Environmental and Social Management Framework Africa Environmental Health and Pollution Management Program (P167788)

Acronyms

AIDS	Acquired immune Deficiency Syndrome
ASGM	Artisanal and Small-Scale Gold Mining
BAT	Best Available Technologies
BEP	Best Environmental Practices
СОР	Conference of Parties
DDT	Dichlorodiphenyltrichloroethane
DEEC	Division de l'Environnement et des Etablissements Classés
ECOWAS	Economic Community of West African States
EHPMP	Environmental Health and Pollution Management Program
EPA	Environmental Protection Agency
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plans
ESS	Environmental and Social Standard
GEF	Global Environmental Facility
ICT	Information and Communication Technologies
IDA	International Development Association
KUSP	Kenya Urban Support Program
MC	Minerals Commission
MEF	Ministry of Environment and Forests
MRO	Mines Resident Offices
MSW	Municipal Solid Waste
NAP	National Action Plan
NEMA	National Environmental Management Authority
NEMC	The National Environmental Management Council
NGO	Non-governmental organization
NIP	National Implementation Plan
OECD	Organization of Economic Cooperation and Development
PBDEs	Polybrominated diphenyl ethers
POPs	Persistent Organic Pollutants
PSC	Program Steering Committee
REC	Regional Economic Community
RPF	Resettlement Policy Framework
SA	Social Assessment
SADC	Southern African Development Community
SAICM	Strategic Approach to International Chemicals Management
SEDCO	Small Enterprise Development Corporation
SEF	Stakeholder Engagement Framework

- UNDP United Nations Development Programme
- UNEP United Nations Environment Programme
- UPOPs Unintentional Persistent Organic Pollutants
- ZEMA Zambia Environmental Management Agency
- ZMERIP Zambia Mining and Environmental Remediation and Improvement Project

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1. Introduction

Mercury use in the Artisanal and Small-scale Gold Mining (ASGM) sector and management of electronic waste (e-waste) have been identified as among the most critical pollution management issues in sub-Saharan Africa. Rising international gold prices are pushing more people into ASGM that is becoming an attractive employment alternative for struggling farmers, poor rural communities, and migrant laborers. The ASGM workforce in Ghana and Tanzania is estimated at more than 1 million people in each country¹. In Tanzania, the ASGM sector contributes approximately 10% of its gold production. The informal, illegal, and unregulated nature of mercury use creates a legacy of severe adverse and irreversible environmental and health damage. Mercury contamination could have serious economic consequences to the lucrative local and regional fisheries due to the potential health risks associated with its bio-accumulation in the food chains². It is therefore a priority to reduce, and where feasible, eliminate mercury use in artisanal and small-scale gold mining. Institutional capacity to monitor use of mercury as well as its health and environmental consequences is limited.

Over the past 20 years, the market for Information and Communication Technologies (ICT) has grown exponentially and estimated to be the fastest growing waste stream in the world at 20-50 million tons per year. The quantities of e-waste accumulating in sub-Saharan countries have been increasing exponentially in recent years. The improper recycling and disposal of heavy metals associated with the burning of e-waste is particularly acute in Africa where environmental monitoring and regulatory enforcement are relatively weak. Recognizing that the e-waste challenge is on the rise and current policies and practices are insufficient, there is a growing need for improved policies, knowledge management and adopting environmentally friendly processing and recycling techniques to address this challenge. The mismanagement of chemicals, releases of unintentionally produced POPs (uPOPS)³ from open-burning and other sources present serious threats to human and environmental health in many parts of Africa.

1.1. Project Objective

To reduce exposure to mercury and uPOPs pollution and strengthen the institutional capacity to manage and regulate mercury use in artisanal small-scale gold mining and e-waste in selected countries in Africa.

1.2 Project Context and Description

This Environmental Health and Pollution Management Program (EHPMP) supported by the Global Environment Facility (GEF) focuses on reduction of the environmental health risks associated with mercury, e-waste and POPs, with several critical barriers needed to be addressed in a holistic and coordinated way. Experience has shown that multiple and fragmented approaches to deal with specific chemicals have not yielded the expected results. This program bringing under one common thread of environmental health, concerns related to urbanization, industrial growth, ASGM, and e-waste, is designed to focus on specific commitments under the Stockholm and Minamata conventions in line with country-driven priorities, and to build institutional and technical capacity into the country projects through offering a menu of options to allow countries to tailor their needs based on their identified priorities, capacity and country context.

¹ UNDP, 2013; World Bank Indicators, 2014.

² UNEP's Global Mercury Assessment of 2013.

³ UPOPS are persistent organic pollutants that are formed and released unintentionally from anthropogenic sources and include the following chemicals: Polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF), Hexachlorobenzene (HCB), and Polychlorinated biphenyls (PCB), and Pentachlorobenzene (PeCB). See Stockholm Convention Annex Parts I-III for details.

The GEF funding for the Program is divided into two:

- Knowledge exchange and institutional partnerships program to reduce environmental health risks from exposure to harmful chemicals and waste (P166233) for US\$ 5 mln.
- 5 country specific programs for US\$ 41.3 mln (P167788).

The Knowledge exchange and partnerships program will raise the conversation, allowing country leadership to mobilize at the regional and national level for an engaged policy and regulation development for improved environmental pollution management. It will establish a virtual platform for regional partnerships and policy dialogue, knowledge management and communication, will leverage lessons learned and disseminate information, tools, and techniques to scale up best practices. This will be a Bank Executed Trust Fund (GEF BETF grant).

The country specific program has five participating countries namely Ghana, Kenya, Tanzania, Senegal and Zambia. They were selected based on their commitment and request for technical and financial support from the World Bank as well as on on-going engagement and dialogue, including with a regional assessment on levels of environmental health risks associated with Mercury in ASGM and POPs in unregulated waste in sub-Saharan Africa. They all developed their respective National Implementation Plan (NIP) for POPs and National Initial Assessment/Action Plans for mercury. A combination of Technical Assistance and Investments in each country targeting specific priorities for pollution management based on the National Implementation Plan and strategy and aligned with regional-level activities are planned.

Several projects and initiatives support the environmental-health agenda in Africa and the EHPMP will coordinate with these for greater synergy of development outcomes. Principal among these projects are: (i) The Global Center of Excellence in Artisanal and Small-Scale Mining led by the Energy and Extractives GP in close collaboration with the Environment and Natural Resources GP and the Organization of Economic Cooperation and Development (OECD); (ii) the Ghana Forest Investment Program – Enhancing Forest Landscapes; (iii) the Ghana Artisanal small Scale Mining Formalization Project; (iv) the Zambia Mining and Environmental Remediation and Improvement Project and (v) the Senegal Municipal Solid Waste Management Project: improving solid waste management services in selected cities in Senegal. The Environment, Natural Resources and Blue Economy GP has ongoing operations in all the countries considered under EHPMP.

1.3 Project Components

The Program's focus will be on policy and strategy formulation and implementation; knowledge and experience sharing; institutional and human capacity building; chemical and hazardous waste management; and coordination and collaboration. Program activities are grouped under four main components which will be implemented at national level adapted to the national conditions. The Program has four components:

Component 1: Institutional strengthening, knowledge and capacity building

Component 2: Policy Dialogue and Regulatory Enhancements

Component 3 – Demonstrating application of technological tools and economic approaches - for

reduced environmental health risks due to mercury, POPs and e-waste.

Component 4: Program and Project Coordination and Management

The EHPMP during implementation will be supported by the regional coordination project (BETF - P166233). At the regional level, the Program will focus on developing communication tools to raise awareness about the health costs and benefits of pollution, including community outreach to increase public understanding and visibility of the scale and environmental health impacts.

This ESMF is specifically designed for component 3 for Ghana, Kenya, Zambia and Tanzania. The component will finance specific community-focused cleaner technology demonstration activities in contaminated areas, selected and designed based on environmental health risks and cost effectiveness of interventions. This ESMF is complimented by the following instruments for each country:

- Stakeholder Engagement Plan (SEP)
- Labor Management Plan (LMP)
- Environmental and Social Commitment Plan (ESCP)

Tanzania and Ghana will pilot adoption of mercury abatement technologies for ASGM. Ghana, Kenya, and Zambia will pilot the use of technologies for waste management to minimize e-waste and POPs burning and promote waste segregation and recycling.

Activities undertaken by Senegal under component 3 involve institutional support; infrastructure development such as installation of dumpsters and recycling points; and supporting a solid waste management system.

The pilots will be directly linked and coordinated with ongoing and proposed Bank operations in each participating country:

Tanzania - Resilient Natural Resources Management for Tourism and Growth Project (REGROW – P150523)

Ghana - Artisanal and Small-scale Mining Formalization (P168002) and the Greater Accra Resilient and Integrated Development Project (GARID)

Zambia – Mining and Environmental Remediation and Improvement Project (P154683)

Senegal – Municipal Solid Waste Management Project (P161477)

Kenya – Kenya Urban Support Program (KUSP).

Recognizing that the risks of exposure, scope of regulations, institutional approaches and enforcement may vary among countries, the investments in specific technologies will be at the national level to meet the specific needs of the participating countries as follows:

Tanzania

Component 3 will support the drive of the Government of Tanzania to formalize the ASGM sector, which will create incentives for artisanal miners to access relevant knowledge, financing and institutional support in line with Government's obligations under the Minamata Convention. Technical assistance under the program will help improve working conditions for local mining community by leveraging planned investment activities under the existing SMMRP-II Project to promote mercury abatement. The objective of this component is to collaborate with Government Agencies such as STAMICO, MRI and other research institutions as well as Small Enterprise Development Corporation (SEDCO/SIDO) or local manufacturers to conduct researches on alternative technologies, prepare prototypes and manufacture/replicate low cost centralized gold extraction equipment to enable moving away from using mercury instead to adopt alternative technologies such as Vat leaching and other mercury free technologies. This initiative will greatly reduce the amount of mercury to be procured and used, and consequently reduce the amount of mercury emissions in the environment and wastage. This effort will complement the MIA initiative for Tanzania by providing policy makers with tools and guidance needed to design and implement strategies for risk reduction.

The project will consider opportunity for climate change mitigation, especially use of cleaner technologies, including available non-mercury options, use of reclaimed lands, and mitigating effect of mining sectors

on carbon sequestering ecosystems, such as forests. In regards to forests/afforestation measures, ASGM will be sensitized to plant trees to mined out areas through progressive rehabilitation as well as total rehabilitation during mine closure. Furthermore, the project will finance a pilot program to rehabilitate selected abandoned mining sites by ASGM to address the past legacies and improve environmental conditions of these areas including planting trees. This can be done through use of available technology such as bioremediation or chemo-remediation of the contaminated soil, backfilling the dug shafts with the bio -remediated soil and planting of indigenous trees. Such environmental improvements will act as demonstration pilots for the PML owners who are mandated to rehabilitate their mines based on the Mine closure policy in the Mining Act, 20104.

The project will benefit from the natural resources-based livelihoods support from REGROW, such as participatory forest management and conservation of landscapes. It is envisaged that apart from mitigating environmental health risks from emissions, mercury abatement will reduce use of tree for fuel wood, and consequently the rate of deforestation land degradation.

Ghana

AGSM

<u>Establishment of clean mining demonstration centers</u>: The Project will focus on demonstrating best practice ASGM processes through the establishment of demonstration centers for training and promotion of alternative mercury free technologies in the ASGM sector. This will not only reduce the amount of mercury to be procured and used but also reduce the amount of mercury emissions and wastage. Based on the funding envelope available, about three to five centers are under consideration. They are also expected to generate concrete lessons on cleaner technologies cost, impact, and application that can be applied nationally to inform scaled-up deployment of mercury-free technologies in ASGM as well as shared regionally for the same purpose.

The demonstration investments will be linked with the Ghana Artisanal and Small-Scale Mining Formalization Project (P168002), which seeks to address the challenges associated with illegal mining by supporting ASM formalization, strengthening the government's capacity to monitor ASM operations, and support environmentally and socially sustainable ASM practices. Shared activities between the two projects include: (i) improving the enabling environment for legalization and formalization of ASM; (ii) strengthening institutional capacity to manage ASM; and (iii) promoting sustainable ASM Practice. Regions and communities will also be chosen in coordination with the other cleaner technologies demonstration initiatives on-going in Ghana as well as in line with Sub-component 1.1 (capacity building).

e-waste management

<u>Development of pilot investments and approaches for sustainable e-waste management</u>: This subcomponent will support the Environmental Protection Agency (EPA) in designing and implementing pilot investments and approaches related to Agbobloshie and other e-waste contaminated sites such as Kumasi, Ashaiman, Tamale, or Koforidua, Paga, Aflaoa, Sunyani, and Techiman on the implementation of integrated and environmentally-sound management solutions to improve the collection, transportation, and safe disposal/recycling of e-waste, following Article 6 of the Stockholm Convention on wastes, and

⁴ The project recognizes that the Minamata Convention is still to develop international guidelines related to mercury site contamination. The Bank team will maintain dialogue with the Minamata interim Secretariat, and the participating country will use the emerging guidance where relevant – as well as being able to provide relevant input to guidance development based on their experience.

relevant guidance. Some of these pilots will also explore the development or strengthening of value chains, to demonstrate solutions for larger private sector engagement in e-waste management.

The Project will directly support the Government's vision for e-waste management (as recently detailed for instance in EPA's 2018 *National Integrated e-waste Management Scheme*) with two interventions at different steps of the e-waste management cycle, working, upstream, on formalizing collection, and downstream, on managing safe disposal.

- Establish collection centers in 2-4 e-waste hotspots outside of Accra (potential locations include: Kumasi, Tamale, Koforidua, Ashaiman, Paga, Aflao, Sunyani, Techiman). EPA's 2018 National Integrated e-waste Management Scheme promotes the establishment of collection centers in every district assembly to facilitate the recovery of e-waste and move the hazardous material out of the informal sector onto the formal sector where recycling activities can be monitored for best environmental practices. These collection centers must be permitted by the EPA and should be operated by the private sector and/or scrap dealer associations and will have access to fund accrued by the Advanced Eco-levy (Act 917, 2016) for the purchasing of e-waste from collectors. While much attention is given to Agbogbloshie as a major e-waste hotspot in Accra, several other hotspots exist in the country, such as Kumasi, Koforidura, Ashaiman, and Tamale, among others. Further, Paga, Aflao, Sunyani and Techiman are major inter-regional trading routes where much e-waste is moved from surrounding countries into Ghana, which has a more advanced scrap materials industry. These collection centres would be built according to EPA requirements as detailed in L.I. 2250 (waterproofed facility, access to sanitary facilities, secured site) and following the design promoted by EPA (i.e., modular assemblage of 40-foot shipping containers). There are value-addition activities that could be integrated into the operations of a collection center, which would then require additional EPA permitting as a dismantling center. Activities such as removing plastics casing, degassing refrigerators, compressing metals to increase bulk density to increase economic efficiency of transport have varying degrees of complexity but can be readily trained to low-skilled workers provided oversight by a higher-skilled supervisor. Continued capacity building may be required to ensure efficiency of operations and maintenance of the investment. This investment is particularly relevant as EPA's vision for e-waste management anticipates collection centers operating in every district assembly (i.e., 276 centers nation-wide) while currently, no known plan exists to fund and/or deploy these centers.
- Establish interim storage and final disposal sites. Currently no final disposal site exists in Ghana for any type of hazardous waste (not considering privately-owned facilities in heavy industry, such as the mining sector). Therefore, it should be considered a nationally priority to establish final disposal options for hazardous wastes. The five-year (2019-2023) World Bank Group financed Greater Accra Resilient and Integrated Development Project (GARID) has earmarked US\$42 million for the construction of an engineered landfill and supporting infrastructure (e.g., transfer stations) within the Greater Accra Region. The EHPMP Project could synergize with the GARID Project providing supporting funds to enable the construction of 1-2 hazardous waste cells and supporting infrastructure and the planned engineered landfill. Some mercury- and POP-containing hazardous wastes cannot be disposed of in a properly engineered hazardous waste landfill, such as refrigerant gasses or mercury-containing lamps, which should be combusted at high-temperatures in controlled settings. If no such facilities exist in-country, Minamata, Stockholm and Basel Conventions require establishment of interim storage facilities where hazardous waste can be safely stored till sufficient quantities are aggregated for shipment to approved treatment/final disposal facilities (most likely in

Europe). Designs for approved interim hazardous waste storage sites vary greatly, but can be as simple as strip foundations supporting water-tight oversea shipping containers protected with an improved roof, security measures and close-system drainage in case of liquid spills. This solution will not only benefit the e-waste sector, but can support national compliance with the Minamata Convention, Stockholm Convention and Basel Convention.

Zambia

Several measures will reduce UPOPS releases from solid waste by strongly limiting the quantities of waste subject to uncontrolled burning. Key outcomes include: (i) improved management of waste collection and transportation; (ii) improved treatment of POPs and hazardous waste; and (iii) improved recycling of wastes. The current dumpsite will be upgraded into a sanitary landfill (through IDA financing), and a feasibility study of short- and long-term BAT/BEP actions will be supported to determine the volumes and types of waste and economic viability for private sector collaboration. Following a waste characterization study in the target area (initiated under the IDA project), this component will support the upgrading of an operating landfill to a recycling facility allowing for additional waste streams and value generation for sustainable growth of the sector. The component will also ensure segregation between hazardous contaminated wastes from other non-hazardous waste streams.

This component will explore ways to reduce the impact of chemical pollution emanating from unregulated landfills in an economic and socially acceptable manner and support the development of communication tools to raise awareness on health costs and benefits of pollution management. This includes community outreach to increase public understanding and visibility of the scale and environmental health impacts. The component will support training and community awareness promotion, especially training existing rag-pickers and providing them with occupational health and safety training and equipment.

The component will support the preparation and implementation of demonstration pilot projects in identified facilities which are already involved in e-waste and waste recycling business (e.g., Metalco, Wonderful Ceiling, Zambezi Paper Mills, Zesco-Elsayeld). The component will also finance the evaluation of the pilot projects and technologies as well as the assessment of their economic viability in the Zambian context. This component will co-finance two successful pilot projects and demonstrated technologies.

Kenya

This component will support the initiation of 2-3 pilot projects in selected counties in Kenya on the implementation of an integrated waste management approach to reduce releases of POPs from e-waste through improving source reduction/reuse, collection, transportation, and disposal/recycling. This will follow Articles 5 and 6 of the Stockholm Convention and related COP guidelines and guidance. This will include (a) analysis of current national and municipal plans, (b) inventory information on toxic substances like PBDEs production, importation and usage, and (c) priorities and institutional capacity (including private sector) for the selected county. Such analysis and inventory will ensure that appropriate solutions are selected, and the basic waste management services are in place and operating before more advanced approaches are considered.

This component is aligned with the Kenya Urban Support Program (KUSP) which assists the Government of Kenya in operationalizing its National Urban Development Policy (NUDP) and achieving medium term planning goals in the urban sector. Under this Component, EHPMP, in collaboration with KUSP, will identify pilot sites at the county-level to improve health outcomes of e-waste management. It will focus on establishing a treatment/recycling facility at the site of an already existing waste management facility.

Based on the identified priorities, infrastructure investments will be designed and implemented, focusing on addressing gaps e-waste flow i.e. in the collection and disposal system. The pilots will support capacity building for all relevant stakeholders in the selected counties (including government, CSOs, and private sector), investment in infrastructure for the entire e-waste management cycle from generation, to collection, transportation, setting up of collection centers or transfer stations, and treatment (recycling) facility. It includes developing protocols and methodologies for the assessment of environmental health risks associated with e-waste based on health and environmental data, knowledge, risks, and impacts. The program envisions engaging stakeholders already working in the field of e-waste management, including CFSK, WEEE, HP, and others to leverage and eventually mainstream existing good practices.

Senegal

Component 3 will support and implement actions to set up a system aiming at reducing environmental health risks from the release of UPOPs and other toxic chemicals through ESM of urban waste in Hann Belk Air, Dalifort and potentially other municipalities in Dakar, which can later be replicated and scaled-up nationally, including through the World Bank PROMOGED Project (P161477), and regionally. Under this component the project will support activities to reduce UPOPs by better preventing UPOPs precursors such as plastic wastes mixed with municipal and organic wastes that are subject to open burning and consequently cause higher emissions of UPOPs. Unregulated combustion will be also better controlled by removing uncontrolled dump sites through separation, segregation, recycling, stocking, collecting and transporting municipal and hazardous waste which should be the primary responsibility of municipalities. In this regard, the project will identify relevant partners such as private companies specialized in waste management, NGOs, etc., and develop a business model that would ensure the capitalization of waste management experiences and sustainability of the accumulated knowledge.

First, the beneficiary municipalities, together with the relevant authorities, will mobilize the communities and the necessary logistical resources to eradicate the recurrent and illegal waste dump sites in their areas in order to permanently eliminate the sources of pollution. This would lead to citizen engagement and will have the advantage of raising people's awareness of their responsibilities in terms of preservation of their living environment and prevention of environmental health risks.

Concurrently with improving the sanitary status, strategies to ensure long-term sustainability will be initiated by setting up a system adapted to local realities and accessible to the population. To this end, a comprehensive urban solid waste management system will be implemented by: (i) promoting the regulatory framework around the Community Based Organizations (CBOs), under the responsibility of local authorities or sanitary committees; (ii) sorting, reusing and recycling waste by communities, integrating social innovations and a circular and inclusive economy; (iii) professionalizing street cleaning along main thoroughfares; (iv) neighborhood cleaning through community-based activities and activities with high labor intensity (Haute intensité de main d'oeuvre - HIMO) under the responsibility of the local authorities; (v) the construction of standardized Regrouping Points (PRN) ("Points de Regroupement normalisé - PRN)") incorporating screening, sorting, marketing and waste recycling to promote employment-generating and income-generating activities; (vi) pre-collection organized around the PRNs through the local authorities ; and (vii) waste collection from households, markets and industrial activities and evacuation to the appropriate municipal waste dumpsite in Dakar.

In addition to corrective actions and the implementation of a waste management system, measures will be taken to secure and enhance public spaces. To this end, public gardens, lakes, retention ponds and any open space will be developed as places for recreational, economic, tourist, sports or other activities. The

objective is to develop them in a sustainable way and to guard against the proliferation of waste dumps and open burning.

A waste management unit will be set up in the participating municipalities to coordinate waste management efforts. With respect to the Guidelines on best available techniques and provisional guidance on best environmental practices relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants, appropriate actions will be developed to manage municipal solid waste and hazardous waste in a sound manner, to minimize the releases of UPOPs and greenhouses gases. The reduction of the release of UPOPS can be expected to be very significant under this component.

1.4 Environmental and Social Benefits

Focusing on addressing environmental health risks related to harmful chemicals and waste management, the program will have immediate and longer-term socio-economic benefits for local communities. Open burning of waste is a source of UPOPs such as dioxins and furans. When formed, uPOPs are released along with other pollutants such as heavy metals, polyaromatic hydrocarbons and fine particles, which eventually contaminate the environment (air, soil and sediments). Via bioaccumulation, uPOPs as well as heavy metals are carried on in biota and in the food chain around these open burning areas. By improving waste management systems, uPOPs contamination of the environment, the food chain and humans can be avoided.

Studies have shown that the health of the miners and other people living within the area affected by mercury contamination may be negatively affected through inhalation of mercury vapor or contaminated dusts, direct contact with mercury, through eating fish and other food, and through the ingestion of waters and soils affected by the mercury contamination. Thus, demonstrating cleaner technologies and providing miners with safe alternatives other than mercury will have a direct benefit of not only reducing mercury emissions into the environment but the reduction in toxic fumes having beneficial impacts on the health of the miners including women and children.

1.5 ESMF Scope

The main purpose of this ESMF is to ensure that the implementation of the EHPMP pilots will be carried out in an environmentally and socially sustainable manner. The ESMF provides the project implementers with a process that will enable them to identify, assess and mitigate potential environmental and social risks of the project. The initial screening will indicate the level of environmental and/or social due diligence that will be required.

The pilots are expected to have positive environmental and social impacts with temporary negative impacts that can be easily mitigated. The ESMF identifies broad management measures and criteria laying a basis for developing site specific management plans for each of the pilot projects under Component 3. Where required by national legislation, Environmental and Social Impact Assessment (ESIA) will be developed as well.

The ESMF will be followed to address environmental and social issues at the project sites. The activities that this ESMF covers are:

- a. Adoption of mercury abatement technologies for ASGM Tanzania and Ghana
- b. Use of technologies for waste management to minimize e-waste and POPs burning and promote waste segregation and recycling Ghana, Kenya, Zambia and Senegal

2. Legal and Regulatory Framework

The EHPMP will strictly adhere to and follow the World Bank's Environmental and Social Framework (ESF) as well as the legal and regulatory frameworks of the countries. This section provides an overview of relevant policies, laws and regulations specifically for Component 3. The key environmental policies, legal framework and procedures considered as relevant under the EHPMP are the following:

2.1 Ghana

Institutional and Administrative Framework

Ministry of Environment Science Technology & Innovation (MESTI): MESTI has the oversight responsibility to provide leadership and guidance for Environment, Science, Technology and Innovation within the broad sector of the economy through sound policy formulation and implementation. It ensures the establishment of the regulatory framework and setting of standards to govern the activities of science and technology and the management of the environment for sustainable development. MESTI also has the responsibility to analyse and coordinate all planned programmes in the environment, science, technology and innovation sector of the economy for purposes of achieving a single integrated management system. MESTI is the sector Ministry to which the Environmental Protection Agency reports to.

Environmental Protection Agency (EPA): EPA was established under the Environmental Protection Agency Act (Act 490 of 1994) as the leading public body responsible for the protection and improvement of the environment in Ghana. It is responsible for enforcing environmental policy and legislation, prescribing standards and guidelines, inspecting and regulating businesses and responding to emergency incidents. The EPA's policy direction is articulated by the Environmental Assessment Regulations, 1999 (LI1652). These two pieces of legislation mandate the EPA to manage, control and monitor compliance of environmental regulations by specific industries. The EPA has an important role in the Project implementation as the lead environmental regulator, which oversees compliance with environmental assessment requirements, facilitate public participation and disclosure and issue environmental permits for the project. The EPA has the mandate to issue environmental permits and pollution abatement notices for controlling the volume, types, constituents and effects of waste discharges, emissions, deposits or any other source of pollutants and of substances which are hazardous or potentially dangerous to the quality of the environment or a segment of the environment. The agency decides on project screening, guide the conduct of the environmental assessment studies and to grant environmental approval for the project to commence. It's mandate also covers monitoring of implementation phase of the project to confirm compliance with approval conditions, mitigation measures, and other environmental commitments and quality standards.

Ministry of Lands and Natural Resources (MLNR): MLNR has overall responsibility for the land and natural resources sector planning and policy direction and for monitoring sector programs towards the attainment of the national goals. The ministry is thus responsible for the management of Ghana's land, forests, wildlife and mineral resources. In order to achieve this goal, the ministry has set out the following objectives:

- o Develop and manage sustainable lands, forest, wildlife and mineral resources;
- To facilitate equitable access, benefit sharing from and security to land, forest and mineral resources;
- Promote public awareness and local communities' participation in sustainable forest, wildlife and land use management and utilization;

- To review, update, harmonizes and consolidate existing legislation and policies affecting land, forest and mineral resources;
- To promote and facilitate effective private sector participation in land service delivery, forest, wildlife and mineral resource management and utilization;
- Develop and maintain effective institutional capacity and capability at the national, regional, district and community levels for land, forest, wildlife and mineral service delivery;
- Develop and research into problems of forest, wildlife, mineral resources and land use MLNR is the sector Ministry to which the Minerals Commission reports to.

Minerals Commission: The Commission was established under Article 269 of the 1992 Constitution and the Minerals Commission Act 1993, Act 450. It is the main promotional and regulatory body for the minerals sector in Ghana and responsible for "the regulation and management of the utilization of the mineral resources of Ghana and the coordination and implementation of policies relating to mining". It ensures compliance with Ghana's Mining and Mineral Laws and Regulation through effective monitoring.

Ministry of Local Government and Rural Development - The Ministry of Local Government and Rural Development and its departments and agencies belong to the Central Management Agencies category of Government Machinery with the mandate to ensure good governance and balanced development of Metropolitan / Municipal / District Assemblies. The Ministry derives its mandate from the 1992 constitution and section 12 of the PNDCL 327 which provides the responsibilities of Ministries.

National Environmental Legislation and Policies

The key policies are as below with details given in Annex I.

- The Constitution of the Republic of Ghana, 1992
- Environmental Protection Agency Act, 1994 (Act 490)
- Environmental Assessment Regulations, 1999 (LI 1652) & Environmental Assessment Regulations, 2002 (LI 1703)
- The National Environmental Policy, 2010
- Environmental Sanitation Policy (Revised), 2010
- National Climate Change Policy,
- Management of Ozone Depleting Substances and Products Regulations, 2005 (LI 1812)
- Forestry Commission Act, 1999 (Act 571)
- Forest and Wildlife Policy, 2012
- Mercury Act, 1989 (PNDC 217)
- Hazardous & Electronic Waste Control & Management Act, 2016, (Act 917
- Small-Scale Gold Mining Law, 1989 (PNDCL 218)
- Minerals Commission Act, 1993 (Act 450)
- Minerals and Mining Amendment Bill 2014 (Mineral Development Fund Bill) & Minerals and Mining Act 2006 (Act 703) Section 96
- Water Resources Commission Act, 1996 (Act 552) and Water Use Regulations, 2001
- Energy Efficiency Regulations, 2008 (LI 1932)
- Ghana National Fire Service Act, 1997 (Act 537)
- The Fire Precaution (Premises) Regulations, 2003 (LI 1724
- Local Governance Act, 2016 (Act 936)
- The Labour Act, 2003 (Act 651)
- National Gender and Children Policy, 2004

- Workmen's Compensation Law, 1987 (PNDC 187)
- Public Health Act, 2012 (Act 851)

2.2 Tanzania

Institutional and Administrative Framework

Ministry of Energy and Minerals (MEM)

The MEM is the primary agency responsible for the satisfactory implementation and monitoring of the ESMF. In doing this, MEM will work in close association with relevant district or local level – the Local Government and Regional Authorities (LGARS). The responsibilities of the MEM include:

- Issuing Licenses (prospecting, mining, etc.) including renewals;
- Overseeing implementation of the Mining Policy;
- Enforcement of laws and regulations for mining and protection of environment in the SMMRP project areas;
- Environmental monitoring and auditing of the various SMMRP project activities;
- Mining projects EIS & EMP approvals (through a multi-sectoral committee under the VPO DOE);
- Managing resettlements in Mining areas (through the Ministry of Lands and Housing Settlements); and
- Mining conflict resolutions.

The Environmental Management Unit (EMU) within the MEM works closely with NEMC to make sure that the social and environmental impacts of mining activities in the country are minimized.

State Mining Corporation (STAMICO)

The main role of STAMICO is the provision of professional mineral services, which include drilling (for mineral and water), land and mine surveying, mineral exploration and investment promotion, promotion and modernization of the small-scale mining sub-sector, promotion of industrial minerals development and mineral consultancy. Its capacity could be strengthened to improve consultation and involvement with stakeholders.

Occupational Safety and Health Authority

OSHA was set up in 2001 under the Ministry of Labour and Employment to administer occupational health and safety at workplaces in the country. The Ministry of Labor and Employment is the main actor with the oversight role of ensuring that decent work is practiced and maintained in Tanzania. It provides directives, technical advice, enforces legislations, proposes amendments, allocates resources, oversees all activities carried out by OSHA and ensures that OHS rules and regulations are adhered to and maintained at workplaces.

National Environment Management Council (NEMC)

Environmental Management Act No. 20 of 2004 re-established NEMC as the responsible authority for the enforcement, compliance, review and monitoring of Environmental Impact Assessments (EIA), including facilitation of public participation processes in environmental decision-making. NEMC undertakes the following activities:

- Performs environmental surveys and advises the government on all relevant matters;
- Enforces pollution control, ensures compliance of the national environmental quality standards and performs the technical arbitration role in the undertaking of EIAs;

- Identifies projects and programs or types of projects and programs for which environmental audit or environmental monitoring must be conducted under this Act;
- Initiates and evolves procedures and safeguards for the prevention of accidents which may cause environmental degradation and remedial measures where accidents occur;
- Publishes and disseminates manuals, codes or guidelines relating to environmental management and prevention or abatement of environmental degradation.

Vice President's Office (Division of Environment)

This Department has overall responsible for planning and implementation on all environmental matters, including approvals of SESA and EIA certificates. It is responsible for formulation and articulation of policy guidelines necessary for promotion & protection of the environment. It advices the Government on legislative measures related to management of the environment and on international agreements in the field of environment and issues general guidelines to sector Ministries and monitors and assesses activities being carried out by relevant agencies in order to ensure that the environment is not degraded. It also coordinates issues relating to articulation and implementation of environmental management aspects of other sector policies.

NGOs and Miners Associations

The Governments' drive to formalise prospecting and Primary Mining Licenses and to stimulate formation of associations of smallscale miners has been effective in giving the small-scale sector a stronger voice and further influence over policy, legislation and implementation procedures. The influence of individual societies, associations, faith groups and other organisations is recognised by government and the mining sector and some bodies, like the Lawyers Environmental Action Team and Policy Forum have played key roles in advocating changes to recent draft legislation. Other groups (TAWOMA, AFWIMM) have lobbied for fairer treatment of women miners and processors.

National Environmental Legislation and Policies

The key policies are as below with details given in Annex I.

- The Mining Act (1998 and 2010)
- The Environmental Management Act No. 20 (2004)
- The National Environmental Policy (1997)
- Environmental Impact Assessment and Audit Regulations (2005)
- Environmental Action Plan
- The Occupational Health and Safety Act No. 5 of 2003.
- The Employment and Labour Relations Act
- Mining Cadastral Information Management System [MCIMS]
- National Gender Policy (1999)
- Community Health Fund Act, 2001
- The Occupational Health and Safety Act (2003)
- Public Health Act No 1 of 2009

2.3 Zambia

Institutional and Administrative Framework

Zambia Environmental Management Agency

The mandate of Zambia Environmental Management Agency (ZEMA) formerly called Environmental Council of Zambia (ECZ), is drawn from the Environmental Management Act (EMA) No. 12 of 2011. ZEMA

plays a regulatory, advisory, consultative, monitoring, coordination and information dissemination role on all environmental issues in Zambia. It is the competent authority in the approval of safeguards instruments and post-approval monitoring.

Ministry of Tourism, Environment and Natural Resources

MTENR is charged with the responsibility of domesticating environmental conventions such as the Stockholm Convention, Basel Convention, Rotterdam Convention and other tourism related global treaties. These include wildlife, forestry, heritage and environmental protection and pollution control. All legislation relating to the management of POPs is enacted through this ministry.

Ministry of Labour and Social Security

MLSS is responsible for protecting workers against occupational accidents and diseases through the Occupational Safety and Health Services (OSHS) Department to ensure the protection of workers from physical, health and environmental hazards resulting from exposure to chemicals.

Ministry of Health

MoH is charged with the responsibility of ensuring policies related to health services are implemented effectively. The Food and Drugs Control Laboratory based in MoH monitors chemicals and drugs including POPs in food. In addition, the Occupational Health Safety and Research Bureau (OHSRB) also under MoH monitor's occupational diseases in workers and carries hazard assessment measurements at the work place.

National Environmental Legislation and Policies

The key policies are as below with details given in Annex I.

- National Policy on Environmental Policy (NPE), 2005
- Environmental Impact Assessment Regulations, 1997
- Environmental Management Act, 2011
- Solid Waste Management and Regulations Act of 2018
- Urban and Regional Planning Act of 2015
- The Public Health Act, Cap 295
- Anti-Gender-Based Violence Act, 2010
- Employment Act, 1997
- Gender Equity and Equality Act, 2015
- Citizens Economic Empowerment Act No 9 of 2016
- Human Rights Commission Act, 1996
- Local Government Act, 1995
- Non-Governmental Organisations Act, 2009
- Occupational Health and Safety Act, 2010
- National Gender Policy (NGP), 2014
- Employment of Children and Young Persons Act, 1994
- Factories Act, 1994

2.4 Kenya

Institutional and Administrative Framework Ministry of Environment and Natural Resources

The Ministry of Environment and Natural Resources (MENR) is responsible for the environment at policy level. The Ministry of Environment and Natural Resources (MENR) mission statement and key objective is to facilitate good governance in the protection, restoration, conservation, development and management of the environment, water and natural resources for equitable and sustainable development.

The mandate of the ministry is to monitor, protect, conserve and manage the environment and natural resources through sustainable exploitation for socio-economic development aimed at eradication of poverty, improving living standards and ensuring that a clean environment is sustained now and in the future. The ministry comprises of various divisions at the headquarters and the following parastatals and departments including the National Environment Management Authority.

National Environment Management Authority (NEMA)

NEMA is the principal instrument of Government in the implementation of all policies relating to the environment including POPs. NEMA is the administrative body that is responsible for the coordination of the various environmental management activities in Kenya. It is also responsible for granting Environmental and Social Impact Assessment (ESIA) approvals and for monitoring and assessing activities in order to ensure that the environment is not degraded by such project activities.

County Environmental Committees

The County Environmental Committees also contribute to decentralized environmental management and enable the participation of local communities. These environmental committees are to be constituted by the governor and are responsible for the proper management of the environment within the County for which it is appointed.

National Environmental Complaints Committee

The National Environmental Complaints Committee (NECC) is established under Section 31 of EMCA. The NECC is concerned with the investigation of complaints relating to environmental damage and degradation generally. The NECC has powers to investigate complaints against any person or even against NEMA or on its own motion investigate any suspected case of environmental degradation. The NECC is required by law to submit reports of its findings and recommendations to NEMA.

Standard and Enforcement Review Committee (SERC)

SERC key function is to advise NEMA on the criteria and procedures for the measurement of environmental standards including but not limited to water quality, effluent discharge, air quality and noise quality, etc. Figure 2 below shows the summary of environmental management systems in Kenya.

National Environmental Legislation and Policies

The key policies are as below with details given in Annex I.

- Constitution of Kenya, 2010
- Environmental Management and Coordination Act, 1999 and Amended in 2015
- Environmental Impact Assessment and Audit Regulations, 2003
- County Government Act, 2012
- Child Rights Act 2012
- Labour Relations Act 2012
- Public Health Policy of 2014-2030
- Occupational Health and Safety Policy of 2012
- HIV/AIDS Policy of 2009

- Kenya National Policy on Gender and Development (NPGD), 2000
- National Gender and Equality Commission Act, 2011
- The Occupational Safety and Health Act, 2007
- Employment Act No 11 of 2007 (Revised 2017)

2.5 Senegal

Institutional and Administrative Framework

The Ministry of the Environment and Sustainable Development (MEDD)

The Ministry of the Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable, MEDD) is responsible for implementing the Government's sectoral policy in environment protection and sustainable development. Thus, the Sectoral Policy Letter on the Environment and Sustainable Development (Lettre de Politique du Secteur de l'Environnement et du Développement Durable, LPSEDD - 2016-2020) is built on accomplishments, lessons learned from underperformances recorded during the implementation of the previous policy letter, the inclusion of emerging themes and the evolution of national and international environments. Assessment results from implementing the Sectoral Policy Letter on the Environment and Natural Resources (Lettre de Politique Sectorielle de l'Environnement et des Ressources Naturelles, LPSERN 2009-2015) emphasize the urgent need for the MEDD to ensure on one hand a better coordination of interventions by its directorates and agencies and, on the other hand, to mobilize and commit various actors (Sectoral Ministries, Local Governments, Private Sector, NGOs, CBOs, other committees, populations) in the management of the environment and natural resources.

The overall objective of Senegal's environmental and sustainable development policy is: "To create a national dynamic for improving the environment and the management of natural resources and integrating sustainable development principles in policies designed to strengthen population resilience to climate change". To this, must be added the necessity to strengthen the capacities of actors in project and program development and execution, and in finance mobilization as well. The 2016-2020 LPSEDD, formulated in a consensus and participatory manner, expresses the shared vision, common values, strategic priorities and programs aligned with a global objective and with specific objectives translated at the functional level into programs and lines of action.

Thus, implementation of the national policy on the protection and enhancement of the environment is under the responsibility of the MEDD. It includes the following technical directorates: the Environment and Classified Establishments Directorate (DEEC), the National Parks Directorate (Direction des Parcs Nationaux, DPN), the Waters, Forests, Hunting and Soil Conservation Directorate (Direction des Eaux, Forêts, Chasses et Conservation des Sols, DEFCCS), the Directorate of Communal Marine Protected Areas (Direction des Aires Marines Communautaires Protégées, DAMCP), the Environmental Planning and Surveillance Directorate (Direction de la Planification et de la Veille Environnementale, DPVE), the Green Financing and Partnerships Directorate (Direction des Financements Verts et des Partenariats, DFVP).

The Environment and Classified Establishments Directorate (DEEC)

The DEEC is responsible for implementing Government policy on the protection of the environment and the population against pollution, nuisances and dangerous waste, and in the management of environmental requirements and provisions for classified establishments and their surrounding areas. In this regard, in the conduct and monitoring of ESIA procedures, the MEDD relies on the Environment and Classified Establishments Directorate (DEEC) and the National Technical Committee set up by ministerial decree n°009469 of November 28, 2001. As such, the DEEC ensures compliance of environmental

assessment submissions and assumes the secretariat of the national technical committee. It coordinates all activities of this committee, from the studies to the validation of environmental assessments.

The DEEC thus includes the following technical divisions: (i) a Division of Environmental Impact Assessments; (ii) a Division of Pollutions and Nuisances Prevention and Control; (iii) a Division of Classified Installations; (iv) and Regional Divisions of Environment and Classified Establishments in the 14 regions.

Division of Environmental Impact Assessments (DEIE) is responsible for:

- validating terms of reference (TOR) of environmental assessments (environmental and social impact studies, strategic environmental assessments of policies, plans and programs, environmental audits, initial environmental analysis);
- determining the admissibility of environmental impact assessments;
- ensuring the monitoring of environmental management in Plans implementation;
- providing a technical advice on projects submitted by developers;
- preparing for the Environment Minister the decision on the environmental compliance certificate; assuming the secretariat functions of the national technical committee for environmental assessments, public hearings and the approval commission for exercising activities related to environmental assessments.

The Technical Committee

In accordance with article R43 of decree n°2001-282 of April 12, 2001 on the Environment Code, the National Technical Committee is a unit responsible for the administration and management of the environmental impact study. It assists the Environment Ministry in the validation of the environmental impact study report. The Environment and Classified Establishments Directorate assures its secretariat. Article 2 of *decree n°009469 of November 28, 2001 on the organization and functioning of the technical committee* provides the list of members of the technical committee, including almost all national directorates, representatives of the private sector, the civil society, representatives of local governments and other entities. The National Technical Committee assumes the following functions:

- ensure the environmental dimension in development projects is taken into account;
- administer the environmental assessment process;
- advise the Environment Minister on his responsibilities as provided by law;
- make public participation to the environmental assessment process possible;
- seek the collaboration between entities that have a role in the process of the environment impact study;
- ensure process integrity and efficiency;
- assess the quality of environment impact study reports and of compliance of the report and the environment impact study process with terms of reference;
- formulate an advice on all projects subjected to an environment impact study;
- ensure recommendations are implemented;
- foster implementation of good practices in the domain of environmental assessment;
- promote research on environmental assessment.

In accordance with article 3 of said decree, the National Technical Committee is responsible for the internal validation of environmental impact study reports and for helping the Environment Minister decide whether a project may be accepted or not. It is chaired by the department which activities are

analyzed based on the current case. It prepares with the developer and all stakeholders the conduct of public hearings.

After receiving the project, the National Technical Committee has ten days to notify developers on the type of studies they must conduct (notification of impact or terms of reference for an in-depth study). It communicates planned measures to decentralized governments.

The Regional Divisions of the Environment and Classified Establishments

At the decentralized level, article 13 of the ministerial decree n°6905 of August 5, 2008 on the organization of the Environment and Classified Establishments Directorate provides for the establishment of Regional divisions of environment and classified establishments (DREEC) which organization and functioning are defined in a service note by the Environment and Classified Establishments Director (Official Gazette of October 25, 2008). DREECs represent the DEEC at the local level and are responsible for executing actions, activities and missions in their respective administrative divisions. In accordance with legislation on local governments, they provide technical assistance to these entities in project identification, formulation and monitoring. The DREEC ensures coordination of regional technical committees for environmental monitoring. They are responsible for, among other missions:

- reviewing authorization applications for any actor operating in a classified establishment;
- receiving and processing requests for opening and exploiting classified installations for environment protection (Installations Classées pour la Protection de l'Environnement, ICPE) and deliver related affidavits;
- determining admissibility of initial environmental analyses;
- proceeding to the census and development of the database on classified establishments as well as tax collection;
- ensuring regular inspections and controls of classified establishments;
- ensuring monitoring of actions by various services and organizations involved in the environment domain;
- ensuring proper handling of dangerous expired and obsolete products and monitor their destruction as needed;
- ensuring monitoring of PGES implementation;
- supporting TOR and EIS validation process;
- implementing appropriate measures to ensure prevention and control of pollution and nuisances;
- fostering energy efficiency for a greater protection of the environment and for the rational management of natural resources.

The Regional Committee for Environmental and Social Monitoring (CRSE)

A Regional Committee for Environmental and social Monitoring (*Comité Régional de Suivi Environnemental et social*, CRSE) of local development projects has been instituted at the region level – with support of the National Program for Local Development (*Programme National de Développement Local*, PNDL) – to better handle decentralization and local development processes. The CRSE is composed of the region's technical services (Environment, Water and Forests, Community Development, Spatial Planning, Programming, Local Development Support, etc.). Its core tasks are to support the environmental assessment and monitoring process for local development projects and to build capacities of local actors in environmental and social management. The DREEC manages coordination of this committee.

The Local Governments Directorate (Direction des Collectivités locales, DCL) of the Ministry of Territorial Governance, Development and Spatial Planning, MGTDAT)

The MGTDAT, under the authority of the Prime Minister, prepares and implements the Head of State's policy on decentralization, territorial governance, development and spatial planning. As such, it oversees the harmonious, balanced and coherent development of agglomerations and economic activities on the national territory. It takes into account social consequences of the territorial distribution of populations and economic activities. It proposes and executes necessary measures for strengthening decentralization. It develops and promotes strategies and programs favorable to territorial development. It ensures the good functioning of local governments. It watches over local governments' control of lawfulness in various actions. It fosters intercommunality, the harmonious cooperation between local governments and the promotion of territory hubs (*Pôles Territoires*). It oversees the capacity-building of Territorial Governments and sets up a training policy for local elected officials.

National Environmental Legislation and Policies

The key policies are as below with details given in Annex I.

- Law n°2001-01 of January 15, 2001 on the Environment Code
- Decree n°2001-282 of April 12, 2001
- Law n°2013-10 of December 28, 2013 on the General Code of Local Governments.
- Law n°83-71 of July 5, 1983 on the Public Health Code
- Law n°98-03 of January 8, 1998 on the Forestry Code
- Law n°2016 of November 8, 2016 on the Mining Code
- Law n°81-13 of March 4, 1981 on the Water Code
- Labor laws and regulations
 - Décret n°2006 1249 du 15/11/2006
 - Loi No 97-17 du 1er décembre 1997
 - Décret 94-244 du 07 Mars 1994
 - Décret 2006-1258 du 15 novembre 2006
 - Décret 2006-1261
 - Décret 2006-1256
- Law n°2008-43 of August 20, 2008 on the Urban Planning Code
- Nomenclature of classified installations for the protection of the environment
- Sectoral referential guides for ESIA
- Guide on the study of danger
- Loi n° 2010-11 du 28 mai 2010 Gender Parity law

2.6 World Bank ESF

The ESF protects people and the environment from potential adverse impacts that could arise from Bankfinanced projects and promotes sustainable development. This new framework provides broad coverage, including important advances on transparency, non-discrimination, social inclusion, public participation and accountability. The ESF also places more emphasis on building Borrower governments' own capacity to deal with environmental and social issues.

The *Environmental and Social Framework (ESF)* enables the World Bank and Borrowers to better manage environmental and social risks of projects and to improve development outcomes. It was launched on October 1, 2018 and replaces the Safeguards Policies.

The ESF offers broad and systematic coverage of environmental and social risks. It makes important advances in areas such as climate change; labor standards; transparency; non-discrimination; disability; public participation; and accountability—including expanded roles for grievance mechanisms. The ESF

codifies best practice in development policies. It brings the World Bank's environmental and social protections into closer harmony with those of other development institutions; and encourages Client countries to use, and improve, their own national environment and social policies, when these policies are strong enough. The ESF provides an incentive for countries to develop and build their own environmental and social policies and capacity.

The ESF consists of:

- the World Bank's Vision for Sustainable Development
- the World Bank's Environmental and Social Policy for Investment Project Financing, which sets out the requirements that apply to the Bank
- the 10 Environmental and Social Standards (ESS), which set out the requirements that apply to Borrowers
- Bank Directive: Environmental and Social Directive for Investment Project Financing
- Bank Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups

As of October 1, 2018, the ESF applies to all new World Bank investment projects. The EHPMP will apply the ESF. **Table 1** depicts the ESSs that are anticipated to be relevant to this Program.

Environmental and Social Standards	Yes	No
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	х	
ESS 2: Labor and Working Conditions	Х	
ESS 3: Resource Efficiency and Pollution Prevention and Management	Х	
ESS 4: Community Health and Safety	Х	
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		x
ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources		x
ESS 7: Indigenous People/Sub-Saharan African Historically Underserved Traditional Local Communities		х
ESS 8: Cultural Heritage		Х
ESS 9: Financial Intermediaries		Х
ESS 10: Stakeholders Engagement and Information Disclosure	Х	

Table 1. Relevant ESS to EHPMP

ESS1 Assessment and Management of Environmental and Social Risks and Impacts: The project is envisioned to identify and assess environmental and social risks and impacts associated with project implementation. An ESIA where applicable and an ESMP will be prepared to address potential impacts associated with proposed activities under Component 3 which will require mitigation measures. This will help to ensure that the project activities are environmentally and socially sound and sustainable. Where there are existing ESIAs (covering the ongoing Bank-funded projects linked with each of the pilots), such ESIAs will be reviewed to assess their coverage of the proposed pilot interventions and to ensure that they

are aligned with the requirements of the ESF. Where contractors will be required for demonstrative activity implementation, each contract will include a condition to implement and comply with the ESMP, including preparing Construction ESMP (CESMP).

ESS2 Labor and Working Conditions: The pilot projects will require either additional workers or existing workers within a facility to be reassigned. Labor Management Plans will be prepared for each country to ensure fair treatment of workers and that terms and conditions of employment (hours, rest periods, annual leave, nondiscrimination, equal opportunities and workers organizations) are aligned with the requirements of national law and ESS2. In addition, to protect workers appropriate Occupational Health and Safety (OHS) should be applied to avoid the risk of ill health, accidents and injuries. In addition, child and forced labor will not be engaged in any elements of the Project. Specifications for contractors should be followed.

ESS3 Resource Efficiency and Pollution Prevention and Management: Different activities under the project components aim at avoiding or minimizing adverse impacts on human health and the environment by eliminating the use of mercury and preventing emissions of uPOPs and other harmful pollutants in ASGM and management of e-waste. In case of e-waste pilots, the purpose of the project is aiming towards material reuse, recycle and recovery. For all pilot designs, any remaining waste will be treated or disposed of it in a safe manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste material. The treatment and disposal process will comply with national legislation and Basel Conventions on storage, transportation and disposal of hazardous wastes. No transboundary waste movements is funded under the project. In case relevant national legislation is insufficient, the implementing agencies will adopt Good International Industry Practice (GIIP) alternatives for its environmentally sound and safe management and disposal.

ESS4 Community Health and Safety: The proposed pilot projects are not anticipated to have substantial risk to community health and safety. Based on the scale of the pilots, there will likely be no influx of workers and followers into a project area. Implementation of the project will have both direct and indirect benefits to the people's health and safety. Some temporary negative effects are possible due to increased traffic, noise or disturbance to local communities living close to the sites as well as through handling of the e-waste. The capacity building programs in components 1, 2 and 3 will provide necessary knowledge and skills on safety measures to be incorporated in ASGM activities and e-waste recycling sector including safe handling of hazardous waste.

ESS8 is not considered relevant but "Chance Find" clauses will be included in contractor contracts requiring contractors to stop construction in the event that cultural property sites are encountered during construction.

ESS 10 Stakeholders Engagement and Information Disclosure: The implementing agencies will provide stakeholders with timely, relevant, understandable and accessible information, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation. A SEP will be prepared for each country to keep stakeholders informed on the project progress. This will ensure appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner format. Stakeholders will be actively involved in decision making and project implementation processes through the ongoing Bank-funded projects linked with each of the pilots and where necessary existing mechanisms will be enhanced or additional mechanisms developed to align with ESS 10.

2.7 World Bank Environmental Health and Safety Guidelines

The World Bank Group's Environmental, Health and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of GIIP. The General EHS Guidelines are designed to be used together with the relevant Industry Sector EHS Guidelines such as the EHS guidelines for waste management facilities which provide guidance to users on EHS issues relevant to waste management facilities.

The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. The applicability of the EHS Guidelines should be tailored to the hazards and risks established for each project on the basis of the results of an environmental assessment in which site-specific variables, such as country context, assimilative capacity of the environment, and other project factors, are taken into account. The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

3. Environmental and Social Procedures

3.1 Potential Impacts from the Program

For e-waste, the project will support technologies to reduce uPOPs by preventing uPOPs precursors such as plastic and electronic wastes being mixed with municipal and organic wastes that are subject to open burning and consequently causing emissions of uPOPs. Unregulated combustion will be better controlled by improving the separation, segregation, recycling of municipal and hazardous waste. Waste separation technologies will allow separation of the waste components such as plastics, metals, electronic cables and wires etc. Examples of e-waste separation technologies include screeners, concentrating tables or density separators, air classifiers or cyclones, magnetic separators, electrostatic separators etc.

For mercury abatement, technologies to promote phasing out of mercury usage will be introduced. The focus will be on promoting alternative technologies for gold extraction without the use of harmful chemicals. Possible technologies to avoid the use of mercury in ASGM include sluicing, direct smelting, improved milling, shaking table, reactivation, centrifuges etc.

Though significant negative impacts are not envisaged, reversible impacts are likely. The key potential environmental and social issues, which can be readily managed/mitigated are related to

- hazardous waste management (including disposal) at pilot e-waste sites;
- dust and particulate materials, causing nuisances to surrounding families and businesses, specially to sensitive receptors (children, elders) during construction;
- undesirable noise levels due to the machinery and equipment especially in areas with health centers, homes for the elderly and schools;
- occupational health and safety of workers; and
- terms and conditions of employment of workers.

Therefore, the projects in the program can be managed through:

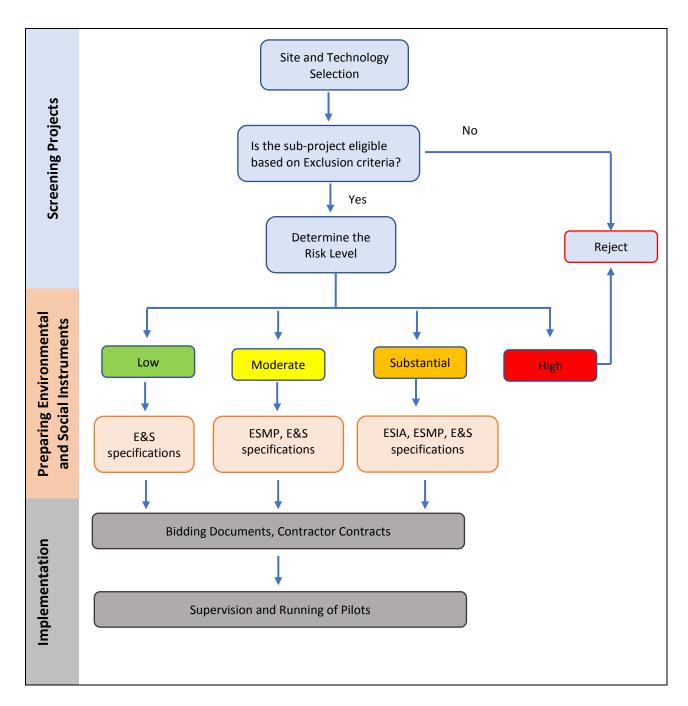
- i. The preparation of environmental and social management plans for construction and operation to address localized issues at the proposed project sites and,
- ii. The application of environmental and social specifications that the contractor should follow during construction.

The ESMF also includes the possibility for carrying out ESIAs for some projects and where required by national legislation. The environmental and social measures to be implemented during construction should be part of bidding documents and contractors' contracts.

3.2 E&S Process

Figure 1 details the process that should be followed from site and technology selection to running of the demonstration pilots.

Figure 1. The Environmental and Social Process



3.3 Screening

Step 1a: Application of the exclusion criteria for site selection

This is the first step to be carried out by the focal Agencies. Each proposed site should be screened based on the exclusion criteria given below. If the potential site meets any of the criteria given in the list, then it should be rejected.

The project sites will NOT:

 require land acquisition, loss of access to natural resources or involuntary physical and/or economic displacement of households including those without legally recognizable rights to the land;

- utilize land traditionally owned or under customary use or occupation or have collective attachment to indigenous and vulnerable people as defined in ESS7;
- utilize land with outstanding land disputes;
- be a significant source of pollution such as having runoff or leading to negative health and environmental effects,
- be located in a degraded area,
- be located close to areas important for biodiversity. For example, not be situated in critical habitat, natural habitats or other legally protected areas;
- be on locations where forced or child labor is present;
- be close to a riparian zone;
- have a high ground water table;
- be inaccessible by road.

In addition, where land is required, the sites should have a legally established landowner willing to voluntary allow the siting of the demonstration pilot on their land in line with the requirements of ESS 5 on voluntary land donation or be government owned land (without resulting in displacement).

The site for locating the demonstration pilot will be selected in consultation with the stakeholders and will be one that is easily accessible to the artisanal small-scale miners. For e-waste, the site should be an existing waste disposal facility with required permits.

Step 1b: Selection of technologies for demonstration pilots

a) Mercury abatement – Tanzania and Ghana

The technology will be selected from internationally recognized and accepted non-mercury methods available. Many of the exiting methods for separating gold without the use of mercury such as using different concentration methods rely on the high density of gold relative to other minerals in ore or alluvium mixture and thus do not generate any waste or negative environmental impacts. Based on available options, discussions will be held with relevant stakeholders such as government agencies, ASGM groups, and local manufacturers to select the best available technology.

Best available technologies should to be selected with following criteria informing the selection process:

- Ease of availability and replicability;
- Ease of usage;
- Cost of purchase and manufacture of the equipment;
- Reduction in mercury use due to adoption of the technology;
- Not be a significant source of pollution or waste;
- Economic and social benefits such as number of miners moving away from mercury usage, benefit of not using mercury including cleanup costs, health benefits.

In Tanzania, the project will collaborate with local partners such as Small Enterprise Development Corporation (SEDCO/SIDO) in order to replicate the equipment for gold recovery thereby supporting small scale industries and job creation, contributing to the local economy.

b) Promotion of waste segregation and recycling to minimize e-waste burning – Ghana, Zambia and Kenya

The cleaner and safer technologies will be selected from existing waste separation technologies. Best available technologies should to be selected with the following criteria to informing the selection process:

- Ease of availability and replicability,
- Ease of usage,
- Efficiency of the process,
- Cost of purchase and manufacture of the equipment,
- Quantity of waste that can be separated as compared to the amount dumped at the facility,
- Types of wastes that can be separated,
- Economic and social benefits such decrease in the amount of uPOPs and other pollutants, health benefits including healthcare costs.

Step 2: Determining the environmental and social risk category

The environmental and social risk should be assessed based on the sensitivity of the site selected in line with the World Bank ESF risk category definitions (See **Annex II**). Using available information such as maps showing key features such as national parks, protected areas, forests, rivers etc; topographic maps; cultural heritage maps; planning records; literature review and site visits, the focal agency should determine the risk of the project. The criteria given in **Table 1** should inform the risk categorization.

Risk	Site Sensitivity
	1.1 High possibility of environment degradation taking place (deforestation, hunting, etc) due to the project
	1.2 High possibility to adversely affect the ecology of protected area areas
High	located with 1km of the site (e.g., interference with the migration routes of mammals or birds)
	 Located in areas highly vulnerable to natural disasters (floods, earthquake, etc.)
	1.4 Will alter historical, archaeological or cultural heritage site or require excavation near such a site
	1.5 Will permanently restrict people's access to pasture, water, public services or other resources that they depend on
	 1.6 Will require significant volumes of rehabilitation materials (e.g. gravel, stones, water, timber, firewood)
	1.7 Will have significant human health and safety risks during construction and operation
	1.8 Will lead to significant soil degradation in the area
	1.9 Will significantly alter soil salinity that should be avoided
	1.10 Will create significant quantities of solid or liquid waste that could
	adversely affect local soils, vegetation, rivers, streams or groundwater
	1.11 Will significantly affect river or stream ecology
	1.12 Will result in significant emissions of chemicals into soil, water or air
	1.13 Will lead to significant migration into the area
	1.14 Will result in permanent loss of crops, fruit trees and household infra-
	structure (such as granaries, outside toilets and kitchens, etc)
	1.15 Will lead to permanent loss of livelihoods of individuals or families
	2.1 Possibility of environmental degradation taking place (deforestation,
	hunting, etc.) due to the project
Substantial	2.2 Possibility to adversely affect the ecology of the protected area areas
	located with 1-3 km of the site (e.g., interference with the migration routes
	of mammals or birds)

Table 1: Assessing Sensitivity of the Project Based on Location

	2.3 Located in areas with substantial risk to natural disasters (floods,
	earthquake, etc.)
	2.4 Historical, archaeological or cultural heritage site near the project that can
	be affected and will require preventative measures 2.5 Will restrict people's access to the pasture, water, public services or other
	resources that they depend on during construction
	2.6 Will require large volumes of rehabilitation materials (e.g. gravel, stones,
	water, timber, firewood)
	2.7 Will have human health and safety risks during construction and operation
	2.8 Will lead to soil degradation in the area requiring mitigation
	2.9 Will affect soil salinity and requires mitigation measures
	2.10 Will generate solid or liquid waste that could affect local soils, vegetation,
	rivers, streams or groundwater
	2.11 Will affect river or stream ecology during construction and operation
	2.12 Will result in emissions of chemicals into soil, water or air and require
	specially designed mitigation measures
	2.13 Will lead to migration into the area
	2.14 Will damage crops, fruit trees and household infra-structure (such as
	granaries, outside toilets and kitchens, etc)
	2.15 Will lead to temporary loss of livelihoods of individuals or families during
	construction
	3.1 Low possibility of environmental degradation taking place (deforestation, hunting, etc) due to the project
Moderate	hunting, etc) due to the project 3.2 Project is greater than 3-5 km from ecologically sensitive habitats or critical
Woderate	ecosystems (wetlands, mangroves, protected areas, national parks, natural
	forests, wildlife sanctuaries, rivers and lakes)
	3.3 Located in zones with low risk to natural disasters (floods, earthquake, etc.)
	3.4 Historical, archaeological or cultural heritage site near with low probability
	of being affected but requires monitoring
	3.5 Will temporarily restrict people's access to the pasture, water, public
	services or other resources that they depend on during construction
	3.6 Will require small quantities of rehabilitation materials (e.g. gravel, stones,
	water, timber, firewood)
	3.7 Possibility of human health and safety risks during construction and
	operation that can be easily managed 3.8 Possibility of soil degradation in the area
	3.9 Will temporarily affect soil salinity
	3.10 Solid or liquid waste affecting local soils, vegetation, rivers, streams or
	groundwater could be generated
	3.11 Installation of the technology may affect river or stream ecology
	3.12 Will result in emissions of chemicals into soil, water or air that can be easily
	mitigated
	3.13 Possibility of migration into the area
	3.14 Possible damage to crops, fruit trees and household infra-structure (such as
	granaries, outside toilets and kitchens, etc)
	3.15 Possible temporary loss of livelihoods of individuals or families
Low	4.1 No environmental degradation will take place (deforestation, hunting, etc)
	4.2 Project is greater than 5 km from ecologically sensitive habitats or critical
	ecosystems (wetlands, mangroves, protected areas, national parks, natural forects, wildlife canetuaries, rivers and lakes)
	forests, wildlife sanctuaries, rivers and lakes) 4.3 Located in zones at no risk to natural disasters (floods, earthquake, etc.)
	+.5 Localeu in zones al no risk to hatural uisasters (10000s, editiiquake, etc.)

4.4	Absence of places with cultural and historical significance near the project
	site
4.5	Will not restrict people's access to the pasture, water, public services or
	other resources that they depend on
4.6	Will not require rehabilitation materials (e.g. gravel, stones, water, timber,
	firewood)
4.7	Will not have human health and safety risks during construction and
	operation
4.8	Will not lead to soil degradation in the area
4.9	Will not affect soil salinity
4.10	Will not generate solid or liquid waste
4.11	Will not affect river or stream ecology
4.12	Will not result in harmful emission of chemicals into soil, water or air
4.13	Will not lead to migration into the area
4.14	Will not damage crops, fruit trees and household infra-structure (such as
	granaries, outside toilets and kitchens, etc)
4.15	Will not lead to loss of livelihoods of individuals or families

Step 3: Level of effort required

Once the risk level has been identified, the level of environmental and social effort for managing the E&S risk for each project should be determined based on Table 3.

Risk Level	Level of E&S Effort
High	Projects should be rejected
Substantial	ESIA and ESMP will be prepared for the project
Moderate	ESMP and E&S specifications for contractors
Low	E&S specifications for contractors

Table 3. Environmental Effort to be Undertaken

High Risk: Projects identified to be of High risk should be rejected.

Substantial risk: Projects should undertake an ESIA. For identified impacts, an ESMP should be developed. E&S specifications for contractors should be followed. The ESMP and E&S specifications for contractors should be included in the bidding documents. The contractor should prepare construction ESMPs (CESMP) based on the ESMP requirements. The contractor should follow the E&S specifications for Contractors during construction.

For Moderate risk Projects: ESMPs should be developed and EIA undertaken if required by law. During construction by following the E&S specifications for contractors with oversight by the focal agency the impacts can be managed. The contractor should prepare CESMPs based on the requirements in the ESMP.

For Low risk Projects, the impacts can be managed through the E&S specifications for contractors with oversight by the focal agency.

3.4 Preparing Environmental and Social Instruments

Once the sites and technologies have been selected, Terms of Reference (ToRs) for the ESMP and ESIA (where required) will be prepared by the focal agency in compliance with national legislation and the World Bank ESF. **Annexes III and IV** provide outlines of ESIA and ESMP. The ToRs will be site specific informed by the screening carried out by the focal agency (and/or PIU).

The ongoing and proposed Bank operations in each participating country associated with the EHPMP have undertaken or are undertaking E&S review and developing their E&S instruments. The pilots will benefit from the E&S due diligence carried out for these projects.

Review of ToRs by the World Bank

The ToRs for ESIA and ESMP for each pilot will be reviewed by the World Bank and the national entity in charge of environmental assessment. Site visits by the World Bank environmental and social specialists may be needed in order to better understand the site conditions and verify the appropriateness of the ToR. The ToRs will be guided by the ESMF.

Preparation of ESIAs and ESMPs

Preparation of ESIAs and ESMPs is the responsibility of the focal agencies. Upon agreement on the ToRs, the focal agency will be responsible for engaging qualified specialists to carry out the assessments and prepare the documents based on outlines of ESIA and ESMP given in Annexes III and IV. With communities being the main beneficiaries of the pilot projects, ownership is extremely important. Stakeholders' participation and public consultations should be integrated across the entire process from planning to construction to operation.

The ESMPs should be prepared covering issues that warrant special attention during construction and operation such as:

- Traffic;
- Location and protection of sensitive receptors such as schools, hospitals, religious places;
- Noise;
- Pastures and fields;
- Community assets such as water supply, irrigation, generators, bus stops etc.;
- Scenic areas and community value (waterfalls, tress for shade);
- Segregation of waste particularly hazardous wastes;
- Safe disposal of waste in compliance with national laws and international conventions;
- Transport of waste to and from the site;
- Occupational health and safety of community and workers.

No transboundary waste movements will be funded under the project. In case relevant national legislation is insufficient, the focal agencies will adopt GIIP for environmentally sound and safe management and disposal of waste. The landfill where the waste would be disposed should have the requisite permits and be in compliance with the national regulations.

E&S Specifications for Contractors

The E&S specifications for contractors are meant to guide the contractor to follow good environmental and social practices during construction. Contractors should follow the Environmental and Social Specifications given in **Annex V**, supplemented by any other site measures from the ESMPs to be implemented by contractors.

Review and clearance of the E&S documents by the World Bank

All environmental and social documents prepared according to this ESMF, will be reviewed by the World Bank and the national entity in charge of environmental assessment prior to implementation. The approved E&S documents will be publicly disclosed in country and on the World Bank website. If a permit is required for any site, then the required permits will have to be obtained prior to starting the pilots.

3.5 Implementation

The focal agencies in the countries are responsible for oversight of the demonstration pilots including engaging with all concerned such as manufacturers, local communities, artisanal small-scale gold miner organizations and waste management/disposal companies. The agencies are also responsible for ensuring implementation and compliance of the ESMPs. Chapter 4 describes the institutional arrangements.

Bidding Documents and Contracts

The ESMPs requirements for projects along with the E&S specifications for contractors should be incorporated into bidding documents for the works by the focal agencies. Contractors should be aware of their obligations upfront and should include the cost of implementing the E&S (including health and safety) requirements. Contractors' contracts should also include all the E&S health and safety requirements, including requirements for the contractor to develop CESMPs during construction for issues such as noise, traffic, labor and grievances by workers and communities.

Purchase of materials should be only from approved sites. Some projects might also generate construction waste that require appropriate environmental disposal. The identification of suitable sites for waste disposal, the environmental management necessary (compacting, re-soiling and re-vegetation, drainage control), and the associated transportation costs should be included in project design and cost estimates.

Construction Environmental and Social Management Plans

Based on requirements of the ESMPs, contractors are required to develop CESMPs for issues such as noise, traffic and labor. The purpose of the construction environmental and social management plan is to outline how during construction the contractor will avoid, minimize or mitigate effects on the environment and surrounding area. CESMPs are 'live' documents that should be reviewed and updated at regular intervals throughout the project life cycle. The CESMP should be approved by the focal agency.

Construction environmental and social management plans may be structured as follows:

- Introduction General purpose, scope and structure of the document.
- Scope of work and project description
- Environmental requirements and controls Policy and planning, environmental impacts, risks and mitigation, procedures for monitoring the construction processes against environmental objectives, pollution control measures, environmental risk register
- Consents and permissions
- Management plans Specific management plans such as noise and vibration, traffic, labor, grievances etc.,
- Health and safety procedures
- Community consultations
- Training
- Incident reporting and investigation
- Emergency response measures/plans

Environmental Supervision during Construction

The focal agency will oversee the construction activities and ensure compliance with the contractor environmental and social management plans and E&S specifications. Where non-compliances are observed, the focal agency will stop the works and work with the contractor to rectify the problem in coordination with the PIU. Chance Find Procedures included in the E&S specifications will be followed if tangible cultural heritage is encountered during civil works.

Reporting

Detailed reporting arrangements will be described in the ESMP, but at a minimum all implementers of activities should submit quarterly reports to the Project Focal Person in the focal agency outlining the following in their reports: type of activity undertaken, expected outputs, timeline of activities, allocated budget, and actual expenditure. The Focal Person shall prepare a report at the end of each quarter to highlight achievements and challenges faced and future activities required to achieve the stated objectives. These reports shall be sent to the Program Steering Committee, the national entity in charge of environmental assessment and World Bank for review.

3.6 Public Consultation

In addition to any specific requirement of the SEP to enhance adequate community relations the contractor shall:

- 1. Inform the population about construction and work schedules, interruption of services, traffic detour routes etc. as appropriate.
- 2. Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.

3.7 Gender and Vulnerable Groups

Women have the potential to play an important role in behavioral change that could significantly reduce exposure of children to hazardous chemicals and waste. The projects have an emphasis on inclusion of women and vulnerable people in the sensitization and communication campaign, participation in the health interventions that target affected children, and local level nutritional support, livelihood support activities. The project will mainstream gender equality and social inclusion into the activities to help groups such as women, children and persons with disabilities that are marginalized and are more susceptible to pollution and the environmental health impacts associated with mining and pollution. The ESIA and/or detailed ESMP will need to consider gender in the identification and assessment of impacts and develop gender specific mitigation as required. Additionally, vulnerable groups will be identified and impacts from the projects assessed and specific mitigation measures developed and included in the ESIA and ESMP.

3.8 Health and Safety

The World Bank Group Environmental, Health and Safety Guidelines are applicable to the project, with the following specific guidelines to be adopted and utilized by the project implementers: general, occupational health and safety, community health and safety, waste management. If need, based on site specific conditions (as identified in the ESIA and/or ESMP), specific measures to include Environment, Health and Safety Management may be developed. All employers and supervisors are expected to implement measures to protect the health and safety of workers including providing personal protective equipment (PPE) to minimize workplace injuries and on the job training.

3.9 Gender-Based Violence

The risk for causing or exacerbating Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) through this project is considered low using the World Bank's Corporate GBV risks assessment tool. Given the limitations of the tool in assessing risks in non-infrastructure projects, the project context was considered in assessing the risks, noting that project activities are focused on policy and strategy formulation and implementation; knowledge and experience sharing; institutional and human capacity building; chemical and hazardous waste management; and coordination and collaboration, and are not likely to induce labor influx or require use of labor camps. Notwithstanding the low rating, the project will implement minimum measures to safeguard against residual GBV risks. The measure will include training and sensitization of participating agencies and relevant stakeholders on GBV and SEA prevention; mainstreaming GBV and SEA risks prevention in contract bidding documents and relevant environmental and social management plans (ESMPs), SEP and GRM; and undertaking regular supervision of project implementation with particular attention to identifying and managing GBV risks as appropriate.

3.10 Stakeholder Consultations and Stakeholder Engagement

The focal agencies in the countries will engage in meaningful consultations with all stakeholders throughout the project life cycle, paying attention to the inclusion of vulnerable and disadvantaged groups (including the elderly, persons with disabilities, female headed households and orphans and vulnerable children). The implementing agencies will provide stakeholders with timely, relevant, understandable and accessible information, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation.

A Stakeholder Engagement Plan will need to be developed for each country covering all Project Components and will need to ensure that the views of stakeholders are included in the selection of the pilot sites and the development of the ESIA/ESMPs as well as the implementation of the Project. The SEP will need to be developed by the borrower. A framework for the requirements of the SEP and associated Grievance mechanism are included in **Annex VI**.

The borrower will maintain, and disclose, a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the feedback received and a brief explanation of how the feedback was taken into account in Project development and implementation, or the reasons why it was not.

Stakeholder identification: The first step will be to undertake a stakeholder identification and mapping exercise. Stakeholders will include government agencies, multilateral organizations, civil society organizations, private sector, and community organizations. A stakeholder mapping exercise will be undertaken in every country (can add info from countries when we get it).

Stakeholder engagement and consultation: the approach to stakeholder engagement and consultation including key messages, engagement methods (for different stakeholder groups), timing of engagement and responsible parties will be outlined in the stakeholder engagement plan along with any budget or resource requirements. As needed, special measures will be included to ensure that the views of vulnerable groups can be captured.

GRM: A grievance redress mechanism will be developed to ensure that all stakeholders can raise concerns and receive feedback in a timely manner. The GRM will need to be prepared taking into account cultural norms and will need to meet the needs of different stakeholder groups.

All stakeholder engagement undertaken for the Project will be logged and records of meetings etc. held. It is also essential that all information is disclosed to stakeholders in a timely, understandable and accessible format to enable meaningful engagement.

3.11 Training

Successful implementation of the projects will depend among others on the effective implementation of the environmental and social management measures outlined in the ESMPs. Training and capacity building will be necessary for the key stakeholders in order to ensure effective implementation of the Environmental and Social Management Framework (ESMF).

Capacity building should be viewed as more than training. It is human resource development and includes the process of equipping individuals with the understanding, skills and access to information that enables them to perform effectively. Therefore, it should also include awareness-raising and sensitization, besides technical training.

The training under component 3 will include but not limited to:

- Environmental and social standards of the World Bank;
- Applicable laws and regulations;
- Benefits of mercury abatement and e-waste management;
- Site selection methodology;
- Best available technologies and selection;
- Use of the technology for recycling and gold extraction;
- Environmental and social management plan;
- Responsibilities of all stakeholders involved;
- ESMP implementation progress report, environmental supervision progress report;
- Occupational health and safety.

4. Institutional Framework and Capacity Building

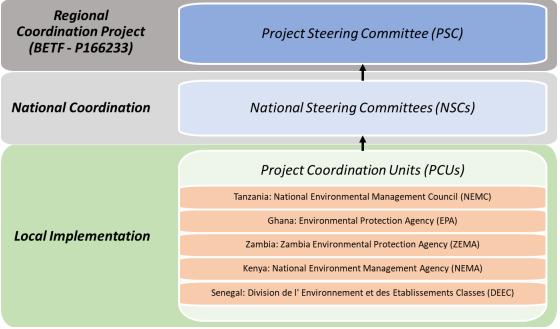
4.1 Institutional and Reporting Arrangements

At the regional level, a **Project Steering Committee** (PSC) will be established as an advisory mechanism to maximize synergies and support the successful design and implementation of the overall project. The PSC will serve as a forum for guidance and monitoring on project implementation and provide a high-level coordination on technical alignment and synergy among the project components and participating countries. The PSC will provide overall strategic guidance, support policy dialogue with countries for regional integration, coordinate cross-boundary interventions, facilitate resource mobilization, and assess the results and impacts of the project. The PSC will be chaired by the WBG and consist of other GEF Implementing Agencies (UNDP, UNEP, UNIDO, AfDB), GEF secretariat, OECD, and key partners who are leaders in the field (i.e. UNITAR, IGF, USEPA), representatives of civil society and participating Countries.

The project is supported by a regional platform for knowledge sharing and technology dissemination efforts (BETF - P166233). The regional knowledge platform will establish a coordination framework for the EHPMP with the participating countries, the regional partners, and other stakeholders to promote communication among project stakeholders through consultations at the national and regional levels. The purpose of the platform is to enable the coordination among stakeholders, monitor outcomes of national projects, support preparation of projects, and capture lessons learned and best practices from national projects. EHPMP, as an umbrella project, ties in five country projects which tackle common chemicals management issues and share concerns of lack of effective solutions.

In addition, each participating country will have a **National Steering Committee (NSC)**, and a **Project Coordination Unit (PCU)**. The NSC will include the key stakeholders at the national level. NSC functions are to: i) provide guidance on national policy matters and strategic decisions; (ii) approve annual work plans and quarterly progress reports; and (iii) coordinate with the PSC and regional knowledge platform to facilitate knowledge sharing. The EHPMP will be implemented by the national PCU in each country, embedded within the National Focal Point Ministries (NFPM). The national PCU will be responsible for: i) preparing annual work plans, ii) preparing Fiduciary and safeguard documents, iii) monitoring and reporting; iv) organizing National Steering Committee meetings, coordinating all regulatory and administrative approvals and clearances; and v) coordinator; c) Communication Specialist; d) M&E and Reporting Specialist; e) Environmental and Social Safeguards Specialist; f) Procurement Specialist; and g) FM Specialist.

The identified NFPMs are: in Ghana the Environmental Protection Agency and the Accra Metropolitan Assembly; in Tanzania the National Environmental Management Council (NEMC); in Senegal the Division de l' Environnement et des Etablissements Classes (DEEC); in Kenya the Environmental Protection Agency (EPA) and Forests and the National Environment Management Agency (NEMA); and in Zambia the Zambia Environmental Protection Agency (ZEMA).



Implementation Arrangements

Tanzania

The project will be implemented through collaboration and partnership directly and indirectly with stakeholders in the management of mining industry in Tanzania. Participatory approaches will be prioritized in order to help stakeholders participate in the implementation of the project to reduce environmental and health risks related to use of mercury in ASGM in Tanzania.

National Steering Committee will be comprised of the Permanent Secretaries from the Ministries responsible for Environment; Mines; Finance; Health; Water; Local Government; and Industry and Trade. It will also include Chief Executives from the Government Chemist Laboratory Authority (GCLA), Mining Commission, Mineral Resources Institute (MRI), State Mining Corporation (STAMICO), and Small Industry Development Organization (SIDO). The Federation of Miners Association of Tanzania (FEMATA) will represent ASGM. Functions of the NSC are to: (i) receive progress reports on the implementation of project components to provide overall guidance on policy matters that relate to the Artisanal Gold Mining Sector; and (ii) ensure that activities of individual sectors are included in the annual work plans to facilitate the smooth handing over at the end of the project; and (iii) coordinate with the Regional Project to facilitate knowledge sharing among participating countries. The Permanent Secretary (PS) from the ministry responsible for environment will Chair the Steering Committee. The Director General for NEMC will be the Secretary to the NSC. NEMC will be a Secretariat to the NSC which will meet twice a year to facilitate smooth implementation of project activities. The NSC will consult and include as necessary technical representatives from key project implementers, including the Vice President's Office (VPO-Division of Environment), National Environment Management Council (NEMC), Ministry of Water and Irrigation (MoW), Ministry of Minerals (MoM), Mining Commission (MC), Ministry of Industry and Trade (MIT), Government Chemist Laboratory Authority (GCLA), Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDEC), Mineral Resources Institute (MRI), STAMICO, SIDO, University of Dar es Salaam (UDSM-Mining and Mineral Processing Department), and offices of Regional Administrative Secretaries for Geita, Mwanza, Mara, Shinyanga, Singida, Songwe, and Mbeya Regions as

well as offices of Regional Miners Associations (REMAs) in the seven regions where the project will be implemented.

Project Coordination Unit. The Project Coordination Unit will be under the Vice President's Office (VPO). The National Environment Management Council (NEMC) will serve as the lead coordinating institution which has demonstrated experience in the coordination of multi-sectoral projects. A senior officer from its core staff will be appointed as Project Coordinator, who will report to the Director General of NEMC. The PCU will be responsible for overall coordination and facilitation of the work program and facilitate communication with the regional platform. Within each implementing institution, a focal person will be appointed to coordinate project activities. The responsibilities of NEMC will include the following: (a) the management of the designated account; (b) financial management and reporting on the overall project; (c) ensuring the execution of the audit of the project; (d) preparation of quarterly Interim financial reports. NEMC will oversee the project financial affairs of the project. More specifically it will be fully responsible for overall project financial management, reporting, and auditing under the supervision of the Director of the Finance and Administration. This directory has adequate qualified and experienced accountants with long experience in managing other IDA and other donor funded projects. In addition, NEMC has a well manned and experienced Internal Audit Unit. This unit will review project financial affairs as part of their regular internal audit reviews.

Project reporting. The lead coordinating institution (NEMC), under the Project Coordinator will be responsible for monitoring and evaluation (M&E) and will report on project performance to the National Steering Committee (NSC). All implementers of activities are required to submit quarterly reports to the Project Focal Person at the NEMC outlining the following: i) type of activity undertaken; ii) expected outputs; iii) timeline of activities; iv) allocated budget; and v) actual expenditure. The project will establish an appropriate M&E system to track progress against the set indicators to provide an overall assessment of project performance. The Focal Person will prepare a report at the end of each quarter to highlight achievements and challenges faced, and future activities required to achieve the stated objectives. These reports will be presented and discussed at bi-annual review meetings.

Ghana

Both the Environmental Protection Agency (EPA) under the Ghana Ministry of Environment Science, Both the Environmental Protection Agency (EPA) under the Ghana Ministry of Environment Science, Technology, and Innovation (MESTI) and the Minerals Commission (MC) under the Ministry of Lands and Natural Resources (MLNR) are responsible for regulating and monitoring mercury use in ASGM in accordance with the country's mining laws. EPA is also responsible for regulating and monitoring e-waste management, following Article 6 of the Stockholm Convention on wastes and relevant guidance. EPA will be the lead implementing agency, in coordination with MESTI and MC, while MESTI will ensure regional coordination. EPA will hold overall fiduciary and safeguards responsibility.

National Steering Committee. The NSC will operate as the primary decision-making body for the Project. It will be co-chaired by the Ministry of Environment Science Technology & Innovation and the Ministry of Lands and Natural Resources. Other members include the Ministry of Finance; Ministry of Health; Ministry of Local Government and Rural Development; Ministry of Trade; Ministry of Gender, Children and Social Protection; Ministry of Water and Sanitation; Ministry of Monitoring and Evaluation; Ministry of Food and Agriculture; Ministry of Chieftaincy; Ministry of Defence; Ministry of National Security; National House of Chiefs; Ministry of Justice; and Attorney General's Department. The NSC will review progress reports and provides guidance on policy matters; review work plan and budget; facilitate coordination across agencies and implementation as needed; and support outreach and resource mobilization. The NSC will meet twice a year, before the Project's report/Work Plan/Budget are submitted to the Bank for review and no objection.

Project Implementation Unit: A PIU will be mainstreamed in EPA and be responsible for overall project management, facilitation of work programs, fiduciary management, supervision of implementation and project reporting. The PIU will coordinate the Project under the leadership of the Executive Director or Deputy Executive Director (Technical Services) of EPA. EPA will provide dedicated staff for the positions of Project Coordinator (at Senior level), Monitoring and Evaluation officer, Environmental and Social Management officer, Finance and Accounts officer, Communication officer and Procurement officer. A Deputy Coordinator will be recruited, focusing on the Project's dimension not covered by the coordinator (e.g., ASGM or e-waste). MnE functions will be carried out jointly by EPA and MESTI (PPME). Depending on investments considered under component 3, and their social implications, Social Development Specialists might be further recruited to cover social safeguards aspects. PIU staff resources may be supplemented from time to time as needed with short term consulting expertise for financial management, procurement, environmental and social management, communication, reporting and logistics. The PIU will coordinate closely with all Implementing Agencies (Environmental Protection Agency and, Minerals Commission) and will be responsible for preparing work plans and budgets for implementation. The PIU will coordinate closely with the PCU for the proposed Artisanal and Small-Scale Mining Formalization Project (P168002) and the Project management unit (PMU) for the Forest Investment Program (FIP) - Enhancing Natural Forest and Agroforest Landscapes Project (P148183). The PIU will also serve as the secretariat to the National Steering Committee.

Zambia

The Zambia national project will be implemented through collaboration and partnership directly and indirectly with stakeholders of waste management in Zambia. Participatory approaches will be prioritized to help stakeholders participate in project implementation to reduce environmental and health risks related to waste management in Zambia. Mobilizing and training beneficiaries will be considered, therefore helping to raise awareness, adopt alternative technologies, change perceptions, and identify economic approaches that are more profitable and capable of reducing environmental and health risks from harmful chemicals and waste exposure.

National Steering Committee will comprise of Permanent Secretaries from the Ministries of Environment, Health, Local Governance, Finance, Mines and Mineral Development, ZMERIP National Coordinator, as well as Director General (DG) of Zambia Environmental Management Agency (ZEMA). The NSC will be Chaired by the Permanent Secretary of the Water Development Sanitation and Environmental Protection (MWDSEP). Functions of the NSC are to: i) provide overall guidance on policy matters that relate to the ewaste and hazardous material management; (ii) assess and provide approval of the annual work plans; and (iii) coordinate with the regional knowledge platform to facilitate knowledge sharing among the participating countries. The NSC will meet twice a year to facilitate smooth implementation of project activities. The National PSC in Zambia will be mainly responsible for approval of Annual Work Plans submitted by the ZEMA and will provide guidance and oversight during implementation.

Project Coordination Unit: A PCU set up at ZEMA for ZMERIP will be responsible for overall coordination and facilitation of the work program as described in the annual plans. Zambia Environmental Management Agency (ZEMA), a regulatory agency under MWDSEP will implement this project with technical support from the Directorate of Planning, Information and Research and the Directorate of Operations. ZEMA is a regulatory agency with a mandate that includes the prevention and management of environmental

pollution, conservation and sustainable management of natural resources, environmental audits and monitoring, and implementation of international environmental agreements and conventions. ZEMA will in collaboration with the Ministry of Mines and Mineral Development (MMMD) and the Ministry of Local Government (MLGH) implement EHPMP activities through the targeted Municipal Councils. Functions of the PCU are: (a) preparation of procurement plans and the management of the designated accounts; (b) accounting, financial management, and reporting on overall project subcomponents; (c) ensuring project audits; (d) preparation of quarterly financial and technical progress reports; (e) managing environmental and social safeguards aspects; (f) undertaking all procurement and contract management activities for all components; and (g) communicating and interacting with partner countries as well as the regional knowledge platform. A senior officer from the PCUs core staff will be appointed as Project Coordinator who will report to the Director General of ZEMA. Within each implementing institution, a focal person will be appointed to coordinate project activities.

Project reporting. All implementers are required to submit quarterly reports to the Project Focal Person at ZEMA outlining the following: i) type of activity undertaken; ii) expected outputs; iii) timeline of activities; iv) allocated budget; and v) actual expenditure. The Focal Person will prepare a report at the end of each quarter to highlight achievements and challenges faced, and future activities required to achieve the stated objectives. These reports will be presented and discussed at bi-annual review meetings

Kenya

National Steering Committee: An NSC will comprise of Permanent Secretaries from the Ministries of Environment and Forestry, as well as Director General (DG) of National Environmental Management Agency (NEMA). Functions of the NSC are to: i) provide overall guidance on policy matters that relate to the e-waste and hazardous material management; (ii) assess and provide approval of annual work plans; and (iii) coordinate with the regional knowledge platform to facilitate knowledge sharing among participating countries. The committee will meet twice a year to facilitate smooth implementation of project activities.

Project Coordination Unit: The Ministry of Environment and Forestry and its subsidiary agency National Management Agency (NEMA) will be the leading project implementation as designated by the GEF Operational Focal Point for Kenya in his official endorsement letter. Both have a legislative mandate that provides authority with regards to management and control of e-waste. The Ministry of Environment has the mandate to promote, monitor, and coordinate environmental activities and enforce compliance of environmental regulations and guidelines. A PCU set up within NEMA will be responsible for overall coordination and facilitation of the work program as described in the annual plans. The PCU will implement EHPMP activities through the targeted counties. Functions of the PCU are: (a) preparation of procurement plans and the management of the designated accounts; (b) accounting, financial management, and reporting on overall project subcomponents; (c) ensuring project audits; (d) preparing quarterly financial and technical progress reports; (e) managing environmental and social safeguards aspects; (f) undertaking all procurement and contract management activities for all components; and (g) communicating and interacting with partner countries as well as the regional knowledge platform. A senior officer was appointed as Project Coordinator who reports to the Director General of NEMA. Within each implementing institution, a focal person will be appointed to coordinate project activities.

Project reporting. All implementers are required to submit quarterly reports to the Project Focal Person at NEMA outlining the following: i) Type of activity undertaken; ii) Expected outputs; iii) Timeline of activities; iv) Allocated budget; and v) Actual expenditure. The Focal Person will prepare a report at the end of each quarter to highlight achievements and challenges faced and future activities required to achieve the stated objectives. These reports will be presented and discussed at bi-annual review meetings.

Senegal

The Division de l'Environnement et des Etablissements Classés (DEEC, Environment and Classified Establishments Directorate) under the Ministry of the Environment and Sustainable Development is responsible for implementing Government policy to protect the environment and the population against pollution, nuisances, and hazardous waste, and in the management of environmental requirements and provisions for classified establishments and their surrounding areas. In this regard, the DEEC will lead project coordination and hosts the Project Coordination Unit. A Project Coordinator will be recruited and will report to the Director of DEEC. DEEC will have the overall Fiduciary responsibility. Component 3 activities will be implemented in close coordination with local municipalities with the help of Facilitating NGOs.

National Steering Committee (NSC). Policy guidance and overall project oversight and supervision will be provided by the NSC. The NSC will be Chaired by the Secretary General of the Minister of Environment and Sustainable Development or his/her Representative and will comprise representatives involving ministries such as Finance, Local government, and Health. It will also include representatives from l'Unité de Coordination et de Gestion des Déchets (Coordination Unit for Solid Waste Management), as well as Mayors of Hann Bel Air, Dalifort, and other zones in Dakar. Functions of the NSC are to: (i) review progress reports on the implementation of project components to provide overall guidance on policy matters related to the decrease of environmental health risks from the release of UPOPs and other toxic chemicals; and (ii) ensure project activities are included in the annual work plans in order to facilitate the smooth handing over at the end of the project life; as well as (iii) Coordinate with the Regional Project to facilitate knowledge sharing among participating countries. The Director of DEEC will be the secretary to the NSC. The Committee will meet twice a year to facilitate smooth implementation of the project activities.

Project coordination. Project coordination will be under the Secretary General's Office. At implementation level, the DEEC will serve as the lead coordinating institution, given its demonstrated experience in the coordination of multi-sectoral projects. A Project Coordinator will be recruited and report to the Director of DEEC. The Project Coordinating Unit (PCU) will be responsible for overall coordination and facilitation of the work program of participating countries and provide communication channels between them. Within each implementing institution, a focal person will be appointed to coordinate project activities.

Project reporting. All implementers are required to submit quarterly reports to the Project Focal Person at DEEC outlining the following: i) Type of activity undertaken; ii) Expected outputs; iii) Timeline of activities; iv) Allocated budget; and v) Actual expenditure. The Focal Person will prepare a report at the end of each quarter to highlight achievements and challenges faced and future activities required to achieve the stated objectives. These reports will be presented and discussed at bi-annual review meetings.

Annex I: National Environmental Legislation and Policies

Ghana

The Constitution of the Republic of Ghana, 1992 - The 1992 Constitution⁵ of Ghana sets out the first source of environmental protection requirements in Ghana. Article 36 (9) of the Constitution states that "the State shall take appropriate measures needed to protect and safeguard the national environment for posterity; and shall seek co-operation with other states and bodies for purposes of protecting the wider international environment for mankind". Similarly, Article 36 (10) states that "the State shall safeguard the health, safety, and welfare of all persons in employment, and shall establish the basis for the full deployment of the creative potential of all Ghanaians". In addition, Article 41 (k) requires that all citizens protect and safeguard the natural environment of the Republic of Ghana.

Environmental Protection Agency Act, 1994 (Act 490) - The Act came into being to establish the EPA as a body for the protection, conservation and management of environmental resources for the Republic of Ghana. The Act mandates the EPA with the formulation of environmental policy, prescribing of standards and guidelines, issuing of environmental permits and pollution abatement notices. In addition, the Act allows the agency to control the volumes, types, constituents, and effects of waste discharges, deposits, or other sources of pollutants and/or substances which are hazardous or potentially dangerous to the human health and the environment.

Section 2 (i) of Act 490 further mandates the EPA to enforce compliance with established EIA procedures among companies and businesses in the planning and execution of development projects, including existing projects. Section 10 (2) of the Act also promulgates the establishment of a Hazardous Chemicals Committee with functions to monitor the use of hazardous chemicals by collecting information on the importation, exportation, manufacture, distribution, sale, use and disposal of such chemicals.

Environmental Assessment Regulations, 1999 (LI 1652) & Environmental Assessment Regulations, 2002 (LI 1703) - The Regulations is established to provide a framework for environmental assessment of development projects in Ghana. The LI 1652 is organized into five schedules of categorised projects which may either be subjected to a complete EIA or a Preliminary Environmental Assessment. Regulation 1 (2) of LI 1652 mandates that no person shall commence an undertaking which in the opinion of the Agency has or is likely to have adverse effects on the environment or public health unless, prior to the commencement, the undertaking has been registered by the EPA and an environmental permit has been issued by the Agency in respect of the undertaking.

The LI 1652 prescribes requirements for the following documents:

- Environmental Impact Statement (EIS).
- Preliminary Environmental Assessment (PEA).
- Environmental Management Plan (EMP).
- Annual Environmental Report (AER).
- Environmental Permits and Certificates

In 2002, the regulations have been amended LI 1703 on fees and charges for processing the

^{1 5}The 1992 Constitution of the Republic of Ghana sets out the Rights, Freedom, Duties and Obligation of every citizen of Ghana. These are these are the constitutional rights of Ghanaians. The constitution also defines specific requirements for the protection of the Environment such as provided under: Article 37(3); Article 39(6); Article 41(k); Article 268 and Article 269.

EIA applications and for permits specified in new Schedules 2A and 2B and fees for certificate specified in new Schedule 2C to the principal Regulations.

The National Environmental Policy, 2010 - The Policy⁶ sets out a new vision for environmental management in Ghana and is based on an integrated and holistic management system for the environment. It is aimed at sustainable development now and in the future. The policy seeks to unite Ghanaians in working toward a society where all residents of the country have access to sufficient and wholesome food, clean air and water, decent housing and other necessities of life that will further enable them to live in a fulfilling spiritual, cultural and physical harmony with their natural surroundings. The policy requires the State to take appropriate measures to control pollution and the importation and use of potentially toxic substances, which include Electrical and Electronic Equipment (EEE). The NEP is defined under key operational principles of accountability, equity, environmental justice, inclusivity and open information, precautionary and polluter pays principles.

Environmental Sanitation Policy (Revised), 2010 - This revised Policy lays the basis for developing a systematic approach and framework for identifying and harnessing resources for value-for-money services to all. It is the outcome of reviews to address limitations of the old policy published in 1999 and a result of nation-wide consultation among sector stakeholders. The Policy has been revised to update its scope to meet current development objectives and address aspirations of sector actors. The revision also takes on board the changing context of national and international development priorities. Emphasis is placed on the need to ensure systematic collection of data on wastes from all sectors of the economy to support relevant research and development to meet the challenges of managing wastes associated with the growing economy and rapidly changing lifestyles.

National Climate Change Policy, 2012 - The main purpose of the Policy is to help policy makers think about the national policy actions and programmes needed to contribute to the fight against climate change and how such needs can be articulated in order to seek or leverage internal and external resources from public, private and international organisations.

Management of Ozone Depleting Substances and Products Regulations, 2005 (LI 1812) – The Regulation aims to protect the ozone layer from further depletion and enable Ghana to meet the national obligations in line with the Montreal Protocol. The Regulations aims to control importation of used refrigerators and air conditioners, which contains ozone depleting chemicals Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs), using ODSs.

Forestry Commission Act, 1999 (Act 571) - An Act to re-establish the Forestry Commission (FC) to bring under the Commission the main public bodies and agencies implementing the functions of protection, development, management and regulation of forests and wildlife resources and to provide for related matters. The Act mandates the Forest Commission to identify land for Artisanal Small-Scale Mining (ASM), ensure harvesting of high-value 'economic trees' prior to mining, and land reclamation and reforestation after mining.

 $^{^2}$ ⁶National Environmental Policy (Revised) 2010 comes in to replace the 1992 National Environmental Policy broad vision founded on and directed by respect for all relevant principles and themes of environment and sustainable development. The policy describes major environmental challenges in Ghana and recommends operational policies, sector strategic goals and sector environmental policies to combat them.

Forest and Wildlife Policy, 2012 – The Policy strengthens the legal framework to give permanency to gazed forest reserves, and Protected Areas to conserve representative samples of major ecosystems and biodiversity in Ghana. In doing so, the Government seeks to (i) develop and approve Forest Management Plans to cover all registered forest reserves, (ii) conclude legal processes for the reservation of all proposed forest reserve areas, and (iii) reduce the prospecting and mining of mineral resources in registered forest reserves.

Mercury Act, 1989 (PNDC 217) – The Act regulates the import and trade of mercury and use of mercury in ASGM in Ghana. It establishes as an offense the use of bad mining practices in the use of mercury by small-scale miners (section 5). Section 4 of the Act authorizes licensed small-scale gold miners to purchase reasonable quantities of mercury from licensed mercury dealers for the purpose of their mining operations. In addition, Section 4 states that the small-scale gold miners shall observe good mining practices in the use of mercury for carrying out mining operations.

Hazardous & Electronic Waste Control & Management Act, 2016, (Act 917) – The Act prohibits the import, export, and transportation of hazardous and other waste in, out and within Ghana, with exception if obtain a written authorization under circumstances specified under the Act. The Act provides that import and export of e-waste is allow if a person is registered and obtains a permit from the EPA after paying an Advance Eco Levy (AEL) for the item.

Small-Scale Gold Mining Law, 1989 (PNDCL 218) – The Law regulates registration activity, granting of gold-mining licenses to individuals, groups, and registered cooperatives, licensing of buyers, and the establishment of district centres to support applicants.

Minerals Commission Act, 1993 (Act 450) – The Act established the Minerals Commission (MC) as a corporate body and defines its functions and powers to designate areas for ASM and transfer mineral rights: that "Where the Minister, after consultation with the Commission considers that is in the public interest to encourage small-scale mining in the area, the Minister may by notice in the Gazette, design that area for operations and specify the mineral to be mined".

Minerals and Mining Amendment Bill 2014 (Mineral Development Fund Bill) & Minerals and Mining Act 2006 (Act 703) Section 96 -

Act to enable the Minister of Lands and Natural Resources to prescribe the rate of royalty payments (formerly fixed at five percent), and second, to enable the confiscation of equipment used in illegal artisanal and small-scale mining operations.

Act revising and consolidating mining and mineral law. Empowers the minister, after consulting MC, to designate areas for ASM operations. Repeals the Minerals and Mining Act, 1986 (PN DCL 153) and Small-Scale Gold Mining Law, 1989 (PN DCL 218) among others and incorporates existing laws and regulations on the sale of mercury and minerals, use of explosives, requirement for environmental permits, etc.

Water Resources Commission Act, 1996 (Act 552) and Water Use Regulations, 2001 - Regulation of domestic and commercial water use and where MC, in consultation with the EPA, considers the proposed water use to require an environmental management plan. Under Section 17 of the Minerals and Mining Act, 2006 (Act 703), a holder of a mineral right may, subject to obtaining the requisite approvals or licences from the Water Resources Commission under the Water Resources Commission Act, 1996 (Act 552), and for purposes of or ancillary to the mineral operations, obtain, divert, impound, convey and use water from a river, stream, underground reservoir or watercourse within the land the subject of the mineral right.

Energy Efficiency Regulations, 2008 (LI 1932) - The Regulation prohibit the importation as well as the sale, manufacture, and distribution of used refrigerators, freezers, incandescent filament lamp, and air-conditioners.

Other Legislations and Policies

Ghana National Fire Service Act, 1997 (Act 537) - This act makes provision for the management of undesired fires and as per the functions of the service provides technical advice for building plans in respect of machinery and structural layouts to facilitate escape from fire, rescue operations and fire management. Other functions of the service are: organize public fire education programmes; inspect and offer technical advice on fire extinguishers; and offer rescue and evacuation services to those trapped by fire or in other emergencies.

The Fire Precaution (Premises) Regulations, 2003 (LI 1724) - The Ghana National Fire Service Act, 1997 (Act 537) states that a fire certificate will be required for premises used as a public place or place of work. This requirement is reinforced by the Fire Precaution (premises) Regulations, 2003 (LI 1724). It is incumbent on any project developer to ensure that adequate measures are introduced to minimise or prevent fire out breaks and a fire permit is obtained for development prior to the commencement of works.

Local Governance Act, 2016 (Act 936) - The Act seeks to give a fresh expression to government's commitment to the concept of decentralization. It is a practical demonstration of a bold attempt to bring the process of governance to the doorstep of the populace at the regional and more importantly, the district level. The Act establishes metropolitan, municipal and district assemblies as the highest decision-making authority at the local level with powers to enforce zoning and building regulation as well as responsibility of waste management.

Land Use and Spatial Planning Act, 2016 (Act 925) - The Act consolidates the laws on land use and spatial planning. It provides sustainable development of land and human settlements through a decentralized planning system and ensures judicious use of land to improve the quality of life, promote health and safety in respect of human settlements. This gives a clearer direction to ensure compliance and enforcement of development regulations by the Ghanaian society. It will also contribute to a more sustainable and well-functioning land administration system that is fair, efficient, cost effective and decentralized and will enhance land tenure security in the country.

The Act ensures that the exploitative use of natural resources for agriculture, mining, industry, and other related activities do not adversely impact on human settlements and collaborates with relevant agencies (e.g. EPA, MC, FC) to ensure adequate reclamation of natural resources areas which have been exploited.

The Labour Act, 2003 (Act 651) - The purpose of the Labour Act, 2003 (Act 651) is to amend and consolidate existing laws relating to employers, trade unions and industrial relations. The Act provides for the rights and duties of employers and workers; legal or illegal strike; guarantees trade unions the freedom of associations and establishes Labour Commission to mediate and act in respect of all labour issues. Under Part XV (Occupational Health Safety and Environment), the Act explicitly indicates that it is the duty of an employer to ensure the worker works under satisfactory, safe and healthy conditions.

National Gender and Children Policy, 2004 – The Policy aims to mainstream gender and children concerns in the national development in order to improve the social, legal/civic, economic and cultural conditions of the people of Ghana, particularly women and children. The Policy complements all policies and programmes of all sectors and defines structures and key target areas for ensuring that gender concerns

are routinely addressed in planning activities, as well as in the implementation, monitoring and evaluation of programme activities.

Workmen's Compensation Law, 1987 (PNDC 187) - This Act seeks to address the necessary compensations needed to be awarded to workers for personal injuries arising out of and in the course of their employment.

Public Health Act, 2012 (Act 851) – The Act revises and consolidates all the laws and regulations pertaining to the prevention of disease, promote, safeguard and maintain and protect the health of human and animals, and to provide for related matters. The law has merged all provisions in the criminal code, ordinances, legislative and executive instruments, acts, bye-laws of the District Assemblies etc. The Act enjoins the provision of sanitary stations and facilities, destruction of vectors including mosquitoes, protection of water receptacles and the promotion of environmental sanitation.

Tanzania

The Mining Act (1998 and 2010)

Principal legislations in the Mineral sector are the Mining Act, 2010, and the Explosives Act, 1963. The following regulations are made under Mining Act also apply:

- The Mining (Mineral Rights) Regulations, 2010
- The Mining (Environmental Protection for Small Scale Mining) Regulations, 2010
- The Mining (Safety, Occupational, Health and Environmental protection) Regulations, 2010
- The Mining (Mineral Beneficiation) Regulations, 2010
- The Mining (Mineral Trading) Regulations, 2010
- The Mining (Radioactive Minerals) Regulations, 2010
- The Explosives Regulations, 1964

The Mining Act (1998), which is the primary mining law, required any minerals project to have a detailed Environmental Impact Statement (EIS) and Section 10(c) of the Mining Act, 1998 clearly stated that development agreements may contain binding provisions relating to, "environmental matters, including in respect of matters which are project specific and not covered by regulations of general application, provisions intended to define the scope, and as may be appropriate in any particular case, limit the extent of the obligations or liabilities of the holder of a special mining license".

The Mineral Policy (2009) recognizes the need to ensure sustainability in mining and the importance of integrating environmental and social concerns into mineral development programs. The policy highlights the need to balance the protection of flora and fauna and the natural environment with the need for social and economic development.

The Mining Act (2010) together with the national environmental legislation governs the environmental management of mining projects. The Act has been amended to include prospecting activities for small-scale miners and addresses licensing barriers by increasing Primary Mining License (PML) tenure to be processed at regional zonal offices. The Act widens the playing field considerably for artisanal and small-scale miners. Specific regulations were made under the Act requires holders of PMLs to conduct baseline environmental investigation and social studies with regard to human settlement, burial sites, cultural heritage sites, water, vegetation, animals and soil, and prepare an Environmental Protection Plan to mitigate the environmental impacts in the licensed area. PMLs are required to pay all liabilities, including employees' entitlement, mine closure and environmental rehabilitation costs as may be necessary for the termination of mining operations.

The Environmental Management Act No. 20 (2004)

This is a framework legislation governing environmental aspects in Tanzania. It includes provisions for sustainable management of the environment, prevention and control of pollution, environmental quality standards, public participation, and the basis for the implementation of international environmental agreements. The Act sets out the mandates of various actors to undertake enforcement and exercise general supervision and coordination matters relating to the environment. The EMA has established environment units in all ministries and environmental Section's responsibility to ensure that environmental concerns are integrated into the ministry's developmental planning and project implementation in a way that protects the environment. It requires project developers to develop and implement Environmental Management Plans (EMP) as well as monitor any identified environmental issues associated with their project.

The National Environmental Policy (1997)

The NEP provides the framework for incorporating and mainstreaming environmental and social considerations into decision-making in Tanzania. It is a comprehensive attempt to guide the conservation and management of natural resources and the environment and provides for cross-sectoral and sectoral policy guidelines, instruments for environmental policy, and the institutional arrangements for environmental management for determining priority actions and monitoring.

Environmental Impact Assessment and Audit Regulations (2005)

The Mandatory List of Projects requiring EIA includes extractive industry including mining. An in-depth study is required to determine the scale, extent and significance of the impacts and to identify appropriate mitigation if the project is deemed likely to have significant adverse environmental impacts. ASM is included in the schedule of small scale industries that require a Preliminary Environmental Assessment. This preliminary assessment decides whether the Project needs a full environmental impact assessment as the Project is likely to have significant adverse environmental impacts but that the magnitude of the impacts are not well-known.

Environmental Action Plan

The Ministry of Energy and Minerals (MEM), the Vice President's Office and DANIDA produced an Environmental Action Plan 2011 – 2016 for the Minerals Sector in August 2011. The Environmental Action Plan aims to mainstream environmental management activities into the Ministries Policies, Strategies and Plans. Eight key issues/challenges are identified by the Action Plan, as detailed below, and 17 priority actions were identified to tackle these issues, along with targets, indicators and budgets:

- Water and Soil Pollution
- Land Degradation
- Air Pollution
- Disturbance of Biodiversity
- Climate change
- Earthquakes, Flooding and Landslides
- Radioactive Minerals
- Unsecured Mine Closure Liabilities.

Other Legislations and Policies

The Occupational Health and Safety Act No. 5 of 2003.

The role of OSHA is to improve health, safety, and general wellbeing of workers and workplaces by promoting occupational health and safe practices in order to eliminate occupational accidents and diseases, hence achieve better productivity in the workplaces.

The Employment and Labour Relations Act

This Act sets out provisions for fundamental rights and protections, which include forced labor, child labor, discrimination, and freedom of association. It also sets out employment standards, wage parameters, working hours, and dispute regulations, among others. Tanzania overhauled its employment and labor laws in 2004 when it enacted the Employment and Labour Relations Act, Act No. 6 of 2004 and the Labour Institutions Act, Act No. 7 of 2004. While the Employment Act provides for labor standards, rights and duties, the Labour Institutions Act constitutes the governmental organs charged with the task of administering the labor laws. Subsequently, in 2007 several pieces of subsidiary legislation were promulgated to facilitate the enforcement of labor rights and standards stipulated in the Employment Act. The new laws further enact employment and labor standards which, by and large, conform to the labor standards set by the International Labour Organization.

There are a number of policies positively impacting gender. Important among them include the following: (i) Gender Policy, (ii Affirmative Action Policy, (iii) Sexual Offenses Act (1998), and (iv) Action Plan against Gender Based Violence (since 2010). Tanzania is a signatory to the Convention on the Rights of the Child.

Mining Cadastral Information Management System [MCIMS]

Tanzania decided to follow the modern worldwide trends to reform the Mining Act and set up a Mining Cadastre Information Management System. The regulations starting from Mining Act 1998 and 2010 recognized ASM as an activity which could be recognized legally if environmental and social due diligences requirements are met. This allows small miners to get PMLs which then get registered in the cadaster system. The MCIMS allows for improved transparency in the sector along with integration of an Environmental and social database.

National Gender Policy (1999)

The objective of this policy is to provide guidelines to ensure gender sensitive plans, programmes and strategies in all sectors and institutions. The policy gives emphasis on gender equality. The policy aims at establishing strategies on poverty eradication by ensuring that both women and men get access to existing resources for their development. It values the role played by women in bringing about development in society. The education sector is highly committed to gender mainstreaming at all levels, through provision of equal enrolment opportunities to both boys and girls.

The Occupational Health and Safety Act (2003)

The Occupational Safety and Health Act, No. 5 of 2003 deal with regulation on health, safety and welfare of workers at workplaces. It protects workers against risks to their safety or health in connection with the activities of persons at work.

Public Health Act No 1 of 2009

The Act provides for promotion preservation and maintenance of public health and sustainable public health to the general public. Section 168 of the Act provides for ensuring welfare and health of every worker is maintained therefore it is an obligation for proposed establishment under the components to maintain welfare of their workers.

Zambia

National Policy on Environmental Policy (NPE), 2005

Zambia's National Environmental Policy is aimed at promotion of sustainable social and economic development through sound management of the environment and natural resources. The policy seeks, among other things, to: secure for all persons now and in the future an environment suitable for their health and well-being; promote efficient utilization and management of the country's natural resources and encourage, where appropriate long – term self-sufficiency in food, fuel wood and other energy requirements; facilitate the restoration, maintenance and enhancement of the ecosystems and ecological processes essential for the functioning of the biosphere and prudent use of renewable resources; integrate sustainable environment and natural resources management into the decentralized governance systems and ensure that the institutional framework for the management of the environment and natural resources supports environmental governance in local government authorities; enhance public education and awareness of various environmental issues and public participation in addressing them; and promote local community, NGO and private sector participation in environment and natural resource management. The key principles applicable to EHPMP are that:

- every person has a right to a clean and healthy environment;
- every person has a duty to promote sustainable utilization and management of the environment and natural resources, including taking legal action against any person whose activities or omissions have or are likely to have adverse effects on the environment;
- women should effectively participate in policy, program and project design and implementation to enhance their role in natural resource use and management activities;
- there is need to use natural resources sustainably to support long-term food security and sustainable economic growth;
- rational and secure tenure over land and resources is a fundamental requirement for sustainable natural resource management; and
- trade-offs between economic development and environmental degradation can be minimized through use of EIA instruments and environmental monitoring.

Environmental Impact Assessment Regulations, 1997

A developer shall not implement a project for which a project brief or an environmental impact statement is required under these Regulations, unless the project brief or an environmental impact assessment has been concluded in accordance with these Regulations and the Council has issued a decision letter.

The various activities to be undertaken on the project are likely to have environmental and social impacts and this will require that site specific environmental instruments be prepared to eliminate or minimize possible impacts. At national level, In Zambia the Environmental Impact Assessment (EIA) regulation of 1997 gives guidance, schedules and categories the various project types and the relevant EIA studies to undertaken. It further gives provision on post EIA approval management of projects and guidelines for developing Environmental Social Management Plans (ESMP's).

Environmental Management Act, 2011

An Act to continue the existence of the Environmental Council and re-name it as the Zambia Environmental Management Agency; provide for integrated environmental management and the protection and conservation of the environment and the sustainable management and use of natural resources; provide for the preparation of the State of the Environment Report, environmental management strategies and other plans for environmental management and sustainable development; provide for the conduct of strategic environmental assessments of proposed policies, plans and

programmes likely to have an impact on environmental management; provide for the prevention and control of pollution and environmental degradation; provide for public participation in environmental decision making and access to environmental information; establish the Environment Fund; provide for environmental audit and monitoring; facilitate the implementation of international environmental agreements and conventions to which Zambia is a party; repeal and replace the Environmental Protection and Pollution Control Act, 1990; and provide for matters connected with, or incidental to, the foregoing.

Implementation of the project will involve construction and operation. This will require that a site specific environmental instruments be prepared in accordance with the provisions of the ZEMA EIA regulations. Furthermore, during the operational phase of the project, some activities will be required to be licensed by ZEMA in accordance with the compliance requirements of the Environmental Management Act, 2011.

The Solid Waste Management and Regulations Act No. 20 of 2018

An Act to provide for the sustainable regulation and management of solid waste; general and self-service solid waste services; the incorporation of solid waste management companies and define their statutory functions; the licensing and functions of solid waste service providers, operators and self-service solid waste providers and provide for their functions; the regulation, operation, maintenance and construction of landfills and other disposal facilities; the setting and approval of tariffs for management of solid waste and provision of solid waste services. The Act is implemented mainly by the Ministry of Local Government and the Local Authorities. The provisions of this Act will have very significant implication on the waste throughout their lifecycle.

The Urban and Regional Planning Act No. 3 of 2015

An Act to provide for development, planning and administration principles, standards and requirements for urban and regional planning processes and systems; provide for a framework for administering and managing urban and regional planning for the Republic; provide for a planning framework, guidelines, systems and processes for urban and regional planning for the Republic; establish a democratic, accountable, transparent, participatory and inclusive process for urban and regional planning that allows for involvement of communities, private sector, interest groups and other stakeholders in the planning, implementation and operation of human settlement development; ensure functional efficiency and socio-economic integration by providing for integration of activities, uses and facilities; establish procedures for integrated urban and regional planning in a devolved system of governance so as to ensure multi-sector cooperation, coordination and involvement of different levels of ministries, provincial administration, local authorities, traditional leaders and other stakeholders in urban and regional planning; ensure sustainable urban and rural development by promoting environmental, social and economic sustainability in development initiatives and controls at all levels of urban and regional planning; ensure uniformity of law and policy with respect to urban and regional planning; repeal the Town and Country Planning Act, 1962, and the Housing (Statutory and Improvement Areas) Act, 1975.

The Public Health Act, Cap 295

This Act provides for the prevention and suppression of diseases and generally to regulate all matters connected with public health in Zambia.

Other Legislations and Policies

Anti-Gender-Based Violence Act, 2010.

An Act to provide for the protection of victims of gender-based violence; constitute the Anti- Gender-Based Violence Committee; establish the Anti-Gender-Based Violence Fund; and provide for matters connected with, or incidental to, the foregoing.

The project will give priority to vulnerable grouping such as women by engaging them in income generation activities for improved financial security and independence.

Employment Act, 1997

An Act to provide legislation relating to the employment of persons; to make provision for the engagement of persons on contracts of service and to provide for the form of and enforcement of contracts of service; to make provision for the appointment of officers of the Labour Department and for the conferring of powers on such officers and upon medical officers; to make provision for the protection of wages of employees; to provide for the control of employment agencies; and to provide for matters incidental to and consequential upon the foregoing.

During project implementation various individuals will be engaged to perform multiple tasks. This will require that all contractors on the project adhere to the provision of the employment act and the national labour laws. This will be achieved by creating a conducive work environment, treating workers in a humane manner and remuneration is favorable.

Gender Equity and Equality Act, 2015

An Act to establish the Gender Equity and Equality Commission and provide for its functions and powers; provide for the taking of measures and making of strategic decisions in all spheres of life in order to ensure gender equity, equality and integration of both sexes in society; promote gender equity and equality as a cross cutting issue in all spheres of life and stimulate productive resources and development opportunities for both sexes; prohibit harassment, victimisation and harmful social, cultural and religious practices; provide for public awareness and training on issues of gender equity and equality; provide for the elimination of all forms of discrimination against women, empower women and achieve gender equity and equality by giving effect on the Convention on the Elimination of all Forms of Discrimination against Women, the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa and the SADC Protocol on Gender and Development; and provide for matters connected with, or incidental to, the foregoing.

The project will mainstream gender equality into its activities to help groupings such as women and children that are marginalized and are more susceptible to pollution and the environmental health impacts associated with AGSM.

The Citizens Economic Empowerment Act of 2016

The Citizens Economic Empowerment Act, among other things, promotes the economic empowerment of targeted citizens, citizen empowered companies, citizen influenced companies and citizen owned companies. It promotes gender-equality in accessing, owning, managing, controlling and exploiting economic resources as well as removes social customs, statutory provisions or other practices that limit access to any particular gender to skills training that is essential for effective participation in the economic sector. Further, the Act promotes the employment of both gender by removing structural and discriminatory constraints that hinder any particular gender from employment opportunities and in so doing ensure equitable income distribution. Essential to the project, the Act accords special incentives to women such as allocating 30% of the Citizen Economic Empowerment Fund to women owned enterprises.

Human Rights Commission Act, 1996

An Act to provide for the functions and powers of the Human Rights Commission; to provide for its composition and to provide for matters connected with or incidental to the foregoing.

These activities will help protect the rights of residents to live in a nonhazardous environment.

Local Government Act, 1995

An Act to provide for an integrated three tier local administration system; to define the functions of local authorities; to repeal the Local Administration Act and certain related laws; and to provide for matters connected with or incidental to the foregoing.

Project implementation and supervision will involve the Municipality of kabwe. The function of the municipalities are guided by the provision of the Local Government Act.

Non-Governmental Organisations Act, 2009

An Act to provide for the co-ordination and registration of non-governmental organisations; establish the Non-Governmental Organisations' Registration Board and the Zambia Congress of Non-Governmental Organisations; constitute the Council of Non-Governmental Organisations; enhance the transparency, accountability and performance of nongovernmental organisations; and provide for matters connected with or incidental to the foregoing.

Non-Governmental Organizations (NGO's) can be stakeholders in the project. This will require that NGO's are registered, regulated and adhere to ethical practices set by the Non-Government Organizations Registration Board and The Zambia Congress of Non- Governmental Organizations.

Occupational Health and Safety Act, 2010

An Act to establish the Occupational Health and Safety Institute and provide for its functions; provide for the establishment of health and safety committees at workplaces and for the health, safety and welfare of persons at work; provide for the duties of manufacturers, importers and suppliers of articles, devices, items and substances for use at work; provide for the protection of persons, other than persons at work, against risks to health or safety arising from, or in connection with, the activities of persons at work; and provide for matters connected with, or incidental to, the foregoing.

During the implementation of project activities, personnel involved in construction and operation will be required to adhere to best practices with regards to Occupational Health and Safety. Procedures

Kenya

Constitution of Kenya, 2010

The Constitution of Kenya (CoK) 2010 is the supreme law of the Republic and binds all persons and all State organs at all levels of government. In relation to the environment, Article 42 of Chapter four, *The Bill of Rights*, confers to every person the right to a clean and healthy environment, which includes the right to have the environment protected for the benefit of present and future generations through legislative measures, particularly those contemplated in Article 69, and to have obligations relating to the environment fulfilled under Article 70. Section 69 (2) every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources. Section 70 provides for enforcement of environmental rights.

Environmental Management and Coordination Act, 1999 and Amended in 2015

The EMCA of 1999, amended in 2015, is an act of Parliament that provides for the establishment of an appropriate legal and institutional framework for the management of the environment. This Act provides for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto. Part II of the Act states that every person in Kenya is entitled to a clean and healthy environment and has the duty to safeguard and enhance the environment. Part VI of the Act directs that any new program, activity or operation should undergo EIA and a report prepared for submission to the NEMA, who in turn may issue a license as appropriate.

Environmental Impact Assessment and Audit Regulations, 2003

This regulation provides guidelines for conducting EIA and Audits. It offers guidance on field study and outlines the structure of EIA and Audit reports. The legislation further explains the legal consequences of partial or non-compliance to the provisions of the Act.

County Government Act, 2012

The County Government Act, 2012 has been adapted to the Constitution's State and County structure in relation to devolution. In particular, the management and governance of a city and municipality shall be vested in the county government (Article 12, Urban Areas and Cities Act).

The Act empowers the county government to be in charge of planning by coordinating integrated development planning within the county; and ensuring integrated planning within the county Act provides for the following;

- The Constitution confers powers on the County Assemblies to receive and approve plans and policies. These plans and policies affect the management and exploitation of the county's resources, and development and management of its infrastructure and institutions.
- Ensuring and coordinating the participation of communities and locations in governance at the local level and assisting communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.
- Control of air pollution, noise pollution, and other public nuisances.

Other Legislations and Policies

Child Rights Act 2012

This Act of Parliament makes provision for parental responsibility, fostering, adoption, custody, maintenance, guardianship, care and protection of children. It also makes provision for the administration of children's institutions, gives effect to the principles of the Convention on the Rights of the Child and the African Charter on the Rights and Welfare of the Child. Section 15 states that a child shall be protected from sexual exploitation and use in prostitution, inducement or coercion to engage in any sexual activity, and exposure to obscene materials.

Labour Relations Act 2012

An Act of Parliament to consolidate the law relating to trade unions and trade disputes, to provide for the registration, regulation, management and democratization of trade unions and employers organizations or federations, to promote sound labour relations through the protection and promotion of freedom of association, the encouragement of effective collective bargaining and promotion of orderly and expeditious dispute settlement, conducive to social justice and economic development and for connected purposes. This Act in Section II Part 6 provides for freedom of employees to associate; section 7 provides for protection of rights of employees; Part 9 provides for adjudication of disputes and Part 10 provides for protection of the employees to hold strikes and lock outs.

Public Health Policy of 2014-2030

This policy is designed to be comprehensive and focuses on the two key obligations of health: realization of fundamental human rights including the right to health as enshrined in the Constitution of Kenya 2010 and; contribution to economic development as envisioned in Vision 2030; and. It focuses on ensuring equity, people centeredness and a participatory approach, efficiency, a multi sectoral approach, and social accountability in the delivery of healthcare services. The policy embraces the principles of protection of the rights and fundamental freedoms of specific groups of persons, including the right to health of children, persons with disabilities, youth, minorities, the marginalised and older members of the society, in accordance with the Constitution. The public health policy calls upon the project proponents to ensure that buildings are adequately provided with utilities so that they are fit for human habitation. The worker's camps must be provided with all amenities/utilities that are essential for safeguarding public health for all people using the facilities. Also, the policy requires subprojects such as livestock holding areas and slaughter houses are well designed to ensure proper management of solid and liquid waste during the operation phase of the facilities.

Occupational Health and Safety Policy of 2012

This policy is intended to provide safety and health to workers in work places. The proposed subprojects will provide employment opportunities to many workers of various categories. The contractor will be expected to comply with the requirements of this policy when engaging workers in various construction activities. The preliminary environmental management provides mitigation measures that can be undertaken to ensure compliance with the requirements of this policy.

HIV/AIDS Policy of 2009

The policy identifies HIV/AIDS as a global crisis that constitutes one of the most formidable challenges to development and social progress. The Pandemic heavily affects the Kenyan economy through loss of skilled and experienced manpower due to deaths, loss of man hours due to prolonged illnesses, absenteeism, reduced performance, increased stress, stigma, discrimination and loss of institutional memories, among others. Specifically, the policy aims at:

- Setting Minimum Internal Requirements (MIR) for managing HIV and AIDS:
- Establishing and promoting programmes to ensure non-discrimination and non-stigmatization of the infected;
- Contributing to national efforts to minimize the spread and mitigate against the impact of HIV and AIDS;
- Ensuring adequate allocation of resources to HIV and AIDS interventions;
- Guiding human resource managers and employees on their rights and obligations regarding HIV and AIDS.

Kenya National Policy on Gender and Development (NPGD), 2000

The purpose of the Gender Policy is to institutionalize The Kenya National Policy on Gender and Development (NPGD), within Gender, Children and Social Development. It articulates the policy approach of gender mainstreaming and empowerment of women at the ministry level. The policy seeks a society where women, men, children and persons with disabilities enjoy equal rights, opportunities and a high quality of life.

National Gender and Equality Commission Act, 2011

The objective of this policy is to mainstream gender perspectives in the national development process in order to improve equality and related social, legal/civic, economic and cultural conditions in Kenya. The policy encourages integration of measures that ensure gender-specific vulnerabilities and capacities of

men and women are systematically identified and addressed. The implementation of project may create job opportunities; through gender mainstreaming the problem of marginalizing women during employment may be addressed.

The Occupational Safety and Health Act, 2007. The Act provides governance on safe and secure working environment for workers through implementation of appropriate safety measures. The Act species the following mandatory requirement for a contractors to have at a workplace;

- Registration of The Workplace/Construction Site,
- Approval of Building Plans (Site Offices),
- Notice of Appointment of Safety Supervisor,
- Purchase of Abstracts (OSHA 2007, BOWEC)
- Purchase of General Register(s),
- Provision of First Aid Boxes,
- Provision of PPE's,
- Road Signage's & Barrier Tapes,
- Marshalling of Traffic,
- Sanitary Facilities,
- Safe Scaffolding,
- Secured Excavations

Employment Act No 11 of 2007 (Revised 2017)

The Employment Act, 2007 defines the fundamental rights of employees including the basic conditions of employment of workers. It also regulates employment of children.

Senegal

Law n°2001-01 of January 15, 2001 on the Environment Code establishes basic rules for the protection of the environment. It regulates classified installations, addresses water pollution, noise pollution, air pollution and unpleasant odors. It also addresses other aspects such as human settlements, waste management, noxious and dangerous substances and the setup of emergency plans.

Article L 48 of the *Environment Code* defines environmental assessment as a systematic process consisting in assessing possibilities, capacities and functions of resources, natural systems and human systems in order to facilitate sustainable development planning in general and anticipate and manage adverse impacts and consequences of proposed developments in particular. There are 4 types of studies: (i) *Environment impact studies* which apply to project or programs with known components and implementation sites; (ii) the strategic environmental assessment intends to assess environmental impacts of decisions made for policies, plans and programs and their alternatives, and regional and sectoral studies; (iii) audits of regulatory compliance for exploitation units authorized before the 2001 environment code or which had not been subjected to an environmental assessment as provided for by said code; (iv) the initial environmental analysis is intended for projects, often of reduced scope, that might have limited impacts on the environment, which are generally contained to a restricted area and may be mitigated by simple measures.

Decree n°2001-282 of April 12, 2001: the main objective under the legislative section of the Environment Code is to provide rules on priority sectors of environmental management. Thus, the environment code and its application decree represent the base reference in environmental management. These are completed by the Prime Minister Office's Circular n°01 of May 22, 2007 on the application of Environment Code provisions relative to environmental impact studies. In terms of the law per se, it is more specifically articles L49, L50, L51, L52, L53 and L54 that govern environmental impact studies. With regard to potential impacts on the environment and the population, the DEEC recommends conducting the study on environmental and social impact.

Other Legislations and Policies

Law n°2013-10 of December 28, 2013 on the General Code of Local Governments.

Since March 19, 2013, Senegal committed to a reform project of its decentralization policy named "Act III of the decentralization" in order to further local democracy. This reform which is marked by a major restructuring of the State's territorial action has for main objective to "organize Senegal into viable and competitive territories that are vectors of sustainable development".

Based on the territorialization of public policies, the reform aims to build Senegal by developing each territory's full potential, in a multi-actor and multi-level approach that will guarantee the participation of all territorial actors. It thus embodies a shift in favor of the strengthening of decentralization and the renewal of regional development policy.

Due to its complexity and its lasting impact on the future of the country, Act III of the decentralization is implemented incrementally and will be deployed in several phases in an iterative, cumulative and inclusive approach.

Thus, law n°2013-10 of December 28, 2013 on the General Code of Local Governments (CGCL) sets the first phase of the reform. The CGCL repeals and replaces laws n°96-06 on the Code of Local Governments, n°96-07 on knowledge transfer to regions, municipalities and rural communities and n°96-09 of March 22, 1996 which sets the administrative and financial organization of the neighboring community ("commune d'arrondissement") and its relationship to the City. These texts specify that the "local government manages the environment inside its own perimeter".

Law n°83-71 of July 5, 1983 on the Public Health Code essentially regulates individual or collective public health and sanitation of the environment. The law defines, among other things, sanitation rules applicable to housings, industrial installations, public roads and waste disposal. EHPMP is concerned by this public health code in that compliance with sanitation rules is an obligation for all actors involved in the project: local governments, enterprises, populations, decentralized services, etc.

Law n°2016 of November 8, 2016 on the Mining Code repeals law n°2003-36 of November 24, 2003 on the Mining Code and its application decree n°2004-647 of May 17, 2004 which regulates all mining activities at the national level. This law regulates the prospection, research and exploitation of mines and quarries.

Law n°81-13 of March 4, 1981 on the Water Code provides various provisions designed to fight against water pollution while reconciling demands related to drinking water supply and public health, to agriculture, biological life of the receptor medium and the fish fauna, site protection and water conservation.

Decree n°2006 – 1249 du 15/11/2006 fixing the minimum safety and health requirements for temporary and mobile sites

Article 3 The client appoints one or more safety and health coordinators for a site where several companies will be present. The client or project manager ensures that a safety and health plan is drawn up prior to the opening of the site in accordance with the provisions of article 5 of this decree.

Article 4 Obligation for the project owner or project manager to communicate by prior notice, prepared in accordance with Annex III, to the Labor and Social Security Inspector of the jurisdiction before the start of work for any site whose estimated duration of work is greater than thirty (30) working days and which employs more than ten (10) workers simultaneously.

Article 9 During the construction of the infrastructures, the prescriptions fixed by this decree must be implemented, in particular with regard to: a) the maintenance of the site in good order and in a satisfactory state of sanitation; b) the choice of the location of the workstations, taking into account the conditions of access to these workstations, and the determination of lanes or areas of movement or circulation; c) the conditions for handling the various materials; d) maintenance, control before commissioning and periodic control of installations and devices in order to eliminate faults likely to affect the safety and health of workers; e) the delimitation and arrangement of the storage and warehousing areas for the various materials, in particular if they are hazardous materials or substances; f) the conditions for the removal of the hazardous materials used; g) storage and disposal or disposal of waste and rubble; h) the adaptation, depending on the development of the site, of the effective time to be devoted to the different types of work or work phases; i) cooperation between employers and the self-employed; j) interactions with operating activities on the site inside or near which the site is located.

Article 12 Workers and / or their representatives are informed of all the measures to be taken with regard to their safety and health on the site. The information must be understandable to the workers concerned.

Article 13 The consultation and participation of workers and / or their representatives must take place on all questions relating to the adoption and implementation of rules for the prevention of occupational risks on construction sites.

Law No. 97-17 of December 1, 1997 on the Labor Code

Article L 171 The employer must ensure that the workplaces, machines, materials, substances and work processes under his control do not pose a risk to the health and safety of workers by technical measures, organization of occupational medicine, organization of work .

Article L 172 When measures taken under article L.171 are not sufficient to guarantee the safety or health of workers, Individual Protection measures against professional risks must be implemented Article L 174 Any use of substances or processes resulting in the exposure of workers to professional risks must be brought to the attention of the labor and social security inspector.

Article L 175 Submission of workplaces to regular surveillance to verify the safety of equipment and installations as well as the health risks at workplaces. Article L 176 Subject workers to periodic medical examinations.

Article L 177 All workers must be fully informed of occupational risks and must receive adequate instructions as to the means available, the procedures to be followed to prevent these risks and protect themselves against them Article L 178 Periodic report on the state of health of workers by the employer.

Decree 94-244 of 07 March 1994 establishing the organization and functioning of the occupational health and safety committee

Article 1 Obligation for any company which has a workforce of 50 employees to set up a Health and Safety Committee at Work.

Article 2 In establishments other than those where the establishment of a Health and Safety Committee Work is compulsory, the Labor and Social Security Inspector of the area can prescribe the creation and organization of a Work Health and Safety Committee, in particular because of the nature of the work, the layout or equipment of work premises. In the event of non-compliance with this prospect, the employer is given notice by the Labor and Social Security Inspector to comply within a minimum period of fifteen (15) days.

Article 3 The Occupational Health and Safety Committee includes: - the head of the establishment or his representative: President; - the head of the security service or the security officer: Secretary; - the occupational doctor of the establishment or the inter-company medical service; - three (3) workers co-opted by the three (3) above-mentioned based on their knowledge of the work environment and generally their knowledge of health and safety. These may be replaced on the committee by alternates appointed under the same conditions. The list of names of committee members must be posted in the premises assigned to the work. The employer must ensure the continuing training of committee members in health and safety.

Article 4 The members of the occupational health and safety committee are appointed for a period of three (3) years. Their mandate is renewable.

Article 5 The mission of the occupational health and safety committee is to:

1. - contribute to the protection of the health and safety of employees of the establishment and those made available to it by an external establishment including temporary workers, as well as improving working conditions;

2. - to carry out or to have carried out an investigation on the occasion of each industrial accident or serious occupational disease, which has led to death or which seems to result in permanent disability or which has revealed the existence of a danger serious following a series of repeated accidents or accidents involving several workers;

3. - to ensure the application of the legislative and regulatory prescriptions and the instructions concerning health and safety as well as the good maintenance of the protection provisions, in particular those relating to the first aid box provided for by article 163 the Labor Code;

4. - to organize with the competent services and the approved organizations, the training of the teams in charge of the fire and rescue services and to see that the instructions of these services are observed; 5. - to develop the safety reflex at the level of the workers and to collect from them any suggestion contributing to the improvement of hygiene, safety and working conditions. Preventive actions can be proposed for this purpose, if the employer is unable to implement them, he must justify his decision. The occupational health and safety committee is informed of any major planning decision modifying health and safety conditions.

Article 7 The Occupational Health and Safety Committee meets at least once a quarter on the initiative of its chairman. It is also convened either following any accident which resulted in or which could have resulted in serious consequences. Or at the motivated request of two of its members. The draft agenda for each meeting of the occupational health and safety committee is drawn up by the chairman and sent

to the committee members and the relevant labor inspector at least three (3) days before the meeting. If the functioning of the committee is blocked or at the request of at least half of its members, the committee may be convened by the relevant Labor Inspector and sit under its chairmanship. The committee may also meet on the initiative of the relevant Labor Inspector.

Article 11 The Committee proceeds to the inventory of all dangerous products, as well as an analysis and an evaluation of real or potential risks.

Article 12 Obligation to keep a health, hygiene and safety register where are mentioned: minutes of meetings, statistics of accidents and occupational diseases, means of intervention and evacuation.

Decree 2006-1258 of 15 November 2006 setting the missions and the rules of organization and operation of occupational health services

Article 40 Obligation of a medical examination at least once a year for employees Article 41 Special medical surveillance on employees assigned to certain work involving special requirements or risks.

Article 2 The occupational health services are provided by one or more doctors who take the name of "occupational doctor" and whose role, essentially preventive, consists in avoiding any deterioration in the health of workers due to their work, in particular by monitoring the conditions of industrial hygiene, the risks of contagion and the state of health of the workers.

Article 29 In each workshop, site or department where dangerous work is carried out, a member of staff must have received the necessary instruction to give first aid in the event of an emergency. Article 30 The occupational doctor is the adviser to the head of the company or his representative, employees, representatives, staff, social services with regard to, in particular:

- the improvement of living and working conditions in the establishment;

- the adaptation of positions, techniques and work rhythms to human physiology;

- the protection of employees against all nuisances and, in particular, against the risk of accidents at work or the use of dangerous products

- the general hygiene of the establishment;

- health prevention and education within the framework of the establishment, in relation to professional activity.

In order to carry out these missions, the industrial doctor conducts actions in the workplace and performs medical examinations.

Decree 2006-1261 relating to general health and safety measures

Article 48 The employer must: - take the necessary measures in first aid, fire-fighting and evacuation of workers, adapted to the nature of the activities and the size of the establishment and taking into account the presence of other people; - organize the necessary relations with external services, in particular in the fields of first aid, emergency medical assistance, rescue and fire-fighting.

Decree 2006-1256 - relating to the obligations of employers in OHS

Article 6 The employer shall take the measures necessary to ensure the promotion of the safety and health of workers, including the prevention of occupational risks, information and training, as well as the establishment of an organization and necessary means.

Loi n° 2010-11 from May 28 2010 (Gender Parity law) aiming to achieve equal female-male ratio in all elections, national, regional or local levels.

Law n°2008-43 of August 20, 2008 on the Urban Planning Code, complemented by decree n°2009-1450 of December 30, 2009. The urban planning code sets construction standard rules and regulates urban plans in three categories: the planning scheme, the master urban plan and the detailed urban plan. The master and the detailed urban plans determine the distribution and organization of surfaces of the urban zone, communication routes, sites reserved for public service, installations of general interest, free spaces, construction rules and servitudes, zoning requirements, etc. The project is concerned by this law and will have to conform to these planning instruments.

The **discharge standards** that may be relevant for the project are:

- Senegalese Standard NS05-061 on the protection of the environment and the population against harmful or unpleasant air pollution and the inter-ministerial decree n°7358 of November 5, 2003 which provides conditions of its application. The NS05-061 addresses conditions of waste water disposal on the national territory. Waste water discharges which may affect the quality of surface waters, ground waters or the sea are prohibited. The standard thus defines rules and modalities for the discharge of waste waters on the Senegalese territory.
- Senegalese Standard NS05-062, on the discharge of waste waters and the inter-ministerial decree n°1555 of March 15, 2002 which provides conditions of its application. This standard defines general conditions under which air discharges must take place. Air pollution is primarily caused by discharged substances from various sectors of activity. The standard addresses all sectors likely to produce pollutants and establishes conditions that must be observed for the protection of the environment and of populations.

It must be noted, however, that noise pollution is addressed by article R84 of the Environment Code which provides that "the maximum noise thresholds not to be exceeded, beyond which the human organism may be exposed to dangerous consequences, are fifty-five (55) to sixty (60) decibels during daytime and forty (40) decibels at night".

Nomenclature of classified installations for the protection of the environment

The nomenclature establishes the classification of establishments into classes based on the dangers or the severity of harm caused by their exploitation: establishments that must be distant from inhabited areas; those whose distance from inhabited areas is not rigorously necessary, but which exploitation may only be authorized under the condition that measures be implemented to prevent dangers or nuisances; establishments which, although they do not present any severe drawback for the neighborhood or for the public health, are only subjected to general provisions issued for the benefit of the neighborhood or the public health to all such establishments. Establishments that are dangerous, unhealthy or inconvenient may not operate without an authorization from the Environment Minister. Classified establishments are either subjected to authorizations, to registration or to affidavits depending on the nature of the activity.

Sectoral referential guides for ESIA

The document on Sectoral referential guides on environmental impact studies published in November 2006 by the DEEC is presented as a sectoral reference document which summarizes the body of information that regulates activities of ESIA execution entities (engineering firms in charge of ESIA) in Senegal and particularly those dealing with procedures. The guide is composed of two major parts: the first part provides general provisions including the mandate, status and composition of the execution entity, work modalities of the execution entity and procedures applicable to ESIA; the second part consists of specific provisions that provide particular conditions for the conduct of ESIA by various sectors of activities. Guide update mechanisms are planned but have never been implemented.

In practice, these guides are very seldom used for several reasons: inadequate sharing and outreach; difficulty of use in light of the current progress of ESIAs; etc. They thus should be updated and distributed among actors, namely ESIA professionals.

Guide on the study of danger

The objective of the Guide on the study of danger is to report on the review conducted by the operator of an establishment in order to characterize, analyze, assess, prevent and reduce risks of an installation or group of installations, as long as it is technologically feasible and economically acceptable, whether its causes are intrinsic to products used, linked to implemented processes or due to proximity with other internal or external risks of the installation. It specifies all the risk-containment measures implemented in the establishment, which reduce the risk inside and outside of the establishment to a level deemed acceptable by the operator.

Annex II. World Bank ESF Risk Categories

High Risk

A Project is classified as High Risk after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.

a. The Project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics:

- i) long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project;
- ii) high in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large);
- iii) significant adverse cumulative impacts;
- iv) significant adverse transboundary impacts; and
- v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.);

b. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.

c. Some of the significant adverse E&S risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.

d. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security.

e. There is a history of unrest in the area of the Project or the sector, and there may be significant concerns regarding the activities of security forces.

f. The Project is being developed in a legal or regulatory environment where there is significant uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.

g. The past experience of the Borrower and the implementing agencies in developing complex Projects is limited, their track record regarding ES issues would present significant challenges or concerns given the nature of the Project's potential risks and impacts.

h. There are significant concerns related to the capacity and commitment for, and track record of relevant Project parties, in relation to stakeholder engagement.

i. There are a number of factors outside the control of the Project that could have a significant impact on the ES performance and outcomes of the Project.

Substantial Risk

A Project is classified as Substantial Risk after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.

a. the Project may not be as complex as *High Risk* Projects, its E&S scale and impact may be smaller (large to medium) and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This would take into account whether the potential risks and impacts have the majority or all of the following characteristics:

- they are mostly temporary, predictable and/or reversible, and the nature of the Project does not preclude the possibility of avoiding or reversing them (although substantial investment and time may be required);
- ii) there are concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm or risks to human security;
- iii) they are medium in magnitude and/or in spatial extent (the geographical area and size of the population likely to be affected are medium to large);
- iv) the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for *High Risk* Projects; and
- v) there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents;

b. The effects of the Project on areas of high value or sensitivity are expected to be lower than *High Risk* Projects.

c. Mitigatory and/or compensatory measures may be designed more readily and be more reliable than those of *High Risk* Projects.

d. The Project is being developed in a legal or regulatory environment where there is uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.

e. The past experience of the Borrower and the implementing agencies in developing complex Projects is limited in some respects, and their track record regarding E&S issues suggests some concerns which can be readily addressed through implementation support.

f. There are some concerns over capacity and experience in managing stakeholder engagement but these could be readily addressed through implementation support.

Moderate Risk

A Project is classified *as* Moderate Risk after considering, in an integrated manner, the risksand impacts of the Project, taking into account the following, as applicable:

a. the potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the Project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics:

- i) predictable and expected to be temporary and/or reversible;
- ii) low in magnitude;
- iii) site-specific, without likelihood of impacts beyond the actual footprint of the Project; and
- iv) low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).
- b. The Project's risks and impacts can be easily mitigated in a predictable manner.\

Low Risk

A project is classified as Low Risk if its potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These Projects, with few or no adverse risks and impacts and issues, do not require further E&S assessment following the initial screening.

Annex III. Outline of Environmental and Social Assessment Report

The objectives the Environmental and Social Impact Assessment are to:

- Establish the baseline conditions of the study area through a combination of desk review, consultations and site visits taking account of any committed development projects which could change the baseline in the future;
- Identify environmental constraints and opportunities associated with the study area which may influence, or be affected by the proposed technologies;
- Identify and assess any environmental impacts (both positive and negative) which could result from the proposed project;
- Identify and incorporate into project design and operation, features and measures to avoid or mitigate adverse impacts and enhance beneficial impacts; and
- Assess the level of significance of all residual effects (direct and indirect, adverse and beneficial, short-term and long-term, permanent and temporary) taking into account of the proposed mitigation measures

The ESIA should at minimum encompass the following:

- 1. Executive summary
- 2. Legal and Regulation Framework
 - Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26.
 - Comparison between the Borrower's existing environmental and social framework and the ESSs, identification of the gaps between them and measures to fill the gaps.
 - Compliance with World Bank Group Environmental, Health and Safety Guidelines
 - Where applicable, Identification and assessment of the environmental and social requirements of any co-financiers.

3. Project Description

Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project's primary suppliers. Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS1 through 10. Includes a map of sufficient detail, showing the project site and the area that may be affected by the project's direct, indirect, and cumulative impacts.

For the EHPMP, this should also describe the criteria for selection of the e-waste and mercury reduction technology selected, the various options/alternatives considered and a description of selected the technology.

- 4. Baseline Data
 - Identified the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include estimation of the extent and quality of available data, key data gaps, and uncertainties associated with predictions.

- Based on current information, assesses the scope of the area to be studied and describe relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences.
- Takes into account current and proposed development activities within the project area but not directly connected to the project.
- Site investigation results
- 5. Alternatives analysis
 - Site selection criteria
 - For each of the alternatives, quantify the environmental and social impacts to the extent possible, and attaches economic values where feasible.
 - With and without Project scenario
 - Description of selected site
 - Feasibility of project in selected site i.e environmental, social and economic
- 6. E&S Risks and Impacts

This should take into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2–8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28. It should include the positive environmental and social outcomes as well.

7. Mitigation Measures

Identifies mitigation measures to manage the environmental and social impacts and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts. Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable. Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the proposed mitigation measures. Specifies issues that do not require further attention, providing the basis for this determination. Covers Environmental and workers health and safety measures.

Includes a monitoring plan identifying parameters to be monitored, frequency and responsible authority.

- 8. Key Measures and Actions for the Environmental and Social Commitment Plan (ESCP) Identifies key measures and actions and the timeframe required for the project to meet the requirements of the ESSs. This will be used in developing the Environmental and Social Commitment Plan (ESCP).
- Public consultation and information disclosure Stakeholder engagement plan Grievance Redress System
- 10. Institutional Arrangements and Reporting

Annexes

- List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
- References—setting out the written materials both published and unpublished, that have been used.
- Record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties.

Annex IV. Outline of Environmental and Social Management Plan

Based on the requirements laid out in the ESMF, the ESMP for the pilot projects should describe the mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social risks and impacts. The ESMP should also include the measures and actions needed to implement these measures.

The ESMP should at minimum encompass the following:

- 1. Objectives of the ESMP
- 2. Project Description

This summarizes the project and provides maps map of sufficient detail, showing the project site and the area that may be affected by the project's direct and indirect impacts.

3. Mitigation Measures

This should identify and summarize all anticipated adverse environmental and social impacts and describe with technical details each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate. It should also estimate any potential environmental and social impacts of these measures.

4. Monitoring Plan

This should identify the monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the ESIA and the mitigation measures described. This is meant to provide (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

5. Capacity Development and Trainings

This should provide a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

6. Implementation Schedule and Cost Estimates

For all three aspects (mitigation, monitoring, and capacity development), the ESMP should include (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

7. Integration of ESMP with Project

The individual mitigation and monitoring measures and actions and the institutional responsibilities relating to each, and the costs of so should be integrated into the project's overall planning, design, budget, and implementation and maybe reflected in the ESCP.

8. Legal requirements and bidding/contract documents

The EMP should be incorporated in all legal documents to enforce compliance by all contractors participating in the project. The EMP should be summarized and incorporated in the bidding and contract documents.

Annexes

Labor Management Plan Stakeholder Engagement Plan including GBV prevention strategy Any other site specific plan required

Annex V. E&S Specifications for Contractors

General

In order to prevent harm and nuisances on local communities, and to minimize the impacts on the environment during construction and installation of the pilots under the EHPMP, the Contractor and his employees shall adhere to the mitigation measures set down in:

- ESIA
- Site Specific ESMP
- The specifications, procedures, and best practices included in this Annex. These specifications complement any technical specifications included in the work quantities and the requirements of the country's regulations
- **Contractor's ESMP:** The Contractor is required to submit a construction ESMP (CESMP)) as part of his proposed Construction Method Statements prepared as part of his Bid document and/or during construction phase. The Contractor's CESMP shall provide details such as Contractor's commitment to environmental protection; methodology of implementing the project ESMP; environmental mitigation measures and monitoring program during different stage of the construction period, and the contractor's proposed resources for the implementation of the ESMP.

The Contractor and his employees shall adhere to the mitigation measures set down in these specifications to prevent harm and nuisances on local communities, and to minimize the impacts in construction and operation on the environment.

Code of Conduct

A Code of Conduct shall be established to outline the importance of appropriate behavior, drug and alcohol abuse, and compliance with relevant laws and regulations. Each employee shall be informed of the Code of Conduct and bound by it while in the employment of the Contractors. The Code of Conduct shall be available to local communities at the project information centers or other place easily accessible to the communities.

The Code of Conduct shall address the following measures (but not limited to them):

- All of the workforce shall abide by the laws and regulations of the country;
- Reporting of work situations that are believed not to be safe or healthy;
- Treating other people with respect, and not discriminating against specific groups such as women, people with disabilities, migrant workers or children;
- Illegal substances, weapons and firearms shall be prohibited;
- Pornographic material and gambling shall be prohibited;
- Fighting (physical or verbal) shall be prohibited;
- Creating nuisances and disturbances in or near communities shall be prohibited;
- Disrespecting local customs and traditions shall be prohibited;
- Smoking shall only be allowed in designated areas;
- Maintenance of appropriate standards of dress and personal hygiene;
- Requirement of completion of relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation, and Sexual Abuse (SEA)
- Failure to comply with the Code of Conduct, or the rules, regulations, and procedures implemented at the construction camp will result in disciplinary actions.

Prohibitions

The following activities shall be prohibited on or near the project site.

- Cutting of trees for any reason outside the approved area;
- Hunting, fishing, wildlife capture, or plant collection;
- Buying of wild animals for food;
- Feeding of wild animals;
- Use of unapproved toxic materials, including lead-based paints, asbestos, etc.;
- Disturbance to anything with architectural or historical value;
- Building of fires;
- Use of firearms;
- Use of alcohol by workers in office hours;
- Washing cars or machinery in streams or creeks;
- Doing maintenance (change of oils and filters) of cars and equipment outside authorized areas:
- Disposing trash in unauthorized places;
- Driving in an unsafe manner in local roads;
- Working without safety equipment (including boots and helmets);
- Creating nuisances and disturbances in or near communities;
- The use of rivers and streams for washing clothes;
- Indiscriminate disposal of rubbish or rehabilitation wastes or rubble;
- Littering the site;
- Spillage of potential pollutants, such as petroleum products;
- Collection of firewood;
- Poaching;
- Explosive and chemical fishing;
- Latrine outside the designated facilities;
- Burning of wastes and/or cleared vegetation;
- Engaging in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other unwanted verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
- Engaging in sexual exploitation, rape or sexual abuse;
- Engaging in any form of sexual activity with individuals under the age of 18, except in case of preexisting marriage.

Transport

The Contractor shall use selected routes to the project site, as agreed with the impelenting agency, and appropriately sized vehicles suitable to the class of roads in the area, and shall restrict loads to prevent damage to local roads and bridges used for transportation purposes. The Contractor shall be held responsible for any damage caused to local roads and bridges due to the transportation of excessive loads, and shall be required to repair such damage to the approval of the implementing agency.

The Contractor shall not use any vehicles, either on or off road with grossly excessive, exhaust or noise emissions. In any built up areas, noise mufflers shall be installed and maintained in good condition on all motorized equipment under the control of the Contractor.

Adequate traffic control measures shall be maintained by the Contractor throughout the duration of the Contract and such measures shall be subject to prior approval of the implementing agency.

Waste Management:

Solid, sanitation, and, hazardous wastes must be properly controlled, through the implementation of the following measures:

Waste Management:

- 1. Minimize the production of waste that must be treated or eliminated.
- 2. Identify and classify the type of waste generated. If hazardous wastes are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal.
- 3. Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each.
- 4. Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands). Dispose in authorized areas all of garbage, metals, used oils, and excess material generated during construction, incorporating recycling systems and the separation of materials.

Erosion Control:

- Disturb as little ground area as possible, stabilize that area as quickly as possible, control drainage through the area, and trap sediment onsite.
- Conserve topsoil with its leaf litter and organic matter and reapply this material to local disturbed areas to promote the growth of local native vegetation.
- Apply local, native grass seed and mulch to barren erosive soil areas or closed construction surfaces.
- Apply erosion control measures before the rainy season begins preferably immediately following construction. Install erosion control measures as each construction site is completed.
- In all construction sites, install sediment control structures where needed to slow or redirect runoff and trap sediment until vegetation is established. Sediment control structures include windrows of logging slash, rock berms, sediment catchment basins, straw bales, brush fences, and silt
- Control water flow through construction sites or disturbed areas with ditches, berms, check structures, live grass barriers, and rock
- Maintain and reapply erosion control measures until vegetation is successfully established.
- Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind-induced erosion, as needed

Maintenance:

Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands). Fuel storage shall be located in proper areas and approved by the Project Engineer.

Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems.

All spills and collected petroleum products shall be disposed of in accordance with standard environmental procedures/guidelines. Fuel storage and refilling areas shall be located at least 300m from all cross drainage structures and important water bodies or as directed by the supervising Personnel.

Disposal of Construction and Vehicle Waste

The Contractor shall establish and enforce daily site clean-up procedures, including maintenance of adequate disposal facilities for construction debris

Debris generated due to the dismantling of the existing structures shall be suitably reused, to the extent feasible, in the proposed construction. The disposal of remaining debris shall be carried out only at sites identified and approved by the Supervising Personnel. The contractor should ensure that these sites (a) are not located within designated forest areas; (b) do not impact natural drainage courses; and (c) do not impact endangered/rare flora. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas.

In the event any debris or silt from the sites is deposited on adjacent land, the Contractor shall immediately remove such, debris or silt and restore the affected area to its original state to the satisfaction of the Supervising Personnel.

All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, where necessary, will be considered incidental to the work and should be planned and implemented by the contractor as approved.

Safety during Construction

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- Conduct safety training for construction workers prior to beginning work;
- Provide personal protective equipment and clothing (goggles, gloves, respirators, dust masks, hard hats, steel-toed and –shanked boots, etc.,) for construction workers and enforce their use;
- During heavy rains or emergencies of any kind, suspend all work.

Dust Control

To control nuisance and dust the Contractor should:

- 1. Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people (children, elders).
- 2. The Contractor shall ensure that the generation of dust is minimized and shall implement a dust control program to maintain a safe working environment, minimize nuisance for surrounding residential areas/dwellings and protect damage to natural vegetation, crops, etc;
- 3. Construction vehicles shall comply with speed limits and haul distances shall be minimized;
- 4. Material loads shall be suitably covered and secured during transportation;
- 5. Exposed soil and material shall be protected against wind erosion and the location shall take into consideration the prevailing wind directions and locations of sensitive receptors;

Community Relations

To enhance adequate community relations the Contractor shall:

1. Inform the population about construction and work schedules, interruption of services, traffic detour routes as appropriate.

2. Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.

Physical Cultural Property Chance-finds Procedures

If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

- Stop the construction activities in the area of the chance find;
- Delineate the discovered site or area;
- Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the National Culture Administration take over;
- Notify the supervisory Personnel who in turn will notify the responsible local authorities and the National Culture Administration immediately (within 24 hours or less);
- Responsible local authorities and the National Culture Administration would be in charge of
 protecting and preserving the site before deciding on subsequent appropriate procedures. This
 would require a preliminary evaluation of the findings to be performed by the archeologists of
 National Culture Administration. The significance and importance of the findings should be assessed
 according to the various criteria relevant to cultural heritage; those include the aesthetic, historic,
 scientific or research, social and economic values;
- Decisions on how to handle the finding shall be taken by the responsible authorities and National Culture Administration. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
- Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
- Construction work could resume only after permission is given from the responsible local authorities or National Culture Administration concerning safeguard of the heritage.

Hazardous Materials

If the construction site is expected to have or suspected of having hazardous materials the Contractor will be required to prepare a Hazardous Waste Management Plan to be approved by the Implementing agency. The plan should be made available to all persons involved in operations and transport activities. Removal and disposal of existing hazardous wastes in project sites should only be performed by specially trained personnel following national or provincial requirements, or internationally recognized procedures

Eating areas

- If none is available, the Contractor shall provide adequate temporary shade within the site to ensure that site personnel do not move off site to eat;
- The Contractor shall provide adequate refuse bins at all eating areas;
- If deemed necessary the Contractor shall demarcate designated eating areas.

Ecological Considerations Protection of Natural Vegetation

- The Contractor shall be responsible for informing all employees about the need to prevent any harmful effects on natural vegetation on or around the rehabilitation site as a result of their activities;
- Clearing of natural vegetation shall be kept to a minimum;
- The removal, damage and disturbance of natural vegetation without the written approval of the Supervising Personnel are prohibited;
- The use of herbicides shall be approved by the Supervising Personnel;
- Regularly check the work site boundaries to ensure that they are not exceeded and that no damage occurs to surrounding areas;
- Prohibit and prevent open fires during rehabilitation and provide temporary firefighting equipment in the work areas, particularly close to forest areas;
- Some tress might be of value for the communities and may not be cut, disturbed, damaged, destroyed and their products may not be possessed, collected, removed, transported, exported, donated, purchased or sold except under license granted a delegated authority.

Protection of Fauna

- The Contractor shall ensure that no hunting, trapping, shooting, poisoning or otherwise disturbance of any fauna takes place;
- The feeding of any wild animals shall be prohibited;
- The use of pesticides shall be approved by the Supervising Personnel;
- No domestic pets or livestock shall be permitted on site.

Grievance Redress Mechanism

The contractor shall develop a GRM for workers and community members to express concerns about the works. The GRM system should be easily accessible. For GBV cases, the GRM shall be designed in a way to keep strict confidentiality. All workers shall be trained about the GRM process and the contractor shall prove that each employee has been inducted with signatures to show that they have been inducted on the procedure. If the dispute is not resolved at the workplace, other resolutions mechanisms provided for in the labor legislations can be utilized.

All complaints received shall be recorded. The Implementing Agency and Supervising Personnel should be informed about the complaints when they are received. A mechanism shall be put in place to resolve the compliant swiftly.

Health Services, HIV/AIDS Education

The Contractor shall provide basic first aid services to the workers as well as emergency facilities for work related accidents including medical equipment suitable for treatment likely to be required prior to transportation to hospital.

The Contractor shall send, to the Implementing Agency and Supervising Personnel details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Engineer may reasonably require.

The Contractor shall conduct an HIV-AIDS awareness program via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

The Contractor shall conduct information and education campaigns addressed to all the site staff and labor (including all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)-or Sexually Transmitted Infections.

First Aid Facilities

Medical and first aid facilities shall be make available for workers. First aid box shall be provided at the construction site and under the charge of a responsible person who shall always be readily available during working hours of the work place. He/she shall be adequately trained in administering first aid-treatment. Formal arrangement shall be prescribed to make motor transport available to carry injured person or person suddenly taken ill to the nearest hospital.

Environmental Emergency Procedures

The possibility exists for environmental emergencies of an unforeseen nature to occur during the course of the construction and operational phases of the project;

- By definition, the nature of such emergencies cannot be known. Therefore, the Contractor shall
 respond on a case-by-case basis to such emergencies and shall initiate event-specific measures in
 terms of notifications and reactions;
- The Contractor shall prepare a report on the incident detailing the accident, clean-up actions taken, any pollution problems and suggested measures to prevent similar accidents from happening again in future. The incident report shall then be submitted to the Implementing Agency and Supervising Personnel for review and records.

Environmental Training and Awareness

The Contractor should ensure that all concerned staff are aware of the relevant environmental requirements as stipulated in local environmental legislation and the Contract specifications. The Contractor is responsible for providing appropriate training to all staff. This should be tailored to suit their level of responsibility for environmental matters. The Contractor should also ensure that all site staff members are aware of the emergency response procedures. All staff should receive environmental induction training and managerial staff should receive additional training. The training materials should be reviewed by the Implementing Agency and Supervising Personnel.

Annex VI. Outline of Stakeholder Engagement Plan

The scope and level of detail of the plan should be commensurate and proportionate with the nature and scale, potential risks, and impacts of the project and the concerns of the stakeholders who may be affected by or are interested in the project.

The SEP should be clear and concise, and focus on describing the project and identifying its stakeholders. It is key to identify what information will be in the public domain, in what languages, and where it will be located. It should explain the opportunities for public consultation, provide a deadline for comments, and explain how people will be notified of new information or opportunities for comment. It should explain how comments will be assessed and taken into account. It should also describe the project's grievance mechanism and how to access this mechanism. The SEP should also commit to releasing routine information on the project's environmental and social performance, including opportunities for consultation and how grievances will be managed.

1. Introduction/Project Description

Briefly describe the project, the stage of the project, its purpose, and what decisions are currently under consideration on which public input is sought. Describe location and, where possible, include a map of the project site(s) and surrounding area, showing communities and proximity to sensitive sites, and including any worker accommodation, lay-down yards, or other temporary activities that also may impact stakeholders. Provide a link to, or attach a nontechnical summary of, the potential social and environmental risks and impacts of the project.

2. Brief Summary of Previous Stakeholder Engagement Activities

If consultation or disclosure activities have been undertaken to date, including information disclosure and informal or formal meetings/or consultation, provide a summary of those activities (no more than half a page), the information disclosed, and where more detailed information on these previous activities can be obtained (for example, a link, or physical location, or make available on request).

3. Stakeholder identification and analysis

Identify key stakeholders who will be informed and consulted about the project, including individuals, groups, or communities that:

- Are affected or likely to be affected by the project (project-affected parties); and
- May have an interest in the project (other interested parties).

Depending on the nature and scope of the project and its potential risks and impacts, examples of other potential stakeholders may include government authorities, local organizations, NGOs, and companies, and nearby communities. Stakeholders may also include politicians, labor unions, academics, religious groups, national social and environmental public-sector agencies, and the media.

3.1. Affected parties

Identify individuals, groups, local communities, and other stakeholders that may be directly or indirectly affected by the project, positively or negatively. The SEP should focus particularly on those directly and adversely affected by project activities. Mapping the impact zones by placing the affected communities within a geographic area can help define or refine the project's area of influence. The SEP should

identify others who think they may be affected, and who will need additional information to understand the limits of project impacts.

3.2. Other interested parties

Identify broader stakeholders who may be interested in the project because of its location, its proximity to natural or other resources, or because of the sector or parties involved in the project. These may be local government officials, community leaders, and civil society organizations, particularly those who work in or with the affected communities. While these groups may not be directly affected by the project, they may have a role in the project preparation (for example, government permitting) or be in a community affected by the project and have a broader concern than their individual household.

Moreover, civil society and nongovernmental organizations may have in-depth knowledge about the environmental and social characteristics of the project area and the nearby populations, and can help play a role in identifying risks, potential impacts, and opportunities for the Borrower to consider and address in the assessment process. Some groups may be interested in the project because of the sector it is in, and others may wish to have information simply because public finance is being proposed to support the project. It is not important to identify the underlying reasons why people or groups want information about a project—if the information is in the public domain, it should be open to anyone interested.

3.3. Disadvantaged / vulnerable individuals or groups

It is particularly important to understand project impacts and whether they may disproportionately fall on disadvantaged or vulnerable individuals or groups, who often do not have a voice to express their concerns or understand the impacts of a project. The following can help outline an approach to understand the viewpoints of these groups:

- Identify vulnerable or disadvantaged individuals or groups and the limitations they may have in
 participating and/or in understanding the project information or participating in the consultation
 process.
- What might prevent these individuals or groups from participating in the planned process? (For example, language differences, lack of transportation to events, accessibility of venues, disability, lack of understanding of a consultation process).
- How do they normally get information about the community, projects, activities?
- Do they have limitations about time of day or location for public consultation?
- What additional support or resources might be needed to enable these people to participate in the consultation process? (Examples are providing translation into a minority language, sign language, large print or Braille information; choosing accessible venues for events; providing transportation for people in remote areas to the nearest meeting; having small, focused meetings where vulnerable stakeholders are more comfortable asking questions or raising concerns.)
- If there are no organizations active in the project area that work with vulnerable groups, such as persons with disability, contact medical providers, who may be more aware of marginalized groups and how best to communicate with them.
- What recent engagement has the project had with vulnerable stakeholders and their representatives?

4. Stakeholder Engagement Program

4.1. Purpose and timing of stakeholder engagement program

Summarize the main goals of the stakeholder engagement program and the envisaged schedule for the various stakeholder engagement activities: at what stages throughout the project's life they will take place, with what periodicity, and what decision is being undertaken on which people's comments and

concerns. If decisions on public meetings, locations, and timing of meetings have not yet been made, provide specific information on how people will be made aware of forthcoming opportunities to review information and provide their views. Include the ESCP as part of such information. For some projects, a stand-alone SEP may not be necessary and its elements may be incorporated into the ESCP.

4.2. Proposed strategy for information disclosure

Briefly describe what information will be disclosed, in what formats, and the types of methods that will be used to communicate this information to each of the stakeholder groups. Methods used may vary according to target audience. For each media example, identify the specific names (for example, *The Daily News* and *The Independent, Radio News 100.6*, television *Channel 44*). The selection of disclosure—both for notification and providing information—should be based on how most people in the vicinity of the project routinely get information, and may include a more central information source for national interest. A variety of methods of communication should be used to reach the majority of stakeholders. The project should select those that are most appropriate and have a clear rationale for their choices. The plan should include a statement welcoming comments on the proposed engagement plan and suggestions for improvement. For remote stakeholders, it may be necessary to provide for an additional newspaper outlet or separate meeting, or additional documents that should be placed in the public domain. The public domain includes:

- Newspapers, posters, radio, television;
- Information centers and exhibitions or other visual displays;
- Brochures, leaflets, posters, nontechnical summary documents and reports;
- Official correspondence, meetings;
- Website, social media.

The strategy should include means to consult with project-affected stakeholders if there are significant changes to the project resulting in additional risks and impacts. Following such consultation, an updated ESCP will be disclosed.

4.3. Proposed strategy for consultation

Briefly describe the methods that will be used to consult with each of the stakeholder groups. Methods used may vary according to target audience, for example:

- Interviews with stakeholders and relevant organization
- Surveys, polls, and questionnaires
- Public meetings, workshops, and/or focus groups on specific topic
- Participatory methods
- Other traditional mechanisms for consultation and decision making.

4.4. Proposed strategy to incorporate the view of vulnerable groups

Describe how the views of vulnerable or disadvantaged groups will be sought during the consultation process. Which measures will be used to remove obstacles to participation? This may include separate mechanisms for consultation and grievances, developing measures that allow access to project benefits, and so forth.

4.5. Timelines

Provide information on timelines for project phases and key decisions. Provide deadlines for comments.

4.6 Review of Comments

Explain how comments will be gathered (written and oral comments) and reviewed, and commit to reporting back to stakeholders on the final decision and a summary of how comments were taken into account.

4.7 Future Phases of Project

Explain that people will be kept informed as the project develops, including reporting on project environmental and social performance and implementation of the stakeholder engagement plan and grievance mechanism. Projects should report at least annually to stakeholders, but often will report more frequently during particularly active periods, when the public may experience more impacts or when phases are changing (for example, quarterly reports during construction, then annual reports during implementation).

5. Resources and Responsibilities for implementing stakeholder engagement activities

5.1. Resources

Indicate what resources will be devoted to managing and implementing the Stakeholder Engagement Plan, in particular:

- What people are in charge of the SEP
- Confirm that an adequate budget has been allocated toward stakeholder engagement
- Provide contact information if people have comments or questions about the project or the consultation process; that is, phone number, address, e-mail address, title of responsible person

5.2. Management functions and responsibilities

Describe how stakeholder engagement activities will be incorporated into the project's management system and indicate what staff will be devoted to managing and implementing the Stakeholder Engagement Plan:

- Who will be responsible for carrying out each of the stakeholder engagement activities and what are the qualifications of those responsible?
- How involved will management be in stakeholder engagement?
- How will the process be documented, tracked, and managed (for example, stakeholder database, commitments register, and so forth)?

6. Grievance Mechanism

Describe the process by which people affected by the project can bring their grievances and concerns to the project management's attention, and how they will be considered and addressed:

- Is there an existing formal or informal grievance mechanism, and does it meet the requirements of ESS10? Can it be adapted or does something new need to be established?
- Is the grievance mechanism culturally appropriate, that is, is it designed to take into account culturally appropriate ways of handling community concerns? For example, in cultures where men and women have separate meetings, can a woman raise a concern to a woman in the project grievance process?
- What process will be used to document complaints and concerns? Who will receive public grievances? How will they be logged and monitored?
- What time commitments will be made to acknowledge and resolve issues? Will there be ongoing communication with the complainant throughout the process?
- How will the existence of the grievance mechanism be communicated to all stakeholder groups? Are separate processes needed for vulnerable stakeholders?

- If a complaint is not considered appropriate to investigate, will an explanation be provided to the complainant on why it could not be pursued?
- Will there be an appeals process if the complainant is not satisfied with the proposed resolution of the complaint? Not all projects will necessarily have an appeals process, but it is advisable to include one for more complex projects. In all cases, complainants need to be reassured that they still have all their legal rights under their national judicial process.
- A summary of implementation of the grievance mechanism should be provided to the public on a regular basis, after removing identifying information on individuals to protect their identities. How often will reports go into the public domain to show that the process is being implemented?

7. Monitoring and Reporting

7.1. Involvement of stakeholders in monitoring activities

Some projects include a role for third parties in monitoring the project or impacts associated with the project. Describe any plans to involve project stakeholders (including affected communities) or third-party monitors in the monitoring of project impacts and mitigation programs. The criteria for selection of third parties should be clear. For further information, see the World Bank's Good Practice Note on Third-Party Monitoring.

7.2. Reporting back to stakeholder groups

Describe how, when, and where the results of stakeholder engagement activities will be reported back to both affected stakeholders and broader stakeholder groups. It is advised that these reports rely on the same sources of communication that were used earlier to notify stakeholders. Stakeholders should always be reminded of the availability of the grievance mechanism.

Annex VII. Outline of the Labour Management Procedures

INTRODUCTION

1. Labor Management Procedures.

Under the World Bank Environmental and Social Standard 2 (ESS2: *Labor and Working Conditions*), the Borrower is required to develop labor management procedures (LMP). The purpose of the LMP is to identify the main labor requirements and risks associated with the project and help the Borrower to determine the resources necessary to address project labor issues. The LMP will enable different projectrelated parties, for example, staff of the project implementing unit, consultants and project workers, to have a clear understanding of what is required on a specific labor issue. The LMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout development and implementation of the project. This annex presents general information for the requirements for 5 participating countries, while country-specific LMP will be prepared and disclosed by each of the implementing agencies, to the satisfaction of the World Bank, prior to commencement of project activities.

2. Project Description.

Regional coordination and cooperation in addressing chemicals-related issues, under relevant multilateral environmental agreements, and interventions that cross-national borders have the potential to stimulate better solutions to address the gaps and challenges of chemicals and waste management.

The geographic coverage of EHPMP includes the five participating countries: Zambia, Ghana, Kenya, Senegal and Tanzania. The Program's focus is on policy and strategy formulation and implementation; knowledge and experience sharing; institutional and human capacity building; research on chemicals and hazardous waste management; and coordination and collaboration, determines the technical assistance nature of the Program. The Program supports demonstration projects for low-cost technologies reducing and eliminating human health hazards from chemicals in ASGM and recycling of e-waste. Program activities are grouped under three main components which will be implemented at national level adapted to the national conditions.

Component 1: Institutional strengthening, capacity building and knowledge sharing

The component aims to enhance the capabilities of participating countries to obtain and share the information needed for their national decision-making, in particular, the sound management of chemicals. It will create a framework for exchange of information to support related national, regional and international policy development and activities related to reducing environmental health risks from poor management of chemicals in ASGM and waste recycling sectors. Poor coordination between sectors and ministries can also be an obstacle for effective monitoring, surveillance and enforcement on chemicals and waste management, which results in their becoming a significant risk to environmental health. The component aims to help eliminate the barriers to information exchange and enhance the communication

among national and regional stakeholders. The capacity building interventions will be further detailed based on country-specific institutional diagnosis, stakeholder engagement, and best international practices in pollution prevention, monitoring, enforcement and compliance:

1.1. Tanzania: The component will support strengthening of the institutions related to environmental monitoring in the artisanal gold mining sector, where there is significant use of mercury.

1.2. Zambia: This component will strengthen the institutional and legislative framework for managing risks from POP releases.

1.3. Ghana: The activities in Ghana focus on artisanal gold mining (AGM) and e-waste. AGM: The component will support activities for strengthening of institutional systems and capacity building for the Environmental Protection Agency (EPA) and the Minerals Commission (MC) for managing the AGM sector, through training at the national and local levels.

e-Waste: This component will support capacity building activities which include (a) benchmarking of key EPA staff to acquire best practices on waste management and ensure appropriate skills transfer; (b) Awareness raising/sensitization workshops on e-waste management along with stakeholders in the value chain country-wide; (c) support to waste management unit in EPA; and (d) streamlining Customs coding with appropriate training of the Customs Officers and borders inspectorate to curtail entry of illicit e-waste in the first place.

1.4. Kenya: The component will support capacity building of NEMA staff on best practices on waste management and Environmentally Sound Technologies for reduction of releases of POP's e-waste management practices and ensure appropriate skills and knowledge transfer.

1.5. Senegal: The component will support measures for institutional enhancement to improve the performance of solid waste management in large cities including designing results-based financing mechanisms such as innovative financing through public-private joint ventures for waste management services and enhanced cost efficiency.

Component 2: Support to policy dialogue and regulatory enhancements

This component is designed to provide support to participating countries for policy development in sound management of chemicals recognizing that most African countries lack sound polices and effective management tools to control the use of chemicals and reduce human health risk. The component will support policies focusing on measures for strengthening current financial incentives; regulations regarding management of hot spots near sensitive habitat; safety and contamination of public resources; institutional capacity for pollution prevention and control; health and environmental assessments, monitoring and reporting. While many of these are national level activities, the component will support harmonization of national approaches for addressing illegal transboundary movements of chemicals (mercury) and e-waste. Country specific activities include:

2.1.Tanzania: This component will support the development of a strategy for promoting reduction of harmful emissions and releases of, and exposure to mercury in artisanal and small-scale gold mining and processing, including application of mercury-free methods.

2.2. Zambia: This component will support the Government's efforts in strengthening the current environmental policies and regulations and capacity to monitor; screen and evaluate health and environmental risks associated with POPs and hazardous chemicals through the development of guidelines.

2.3. Ghana: The component activities in Ghana focus on artisanal gold mining (AGM) and e-waste: AGM -The component will support the EPA in strengthening the policy requirements targeted at the ASGM sector. This component will also support Government's efforts in strengthening the current environmental policies and regulations and capacity to monitor; screen and evaluate health and environmental risks associated with e-waste. 2.4. Kenya: The component activities will support development of e-waste management regulation with provisions for national and local level implementation. This regulation will be key for strengthening current waste management policies.

2.5. Senegal: The component will help augment the effectiveness of activities financed under an ongoing Bank funded project Senegal Municipal Solid Waste Management Project (P161477) which focus on improved solid waste management services in selected cities in Senegal.

Component 3: Demonstrating application of technological tools and economic approaches The component will finance specific demonstration projects for cleaner technology in areas contaminated by chemical waste. These investments will be based on a standard set of (social, environment and economic) criteria, without impacting the livelihood and employment opportunities and tailored to country specific implementation conditions. Recognizing that the risks of exposure, scope of regulations, institutional approaches and enforcement may vary among countries, country specific initiatives are outlined for the participating countries as follows below:

3.1. Tanzania: The component will support the drive of the Government of Tanzania to formalize the ASGM sector. Specific activities which be designed to create incentives for artisanal miners to access relevant knowledge, financing and institutional support in line with Government's obligations under the Minamata Convention. The demonstration investments will be linked with ongoing Tanzania REGROW Project and will aim to enhance the Government's policy towards appropriate land usage for pastoral and agricultural activities and strengthen community level monitoring, through involvement of communities in land use shifts.

3.2. Zambia: The component support will focus on improving the waste value chain and measures that will reduce UPOPs releases from solid waste by strongly limiting the quantities of waste subject to uncontrolled burning: invest into improving the management of waste collection; transportation; treatment and disposal and improved recycling of waste. The current dumpsite at Kabwe will be upgraded into a sanitary landfill (through IDA financing), and feasibility study of short- and long-term BAT/BEP actions will be supported to determine the volumes and types of waste and the economic viability for private sector collaboration.

3.3. Ghana: The component activities in Ghana focus on artisanal gold mining (AGM) and e-waste: AGM. Support under this component is linked to Component 1. It aims to demonstrate the environmental improvement of 2-3 pilot abandoned mines, based on cost-effective and environmentally sound technologies. The component will also enhance Government's policy towards shifting to appropriate land use for agricultural activities. This component will also support the improvement of environmental and social work conditions to promote mercury abatement techniques. This component will also support the initiation of a pilot project related to Agbobloshie on implementation of integrated and environmentally sound management approach to improve collection, transportation, and safe disposal/recycling of e-waste, following Article 6 of the Stockholm Convention on wastes, and relevant guidance.

3.4. Kenya: This component will support a pilot project in a selected county in Kenya in support of the Kenya Urban Support Program on implementation of integrated waste management approach to reduce releases of POPs from ewaste through improving source reduction/reuse, collection, transportation, and disposal/recycling. The pilot project will be identified based on review of priorities and institutional capacity (including private sector) for the selected location. Another set of activities financed by this component will support development and piloting a take back scheme with IT manufacturing industry, government ministries, for example Ministry of Education on computer-for-schools programme.

3.5. Senegal: This component will focus on improving the waste value chain and measures that will reduce UPOPs releases from solid waste by introducing new technologies and behavioral change methods for waste minimization and disposal. A demonstration project will invest in improving the management of waste cycle and improved recycling in a pilot site. A waste management unit will be strengthened in the identified municipalities to coordinate waste management efforts. This component will also look into the

ways to reduce the impact of chemical pollution emanating from unregulated landfills and support the development of communication tools to raise awareness about the health costs and benefits of pollution management.

2. Overview of Labor Use on the Project

ESS 2 categorizes the workers into: direct workers, contracted workers, community workers and primary supply workers. The labor category of direct workers will be government civil servants (belonging to the designated implementing agencies at the national level⁷) and staff from other government ministries, departments and agencies benefitting from the project or those deployed as 'technical consultants' by the project. While the civil servants are governed by the employment laws and a set of public service regulations and Human Resources Manuals, the consultants will be governed by a set of mutually agreed contracts. These consultants will be housed in a Project Implementation Unit (PIU) to be established under the country-level implementing agencies.

Direct Workers. The project will engage the following types of workers as "direct workers":

- Project Implementation Unit (PIU): One Implementation Unit (PIU) will be set up within the designated implementing agencies to manage the project. The PIUs will be staffed with a project coordinator as well as a financial management specialist, procurement specialist, monitoring and evaluation (M&E) specialist, and an Office Assistant. This project Component 4 will provide funding for those functions and their implementation.
- 2) Civil Servants: civil servants (belonging to the designated implementing agencies) and staff from other government ministries, departments and agencies benefitting from the project will be involved on part time: The PIUs could be supported by international consultants, if needed, with a focus on building capacity of the unit over the initial phase of the project.

Primary supply workers. The project will require primary supplies to cater for the operational costs for the statistics office particularly office supplies and equipment (including computers, printers, utilities, internet & other communication costs, and related equipment). Where such materials are directly

⁷ TZ: The National Environmental Management Council (NEMC), GH: Environmental Protection Agency (EPA), KE: National Environmental Management Authority; ZM: Zambia Environmental Management Agency; SN: Direction de l'Environnement et des Etablissements Classés - DEEC

sourced from primary suppliers on an ongoing basis, the workers engaged by such primary suppliers are deemed "primary supply workers", as defined in ESS2. The need for primary suppliers will be determined at project implementation stage.

Community workers. The project will have no community workers as defined under ESS2. The community members to be engaged will be categorized and managed as "contracted or casual workers".

Other stakeholders working in connection with the project. Stakeholders working in connection with the project other than the above project workers will include the **Government civil servants**: some national and local Government civil servants will be working in connection to the project, which will include relevant ministries' and agencies' officials. They will remain subject to the terms and conditions of their existing public sector employment, which are governed by the national labour regulations. There will be no legal transfer of their employment or engagement to the project. The list of relevant laws for project countries are listed in Section II below. The government civil servants involved in the project are not expected to be exposed to Occupational Health Safety (OHS) risks under the project as they will not engage in project-related civil works.

Table: Overview of Indicative Labor Use

Type of project workers	Characteristics of project workers	Timing of labor requirements	Indicative number of workers
 Direct workers PIU staff Project implementation team 	 PIU: Implementation team national consultants: international and national experts Field workers: National 	 PIUs: from project preparation until project completion consultants: from project preparation until project completion fieldworkers: during project implementation mainly during the project pilot. 	 PIU: approx.5-7 consultants: To be identified during the project implementation BD Field staff: To be identified during the project implementation
 Primary supply workers Workers engaged by primary suppliers 	 They are most likely to be local workers. 	 Project implementation. 	 The primary supply workers will be identified during the project implementation stage.
Community workers	 They are most likely to be local workers as casuals 	 Project implementation 	 The will be identified during the project implementation

I. ASSESSMENT OF KEY POTENTIAL LABOR RISKS

9. **Project activities.** The project may finance the purchase of IT equipment, including printers, photo copiers, desktops, laptops, and tablets. The project will also finance civil works for the pilot including repair or rehabilitation of offices. The project will have positive impacts (through e-waste management) on vulnerable groups and reduction of exposure to pollution associated with e-waste. All potential E&S impacts will be assessed under ESS1, including risks of exclusion, GBV and labor management. Stakeholder Engagement Plan and Labor Management Procedures are the E&S instruments that will be prepared by the client before appraisal. To ensure full inclusion of vulnerable groups in the project area, project data collection, documentation and analysis will cater for coverage of disadvantaged and vulnerable households. To offer fair selection of the pilot project site, a criteria for selection of the pilot county will be developed and used by the implementing agencies through a national selection committee.

10. **Key labor risks.** Potential risks are those related to labor and working conditions, such as workrelated discrimination, GBV and OHS risks. The client will assess and address this by developing recruitment guidelines procedures and appropriate OHS measures and guidelines for fieldwork assignments or applying relevant provisions of the national labor legislation, public service regulations and the agency HR manual. The client will prepare an LMP and relevant mitigation measures to address such risks and will be incorporated into procurement documents. The LMP will include an estimate of the project workers (PIU) expected to be involved in the project and a well-functioning and easily accessible grievance mechanism for project workers. The following are key labor risks expected during the implementation of the project:

- Occupational health and safety (OHS) risks: With the project involving handling of e-waste which may have health associated pollutants a risk to the field workers is likely.
- Sexual harassment, exploitation and abuse. Given the context at the pilot project, sexual
 harassment, exploitation and abuse of co-workers and survey respondents is a likely risk. Thus, all
 staff and contracted workers should sign a code of conduct outlining expected standard of
 behavior in this regard and attend an awareness session on the same including the consequences
 of such actions.
- **Child labor:** Suppliers may tend to use children for economic reasons and convenience. The forced labor risks are less likely as the project will recruit skilled field staff with post-secondary school academic qualifications.
- Labor disputes over terms and conditions of employment. Likely causes for labor disputes include demand for limited employment opportunities; labor wages rates and delays of payment; disagreement over working conditions; and health and safety concerns in work environment. In turn, there is also a risk that employers may retaliate workers for demanding legitimate working conditions, or raising concerns regarding unsafe or unhealthy work situations, or any grievances raised, and such situations could lead to labor unrest.
- Discrimination and exclusion of vulnerable groups. If unmitigated, vulnerable groups of people may be subject to increased risk of exclusion from employment opportunities under the project. Such groups will include women, and persons with disabilities. Sexual harassment and other forms of abusive behavior by workers will also have the potential to compromise the safety and wellbeing of the vulnerable groups of workers and the local communities, while adversely affecting project performance.

• Security risks. Often handling of solid waste involve un-regulated business that may pose some security issues.

II. BRIEF OVERVIEW OF LABOR LEGISLATION

- 11. **ILO fundamental conventions ratified by all participating countries**, including the following:
 - Forced Labor Convention
 - Freedom of Association and Protection of the Right of Organize Convention
 - Right to Organize and Collective Bargaining Convention
 - Abolition of Forced Labor Conventions
 - Discrimination (Employment and Occupation) Convention
 - Worst Forms of Child Labor Convention

12. All five participating countries have specific laws governing labor. There are Constitutional provisions and related public service regulations which set out the legislative framework for labor issues.

13. **Terms and Conditions**. All participating countries include in their national legislation the following provisions with regard to terms and conditions of work:

- Content of individual contract which shall specify the following: (a) name and family name of workers;
 (b) address, occupation, age and sex of workers; (c) employer's name and address; (d) nature and duration of contract; (e) hours and place of work; (f) remuneration payable to the worker; (g) procedure for suspension or termination of contract.
- Notice for termination of contract
- Protection of wages
- Hours of work
- Weekly rest
- Annual leave
- Fringe benefits, covering (a) accommodation when a worker is required to be away from his normal residence; (b) free food to workers, or subsistence allowance in place thereof; (c) free transport to and from the place of work, when a worker is required to work in a town or locality away from his normal residence.
- Deductions from remuneration
- Death benefit
- Maternity and Paternity Leaves

14. **Occupational Health and Safety (OHS)** legislation covers protection against risks to the workers, notification procedures in occupational accidents, medical requirements at site and conveyance of injured workers to the hospitals, among others. Below is the list of relevant provisions covered at the OHS legislation for each of the participating countries, with regard to OHS.

- 1) Protection against possible risks
 - a) Provision and maintenance of plant and systems and procedures work that are safe and without risks to health
 - b) Arrangements for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;
 - c) Provision of such information, instruction, training and supervision as is necessary to ensure the safety and health at work of every person employed;
 - maintenance of any workplace under the occupier's control, in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks to health;
 - e) Provision and maintenance of a working environment for every person employed that is, safe, without risks to health, and adequate as regards facilities and arrangements for the employees welfare;
 - f) Informing all persons employed of (i) any risks from new technologies; and (ii) imminent danger; and (g) ensuring that every person employed participates in the application and review of safety and health measures;

15. Non-discrimination and equal opportunities.

16. **Child labor and forced labor** to guide protection of child and forced labor and worker's organizations covering trade unions, freedom of associations and rights of trade unions.

III. BRIEF OVERVIEW OF LABOR INSTITUTIONAL FRAMEWORK

19. The following Ministries are responsible for labor policy and regulatory frameworks:

- a. Ghana Ministry of Employment and Labour Relations
- b. Tanzania Ministry of Labour and Employment
- c. Kenya State Department of Labour
- d. Zambia Ministry of Labour
- e. Senegal Ministry of Public Service, Labour and Employment

20. **The Project Implementation Units (PIUs)**. PIUs will be responsible for overall project management and coordination, including the compliance with safeguards requirements including on labor and working condition. The PIU will engage with consultant(s) with expertise in environmental, social, occupational health and safety issues. The PIUs will be responsible for the following tasks relevant to labor and working conditions:

- 1) Undertake the overall implementation of this LMP.
- Engage and manage consultants in accordance with this LMP and the applicable Procurement Documents.
- Monitor pilot project consultants and workers to ensure their activities are included in the LMP and the applicable Procurement Documents.
- 4) Monitor the potential risks of child labor, forced labor and serious safety issues in relation to primary suppliers.
- 5) Monitor training of relevant project workers.
- 6) Ensure that the grievance mechanism for project workers is established and implemented and that workers are informed of it.
- 7) Monitoring the implementation of the Worker Code of Conduct.
- 8) Report to the World Bank on labor and occupational health and safety performance.

21. **Consultant.** The PIUs assign a member to be responsible for monitoring the project and adherence to the safeguard instruments. They will oversee the performance on labor and working conditions on a daily basis on behalf of the PIU. The Consultant will employ qualified expert(s) for such oversight and report on performance to the PIU.

22. **The designated member** will be responsible for the following:

- 1) Supervise their workers' adherence to the LMP.
- Maintain records of recruitment and employment of contracted workers (including subcontractors).
- Provide induction and regular training to contracted workers on environmental, social and occupational health and safety issues.
- 4) Require the primary supplier to identify and address risks of child labor, forced labor and serious safety issues.

- 5) Develop and implement the grievance mechanism for contracted workers, including ensuring that grievances received from their contracted workers resolved promptly, and reporting the status of grievances and resolutions.
- 6) Ensure that all contractor and subcontractor workers understand and sign the Code of Conduct prior to the commencement of works and supervise compliance with the Code.
- 7) Report to PIU on labor and occupational health and safety performance.

Responsibility area	Direct workers	Primary supply workers
Hiring and managing individual project workers	 PIU to engage and manage consultants 	n/a (outside the scope of ESS2)
OHS	N/A (Direct workers will follow OHS measures when visiting construction sites)	 Primary supplier to adhere to child labor guidelines. PIU/ consultants to review
Child labor and forced labor	N/A (The contract for direct workers does not allow child labor and forced labor)	
Training	PIU/ consultants	n/a (outside the scope of ESS2)
Code of conduct	n/a (the contract for direct workers will address relevant risks.)	
Grievance mechanism	PIU/ consultants	
Monitoring and reporting	PIU/ consultants to monitor and report World Bank	Relevant PIU to monitor and report to PIU CoordinatorPIU to report to World Bank.

Table: Summary of the project staff/entity responsible for various key responsibility areas

IV. POLICIES AND PROCEDURES

23. The project will apply the following policies and procedures to address the key labor risks identified under the section II. The summary of indicative procedures to implement the polices is presented in the following table.

Occupational health and safety (OHS). Pursuant to the relevant provisions of the national Occupational Health and Safety and employment legislation, ESS2 (including WBG Environmental, Health and Safety Guidelines (EHSGs)), and WB standard procurement documents, the implementing agency will manage the project in such a way that the workers and the community are properly protected against possible OHS risks. Key elements of OHS measures should include (a) identification of potential hazards to workers; (b) provision of preventive and protective measures; (c) training of workers and maintenance of training records; (d) documentation and

reporting of occupational accidents and incidents; (e) emergency preparedness; and (f) remedies for occupational injuries and fatalities.

- Child labor. The minimum age of project workers for the project is set at over 18. To prevent engagement of under-aged labor, all contracts shall have contractual provisions to comply with the minimum age requirements including penalties for non-compliance in-line with the relevant laws. NEMA is required to maintain labor registry of all contracted workers with age verification. More details are provided in Section VII.
- Labor influx. To minimize the labor influx, the project will contractually require the PIU to preferentially recruit unskilled labor from the local communities and nearby areas. All contracted workers will be required to sign the code of conduct (see Appendix 1 on the Guideline on Code of Conduct) prior to the commencement of work, which includes a provision to address the risk of Gender Based Violence (GBV).
- Labor disputes over terms and conditions of employment. To avoid labor disputes, fair terms and conditions will be applied for project workers (guided by relevant laws). The project will also have grievance mechanisms for project workers (direct workers and contracted workers) in place to promptly address their workplace grievances (more details are provided in Section IX). Further, the project will respect the workers' right of labor unions and freedom of association, as set out in the national labour and employment regulations.
- Discrimination and exclusion of vulnerable groups. The employment of project workers under project will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, terms of employment (including wages and benefits), termination and access to training. The project shall comply with the national level employment regulations and the implementing agency Human Resources Manual on gender equality in the work place, which will include provision of maternity leave and sick leave and sufficient and suitable toilet and washing facilities, separate from men and women workers.
- **Security risks.** There are no foreseen security concerns in the implementation of the project but should this arise the national police service will be involved to manage the security concerns.
- Sexual harassment, exploitation and abuse. Given the context, sexual harassment, exploitation and abuse of co-workers is a likely risk. Thus all staff and contracted workers should sign a code of conduct outlining expected standard of behavior in this regard and attend an awareness session on the same including the consequences of such actions.

24. **Monitoring and reporting**. The PIU shall report on the status of implementation of the above policies and procedures on a monthly basis. The PIU will closely monitor labor and occupational health and safety performance of the project and report to the World Bank on a quarterly basis.

25. **Fatality and serious incidents.** In the event of an occupational fatality or serious injury, the PIU shall report to the Bank as soon as becoming aware of such incidents and inform the government authorities (where available) in accordance with national reporting requirements. Corrective actions shall be implemented in response to project-related incidents or accidents. The PIU or, where relevant the consultant, may conduct a root cause analysis for designing and implementing further corrective actions.

V. AGE OF EMPLOYMENT

26. **Minimum age**. As presented above, the national labor regulations provide that the minimum age for employment to be over 18 years.

27. **The process of age verification**. Verification of the age shall be undertaken prior to the engagement of labor and be documented. The national identification document (ID) or Passport will be used as indicative age verification means.

VI. TERMS AND CONDITIONS

28. **Direct workers**. The terms and conditions for direct workers in PIU, the consultants and workers at the pilot project will be governed by the Standard World Bank Consultancy contracts and National Labor Laws A. Workers who are normally on short-term will not have maternity or annual leave etc. Their terms and conditions will be based on a specific assignment to complete assigned work within a certain period at a pay rate per day. These terms and conditions should be discussed at recruitment.

29. **Contracted workers**. The national employment and labour regulations and associated public service regulations are the guiding legislations on employment terms and conditions for contracted workers. The Implementing Agency shall therefore follow these provisions related to labor engagements and management. Below are key components⁸ of the terms and conditions that should be applied to contracted workers under the project⁹.

⁸ While there are other provisions applicable to labor engagement in labor regulation (for example, "fringe benefits"), the applicability of such provisions will be reviewed during the contracting stage, when the approach to work implementation is better understood.

⁹ It should be noted that some provisions (such as annual leave) will not be applicable to short-term unskilled contracted workers.

31. **Provision of written individual contract of employment**. A written individual contract of employment shall be provided to workers that specify the following: (a) name of workers; (b) address, occupation, age and sex of workers; (c) employer's name and address; (d) nature and duration of contract; (e) hours and place of work; (f) remuneration payable to the worker; (g) procedure for suspension or termination of contract. Depending on the origin of the employer and the employee, employment terms and conditions will be communicated in a language that is understandable to both parties. In addition to written documentation, an oral explanation of conditions and terms of employment will be provided to workers who may have difficulty understanding the documentation.

32. **Notice for termination of contract**. Either of the contracting parties may terminate a contract of employment by giving written notice as under: (a) not less than ten days in the case of casual workers; or (b) not less than 30 days in the case of non-manual workers. No notice needs to be given in case the duration of contract does not exceed one month. For workers who may be found in breach of confidentiality or falsifying information, termination should be forthwith even if contractual period were more than one month

33. **Minimum Wages.** The official minimum wage will be governed by the provisions of Salaries and Remuneration Commission.

34. **Hours of Work.** The normal hour of work of a project worker shall not exceed 8 hours a day. Hours worked in excess of the normal hours shall be entitled to relevant allowances.

35. **Rest per week.** Every worker shall be entitled rest on Saturday and Sunday. Workers shall also be entitled to a rest day on public holidays recognized as such by the country.

36. **Annual leave**. Workers shall be entitled to leave with pay for every year of continuous service (refer to country level regulations for specific provision).

37. **Maternity and Paternity leaves**. A female worker shall be entitled, on presentation of a medical certificate indicating the expected date of her confinement a maternity leave, provided that she/he has

been employed by the employer for at least six months without any interruption on her part except for properly certified illness (refer to country level regulations for specific provision).

38. **Deductions from remuneration**. No deductions other than those prescribed in labor laws shall be made hereunder or any other law or collective labour agreement shall be made from a worker's remuneration, except for repayment of advances received from the employer and evidenced in writing. The employer shall not demand or accept from workers any cash payments or presents of any kind in return for admitting them to employment or for any other reasons connected with the terms and conditions of employment.

39. **Death benefit.** In case of death of a worker during his contract of employment, the employer shall pay to his heirs remuneration as death benefits in-line with the provisions of the relevant laws.

40. **Medical treatment of injured and sick workers.** The workers will be insured on medical insurance by the implementing agency in the general agency medical insurance scheme and workers will use the medical insurance to cover injuries and sickness treatment.

41. **Collective Agreements.** A collective agreement is an agreement relating to terms and conditions of work concluded between the representatives of one or more trade unions, on the one hand, and the representatives of one or more employers, on the other hand. Where collective agreements exist between the employer and project workers, such agreements will be applied, where relevant.

VII. GRIEVANCE MECHANISM

43. **General Principles.**, Typical work place grievances include demand for employment opportunities; labor wages rates and delays of payment; disagreement over working conditions; and health and safety concerns in work environment. Therefore, a separate grievance mechanism will be established for project workers (direct workers and contracted workers), as required in ESS2. Handling of grievances should be objective, prompt and responsive to the needs and concerns of the aggrieved workers. The mechanism will also allow for anonymous complaints to be raised and addressed. Individuals who submit their comments or grievances may request that their name be kept confidential.

44. **Direct workers**. The project will have a compact but effective grievance system for direct workers. Each unit engaging direct workers (PIU, field staff, enumerators and the consultants) will hold periodic team meetings to discuss any workplace concerns. The grievance raised by workers will be recorded with the actions taken by each unit. The summary of grievance cases will be reported to the World Bank as part of the regular report. Where the aggrieved direct worker wishes to escalate their issue or raise their concerns anonymously and/or to a person other than their immediate supervisor/hiring unit, the worker may raise the issue with the World Bank task team. Where the consultant has an existing grievance system, their direct workers should use such mechanism.

45. National appeal process. The labor laws provide for the national appeals process.

46. **Grievances related to Gender Based Violence (GBV)**. To avoid the risk of stigmatization, exacerbation of the mental/psychological harm and potential reprisal, the grievance mechanism shall have a different and sensitive approach to GBV related cases. Where such a case is reported, it should immediately be referred to the appropriate service providers, such as law enforcement, medical and psychological support, emergency accommodation, and any other necessary services. Data on GBV cases should not be collected through the grievance mechanism unless operators have been trained on the empathetic, non-judgmental and confidential collection of these complaints. Only the nature of the complaint (what the complainant says in her/his own words) and additional demographic data, such as age and gender, can be collected as usual.

VIII. PRIMARY SUPPLY WORKERS

47. **Selection of primary suppliers**. When souring for primary suppliers, the project will require such suppliers to identify the risk of child labor/force labor and serious safety risks. The PIU and the consultants will review and approve the purchase of primary supplies from the suppliers following such risk identification/assessment. Where appropriate, the project will be required to include specific requirements on child labor/forced labor and work safety issues in all purchase orders and contracts with primary suppliers.

48. **Remedial process**. If child labor/forced labor and/or serious safety risks are identified, the PIU and the consultants will require the primary supplier to take appropriate steps to remedy them. Such mitigation measures will be monitored periodically to ascertain their effectiveness. Where the mitigation

measures are found to be ineffective, the PIU will, within reasonable period, shift the project's primary suppliers to suppliers that can demonstrate that they are meeting the relevant requirements.

LMP - APPENDIX 1

Guideline on Code of Conduct

1. A satisfactory code of conduct will contain obligations on all project workers (including subcontractors) that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the ministries, the location and the project sector or to specific project requirements.

2. The Code of Conduct should be written in plain language and signed by each worker to indicate that they have:

- received a copy of the code;
- had the code explained to them;
- acknowledged that adherence to this Code of Conduct is a condition of employment; and
- Understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.

Annex VIII. Public Consultations

The objective of public consultations is to ensure the participation of the populations in the planning process of the project's activities. These included: (i) informing the population about the project and its activities; (ii) allow the populations to express their concern, to share their opinion on the project; (iii) to identify and collect the concerns (needs, expectations, fears, etc.) of the populations about the project as well as their recommendations and suggestions.

Zambia

Date of Public Consultation

The EHPMP Stakeholder Consultations were held on the 19th of December 2019.

Venue of the Consultation

The EHPMP Stakeholder Consultations for Lusaka was held in the Information and Document Centre at ZEMA starting at 09:00 and ending at 11:30. Whilst the EHPMP Stakeholder Consultations in Kabwe Town (the proposed project site) were held at Neem Park courtyard hotel starting at 14:00 to 17:00.

Procedure followed to invite the Stakeholders

The public consultation consisted of two public meetings with the stakeholders in Lusaka and Kabwe. The stakeholders included, national and local policy makers, non-governmental organizations (NGOs) and the local people were invited through newspaper announcements (National newspapers: annex 2 figure 1& 2) and through on social media (ZEMA Facebook page-see annex 2, figure 3). Additionally, some key institutions were invited via Telephone. All the participants from both sessions of the public consultation signed in the attendance register/

Public Discussion

The ZEMA project team consisted of the following persons:

- (i) Mr. Maxwell M. Nkoya- Director Planning, Information and Research (Team Leader and Meeting Chairperson)
- (ii) Ms. Catherin Mukumba- Principal Inspector (Project Team Member and Environmental Safeguards Expert)
- (iii) Mr. Robert Banda Principal Monitoring & Evaluation (Project Team Member and M&E Expert)

Format of the Discussion

The meeting started with the welcome speech of Mr. Maxwell Nkoya (Director of Projects & Research-ZEMA) who introduced himself and the ZEMA Project Team and then explained the purpose of the consultation. He then gave a presentation on the Project, including the project description, project objectives, and the project components (see Annex 4). He further made a presentation of the expected projects benefits and the likely social and environmental and social impacts that would be encountered during the implementation of the project and the key safeguard documents/measures that will be implemented along the project in order to mitigate any negative impacts i.e. the ESMF, SEP, and FGRM. The stakeholders were then invited to ask any questions regarding the presentation and/or the Project

itself. Two other staff from ZEMA were on hand in the consultation meeting and they answered the questions coming from the people in the meeting.

1. Opening

- 2. Purpose of the public consultation
- 3. Description of the Project
- 4. Project Components
- 5. Technology and operation of the project
- 6. Environmental and Socio-economic impacts
- 7. Responding to Questions

It must be stated that stakeholders were allowed to ask questions even as the presentation was still going. One such aspect was Component 3 of the project.

Main issues raised by Theme

Overall, stakeholders were generally supportive of the EHPMP. However, several stakeholders provided specific and constructive feedback on the report, including concerns and specific questions.

a. Project Objectives

Questions on Project Objectives: The participants in the Lusaka session wanted to know why the EHPMP is focusing more on waste management and completely leaving out mercury use and mercury waste as was the case with the other participating countries in the programme. They therefore proposed that mercury be included in the form of dental amalgam and mercury in e-waste.

Mr. Nkoya responded by saying this was a valid contribution. It was explained that although issues of dental amalgam and Artisanal and small-scale gold mining were not included in the final project document, aspects of mercury in electrical and electronic waste such as in lighting devices were much a part of the approved project. He further explained that the matter will be escalated and discussed with the World Bank and relevant stakeholders.

The representative from the Ministry of Local Government affirmed that the project objectives will have significant contributions to solid waste management in Kabwe in particular but also in the country in general. He further proposed that the project scope in the objectives be broad enough to cover the entire country to ensure incremental benefits.

b. Project Components

Component 1: Improved and regular environmental monitoring of POPs and inspections

One participant in the Kabwe session of the public consultation complained of the difficulty on the part of the Kabwe Municipality of monitoring the private companies contracted to manage waste in the townships citing failure to take the waste to designated disposal sites.

The chairperson explained that the programme is meant to strengthen the capacity of the local municipalities and monitoring and enforcement are among the main focus areas in this regard and emphasized the pint by revented to the slide that had the project components as summarized below;

'Component 2: Enhanced Policy framework for management of harmful chemicals related to POPs

Component 3: Reduced environmental health risks from POPs releases in urban waste in Kabwe Municipality

Component 4: Effective and sustainable Project Management'

The participants in the first session of the public consultation (Lusaka session) wanted to know how the Technical Working Committee, the National Steering Committee, the Ministry of Water Development, Sanitation and Environmental Protection (MDSEP), Zambia Environmental Management Agency, and the EHPMP Project Implementation Unit (PIU) and the Zambia Mining Environment Rehabilitation and Improvement Project (ZMERIP) PIU will coordinate during the implementation of the EHPMP.

The chairperson, responded by explaining that the entire Africa Environmental Health and Pollution Management Programme will be coordinated by the Regional Steering Committee at regional level (i.e.

for the 5 participating countries in the programme). While at the national level a national steering committee (NSC) there were two proposals under discussion; the first option is for the current Steering Committee under the ZMERIP project to serve as NSC while the second option presented was to have a separate NSC to be chaired by the Permanent Secretary for the MWDSEP while the PS Local Government serves as Vise Chairperson. In the second option key ZMERIP Steering Committee members will also be a part of the NSC. It was further explained that there will be a national technical committee that will handle technical matters and will provide appropriately advise to the NSC and the EHPMP PIU.

He further explained that the day-to-day administration of the project will be handled by the ZMERIP PIU. Consistent with the project earlier project design and the policy on co-financing, the EHPMP will need additional staff (about two) from ZEMA to be seconded to the current PIU under ZEMRIP.

The representative from Ministry Local Government made a critical observation by stating that to ensure effective day to day management of the project it will be necessary to for the project to have its own project coordinator and thus consisting a separate PIU which will leverage the financial, procurement and other services of the ZMERIP PIU. This will prevent the PIU from having dual reporting i.e. reporting to the EHPMP NSC (chaired by PS- MWDSEP) and the ZMERIP NSC (chaired by the Ministry of Mines and Minerals Development, MMMD).

The stakeholders in the Lusaka session also noted that the ZMERIP will an end **at least two years earlier than the EHPMP** and that it will mean leaving the EHPMP PIU incapacitated or forcing the ZMERIP PIU on the EHPMP. This will have financial implications which have not yet been fully discussed and planned for. The stakeholders in the Lusaka session commended the idea of using part of the ZMERIP PIU in leveraging resources, however, they feared the confusion that might come with the closure of the ZMERIP and lack of competencies in waste management by the ZMERIP staff, and the policy gaps in terms of the mandate of the ZMERIP which was mandated to handle the mining environment. The representatives in the Lusaka meeting unanimously agreed, therefore, proposed that the EHPMP should have its own separate project Coordinator and part of the PIU and NSC right from the start.

The chairperson noted the issues raised and informed the meeting that all their concerns and recommendations will be shared with the Bank and also re-affirmed that this was why the Public Consultation meeting is part of the preliminary project development phases.

The representative from Ministry of Local Government in the Lusaka session wanted to know how the composition of the NSC will be since there is now in place the new Solid Waste Management Act of 2018 which takes away the solid waste (domestic waste) mandate from ZEMA/MWDSEP leaving ZEMA to only regulate hazardous waste management and places that responsibility to regulate solid waste in the country to the Municipalities which fall under the Ministry of Local Government. The Participant stated that he was aware the project will handle both solid waste and hazardous (e-waste) wastes and as such proposed that the NSC for the EHPMP be co-chaired by the two permanent secretaries responsible for the two ministries (Ministry of Local Government & MWDSEP). He further asked if the EHPMP will have another coordinator at the Ministry of Local Government.

Mr. Kapindula (ZEMA- Manager- Operations) clarified that the new Solid Waste Management Act of 2018 was not in existence when the EHPMP was conceptualized hence this gap.

Mr. Nkoya responded by saying this issue would need further consultation and promised it would be resolved appropriately. On the issue of chairing of the NSC, he stated that there is a possibility of the two Permanent Secretary co-chairing the NSC, however, since this is more of an environmental project and

for purposes of accountability and responsibility it may be preferred that the PS environmental protection serves as Chair. He further indicated that specific roles of the two Ministries will be well elucidated in the terms of reference for the EHPMP. Draft ToRs for the NCS and TC were available though they require to be revised before they can be shared with stakholders.

c. Regulatory Framework

The participants in the Lusaka session proposed the addition of other legal/regulatory provisions to the EHPMP regulatory framework, including the Information & Technology Act.

d. Institutional Framework

The participants in the Lusaka session proposed the addition of other institutions to the EHPMP institutional framework, including Ministry of Agriculture and Ministry of Fisheries and Livestock, Ministry of Transport and Communication, Ministry of Trade and Commerce, Ministry of Gender and Community Development, Ministry of Justice, and Ministries of General/Higher Education.

e. Selecting Pilot Project Sites

The participants in the Lusaka session wanted to know how the projects sites will be selected. One participant proposed the need for developing a system for selecting pilot sites for demonstration i.e. reviewing project component 1.

Mr. Nkoya told the meeting that the component 1 has within it the need to assess the capacity and infrastructure of the municipality and it is from this assessment that the pilot sites will be selected.

f. Scaling up the EHPMP

The participants in the Lusaka session wanted to know how the EHPMP will be rolled out to the rest of the country. The chairperson explained that with the help of the Bank, the ZEMA project Team have since developed detailed project activities which in due course will be shared with all key stakeholders.

g. e-Waste Capacity

Participants in the Kabwe session wanted to know if Kabwe can produce enough e-waste to fully utilize the e-waste compartment of new Kabwe Landfill.

The Chairperson explained that there will be a national waste characterization study that will be undertaken as part of the EHPMP and different e-waste streams will be drawn from other parts of the country as the currently Zambia has not capacity to dispose e-waste. The stakeholders recommended that to ensure sustainability the pilot project for e-waste should be located very close to Lusaka.

Another participant wanted to find out if in the event the country fails to fully utilize the e-waste cells at the Kabwe Landfill, is the country going to import e-waste. Further to his response earlier, Mr. Nkoya added that the waste characterization exercise will provide necessary national data regarding e-waste and these data will be key in the design of the facility.

h. Project Safeguards

Just like many other projects/programmes, the EHPMP would may pose social and environmental impacts. A presentation of potential significant impacts and the measures put in place was made. This included the FGRM, the ESMF, and the SEP. When asked about specific mitigations that would be put in place regarding impacts at the two pilot project sites, Mr. Nkoya explained that Environmental Impacts Assessments for the pilot projects will be conducted in line with the Zambian Environmental Law and the Banks ESMF will be fully enforced.

i. What now after the Public Consultation?

The participants in the Kabwe session wanted to know the status of the other countries participating in the EHPMP. In response it was explained that the most of the countries experienced challenges like the Zambian EHPMP that took some time to begin due to some project design and administrative changes related issues, however, at the time of the meeting nearly all the countries were almost at par with minor variations in progress.

The participants in the Kabwe session also wanted to find out what would happen next after the public consultation. To this, it was explained that it was expected that the appraisals by the Bank will take place in February 2020 and this will eventually be followed by Negotiations and then other administrative processes. It was expected that actual project commencement will be in the third quarter of 2020, provided successful appraisal and negotiation.

j. Resolution

Overall remarks: Stakeholders in both Lusaka and Kabwe were supportive of the project to proceed while the concerns and issues raised should be addressed.

Conclusion

The stakeholder consultative meeting held on December 19, 2019 in Lusaka and Kabwe were successful as evidenced by the outputs presented in this report. Though the meeting in Lusaka attracted very few stakeholders, key stakeholders especially Ministries responsible for Local Government and that responsible for Environmental Protection were present. On the other hand the one in Kabwe was very well attended. Stakeholders at both meetings raised issues that are pertinent to the project design, management/oversight, benefit and intended outcomes. The major issue raised in the meetings bordered on the establishment of Project Coordination and Steering Committee and related complications on reporting lines taking into account the proposal of the ZMERIP PIU being the PIU for the project as well. It was proposed that since ZMERIP will end 2 years earlier and to ensure effective oversight and day to day running of the project, it was preferred to have a separate NSC and a semi-autonomy PIU with its own Coordinator while leveraging on Accounts and Procurement services from the current PUI. To ensure sustainability, the e-waste pilot site recommended to be located close to Lusaka while the waste recycling pilot should be in Kabwe to optimize socio-economic benefits of the project to Kabwe.

Declaration of authenticity of report contents

This consultation report contains views and recommendations captured during the consultation meetings in Kabwe and Lusaka held on December 19, 2019. They reflect as close as possible the views and recommendations made by participants. To the best of the abilities of the Rapporteurs and Reviewers they are a true reflection of the meetings proceedings, unless otherwise stated.



ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY ATTENDANCE REGISTER AFRICA ENVIRONMENTAL HEALTH AND POLLUTION MANAGEMENT PROGRAM PUBLIC CONSULTATION MEETING 19TH DECEMBER 2019 乙ごMA てムC

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ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY

Public Disclosure Meeting for the Health and Pollution Management Programme : 19th December, 2019. Neem Park Courtyard, Kabwe

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ZAMBIA ENVIRONMENTAL MANAGEMENT AGENCY Public Disclosure Meeting for the Health and Pollution Management Programme : 19th December, 2019. Neem Park Courtyard, Kabwe

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ATTENDANCE LIST	Min of Naves Dev Spritchend Envi		
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The EHPMP Stakeholder Consultations Adverts



Figure 1: Advert in the Times of Zambia of December 12,2019



Figure 2: Advert in the Daily Mail of December 11,2019



<u>KABWE</u> Date: Thursday, 19th December,2019 Venue: Neem Park Courtyard Time: 15:00-17:00hrs

Please do not hesitate to contact the undersigned during office hours from **09:00 hours to 16:00 hours** should there be any other issue herein that may require our attention.

The Director General Zambia Environmental Management Agency Corner of Church and Suez Roads P.O. Box 35131, **LUSAKA** Tel No.: +260 211 254023/59 E-mail: <u>info@zema.org.zm</u>

Figure 3: Advert placed on Social Media

Photos of the Stakeholders in Attendance



Figure 4: Mr Nkoya emphasizing a point at the Lusaka Meeting



Figure 5: Mr Nkoya making a presentation at the Kabwe Meeting



Figure 6: Participant at the Kabwe Meeting

Senegal

Compte rendu de la réunion de consultation des acteurs au niveau de la Commune de Dalifort

<u>Lieu</u> : Mairie Dalifort <u>Date</u> : Vendredi 24 Mai 2019 <u>Acteurs rencontrés</u> : Cf liste de présence Photos de la rencontre



L'an 2019 le 24 mai, s'est tenue, à partir de 10h, une réunion de consultations des acteurs, dans le cadre de la préparation du projet EHPMP, sous la présidence du Maire de Dalifort et en présence du Secrétaire municipal de la Mairie et du Consultant de la Banque mondiale.

Cette réunion fait suite à la convocation du Maire à l'attention de toutes les composantes de la population (Délégués de quartiers, femmes, jeunes, délégués des marchés, société civile...). La réunion a démarré par une brève présentation du projet par le Consultant et un rappel de ses objectifs.

En effet, pour la préservation de la santé et de l'environnement le projet vise à éradiquer les sources de pollution par les déchets solides, à travers une prévention active qui intègre l'aménagement d'espaces publics.

Préoccupations et recommandations des acteurs

- Au niveau du marché de Dalifort, on note une absence de points de collecte et un mélange entre les déchets solides et liquides. A ce titre, il est nécessaire de démolir des cantines afin de disposer d'espace nécessaire pour aménager un Point de Regroupement normalisé (PRN);
- La collecte des déchets est régulière au niveau des grandes artères, toutefois on constate une prolifération des dépôts sauvages, notamment à côté de la Mairie et des bassins du fait des comportements inciviques des populations. Ainsi, serait-il nécessaire de prendre les mesures coercitives idoines et des sanctions ;

- Face à la récurrence de l'insalubrité, il est utile de renforcer la sensibilisation à travers la mise en place de bacs à ordures, de panneaux d'interdiction de dépotage d'ordures et d'agents de surveillance;
- La récurrence des dépôts sauvages a un impact considérable sur la santé et l'environnement. Ainsi, est-il urgent d'agir pour leur éradication;
- La résolution du problème de l'insalubrité n'est pas facile. A ce titre, il faut de l'abnégation et surtout promouvoir des solutions durables ;
- Il se pose le problème d'inaccessibilité de certains quartiers. A ce titre, il faudra promouvoir une pré-collecte organisée ;
- Face aux comportements inciviques, il est nécessaire de mettre en œuvre un programme de formation, de sensibilisation et d'éducation à l'attention des enfants et de susciter l'intérêt des populations pour la propreté;
- Les femmes doivent être la cible principale du projet ;
- Il faut créer une police municipale ou une brigade environnementale dédiée à la protection de l'environnement ;
- Les charretiers qui assurent la pré-collecte des déchets doivent être mieux encadrés ;
- Pour se prémunir de la sortie anarchique des déchets, il y a lieu de renforcer le conditionnement réglementaire des déchets ;
- Les 21 conseils de quartier ainsi que les écoles, lors des levées de couleur, constituent des opportunités pour la sensibilisation;
- Les heures de passage pour les Visites à Domicile (VAD) doivent être adaptées ;
- Plusieurs associations de base existent mais ne fonctionnent pas. Il serait utile de les redynamiser;
- Il faudra créer une synergie avec le service d'hygiène ;
- Il faut promouvoir le tri/séparation des déchets et mettre des boutiques pour la commercialisation des plastiques.

Compte rendu de la réunion de consultation des acteurs au niveau de la Commune de Hann Bel Air

<u>Lieu</u> : Mairie Hann Bel Air <u>Date</u> : Vendredi 24 Mai 2019 <u>Acteurs rencontrés</u> : Cf liste de présence Photos de la rencontre



L'an 2019 le 24 mai, s'est tenue, à partir de 15h30, une réunion de consultations des acteurs, dans le cadre de la préparation du projet EHPMP, sous la présidence du Maire de Hann Bel Air et en présence du Secrétaire municipal de la Mairie et du Consultant de la Banque mondiale.

Cette réunion fait suite à la convocation du Maire à l'attention de toutes les composantes de la population (Délégués de quartiers, femmes, jeunes, délégués des marchés, société civile...). La réunion a démarré par une brève présentation du projet par le Consultant et un rappel de ses objectifs.

En effet, pour la préservation de la santé et de l'environnement le projet vise à éradiquer les sources de pollution par les déchets solides, à travers une prévention active qui intègre l'aménagement d'espaces publics.

Préoccupations et recommandations des acteurs

- Il est nécessaire de prévoir l'aménagement des lacs de Mariste qui constituent un problème de santé publique ;
- Il faut veiller à un portage institutionnel par la Mairie ;
- Il faut s'assurer de l'intégration des couches vulnérables ;
- La priorité doit être accordée à l'information et à la sensibilisation car les dépôts sont créés et alimentés par les riverains ;
- Il faudra mettre en place une brigade de surveillance dans les quartiers et lutter contre l'encombrement ;
- Il y a lieu de noter que le bénévolat présente des limites et n'a plus de perspectives, il faudra intéresser les acteurs ;
- L'éradication des dépôts sauvages est nécessaire ;
- Face aux comportements inciviques, il est nécessaire de mettre en œuvre un programme de formation, de sensibilisation et d'éducation à l'attention des enfants et de susciter l'intérêt des populations pour la propreté;
- Il faut organiser des causeries populaires sur l'environnement ;
- Il faut s'inscrire dans une perspective de durabilité des interventions et préparer les consciences individuelles et collectives à travers l'éducation environnementale
- L'aménagement du lac au niveau du parc Hann doit être pris comme référence ;

- Il faudra bien définir les mesures de pérennisation du projet les mécanismes d'intervention ;
- Il faut pour le concept de projet prévoir une approche filière ;
- Le problème de la pollution de la baie de Hann doit aussi être abordé par des mesures de suivisurveillance- contrôle
- Les OCB doivent être responsabilisées dans le cadre du projet ;
- Il faut promouvoir l'usage des poubelles réglementaires ;
- Le mécanisme de financement doit aussi être abordé ;
- Le projet doit s'inscrire dans une dynamique de création d'emplois ;
- L'expérience positive de SEN -Environnement doit être capitalisée dans le nettoiement de la baie de Hann;
- La salubrité des quais de pêche doit aussi être abordée par le projet ;
- Il faudra cumuler « carotte et le bâton » avec des moyens de coercition et un système de motivation ;
- Il faut promouvoir le tri/récupération,
- Les acteurs communautaires constituent une opportunité intéressante au niveau local ;
- Il y a lieu de mettre en place des dépôts réglementaires ;
- Il faut mettre en œuvre un programme de renforcement de capacités des acteurs ;
- Le problème majeur relève des comportements inciviques des populations car la collecte est régulière ;
- Le projet doit être intégré.

Kenya

MINUTES OF THE STAKEHOLDERS ENGAGEMENT/CONSULTATIONS PLAN ON ENVIRONMENTAL AND SOCIAL INSTRUMENTS, INCLUDING ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF), STAKEHOLDER ENGAGEMENT PLAN (SEP), ENVIRONMENTAL SOCIAL AND COMMITMENT PLAN (ESCP) AND LABOUR MANAGEMENT PLAN (LMP)) ON 4TH DECEMBER, 2019 AT NEMA HEADQUATERS.

Agendas

- 1. Disclosure and presentation of the project objectives and components
- 2. Environmental and Social Commitment Plan (ESCP)
- 3. Environmental and Social Management Framework (ESMF)
- 4. Labor Management Procedures (LMP)
- 5. Stakeholder Engagement Plan

Members present

- 1. David Wanjala State Department of Industrialization (SDI)
- 2. Tampushi Leonard National Environment Management Authority (NEMA) Taking minutes
- 3. Charles Lange National Environment Management Authority (NEMA) Chairing
- 4. Obiero Wycliffe Kenya Revenue Authority (KRA)
- 5. Seth Munyambu WEE (Private Sector)
- 6. Michael Koech Safaricom (Mobile telephone company)

Absent with apology

Georgina Wachuka – Kenya Association of Manufacturers

MIN 1/12/2019 - Opening Remarks

The Project Coordinator Dr. Charles Lange who represented the Director General called the meeting to order at 10.45am and also chaired the meeting and gave the opening remarks on behalf of DG. He welcomed thanked all participants for having time to attend the meeting and noted that that is a strong positive gesture of supporting the project implementation. The chair introduced the agendas of the meeting and the importance of building strong coordination systems with the keys institutions which will

be instrumental in bringing the objectives of the project into reality in Kenya for the sound management of chemicals, in particular Persistent Organic Pollutants from E-waste.

MIN 2/12/2019 - Presentation of the project objectives and components

The Project Coordinator presented a brief on the project design and components to the stakeholders who shared their comments to enrich on the areas of concern to specific mandates and roles of institutions. The chair also gave a current status of the e-waste management, citing the critical areas that needs interventions in e-waste management.

MIN 3/12/2019 - Stakeholder Engagement Plan

The participants of the meeting were taken through the requirements of the World Bank on the adherence to the SEP in the project design development and implementation. The Coordinator informed the participants of the importance of transparent engagement between the Authority and all stakeholders in the project in successful implementation of the project. He also articulated the importance of SEP in affirming stakeholder acceptance of the project which will enhance environmental and social sustainability, inclusivity and contribution to project design. The participants expressed their interest in supporting the project throughout the project cycle. It is also worthy to note the concerns raised by the members regarding various challenges faced by the country in management of e-waste from various waste sources. The issues are summarized in the table below.

Environmental and Social Management Framework (ESMF) and Environmental and Social Commitment Plan (ESCP)

The participants were taken through the guidelines for application in the development of ESMF and ESCP and their roles in ensuring environmental risk and impacts are disclosed and communicated to all stakeholders involved. The project coordinator informed members that ESMF, followed by ESCP is an important tool which will provide accessibility and inclusivity of all stakeholders and partners to raise issues and grievances and provide solutions to managing the grievances which could be raised by stakeholders throughout the project cycle. The drafts of ESMF and ESCP were presented and upon members appreciated the efforts in making the draft. Some comments were made but generally the ESMF and ESCP were endorsed for finalization by NEMA.

Labor Management Procedures (LMP)

The project Coordinator presented the World Bank guidelines for application on the development of the LMP and a draft LMP was shared to members. The project coordinator informed members present of the value of LMP is driving the labor matters of the project particularly employees of the project. The presentation also highlighted different categories of workers such as Direct workers (PIU and Civil servants), Primary supply workers, Community workers as per the world bank guidelines. The members were also informed that the draft LMP was drafted following the provisions of the national labor laws and NEMA Human Resource policy and manuals.

First Key institutional stakeholder consultative meeting

Engagements and consultation on the project design and the planned activities and implementation arrangements have been done with key institutional stakeholders including the relevant Government agencies, private and E-waste Managers

Stakeholder	Key points raised
Ministry of Industrialization	Developing the SME policy to formalize all activities undertake by the informal sector including on e-waste management
Kenya Revenue Authority (Border Control Office)	Strengthening border controls on e-waste movements into the country
Waste Electrical and Electronic Centre	 Lack of incentives to clients who deliver e-waste for treatment Urban mining of e-waste (repair shops) e.g for mobile phones are the major polluters Lack of legal framework on e-waste is a serious setback in management of e-waste Formalization of the informal sector which is the biggest handlers of e-waste in Kenya Supporting Recyclers and e-waste handlers by streamlining charges imposed by county governments to avoid double
Kenya Association of Manufacturers	• There are industries that are assemblers of Electric and Electronic components and therefore form part of users, importers and distributors of electric and electronics. As a result of this there is a need to monitor the e waste generated from the sector.

	 KAM is also be able to share technical support in the development of policy and other tools/ frameworks on E waste management. KAM will also be able to drive in collaboration with NEMA initiatives to drive Responsible Care in the management of E - waste - "cradle to grave" approach on E waste Management. Building synergies of E-Waste to other programmes programs such as UPOPs (where KAM and NEMA are implementing partners) in mainstreaming sound chemicals management where we can ensure close collaboration with NEMA in E waste management is realized. KAM is a credible and respected institution that follows up its roles in support towards such programs for accountability and sustainability. KAM is also focused on supporting initiatives that propose sustainable development (Policies, SDGs amongst others) to promote compliance for industry.
SAFARICOM)	 The biggest challenge is the segregation of e-waste at source Regulation is critical to addressing sector responsibilities Communication strategy to the public is very important in the successful implementation of the project Safaricom customer care shops are used as collection points of all e-waste Lack of clear responsibility of all players in the e-waste value chain Strengthen the capacity of Technical and Vocational Education and Training Institutions to do basic dismantling of electronic devices before taking for treatment and recycling

Specific details of the inputs by stakeholders on LMP, SEP, ESMF and ESCP are captured in the draft documents.

Closing Remarks

The chairman thanked all participants for attending the meeting as well as their active participations and informed them that a public consultative meetings will be called upon by NEMA in dues time as the project planning continues to its final stages and start of implementation. The meeting adjourned at 14:00 hrs

Chairperson..... Date.....

Secretary Date





Ghana



Photos of Stakeholder Engagement Workshops on Mercury Initial Assessment

Name	Institution	
	institution	
F. Ohene- Mensah	AFI	
Manuela D. Nelson	Asanko Gold	
NiiAdjetey Kofi Mensah	ASMAN	
Tracy Jane-Lake	Attorney Generals Department	
Vivian	Birth and Death Registry	
Samuel Obiri	Centre for Environmental Impact Assessment	
Dr. K. A Asante	Centre for Scientific and Industrial Research-Water Research Institute	
Richard Ellimah	Centre for Social Impact Studies	
Kenneth Kwame SwanzyEssuman	Chamber of Commerce - Tarkwa	
F-Ohene-Mensah	DEI	
E. Odjam- Akumatey	Ecological Restoration	
Haruna	Energy Commission	
Anifat Abu- Mahama	Environmental Protection Agency	
Diane Gasinu	Environmental Protection Agency	
Dr. Sam Adu- Kumi	Environmental Protection Agency	
Ebenezer Appah-	Environmental Protection	
Sampong Esi Nerquaye-	Agency Environmental Protection	
Tetteh	Agency	
Faisal Seidu	Environmental Protection Agency	
Felisa Owusu-	Environmental Protection	
Darko	Agency Environmental Destantion	
Gabriel Anthony	Environmental Protection	
Amppiah George Lamptey	Agency Environmental Protection	
Gifty Attah	Agency Environmental Protection Agency	
Gifty Tetteh	Environmental Protection	
Humu Saeed	Agency Environmental Protection	

Name	Institution	
Roger Gardiner	Ghana Revenue Authority Custom Division	
Joachim Davies	Ghana Revenue Authority Custom Division	
Mariam A. Rahman	Gold fields Ghana Limited	
Charlotte Dsidsorna	Golden Star Bogoso	
Samuel Dotse	HATOF	
Larsey Mensah	Institute of Environmental Compliance and Sustainable Development	
Kwaku Treveh	International Labour Organization	
RazafindrakotoMamyLalaina	International Labour Organization	
Kwame Mensah	KASA Ghana	
Smart-Abbey Ahimah	KASA Ghana	
Priscilla Attafuah	Kinross Gold	
Jonathan Hogarh	Kwame Nkrumah University of Science and Technology	
Esther	Korle Bu Teaching Hospital	
Eugene N. Korletey	Labour Department	
Nelson Ahedor	Minerals Commission	
Frank Sofo	Ministry of Local Government & Rural Development.	
Cecelia Ansah-Obiri	Ministry of Employment and Labour Relations	
Fredua Agyemang	Ministry of Environment, Science, Technology and Innovation	
Amos Nana Acquah	Ministry of Finance	
Dennis Akunmle	Ministry of Finance	
Elizabeth Nancy Ameyaw	Ministry of Finance	
Jones Obeng	Ministry of Finance	
Konney Theresa	Ministry of Finance	
Kwesi Asante	Ministry of Finance	

	Agency
Irene Parker-	Environmental Protection
Allotey	Agency
	Environmental Protection
J.C Edmund	Agency
John A.	Environmental Protection
Pwamang A.	Agency
rwannang	Environmental Protection
John Tettey	Agency
Justine	Environmental Protection
SeyireOzadzie	
Seyneozauzie	Agency Environmental Protection
K. E Gura-Sey	
	Agency Environmental Protection
Kafui Boni	
Kani Inum	Agency Equirenmental Protection
Kani Lawrence	Environmental Protection
Jnr	Agency
Lawrence Kani	Environmental Protection
Jnr	Agency Facility Bacterities
Lovelace	Environmental Protection
Sarpong	Agency
Michael Sandow	Environmental Protection
Ali	Agency
Nathan Quao	Environmental Protection
Huthan Quuo	Agency
SelaseSedzi	Environmental Protection
JelaseJeuzi	Agency
V.K Nartey	Environmental Protection
V.K Waltey	Agency
Victoria Leba-	Environmental Protection
Kamanya	Agency
Victoria Leba-	Environmental Protection
Kamanya	Agency
Yussif D. Iddisah	Environmental Protection
russii D. luuisan	Agency
Dr. Crentsil Kofi	Environmental Youth Action
	Network/Ghana Atomic Energy
Bempah	Commission
ShallovernSrodah	Federation of Ghana
snallovernsrouan	Goldsmith &Jewellers
Solomon Kusi	
	Friends of the Nation
Ampofo	
	Ghana Association of Small
Gloria	Gnana Association of Small Scale Miners
	Scale Millers
Comfort Okoe	Ghana Bauxite Company Ltd
comon okoe	Ghana bauxite Company Ltd

Theresa Konney	Ministry of Finance		
Francisca Atuluk	Ministry of Gender		
Patricia Dovi Sampson	Ministry of Information		
Deborah Mensah	Ministry of Interior		
Opoku Jacob	Ministry of Interior		
Ursula Renette Amoah	Ministry of Justice		
Ben Aryee	Ministry of Lands & Natural Resources		
Benjamin Aryee	Ministry of Lands & Natural Resources		
Rebecca Bortey	Ministry of Trade & Industry		
Michael A. Senayah	Ministry of Trade & Industry		
Samuel Cudjoe	National Petroleum Authority		
Susan Keane	Natural Resource Defence Council		
Doreen O. Drapson	Newmont Ghana Limited		
Vivian Odame	Perseus Mining Company		
NafisatuYussif	Solidaridad West Africa		
Nana Quame	Tema Metropolitan Assembly		
Joel Ayim Darkwah	United Nations Development Programme		
Louis Kuukpen	United Nations Development Programme		
Paolo Dalla Stella	United Nations Development Programme		
Etienne Gonin	United Nations Development Programme (MPU/Chemicals)		
Abena Nakawa	United Nations Development Programme /Ministry of Health		
Dr. Richard Amfo-Otu	United Nations Development Programme /Presbyterian University College		

Victoria	Ghana Crematoria Society	Joseph Yeboah	United Nations Industrial Development Organization
Felicia Hukportie	Ghana Gas Company	Fakhruddin Azizi	United Nations Industrial Development Organization
Dr. Carl Osei	Ghana Health Service/Ministry of Health	Yomi Banjo	United Nations Industrial Development Organization
Dr. Edith Clarke	Ghana Health Service/Ministry of Health	Nelson Manda	United Nations Institute for Training and Research
Emmanuel Dzeble	Ghana National Association of Small Scale Miners	Dr Ishmael Quaicoe	University of Mines and Technology
Emmanuel YirenkyiAntwi	Ghana National Association of Small Scale Miners	Isaiah Tuotienne	US Embassy
Daniel Asare	Ghana Ports and Harbour Authority	Karen Bel	US Embassy
		Kate Ansah	Volta Aluminum Company
		Georgette Sakyi-Addo	WIM & AMN
		Sandra A.A.O. Donkor	WIM Ghana
		Asferacew Abate	World Bank
		Akosua Kwakye	World Health Organization

Source: Minamata Convention on Mercury Initial Assessment Report for Ghana, 2018

Stakeholder Workshop on Public Health Challenges in ASGM Communities

In case of reply, thenumber and the date Of this letter should be quoted

My Ref. No.....

Your Ref. No.



Ghana Health Service Private Mail Bag Ministries Accra-Ghana

E-mail: carl.osei@ghsmail.org

28th October 2019

Dear Sir/Madam,

INVITATION TO A NATIONAL STAKEHOLDER DISSEMINATION WORKSHOP: ASSESSMENT OF PUBLIC HEALTH CHALLENGES IN ARTISANAL AND SMALL-SCALE GOLD MINING (ASGM) COMMUNITIES IN GHANA AND THE LOCAL HEALTH SYSTEM'S READINESS TO RESPOND

Artisanal and Small-Scale Gold Mining (ASGM) in Ghana exposes miners, their families and communities to a range of occupational and public health risks from the use of mercury. Since July this year, the World Health Organisation (WHO), the Ministry of Health and Ghana Health Service(GHS) have collaborated to conduct a WHO-led project study that will contribute to the development of the "health component" of a National Action Plan (NAP) for country-level implementation of health aspects of the Minamata Convention on mercury. This is in line with Article 7 of the Convention which has a focus on addressing the health effects of mercury exposure in ASGM.

The project study, which involved an institutional capacity assessment; rapid health situation assessment in ASGM communities and an assessment of local health system capacity to respond to ASGM related health issues, has been completed and a national stakeholder workshop is being organized to bring together a broad range of policy/decision-makers and development partners operating within the domains of health, environment and mining, at national and sub-national levels for dissemination of the results and provide inputs into project recommendations for the NAP.

On behalf of the project team, I take this honour to invite you or your representative (as indicated on the distribution list) to attend a two-day residential workshop scheduled as follows:

Date: 12th to 13th November 2019 ; ARRIVAL: 11th NOV. 2019 4 Flor 2 pm.

Venue ARUBA GUEST LODGE, ABURI

GHS will cover the cost of travel and hotel accommodation for participants as indicated on the attached distribution list. Other participants not covered by GHS are expected to arrange for their own accommodation or attend meetings on non-residential basis.

Kindly confirm your participation by contacting Mrs. Agnes Armah of the Occupational and Environmental realth Unit, GHS at <u>armah.agnes@yahoo.com</u> or tel. 0243527888, by 6th November 2019 to facilitate planning and special provisions.

Yours sincerely

DR. ANTHONY INSIAH ASARE

INVITED PARTICIPANTS

		IN
1	Representative of Mining community, Birim North District	12 (A)
2		
3	Municipal Director of Health Services, Birim North District	
4	Municipal Director of Health Services, Tarkwa- Nsuaem Municipal	
5	Municipal Chief Executive, Birim North Municipal Assembly	
6		
7	Representative, GNASSM, Birlin North Municipal	-3
8	Representative, GNASSM, Tarkwa-Nsuaem Municipal	
9	Representative, Trades Union Congress	
10	Susan Keane. National Resources Defence Council	
11	Chief Executive Officer, Friends of the Nation	
12	Secretary, Inter-ministerial Committee on illegal Mining	
13	Chairman, Water Resources Commission	
14	The Minister. Ministry of Environment, Science, Technology and Innovation	
15	The Minister, Ministry of Health	
16	Chief Director, Ministry of Lands and Natural	
17	Resources Chief Director, Ministry of Trade and Industry	1 2
18	Office of Chief Director, Ministry of Sanitation	
19	and Water Resources Executive Director, Centre for Scientific &	
20	Industrial Research (CSIR) Chief Executive, Environmental Protection	
21	Agency Chief Executive, Ghana Minerals Commission	12
22	Country Representative, ILO, Ghana	
23	Country Representative, UNDP, Ghana	
24	Country Representative, UNIDO, Ghana	
	iscuss	

25	Country Representative, WHO, Acera
26	Country Director, Aurum Institute, Ghana
27	Head, Sustainable Development Cluster, UNDP
28	Director General, Ghana Health Service
29	Director, Public Health Division, GHS
30	Regional Director of Health Services, GHS, ER
31	Regional Director of Health Services, GHS, WR
32	The Executive Director, Precious Mineral
	Marketing Company
33	The Minamata Convention Focal Point, EPA
34	President, Association of Small-Scale Miners (ASSMAN)
35	President, Ghana National Association of Small-Scale Miners (GNASSM)
36	Social Development/ Environment Specialist,
-	World Bank
37	Principal Investigator, Dr. Mirko Winkler,
	Swiss Tropical and Public Health Institute
38	Members, Expert Team of International Consultants
39	Consultant /Project Co-ordinator, WHO, Ghana
40	Programme Officer / Project Co-ordinator.
	WHO, Ghana
41	Focal Person, Chemicals, WHO/ AFRO
42	Focal Person, ASGM Project, WHO/HQ
43	Director Technical Directorate, Project Focal
	Person, MOH
44	Gender Expert MOH/GHS
45	Head; Poisons Centre, Occup. & Env. Health
	Unit, GHS
46	Program Manager, Occup & Env. Health Unit, GHS
47	Secretarial staff, Occup. & Env. Health Unit, GHS
48	The Media

Photos of Stakeholder Engagement During Ghana e-Waste Country Assessment



Source: Ghana e-Waste Country Assessment Report