



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Lao People's Democratic Republic	EAST ASIA AND PACIFIC	P175996	
Project Name	Lao Environmental and Waste Management Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	7/1/2022	9/30/2022
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance, Lao People's Democratic Republic	Environment Protection Fund, Lao People's Democratic Republic, Ministry of Public Works and Transport, Lao People's Democratic Republic		

Proposed Development Objective

To improve environmental, waste and pollution management in Lao PDR.

Financing (in USD Million)

Amount

Total Project Cost	43.00
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B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The Lao People's Democratic Republic achieved rapid growth and significant poverty reduction between 2005 and 2015, though inequality widened. Gross domestic product (GDP) has averaged around 8 percent growth per year since 2000. The poverty rate declined from 34 percent in 2003 to 23 percent in 2013, reaching 18 percent in 2019. Yet



the Gini coefficient increased from 32.5 to 38.8 during the same period, reflecting lower gains for the bottom 40 percent. COVID-19 is placing an added economic burden on the country. Economic growth declined to 0.4 percent in 2020, the lowest level in three decades.

Lao PDR has been shifting its development trajectory to a green growth path that is more resilient, inclusive and sustainable. Key policies have been put in place that aim to reduce pollution and the high cost it places on human health and economic growth. The National Green Growth Strategy 2030 prioritizes policy and investment action on renewable natural resources; pollution and waste management; environmental fiscal instruments; and others that can drive the circular economy. The proposed project would build upon these achievements and support the GoL by increasing its implementation capacity to address a range of environmental issues, including pollution and waste management.

Pollution levels in Lao PDR have severe public health and economic impacts and need improved monitoring and regulatory oversight. Recent WB assessments attribute some 10,000 deaths annually (21% of all deaths) to environmental health risk factors, and health impacts from pollution are equivalent to 15 percent of GDP. Improved monitoring and regulation of key pollution sources such as household and ambient air pollution, lead exposure, drinking water including biological and arsenic contamination are needed to reduce the severe health and economic impacts on the country. Climate change hazards are expected to exacerbate current human health issues and degradation of natural resources and should be addressed alongside such measures.

Solid waste generation has increased substantially over the years. Sound waste data is missing in the country and is often inconsistent and unverifiable. Waste generation is rapidly increasing in cities and towns due to urbanization, economic growth and changing lifestyles, as well as in tourism hotspots which have seen rapidly increasing numbers over the last decade. Nevertheless, waste collection is largely limited to the urban centers but remains at low levels. While no accurate figures exist, it is estimated that in Vientiane city only around 30-50% of the waste generated, and only about 25% of household waste, is collected and transported to the landfill sites. Due to the lack of appropriate collection systems, open burning, household burying, littering along roadsides and rivers, and dumping in vacant lands are widely spread practices in both urban and rural areas.

Plastics pollution is an increasing concern in the country. The amount of plastic waste is continuously increasing particularly in urban areas and often remains uncollected. In Vientiane, plastics constitute around 12 percent of the total waste stream. In major cities such as Vientiane, Savannakhet, and Pakse, plastic waste is a key factor in blockage of drainage systems causing sudden flooding during rains. In key tourism hotspots such as Luang Prabang or Vang Vieng, widespread plastics littering poses a substantial threat to the touristic value. Lao PDR has seen an almost 10-fold increase in plastic waste imports from 2018 to 2019 due to the recent import regulations by neighboring countries. The quality and recyclability of the waste imports are unknown, and the capacity to cope with the large amounts of plastic waste in Lao PDR is not present.

The priority challenges within the solid waste sector can be summarized as follows. (a) lack of a clear legal framework for solid waste and pollution management and policies and regulations on pollution and solid waste management; (b) lack of capacities at national level to provide regulatory oversight; (c) lack of monitoring and enforcement capacities for environmental pollution (d) local governments are in charge of solid waste management but lack of capacities for operations, monitoring and regulations; (e) lack of financial sustainability due to limited fee collection leading to partial services; (f) lack of proper treatment, recycling and disposal infrastructure causing environmental pollution and



severe health and economic impacts; (g) strong increase of single-use plastic items and widespread plastics pollution. The project will be designed to address these key challenges and priorities at both national and local levels.

The project aims to improve environmental, solid waste and plastics, and pollution management in Lao PDR. The project will seek to comprehensively support stakeholder collaboration across all aspects of the sector, most notably the Ministry of Natural Resources and Environment, Ministry of Public Works and Transport, and Environment Protection Fund, as well as local governments responsible for solid waste management.

Component 1: National Policies and Institutional Capacity Development (US\$5M) will provide technical assistance (TA) to strengthen policies, institutional framework, and capacities of central government agencies responsible for various technical and administrative aspects of environmental, pollution, solid waste and plastics management. Specifically, Component 1A: Development of national solid waste policies, regulatory framework, and institutional capacities, and Component 1B: Development of plastic policies and legislation will support policy development and institutional strengthening at the national level to enhance regulatory oversight and planning of the solid waste and plastics sector while Component 1C: Strengthening pollution monitoring, environmental risk and climate change management will focus on increasing capacities in ministries to address some of the most severe sources of pollution in the country including household and ambient air pollution, lead exposure and drinking water pollution including biological and arsenic contamination, and enhance environmental risk and climate change management.

At the municipal level, the Project will focus on improving solid waste services and increasing the financial and environmental sustainability of solid waste management operations through technical assistance and investments in infrastructure and equipment under Component 2: Integrated Support and Capacity Building for Local Government (US\$ 7M) and Component 3: Infrastructure Investments for Solid Waste and Plastic Management (US\$ 28M).

Component 2 will strengthen the capacities of participating local governments for better solid waste planning, operational management, financial management, and monitoring. TA and financing will be provided for: (i) establishment of adequate tariff models, waste fee collection systems, and service contracts including performance indicators; and (ii) establishment of pollution and waste monitoring and information systems. The component will also support preparation of investments to be financed by the Project under Component 3. This will include the provision of technical assistance for developing feasibility studies, detailed engineering designs for priority investments, site specific ESIA, and bidding documents.

Component 3 will finance priority low-cost infrastructure to improve effectiveness and efficiency of waste and plastics management to enhance services and environmental sustainability by reducing pollution caused by open burning and dumping of waste, uncollected leachate and methane, and plastics leakage. It will provide financing for selected local governments that have demonstrated sufficient capacity in solid waste management and commitment to justify investments. Component 3A: Priority lower-costs infrastructure investments in solid waste management will provide financing for investments in all needed infrastructure aspects of solid waste management currently not in place, including waste collection, transport, transfer, treatment including intermediate treatment facilities (e.g. composting facilities, waste sorting facilities, material recovery facilities, etc.) and composting, and disposal of waste at rehabilitated or new landfills to increase environmental sustainability. Component 3B: Infrastructure investments in plastics management will provide financing for investments to improve plastics waste management including investments in sorting facilities; material recovery facilities (MRF); intermediate plastic waste treatment facilities; and possibly efficient and low-cost plastics collection and clean-up systems at priority (tourism) hotspots.



Component 4: Project Coordination and Reporting (US\$ 3M). This component will focus on inter-ministerial coordination, progress reporting, and monitoring and evaluation. Strengthening implementation and management capacity will involve support for monitoring and evaluation systems for the proposed program, enhancing stakeholder's collaboration at all levels .

Component 5. Contingent Emergency Response Component (CERC). This component is designed to provide swift response in the event of an eligible crisis or emergency that could arise during implementation. Crises may include extreme flooding and zoonotic disease outbreaks. The activation process and implementing arrangements for the component, list of activities that may be financed, and other required aspects will be further assessed during project preparation.

The project intends to apply a tier-based system to adapt investments and TA support to different degrees taking into account local government's commitment and capacities. The project will facilitate the creation of models for solid waste management in selected cities that can demonstrate improved and cost-effective performance and serve as inspirations for other cities. Proposed criteria for selecting the project areas included: (i) economically feasible; (ii) sufficient capacity, operational budgets (or system to facilitate budget) and commitment to improve waste management infrastructure and services; (iii) no overlap with other projects with same activities; (iv) complementary to other projects; (v) strategic or government priority areas; (vi) high-level and technical level commitment and willingness to undertake reforms; and (vii) remaining capacity of current landfill (open dump) site.

During project preparation a World Bank financed pre-feasibility study, funded by Korean Green Growth Trust Fund (KGGTF) and ProBLUE Trust Fund, will inform project design, including identification of specific investments and sites prior to project appraisal. Site selection was recognized by the Client during the identification mission in April 2021 as a priority during the project preparation phase, enabling the preparation of site-specific social and environmental impact assessments and management plans for one priority landfill site prior to project appraisal. Currently, provinces that are tentatively under consideration include Vientiane Capital (prefecture); Udomxay; Vientiane (VTE); Huaphan; Xayabouly; Salavanh; Xaysomboun; Luang Prabang; Savanhnaket; and Champasak. Solid waste management practices in these provinces vary depending on the availability of landfill and waste collection services. Current solid waste management practices in each candidate provinces will be investigated during Pre-FS. Medical waste collection/transportation/disposal in targeted provinces should also be studied during project preparation and considered for support under the project. It is envisaged that solid waste management facilities in three secondary cities (one per province) will supported by the project. Investments in solid waste facilities are expected to be made at district level, with possibilities for regional landfills. For some project activities, such as public private partnerships (PPP) on waste sorting and recycling under Component 3, project locations may not be known prior to appraisal.

This operation is well aligned with the World Bank Group's Country Partnership Framework (CPF) 2017–2021 for Lao PDR (Report No. 110813-LA), and directly supports the Bank's goals on poverty reduction, shared prosperity, sustainability, and commitments on climate co-benefits. It also supports the GoL with regional and international commitments such as the ASEAN Bangkok Declaration on Marine Plastics and the Basel Convention. The project is part of a series of regional projects, Southeast Asia Regional Program on Combatting Marine Plastics (SEA-MaP), which supports marine plastics solutions at the regional and national levels.



D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project activities will be implemented nationwide on the part related to technical assistance under Component 1. Under component 2 and 3, the project will be implemented in selected provinces and districts which project locations will be confirmed during project preparation as part of the Pre-FS.

Most of the population in Lao PDR, including the potential project provinces, is exposed to elevated pollution associated with at least two of the following factors: household air pollution, ambient air pollution, drinking water (E. Coli or Arsenic contamination) and sanitation, and Lead (Pb) exposure. Currently, approximately 30 controlled landfills and 60 open dumps are in operations in Lao PDR. Medical waste treatment facilities are still limited with two medical waste incinerators in Vientiane while medical wastes are placed in landfills in other places. Inadequate solid and plastic waste management system leads to widespread practices of open burning, household burying, littering along roadsides and rivers, and dumping in vacant lands which has contributed to pollution generation. Household burning of waste is one of the major sources of ambient air pollution in VTE capital. Open burning and occasional accidents, such as inferno, at landfill sites could also aggravating the already pressing air pollution issues. Toxic waste components are contaminating surface and groundwater, including of adjacent farmland. Uncollected methane significantly contributes to national greenhouse gas emissions and results in a high risk of landfill fires. Watershed characteristics varies in each region of Lao PDR. Some 80 percent of the country's land area, largely in the north, is mountainous. The remaining 20 percent is low-lying plain along the Mekong River and threatened by annual floods. Widespread open dumpsites or into rivers leads to pollutants ending up in rivers, aquifers and the sea damage ecosystems and present significant health risks to the public. Climate change hazards are expected to exacerbate current human health issues and degradation of natural resources. Lao PDR is one of the world's biologically richest and most endangered terrestrial eco-regions. Biodiversity is crucial to the country economy due to the basic goods and ecosystem services that biodiversity provides. However, rapid economic growth has resulted in significantly high rates of natural resource depletion and environmental degradation. Siting of waste management facilities should give due considerations on impacts to biodiversity and natural habitats.

Lao PDR is culturally diverse with 49 ethnic groups with project locations still not know there is the potential for ethnic groups to be affected. Cities in Lao PDR are small in population, with only the capital city Vientiane having a population of more than 100,000 people and few high-rise buildings. City centres are not very densely built up and have wide peri-urban areas around them, requiring trash collection and recycling transportation. Waste collection schemes currently exist only in (parts of) the larger cities in the country. Collection of recyclable materials is informal and focusses only on materials for which there is an attractively priced market. When prices drop, specific materials may no longer be collected. In rural areas a market for some recyclable materials is lacking (e.g. plastic bottles) due to lower resale value and higher transportation costs. Collection of recyclable materials is mainly implemented by 3 actors: informal door-to-door collectors of recyclables; formal waste collectors separating valuable materials during their regular collecting rounds; and waste pickers (formal/informal) collecting at waste disposal sites. Waste separation at source is rare, except for some higher value materials such as scrap metal, used engine oil and re-use of glass beer bottles by the beer factories. Cleaning of recyclable materials, such as plastic bags can add value, but is rare.

D. 2. Borrower's Institutional Capacity

The project will work with the Government at national, provincial and district levels, as well as private sector actors. A National Project Coordination Unit (PCU) located in the Environmental Protection Fund (EPF) will provide overall



project guidance and coordination among ministries and provincial departments implementing specific activities. They will perform monitoring and evaluation (M&E), environmental and social (E&S) risk management, and fiduciary functions for the project. The PCU will hire one environmental and one social consultant to support project preparation and implementation.

A Central Project Implementation Unit (CPIU) is expected to comprise officials from the Ministry of Natural Resources and Environment (MONRE) and the Ministry of Public Works and Transport (MPWT), and possibly other line ministries according to their specific mandates. Component-specific Implementation Units will be required for some project components. For example, Component 1 (Institutional and Policy Development) will most likely be led by MONRE (Department of Solid Waste Management) and Component 3 on infrastructure will likely be led by MPWT. The exact implementation arrangements are subject to further assessments and will be further developed as part of project preparation.

MONRE and MPWT have had experiences with the World Bank safeguard policies under various past and on-going projects but do not have experience with the ESF. Safeguards implementation performance for each project varies but mostly is satisfactory. Participating local government departments are known to have institutional capacity constraints and current systems for E&S risk management are weak. E&S risk management capacity for waste and plastic management in line with international practice experience is expected to be built under the project. Considering that this project is the first type of its kind carried out by the World Bank in Lao PDR, a Capacity Needs Assessment will be carried out during project preparation, as part of the E&S instrument preparation. This will inform Component 4 which will have activities to support building capacity and knowledge on the E&S instruments. The staff of the PCU and CPIUs of the line ministries will receive training through the project consultancy services to ensure adequate capacity to implement and monitor all relevant Environmental and Social Standards (ESSs) under the Environmental and Social Framework (ESF). Training will also be provided to local government departments to enhance capacity on E&S risk management during project implementation. To support institutional sustainability, the project will provide support to PCU and CPIU under Ministries by funding E&S consultancy services for PCU and CPIUs within ministries. As part of achieving the project objectives as well as E&S risk management, capacity will also be built regarding managing solid waste with reference to international standards in the public sector.

The MPWT has a dedicated unit working on environmental and social aspects, including an environmental and social compliance process. The overall Environmental and Social Management System (ESMS) at the national level for MONRE and MPWT has been established and is operational but needs strengthening in terms of the number of staff, clearer allocation of roles and responsibilities, monitoring and reporting skills and coordination with MONRE. Risk management staff will be added by Ministries as Environmental and Social Officers (ESOs) for this project as required and a Capacity Needs Assessment undertaken as part of project preparation and reflecting project activities that will be implemented by each of the ministries. Specific institutional capacity strengthening/ building measures will be identified and presented in the E&S instruments, including the Environmental and Social Commitment Plan (ESCP) to ensure ownership and sustainability of the resources. This capacity building is part of Component 4.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

High



Environmental Risk Rating

High

Environmental risk of the project is rated as High, taking into account the following factors: (i) There are pre-existing issues due to insufficient waste management in Lao PDR including leakage of leachate/toxic waste components into soil, water resource, air pollution and landfill fire risks, etc. Currently, only 48% of wastes, are collected and 60 % of them are disposed in open dumps. Hazardous waste is not collected or treated separately from general waste, resulting in toxic materials and medical waste being disposed of with municipal waste. The project, which objective is highly aligned with the ESF objective, aims to address these pre-existing issues and increase environmental sustainability; (ii) The project, by its nature, will provide range of significant environmental benefits including reduced greenhouse gas (GHG) emissions. However, project activities could generate significant adverse risks and impacts on the environment at and nearby selected landfill/waste disposal sites, intermediate and associated facilities if these facilities are located on the areas close to sensitive environmental receptors or densely populated areas particularly where groundwater is the main source of drinking water. The main environmental risk is associated with the closure and rehabilitation of the existing dumps and construction of new landfills and related facilities. Potential environmental risks/impacts from the project include: (a) air and noise pollution from earthworks and movement of materials and heavy equipment; (b) soil and water resources pollution due to accidental spillage of oil and other lubricants and discharge of domestic sewage during construction ; (c) accumulation of construction wastes such as excavated construction materials, general wastes from workers; and (d) failure to ensure occupational health and safety. The operation of the solid waste management facilities supported under the project is associated with the generation of leachate, landfill gas, litter and dust, which could affect air quality, soil and groundwater and surface water quality, and biological resources of waste management sites and surrounding areas and might bring about the local proliferation of flies, rodents and other disease-carrying vectors, and expose workers to health risk. The risks and impacts during operations are likely to be continuous and long-term, and compounded by contextual environmental risks (e.g. extreme weather events, flash floods and typhoons, landslides) and institutional risks (e.g. capacity constraints pertaining to the operation of waste management facilities); and (iii) Information regarding project locations, size and type of landfill/waste disposal and related facilities are limited at this stage; thus project adverse impacts are unknown as is the sensitivity of local environment conditions (e.g. affected population/habitats/species). The risk rating will be re-visited before appraisal as project locations and details of components and activities are determined. The project will be implemented in selected provinces and districts which sites and investment will be identified at later stage of project preparation. There are risks that waste management facilities are located close to natural habitats and forest cover, rivers/water ways or site(s) with cultural heritage or aesthetic values (such as Luang Prabang, key tourism sites) if environmental considerations during site selection process are inadequate. It is possible that the project would support investment of regional landfill(s) that serve one or more provinces or districts. Overall, ESF capacity of the implementing agencies is limited which could hinder the preparation of ESF instruments. Challenges currently faced with regards to coordination among different institutional levels (central, province, and district level) within the same ministries and across ministries could also affect effectiveness of ESF preparation and implementation.

Social Risk Rating

High

The social risk is classified as High. Whilst the project aims to deliver a range of benefits, project activities have the potential to generate significant social risks and impacts. These include: potential for opposition from communities neighbouring existing or new waste facilities and from waste-pickers who perceive project activities as a threat to their livelihoods; risk of impoverishment of vulnerable groups economically displaced in case of land acquisition for new landfills and/or recycling facilities; risk of not being able to find and agree an inclusive solution in compliance



with the ESF for children waste-pickers; labour and working condition risks related to the construction and operation of solid waste disposal sites and recycling facilities; impacts related to increases in heavy traffic; impacts from exposure to legacy pollution of groundwater resources; potential risk for increases in substance abuse; and risk of increased gender-based violence from workers and their proximity to vulnerable groups. Special attention will be needed to monitor and verify compliance in the application of: ESS2, particularly in addressing risks related to child labour and vulnerable workers; ESS4, especially road safety, sexual exploitation and abuse and sexual harassment (SEA/SH), and community exposure to legacy pollution of groundwater resources; and ESS5, due to the risk of permanent and temporary economic displacement of waste -pickers as well as potential land acquisition for new or expanded landfills and recycling facilities, and for environmental monitoring stations. There is also the potential for ethnic groups and their land to be impacted. Meaningful engagement will be key for managing concerns as well as the potential risks and impacts resulting from the project activities. The engagement will need to take into consideration consent, language, literacy, access to information, vulnerability, child protection, and cultural needs of the various groups including ethnic groups. The project is expected to bring substantial benefits to the quality of life of local communities around existing solid waste disposal and recycling facilities, and improve occupational health and safety for the waste-pickers, as well as provide data on air and water quality at selected locations. Communities may have concerns about the rehabilitation or expansion of existing waste facilities and the creation of new facilities. An increased number of garbage trucks going back-and-forth to the landfill could lead to increased dust, noise, smells, and road safety issues. Waste -pickers may perceive the project activities as a threat to their current source of livelihoods. New solid waste disposal sites and recycling facilities may require land acquisition or impact ecosystem services such as provisioning of sources of water for water supply systems. The social risk rating also reflects uncertainty over project locations as well as methods and approaches. The approach to social risk management in Lao PDR should reflect its unique social and geographical features. The Client capacity for managing social aspects related to solid waste management is low and they have a limited familiarity with ESF requirements and implementation. The client will be challenged in managing and mitigating livelihood impacts to informal waste pickers, many of whom are socially marginalized and vulnerable. Child protection measures will need to be in place as some of the waste-pickers are children.

Public Disclosure

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

The proposed project could lead to the the following expected Environmental impacts and potential risks: (a) site-specific soil/groundwater/surface water contamination from leakage/ accidental spill of leachate/toxic waste components from closure/rehabilitation/ expansion/new construction of landfills; (b) air pollution and odor nuisance in case of deficiencies in minimizing and mitigating the related impacts during operation and maintenance of landfill and associated facilities ; (c) potential fire risks/hazards if adequate measures to capture landfill gas and flaring is not integrated as part of proposed plans; (d) occupational health and safety (OHS) risks from solid waste management operations; (e) impacts to cultural heritage or aesthetic values of surrounding areas from construction and operations of waste facilities; and (f) other typical impacts from infrastructure construction including dust/noise/wastewater/ solid wastes generation, traffic and road safety impacts, OHS risk, etc. The available reporting on current levels of soil



and groundwater contamination due to current SWM practices, impacts on health aspects, etc. and the possible remediation options and segregation of hazardous waste is discussed under ESS3.

Social risks and impacts anticipated for this project are: (a) potential conflicts with communities who may disagree to rehabilitate existing dumps and/or recycling facilities located close to them or disagree when the construction of a new landfill and/or recycling facility that is planned and/or waste -pickers who may consider that the project activities are a threat to their current source of livelihoods; (b) risk of enhancing impoverishment of vulnerable groups to be economically displaced by the project (mainly waste -pickers), in case livelihood restoration plans are not adequately implemented; (c) risk of not being able to find and agree an inclusive solution, in compliance with the ESF, for the children currently working as waste-pickers; (d) if not appropriately managed labour and working conditions impacts related with the construction works and operation of the solid waste disposal sites and recycling facilities; (e) potential increase of heavy traffic (especially garbage trucks) close to the new or improved sanitary landfills, related facilities and/or recycling facilities; (f) community exposure to health problems from legacy pollution of groundwater resources and which may impact the quality of drinking water coming from wells; (g) temporary labour influx of workers, which might increase the risk of substance abuse (h) increase in gender-based violence from workers and their proximity to vulnerable groups; (i) potential for land acquisition for new landfills and/or recycling facilities; (j) potential impacts to ethnic groups and their land; and (k) risk of anxiety if air pollution and water quality data is not appropriately shared and disclosed.

Based on the above understanding of project preparation activities and decision points and to address identified risks and impacts, the Borrower will develop, consult and disclose the following environmental and social due-diligence instruments prior to appraisal:

EPF will engage support from consultants to conduct and prepare an Environmental and Social Management Framework (ESMF); standalone Social Impact Assessment (SIA) and Social Management Plan (SMP); a preliminary Environmental and Social Impact Assessment (ESIA) for one landfill; Stakeholder Engagement Plan (SEP); and ESCP prior to appraisal. The ESMF, SIA and SMP will inform project design, risk management of TA activities (policies development and preparation of feasibility studies), and risk management instruments for: (i) the selected landfill sites and other large-scale facilities and (ii) project activities for which specific site locations are not yet determined. The Terms of Reference (ToR) will be prepared by the EPF for the preparation of these instruments and will be reviewed by the Bank prior to its commencement.

The ESMF will set out the principles and guidelines to screen and assess the environmental and social risks and impacts for all components including site-specific investment and TA activities in a manner consistent with ESSs requirements, and Lao EIA procedure. On social aspects the ESMF will reference the relevant sections of the SIA and SMP. The ESMF will provide guidance for preparation of site specific ESIA/ESMPs with relevant provisions for implementation budget and proposed institutional mechanisms and will specifically refer to WBG Environmental Health and Safety Guidelines (EHSG) for Waste Management Facilities. The ESMF will also include Rapid Cumulative Impact Assessment, templates for ESMP for small investments, and ToRs for the proposed Strategic Environmental and Social Assessment (SESA) to be carried out during implementation. For the CERC component, an addendum to the ESMF or a specific CERC-ESMF will be prepared specifically for the CERC and disclosed. Timing for the preparation of ES instruments for the CERC will be assessed during project preparation.



The SIA will primarily focus on the infrastructure investments under component 3. Based on the findings of the project SIA, an SMP will be prepared to manage identified impacts. The SMP will include Labour Management Procedures (LMP), including a Worker Grievance Procedure; Community Health and Safety Plan (CHSP); as applicable - Resettlement Policy Framework (RPF) also covering livelihoods restoration as an overarching instrument and to inform site specific plans (Resettlement Action Plans (RAPs) or Livelihoods Restoration Plans (LRPs)); and, an Ethnic Group Development Framework (EGDF) as overarching instrument and to inform Ethnic Group Development Plans (EGDPs). The SMP will also include budget, staffing, and operational arrangements for project social risk management, including a capacity assessment and training plan.

A preliminary ESIA will be prepared prior to appraisal for one priority landfill site that will be identified during project preparation. The SIA-SMP will feed into the preliminary ESIA. Landfill sites will be identified through the following tasks of the Pre-FS: (i) suitability analysis on five long-listed town/districts; and (ii) identification of three potential project sites in three short-listed towns/districts. Locations adversely impacting critical natural habitats will not be eligible. Landfill site suitability criteria will include environmental and social criteria such as: land availability, ownership and landuse; vicinity and distance to neighboring communities; proximity to sensitive water resources and general hydrology/hydrogeology and other local ecological conditions; (unique) natural and cultural treasures; flooding occurrence and risk, as well as land stability; and current informal waste pickers working situation.

A standalone SEP including a Grievance Redress Mechanism (GRM) will be prepared prior to appraisal to guide the Borrower to identify stakeholders, build and maintain a constructive relationship with them, and to meet communication and disclosure requirements with a particular focus on project-affected parties. Further details are provided under ESS10.

The ESMF, preliminary ESIA, and SIA will be undertaken with active stakeholder participation and the findings incorporated into the ESMF, SIA report, SMP, preliminary ESIA, and SEP and inform the ESCP. Following review by the World Bank, draft reports will be disclosed by the Client prior to project appraisal and consulted upon. Due to the high E&S risk rating of this project and low institutional capacity on solid waste management, independent consultants will need to be engaged to support the Client during project preparation and (possibly) during implementation.

Areas where “Use of Borrower Framework” is being considered:

The Borrower's E&S Framework will not be used for the Project, in whole or in part.

ESS10 Stakeholder Engagement and Information Disclosure

The Client will prepare a SEP, including a GRM, which will be implemented, updated, and disclosed throughout the different phases of the project life cycle. It will be developed early in the project preparation to inform engagement to effectively reach out to affected person and other stakeholders to ensure accessibility and cultural appropriateness. The approach to engagement activities will take into account of the needs of ethnic groups (potentially including ethnic groups who meet the characteristics and definition of Indigenous Peoples under ESS7), vulnerability, language, literacy as well as consent and child protection measures. The engagement will ensure not only risks are managed but benefits are accessible to all.



The project is expected to involve different groups of stakeholders from national to village levels, including local communities, government line agencies, mass organisations and the private sector. The project’s stakeholders and the level of their engagement will be identified and analysed by the client during project preparation. Stakeholder groups include: (a) those directly affected: waste collectors and pickers and their families (b) central government agencies including EPF, Ministry of Natural Resources and Environment (MONRE), Ministry of Public Works and Transport (MPWT) and Ministry of Health, (c) local government administrations at provincial, district and village level, (d) individuals and communities located nearby project investments, (e) mass organisations and civil society organizations working with women, youth, ethnic groups and other related sectors - (f) private sector actors including waste management companies, waste recycling companies, waste-pickers representatives, (g) academics, environmental organizations, international NGOs and other development partners working on waste management, environment and related issues

To raise awareness on plastics and waste, the project may include public awareness campaigns. Key topics might include waste reduction (particularly plastics); waste fees and payment system; waste collection information; waste separation pollution impacts. A Bank funded prefeasibility study will determine which topics will be include in these awareness raising campaigns.

To increase sustainability, the project is considering (to be confirmed in the design stage) shifting the fee collection from the waste collection companies to a government tax system. Such a shift will require not only a well-functioning tax system but also extensive stakeholder engagement, public awareness campaigns, and an appropriate design to ensure that such taxes will not have a disproportionate burden on poor and vulnerable households. This will need to be included in the SEP.

Success of this project in delivering socially inclusive benefits and achieving planned project outcomes will depend on meaningful and culturally appropriate stakeholder engagement including vulnerable households, women, ethnic groups and affected waste collectors, waste pickers, as well as child protection measures due to presence of children. The SEP will seek to ensure that beneficiaries and affected communities will be engaged, especially regarding project design options. Specific public communications campaign and consultations about the risks, impacts and project benefits will be undertaken. It may include study tours to rehabilitated landfills and nearby communities. Livelihood Restoration Plans (LRPs) for waste -pickers, if required, will include specific engagement requirements to ensure accessibility and inclusiveness.

Meaningful engagement will also be key for managing possible concerns as well as the potential risks and impacts resulting from the project activities. Air and water quality monitoring programs will need to ensure access to information to enable citizens to understand the data and respond appropriately to known dangers to their health. In order to achieve this, the project will include the development of a public web interface – likely an app – for information dissemination on air and water quality data.

As part of the information disclosure arrangements, the drafts of ESMF, preliminary ESIA, SIA-SMP, SEP, and ESCP will be disclosed publicly on the websites of the implementing agencies with directly affected households meaningfully consulted and at the selected landfills. Meetings will be consistent with applicable government guidance on COVID19 measures for public gatherings. Meaningful consultation with relevant stakeholders will be conducted before appraisal, and its results adequately recorded and disclosed.



B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project is expected to finance construction of infrastructure and civil works that would potentially bring an influx of labourers. The project will involve civil servants (government staff appointed from the implementing and concerned agencies at all levels), direct workers (workers hired directly by CPU/CPIU) and contracted workers (employees of civil works contractors and subcontractors, service providers, employees of consulting firms), but is not anticipated to involve any primary supply workers (workers from ongoing providers of essential goods and materials) nor community workers.

There is a potential risk of job redundancies. A Bank-funded pre-feasibility study will look at this and if identified, appropriate risk mitigation strategies will be included in project design during project preparation.

Labour related risks include the risk of: (i) employment discrimination, (ii) labour related disputes, (iv) Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH), (v) child labour (waste pickers); (vi) accidents and injuries, exposure to toxic waste component/ air pollution (dust and bio-aerosols, odours nuisances, and vehicle emissions/noise and vibration/ pathogens and vectors in waste collection, transport and management processes.

The client is required to develop Labour Management Procedures (LMP) as part of the SMP. The LMP will set out how all categories of project worker will be managed and treated in line with the national Labor Law and ESS2. The LMP will also include OHS issues and ensure that different project teams and workers will be provided with adequate resources, including personal protective equipment (PPE), accommodation, transport, first aid-kits available at working sites, and can be contacted/reached in case of emergency. The PCU located in EPFO will ensure that Social Security (health and life insurance) is provided to all workers according to the Labor Law before the commencement of project activity.

Labour, especially construction labour and drivers have an increased risk for substance abuse, such as alcohol and amphetamine. Such substance abuse is often a contributing factor to accidents and incidents. During project preparation, the client will assess the risk of substance abuse and put in measures in the LMP to address the risks and impacts of substance abuse including Codes of Conduct (CoCs). The CoCs which will be included in the letter of appointment for government staff and contractors.

The Client will develop a dedicated Worker Grievance Mechanism, as part of LMP, for all groups of workers, to collect and address potential grievances coming from these workers.

At the end of the dry season and beginning of the wet season, temperatures can reach 40 Celsius and waste picking may be done at night to avoid the heat and smelly gases. During the wet season, rainfall limits the time when waste pickers can collect recyclable materials and thereby the volume and reduce overall value.

OHS issues related to operation of facilities will also be included in various facilities operation plans and protocols, emergency plans, etc. to operationalized them.



The project's Labour Management Procedures (LMP) will also need to take into account the latest COVID-safe guidelines mandated by the government and/or best practice in the country, in order to maintain a safe working environment for workers and for the community and minimize the risk of COVID transmission. This should include hygiene practices, use of PPE and ensuring sick workers can self-isolate and access pay.

ESS3 Resource Efficiency and Pollution Prevention and Management

This standard is relevant because the project, by its nature, will contribute to pollution prevention through improved solid waste management system to be established in Lao PDR. Nonetheless, the project may produce significant site-specific adverse environmental impacts if the site is not well designed and operated properly. During operation, landfill would produce leachate that may pollute surface water and ground water, olfactory nuisances likely to pollute the ambient air, the bio-gas that may cause fire and explosion as well. Any pollution-related risks including but not limited to soil/groundwater and surface water contamination, air pollution, water-borne diseases, and pests and disease-carrying vectors which might be associated with the phases of construction/rehabilitation/closure, will be addressed by good technical design and the implementation of respective mitigation measures to be identified in the ESMF and further detailed in site-specific ESIA/ESMPs including a preliminary ESIA for one landfill site identified during project preparation. The project design will also include approach to the management of residual hazardous waste through: (i) separation of domestic waste and hazardous waste at waste sorting/recycling facilities; (ii) design of sanitary landfill that will include proper lining to prevent leachate contamination into soil and groundwater; and (iii) design and installation of leachate treatment facilities. The ESIA/ESMPs will consider, inter alia, impacts associated with leachate management plan, landfill closure plan, rehabilitation and construction and/or operation of the new landfills as part of the project Component 3, in line with the GIIP and the WBG ESHGs. Information on groundwater and/ soil contamination and remediation options is quite limited in Lao PDR. The study on "Heavy metal accumulation in water, soil, and plants of municipal solid waste landfill in Vientiane, Laos" carried out in 2018 is the first to warn of serious heavy metal pollution occurring in the water, soil, and plants in the landfill of Vientiane, Laos. The study suggested that urgent phytoremediation is required along with other measures including improvement of landfill system, frequent monitoring of surface water, ground water and soil quality. Construction contractors will also be required to prepare specific waste management and pollution prevention plans. The project implementation will require the use of resources such as water and energy. Site-specific ESIA/ ESMPs will define measures to ensure efficient use of resources. Also, the project design will provide for the collection of landfill gases. The project, by its design, is expected to reduce existing adverse impacts related to air and groundwater pollution by reducing gaseous emissions from landfills (smoke, CH₄, H₂S, CO₂, etc.) as well as the seepage of contaminated leachate into the groundwater as well as surface water bodies.

ESS4 Community Health and Safety

To address community health and safety impacts a Community Health and Safety Plan (CHSP) with site-specific mitigation measures will be included in the SMP. The recommendations will need to be considered in engineering design solutions. Those measures shall be in line with the WB Environmental Health and Safety Guidelines (EHS) and Good International Industrial Practices (GIIP).



Some project activities (e.g. closure of existing sites) may impact health and safety aspects for the waste-pickers. New construction or expansion of solid waste disposal sites and recycling facilities may impact ecosystem services such as provisioning of sources of water for water supply systems if these sites are not well designed and operated appropriately.

Air quality is poor during the dry season due to the widespread use of fire to clear land. Air and water quality monitoring programs will need to ensure access to information to enable citizens to be informed and respond appropriately to known dangers to their health.

If well managed, this project has a substantial potential to improve the environmental, social, and health conditions of the communities living nearby existing solid waste dumpsites and recycling facilities. However, the project activities may increase heavy traffic, including garbage trucks going back-and-forth to the landfill, especially if regional landfills are developed and separate recycling facilities. Project activities may cause community exposure to more pollution and landfill fire risk if operation of landfills and waste facilities do not meet the expected design and operational standards. To address road safety risks during construction and operation phases, the project's SIA/CHSP will include road traffic safety assessments and plans. They will pay special attention to children and vendors working close to the access roads.

The Project also has a potential risk of spreading COVID19 to communities and the CHSP will also need to take into account the latest COVID-safe guidelines mandated by the government and/or best practice in the country.

The risk on health and safety of communities might also be associated with the operation of landfill and storage of waste and materials. Based on Lao PDR CEA (August 2020) and other relevant studies, impacts on human health from current solid waste management practices include: (i) health damages of residents from household waste burning and open waste burning at landfill sites; (ii) impacts on the health of waste pickers at illegal dumpsites and the unmanaged open landfills; (iii) problems on respiratory system of people living nearby landfills from toxic smoke accidental landfills inferno, etc. New solid waste disposal sites and recycling facilities may impact ecosystem services such as provisioning of sources of water for water supply systems. The leachate from the landfill or recycling facilities, when not properly collected and treated may pollute the drinking water source for the communities; the bio-gas from landfills could cause fire and explosion if not properly collected and treated, threatening the safety of communities nearby. In addition, the nuisance odor from the landfills may cause impact on the health of residents nearby. However, with good technical design and E&S mitigation measures the probability of such accidents relevant for the community health and safety would be reduced significantly. The project design will pay special attention to improve government waste management capacity to meet the required standards in a sustainable way. The ESMF and site-specific ESIA/ESMPs will include mitigation measures on pollution management in line with WBG EHS for Waste Management Facilities.

The SIA will focus on the social determinant aspects of community health and risks and impacts. As such during project preparation, the client will assess the risk of Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) for all workers as part of the SIA. The scale of labour influx and the installation of temporary workers' camps is unknown at this stage. To address the risk of SEA/SH, the project's CHSP will include provisions to prevent and manage SEA/SH and violence against children (VAC). Among others, it will include provisions to promote local recruitment of workforce plus mitigation measures such as a worker code of conduct (including requirements for



both worker-community and worker-worker interactions), mapping of third-party service providers plus specific actions (training, public awareness, etc.) to avoid sexual harassment, sexual assault, and exploitation and human trafficking.

Labour, especially construction labour and drivers have an increased risk for substance abuse, such as alcohol and amphetamine. Such substance abuse is often a contributing factor to accidents and incidents. It also is a contributing factor for gender-based violence. During project preparation, the client will assess the risk of substance abuse as part of the SIA. To address the risk of substance abuse, the project's CHSP will include provisions to prevent and manage substance abuse.

Codes of Conduct (CoCs) will also be included in the letter of appointment for government staff and contractors.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Land acquisition and economic displacement are foreseen for the construction of new landfills and/or recycling facilities. However, specific project locations are not yet known. Although it is possible that one possible landfill site will be identified prior to appraisal in sufficient detail to be the subject of a preliminary ESIA, detailed designs will not be available.

The establishment of water quality measurement networks may also require land acquisition and/or result in impacts on livelihoods. By contrast, the establishment of air quality measurement networks is foreseen to be placed within the compound of district MONRE offices and as such, are unlikely to require land acquisition. The project may also cause the loss/reduction of the existing livelihoods of waste collectors, waste-pickers and other groups like informal recyclers who rely on revenue from the waste stream for their livelihood (e.g. small-scale waste buyers).

Therefore, as part of project preparation, the SIA will capture the potential risk of economic and/or physical displacement and associated impacts. Furthermore, prior to appraisal, the project will prepare, a Resettlement Policy Framework (RPF), including measures for livelihood restoration for waste pickers, will be prepared and included in the SMP. The RPF will specify the requirements for the preparation of site-specific land acquisition and resettlement plans, as well as livelihood restoration plans, once the location of activities are known, and relevant designs have been prepared.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is relevant because the provinces for which will be included for investment support, might be characterized by rich biodiversity resources which might be adversely impacts by the project activities. The country overall has high levels of biodiversity which is crucial to it's economy. But Lao PDR's biodiversity is in danger due to several threats including infrastructure development in and around protected areas. The current practices of solid and plastic waste disposal in open dumpsites or into rivers affect habitats or ecological resources of surrounding areas through degraded environmental quality from discharge of leachate, untreated wastewater, and methane. Pollution from unmanaged plastic waste could harm domestic animals/wildlife/aquatic livings. The project support for improving solid and plastic waste management system is expected to have overall positive impact on the receiving environmental receptors (air, surface water and groundwater, soil) and its ecological system. Nonetheless, adverse



site-specific impacts on biodiversity or natural habitats mentioned earlier from new/rehabilitation of landfill and other facilities to be supported by the project could occur. These aspects will be carefully managed during the project preparation and implementation.

The project do not expect to fund any activities within protected areas, or critical natural habitats and its buffer zone. The processes for landfill site selection that will be carried out as part of the Pre-FS will ensure that the requirements of ESS6 and other relevant ESSs are met through (i) suitability analysis on five long-listed town/districts: Recommendation of the package of investment options for the five town/districts, based on various factors including environmental and social safeguard related would be prepared and will serve as basis for selection of three shortlisted town/districts for more detailed assessments. Locations adversely impacting critical natural habitats will not be eligible; and (ii) identification of three potential project sites in three short-listed towns/districts. The list of landfill sites will be verified against the landfill site suitability criteria that include criteria on environmental and social criteria such as: land availability, ownership and land use; vicinity and distance to neighboring communities; proximity to sensitive water resources and general hydrology/hydrogeology and other local ecological conditions; (unique) natural and cultural treasures; flooding occurrence and risk, as well as land stability; and current informal waste pickers working situation.

There are other solid and plastic waste management infrastructures that site could not be identified during Pre-FS. The ESMF will include site selection criteria for those un-identified infrastructures. Site-specific ESIA would examine sensitivity of biological resources in the project areas, identify and assess the potential impacts and risks from project activities and the ESMPs will include appropriate measures to address biological impacts in accordance with ESS6.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The project area is culturally diverse, there 49 ethnic groups in Laos and the project covers the whole country. These 49 distinct ethnic groups who are classified into four ethno-linguistic families namely Hmong Iew Mien, Mone-Khmer, Chine-Tibetan and Lao-Tai. The term "Ethnic Groups" is often used for ethnic minority groups belonging to the first three ethno-linguistic families (Hmong Iew Mien, Mone-Khmer and Chine-Tibetan) who meet the characteristics and definition of Indigenous Peoples under ESS7. The Constitution (amended 2015) recognizes ethnic groups' self-identification as members of a distinct cultural group with a separate identity from the mainstream society. The Lao Front for National Development (LFND), through its Department of Ethnic Affairs (DEA), is the main counterpart responsible for dealing with issues related with Ethnic Groups. LFND is a GOL mass organization with a strong local presence in all provinces and districts. Based on the locations being considered the SIA will assess whether the ethnic groups are likely to be impacted and the nature and scale of those impacts.

As the location of project activities will not be known prior to appraisal (for example PPP under component 3 for waste recycling) an Ethnic Group Development Framework (EGPF) will be included in the SMP. Where necessary Free, Prior, and Informed Consent (FPIC) will be used in the preparation of site-specific plans. There is a need to ensure that ethnic groups are not excluded from any benefits and there is equity in the benefits.

Special attention to the needs of ethnic groups in engagement including ensuring translation into relevant languages during consultations of key issues and measures. The SEP will include relevant provisions/ mechanisms to fully



engage all ethnic groups. Special attention will be paid to ensure the active participation of the different ethnic groups and representatives in the project’s stakeholder engagement activities and to ensure that any information shared is sensitive to cultural needs. The grievance mechanism for the project will need to be prepared and communicated taking into consideration the needs of the ethnic groups, and accessibility for ethnic groups to submit feedback or grievances. In case it applies, special attention will be paid to ensure the active participation of the different resident ethnic groups and their representatives in the project’s stakeholder engagement activities, and that any information shared is sensitive to their cultural needs.

ESS8 Cultural Heritage

This standard is relevant because there might be tangible and intangible cultural heritage within the sites identified as pilots for the project properties. This will be determined by respective ESIA/ESMPs, and if this is the case, respective mitigation measures will be proposed to avoid or minimize any impact on cultural heritage. Where tangible or intangible cultural heritage sites are known to be in the vicinity of the proposed landfill sites, those sites will be excluded from consideration. The ESMF will provide an overview of steps to be taken by the Borrower and other stakeholders in case of chance finds.

ESS9 Financial Intermediaries

Relevance of ESS 9 needs to be determined during project preparation regarding the financing mechanism proposed for sub-component 3B Infrastructure investments in plastics management. Specific financing flows will still need to be worked out during project preparation. After a clearer picture for subcomponent 3B becomes available, the relevance status of this standard will be reassessed and revised accordingly.

Public Disclosure

B.3 Other Relevant Project Risks

All risks and impacts are summarized against each of standards.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways	No
OP 7.60 Projects in Disputed Areas	No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

Sub-component 3B is envisaged to receive additional regional IDA financing linked to the SEA-MaP project. The bank E&S instruments will be applied.



Co-financing with AIIB and other development partners is still being considered but not decided. Further details will need to be worked out during the project design stage.

B. Proposed Measures, Actions and Timing (Borrower's commitments)

Actions to be completed prior to Bank Board Approval:

To be undertaken, prepared, disclosed and consulted upon prior to appraisal:

- Environmental and Social Management Framework (ESMF) that includes: Guideline for preparation of site-specific Environmental and Social Impact Assessment/s (ESIA/s)/ Environmental and Social Management Plan/s (ESMP/s); A Rapid Cumulative Impact Assessment; and Guideline and ToR for Strategic Environmental and Social Assessment (SESA). On social aspects the ESMF will reference the relevant sections of the SIA and SMP;
- Standalone Social Impact Assessment and Social Management Plan (SIA-SMP) including: Labour Management Procedures (LMP), with a Worker Grievance Procedure; Community Health and Safety Plan (CHSP); Resettlement Policy Framework (including livelihoods restoration); and Ethnic Group Development Framework.
- Standalone Stakeholder Engagement Plan (SEP) including Grievance Redress Mechanism (GRM);
- A Preliminary Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP for one landfill site identified during preparation;
- Environmental and Social Commitment Plan (ESCP).

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

- Preparation, disclosure and consultation of site-specific ESIA/s and ESMP/s, including Resettlement Action Plan/s and Ethnic Group Development Plan/s.
- Integration of key SESA aspects into TOR for formulation of new legislation framework; or Preparation, disclosure and consultation of Stand-alone SESA for formulation of new legislation framework, where relevant.
- Effective operationalisation and effective implementation of GRMs.
- Preparation and disclosure of CERC-ESMF Addendum or self-standing CERC-ESMF.
- Meaningful engagement throughout project implementation.
- Effective operationalisation of Incident Management System.
- Implementation risks management measures and their monitoring.
- ESF capacity building for the implementing agencies.
- Allocation of adequate resources (human, including consultants and financial resources) for the implementation of risk management measures and monitoring.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

30-Jun-2022

IV. CONTACT POINTS

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Implementing Agency(ies)

Implementing Agency: Environment Protection Fund, Lao People's Democratic Republic

Implementing Agency: Ministry of Public Works and Transport, Lao People's Democratic Republic

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VI. APPROVAL

Task Team Leader(s): Maurice Andres Rawlins
Practice Manager (ENR/Social) Susan S. Shen Recommended on 28-Jun-2021 at 06:55:34 GMT-04:00
Safeguards Advisor ESSA Ekaterina Romanova (SAESSA) Cleared on 28-Jun-2021 at 11:13:55 GMT-04:00