open air (e.g. worker's camp, slash materials, construction debris) • transmission and spread of COVID-19 among workers and the community	• positive impacts - employment to local people; enhance disaster/pandemic response capacity of conditions of municipalities • Prevention and control of spread of COVID-19

35. However, since the subproject locations/sites and design will be screened following the subproject/design selection, as well as the environmental safeguards criteria in Tables 5 and 6, the potential environmental impacts due to the subproject/component design and location as listed in Tables 7 to 9 are expected to be avoided or minimized. Output 1 subprojects/components (installation of mobile toilets and hand washing facilities, rehabilitation of existing toilets, construction of multipurpose shelters, and the operation of these facilities) will not have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. Potential impacts are site-specific and unlikely to affect areas larger than the sites or facilities subject to physical works. Mitigation measures can be readily developed to reduce all negative impacts to acceptable levels. The PMO will ensure that that these selection criteria are considered in the detailed design of the subproject components and that measures will be included in the subproject component designs. In most cases, mitigation measures can be designed with uncomplicated measures commonly used at construction sites and known to civil works contractors.

36. Due Diligence Reports or IEEs including environmental management plans (EMPs) will

be prepared for subprojects when the location of the components are determined. It will describe and address the potential impacts and risks identified associated with the subproject impacts during the preconstruction, construction, and operation phase. The EMPs will include proposed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and relevant environmental performance indicators. The DDRs or the IEEs and EMPs will be included in the bidding and contract documents which will have specific provisions requiring contractors to (i) comply with all other conditions required by ADB[13] and (ii) to submit a site-specific environmental management plan (SEMP), including (a) proposed sites/locations for construction work camps, storage areas, hauling roads, lay down areas, disposal areas for solid and hazardous wastes; (b) specific mitigation measures following the approved EMP; (c) monitoring program as per SEMP and in accordance with the EMP; and (iv) budget for SEMP implementation.

[13] Contractors to comply with (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites.

VI. CONSULTATION, INFORMATION DISCLOSURE AND GRIEVANCE REDRESS MECHANISM

A. Consultation

37. ADB SPS requires meaningful consultation with affected people that:

(i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle;
(ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people;
(iii) is undertaken in an atmosphere free of intimidation or coercion;
(iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and
(v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

38. Also, EPR 2020 specifies that the opinion and suggestions on the potential environmental impacts of the proposed subproject shall be sought from the public by the proponent during the conduct of environmental assessment.

39. To comply with the requirements of both the ADB and the Government of Nepal, therefore, PMO and RPMO will:

(i) conduct consultation in more than one location based on geographies covered by the project, following the procedure of the Government of Nepal described in EPR 2020;
(ii) send notice to the concerned stakeholders requesting for their written opinions and suggestions within 7 days regarding their perceived impacts of the subproject's implementation; and
(iii) publish a notice in local newspaper, radio or other media, ward office of concerned local level and any public place of project area for dissemination of project. Received opinion and suggestions, will be taken into account in the subproject preparation and environmental assessment and include attendance, photographs and audio-video material from consultations in the IEE report.

40. The consultation shall be conducted, and its handouts shall be written, in the national language. The consultation process shall be well documented. All relevant views and concerns raised during the consultation shall be:

(i) incorporated in the IEE reports/DDRs; and
(ii) considered in the design of the proposed activity. Attendance sheets and notes of informal and formal consultations for shall be included in the IEE reports/DDRs as proofs that consultation/s had been held. Template of attendance sheet is in Appendix 6.

41. The PMO and RPMO shall be open to contact for consultation by the public on environmental assessment matters, including review of environmental implications, from the project preparation stage and throughout PCCWHSST implementation phases.

42. The PMO and RPMO shall comply with the COVID-19 health protocols in the implementation of public consultation activities and consider use of various channels to ensure meaningful consultation.

B. Information Disclosure

43. PMO and RPMOs will be responsible for ensuring that all IEEs, environmental due diligence reports, quarterly progress reports and grievance redress documents are properly kept as part of project records. PMO and the RPMOs will:

(i) ensure that hard and/or electronic copies of these documents are made available at locations accessible to all stakeholders such as the offices of PMO, RPMOs, Municipalities/PISU and WUSCs;
(ii) ensure that the summary of a subproject IEE/DDR is translated in the local language and made available to all stakeholders and posted on bulletin boards or similar accessible locations at the offices of PMO, RPMOs and WUSCs; and
(iii) all environmental documents including IEE reports/DDRs are disclosed on project website.

44. The PMO will submit to ADB the following documents for disclosure on ADB's website:

(i) the EARF before project appraisal; and
(ii) the draft, updated and/or final IEE/DDR reports for all subprojects.

C. Grievance Redress Mechanism

45. The Grievance Redress Mechanism (GRM) under UWSSP is functioning well, has regular reporting on issues, concerns and grievances and resolution, and the same would be adopted for the grant.

46. The Grievance Redress Committee (GRC) will receive, evaluate and facilitate resolution of affected persons' concerns, complaints, and grievances related to social, environmental and other concerns on the project. The GRM will aim to provide a time-bound and transparent mechanism to resolve such concerns. Grievances may be channeled through letters, emails, text messages (SMS), verbal narration, grievance boxes and registers. Suggested template for grievance redress form is in Appendix 7.

47. A sample grievance registration form will be published on the project website in local language and/or indigenous people dialect, at the hoarding board of each of the participating WUSC or municipalities' office. Every grievance shall be registered with careful documentation of process adopted for each of the grievance handled, as explained below. The environmental and social safeguards officer (ESO/SSO) at the PMOwill have the overall responsibility for timely grievance redress on environmental and social safeguards issues. The SSO at the RPMO will be the focal person for facilitating the grievance redress at the local level.

48. A municipal-level public awareness campaign will be conducted on a regular basis as per the communication strategy of the project to ensure awareness on the project and its' GRM. The designated focal persons (deputy project managers) for social and environmental safeguards will oversee ensuring the implementation of the environmental and social safeguards requirements for this project. Social Development Specialist will support the WUC or municipalities in conducting municipality-wide awareness campaigns, which will ensure that all stakeholders including poor and vulnerable are aware of the GRM and project's entitlements.

49. A grievance redress committee (GRC) will be formed at the Municipality level, comprising the Mayor as Chairperson of GRC, and Regional Project Manager RPMO as Secretary. The GRC members will comprise of (1) WUSC Secretary/PISU; (2) RPMO Engineer; (3) RPMO social/environmental (as relevant) officer, (4) representative of affected persons, (5) Safeguards specialist (social/environment as relevant), (6) a representative of reputable and relevant

CBO/SHG/organization working in the project area as invitee[14], and (7) contractor's representative. The secretary of the GRC will be responsible for convening timely meetings and maintaining minutes of meetings. The Social Development Specialist will support the RPMO safeguard's officer and Project Manager of RPMO to ensure that grievances, including those of the poor and vulnerable are addressed. All GRCs shall have at least two women committee members. Along with representatives of the affected persons, civil society and eminent citizens can be invited as observers in GRC meetings.

50. The functions of the local GRC are as follows: (i) provide support to affected persons on problems arising from environmental or social disruption; asset acquisition (if necessary); and eligibility for entitlements, compensation and assistance; (ii) record grievances of affected persons, categorize and prioritize them and provide solutions within 15 days of receipt of complaint by WUSC or local bodies; and (iii) ensure feedback to the aggrieved parties about developments regarding their grievances and decisions of the GRC. The GRM procedure is depicted in Figure 1, and is outlined below in detail, with each step having time-bound schedules and responsible persons to address grievances and indicating appropriate persons whose advice is to be sought at each stage, as required. If affected persons are not satisfied with the response they can elevate it to the next level:

(i) **First Level of GRM** (WUSC/PISU level): The first-level, which is also the most accessible and immediate venue for quick resolution of grievances will be the contractors, RPMO supervision personnel, who will immediately inform the WUSC/PISU. Any person with a grievance related to the project works can contact PCCWHSS to file a complaint. The municipal-level field office of the RPMO, in WUSC's building, will document the complaint within 24 hours of receipt of complaint in the field, and WUSC/PISU or local bodies will immediately address and resolve the issue at field-level with the contractor, supervision personnel of RPMO and Social Development Specialist within 5 days of receipt of a complaint/grievance. The assigned focal person at WUSC/PISU will be responsible to fully document: (i) name of the person, (ii) date of complaint received, (iii) nature of complaint, (iv) location and (v) how the complaint was resolved as well as to provide feedback to the complainant. If the complaint remains unresolved at the local level within 5 days, the WUSC/PISU will forward the complaint to the municipality level GRM.

(ii) **Second Level of GRM** (Municipality level): The complainant will be notified by the WUSC that the grievance is forwarded to the Municipality-level GRC. The Municipality-level GRC will be called for a meeting, called and chaired by the Mayor. The GRC will recommend corrective measures at the field level and assign clear responsibilities for implementing its decision within 10 days of receipt of complaint by WUSC. If the grievance remains unresolved within 10 days of receipt of complaint by WUSC, the matter will be referred to the third level. The RPMO Engineer will be responsible for processing and placing all papers before the GRC, recording decisions, issuing minutes of the meetings, providing feedback to complainants and taking follow up actions so that formal orders are issued and decisions are carried out.

[14] If the complaints are related with IP/Dalits/other vulnerable groups, specific NGO/CBO that actively involved in development of these communities shall be involved.

(iii) **Third Level of GRM** (PMO Level)**:** Any unresolved or major issues at Municipality level will be referred to the PMO for final solution. A representative of the Nepal Foundation for Indigenous Nationalities (NEFIN) will be invited to attend any meetings related to resolution of Indigenous Peoples grievances. Decision has to be made within 15 days of receipt of complaint from the Municipality-level GRC.

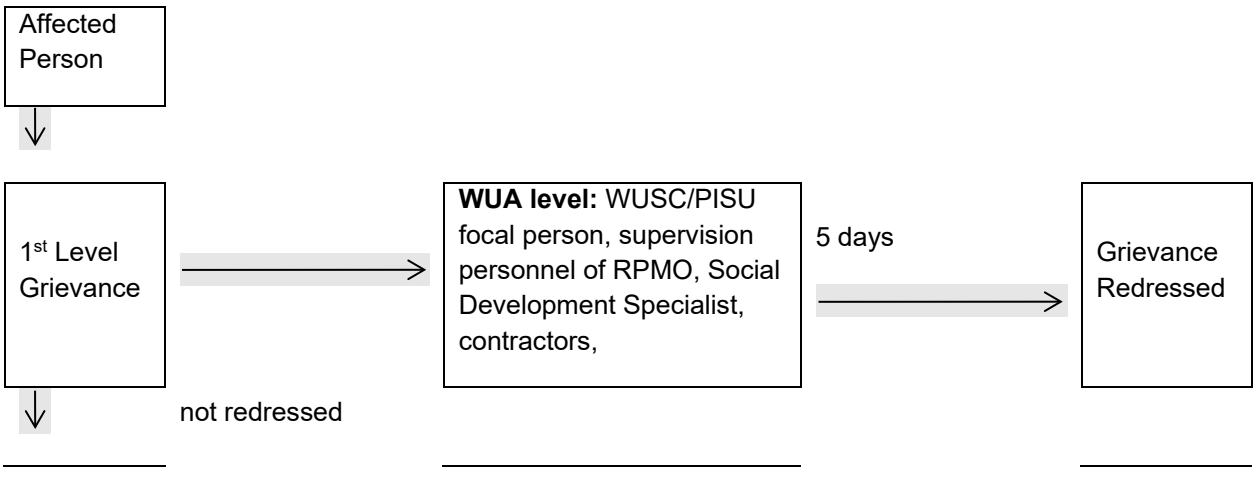
51. The Project Director will sign off on all grievances received by the PMO. The concerned Deputy Project Director (DPD) and environmental and social safeguards officers (ESO and SSO) of PMO will be involved with support from the Senior Engineer/Environmental specialist and Social Development Specialist (Consultant). The SSO will be responsible to convey the final decision to the complainant.

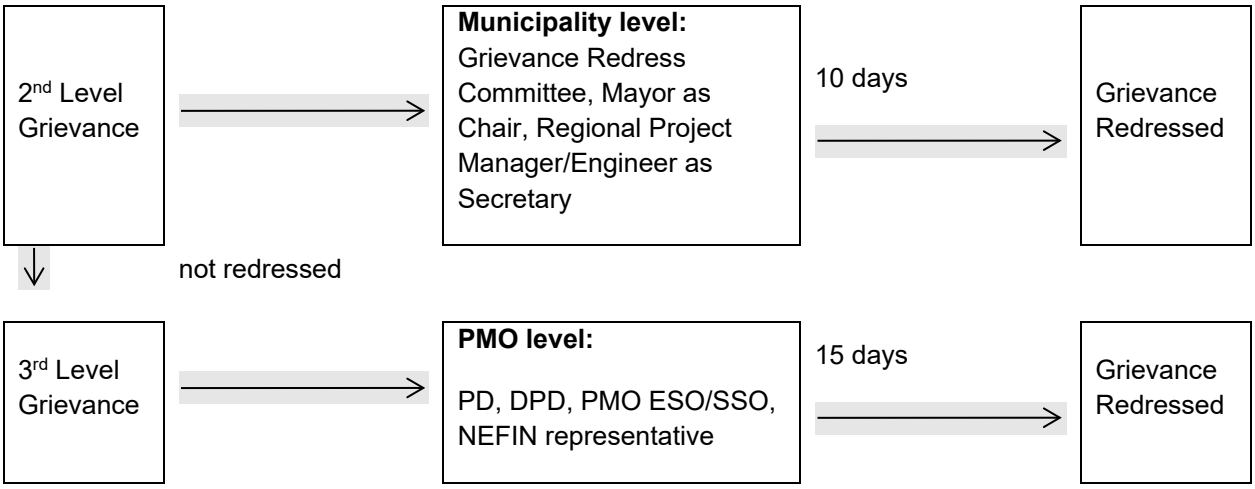
52. All paperwork (details of grievances) needs to be completed by the WUSC member secretary/PISU focal person assisted by Social Development Specialist and circulated to the WUSC Chairperson and members; and Social Development section of the Municipality. At Municipality level, the RPMO Engineer will be responsible for circulation of grievances to the Regional Project Manager, DWSSM, Mayor and other GRC members, prior to the scheduled meetings. The RPMO's Engineer will be responsible for follow-through of all escalated grievances. All decisions taken by the GRC will be communicated to the affected persons by the RPMO's SSO.

53. Despite the project GRM, an aggrieved person shall have access to the country's legal system at any stage and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

54. In the event that the established GRM is not in a position to resolve the issue, the affected person also can use ADB's Accountability Mechanism through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB Nepal Resident Mission. The complaint can be submitted in any of the official languages of ADB's developing member countries (DMCs). The ADB's Accountability Mechanism information will be included in PCCWHSST Information Datasheet (PID), to be published in web and distributed to the affected communities, as part of the project GRM.

Figure 1. Grievance Redress Mechanism for PCCWHSST





ESO=environmental safeguards officer, SDO=social development officer, SSO=social safeguards officer, GRC = grievance redress committee; PD = project director; DPD=Deputy Project Director; PMO = project management office, NEFIN = Nepal Federation of Indigenous Nationalities.

VII. INSTITUTIONAL ARRANGEMENT AND RESPONSIBILITIES

A. Institutions and Responsibilities

55. The EA will be the Ministry of Water Supply (MoWS). The DWSSM (under MoWS) will be the implementing agency. Project Director of Third Small Towns Water Supply and Sanitation Sector Project and Urban Water Supply and Sanitation (Sector) Project will be given responsibility as Project Director for the JFPR project[15]. Two full time dedicated engineers will be appointed or deployed for managing day to day implementation of the grant. For the overall project management, four individual consultants will be engaged using individual consultant selection method.[16] DWSSM confirmed to engage additional individual consultants, if required, from their own sources. The PMO under the UWSSP also has focal persons dedicated each for Gender Equality and Social Inclusion (GESI), environmental and social safeguards who can provide assistance in the safeguards aspects of the grant. Municipalities in secondary towns and WUSCs in small towns will be responsible for the implementation of civil works and capacity building/training activities with support from the DWSSM.[17] A Project Implementation Support Unit (PISU) will be established in social development section of the grant municipality and WUSCs of the selected small towns. Since the start of the COVID-19 pandemic, the DWSSM has been working with development partners and nongovernment organization (national and international) to ensure continuity of WASH services across the country. The DWSSM will coordinate with Department of Health services, to ensure synergy and avoid duplication of ADB's support. National Water Supply and Sanitation Training Center (NWSSTC) in collaboration and coordination with Department of Health Services, United Nations International Children's Emergency Fund (UNICEF) and World Health Organization (WHO) will support DWSSM to implement institutional strengthening and capacity development activities of the grant. Figure 2 shows the institutional arrangement for safeguards implementation.

56. The PMO under the DWSSM will be responsible for overall project planning, management, implementation, monitoring and reporting for the project. The PMO will be supported by a Senior Engineer/Environmental Consultant, and individual consultants who will be responsible for screening the proposed subprojects in accordance with the subproject selection criteria for the project[18], assisting the municipalities in conducting feasibility studies, reporting to and being point of liaison with ADB on the project; quality control of detailed design and construction supervision; procurement of civil works contractors; support for capacity building; and overseeing safeguard compliance. The PMO will liaise with WUSCs or municipalities to sign the management agreement prior to the award of contract for each subproject. The PMO will also engage all consultants under the project.

57. The RPMOs established under UWSSP in (i) Itahari, Sunsari, for the eastern region, (ii) in Nepalgunj, Banke, for the western region, and (iii) PMO (Kathmandu) will act as RPMO for central region projects. The RPMOs will report to the PMO and be supported and monitored by PMO to implement the projects in the field and manage contractors. The RPMOs will liaise with the grant coordinators in the project towns and municipalities. The RPMOs will manage the construction supervision with support from project consultant (senior engineer) that PMO would

[15] DWSSM will continue the existing PMO established and operational for the Third Small Towns Water Supply and Sanitation Sector project and Urban water Supply and Sanitation Sector Project.
[16] JFPR Grant Coordinator, Public Health Specialist, Senior Engineer and Social Development Specialist.
[17] In line with the Nepal constitution, local government can make decisions that are more representative of their localized health needs and management of health posts are devolved to the local government.
[18] Subproject selection criteria (covering all aspects of a proposed subproject other than the selection criteria for environment is discussed in this EARF)

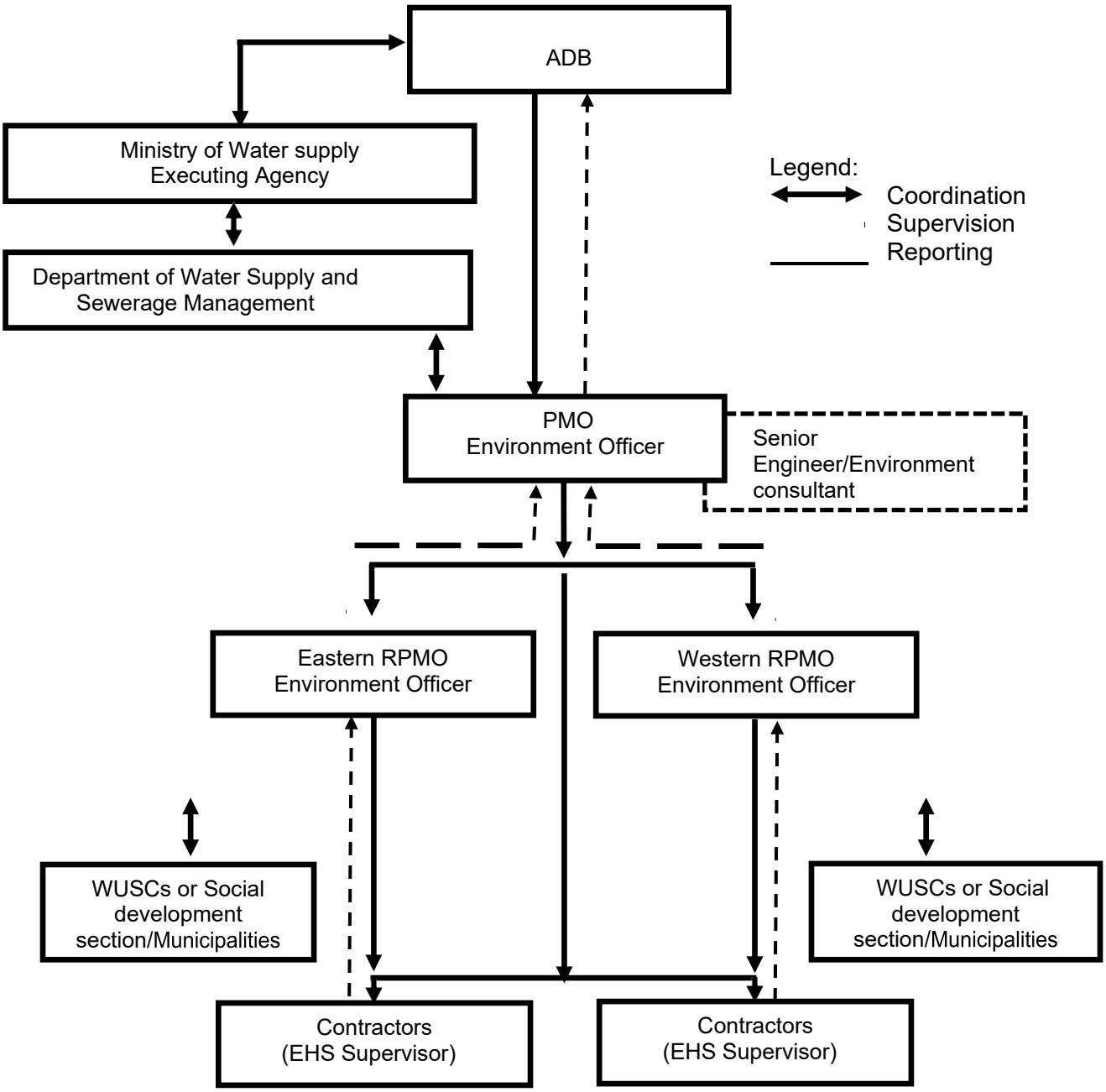
engage for the subproject; a dedicated implementation core group[19] will be established in the field, at each WUSC's office/PISU headed by a qualified engineer from the RPMO to conduct day-to-day project management, planning and construction supervision.

58. The WUSC or the municipality will be responsible for O&M of the multipurpose shelter, mobile public toilets and sanitation facilities (public toilets) rehabilitated/ constructed, operating under a management agreement with DWSSM. WUSCs consist of nine executive members, at least three of whom are women.

[19] The implementation core group, as a minimum, comprises of (i) an Engineer, a Social mobilizer, and an EMP monitor, RPMO; (ii) an Administration Staff, or a Finance Staff, or Engineer or Junior Engineer of WUSC/PISU as grant coordinator

[20] If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

Figure 2: Safeguard Implementation Arrangement



ADB = Asian Development Bank, EHS = Environmental, Health and Safety, PMO – project management office, RPMO = regional project management office, WUSC = Water Users and Sanitation Committee.

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59. **Project Management Office.** A project officer (Engineer/Environment) will be engaged in PMO to ensure implementation of environmental safeguards. He/she will be provided with necessary consultant support, and capacity development and training. The responsibilities of the Environment Officer are:

(i) prepare/update the IEEs/DDRs and EMPs based on detailed designs, in accordance with this EARF and government rules;
(ii) prepare the REA checklists and determine the subproject environmental category;
(iii) ensure that the IEEs/DDRs and EMPs are included in bidding documents and civil works contracts;
(iv) provide oversight on environmental management aspects of subprojects and ensure EMPs are implemented by RPMOs and contractors;
(v) establish a system to monitor environmental safeguards of the project including monitoring the indicators set out in the monitoring plan of the EMP;
(vi) facilitate and confirm overall compliance with all Government rules and regulations regarding site and environmental clearances as well as any other environmental requirements as relevant;
(vii) supervise and provide guidance to the RPMOs to properly carry out the environmental monitoring and assessments as per the EARF;
(viii) review, monitor and evaluate effectiveness with which the EMPs are implemented, and recommend necessary corrective actions to be taken;
(ix) consolidate monthly environmental monitoring reports from RPMOs and submit environmental safeguards compliance reports to ADB through the QPRs
(x) ensure timely disclosure of final IEEs/DDRs and EMPs in project locations and in a form accessible to the public;
(xi) assist with ongoing meaningful consultation and assist in setting up of GRM in respect of environment concerns;
(xii) address any grievances brought about through the GRM in a timely manner as per the IEEs;
(xiii) undertake regular review of safeguards-related loan covenants, and the compliance during program implementation; and
(xiv) organize periodic capacity building and training programs on safeguards for project stakeholders, PMO, RPMOs, and WUSCs.

60. **Regional Project Management Offices.** The environmental officer assigned by DWSSM to the RPMOs will receive support from (i) the PMO environmental officer and (ii) Senior Engineer/Environmental specialist (Consultant) to carry out the following:

(i) conduct regular site inspections and ensure proper implementation of EMPs including environmental monitoring by contractors;
(ii) take corrective actions when necessary to ensure no environmental impacts;
(iii) submit monthly environmental monitoring reports to PMO;
(iv) assist with ongoing meaningful consultation and assist in setting up of GRM in respect of environment concerns; and
(v) address any grievances brought about through the GRM in a timely manner as per the IEEs and in accordance with this EARF.

61. **Senior Engineer/Environmental Specialist (Individual Consultant).** The Senior Engineer who is also responsible for managing environmental safeguards matters will provide support to the PMOs in the following areas.

62. The detailed TORs are in the PAM:

(i) consult with municipality and concerned WUSCs during the feasibility study and fixing the location of the proposed community shelter and WASH facilities;
(ii) prepare and finalize detailed designs with quantities and ensure detailed designs accommodate the recommendations of the land acquisition and resettlement plans and the environmental management;
(iii) visit the existing public toilets facilities in the town, assess the status of operation, consult with Municipality and WUSC and propose required maintenance or renovation/rehabilitation with future operation mechanism;
(iv) conduct the IEEs/due diligence and prepare the IEE reports/DDRs according to the provisions of this EARF and applicable government regulations;
(v) anticipate the likely environmental impacts of the grant activities and proactively plan to take necessary action so that implementation is not delayed;
(vi) during the construction phase, monitor the project's compliance with environmental management plan and/or environmental mitigation action plan as well as any other environmental issues in co-ordination with Municipality, WUSCs, DWSSM and other stakeholders.
(vii) Prepare quarterly environmental monitoring reports for the project as a whole as part of the quarterly progress reports, following monitoring requirements stipulated in this EARF, and the respective IEE/due diligence for subprojects and submit it to the PMO for review and endorsement
(viii) Prepare Environmental Safeguard Report when required in consultation with JFPR Grant Coordinator.

63. **Civil Works Contracts and Contractors.** The contractor will be required to designate an Environment, Health and Safety (EHS) supervisor/officer to ensure implementation of EMP during civil works. Contractors are to carry out all environmental mitigation and monitoring measures outlined in their contract. The contractor will be required to submit to RPMO, for review and approval, a SEMP including (i) proposed sites/locations for construction work camps, storage areas, hauling roads, lay down areas, disposal areas for solid and hazardous wastes; (ii) specific mitigation measures following the approved EMP; (iii) monitoring program as per SEMP; and (iv) budget for SEMP implementation. No works can commence prior to approval of SEMP. The contractor will be required to undertake day to day monitoring and report to the respective RPMO.

64. A copy of the EMP or approved SEMP will be always kept on site during the construction period. Non-compliance with, or any deviation from, the conditions set out in the EMP or SEMP constitutes a failure in compliance and will require corrective actions.

65. The PMO and RPMOs will ensure that bidding and contract documents include specific provisions requiring contractors to comply with: (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites.

B. Staffing Requirement

66. In addition to the regular position of the environmental focal persons in the PMO and RPMOs, a senior engineer who will also look after environmental safeguards issues will be recruited. The senior engineer will support the PMO/RPMOs to conduct the IEEs/due diligence and prepare the IEE reports/DDRs according to the provisions of this EARF.

C. Budget

67. The estimated costs for EARF implementation is presented in Table 10. It includes the costs for consultants' support for the PMO and RPMOS, environmental monitoring, mitigation/compensatory measures, capacity building, administrative costs and other costs, e.g., conduct of consultations, resolution of grievances and eventual unanticipated impact from project implementation.

Table 10: Indicative Costs for Environmental Assessment and Review Framework Implementation

No.	Particulars	Stages	Unit	Total Number	Rate (NRs)	Cost (NRs)	Cost Covered by
A.	**Consultants Costs**						
1.	Senior Engineer/Environmental Specialist safeguard specialist (1 person)	Responsible for environmental safeguards of the project at project management office (PMO)	person months (spread over entire project implementation period)	24-person months	300,000 per person month	7,200,000	Cost covers only remuneration, which together with budget for travel covered in the contract
B.	**Tree plantation and Environmental Monitoring**						
2.	Compensatory plantation measures (average estimate)	Construction	No. of plantation activities	As needed	Lump Sum	5,000,000	Civil works contract
3.	Air quality monitoring	Pre-construction (baseline) Construction	No. of sampling activities	Once during pre-construction to be used as baseline As needed during construction phase As needed during operation and maintenance phase			Civil works contract
4.	Noise levels monitoring	Pre-construction (baseline) Construction	No. of sampling activities				Civil works contract
5.	Water Quality monitoring	Pre-construction (baseline) Construction Operation and Maintenance (for water supply and wastewater treatment subprojects)	No. of sampling activities				Costs during operation and maintenance phase covered by respective WUAs or municipalities.
C	**Capacity Building**						

No.		Particulars	Stages	Unit	Total Number	Rate (NRe)	Cost (NRe)	Cost Covered by
		induction course for contractors, preparing them on environmental management plan (EMP) implementation and environmental monitoring requirements related to mitigation measures; and taking immediate action to remedy unexpected adverse impacts or ineffective mitigation measures found during the course of implementation; and	prior to contract of award for civil works	Lumpsum			200,000	Covered under Output 2 - Improved Institutional Capacity and Project Implementation Platform

No.	Particulars	Stages	Unit	Total Number	Rate (NRe)	Cost (NRe)	Cost Covered by
D.	**Administrative Costs**						
1.	Legislation, permits, and agreements	Permit for excavation, tree-cutting permits etc.	Lumpsum				These consents are to be obtained by contractor at his own expense.

		Environmental assessment and environmental clearances as per ECA and ECR requirements	Per town	10	60,000	600,000	Covered under the PMO
E.	**Other Costs**						
1.	Public consultations and information disclosure	Information disclosure and consultations during preconstruction and construction phase, including public awareness campaign through media	As per requirement	Lumpsum	350,000	350,000	Covered under PMO budget
2.	Grievance redress mechanism (GRM) implementation	Costs involved in resolving complaints (meetings, consultations, communication, and reporting/ information dissemination)	As per requirement	Lumpsum	200,000	200,000	Covered under PMO budget
3.	Any unanticipated impact due to project implementation	Mitigation of any unanticipated impact arising during construction phase and defect liability period		Lumpsum	Contractor's liability	As per insurance requirement	Civil works contract – contractor's insurance

VIII. MONITORING AND REPORTING

68. The monitoring activities will correspond with the project's risks and impacts and will be identified in the IEEs/DDRs for the subprojects. The PMO and RPMOs, will undertake site inspections and document review to verify compliance with the EMP and progress toward the desired outcome.

69. Compliance with grant covenants will be screened by the PMO. RPMOs will submit monthly monitoring and implementation reports to PMO, who will take follow-up actions, if necessary. The PMO environmental safeguard consultant will document monitoring results, identify the necessary corrective actions, reflect them in a corrective action plan, and for each quarter, will study the compliance with the action plan developed in the previous quarter. PMO will submit the project's environmental safeguards compliance reports through the quarterly progress report to ADB.

70. ADB will review project performance against the EA commitments as agreed in the legal documents. The extent of ADB's monitoring and supervision activities will be commensurate with the project's risks and impacts. Monitoring and supervising of social and environmental safeguards will be integrated into the project performance management system. ADB will carry out the following monitoring actions to supervise project implementation:

(i) conduct periodic site visits for projects with adverse environmental or social impacts;
(ii) conduct supervision missions with detailed review by ADB's safeguard specialists/officers or consultants for projects with significant adverse social or environmental impacts;
(iii) review the periodic monitoring reports submitted by PMO to ensure that adverse impacts and risks are mitigated, as planned and as agreed with ADB;
(iv) work with PMO to rectify to the extent possible any failures to comply with their safeguard commitments, as covenanted in the legal agreements, and exercise remedies to re-establish compliance as appropriate; and
(v) prepare a project completion report that assesses whether the objective and desired outcomes of the safeguard plans have been achieved, taking into account the baseline conditions and the results of monitoring.

71. ADB's monitoring and supervision activities are carried out on an on-going basis until a Grant Completion Report is issued.

INDICATIVE LIST OF PACKAGES

The list will be updated in the Project Administration Manual and Procurement Plan. The procurement plan will be updated by the PMO for approval by ADB, at least annually, and more frequently if necessary, and shall cover the next 18 months of procurement activity.

PCCWHSST Indicative List of Packages

Package Number	General Description
Goods and Works	
W01	Construction of multipurpose community shelters (20 nos.)
G01	Mobile toilets- 30 nos (4 nos. in five secondary cities and two each for 10 small towns)
G02	Supply of basic sanitation and hygiene commodities in 15 municipalities/small towns
G03	Procurement of disinfectant sprayers in each selected municipality and small town
W02	Rehabilitation/refurbishing of existing public toilets including septic tank in the project municipalities/small towns
G04	Establishment of health desks and handwashing stations in 15 municipalities
Consulting Services	
C01	JFPR Grant Coordinat or
C02	Senior Engineer (Design, Procurement, Monitoring and Quality Control)
C03	Social Development Specialist
C04	Public Health Specialist

Rapid Environmental Assessment (REA) Checklist for Urban Development

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Safeguards Division (SDSS) for endorsement by the Director, SDSS and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's: (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

Country/Project Title:

Sector Division:

Screening Questions	Yes	No	Remarks
A. Project Siting Is the project area…			
Densely populated?			
Heavy with development activities?			
Adjacent to or within any environmentally sensitive areas?			
Cultural heritage site			
Protected Area			
Wetland			
Mangrove			
Estuarine			
Buffer zone of protected area			
Special area for protecting biodiversity			
Bay			
B. Potential Environmental Impacts Will the Project cause…			
impacts on the sustainability of associated sanitation and solid waste disposal systems and their interactions with other urban services.			

Screening Questions	Yes	No	Remarks
deterioration of surrounding environmental conditions due to rapid urban population growth, commercial and industrial activity, and increased waste generation to the point that both manmade and natural systems are overloaded and the capacities to manage these systems are overwhelmed?			
degradation of land and ecosystems (e.g. loss of wetlands and wild lands, coastal zones, watersheds and forests)?			
dislocation or involuntary resettlement of people?			
disproportionate impacts on the poor, women and children, Indigenous Peoples, or other vulnerable group?			
degradation of cultural property, and loss of cultural heritage and tourism revenues?			
occupation of low-lying lands, floodplains, and steep hillsides by squatters and low-income groups, and their exposure to increased health hazards and risks due to pollutive industries?			
water resource problems (e.g. depletion/degradation of available water supply, deterioration for surface and ground water quality, and pollution of receiving waters?			
air pollution due to urban emissions?			
risks and vulnerabilities related to occupational health and safety due to physical, chemical, and biological hazards during project construction and operation?			
road blocking and temporary flooding due to land excavation during rainy season?			
noise and dust from construction activities?			
traffic disturbances due to construction material transport and wastes?			
temporary silt runoff due to construction?			
hazards to public health due to ambient, household and occupational pollution, thermal inversion, and smog formation?			
water depletion and/or degradation?			
overpaying of ground water, leading to land subsidence, lowered ground water table, and salinization?			
contamination of surface and ground waters due to improper waste disposal?			
pollution of receiving waters resulting in amenity losses, fisheries and marine resource depletion, and health problems?			

Screening Questions	Yes	No	Remarks
large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?			
social conflicts if workers from other regions or countries are hired?			
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 and construction?			
community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation, and decommissioning?			

A Checklist for Preliminary Climate Risk Screening

Country/Project Title:
Sector:
Subsector:
Division/Department:

Screening Questions		**Score**	**Remarks**[20]
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather-related events such as floods, droughts, storms, landslides?		
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc.)?		
Materials and Maintenance	Would weather, current, and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?		
	Would weather, current, and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s) ?		
Performance of project outputs	Would weather, climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design lifetime?		

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1–4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

Result of Initial Screening (Low, Medium, High):_____

Other Comments:_____
_____
_____

[20] If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

_____

Prepared by: _____

Environments, Hazards and Climate Changes

Environment	Natural Hazards and Climate Change
Arid/Semiarid and desert environments	Low erratic rainfall of up to 500 mm rainfall per annum with periodic droughts and high rainfall variability. Low vegetative cover. Resilient ecosystems & complex pastoral and systems, but medium certainty that 10–20% of drylands degraded; 10-30% projected decrease in water availability in next 40 years; projected increase in drought duration and severity under climate change. Increased mobilization of sand dunes and other soils as vegetation cover declines; likely overall decrease in agricultural productivity, with rain-fed agriculture yield reduced by 30% or more by 2020. Earthquakes and other geophysical hazards may also occur in these environments.
Humid and sub-humid plains, foothills and hill country	More than 500 mm precipitation/yr. Resilient ecosystems & complex human pastoral and cropping systems. 10-30% projected decrease in water availability in next 40 years; projected increase in droughts, heatwaves and floods; increased erosion of loess-mantled landscapes by wind and water; increased gully erosion; landslides likely on steeper slopes. Likely overall decrease in agricultural productivity & compromised food production from variability, with rain-fed agriculture yield reduced by 30% or more by 2020. Increased incidence of forest and agriculture-based insect infestations. Earthquakes and other geophysical hazards may also occur in these environments.
River valleys/ deltas and estuaries and other low lying coastal areas	River basins, deltas and estuaries in low-lying areas are vulnerable to riverine floods, storm surges associated with tropical cyclones/typhoons and sea level rise; natural (and human-induced) subsidence resulting from sediment compaction and ground water extraction; liquefaction of soft sediments as result of earthquake ground shaking. Tsunami possible/likely on some coasts. Lowland agri-business and subsistence farming in these regions at significant risk.
Small islands	Small islands generally have land areas of less than 10,000km^2 in area, though Papua New Guinea and Timor with much larger land areas are commonly included in lists of small island developing states. Low-lying islands are especially vulnerable to storm surge, tsunami and sea-level rise and, frequently, coastal erosion, with coral reefs threatened by ocean warming in some areas. Sea level rise is likely to threaten the limited ground water resources. High islands often experience high rainfall intensities, frequent landslides and tectonic environments in which landslides and earthquakes are not uncommon with (occasional) volcanic eruptions. Small islands may have low adaptive capacity and high adaptation costs relative to GDP.
Mountain ecosystems	Accelerated glacial melting, rock falls/landslides and glacial lake outburst floods, leading to increased debris flows, river bank erosion and floods and more extensive outwash plains and, possibly, more frequent wind erosion in intermontane valleys. Enhanced snow melt and fluctuating stream flows may produce seasonal floods and droughts. Melting of permafrost in some environments. Faunal and floral species migration. Earthquakes, landslides and other geophysical hazards may also occur in these environments.
Volcanic environments	Recently active volcanoes (erupted in last 10,000 years – see www.volcano.si.edu). Often fertile soils with intensive agriculture and landslides on steep slopes. Subject to earthquakes and volcanic eruptions including pyroclastic flows and MoWS flows/lahars and/or gas emissions and occasionally widespread ash fall.

"NO MITIGATION MEASURES SCENARIO" CHECKLIST FOR PCCWHSST

Checklist 1: Scoping Checklist Part 1 - Questions on Project Characteristics

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
1. Will construction, operation or decommissioning of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in waterbodies, etc.)?				
1.1	Permanent or temporary change in land use, landcover or topography including increases in intensity of land use?			
1.2	Clearance of existing land, vegetation and buildings?			
1.3	Creation of new land uses?			
1.4	Pre-construction investigations e.g. boreholes, soil testing?			
1.5	Construction works?			
1.6	Demolition works?			
1.7	Temporary sites used for construction works or housing of construction workers?			
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations?			
1.9	Underground works including mining or tunnelling?			
1.10	Reclamation works?			
1.11	Dredging?			
1.12	Coastal structures *e.g.* seawalls, piers?			
1.13	Offshore structures?			
1.14	Production and manufacturing processes?			
1.15	Facilities for storage of goods or materials?			
1.16	Facilities for treatment or disposal of solid wastes or liquid effluents?			
1.17	Facilities for long term housing of operational workers?			
1.18	New road, rail or sea traffic during construction or operation?			
1.19	New road, rail, air, waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?			

1.20	Closure or diversion of existing transport routes or			

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
	infrastructure leading to changes in traffic movements?			
1.21	New or diverted transmission lines or pipelines?			
1.22	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?			
1.23	Stream crossings?			
1.24	Abstraction or transfers of water from ground or surface waters?			
1.25	Changes in waterbodies or the land surface affecting drainage or run-off?			
1.26	Transport of personnel or materials for construction, operation or decommissioning?			
1.27	Long term dismantling or decommissioning or restoration works?			
1.28	Ongoing activity during decommissioning which could have an impact on the environment?			
1.29	Influx of people to an area in either temporarily or permanently?			
1.30	Introduction of alien species?			
1.31	Loss of native species or genetic diversity?			
1.32	Any other actions?			
2. Will construction or operation of the Project use natural resources such as land, water, materials or energy, especially any resources which are non-renewable or in short supply?				
2.1	Land especially undeveloped or agricultural land?			
2.2	Water?			
2.3	Minerals?			
2.4	Aggregates?			
2.5	Forests and timber?			
2.6	Energy including electricity and fuels?			
2.7	Any other resources?			

3. Will the Project involve use, storage, transport, handling or production of substances or materials which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?				
3.1	Will the project involve use of substances or materials which			

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
	are hazardous or toxic to human health or the environment (flora, fauna, water supplies)?			
3.2	Will the project result in changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)?			
3.3	Will the project affect the welfare of people e.g. by changing living conditions?			
3.4	Are there especially vulnerable groups of people who could be affected by the project e.g. hospital patients, the elderly?			
3.5	Any other causes?			
4. Will the Project produce solid wastes during construction or operation or decommissioning?				
4.1	Spoil, overburden or mine wastes?			
4.2	Municipal waste (household and or commercial wastes)?			
4.3	Hazardous or toxic wastes (including radioactive wastes)?			
4.4	Other industrial process wastes?			
4.5	Surplus product?			
4.6	Sewage sludge or other sludges from effluent treatment?			
4.7	Construction or demolition wastes?			
4.8	Redundant machinery or equipment?			
4.9	Contaminated soils or other material?			
4.10	Agricultural wastes?			
4.11	Any other solid wastes?			
5. Will the Project release pollutants or any hazardous, toxic or noxious substances to air?				
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources?			
5.2	Emissions from production processes?			
5.3	Emissions from materials handling including storage or transport?			

5.4	Emissions from construction activities including plant and			

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
	equipment?			
5.5	Dust or odors from handling of materials including construction materials, sewage and waste?			
5.6	Emissions from incineration of waste?			
5.7	Emissions from burning of waste in open air (*e.g.* slash material, construction debris)?			
5.8	Emissions from any other sources?			
6. Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?				
6.1	From operation of equipment e.g. engines, ventilation plant, crushers?			
6.2	From industrial or similar processes?			
6.3	From construction or demolition?			
6.4	From blasting or piling?			
6.5	From construction or operational traffic?			
6.6	From lighting or cooling systems?			
6.7	From sources of electromagnetic radiation (consider effects on nearby sensitive equipment as well as people)?			
6.8	From any other sources?			
7. Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into sewers, surface waters, groundwater, coastal waters or the sea?				
7.1	From handling, storage, use or spillage of hazardous or toxic materials?			
7.2	From discharge of sewage or other effluents (whether treated or untreated) to water or the land?			
7.3	By deposition of pollutants emitted to air, onto the land or into water?			
7.4	From any other sources?			
7.5	Is there a risk of long term build-up of pollutants in the environment from these sources?			
8. Will there be any risk of accidents during construction or operation of the Project which could affect human health or the environment?				

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
8.1	From explosions, spillages, fires etc. from storage, handling, use or production of hazardous or toxic substances?			
8.2	From events beyond the limits of normal environmental protection e.g. failure of pollution control systems?			
8.3	From any other causes?			
8.4	Could the project be affected by natural disasters causing environmental damage (*e.g.* floods, earthquakes, landslip, *etc.*)?			
9. Will the Project result in social changes, for example, in demography, traditional lifestyles, employment?				
9.1	Changes in population size, age, structure, social groups *etc.*?			
9.2	By resettlement of people or demolition of homes or communities or community facilities e.g. schools, hospitals, social facilities?			
9.3	Through in-migration of new residents or creation of new communities?			
9.4	By placing increased demands on local facilities or services e.g. housing, education, health?			
9.5	By creating jobs during construction or operation or causing the loss of jobs with effects on unemployment and the economy?			
9.6	Any other causes?			
Question - Are there any other factors which should be considered such as consequential development which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality?				
9.1	Will the project lead to pressure for consequential development which could have significant impact on the environment e.g. more housing, new roads, new supporting industries or utilities, etc.?			
9.2	Will the project lead to development of supporting			

No.	Questions to be considered in Scoping	Yes/No/?	Which Characteristics of the Project Environment could be affected and how?	Is the effect likely to be significant? Why?
	facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: • supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries other?			
9.3	Will the project lead to after- use of the site which could have an impact on the environment?			
9.4	Will the project set a precedent for later developments?			
9.5	Will the project have cumulative effects due to proximity to other existing or planned projects with similar effects?			

Checklist 2: Scoping Checklist Part 2 - Characteristics of the Project Environment (Environmental Sensitivity)

Question - Are there features of the local environment on or around the Project location which could be affected by the Project? • Areas which are protected under international or national or local legislation for their ecological, landscape, cultural or other value, which could be affected by the project? • Other areas which are important or sensitive for reasons of their ecology e.g. • Wetlands, • Watercourses or other waterbodies, • the coastal zone, • mountains, • forests or woodlands • Areas used by protected, important or sensitive species of fauna or flora e.g. for breeding, nesting, foraging, resting, overwintering, migration, which could be affected by the project? • Inland, coastal, marine or underground waters? • Areas or features of high landscape or scenic value? • Routes or facilities used by the public for access	

to recreation or other facilities? • Transport routes which are susceptible to congestion or which cause environmental problems? • Areas or features of historic or cultural importance?	
Question - Is the Project in a location where it is likely to be highly visible to many people?	
Question - Is the Project located in a previously undeveloped area where there will be loss of greenfield land?	
Question - Are there existing land uses on or around the Project location which could be affected by the Project? For example: • Homes, gardens, other private property, • Industry, • Commerce, • Recreation, • public open space, • community facilities, • agriculture, • forestry, • tourism, • mining or quarrying	
Question - Are there any plans for future land uses on or around the location which could be affected by the Project?	
Question - Are there any areas on or around the location which are densely populated or built-up, which could be affected by the Project?	
Question - Are there any areas on or around the location which are occupied by sensitive land uses which could be affected by the Project? • hospitals, • schools, • places of worship, • community facilities	
Question - Are there any areas on or around the location which contain important, high quality or scarce resources which could be affected by the Project? For example: • groundwater resources, • surface waters, • forestry, • agriculture, • fisheries, • tourism, • minerals.	
Question - Are there any areas on or around the location of the Project which are already subject to pollution or environmental damage **e.g. where existing legal environmental standards are exceeded, which could be affected by the project?**	

Question - Is the Project location susceptible to	

earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions e.g. temperature inversions, fogs, severe winds, which could cause the project to present environmental problems?	
Question - Is the Project likely to affect the physical condition of any environmental media? • The atmospheric environment including microclimate and local and larger scale climatic conditions? • Water – e.g. quantities, flows or levels of rivers, lakes, groundwater. Estuaries, coastal waters or the sea? • Soils – e.g. quantities, depths, humidity, stability or erdodibility of soils? • Geological and ground conditions?	
Question - Are releases from the Project likely to have effects on the quality of any environmental media? • Local air quality? • Global air quality including climate change and ozone depletion • Water quality – rivers, lakes, groundwater. Estuaries, coastal waters or the sea? • Nutrient status and eutrophication of waters? • Acidification of soils or waters? • Soils • Noise? • Temperature, light or electromagnetic radiation including electrical interference? • Productivity of natural or agricultural systems?	
Question - Is the Project likely to affect the availability or scarcity of any resources either locally or globally? • Fossil fuels? • Water? • Minerals and aggregates? • Timber? • Other non-renewable resources? • Infrastructure capacity in the locality - water, sewerage, power generation and transmission, telecommunications, waste disposal roads, rail?	

Question - Is the Project likely to affect human or community health or welfare? • The quality or toxicity of air, water, foodstuffs and other products consumed by humans? • Morbidity or mortality of individuals, communities or populations by exposure to pollution? • Occurrence or distribution of disease vectors including insects? • Vulnerability of individuals, communities or populations to disease? • Individuals' sense of personal security? • Community cohesion and identity?	

• Cultural identity and associations? • Minority rights? • Housing conditions? • Employment and quality of employment? • Economic conditions? • Social institutions?	

Checklist 3: Significance of Impacts

Questions to be Considered	
1. Will there be a large change in environmental conditions?	
2. Will new features be out-of-scale with the existing environment?	
3. Will the effect be unusual in the area or particularly complex?	
4. Will the effect extend over a large area?	
5. Will there be any potential for transboundary impact?	
6. Will many people be affected?	
7. Will many receptors of other types (fauna and flora, businesses, facilities) be affected?	
8. Will valuable or scarce features or resources be affected?	
9. Is there a risk that environmental standards will be breached?	
10. Is there a risk that protected sites, areas, features will be affected?	
11. Is there a high probability of the effect occurring?	
12. Will the effect continue for a long time?	
13. Will the effect be permanent rather than temporary?	
14. Will the impact be continuous rather than intermittent?	
15. If it is intermittent will it be frequent rather than rare?	
16. Will the impact be irreversible?	
17. Will it be difficult to avoid, or reduce or repair or compensate for the effect?	

RELEVANT ENVIRONMENTAL QUALITY STANDARDS

(Note: International Guidelines are presented, where applicable, to show comparison and will be useful if evaluation of quality monitoring results include checking of how subproject's environmental performance fare with international standards.)

Table 1: Ambient Air Quality Standards

Parameter	Averaging Period*	Nepal's Ambient Air Quality Standard, 2003**(µg/m^3)	WHO Air Quality Guidelines (µg/m^3)		Standard values to be followed by PCCWHSST subprojects, whichever are applicable^^^ (µg/m^3)
			Global Update^ 2005	Second Edition ^^ 2000	
TSP	Annual	-	-	-	-
	24-hour	230	-	-	230
PM_{10}	Annual	-	20	-	20
	24-hour	120	50	-	50
$PM_{2.5}$	1-year	-	10	-	10
	24-hour	-	25	-	25
SO_2	Annual	50	-	-	50
	24-hour	70	20	-	20
	10-minute	-	500	-	500
NO_2	1-year	40	40	-	40
	24-hour	80	-	-	80
	1-hour	-	200	-	200
CO	8-hour	10,000	-	10,000	10,000
	15-minute	100,000	-	100,000	100,000
Pb	1-year	0.5	-	0.5	0.5
Benzene	1-year	20	-	-	20

* Due to short term duration of civil works, the shortest period will be more practical to use.

** as implementing rules on ambient air quality standards under the Environmental Protection Act, 1997. Summary available from Environment Statistics of Nepal 2011, Government of Nepal, National Planning Commission Secretariat, Central Bureau of Statistics, Kathmandu, Nepal.

^ Source: Environmental, Health and Safety General Guidelines, 2007. International Finance Corporation, World Bank Group.

^^ Source: Air Quality Guidelines for Europe, Second Edition, 2000; WHO Regional Office for Europe, Copenhagen

^^^ Subject to capacity of executing agency to do the test, including the availability of facilities to do the test in the country.

Table 2: Noise Level Standards

Receptor/ Source	National Noise Standard Guidelines, 2012* (dB)		WHO Guidelines Value For Noise Levels Measured Out of Doors** (One Hour LA_q in dBA)		Standard values to be followed by PCCWHSST subprojects, whichever are applicable (dB)
	Day	Night	07:00 – 22:00	22:00 – 07:00	
Industrial area	75	70	70	70	70 for day time 70 for night time
Commercial area	65	55			65 for day time 55 for night time
Rural residential area	45	40	55	45	45 for day time 40 for night time
Urban residential area	55	50	55	45	55 for day time 45 for night time

Receptor/ Source	National Noise Standard Guidelines, 2012* (dB)		WHO Guidelines Value For Noise Levels Measured Out of Doors** (One Hour LA_q in dBA)		Standard values to be followed by **PCCWHSST** subprojects, whichever are applicable (dB)
	Day	Night	07:00 – 22:00	22:00 – 07:00	
Mixed residential area	63	55	55	45	55 for day time 45 for night time
Quiet area	50	40	-	-	50 for day time 40 for night time
Water Pump	65		-		65
Diesel generator	90		-		90

* as implementing rules on noise standard guidelines under Environmental Protection Act, 1997.
** Guidelines for Community Noise, WHO, 1999.Source: Environmental, Health and Safety General Guidelines, 2007. International Finance Corporation, World Bank Group.

Table 3: National Drinking Water Quality Standards, 2006

Group	**National Drinking Water Quality Standards, 2006***			**WHO Guidelines for Drinking-Water Quality, 4th Edition, 2011****	**Standard values to be followed by PCCWHSST subprojects, whichever are applicable^^^**
	Parameter	**Unit**	**Max. Concentration Limits**		
Physical	Turbidity	NTU	5(10) ***	-	5(10) ***
	pH		6.5 – 8.5	none	6.5 – 8.5
	Color	TCU	5 (15)	none	5 (15)
	Taste and Odor		Would not be objectionable	-	Would not be objectionable
	TDS	mg/l	1000	-	1000
	Electrical Conductivity	µc/cm	1500	-	1500
	Iron	mg/l	0.3 (3)	-	0.3 (3)
	Manganese	mg/l	0.2	-	0.2
	Arsenic	mg/l	0.05	0.01	0.01
	Cadmium	mg/l	0.003	0.003	Same
	Chromium	mg/l	0.05	0.05	0.05
	Cyanide	mg/l	0.07	none	0.07
	Fluoride	mg/l	0.5 – 1.5 ^	1.5	0.5 – 1.5 ^
	Lead	mg/l	0.01	0.01	0.01
	Ammonia	mg/l	1.5	none established	1.5
Chemical	Chloride	mg/l	250	none established	250
	Sulphate	mg/l	250	none	250
	Nitrate	mg/l	50	50	50
	Copper	mg/l	1	2	1
	Total Hardness	mg/l	500	-	500
	Calcium	mg/l	200	-	200
	Zinc	mg/l	3	none established	3
	Mercury	mg/l	0.001	0.006	0.001
	Aluminium	mg/l	0.2	none established	0.2

Group	National Drinking Water Quality Standards, 2006*			WHO Guidelines for Drinking-Water Quality, 4th Edition, 2011**	Standard values to be followed by PCCWHSST subprojects, whichever are applicable^^^
	Parameter	Unit	Max. Concentration Limits		
	Residual Chlorine	mg/l	0.1 - 0.2	5 ^^	0.1 - 0.2
Micro Germs	E-coli	MPN/100ml	0	Must not be detectable in any 100 ml sample	0
	Total Coliform	MPN/100ml	0 in 95%of samples taken		0 in 95%of samples taken

as the implementing rules on drinking water quality standards under Water Resources Act, 1992

** Health-based guideline values

*** Figures in parenthesis are upper range of the standards recommended.

^ These standards indicate the maximum and minimum limits.

^^ From WHO (2003) Chlorine in Drinking-water, which states that this value is conservative.

^^^ Subject to capacity of executing agency to do the test, including the availability of facilities to do the test in the country

OUTLINE OF AN ADB INITIAL ENVIRONMENTAL EXAMINATION REPORT

This outline is part of the safeguard requirements. An initial environmental examination (IEE) report is required for all environment category B projects. Its level of detail and comprehensiveness is commensurate to the significance of potential environmental impacts and risks. A typical IEE may have a narrower scope than an environmental impact assessment (EIA), depending on the nature of the project. The substantive aspects of this outline will guide the preparation of IEE reports, although not necessarily in the order shown.

Executive Summary

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

A. Introduction

B. Policy, Legal, and Administrative Framework –discusses the national and local legal and institutional frameworks within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party. Description of PCCWHSST – describes (i) PCCWHSST; (ii) its major components; and (iii) 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.

I. **Description of the Environment (Baseline Data) –** 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.

II. **Anticipated Environmental Impacts and Mitigation Measures –** (i) predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media), and physical cultural resources in the project's area of influence, in quantitative terms, and to the extent possible; (ii) identifies mitigation measures and any residual negative impacts that cannot be mitigated; (iii) explores opportunities for enhancement; (iv) 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 (v) examines global, trans-boundary, and cumulative impacts as appropriate.

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

IV. **Grievance Redress Mechanism –** describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

V. **Environmental Management Plan –** 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 to the project's impacts and risks):

A. 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 people, or emergency response) required for the project.

B. 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 mitigation measures, and documents the progress and results of mitigation.

C. 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

D. 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.

Conclusion and Recommendation – provides the conclusions drawn from the assessment and provides recommendations.

PROPOSED FORMAT FOR ATTENDANCE SHEET AND NOTES OF CONSULTATION

(Subproject Title)
Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns (PCCWHSST) Project
ADB Grant: JFPR
Attendance Sheet

Date:

Venue/Location: _____

Consulted Group: _____

Consulting Group: _____

No	Name	Address	Age	Gender		Head of HH		Ethnicity	Representation			
				M	F	Y	N		Resident	Business Owner	Youth	Others*
1												
2												
3												
4												

***** Examples: Rural Municipality/Urban Municipality, Ward Council, NGOs, Schools, Churches, Women's Groups, other Civil Society Groups, etc.

(Subproject Title)
Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns (PCCWHSST) Project
ADB Grant: JFPR
E-2: Notes of Consultations
Date: _____
Venue/Location :
Consulted Group:
Consulting Group:
No. of Participants: Total: Female: Male:

Discussion, Responses, Outcomes:

No.	Name	Gender		Question, Response, Outcome
		M	F	
1				
2				
3				
4				

SAMPLE GRIEVANCE REDRESS FORM

(To be available in Nepalese and English)

The Prevention and Control of COVID-19 through WASH and Health initiatives in Secondary and Small Towns (PCCWHSST) Project welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback. Shall you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing *(CONFIDENTIAL)* above your name. Thank you.

Date		**Place of registration**			
Contact Information/ Personal Details					
Name		**Gender**	***Male** ***Female**	**Age**	
Home Address					
Place					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below: If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered By: (Name of Official registering grievance)	
Mode of Communication: Note/Letter E-mail Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	Yes No
Means of Disclosure:	

OUTLINE FOR ENVIRONMENTAL SAFEGUARDS IMPLEMENTATION MONITORING

Environmental Safeguard
-Brief introductory paras on IEE and EMP implementation and monitoring status

Compliance Status with the Environment Safeguards Provisions
-The Environmental Management Plans with respect to the guidelines defined in the Initial Environmental Examination (IEE) Report.

Environment Safeguards Status checklist of reporting period

Activity	Yes/No	Remarks(If Answer Is No)
A. For subproject packages under bidding		
• IEEs cleared by ADB?		
• IEEs/EMPs included in the bidding		
• Are there changes in the scope of work of the cleared IEEs?		
• Core labor standards and environment, health and safety (EHS) incorporated in Section 8 of the bid documents?		
• BOQ line item includes EMP requirements?		
• IEE disclosed in form and language understood by stakeholders and affected persons		
For subproject packages with contracts awarded (no works yet)		
• All statutory clearances/permits obtained?		
• Each contractor appointed EHS and/or safety officer?		
• Baseline regarding condition of roads, agricultural land and other infrastructure prior to start of transportation of materials and construction has been recorded?		
• Contractor has established tie-ups with local hospitals/clinics for emergencies onsite?		
• For DBO packages, detailed design completed and updated IEE submitted to ADB?		
• For civil works packages, site-specific EMP submitted to ADB?		
For subproject packages with contracts awarded and works on-going		
• Contractors have appointed EHS and/or safety officer onsite per subproject package?		
• Site-specific EMP posted onsite?		
• Contractors' records of accidents / incidents submitted to PMU on a monthly basis?		
• Contractors provided PMU with a notification/incident report of any accident(s) within 24 hours of its occurrence?		
• Reports of complaints/grievances reported monthly to PMU?		
• Records of information disclosure/consultations submitted by PIUs to PMU		
• Records of site inspection by PIU submitted to PMU monthly?		

Status of Site Specific Environmental Management Plan (SEMP)

-Brief on preparation and monitoring of the Site specific EMP

Status of SEMP

SN	PKG. Nos.	Project	Status of SEMP

Status of Environmental Officer at Project Implementation Level

Environment Safeguard Team at Different Level for Implementation of PCCWHSST

Name	Designation/Office	Email Address	Contact No.
• **PMO**			
• **RPMO**			
• **Consultants**			

Status of EHS personal at Site during Project Construction

Designated EHS Focal person for monitoring of EMP at Contractor Level

S.N.	Project Towns	Name of the personnel	Position

Status of Environmental Assessment Report of Different Subproject under PCCWHSST

Status of Environmental Assessment and TOR of Different Subproject

S.N	Package Nos	Project name	Status of Environmental Assessment	
			As per ADB	As per Government

Compliance Status with the Environmental Management Plan

Status of Environmental Safeguards during Planning Stage

SN	Pkg. Nos	Name of Project or Subproject	Environmental screening is carried out? (Yes or No)	Environment category of the project / subproject	IEE with EMP is prepared (Yes/No)	ADB approved IEE with EMP	Government approved IEE with EMP	Safeguard monitoring and coordination mechanism established	GRC is established (Yes/No)	EMP cost in is included in BOQ as an individual item	Remarks

Summary of Implementation of Environmental Management Plan and Environmental Safeguards Monitoring

S.N	Indicator	Activities	Eastern Region								Western Region														Central Region					
			Package no.																											
			Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No	Y	No
1	Physical improvements	Road Construction																												
		Rehabilitation																												
2	Protection/ stabilization	Retaining wall																												
		Gabion wall																												
3	Greenery Management	Conservation																												
		Promotion																												
4	Campsite management	Good Accommodation																												
		Service Facility																												
		Waste Management																												
		Informatory Signage																												
5	Workforce management	Workers Record																												
		Gender rights																												
		Child labour																												
		Local manpower																												

		Code of conduct																														
6	Occupational Health and Safety	Records of accidents																														
		Hospital MoU																														
		Use of PPEs																														
		Insurance																														
		First Aid facility																														
		COVID Response Plan																														
		Safety messages Site																														
7	Environmental monitoring	Noise level																														
		Air quality																														
		Water quality																														

CONSTRUCTION CODE OF PRACTICE (CoCP)

The purpose of the construction code of practice (CoCP) is to ensure that the activities are undertaken in a responsible, non-detrimental manner with the objectives of:

(i) providing a proactive, feasible and practical working tool to enable the measurement and monitoring of environmental performance on-site;
(ii) guiding and controlling the implementation of findings and recommendations of the environmental due diligence conducted for the project;
(iii) detailing specific actions deemed necessary to assist in mitigating the environmental impact of the project; and
(iv) ensuring that safety recommendations are complied with.

A copy of the CoCP must be always kept on work sites. This CoCP will be included in the bid documents and will be further reviewed and updated during implementation. Non-compliance with, or any deviation from, the conditions set out in this document constitutes a failure in compliance. The contractor will be required to prepare site-specific/detailed EMP in accordance with this CoCP.

ANTICIPATED ENVIRONMENTAL IMPACTS AND RISKS

The anticipated impacts of proposed civil works include:

(a) Air pollution from dust emissions from on-site excavation and emission from heavy equipment and construction vehicles used for construction and construction activities.
(b) Water pollution from run-off or soil erosion from stockpiled construction materials, wastewaterfrom domestic sewage of construction workers, and accidental spillage of oil and other lubricants from washing of construction equipment.
(c) Noise pollution and vibration from construction activities that may disturb nearby communities.
(d) Generation of solid wastes from construction workers and construction and demolition
(e) Generation sewage waste during construction and operation phase
(f) Generation of medical waste during operation phase
(g) Occupational health and safety risks to construction workers.
(h) Community health and safety impacts, primarily as a result of exposure to noise, smell ofpaints and solvents and dangerous excavated work areas.

CONTRACTOR OBLIGATIONS

Each Contractor is required to take the following measures to address potential impacts and risksto environment, health and safety of workers and communities:

(i) Appointment of a qualified environment, health and safety specialist to supervise construction works in compliance with the CoCP.
(ii) The execution of the works and all associated operations on the work sites or off-site are carried- out in conformity with statutory and regulatory environmental requirements of the Government of Nepal and the ADB SPS 2009.
(iii) All measures and precautions are taken to avoid any nuisance or disturbance arising from the execution of construction works and their related activities. This will, wherever possible, be achieved by suppression of the nuisance (or unwanted effects to the physical environment and people) at source rather than abatement of the nuisance once generated.

(iv) Compensation is paid for any damage, loss, spoilage, or disturbance of the properties and healthof affected people during execution of the construction works as specified in the Bid Documents.

(v) Local skilled and unskilled labour is recruited to increase the direct benefits in the subproject area(s) and to minimize potential environmental issues related to construction camps, disease transmission and socio-cultural disputes.

(vi) Ensure that the applicable national laws and regulations are applied to the contractor's personnel, including laws related to their employment, health, safety, and welfare during the construction of the isolation facilities. More specifically, each contractor shall: (a) comply with theBorrower's applicable labor law and regulations and incorporate applicable workplace occupational safety norms; (b) do not use child labor; (c) do not discriminate workers in respect of employment and occupation; (d) do not use forced labor; (e) allow freedom of association and effectively recognize the right to collective bargaining.

(vii) Establish a simple system to receive, register, and address community concerns and complaints.Contact number of the contactor including name, position and telephone number will be shared with WUSC and municipalities.

(viii) Demonstrate how the impacts associated with the construction works as defined in Table 1 beloware complied with. For that purpose, conduct weekly monitoring of compliance with the CoCP, and include section in the monthly report to the PMO/RPMO. The report format defined in Appendix 1 shallbe used for monthly reporting to the EA.

The following activities are strictly prohibited on or near the project site:

(a) Cutting of trees for any reason outside the approved construction area;
(b) Hunting, fishing, wildlife capture, or plant collection;
(c) Use of unapproved toxic materials, including lead-based paints, asbestos-containingmaterials;
(d) Deposition of chemicals, sanitary wastewater, spoil, waste oil, and concrete agitatorwashings in water courses;
(e) Disturbance to anything with architectural or historical value;
(f) Employment of workers under the age of 16;
(g) Discrimination regarding recruitment, wages and compensation.

Table A9.1: Mitigation/Management Measures for Pre-Construction and Construction Phase by Contractor

Potential impacts and issues	Nature of impacts/Issues	Environmental Action/Prevention by Contractor
Design and pre-construction phase		
Facility design	Failure to comply with GoN procedures, codes and administrative orders for Multipurpose community building design	• Ensure compliance with relevant design standards for multipurpose building based onthe requirements of National Building Codes (NBC), administrative orders, circulars, and guidelines as per Building Act 2055
Permits	Failure to secure necessary permits and clearances prior to construction	• Secure the Building Permit, Sanitary Permit, Electrical Permit, and otherclearances from the local government prior to start of construction works
Construction phase		
Environmental and Social Issues	Complaints, Concerns	• Establish and disseminate effective grievance redress mechanism (GRM) • Share contractor contact details with WUSC and

		Municipality
EHS capacity	Inadequate Environment, Health and Safety (EHS) management capacity	• Establish and disseminate effective grievance redress mechanism (GRM) • Share contractor contact details with WUSC and Municipality
Monitoring and Reporting	Failure to comply with DWSSM requirements; Failure to adequately implement the CoCP	• Submit progress reports/status of construction and CoCP implementation every month to WUSC/Municipality/RPMO
Water and soil pollution	Leakage of spills of fuel and lubricants that may contaminate soil, surface water and groundwater	Prevent pollution of soil, surface water/ groundwater by ensuring the following: • Location of storage facilities for fuel/oil/cement/ chemicals are located 200m away from the river, stream and waterways • Soil surfaces shall be made impermeable and provided with bunds Vehicles/heavy equipment maintenance and re-fuelling area will • prevent spillage of fuel, oil and hazardous materials to seep into soil • Oil traps shall be provided in the maintenance and service areas; • Fuel storage and refilling areas located > 50 m from water sources and protected by temporary bunds to contain spills.
Air quality	Concentration of machinery working in one area plus haulage vehicle traffic may result in local areas of poor air quality	• Equipment will be maintained to a high standard to ensure efficient running and fuel-burning. High-horsepower equipment will be provided with tail gas purifiers. • All vehicle emissions will be in compliance with relevant emission standards of National Ambient Air Quality Standards
Dust	Caused by earthmoving and construction haulage traffic can cause poor air quality and nuisance to householders and farmers.	• Material stockpiles and concrete mixing equipment will be equipped with dust shrouds • Regular water spraying when dust observed on construction sites, construction roads, and stockpiled material • Maintenance of driving surfaces will be standard site management practice • Vehicles carrying soil, sand, or other fine materials to and from the construction sites will be covered
Noise impacts on sensitive receptor	Noise caused by the concentration of machinery working in one area, plus haulage vehicles, can cause a range of impacts from nuisance to health problems. Noise could disrupt ongoing medical services	• Construction after 10 pm shall be strictly prohibited. • During daytime construction, the contractor will ensure that temporary anti-noise barriers will be installed to shield sensitive receptors.
Water Quality	Pollution of local water courses through sediment	• Construction site drainage will ensure any rainfall will be diverted to a holding pond or suitable land to prevent localised flooding and sedimentation of surface water
Construction waste and spoil	Unauthorized or careless storage and disposal of waste can damage property, vegetation, agricultural land, and block natural drainage.	• Temporary storage of spoil waste shall be located away from the rivers, streams and waterway • Construction waste will be stored securely to prevent escape in containers • Final disposal site of waste and spoil will be in a site approved by the district and provincial authorities.
Waste from workers	The construction workforce will generate domestic wastewater & garbage (food wastes, paper, and other solid waste including food laden wash water) which causes impacts if poorly disposed	Provide sufficient waste bins at strategic locations and ensure that: • They are protected from birds and vermin • Emptied regularly to prevent overflow • Disposed of in local disposal site as approved by local authorities

Erosion impacts	Facility construction may require earthworks which will leave surfaces liable to erosion, especially in heavy rain periods.	Erosion control includes: • Limiting construction and material handling during periods of rains and high winds • Stabilizing all cut slopes, embankments and other erosion-prone working areas while works are going on • All earthwork disturbance areas shall be stabilized within 30 days after earthworks have been completed.
Community health and safety	Construction work poses safety hazards and threats to nearby residents and passers-by. Excavations, loss of access and movements of large machinery and vehicles potentially impact on existing utilities and community safety	Community health and safety will be safeguarded by: • Planning construction activities so as to minimize disturbances to residents, passers-by, and utilities • Temporary land occupation will be planned well ahead of construction to minimize its impact and after consultation with the affected community • Land reinstated to its original condition after construction. Implementing safety measures around the construction sites to protect the public, including warning signs to alert the public to potential safety hazards, barriers to prevent public access to construction sites, and a watch person, where necessary.
Road safety (through movement of vehicle and equipment for construction)	Increased motorized vehicle movement including heavy goods vehicles to and from the site during construction may increase road safety risks for local residents and passers-by.	• Ensure that drivers of all vehicles strictly follow road rules and maintain good road safety standards • Deliveries of construction materials to the site by heavy good vehicles will be properly supervised by use of banks men / traffic marshals
Occupational health and Safety	Workers are subject to safety hazards while operating and/or moving around machinery, as well as dust and noise impacts from extended exposures at the work site.	Contractors shall ensure that: • All reasonable steps are taken to protect any person on the site from health and safety risks • Construction sites are safe and healthy workplaces • Only certified and tested machineries and equipment is used • Adequate training or instruction for occupational health and safety is provided • Adequate supervision of safe work systems is implemented • Means of access to and exit from the site are without risk to health and safety • A first aid kit will be available on each construction site • All member of staff is responsible for first aid and is aware of local health care facilities
Employment opportunity	Local people employed in project activities	• Contractors are encouraged to use local labor, wherever possible
Influx of migrant workers	Health and safety risks Chances of spread of sexually transmittable diseases like HIV / AIDS	Contractor shall ensure impact mitigation measure: • Disseminate, or engage appropriate service providers to disseminate, information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly women.
COVID 19 response	Spread of infection which causes serious symptoms like difficulty in breathing, chest pain and loss of speech or movement. If not treated it will lead to death	• Taking cognizance of situation at time of mobilisation, the Contractor shall undertake a COVID risk assessment of project area and prepare a COVID Response and Management Plan (C-R&MP) and submit to PMO for approval. • The preparation of C-R&MP shall consider guidance of Government of Nepal, World Health Organisation, International Labour Organisation, International Financial Corporation and World Bank's interim guidance note etc. • The contractor shall submit a weekly monitoring and progress report to PMO.

Human health and environmental pollution – Site Hand Over	Hazardous waste materials, unprotected latrines and organic waste remaining after construction will pose a risk to human health and safety.	• All unused or discarded construction materials will be removed from the site before hand-over • Surroundings will be landscaped to reinstate original site conditions • All temporary dwellings, cook houses and latrines will be removed upon completion of the construction and the site cleaned.
Construction completion	Facility does not conform to approved plans and specifications; Improper site clean-up and restoration	• Submit a completion report together with as-built drawings to the WUSC/Municipality/PMO • Ensure proper restoration of disturbed areas and clean-up of site.

Appendix 1: Contractor's EHS Progress Monitoring Report
Contract (*Insert Contract ref/number*)

Completed by *(Insert name of Contractor's Environmental Health and Safety Officer*)

Company name *(Insert name of Company)*

Reporting Frequency: Monthly

Date of this report	DD-MM-YY	**Reporting Period**	MM/YY – MM/YY
Permits and licenses secured (construction permits, licenses)	• Xxx • Xxx • xxx		
Key construction activities since last report			
Planned construction activities in next reporting period			

Progress with EHS Activities this month	
Recruitment of constructionworkers **Compliance with labor laws andregulations**	• Total number of construction workers as of DD-MM-YY: Xxx women, xxx men; xxx%unskilled labor • Number of new recruitments in reporting period: xxx women, xxx men • We confirm the following: ☐ Adherence to the International Labor Organization (ILO) Core LaborStandards ☐ Compliance with Labor Code of the GoN
Trainings Undertaken *– all training related to EHS*	EHS Training Provided: Participants: Who provided the training:
Personal Protective Equipment	New construction PPE issued this month: Number of incidents of workers not wearing adequate construction PPE:
Emergency Response	
Use of site accident Book	Accidents reported: Description and Actions taken: Outcome:

Spillages	Number of spills: Description and Actions taken: Impact of spill:
Other incidents	Number of incidents: Description and Actions taken: Impact of incident:
Concerns and Complaints	
	Number of complaints: Action taken for each complaint: Outstanding complaints:
Describe COCP Compliance Issues, Problems or Other issues PMO should be aware of	

Prepared by: _____ (Contractor)	**Verified by: _____ (authorized WUSC/Municipality/RPMO Staff)**