

# Environmental Assessment and Review Framework

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November 2022

## Cambodia: Cross-Border Livestock Health and Value-Chain Infrastructure Improvement Project

Prepared by the Ministry of Agriculture, Forestry and Fisheries for the Asian Development Bank and the Asian Infrastructure Investment Bank.

## ABBREVIATIONS

ADB	–	Asian Development Bank
AHP	–	animal health and production
CLHVCIP	–	Cross-Border Livestock Health and Value Chains Improvement Project
CSE	–	construction supervision engineer
EARF	–	environmental assessment and review framework
EHS	–	environmental, health, and safety
EIA	–	environmental impact assessment
EMP	–	environmental management plan
GDAHP	–	General Directorate of Animal Health and Production
GMP	–	good manufacturing practice
GRM	–	grievance redress mechanism
HACCP	–	Hazard Analysis and Critical Control Point
HEPF	–	high efficient particulate air filter
IBAT	–	integrated biodiversity assessment tool
IEE	–	initial environmental examination
MoE	–	Ministry of Environment
MOWRAM	–	Ministry of Water Resource and Meteorology
NCBC	–	National Cattle Breeding Center
NAHPRI	–	National Animal Health and Production Research Institute
OM	–	Otdar Meanchey
PDAFF	–	Provincial Department of Agriculture, Forestry and Fisheries
PIC	–	project implementation consultant
PIU	–	project implementation unit (national)
PPIU	–	provincial project implementation unit
POAHP	–	provincial office of animal health and production
PPUC	–	project public complaint unit
SOP	–	standard operation procedures
VPC	–	Vaccine Production Center

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## I. INTRODUCTION

1. The Greater Mekong Subregion (GMS) Cross-border Livestock Health and Value Chains Improvement Project (CLHVCIP) is a priority in the Strategy for Promoting Safe and Environment-Friendly Agro-Based Value Chains in the Greater Mekong Subregion endorsed by the GMS Ministers of Agriculture in September 2017, including Cambodia. The project concept was developed through consultations in GMS countries, including Cambodia, between November 2018 and June 2019.

### A. Key Investments and Subprojects for Project Funding

2. The Project in Cambodia is aligned with the following impact: GMS vision as a leading supplier of safe and environmentally friendly agriculture products realized. The Project outcome is improved health, value chains and formal trade of livestock and livestock products. The project has three outputs

- (i) **Output 1:** Livestock health and value chain infrastructure expanded and upgraded in a climate-friendly manner; Key activities include: (a) Livestock Inspection and Quarantine Centers and Disease Control Zones; (b) National Veterinary Vaccine Center; (c) National Cattle Breeding Center; (d) National Animal Health and Production Research Institute; (e) Public Abattoirs and Wet Markets; (f) Livestock Investment Advisory Services.
- (ii) **Output 2:** Capacity for improved production and health of livestock and livestock products strengthened; Key initiatives under this output include provision of (a) Animal Health Improvement through Livestock Epidemiology and Informatics Program; (b) Livestock Value Chain Development Services through introduction of Good Abattoir Management Practice and Risk-based Meat Inspection; (c) Animal Production Services, including Good Animal Husbandry Practices, and Forage Production; and (d) Capacity building.
- (iii) **Output 3:** Enabling policies for better supply, health, safety, and trade in livestock and livestock products enhanced. The project will support of 4 groups of policy activities: (a) national livestock policies, (b) cross-border livestock trade policies; (c) regulations and standards; and (d) private livestock sector development.

### B. Purpose of the Environmental Framework

3. This environmental assessment review framework (EARF) sets out criteria and procedure for the screening (categorizing), assessment, and management of environmental impacts of project activities/subprojects that will only be identified later in project implementation (i.e., after ADB board approval) to ensure compliance with both Cambodia national and ADB environmental safeguard requirements. It documents the above due diligence process carried out for the representative subprojects, anticipated adverse impacts and mitigation measures as well as implementation arrangement proposed. It provides applicable environmental regulatory framework both domestic and international including ADB safeguard requirements. Subprojects that have already been prepared should comply with the general guidance provided in the EARF and subproject-specific impact avoidance and mitigation measures set out in other environmental safeguard instruments; initial environmental examination (IEE) and environmental management plans (EMP).

## II. LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY IN CAMBODIA

4. The design, construction and operation of project subprojects must conform to environmental laws, regulations and standards set by the Government of Cambodia, and ADB safeguard requirements.

### A. Cambodia Legal Framework for Environment

5. The Law on Environmental Protection and Natural Resource Management (NS/RKM/1296/36), enacted by National Assembly in 1996, and promulgated by Preah Reach Kram/NS/RKM-1296/36 is the primary governing law for environment management. Responsibilities and procedures for conducting environmental assessments, together with the requirements for environmental monitoring of projects, are elaborated in the Royal Government of Cambodia (RGC) sub-decree No 72 ANRK.BK on EIA promulgated requiring on 11 August 1999.

6. According to this sub-decree, the environmental impact assessment for projects is classified in three categories. (i) projects requiring full environmental impact assessment (full ESIA), equivalent to ADB's environmental category A; (ii) projects that requiring initial environmental impact assessment (IEIA), equivalent to ADB's environmental category B; and (iii) projects requiring the Contract on Environmental Protection (EPC) equivalent to ADB's environmental category C plus simple analysis and EMP. An excerpt of the Cambodia thresholds-based classification, covering agricultural activities likely to be considered as part of CLHVCIP, is presented in Table 1.

**Table 1. Combined environmental Screening/ Classification criteria for CLHVCIP**

Type of Projects and activities	Need full ESIA (ADB's cat. A)	Need initial ESIA (ADB's cat. B)	Need EPC (need EMP, equal ADB cat. C+ )
Slaughterhouse	>200 Head/d*	≥100 head/day	10 - <100 head/day
Livestock farm (cattle, buffalo, horse and others) in holding	>4000 head*	≥500 head	100- < 500 head
Farm of chicken, duck, and other birds raised for meat and/or eggs		≥50,000 head	5,000-<50,000
Food and canned food processing	>20 t/d *	≥500 tons/year	<500 t/yr (<1.7t/d)
Tanneries and leather processing	All sizes		
Animal feed factories	>100 t/d *	≥10,000 t/yr	<10,000 t/yr. (30t/d)
Laboratories		All sizes	
Natural sewage water treatment and DrainageSystem		All sizes	
Organic fertilizers factories		All sizes	

\*Thresholds designed by the project to fill gaps in domestic classification criteria for targeted sub/sectors where all are considered B or C domestically but disagreed by ADB. Thus, the project's environmental screening criteria combines both domestic and ADB requirements.

Source: Asian Development Bank.

7. In accordance with the EIA sub-decree of Cambodia, project proponents are responsible for preparing environmental assessment reports and implementing stipulated project approval requirements, including mitigation measures and monitoring. MOE is responsible for review and approval of environmental assessment reports, issuance of environmental compliance certificates (i.e., approval of environmental assessment reports), and oversight of EMP, also referred to as an environmental management and monitoring plan, implementation. These

functions may be fulfilled at central or provincial level, depending on the scope, size and nature of a subproject. Generally Provincial Offices of the Natural Resource and Environment (PONRE) are responsible IEE-type projects.

8. Standards that apply to discharges, emissions and pollution levels are specified in the annexes of Sub-decree on EIA Process (1999), Sub-decree on Solid Waste Management (1999), Sub-decree on Water Pollution Control (2009), Sub-decree on Air Pollution Control and Noise Disturbance (2000), and Sub-decree No. 235 on The Management of Drainage and Wastewater Treatment System, Prime Minister, 2017. It should be noted however that for ADB-funded projects the more stringent of national standards and international guidelines apply. Specifically, the ADB Safeguard Policy Statement (SPS) (2009) requires that projects will apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety (EHS) Guidelines; these are often referred to as the International Finance Corporation (IFC) EHS Guidelines, IFC being part of the World Bank Group. The EHS guidelines reference World Health Organization drinking water guidelines and other good industry practice worldwide. The EHS guidelines predominantly focus on effluent and emissions, and on avoiding degradation of drinking water sources. The guidelines do not cover ambient water and air quality and so national standards for protection of aquatic life and human health apply.

9. The EIA department of MOE oversees and regulates EIA and coordinate the implementation of project in collaboration with project execution agencies (EA) and concerned ministries. MOE and PoE environmental and social safeguards departments have benefited from donor-funded institutional strengthening and capacity development over the last fifteen years. Safeguards implementation practice however remains only moderate as a consequence of too few trained and skilled personnel, lack of environmental data, insufficient implementation follow up and monitoring, and limited enforcement. Information disclosure is unsatisfactory, with assessment reports generally not made available to the public or accessible on the ministry website. Additionally, EIA screening and approval procedures can be opaque, with some projects not being subject to assessment in accordance with the regulations, and project assessments may not be of satisfactory quality.

## **B. ADB Safeguard Requirements**

10. ADB environmental evaluation requirements are set out in ADB SPS and instructions and guidance notes. The main objective of ADB's safeguards is to: avoid adverse impacts of projects on the environment and affected people, where possible; and minimize, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible.

11. ADB carries out screening and categorization at the earliest stage of subproject preparation when sufficient information is available for this purpose. Screening and categorization is undertaken to: assess the significance of potential impacts or risks that a subproject might present, identify the level of assessment and institutional resources required for the safeguard measures, and determine disclosure requirements. An example screening checklist is provided as Appendix A.

12. ADB uses a classification system to reflect the significance of a subproject's potential environmental impacts. The subproject category is determined by the most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the subproject's area of influence. Each proposed subproject 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) A proposed subproject 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 EIA is required. Category A subprojects are not eligible for CLHVCIP funding.
- (ii) A proposed subproject 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 subprojects. An IEE is required.
- (iii) A proposed subproject 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.

### **III. POTENTIAL ENVIRONMENTAL IMPACTS**

13. Potential environment impacts of subprojects will vary across subproject type. Given the nature of the representative subprojects, i.e. animal breeding, animal holding for inspection and disease control, slaughtering, wet market, etc., it is anticipated that the main potential environmental impacts will be from operational processes. Although construction of slaughtering houses and food processing facilities, wet markets, quarantine center may result in adverse impacts and nuisance to residents, operation phase impacts are commonly more pronounced (e.g., wastewater and degradation of water bodies, solid and hazardous wastes and their disposal, odor and other air emissions). Subproject funding for the proposed veterinary diagnostic lab upgrading and vaccine production facility pose more technical, health and safety issues relating to proper handling and disposal of hazardous, infectious, and chemical wastes.

14. To avoid and mitigate adverse impacts from less impactful subprojects, i.e. category C activities mainly wet markets, an Environmental Code of Practice (ECOP) is included in this EARF. An ECOP for construction and measures on covid-19 risks management are also included in Appendix 5, applicable to all subprojects. Additionally, subproject-specific measures need to be developed for category B subprojects, as detailed in their EMP, based on a thorough assessment of potential subproject impacts.

### **IV. SUBPROJECT SCREENING AND SELECTION PROCEDURE**

15. The subproject screening and selection procedure is developed jointly by the Project Implementation Unit (PIU) at the General Directorate of Animal Health and Production (GDAHP) and project implementation consultant (PIC) under ADB guidance. The logical framework is as follows:

- (i) Subprojects are first judged against minimal criteria agreed between the PIU and ADB regarding technical, economic, financial, environmental, and social eligibility.
- (ii) Only eligible subprojects will proceed to technical-economic/financial feasibility study and social-environmental impact assessment, excepting ADB category C subprojects with no or minimal impacts.
- (iii) Only subprojects that meet both eligibility and feasibility requirements can be selected for project funding.



## A. Environmental Screening procedure

16. Once proposed subprojects have satisfied the abovementioned selection requirements, proposals are subject to further environment-specific screening. Environmental screening procedure are as follows:

- (i) All subproject proponents need to submit proposals according to the format set by the PIU; normally including basic information on activity type and technical processes involved, scale, and subproject location/site. Meanwhile they also need to fill out the environmental screening forms (in Appendix 1) for additional information such as location/site characteristics in order to judge their environmental impacts preliminarily.
- (ii) Subprojects belonging to ADB's Prohibited Investment Activities List (Appendix 2) and the PMO's exclusion list will not be eligible.
- (iii) Subprojects that pass the above minimal requirements of 1-2 will be screened by comparing their proposal and environmental screening forms with the project's environmental screening criteria (Table 2-1) based on the country's EIA thresholds-based rules modified to also meet ADB's criteria.
- (iv) For subprojects judged to have minimal adverse environmental impacts, ADB category C is assigned, and the subproject can be accepted for project funding from environmental perspective without impact assessment.
- (v) For subprojects judged to have moderate adverse environmental impacts, ADB category B is assigned, and an IEE needs to be prepared. Based on the assessment findings the PIU/Provincial Project Implementation Unit (PPIU) can decide whether to accept the subproject.
- (vi) Subprojects judged to have high impacts as defined by ADB policy reflected in Table 2-1, it is category A and will be rejected/excluded.
- (vii) For proposals not covered by the project's environmental screening criteria, professional judgment by environmental specialists of the PIU is needed, in consultation with local environmental authority and, if necessary, with the ADB.

17. Siting criteria for subprojects should also be considered during the above screening process of any subproject proposals. The project's siting criteria are:

- (i) Sites should be outside of flood prone zones.
- (ii) Where possible, sites should be within a designated industrial area.
- (iii) The boundary of proposed subprojects must be at least 100 m from rivers, streams, lakes, ponds, intakes of water and wells to avoid water quality degradation contamination.
- (iv) Avoid locating site at area belonging to groundwater recharging zone and groundwater are centralized drinking water source.
- (v) The boundary of subprojects must be at least 100 m away from any sites of cultural, historical or religious significance.
- (vi) The boundary of subprojects must be at least 5 km away from the boundary (or outside the buffer zone) of any sensitive biodiversity habitat based on discussions with responsible government ministries/departments regarding protected areas, protected forest, Tonle Sap Biosphere Reserve (TSBS), or conservation areas in a subproject's area of influence. At least, authorities responsible for enforcement of relevant protected areas legally protected under national law or international conventions should be consulted and clearance from such authorities should be obtained before decision-making.

- (vii) Avoid locating subproject site in the prevailing wind upstream of any settlement, residence, schools, and other public and commercial sites.

## **B. Environmental Assessment and review of subprojects**

18. Environmental assessments of proposed subprojects should be undertaken by the proponents. For public subprojects, this would mean PIU supported by the PIC environment specialist(s), or the relevant Provincial Agriculture and Forestry Office (POAHP)/PPIU who are responsible for IEE, usually by PIC environmental specialists or hiring separately IEE preparers.

19. For ADB category B subprojects POAHP/PPIU need to prepare an IEE report according to the requirements and format in the model IEE/EMPs for five subprojects representing main types of category B subprojects. Recognizing the limitations in assessment capacity the following process applies:

- (i) For infrastructure and agro-processing subprojects, the PIC environmental specialist(s) would normally need to prepare the IEE on the behalf of Provincial Office of Animal Health and Production (POAHP)/PPIU.
- (ii) Draft IEEs should be disclosed at the district level and updated based on comments received, and then sent to the PIU for review.
- (iii) Following review PIU either accepts or instructs POAHP /PPIU to provide further information or revisions. The Ministry of Agriculture, Forestry and Fisheries (MAFF), as the project proponent, will send accepted IEE reports to MOE or relevant Provincial Office of Environment (POE) for review and issuance of an environmental compliance certificate prior to selection by the PIU for project funding.
- (iv) If an IEE is prepared to satisfy national regulatory requirements, it is recommended that a single IEE be prepared to meet both national and ADB requirements.
- (v) The first IEE report for each type of category B subproject should be submitted to ADB for review and disclosure<sup>1</sup>.

20. To facilitate subproject assessment and review without compromising on quality, a consolidated IEE can be prepared for multiple subprojects of similar type or in one locality (e.g., a province), if permitted for subprojects subject to national environmental assessment requirements. Results of both internal and external (domestically and by ADB) IEE/EIA reviews have the following scenarios:

- (i) Approved by all reviews: can be selected from environmental perspective.
- (ii) Rejected by any of the reviews: NOT to be selected.
- (iii) Additional study or improvement requested by any reviews: the proponent works with the PIC environmental specialists to revise and resubmit.

21. For category C subprojects, an environmental code of practice (ECOP) is included in this EARF for both construction and operation of types of activities with minimal potential environmental impacts (Appendix 3). Category C subprojects must adhere to the ECOP, including its attachment to tender documents and construction contracts.

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<sup>1</sup> The environmental policy 6 of ADB SPS stipulates to disclosure of a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language understandable to affected people and other stakeholders. In addition to local disclosure, English language IEE/EMPs need to be disclosed on the ADB website.

22. **Climate Change Risk.** An overall climate risk assessment has been carried out during project preparation and recommendations proposed. IEE reports, especially subproject EMP, need to take into account the assessment findings and recommendations.

## **V. IMPLEMENTATION AND SUPERVISION**

### **A. Responsibilities and Institutional Arrangements**

23. **PIU is responsible for project's environmental aspect overall which mainly** include: (i) implementing environmental management of the project according to this EARF; (ii) Supervising the implementation of subprojects according to their EMPs or ECOPs; (iii) Tracking and reporting on project progress to the EA and to ADB, and (iv) monitoring environmental safeguard compliance.

24. **The designated safeguard staff or focal point of the PIU** should coordinate environmental management of the project according to this EARF and the EMPs of subprojects. S/he is in charge of environmental supervising, monitoring and semi-annual environmental performance report to the EA and the ADB.

25. **The local PPIUs** as the first layer of management need to supervise the EMP implementation by contractors or operators of their subprojects. The PIU assisted by the PIC will serve as the second layer of supervision and monitoring.

26. **The subproject owners** (can be local PPIUs or other entities) are responsible for compliance with both domestic and ADB applicable environmental, health and safety requirements through implementing the EMP, among others. To this end, the EMP of individual subprojects needs to be included in bidding documents and contracts with contractors for construction and operators for operation and maintenance (O&M).

27. **PIC environment specialist(s)** should assist the PIU in carrying out all environmental safeguard duties as described in this EARF, subprojects' EMPs, and the loan agreement. Such support should include delivery of training to the PIU/PPIU) and contractors on application of the EARF for category C subprojects and EMP for category B subprojects.

### **B. Monitoring and Reporting Requirements**

28. For category C subprojects, routine onsite supervision is usually not necessary. Instead, PPIUs can undertake random checks on adherence to EARF stipulations. If subprojects are found to not be following the ECOP, PPIUs should have more regular site visits until their performance is improved.

29. For category B subprojects, PIU/PPIUs assisted by the PIC environmental specialist(s) should conduct at least twice-yearly site visits. Additionally, day-to-day supervision of EMP implementation during construction (e.g., infrastructure subprojects) should be carried out by the supervision engineer. If a supervision engineer has not been assigned, resident engineers (i.e., staying at the site) should perform this function. During subproject operation, the PPIU should conduct regular site visits to confirm satisfactory self-reporting by subproject operators (e.g., abattoir).

30. The PIU assisted by the PIC is responsible for preparation of semi-annual subproject implementation reports for submission to ADB. Report content should be compiled from quarterly supervision reports prepared by POAHP/PPIU.

### C. Subproject Changes and Non-compliance

31. During a subproject contract period, any changes to the subproject design that could potentially cause additional or increased adverse environmental impacts shall be screened by the PIU and PIC environmental specialist(s), and as appropriate by ADB, to evaluate whether such changes necessitate additional mitigation and monitoring measures or affect the subproject environmental safeguard categorization.

32. One of three scenarios will apply if proposed changes a subproject may cause additional or more significant environmental impacts: (i) for category C subprojects subject to the EARF, the subproject is re-categorized as B and an IEE and EMP needs to be prepared (ii) mitigation measures stipulated in category B subproject EMP are revised or amended as necessary; or (iii) changes to category B subprojects resulting in potential significant environmental impacts necessitating re-categorization as A, causing the subproject to be no longer eligible for project funding.

33. In cases of non-compliance by subprojects with the EARF or EMP, as applicable to a particular subproject, the following procedure will apply:

- (i) PIU and PPIU assisted by the PIC instruct a non-compliant subproject to remedy breaches within a specified timeframe, at their own cost. PIU and PPIU will monitor the subproject to ascertain whether the non-compliance issue has been satisfactorily addressed.
- (ii) In cases of material (i.e., serious) non-compliance (e.g., resulting in public complaints, causing documented surface water quality degradation) the PIU and PPIU will obtain written confirmation from PONRE that the non-compliance issue has been resolved to their satisfaction.
- (iii) If the subproject has not satisfactorily rectified the non-compliance issue within the specified timeframe, subproject will be suspended and applicable remedies (e.g., contractual penalties) applied.
- (iv) In cases of material non-compliance and failure of a subproject to satisfactorily rectify an issue, the PIU will promptly notify MAFF/ADB on the non-compliance issues and actions taken.

### D. Public Consultation and Information Disclosure

34. Public consultation shall include discussions with subproject beneficiary groups, affected persons and commune officials, as a part of IEE preparation, in order to identify any concerns that may need to be addressed. Consultation procedures should satisfy both the EIA decree and ADB SPS requirements. Information provided during consultations should include a summary of: subproject works, potential adverse environmental impacts during the construction and design stages, and planned avoidance and mitigation measures.

35. Dates, attendees, topics covered, and feedback provided conclusions should be recorded and summarized in IEE reports. The final IEE report should be made available, in both English and Khmer language, for public review. All IEEs will be submitted to ADB for disclosure on the ADB website. To translate ADB's policy in practice, the following procedure and requirements are adopted by the project:

- (i) **Step 1.** Draft the public announcement about IEE with key contents below:
  - (a) Objective of the disclosure and the follow-up consultation;
  - (b) A summary of the project and IEE including EMP;

- (c) Weblink to e-version of draft documents;
  - (d) Addresses/locations to get or view the hard copies (local government office, community centers, and public library);
  - (e) Deadline for feedback from the public: the longer the better to allow sufficient time for the public to read, think, discuss, consult and coordinate to form opinions (at least two weeks between draft IEE disclosure and consultation dates); and
  - (f) Contact information for the public to send feedback: names of persons, email and post address, telephone numbers, websites, social media, or other means.
- (ii) **Step 2.** Publicize the announcement at least two weeks prior to consultation using:
- (a) Traditional media: bulletin board, popular newspaper, TV/radio channels;
  - (b) Social media (Facebook, Instagram, Whatsapp, and Telegram); and
  - (c) Mobile phone text messaging or mass emails to key stakeholders.
- (iii) **Step 3.** Consultation, usually a combination of typical methods below:
- (a) Get feedback through contacts in the announcement: deadline by last consultation;
  - (b) Questionnaire or online surveys: anonymous, efficient, broader, less interactive;
  - (c) Meetings or interviews: costlier, limited participants, afraid to speak out at meetings, but more interactive (might be difficult during Covid-19 restriction); and
  - (d) Representativeness of project affected persons (PAPs) and stakeholders: by age, gender, ethnicity, profession, and education level.

## E. Grievance Redress Mechanism

36. The PIU will set up grievance redress mechanism (GRM) in coordination with the PPIU to ensure that any complaints raised by the community and affected persons relating to subproject construction and operation are addressed in a timely manner. The GRM should be broadly accessible to the community, including women, youth, and especially vulnerable groups. Multiple points of entry, including face-to-face meetings, written complaints, telephone conversations, or e-mail, should be made available. An affected person submitting a grievance may wish to raise a concern in confidence. If the complainant asks that their identity be protected, it should not be disclosed without consent. The GRM complaints procedure is as follows:

- (i) A grievance can be lodged by an individual, household or by a community according to the type of complaint. The complainant must first meet the village chief to explain the problem. The village chief will then review the complaint and either redress it at village level or refer to a higher authority if a solution cannot be found. The village chief will assist in filling out a complaint register form, clearly describing the cause of the problem and possible/preferable settlement. The completed will be signed by both parties.
- (ii) After completing the complaint register form one copy will be filed at the village chief's office, one copy given to complainant, and one copy submitted to the DOAHP. Within fifteen working days after receiving the official complaint, the village chief and DOAHP accompanied by specialists as needed, will visit the complainant to find out the cause of a problem and agree on a solution. A solution if reached will be signed by all concerned parties.
- (iii) In case the complainant is dissatisfied with the DOAHP in settling the grievance, the complaint will be submitted to PPIU/POAHP to settle within ten working days. A solution if reached will be signed by all concerned parties.
- (iv) If the final settlement or solution is not acceptable to the complainant, the

- complaint can be submitted to the People's Court.
- (v) The complainant may also choose to contact the ADB country office and/or approach the ADB Accountability Mechanism<sup>2</sup>.
  - (vi) The PPIU may contact the complainant at a later stage to ensure their satisfaction with corrective actions taken. If there is a remaining problem, it will be treated as a new grievance and re-enter the GRM process.
  - (vii) The PPIUs and PIU will maintain records of complaints and actions taken to rectify them. This information should be included in PIU's reports to the ADB.

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<sup>2</sup> The ADB Accountability Mechanism exists to provide an independent and effective forum for those affected by ADB-assisted projects to voice their concerns. Complaints can be submitted to the Complaint Receiving Officer (CRO), Accountability Mechanism [amcro@adb.org](mailto:amcro@adb.org). Alternatively, the complaint may be submitted through any ADB office, such as a resident mission or representative office, which will forward the complaint to the CRO.

## Screening for Environmental Categorization

### **Instruction:**

The purpose of this set of tables is to collect basic information necessary to determine the potential environmental impacts of a project and thus its category (A, B or C) for assessment and management. Part I captures the nature and scale of a project, key factors that determine environmental impacts thus its category. Part II is about its siting, the third determinant especially needed when the category seems cross-category judging by the first two. EIA categorization criteria in most countries are exactly based on nature and scale, basics that any project proposals must have, supplemented by its siting information. Explanation on how to fill out the tables are in *italic*.

### **Part I. Basic features of the (sub)project**

#### **1. Nature of the project activities:**

*(What is it about or which sub/sector? Such intrinsic feature sets the tune of impacts, e.g.:*

- Linear infrastructure: road or irrigation channel? New or rehab? If rehab, any widening? How much wider roughly? The former normally has more environmental impacts than the latter in above pairs.
- Non-linear infrastructure: Landfill, waste water treatment plant (WWTP), or power plant? Coal-fired has bigger and more complex impacts than gas or biomass fired. Treatment of garbage is more complex than sludge.
- Agro-processing or industries: clarify which subsector or industries, as some are highly polluting and energy/water-intensive, e.g., slaughtering and tanning, others much less such as grain processing, yet others are in between, such as dairy, edible oil and juice production.

#### **2. Scale of the project activities:**

*(Design capacity or actual capacity, e.g., length of proposed roads or canals? Size of command area (ha), how many M3/day the WWTP can treat? How many tons/day for landfill or incineration, number of animal per farm or per day for animal production and processing. Such data is crucial for judging and justifying, because within one industry/subsector, scale decides the magnitude of impacts. For sector, FI, RBL or PBL modalities: provide range of scale foreseen for each sub/sector covered)*

#### **3. Applicable domestic environmental compliance requirements**

*(Compare the information gathered in the above 1-2 with the EIA classification criteria of the country which are all by subsector and scale-thresholds. For activities not covered in country's rule, consult with relevant environmental authority about domestic category and associated EIA requirements, and other approval or permits needed in the country. This is also as reference for your judgement.)*

<p><b>Other information that can help judge the impacts or risks (thus category):</b> <i>(For example, the host's capacity in environmental management, their track-record etc.)</i></p>

Source: Asian Development Bank.

## **PART II. Siting of the (sub)project proposed**

<b>Sensitive receptors and/or various protected areas Include but are not limited to:</b>	<b>If inside these areas, please provide details</b>	<b>If outside, where and how far from their boundary?</b>
Critical and natural habitat as defined by SPS, world natural or cultural heritage sites, officially designated nature reserves, forest park, geo-park, important wetland, key habitats for wildlife, reproduction area of protected flora, spawning, feeding, wintering ground and migrating route for key aquatic life, estuary, mangrove etc, un-official domestically but designated internationally as various protected areas, such as by IUCN, UNEP etc.		
Designated basic farmland, basic grassland, scenic area/park, drinking water source protective zone, oceanic special protective zones, natural fishery ground, key zone for water and soil erosion control, closure zone for desertification etc		
Areas with main function as residential, health and medical, cultural, educational, R&D, and offices as well as physical cultural resources/relics, airports, air fields or military bases/zones etc.		

Source: Asian Development Bank.



## ADB Prohibited Investment Activities List

1. The following do not qualify for ADB financing:
  - (i) Production or activities involving harmful or exploitative forms of forced labor<sup>1</sup> or child labor;<sup>2</sup>
  - (ii) Production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phase-outs or bans, such as (a) pharmaceuticals,<sup>3</sup> pesticides, and herbicides,<sup>4</sup> (b) ozone-depleting substances,<sup>5</sup> (c) polychlorinated biphenyls,<sup>6</sup> and other hazardous chemicals,<sup>7</sup> (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora,<sup>8</sup> and (e) transboundary trade in waste or waste products;<sup>9</sup>
  - (iii) Production of or trade in weapons and munitions, including paramilitary materials;
  - (iv) Production of or trade in alcoholic beverages, excluding beer and wine;<sup>10</sup>
  - (v) Production of or trade in tobacco;
  - (vi) Gambling, casinos, and equivalent enterprises;
  - (vii) Production of or trade in radioactive materials,<sup>11</sup> including nuclear reactors and components thereof;
  - (viii) Production of, trade in, or use of unbounded asbestos fibers;<sup>12</sup>
  - (ix) Commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and
  - (x) Marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats

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<sup>1</sup> Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

<sup>2</sup> Child labor means the employment of children whose age is below the host country statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" ([www.ilo.org](http://www.ilo.org)).

<sup>3</sup> A list of pharmaceutical products subject to phase-outs or bans is available at <http://www.who.int>.

<sup>4</sup> A list of pesticides and herbicides subject to phase-outs or bans is available at <http://www.pic.int>.

<sup>5</sup> A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at <http://www.unep.org/ozone/montreal.shtml>.

<sup>6</sup> A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

<sup>7</sup> A list of hazardous chemicals is available at <http://www.pic.int>.

<sup>8</sup> A list is available at <http://www.cites.org>.

<sup>9</sup> As defined by the Basel Convention; see <http://www.basel.int>.

<sup>10</sup> This does not apply to project sponsors who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to a project sponsor's primary operations.

<sup>11</sup> This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.

<sup>12</sup> This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

### Environmental Code of Practices

**(Note:** implementors for all measures are contractors and their workers. Routine monitoring is mainly by supervision (resident) Engineers who are on site daily with duty on EHS too. On top of that, PPIUs/PMUs assisted by environ personnel need to check and inspect on site. )

Environmental Aspect	Activities and Location	Mitigation Measure(s)
<b>Overall during pre-construction</b>	Bidding and contracting	<ol style="list-style-type: none"> <li>1. Comply with all statutory requirements set out by Government;</li> <li>2. Confirm Gov. Approval and Secure Requisite Permits, Clearances;</li> <li>3. PMUs ensure the EMP be included in bidding docs thus in contracts of civil work.</li> <li>4. The tender documents shall include a lump sum bid item “Environmental Mitigation Measures”. It shall be clarified in the specification documents that the applicable measures in the ECOP and EMP are to be charged to this item. This will allow the construction supervision engineer to require the contractor to quickly address the environmental issues during construction.</li> </ol>
Unexploded ordnance (UXO)	Several provinces in Cambodia still have UXO serious risk to farmers and people in construction or gathering etc.	Initial consultation with local authorities to identify level of risk. At subproject locations where an elevated UXO risk exists, contract a certified firm to perform a UXO survey (i.e., use of metal detectors to identify UXO), and UXO clearance as required. For low-risk locations a letter to this effect should be obtained from district or provincial authorities. At locations which have been surveyed and cleared, satisfactory conduct should be certified by the UXO national regulatory authority.
Encroachment of protected areas, physical cultural resources, local sacred sites or artifacts etc	Selection criteria for quarry, borrow pits, disposal sites etc.	<u>Quarry, borrow pits and disposal sites selection criteria:</u> <ul style="list-style-type: none"> <li>- <b>Located beyond of right-of-way/demarcation of riparian zone: at least 5 (five) meters from the foot of river with embankment; at least 100 (one hundred) meters from the riverbank of large river without embankment; at least 50 (fifty) meters from the riverbank for tributary without embankment outside of settlement area</b></li> <li>- Alternatively, outsource of quarry, borrows pits and disposal with competent and certified third parties</li> </ul>
Release of silt, or runoff cause siltation of water body. Release of domestic wastewater from construction camp and construction activities to pollute	All sites where earthworks/landscaping takes place All construction camps and sites	<ul style="list-style-type: none"> <li>- Labor camps, storage / cleaning areas for fuel, machinery and vehicles will be located &gt;500 m from water bodies</li> <li>- Adequate supervision of the works, confining excavation works to the dry session.</li> <li>- Discretionary use of silt traps where warranted and careful placing of excavated material</li> <li>- All earthworks located within 50 m of rivers and channels, will only be conducted during dry season)</li> <li>- Construct silt traps, deviation channels, mounting barriers or trenches around the stockpiles of materials.</li> <li>- Provide adequate water supply and temporary toilet facilities at the worker’s camp. Regular disinfection of toilets.</li> <li>- Construct intercepting channels to prevent construction runoff entering waterways</li> </ul>

Environmental Aspect	Activities and Location	Mitigation Measure(s)
water		<ul style="list-style-type: none"> <li>- Divert runoff from sites to sedimentation ponds or existing drainage</li> <li>- Construct temporary sedimentation tank be installed, recycled after sedimentation</li> <li>- Oil-water separators will be installed before the sedimentation tank for oily wastewater treatment</li> <li>- Machine wash-down sites are equipped with water collection basins and sediment traps</li> <li>- Locate storage / cleaning areas for fuel, machinery, and vehicles &gt;500 m from water body</li> <li>- Storage facilities for fuels, oil, and other hazardous materials will be within secured areas on impermeable surfaces, and provided with bunds and cleanup installations</li> <li>- Portable or constructed toilets with adequate sewage and septage storage must be provided on site for construction workers and must be emptied (or siphoned) in an appropriate manner into an existing off-site septic treatment system or to the public sewer system</li> </ul>
Dust and other airborne pollutants emission	All facilities, with particular attention to sites near homes, schools, hospitals, or offices	<ul style="list-style-type: none"> <li>- Require the contractor to cover materials with tarpaulin or other suitable materials while in transit to avoid spillage of materials.</li> <li>- Moisten earthen roads during dry and dusty conditions, particularly roads near residences and through the town core area.</li> <li>- Impose speed limits on construction vehicles.</li> <li>- Conduct regular maintenance on construction equipment and vehicles to control air emissions during vehicle operation.</li> <li>- Sites borrow pits and spoil disposal sites must be at least 300 m from residential areas to reduce dust from these sites.</li> <li>- Effective dust suppression measures will be implemented</li> <li>- Provide workers with personal protective equipment (PPE)</li> <li>- Sensitive receptors such as schools, hospitals, or housing, regularly spraying water on the construction site for de-dusting, and keep windows and doors open for air circulation for repair and renovation subproject</li> </ul>
Nuisance Noise: Affect workers and community health	All construction sites, particularly noisy construction equipment is used	<ul style="list-style-type: none"> <li>- Limit construction activities, particularly operation of noise generating equipment at night. <a href="#">(6am up to 6pm only). Adopt Noise Guidelines (58 dBA for residential areas, 73 dBA for Commercial and Industrial Areas)-</a></li> <li>- Position any stationary equipment that produce high noise levels such as diesel generators as far as practical from sensitive receptors.</li> <li>- Erect temporary barriers around construction sites especially near schools, hospitals, and houses.</li> <li>- Install noise suppression devices to noise generating equipment.</li> <li>- Require drivers to minimize blowing of horn and to comply with speed limits.</li> <li>- Provide information to community on schedule of construction activities through billboard/signs.</li> </ul>
Clearing of vegetation/ soil erosion	All construction sites on forested or vegetated land	<ul style="list-style-type: none"> <li>- Cutting of trees will be undertaken as per approved design and only upon approval of relevant authorities. Avoid cutting of trees as much as possible and minimize damage to native vegetation.</li> <li>- Implement landscaping and planting of trees/vegetation at sites of the proposed facilities.</li> <li>- Soil erosion management plan to be prepared by the contractor and to be approved by the responsible authority before construction starts.</li> </ul>

Environmental Aspect	Activities and Location	Mitigation Measure(s)
		<ul style="list-style-type: none"> <li>- Roads and paths to the facilities will only be sufficiently wide to accommodate construction vehicles/equipment to minimize land take.</li> <li>- Manual labor will be utilized in sloping terrain where use of heavy equipment would cause unnecessary damage. Steep exposed slopes will be graded and covered with bush and grass to minimize erosion.</li> <li>- Maintain slope stability at cut faces by implementing erosion protection measures.</li> <li>- Construction in erosion and flood-prone areas should be mainly restricted to the dry season.</li> <li>- Control silt runoff and cover soil stockpiles.</li> <li>- Locate temporary soil stockpiles in areas where runoff will not induce sedimentation of waterways.</li> <li>- Establish protection measures for river embankment works, cut slopes, material stockpiles and other areas at risk of soil erosion prior to periods of heavy rainfall</li> <li>- Restore borrow/disposal pits and work sites to prevent/reduce erosion</li> <li>- Stabilize earthwork areas within 30 days after earthworks have ceased at the sites</li> <li>- Strip and stockpile topsoil, and cover (by geotechnical cloth) or seed temporary soil stockpiles</li> <li>- Conduct regular site inspections and monitoring for soil erosion, contamination</li> <li>- Indigenous strands of forest trees on the site be compensated and moved to a nearby site</li> </ul>
Impact on Ecological Resources	Construction sites that are near and easily accessible to forest area	<ul style="list-style-type: none"> <li>- The contractors will prohibit activities such as cutting wood for cooking, hunting, or wildlife trade.</li> </ul>
Effects of temporary worker populations	All construction sites	<ul style="list-style-type: none"> <li>- Engaging local contractors as far as capabilities allow, to undertake the construction. Consultation with local people on acceptable areas for siting of facilities. If construction camps are required, installation of suitable toilets such as pit latrines and grey water drainage facilities. Arrangements for collection of solid waste. Briefing of workers and awareness raising of the local population on dangers of communicable diseases.</li> </ul>
Construction debris and spoil; Pollute land	All construction sites	<ul style="list-style-type: none"> <li>- Surplus excavated material/cut soil will be used as backfill material for low-lying areas that have been identified by the village authority.</li> <li>- Provide appropriate segregation bins or areas for construction wastes.</li> <li>- Secure and control storage of all hazardous materials including fuels.</li> <li>- Reuse recyclable construction wastes such as wood, steel, and scaffoldings or sell to junk shops.</li> <li>- Solid waste to be collected and disposed in approved disposal site of the districts.</li> <li>- Define spoil disposal sites and borrow pit locations, at least 50 m from water bodies or settlement or other sensitive receptors, in the construction tender documents</li> </ul>
Safety hazards to workers and local people	All construction sites	<ul style="list-style-type: none"> <li>- Allocation of responsibility for site safety to contractor site supervisors, who will ensure that appropriate safety measures, such as use of safety clothing and equipment and placing of hazard warnings are put in place.</li> <li>- Apply good housekeeping at construction sites to ensure worker safety. Designate areas for waste segregation and storage. Provide appropriate fire extinguishers and keep fire extinguisher stations clear and accessible.</li> </ul>

Environmental Aspect	Activities and Location	Mitigation Measure(s)
Disruption of traffic, or increased volume of traffic	All construction sites within or adjoining towns	<ul style="list-style-type: none"> <li>- Contractors should plan construction operations in consultation with area residents and businesses. Local authorities can arrange temporary trading sites and alternative traffic routes during construction.</li> <li>- Prepare a traffic control and management plan together with the local traffic police prior to any construction. The plan shall include provisions for diverting or scheduling construction traffic to avoid morning and afternoon peak traffic hours, regulating traffic at road crossings with an emphasis on ensuring public safety through clear signs, controls and planning.</li> <li>- In case of lane closures, deploy workers to direct traffic.</li> <li>- Signage and other appropriate safety features will be installed to indicate construction works are being undertaken</li> <li>- Speed limits shall be established in the work sites to minimize the risk of accidents.</li> </ul>
Social disturbance, temporary disruption of Community Roads, Paths, and Accesses	All construction site closer to local communities	<ul style="list-style-type: none"> <li>- Walking access will be maintained to affected properties and access routes will be temporarily lined with timber or similar material. Particular attention will be given to ensuring safety along roads and paths used by pedestrians.</li> <li>- Install barriers and safety warning signs on road sections and if necessary, deploy traffic aides/ flag persons at affected locations. Information boards at blocked roads will provide information about the temporary closure of roads, schedule of works and the traffic-rerouting plan. Install signs at construction sites to inform people of the project GRM, potential dangers (e.g., moving vehicles, hazardous materials, excavations) and safety issues)</li> <li>- Require the contractor to immediately rehabilitate the excavated areas and any damaged road and path sections.</li> <li>- Enclose construction site perimeters so that pathway use, and access remains unimpeded.</li> <li>- Install safety barricades around all excavations.</li> <li>- Ensure that all sites are secure, discouraging access through appropriate fencing.</li> <li>- Lock and secure all work sites to prevent unauthorized access</li> </ul>
<b>COMMUNITY HEALTH AND SAFETY</b>	All construction site	<ul style="list-style-type: none"> <li>- Prior to any works, inform residents and businesses in advance through media, information boards, and direct consultations, of the construction activities, dates, and duration of expected disruption.</li> <li>- Especially for the communities within 40 m of works and who will be subjected to higher noise/dust levels, conduct meetings with residents prior to any works.</li> <li>- Record all community feedback and solutions discussed and agreed.</li> <li>- Based on feedback from the community consultations: (i) update contractor site plans as needed to incorporate the solutions, including revisions in work schedules, daily working hours, construction methods, and/or mitigation methods; (ii) revise CSC monitoring schedules and monitoring criteria as needed to reflect the updated contractor site management plans.</li> </ul>

Environmental Aspect	Activities and Location	Mitigation Measure(s)
Disruption of physical, cultural resources	All facilities	<p>If any cultural relics chance finds by contractor, including graveyards and/or individual graves during excavation or construction, they shall:</p> <ul style="list-style-type: none"> <li>- In the event of accidental finds of relics, contractor should immediately cease any works in the area and protect the site</li> <li>- Delineate the discovery area.</li> <li>- Secure the site to prevent any damage or loss of removable objects (e.g., in cases of removable antiquities or sensitive remains, a night guard should be arranged);</li> <li>- Immediately notify the supervisory project engineer and environment specialist who will notify the responsible authority.</li> <li>- Follow direction from the responsible authority regarding changes in the site layout; and</li> <li>- Resume construction work after permission is given by the responsible authority.</li> <li>- Contractor will ensure that the workforce is briefed on this procedure during prior training on EMP/ECC.</li> </ul>
Occupational Health and Safety	All construction site	<ul style="list-style-type: none"> <li>- Require the contractor to implement the construction health and safety plan in accordance with the World Bank EHS Guidelines (<a href="http://www.ifc.org/ehsguidelines">http://www.ifc.org/ehsguidelines</a>) as a minimum standard. The contractor will appoint an environment, health, and safety officer to ensure implementation of the plan. The plan will at minimum include: <ul style="list-style-type: none"> <li>• Provision of first-aid facilities readily accessible by workers.</li> <li>• Provision of personal protective equipment (PPEs) such as hard hats, gloves, rubber boots, etc.</li> <li>• Wearing of PPEs while working onsite will be a mandatory requirement for workers.</li> <li>• Posting of safety signs/reminders in strategic areas within the construction area.</li> <li>• Installation of sufficient lighting at night.</li> <li>• Ensure that vehicle and equipment operators are properly licensed and trained.</li> <li>• Provide staff with COVID 19, communicable disease and HIV-related awareness training.</li> </ul> </li> </ul> <p>The contractor will be required to provide priority hiring of qualified construction workers from the villages and to consult with the local authorities to avoid conflict if migrant workers will be brought to the site.</p>

Source: Asian Development Bank.

### Environmental Code of Practice for Wet Markets

Topics	Mitigation measures
Water pollution	<ul style="list-style-type: none"> <li>• Minimize wastewater generation through water saving measures.</li> <li>• Provision for improved drainage systems, and</li> <li>• Adoption of operation procedures and maintenance of ditches treatment facility with. capability building in operation and maintenance (O&amp;M).</li> <li>• awareness raising support to commune authorities and market managers regarding solid waste collection and management (e.g., measures to reduce, reuse and recycle).</li> </ul>
water-borne diseases	<p>For markets, provision for concrete floors, roofs over trading areas, and improved drainage systems, making the markets easier to keep clean and free of areas where insects can breed.</p> <p>For abattoirs and meat processing facilities, provision of effective building drainage, paving of parking surfaces, and drainage and landscaping for the entire compound to prevent ponding.</p>
Social disturbance	Provision for improved layout, including loading/offloading bays away from the road, and for vehicle parking.
solid waste	Provision of areas where solid waste is temporarily disposed by market users, and readily collected for transport to a suitable landfill site. Segregate recyclable or reusable wastes. Segregate organic waste for processing into animal feed and compost.
Occupational health and safety	<p>Good industry practice is detailed in the IFC EHS guidelines for food and beverage processing;  <a href="https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines">https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines</a></p> <p>COVID-19 specific recommended practice as detailed in Appendix 4 should additionally be strictly adhered to.</p>

Source: Asian Development Bank.

## COVID-19 Risk Management Measures

- Siting of Camps and Field Offices
  - Not in area susceptible to flooding, landslide or other natural hazards
  - Not in area affected by construction dust, noise, sewage or other pollution
  - Not in a residential area
- Minimum housing standards
  - Separate bed for each worker
  - Beds should not be arranged in tiers of more than two
  - Separate accommodation of the sexes or to accommodate couples
  - Adequate natural light during the daytime and adequate artificial light
  - Adequate ventilation to ensure sufficient movement of air
  - Adequate supply of safe potable water
  - Adequate sanitary facilities
  - Adequate drainage
  - Adequate furniture for each worker to secure his or her belongings, such as a locker
  - Common dining areas, canteens or mess rooms, located away from the sleeping areas
  - Appropriately situated and furnished laundry facilities
  - reasonable access to plug sockets for charging telephones and other devices
  - Rest and recreation areas and health facilities, where not available in the community
- Minimum accommodation sizes
  - Inside dimensions over 198 centimeters by 80 centimeters;
  - Headroom of over 203 centimeters allowing full free movement
  - Beds minimum 2m apart
- Sanitation Facilities
  - One toilet, one tap / basin, one toilet for every 6 people
  - Convenient location to accommodation
  - Provision of soap
  - Separate facilities for men and women
  - Ventilation to open air
  - Fresh cold running water
  - Clean and hygienic
  - Septic tank/sewage treatment facility, or pit latrines located at least 200m from surface waters, and in areas of suitable soil profiles and above the groundwater levels
- Health and Safety within worker accommodation
  - Separate area for sick workers to prevent transmission of disease
  - Smoke detector in sleeping area



- Fire safety throughout accommodation such as fire extinguishers, fire alarms, fire blankets
  - Worker training in fire prevention and procedures
  - Fire exit sign, adequate means of escape and clearly maintained exit
  - Security lighting within camp and for sanitation block and lighting for route from sleeping area to sanitation block
  - Electrical cables to be in safe condition, elevated and not in areas liable to flood
- Inspection
- 2 weekly inspections for cleanliness, state of repair of building, accommodation and fire equipment.
  - Record inspection results and retain for review
  - Form a joint team to plan and organize commencement and/or return to work
  - Develop or convene a joint occupational safety and health committee with members representing the employer and workers
  - Train team members on the basic principles for the formulation and implementation of occupational safety and health preventive and control measures.
  - Develop and communicate a work plan on safe working for COVID-19
  - Such plan should be fully aligned with any government regulations and guidelines on COVID-19 prevention and control, or in the absence thereof, with international good practice guidelines as may be updated from time to time
  - Risk assessment to decide when to work, who works and how
  - Undertake a risk assessment to determine the preventive and control measures
  - Ensure preventative measures are in place before resuming or beginning construction work
  - Adopt engineering, organizational and administrative measures
  - Avoid physical interaction and maintain physical distancing requirements as prescribed by national policy of at least 2 meters, or in the absence thereof, international good practice
  - Ventilate enclosed workplaces including work camps and communal spaces
  - Avoid concentration of workers - limit the capacity of common areas such as work camp dining areas and changing rooms to allow the minimum separation of 2 meters and organize one-way systems. This includes sleeping areas which must be a minimum of 2 meters between beds
  - Put in place training and information on COVID-19 and measures required for its management.
  - The construction site is to be segregated to the extent possible in zones or other methods to keep different crews physically separated at all time
  - Stagger break and lunch schedules to minimize the number of people in close proximity to one another
  - Regularly clean and disinfect
  - Increase the frequency of cleaning and disinfection, in particular heavily trafficked areas and common areas, including work camps
  - All door handles, railings, ladders, switches, controls, eating surfaces, shared tools and equipment, taps, toilets, and personal areas are wiped down at least twice a day with a disinfectant
  - Discourage the sharing of items such as cups, glasses, plates, tools

- Promote personal hygiene
- Provide workers with the conditions and means necessary for frequent hand washing (soap, water or alcohol gel) with a posted hand washing protocol at site entries, exits, bathrooms, communal areas, offices, and any other areas with commonly touched surfaces
- Inform workers of the need to avoid physical contact when greeting, and avoid touching eyes, nose and mouth
- Inform workers of the need to cover the mouth and nose with a disposable handkerchief when coughing or sneezing or the crook of their arm
- Dispose of tissues in a lined and covered waste bin and wash hands afterwards
- Provide personal protective equipment (PPE) and inform workers of its correct use
- Identify appropriate PPE related to the tasks and health and safety risks faced by workers according to the results of risk assessment and the level of risk, and provide it to workers free of charge and in sufficient number, along with instructions, procedures, training and supervision
- Non-medical face-coverings (such as homemade cloth masks provided by contractor to all its workers, and supervisors) should be worn as mitigation for catching and transmitting the virus, but are not to be treated as substitutes for proper hand washing
- Health surveillance and insurance
- Before entering the site, staff and visitors must confirm that they are not currently exhibiting flu-like symptoms
- Monitor the health status of workers, develop protocols for cases of suspected and confirmed COVID-19. The protocol will state that:
  - 1). Workers with symptoms or confirmed cases must be isolated within the construction camp or stay at home for 7 days after symptoms started
    - If symptoms persist after 7 days, the person must isolate until the symptoms stop
    - People who have been in close contact with the person with confirmed COVID-19 be quarantined for 14 days
  - 2). All workers in quarantine or isolation must be provided with adequate food, water, medical assistance and sanitation
    - Identify workers who have had close contact with people infected with COVID-19 and follow national medical guidance
    - Communicate confirmed cases of COVID-19 infection to the appropriate authorities
    - All workers should be provided with health insurance that includes COVID-19 treatment
    - Consider other hazards, including psychosocial
    - Promote a safe and healthy working environment free from violence and harassment.
    - Encourage health promotion and wellbeing in the workplace through enough rest, balance of physical and mental activity and adequate work life balance
    - Implement prevention and control measures for the use and storage of chemicals, particularly those used for disinfection during COVID-19
    - The contractor will be asked to develop and review emergency preparedness plans and set up key procedures to prevent and control the pandemic and regularly review and update its plan. Such plan should include:
      - Setting out clear responsibility of managers, supervisors and employees
      - Make sure that it employees must familiarize themselves with the symptoms of COVID-19
      - provided the control and preventative guidance to all workers regardless of exposure risk

- provided guidance for employers regarding safety practices for “critical infrastructure workers” who may have been exposed to a person with a suspected or confirmed case of COVID-19
- institute the protective measures at all jobsites
- Personal Protective Equipment and Work Practice Controls
- institute regular housekeeping practices, which includes cleaning and disinfecting frequently used tools and equipment, and other elements of the work environment
- Jobsite Exposure Situations for
  - Employee Exhibiting COVID-19 Symptoms
  - Employee Tests Positive for COVID-19
  - Employee Has Close Contact with a Tested Positive COVID-19 Individual
- Recordkeeping and reporting
- Periodically monitor prevention and control measures to determine whether they have been adequate to avoid or minimize risk, and identify and implement corrective actions for continuous improvement
- Establish and maintain records related to work-related injuries, illnesses and incidents, worker exposures, monitoring of the work environment and workers' health